

Jiaju Zhou · Guirong Xie · Xinjian Yan

Encyclopedia of Traditional Chinese Medicines

Molecular Structures, Pharmacological Activities,
Natural Sources and Applications

Vol.3

Isolated Compounds H-M

 Springer

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Activities, Natural Sources and Applications

Vol. 3: Isolated Compounds H-M

Jiaju Zhou
1303, Buld. 10,
31 ZhongGuanCun NanDaJie,
HaiDian District,
100081, Beijing,
China
jjzhou@mail.ipe.ac.cn

Guirong Xie
Apt-2-1-302,
43 NongDa NanLu,
BoYaXiYuan,
HaiDian District,
100193, Beijing,
China
zhouxuexi@yahoo.cn

Xinjian Yan
523 Redland Blvd,
Rockville,
MD 20850,
USA
yunyan316@yahoo.com

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Encyclopedia of Traditional Chinese Medicines

Molecular Structures, Pharmacological Activities, Natural Sources and Applications

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Preface

A significant preoccupation of modern traditional Chinese medicine (TCM) research has been the characterization of TCM components, such as pertain to their isolation, purification, structural determination, and pharmacological activity. As a reference tool, this *Encyclopedia of Traditional Chinese Medicines* presents a comprehensive and integrative work on surveying TCM plant sources, chemistry, pharmacology and medicinal effects and indications in a systematic manner.

This encyclopedia is an integrated achievement of a long-term TCM research project by the authors at the Chinese Academy of Sciences^[1-4], involving three parts and now organized in six volumes:

Part I (Volumes 1 to 4 and part of Volume 5) provides structural, physical, pharmacological and natural source information on 23,033 isolated chemicals captured from 5,535 references, basically up to year 2005. A great deal of effort has been paid on overlapping or contradictory data in order to provide readers with an accurate and reliable resource.

Part II (last part of Volume 5) describes 6,926 TCM plants and congeners, together with their medicinal effects and indications. The contents of Part I and Part II are all organized in alphabetical order.

Part III (Volume 6) includes seven indexes produced by a computer program. Based on the indexes, users can readily find concerned contents in multiple ways.

With this encyclopedia, the authors attempt to provide a bridge for the communication between the TCM system and Western medicinal systems, and a platform with multiple-subjects in support of research and development of the health sciences.

JJ Zhou, GR Xie and XJ Yan
Institute of Process Engineering, Chinese Academy of Sciences
Sep, 2010, Beijing

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Introduction

This encyclopedia mainly consists two parts - compound and plant. Its core content is the structural and pharmacological information of 23,033 phytochemicals, as well as medical effects and indications of 6,926 plant species from which the phytochemicals were isolated. The compounds, i.e. phytochemicals, are ordered alphabetically, and their ordinal numbers are used as compound unique codes. The plant species are coded from T0001 to T6926. With this code system, the complicated “many to many” relationship between compounds and plants can be clearly expressed, and any individual compound or plant could be located easily in this 6 volumes book.

1. Compound Entry

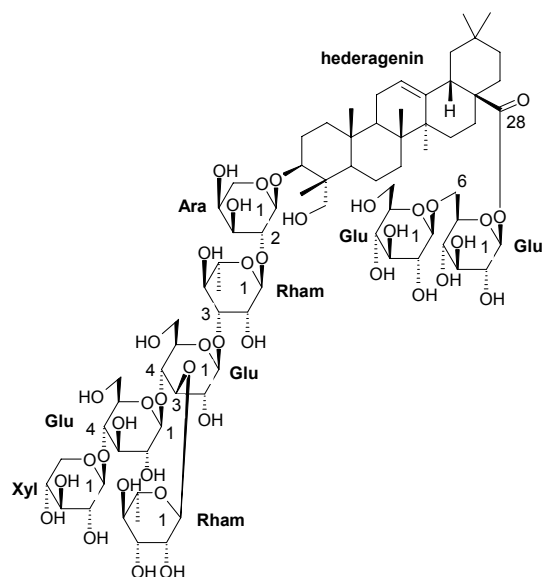
Format of Compound Entry. A compound entry starts with a title line, in which there are two items: the compound’s unique code and main name. Following the title line is the compound physical, pharmacological and source information, which may include 8 items:

Title line (code number, main name)

- A. Synonyms of the compound (if any);
- B. CASRN number (if any);
- C. Formula (relative molecular mass);
- D. Physicochemical properties;
- E. Pharmacological data (if any);
- F. Source(s);
- G. Reference(s);
- H. Graphic structure.

Chemical Names and Synonyms. Generally, a compound may have one scientific name and several trivial names. In the encyclopedia, based on original articles, we select one name as the “main name” (appeared at the title line of each compound entry), and use it to alphabetically order the 23,033 compounds in the first 5 volumes. The main name is either a scientific name or a trivial name. All of other names of each compound, if any, are presented after the title line.

Stereochemistry of Chemical Structure. We protracted all compound structures down to atom-bond level including complicated glycosides, with stereo-chemical information based on the data in the original papers. For example, the structure with full stereochemistry of compound 22,834 (isolated from CHUAN XU DUAN *Dipsacus asperoides*) is:



3-*O*-[β -*D*-Xylopyranosyl(1 \rightarrow 4)- β -*D*-glucopyranosyl(1 \rightarrow 4)]
 [α -*L*-rhamnopyranosyl(1 \rightarrow 3)]- β -*D*-glucopyranosyl(1 \rightarrow 3)-
 α -*L*-rhamnopyranosyl(1 \rightarrow 2)- α -*L*-arabinopyranosyl hederagenin-
 28-*O*- β -*D*-glucopyranosyl(1 \rightarrow 6)- β -*D*-glucopyranoside

Normalization of Pharmacological Data. More than 8,000 TCM components in this encyclopedia have a variety of pharmacological data, which are valuable not only for the study of TCM, but also for the development of Western medicine. Because different expressions are used for the same kind of data in different articles, we have to define and normalize thousands pharmacological terms, so that the data could be expressed by a unified way, and be easily understood by readers.

The pharmacological terms in the encyclopedia are presented by a multi-layered structure. In the top layer, there are around 20 types of pharmacological activity terms, they are cytotoxic (*in vitro* anticancer), antineoplastic (*in vivo* anticancer), antibacterial, antifungal, antiviral, anti-HIV, anti-inflammatory, antioxidant, antimalarial, enzyme inhibitors, NO production inhibitors, cardiovascular activity, smooth muscle relaxant and stimulant, toxin and medium lethal dose LD₅₀, and so forth. For each term there is a regulation about how to describe related pharmacological data. The following is an example:

Term name (*in vitro/in vivo*,
 target cell **1**, quantitative data,
 control Compound, control's data;
 target cell **2**, quantitative data,
 control Compound, control's data;
 target cell **3**, quantitative data,
 control Compound, control's data;
 terse description of related mechanism if any).

Under the subtitle “Pharm:” of compound entry 248 (17-Acetoxyabda-7,12(*E*),14-triene), a set of bio-data is presented as follows:

Pharm: **Cytotoxic** (*in vitro*,
 BT474 human galactophore cancer cell, $IC_{50} = 4.7\mu\text{g/mL}$,
 control Doxorubicin hydrochloride, $IC_{50} = 0.08\mu\text{g/mL}$;
 CHAGO human undifferentiated lung cancer cell, $IC_{50} = 5.7\mu\text{g/mL}$,
 control Doxorubicin hydrochloride, $IC_{50} = 2.3\mu\text{g/mL}$;
 HepG2 human liver cancer cell, $IC_{50} = 6.5\mu\text{g/mL}$,
 control Doxorubicin hydrochloride, $IC_{50} = 0.9\mu\text{g/mL}$;
 Kato3 human gastric cancer cell, $IC_{50} = 5.3\mu\text{g/mL}$,
 control Doxorubicin hydrochloride, $IC_{50} = 1.7\mu\text{g/mL}$;
 SW620 human colorectal adenocarcinoma cell, $IC_{50} = 5.6\mu\text{g/mL}$,
 control Doxorubicin hydrochloride, $IC_{50} = 1.1\mu\text{g/mL}$).

In order to standardize abbreviations of cancer cells, such as BT474, CHAGO, etc., we defined and used 270 cancer cell codes (CCC) in the encyclopedia. For explanations of these codes, please see “Cancer Cell Codes in the Pharmacological Models” in Volume 1 of the encyclopedia.

By means of the formatted and structuralized methods, we normalized expressions of most pharmacological data appeared in the encyclopedia. For complete information of all 3367 normalized pharmacological activity terms, please see “Compound Pharmacological Activities Index” in Volume 6.

2. Plant Entry

One Species One Entry. Conventionally, a TCM name may include more than one plant species that have the same medical functions; therefore, a plant may not have an independent TCM entry and may be described under a TCM name. In this book, modern botany classification regulation is adopted and each plant species has an independent entry.

For example, traditional Chinese medicine DAN SHEN includes three species. They are equivalent in both effects and indications in TCM practice. In this encyclopedia, we defined three plant entries for each one of them.

T5680 *Salvia miltiorrhiza* (Lamiaceae); DAN SHEN; Danshen;
 T5681 *Salvia miltiorrhiza* f. *alba* (Lamiaceae); BAI HUA DAN SHEN; Whiteflower Danshen;
 T5688 *Salvia przewalskii* (Lamiaceae); GAN XI SHU WEI CAO; Przewalsk Sage.

With this method, we are able to smoothly link TCM information with that of modern botany.

Simplified Latin Name. For each TCM plant or TCM congener, four names are used in the encyclopedia. They are Latin name, English name, PIN-YIN name and Chinese

name, while the Chinese name only appears in TCM Plants PIN-YIN/Chinese Names Index” not in the main part of the book. For plant Latin name (e.g. scientific name), we use a simplified nomenclature, in which the nomenclator(s) information is not included. For example the Latin name of Chinese Angelica (DANG GUI) in the encyclopedia is “*Angelica sinensis*”, not “*Angelica sinensis* (Oliv.) Diels”.

Family Name. According to the “International Code of Botanical Nomenclature” (2007), the following eight authoritative family names are used in the encyclopedia. The family names of long usage, which are not used in are the encyclopedia, indicated in parentheses:

Apiaceae (Umbelliferae);
 Arecaceae (Palmae);
 Asteraceae (Compositae);
 Brassicaceae (Cruciferae);
 Clusiaceae (Guttiferae);
 Fabaceae (Leguminosae);
 Lamiaceae (Labiatae) and
 Poaceae (Gramineae).

PIN-YIN Name and Chinese Name. A simplified PIN-YIN name system is used in the encyclopedia. That is not to include the four-tone mark. However, there are exceptions. Among the thousand PIN-YIN names in the book, there are seven confusing cases. For each mistakable name, a superscript is attached to the name for indicating its four-tone in order to distinguish it from other plant species. For example: BAI MAO GEN⁽¹⁾ and BAI MAO GEN⁽⁴⁾ are two different TCM plants:

T3416 *Imperata cylindrica* var. *major* (Poaceae); BAI MAO GEN⁽¹⁾; Lalang Grass Rhizome.
 T3309 *Hydrastis canadensis* (Ranunculaceae); BAI MAO GEN⁽⁴⁾; Golden-seal.

Other six cases are:

T1449 *Cirsium japonicum* (Asteraceae); DA JI⁽⁴⁾; Japanese Thistle.
 T2608 *Euphorbia pekinensis* (Euphorbiaceae); DA JI⁽³⁾; Peking Euphorbia.
 T4124 *Matricaria chamomilla* [Syn. *Matricaria recutita*] (Asteraceae); MU⁽³⁾ JU; Mayweed.
 T0197 *Aegle marmelos* (Rutaceae); MU⁽⁴⁾ JU; Sepiaria.
 T1039 *Bruguiera gymnorrhiza* (Rhizophoraceae); MU LAN⁽³⁾; Common Bruguiera.
 T3423 *Indigofera tinctoria* (Fabaceae); MU LAN⁽²⁾; True Indigo.
 T6798 *Vitis vinifera* (Vitaceae); PU⁽²⁾ TAO; European Grape.
 T6267 *Syzygium jambos* (Myrtaceae); PU⁽³⁾ TAO; Roseapple.
 T2107 *Dendrobium nobile* (Orchidaceae); SHI HU⁽⁴⁾; Noble Dendrobium.
 T2646 *Evodia rutaecarpa* var. *officinalis* (Rutaceae); SHI HU⁽³⁾; Official Evodia.
 T1221 *Caryopteris divaricata* (Verbenaceae); YOU⁽²⁾; Divaricate Bluebeard.
 T1478 *Citrus grandis* (Rutaceae); YOU⁽⁴⁾; Pummelo.

Translation of TCM Effects Terms. In the Volume 5 of the encyclopedia, 6,926 TCM Plant entries list in alphabetical order of *Latin names*, including 2,923 original TCM plants (including few of animals)^[R01-R04] and 4,003 congeners (including a few of non-TCM medicinal plants). For each TCM plant, two most important features are traditional TCM effects and indications.

For preparing this encyclopedia, one of the greatest challenges is how to correctly translate each TCM term into correspondent English, so that Western readers are able to understand the true meaning of the content in the book. After comparing several translation systems, we decided to use Wiseman's terminological system^[R05-R07] for this book.

Wiseman's system obeys two most important principles: (1). The English-language terms should be faithful to the original concepts in traditional Chinese medicine. (2). The English-language TCM terminology should be flexible enough to allow modifications and extensions so that derivative effects can be described by a structuralized manner. For instance, the term "quicken blood" describes a general effect meaning "activating blood flow" or "promoting blood circulation". Elaboration of this term produces "quicken blood and transform stasis", "quicken blood and relieve pain", "quicken blood and regulate menstruation", and so on. The following illustrations are an example of the structuralized expressions related to the term "quicken blood":

quicken blood and disinhibit water
 quicken blood and dispel stasis
 quicken blood and dispel wind
 quicken blood and disperse swelling
 quicken blood and disperse welling abscess
 quicken blood and dissipate binds
 quicken blood and dissipate stasis
 quicken blood and free menstruation
 quicken blood and free network vessels
 quicken blood and free vessels
 quicken blood and joint bones
 quicken blood and move *qi*
 quicken blood and move stasis
 quicken blood and nourish heart
 quicken blood and promote milk
 quicken blood and quiet spirit
 quicken blood and regulate menstruation
 quicken blood and relieve pain
 quicken blood and resolve toxin
 quicken blood and settle pain
 quicken blood and soothe sinews
 quicken blood and stanch bleeding
 quicken blood and strengthen sinews
 quicken blood and transform stasis
 quicken blood and vessels

Translation of TCM Indications Terms. Based on Wiseman's terminological system, "Chinese-English Dictionary of Traditional Chinese Medicine" compiled by Guangzhen Gao *et al.*^[R08], "An English-Chinese Medical Dictionary, Second Edition" compiled by Weiyi Chen *et al.*^[R09], and other reference dictionaries, we defined over 3,800 standard indication terms for translating TCM indications terms from Chinese to English. Among the 3,800 terms, 2,526 terms are actually used in the encyclopedia, in which 85% terms are traditional TCM terms and the rest 15% are common modern medicinal terms. Some typical examples of traditional TCM indication terms are as follows:

yin vacuity internal heat
yin vacuity lung dryness
yin vacuity tidal fever
 chest impediment
 chest impediment and heart pain
 chest impediment and heart pain over back
 chest oppression and pain
 chest oppression with breathe hard
 distention pain in rib-side
 distention pain in stomach duct
 distention pain in stomach duct and abdomen
 externally contracted summer heat-damp
 externally contracted wind evil
 externally contracted wind-cold
 externally contracted wind-heat
 knocks and falls
 sores
 sores clove boil
 swelling of sores and boils
 sore scab and lichen
 toxin swelling of sores

In summary, this encyclopedia provides a collection of more than 23,000 TCM chemical components isolated from natural resources and a large number of pharmacological activity data of these components. It may be used not only as a handbook to look for structures and pharmacological activities of TCM chemical components and source plant information, but also a fundamental platform for studying TCM with a systematic and integrative approach.

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(English translation tools)

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(Names of plant, bacteria, fungus)

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How to Use the Books

1. Three Kinds of “Many to Many” Relationships

To help readers effectively search and use of the books, authors strongly suggest readers being familiar with the structure of the encyclopedia and certain important linkers or pointers between different data sets.

Firstly, in order to avoid confusing cases, please keep in mind the following three features of the book:

(a) In the encyclopedia, all of pharmacological data belong to compounds, not to plants. In other words, the encyclopedia doesn't include plants' pharmacological data.

(b) All effect and indication terms belong to TCM plants, not to compounds. And almost all of effect terms as well as 85% indication terms are pure Chinese traditional concepts.

(c) In the encyclopedia, there are three kinds of “many to many” relationships: (i), compounds to plants, which is the most important relationship. (ii), pharmacological data to compounds in the molecular level only. (iii), plants to effects/indications in the species level.

Pharm. data ↔ Compound 1		Plant T0001 ↔ effects, indications
Pharm. data ↔ Compound 2		Plant T0002 ↔ effects, indications
Pharm. data ↔ Compound 3	↔	Plant T0003 ↔ effects, indications
.....	
Pharm. data ↔ Compound 23032		Plant T6925 ↔ effects, indications
Pharm. data ↔ Compound 23033		Plant T6926 ↔ effects, indications
(Molecular level)		(Species level)

Sketch Map of Three Important “Many to Many” Relationships

2. Seven Useful Indexes

In Volume 6, there are seven indexes for data searching.

The indexes 1-3 are tools to search compounds from different starting-points:

Index 1 (Compound Pharmacological Activity Index) links pharmacological terms

with related compound codes. For example, if there is a question as:

“Which compounds have *in vitro* cytotoxic activity against human breast cancer cells?”

From the index 1, the answer can easily be obtained as follows:

Cytotoxic, BC hmn breast cancer cells 24, 349, 526, 2244, 3416, 3429, 3708, 4775, 5095, 6759, 6759, 6759, 12453, 12454, 15494, 15495, 18515, 20671.

Cytotoxic, BC-1 hmn breast cancer cells 1277, 2260, 5064, 5327, 6759, 6759, 8220, 8221, 8222, 8235, 10250, 10297, 10511, 11353, 13489, 13490, 13491, 13492, 13493, 13494, 13495, 15919, 17008, 18866, 20809.

Cytotoxic, BCA-1 hmn breast cancer cells 6759, 13468, 13469, 13470, 15739.

Cytotoxic, Bcap37 hmn breast cancer cells 843, 11392, 13123, 16183, 17717, 18499.

Then, from compounds code numbers, one can get detailed data for each compound.

Index 2 (Compound Molecular Formula Index) connects a molecular formula to its all isomers. For example, there are five isomers with formula $C_{45}H_{76}O_{18}$:

$C_{45}H_{76}O_{18}$

Abutiloside F, 40

Asp-IV, 1905

Asp-V, 1906

Trigoneoside IIIa, 21669

Trigoneoside IIIb, 21670

Index 3 (Compound Synonym Index) is useful for searching a compound from a known name. A strong suggestion to readers is that when searching a compound from a known name, to search twice probably is necessary: firstly from entry title in the encyclopedia text and then from the index 3.

The indexes 4–7 are tools to search TCM plants:

Index 4 (TCM Plant English Name Index) links a Plant English Name to other names of the plant, for example:

Chinese Angelica = T0495 *Angelica sinensis* = DANG GUI

Siberian Phlojodicarpus = T4804 *Phlojodicarpus sibiricus* = ZHANG GUO QIN

Dahurian Angelica = T0478 *Angelica dahurica* [Syn. *Angelica porphyrocaulis*] = BAI ZHI

Gigantic Angelica = T0483 *Angelica gigas* = CHAO XIAN DANG GUI

Narrowleaf Angelica = T0476 *Angelica anomala* = XIA YE DANG GUI

Index 5 (TCM Plant PIN-YIN and Chinese Name Index) links PIN-YIN name to Latin name and/or English name, for example:

BAI HUA QIAN HU = T4768 *Peucedanum praeruptorum* = Whiteflower Hogfennel

BAI HUA SHE GAN = T3457 *Iris dichotoma* = Vesper Iris

BAI HUA SHE SHE CAO = T4485 *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] = Spreading Hedyitis

Index 6 (TCM Plant Traditional Effects Index) and **Index 7** (TCM Plant Traditional Indications Index) connect specific effect and/or indication to related plants.

For example, to search all plants with effect “nourish heart and quiet spirit”, the result is:

nourish heart and quiet spirit:

T0944 *Biota orientalis* [Syn. *Thuja orientalis*; *Platyclusus orientalis*],
 T1292 *Celastrus orbiculatus* [Syn. *Celastrus articulatus*],
 T1381 *Choerospondias axillaris*,
 T4194 *Menyanthes trifoliata*,
 T4400 *Nelumbo nucifera*,
 T4902 *Pimpinella thelungiana*,
 T5108 *Polygonum multiflorum*,
 T5497 *Rhodiola kirilowii*,
 T5701 *Salvia yunnanensis*.

If searching all plants with indication “angina pectoris” (a modern medicinal term), “externally contracted wind-cold” (a TCM term), and “externally contracted wind-heat” (a TCM term), you will obtain the following results:

angina pectoris: T1215 *Carthamus tinctorius*, T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1775 *Crataegus pinnatifida*, T1778 *Crataegus pinnatifida* var. *major*, T2274 *Dryobalanops aromatica*, T2389 *Epimedium acuminatum*, T2390 *Epimedium brevicornum*, T2392 *Epimedium davidii*, T2394 *Epimedium elongatum*, T2398 *Epimedium koreanum*, T2401 *Epimedium pubescens*, T2402 *Epimedium sagittatum*, T2404 *Epimedium sutchuenense*, T2406 *Epimedium wushanense*, T2846 *Ganoderma japonicum* [Syn. *Ganoderma sinense*], T2848 *Ganoderma lucidum*, T2964 *Ginkgo biloba*, T3388 *Ilex chinensis* [Syn. *Ilex purpurea*], T3396 *Ilex pubescens*, T3397 *Ilex pubescens* var. *glaber*, T3875 *Liriope spicata* var. *prolifera*, T3925 *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], T3926 *Loropetalum chinense*, T4303 *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*, T4507 *Ophiopogon japonicus*, T4608 *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], T4953 *Piper longum*, T5312 *Pueraria edulis*, T5313 *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], T5316 *Pueraria omeiensis*, T5318 *Pueraria phaseoloides*, T5320 *Pueraria thomsonii*, T5680 *Salvia miltiorrhiza*, T5681 *Salvia miltiorrhiza* f. *alba*, T5688 *Salvia przewalskii*, T6510 *Trichosanthes kirilowii*, T6513 *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], T6584 *Typha angustata*, T6585 *Typha angustifolia*, T6587 *Typha latifolia*.

externally contracted wind-cold: T4039 *Magnolia grandiflora*, T4445 *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], T4446 *Notopterygium incisum*, T4956 *Piper mullesua*, T5727 *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*].

externally contracted wind-heat: T0480 *Angelica decursiva* [Syn. *Peucedanum decursivum*], T1395 *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], T1933 *Cyclea sutchuenensis*, T2798 *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], T3819 *Ligusticum brachylobum*, T4413 *Nepeta cataria*, T4761 *Peucedanum longshengens*, T4768 *Peucedanum praeruptorum*, T4769 *Peucedanum rubricaulis*, T6791 *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*], T6793 *Vitex trifolia*.

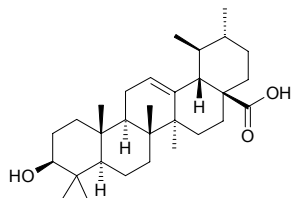
3. Data Survey Example of Compound Entry

At last, we would like to take Ursolic acid (compound code 22270 in the books) as a data survey example. Under this compound there are a quite number of data as follows:

22270 Ursolic acid

β -Ursolic acid [77-52-1] C₃₀H₄₈O₃ (456.72).

White solid powder (chloroform–methanol), mp 298~294°C, 265~267°C.

**Pharm: (27 items)**

Cytotoxic (KB, ED₅₀ > 25µg/mL, control Doxorubicin, ED₅₀ = 0.12µg/mL; Hep3B, ED₅₀ > 25µg/mL, control Doxorubicin, ED₅₀ = 0.14µg/mL; Colon205, ED₅₀ > 25µg/mL, control Doxorubicin, ED₅₀ = 0.10µg/mL; HeLa, ED₅₀ > 25µg/mL, control Doxorubicin, ED₅₀ = 0.11µg/mL)^[4369];

cytotoxic (*in vitro*, HONE-1 cell, IC₅₀ = (8.8±1.5)µmol/L, control Etoposide, IC₅₀ = (0.5±0.2)µmol/L, *cis*-Platin, IC₅₀ = (3.2±0.5)µmol/L; KB cell, IC₅₀ = (8.2±2.7)µmol/L, Etoposide, IC₅₀ = (0.9±0.3)µmol/L, *cis*-Platin, IC₅₀ = (4.4±0.9)µmol/L; HT29 cell, IC₅₀ = (4.7±1.5)µmol/L, Etoposide, IC₅₀ = (2.4±0.5)µmol/L, *cis*-Platin, IC₅₀ = (5.7±1.1)µmol/L)^[5254];

antineoplastic (liver cancer cells *in vitro*, mus ascites carcinoma *in vivo*, life was prolonged);

antibacterial (*Escherichia coli*, IZD = 13~15mm, control Chloramphenicol, IZD = 16~20mm, control DMSO (4%), IZD < 10mm; *Staphylococcus aureus*, IZD = 10~12mm, control Chloramphenicol, IZD = 16~20mm, control DMSO (4%), IZD < 10mm; *Bacillus subtilis*, IZD = 13~15mm; control Chloramphenicol, IZD = 16~20mm, control DMSO (4%), IZD < 10mm)^[5315];

antibacterial (*Staphylococcus* spp. *in vitro*, MIC = 300µg/mL, gram-positive bacteria *in vitro*, MIC = 50~400µg/mL, gram-negative bacteria *in vitro*, MIC = 200~800µg/mL, microzyme *in vitro*, MIC = 100~700µg/mL);

antitubercular (*Mycobacterium tuberculosis*, MIC = 41.9µg/mL, cytotoxic, Vero cells, IC₅₀ = 46.5µg/mL, SI (IC₅₀/MIC) = 1.11, positive control Rifampin, MIC = 0.03µg/mL, IC₅₀ = 98.3µg/mL, SI = 3277)^[4986];

anticonvulsant (induced by corazol);

anti-inflammatory (rat, induced by embedding woolball, 12.5mg/(kg·d) ip, 7 days, effective);

anti-inflammatory (*in vitro*, murine macrophage RAW264.7 Cells, inhibits LPS-induced NO and PGE₂ release)^[5016];

COX-2 enzyme selective inhibitor (mean IC₅₀ of isomers = 130µmol/L)^[4415];

COX-2 enzyme inhibitor (PMA-treated hmn mammary and oral epithelial cells, molecular mechanisms is mediated by a cAMP response element in the COX-2 promoter, associated with inhibition of protein kinases)^[4415];

antipyretic (clearly reduces normal body temperature of rat);

reduces serum transaminase (animal, 100mg/kg);

antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, MLC = 6.2µmol/L, control Gentian violet, MLC = 6.2µmol/L)^[2579];

mucin release stimulator (acts directly on airway mucin-secreting cells, increased mucin release (40~50)% above control at the highest concentrations 0.00001~0.001mol/L, possible use to treatment of chronic airway diseases)^[4084];

platelet aggregation inhibitor (2~5mg/mL collagen-induced, IC₅₀ = (511±4)µmol/L, control ASA, IC₅₀ = (420±3)µmol/L; 1~4µmol/L epinephrine-induced with 0.8~1.0mg/mL collagen, IC₅₀ = (82.6±2.8)µmol/L, ASA, IC₅₀ = (53.0±4.5)µmol/L; 10~40µmol/L Sodium arachidonate-induced with 0.8~1.0mg/mL collagen, IC₅₀ =

(669±12)μmol/L, ASA, IC₅₀ = (66.0±2.1)μmol/L; 1~5μmol/L PGH₂/TXA₂ receptor agonist U46619-induced with 0.8~1.0mg/mL collagen, IC₅₀ > 1000μmol/L, ASA, IC₅₀ = (340±12)μmol/L)^[4994];

tissue factor inhibitor inactive^[5387];

antirheumatic^[5341];

anti-diabetic^[5341];

antiulcer^[5341];

hypolipidemic^[5341];

anti-atherosclerotic^[5341];

anti-HIV^[5341];

TGF-β1 antagonist (inhibits the binding of ¹²⁵I-TGF-β1 to its receptor in Balb/c 3T3 cell, IC₅₀ = (6.9±0.8)μmol/L, suggests TGF-β1 antagonistic activity is responsible, at least in part, for therapeutic efficacy of *Clerodendranthus spicatus* to treat humans with renal disease)^[5496];

glucocorticoid (enhances glycogen in liver, reduces glycogen in heart and striated muscles);

LD₅₀ (mus, ip) = 680mg/kg.

Sources: (52 species)

BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] (whole herb: mean content of 16 origins = 0.211%)^[5508];

BI LU GOU TENG *Uncaria tomentosa*,

CHE QIAN *Plantago asiatica* (whole herb: content scope = 0.28%~2.32%, mean content = 0.97%)^[5508];

CHI NAN *Syzygium buxifolium*,

CHONG YA YAO *Isodon ternifolius*,

CI WU JIA YE *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*],

DA CHE QIAN *Plantago major*,

DA ZAO *Ziziphus jujuba* (ripe fruit: mean content = 0.016%)^[5508],

DAN SHEN *Salvia miltiorrhiza*,

DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield = 0.0064%dw),

DONG LING CAO *Rabdosia rubescens* (whole herb: mean content = 0.414%^[5508]; leaf: mean content = 0.573%)^[5508];

DU ZHONG *Eucommia ulmoides*,

DUAN TING SHAN MAI DONG *Liriope muscari* (tuber),

GOU GU YE *Ilex cornuta* (leaf: mean content = 0.96%)^[5508],

GUANG JING QIAN CAO *Rubia wallichiana* (stem),

HONG HUA LU TI CAO *Pyrola incarnata* (whole herb: content = 2.06%)^[5508],

HU BEI SHAN ZHA *Crataegus hupehensis* (dried ripe fruit: mean content = 0.455%),

JIAN YE TOU WU GEN *Ligularia sagitta*,

LIAN QIAN CAO *Glechoma lungituba*,

LIAN QIAO *Forsythia suspensa*,

LIU QIU SHE GEN CAO *Ophiorrhiza liukiuensis* (whole herb),

MA BIAN CAO *Verbena officinalis* (whole herb: mean content of 5 batch samples = 0.227%)^[5508],

MAO CAO LONG *Ludwigia octovalvis* (whole herb: yield = 0.00012%dw),

MAO PAO TONG *Paulownia tomentosa*,

MAO XU CAO *Clerodendranthus spicatus*,

MU GUA *Chaenomeles sinensis*,

NV ZHEN ZI *Ligustrum lucidum*,

PI PA YE *Eriobotrya japonica* (dried leaf: mean content = 0.677%)^[5508],

PI PA YE *Eriobotrya japonica* (stem and leaf),

PING CHE QIAN *Plantago depressa* (whole herb: mean content = 0.276%)^[5508],

RI BEN LU TI CAO *Pyrola japonica*,

RONG SHU *Ficus microcarpa* (aerial root),
 SHAN DI XIANG CHA CAI *Isodon oresbia*,
 SHAN LI HONG *Crataegus pinnatifida* var. *major*,
 SHAN ZHA *Crataegus pinnatifida* (fruit: content scope = 0.31%~0.56%)^[5501],
 SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*] (dried ripe fruit: content
 scope = 0.24%~0.32%)^[5501], mean content = 0.263%)^[5508],
 SHI NAN *Photinia serrulata* (leaf: mean content = 1.50%)^[5508],
 SHI SHENG BIAN LEI *Gentianopsis paludosa*,
 SHI YE *Diospyros kaki* (dried leaf: mean content = 0.784%)^[5508],
 SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root),
 SUAN ZAO *Ziziphus jujuba* var. *spinosa* (ripe fruit: content = 0.030%)^[5508],
 SUO YANG *Cynomorium songaricum* (fleshy stem: content = 0.78%)^[5508],
 WEI LING CAI *Potentilla chinensis*,
 WU GENG WU JIA PI *Acanthopanax sessiliflorus* (fruit),
 XIA KU CAO *Prunella vulgaris* (dried spike: content = 0.780%)^[5508],
 YANG MEI SHU PI *Myrica rubra* (bark: content = 0.027%),
 YE SHAN ZHA *Crataegus cuneata* (dried ripe fruit: mean content of 3 origins =
 0.399%)^[5508],
 YI LANG QING LAN *Dracocephalum kotschyi*,
 ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*] (dried ripe fruit: mean content =
 0.041%)^[5508],
 ZHOU YE LU TI CAO *Pyrola rugosa* (whole herb: content = 3.00%)^[5508],
Cussonia bancoensis,
 Occurs in many plants.

Ref: 4, 367, 428, 454, 501, 592, 595, 600, 658, 660, 2579, 3005, 3061, 4084, 4163, 4369,
 4415, 4527, 4767, 4772, 4986, 4994, 5016, 5254, 5315, 5382, 5387, 5341, 5496, 5501,
 5508.

Abbreviations and Symbols

12(S)-HETE	12(S)-Hydroxy-5,8,10,14-EicosaTetraEnoic acid	cAMP-PDE	cAMP-phosphodiesterase
¹²⁵ I-TGF- β 1	¹²⁵ I-Transforming Growth Factor- β 1	CAPE	Caffeic Acid Phenethyl Ester
5-FU	5-FluoroUracil	CB	cytochalasin B
5-HT	5-HydroxyTryptamine (serotonin)	CC	macrophage inflammatory protein (MIP-1 β), monocyte chemotactic protein (MCP-2), and C lymphotactin (ltn) (a chemokine family)
95%FL (=CI ₉₅)	95% Fiducial Limits (=95% Confidence Interval)	CC ₀	Minimum cytotoxic concentration
AA	Arachidonic Acid	CC ₅₀	IC ₅₀ of cytotoxicity (concentration of the 50% cytotoxic effect)
AAPH	2,2'-Azo-bis-(2-AmidinoPropane)-diHydrochloride	CCR1	chemokine receptor 1
ABTS ⁺	2,2'-Azino-Bis-(3-ethylbenzThiazoline 6-Sulphonic acid), radical	CD	concentration required to double enzyme (induction) activity
ACAT	Acyl-CoA Cholesterol acyltransferase	CD	Concentration required to double quinone reductase (induction) activity
ACE	Angiotensin Converting Enzyme	CD ₅₀	medium Convulsive Dose
Ach	Acetylcholine	cGMP	cyclic guanosine monophosphate
AChE	Acetylcholinesterase	cGMP-PDE	cGMP-phosphodiesterase
ACTH	AdrenoCorticoTropic Hormone	CGN	<i>cis</i> -Golgi network
AD	Alzheimer's disease	CGRP	Calcitonin gene-related peptide
ADM	adriamycin	CHO	Chinese hamster ovarian
ADP	adenosine diphosphate	CI	Chemopreventive index (=IC ₅₀ /CD)
AG	aminoguanidine	CI ₉₅ (=95%FL)	95% Confidence Interval (=95% Fiducial Limits)
AggRt	aggregation rate	CIC	complete inhibiting concentration
AIDS	acquired immunodeficiency syndrome	CIMC	complete inhibiting minimum concentration
ALS	amyotrophic lateral sclerosis	CINC-1	cytokine-induced neutrophil chemoattractant 1
ALT	alanine aminotransferase	CMV	Cytomegalovirus
AMP	adenosine monophosphate	CNQX	6-Cyano-7-nitroquinoxaline-2,3-dione (non-NMDA receptor antagonist)
AMV	avian myeloblastosis virus	CNS	central nervous system
AP	angina pectoris	ConA	concanavalin A
AP-1	activator protein-1	COX	cyclooxygenase
APN	Aminopeptidase N	COX-1	cyclooxygenase-1
APV	<i>dl</i> -2-Amino-5-phosphonovaleric acid (a competitive antagonist of the NMDA receptor)	COX-2	cyclooxygenase-2
aq.	aqueous solution	CPT	camptothecin
ASA	AcetylSalicylic Acid	CRF	corticotrophin releasing factor
AST	aspartate transaminase; aspartate aminotransferase	CRH-1	corticotrophin releasing hormone-1
AT-III	Antithrombase-III	CRP	C-reactive protein
ATPase	Adenosine triphosphatase	CV-3988	<i>rac</i> -3-(<i>N</i> -octadecylcarbomoyloxy)-2-methoxypropyl 2-thiazoliethyl phosphate
AZT	3'-azido-3'-deoxythymidine	CVS	cardiac vascular system
BACE1	β -Secretase	CXC	Stromal cell-derived factor (SDF)-1 α and IL-8 (a chemokine)
BChE	Butyrylcholinesterase	CYP1A	Cytochrome P450 1A
bFGF	basic Fibroblast Growth Factor	CYP2D6	Cytochrome P450 2D6
BHA	Butylated HydroxyAnisole; 3- <i>tert</i> -Butyl-4-HydroxyAnisole	CYP3A4	Cytochrome P450 3A4
BHT	Butylated HydroxyToluene	d	day
bid	bis in die (Latin)	DCFH	2',7'-dichlorodihydrofluorescein dye
BLM	bleomycin	DDDP	DNA-dependent DNA polymerase
bp	boiling point	dec	decomposition
BST	Brine Shrimp lethality bioassay = Brine Shrimp Test	<i>D</i> -GalN	<i>D</i> -galactosamine
<i>c</i>	concentration		
C5a	complement 5a		
cAMP	cyclic adenosine monophosphate		

DGAT	Diacylglycerol acyltransferase	GSH	Glutathione; <i>N</i> -(<i>N</i> - <i>L</i> - γ -Glutamyl- <i>L</i> -cysteinyl)glycine
dil.	dilute	GTP	Guanosine TriPhosphate
DIZ	Diameter of Inhibitory Zone	GVHR	Graft-Versus-HostReaction
DMBA	9,10-dimethyl-1,2-benzanthracene (carcinogen); 7,12-dimethylbenz[<i>a</i>]anthracene (carcinogen)	h	hour
DMDP	(2 <i>R</i> ,3 <i>R</i> ,4 <i>R</i> ,5 <i>R</i>)-2,5-DihydroxyMethyl-3,4-Dihydroxy-Pyrrolidine	HAD	hmn immunodeficiency virus associated dementia
DMSO	DiMethyl SulphOxide	HBeAg	hmn type B Hepatitis, e Antigen
DNA	deoxyribonucleic acid	HBsAg	hmn type B Hepatitis, Surface Antigen
DNJ	1-Deoxynojirimucin (one kind of polyhydroxy alkaloid, glucosidase inhibitor)	HBV	Hepatitis B Virus
DOX	doxorubicin	HC ₅₀	medium Hemolytic Concentration
DPI	Diphenyleneiodonium	HCoV-229E	hmn coronavirus strain 229E
DPPH	1,1-DiPhenyl-2-PicrylHydrazyl free radical	HD	Huntington's disease
DS8000	Dextran sulphate, prepared from average Mr 8000	HER rat	Hypertensive Essential Rat
DSCG	DiSodium ChromoGlycate (anti-allergic agent)	HIV	hmn immunodeficiency virus
dw	dried weight	HIV-1	hmn immunodeficiency virus type 1
E.A.	Enzyme Activity	HIV-1 IN	hmn immunodeficiency virus type 1 integrase
EBV-EA	Epstein-Barr Virus Early Antigen	HIV-1 RT	hmn immunodeficiency virus type 1 reverse transcriptase
EC	Effective Concentration	HIV-RT	hmn immunodeficiency virus reverse transcriptase
EC ₅₀	medium Effective Concentration	hmn	human
ED	Effective Dose	HSV-1	herpes simplex virus 1
ED ₂₅	Effective Dose for 25%	HSV-2	herpes simplex virus 2
ED ₅₀	medium Effective Dose (in some cases for the medium Effective Concentration)	HVA	homovanillic acid
EGCG (EGCg)	(-)-Epigallocatechin gallate	hydroxyl radical	OH [•]
EGF	Epidermal Growth Factor (it protects MPP ⁺ -induced cell death)	ia	intra-arterial injection
EGFR	Epidermal Growth Factor Receptor	IAA	indole-3-acetic acid
ELAM-1	Endothelial-Leukocyte Adhesion Molecule-1	IC	Inhibiting Concentration
ELISA	Enzyme-Linked ImmunoSorbent Assay	IC ₅₀	median Inhibiting Concentration
eotaxin	eosinophilous cytotoxin	IC ₁₀₀	Absolute Inhibiting Concentration
ERK	Extracellular signal-Regulated Kinase	ICAM-1	Intercellular Cell Adhesion Molecule-1
ET	experimental times	ICR	Imprinting Control Region mouse
FAG	Fagomine (one kind of polyhydroxy alkaloid, glucosidase inhibitor)	id	intradermal injection
FCA	Freund's complete adjuvant	ID	Inhibiting Dose
FI	Feeding Index (= ((C-T)/(C+T)×100)	ID ₅₀	Median Inhibiting Dose
Flu-A	influenza virus type A	IFN	interferon
fMLP	<i>N</i> -formyl- <i>L</i> -Methionyl- <i>L</i> -Leucyl- <i>L</i> -Phenylalanine	IFN- γ	Interferon- γ
fp	freezing point	IgE	Immunoglobulin E
FR ₅₀	Feeding ratio when the consumed area of control disc (CCD) is 50% [FR = CTD(consumed area of treated disc)/CCD]	IgG	Immunoglobulin G
fw	fresh weight	IL	interleukin
G6PD	Glucose-6-Phosphate Dehydrogenase	IL-1	Interleukin-1
GABA	γ -aminobutyric acid	IL-1 α	interleukin-1 α
GaIN	galactosamine	IL-1 β	interleukin-1 β
GI	growth inhibition	IL-2	Interleukin-2
GI ₅₀	the concentration of sample necessary to inhibit the growth to 50% of the control	IL-4	Interleukin-4
Glu	glutamate	IL-6	Interleukin-6
GOT	Glutamate-Oxaloacetate Transaminase	IL-8	Interleukin-8
Gp	Gastro protective effect	IL-10	Interleukin-10
gpg	guinea pig	IL-12	Interleukin-12
GPT	GlutamicPyruvic Transaminase	im	intramuscular injection
GRO	Growth-Related Oncogene	<i>in vitro</i>	<i>in vitro</i>
		<i>in vivo</i>	<i>in vivo</i>
		Indo	indomethacin
		iNOS	inducible Nitric Oxide Synthase
		InRt	inhibitive rate
		ip	intraperitoneal injection

i.t.	intrathecal injection	MMP	Matrix MetalloProteinases
iv	intravenous injection	MMP-2	Matrix MetalloProteinase-2
IZA	Inhibition Zone Area (mm ²)	mp	melting point
IZD	Inhibition Zone Diameter (mm)	mPGES	microsomal ProstaGlandin E Synthase
J774.A1	murine monocyte/macrophage cell J774.A1	MPP+	1-methyl-4-phenylpyridinium ion (neurotoxin)
JNK	c-Jun NH ₂ -terminal kinase	MRSA	Methicillin-Resistant <i>Staphylococcus aureus</i>
KD ₅₀	Dose required to Knock down 50% of the population of insects	MSSA	Methicillin-Sensitive <i>Staphylococcus aureus</i>
LC ₅₀	concentration at which only 50% of the cell are viable	MTC	Minimal Toxic Concentration
LC ₅₀	concentration of inhibiting luminous intensity 50%	MTT	A Cytotoxicity measurement method (tetrazolium-based colorimetric assay used for cytotoxicity bioassay, see Rubinstein L. V., et al., <i>Nat. Cancer Inst.</i> , 82, 1113-1118, 1990)
LCIC	Lowest Complete Inhibition Concentration	mus	mouse
LD	Lethal Dose	<i>n</i>	number of parallel experiments
LD ₁₀₀	100% Lethal Dose	nAChR	neuronal nicotinic AcetylCholine Receptor
LD ₅₀	medium Lethal Dose	NADH	reduced nicotinamide adenine dinucleotide
LDH	lactate dehydrogenase	NADPH	cytochrome C reductase
LDL	Low Density Lipoprotein	NCCLS	A standard antibacterial activity test method (see Wayne P. A., "National Committee for Clinical Laboratory Standards Performance Standards for Antimicrobial Disk Susceptibility Tests," 6th ed., Approved standards M2-A6. NCCLS, 1997)
L-NA	N ^o -L-nitroarginine	NDGA	Nordihydroguaiaretic acid
L-NMMA	N ^G -monomethyl-L-arginine	NEP	Neutral EndoPeptidase
LOX	Lipoxygenase	NF	Nuclear Factor
LPO	lipid peroxidation	NF-κB	Nuclear Factor κB
LPS	lipopolysaccharide	NFAT	Nuclear Factor of Activated T cell
LTB ₄	Leukotriene B ₄	NGF	Nerve Growth Factor
LTC ₄	Leukotriene C ₄	NMDA	N-methyl-D-aspartate
LTD ₄	Leukotriene D ₄	NO	nitric oxide
MA	maytenfolic acid	non-oral	paraoral
MA	maslinic acid	NOR1	(+/-)-(E)-4-methyl-2-[(E)-hydroxyimino]-5-nitro-6-methoxy-3-hexenamid
MA	minimal amount	NOS-2	Nitric oxide synthase type-2
MABA	Microplate Alamar Blue Assay	OCIF	OsteoClastogenesis-Inhibitory Factor
MAC-1	integrin MAC-1	oral	oral
MAO-A	Monoamine oxidase A	OVA	ovalbumin
MAO-B	Monoamine oxidase B	oxazolone	oxazolone
MAPK	Mitogen-Activated Protein Kinase	OZ	opsonized zymosan
MCC	Minimum Cytocidal Concentration	P450	Cytochrome P450
MCP	Monocyte Chemotactic Protein	PAF	Platelet Activating Factor
MCTHBE	Minimum Concentration for Total Haemolysis of Bovine Erythrocytes (µg/mL)	PAF	Platelet Aggregation Factor
MDA	Methylene Dihydroxy Amphetamine	PAI-1	Plasminogen Activator Inhibitor type 1
MDA	Malondialdehyde	Para-3 (=PIV3)	Parainfluenza type 3 virus
MDR	MultiDrug Resistance	PBMC	hmN Peripheral Blood Mononuclear Cell
MED	Minimal Effective Dose	PCA reaction	Passive Cutaneous Anaphylaxis reaction
MFC	Minimal Fungicidal Concentration	PD	Parkinson's Disease
MIA	Minimal Inhibitory Amounts (µg/disc)	PD	a cytotoxic model
MIC	Minimum Inhibitory Concentration	pD2 (=pEC ₅₀)	negative logarithm (-logM) of the concentration required to produce 50% of the maximum response (EC ₅₀)
MIC ₈₀	Minimal Inhibitive Concentration for 80%	PDE	phosphodiesterase
MIC ₉₀	Minimal Inhibitive Concentration for 90%	PDTC	pyrrolidine dithiocarbamate
min	minute	PEBP2αA	polyoma enhancer binding protein 2αA
MIP-1α/β	macrophage inflammatory protein	pEC ₅₀	negative logarithm (-logM) of the concentration required to produce 50% of the maximum response (EC ₅₀)
MIQ	Minimum inhibitory quantity (µg)		
MK-801	dizocipline maleate (a non-competitive antagonist of the NMDA receptor)		
MLC	Minimum Lethal Concentration		
MLD	Minimum Lethal Dose		
MMDC	Minimal Morphological Deformation Concentration		
MMOC	Mouse Mammary Organ Culture model		

PEG	PolyEthylene Glycol	Singlet oxygen	$^1\text{O}_2$
PEP	Prolyl endopeptidase (a serine protease)	SIZ	sulfisoxazole
pet. ether	petroleum ether	SNP	sodium nitroprusside
PFTase	farnesylprenyltransferase	SOD	Superoxide dismutase
PGD ₂	prostaglandin D ₂	sp.	species
PGE ₂	prostaglandin E ₂	SP-A	pulmonary surfactant Protein A
PGF _{2α}	prostaglandin F _{2α}	spp.	species (plural)
PGH ₂	prostaglandin H ₂	SRSA	Slow-Reacting Substance of Anaphylaxis
PGI ₂	prostacyclin (prostaglandin I ₂)	StRt	Stimulatory Rate
PHA	phytohemagglutinin	STZ	streptozotocin
Phe	Phenylephrine	superoxide anion	$\text{O}_2^{\bullet-}$
pIC ₅₀	negative logarithm (-logM) of IC ₅₀	SuRt	survival rate
PK	protein kinase	Syn.(= ‡)	Synonym
PKC	protein kinase C	T/C	survival ratio
PLA ₂	phospholipase A ₂	TACE	α -Secretase (a serine protease)
PMA (=TPA)	Phorbol-12-Myristate-13-Acetate	TBARS	ThioBarbituric Acid Reactive Substance assay
PMNs	polymorphonuclear cell	TC ₅₀	50% cytoToxic Concentration
pNPPase	<i>p</i> -nitrophenylphosphate enzyme	TCM	Traditional Chinese Medicines
POA	pentacyclic oxindole alkaloids	TFP	Trifluoperazine (calmodulin antagonist)
PPase1	Protein serine/threonine Phosphatase	TGF- β_1	Transforming Growth Factor- β_1
PRA	Plaque Reduction Assay	TGI	Total Growth Inhibition, concentration at which no growth was observed
PTH	parathyroid hormone	TI	Therapeutic Index (=IC ₅₀ /EC ₅₀)
PTN	parthenolide	TNF- α	Tumor Necrosis Factor- α
PTP1B	Protein Tyrosine Phosphatase 1B	TOA	tetracyclic oxindole alkaloids
QR	quinone reductase	topo II	DNA topoisomerase II
RA	rheumatoid arthritis	TP	Thymidine phosphorylase
Raji	EBV-transformed B cell line	tPA	tissue Plasminogen Activator
rat	white rat	TPA (=PMA)	12- <i>O</i> -tetradecanoyl phorbol 13-acetate
rbt	rabbit	TrkA	proto-oncogene TrkA
RDDP	RNA-dependent DNA polymerase	TXA ₂	thromboxane A ₂
RDS	Respiratory Distress Syndrome	TXB ₂	thromboxane B ₂
rel-InRt	relative inhibitive rate (taking the control compound as 100%)	UDP-MurNac	UDP- <i>N</i> -acetylmuramic acid
RM	Relative Mobility	VCAM-1	Vascular Cell Adhesion Molecule-1
RNA	ribonucleic acid	VCR	vincristine
RNase H	inherent ribonuclease H	VEGF	Vascular Endothelial Growth Factor
ROS	reactive oxygen species (they are involved in the genesis of various cancers, arteriosclerosis, rheumatism and ageing)	Veraguensin	veraguensin
RSV	Respiratory Syncytial Virus	VHR DS-PTPase	VHR Dual-Specificity Protein Tyrosine Phosphatase
RT	Reverse Transcriptase	VHR protein	Vaccinia open reading-frame H1-Related protein phosphatase
RT-PCR	reverse-transcribed polymerase chain reaction	VP-16	A positive control for cytotoxic assay (Sigma product)
sALT	serum alanine transaminase	VRE	Vancomycin-Resistant <i>Enterococci</i> sp
sAST	serum aspartate transaminase	VSE	Vancomycin-Sensitive <i>Enterococci</i> sp
sc	subcutaneous injection	VSV	Vesicular Stomatitis Virus
SC ₅₀	Half-maximal radical Scavenging Concentration	ww	wet weight
SC ₅₀	50% Scavenging Concentration	XTT	sodium 3'-[1-(phenylaminocarbonyl)-3,4-tetrazolium] bis(4-methoxy-6-nitrobenzene)sulfonic acid
ScRt	scavenging rate	†	homonym mark
SDF	Stromal cell-Derived Factor	‡ (=Syn.)	synonym mark
SGOT	serum Glutamic Oxalacetic Transaminase	*	the name is given by the authors of the books
SGPT	serum Glutamic Pyruvic Transaminase		
SHR rat	Spontaneously Hypertensive Rats		
SI	Selective index = cytotoxic CC ₅₀ /target EC ₅₀		
SI	Selective index = cytotoxic IC ₅₀ /target IC ₅₀		
SI	Selective index = cytotoxic IC ₅₀ /target MIC		

Cancer Cell Codes

This set of codes for 270 cancer cells, named as **CCC code**, are defined and tried out in the books for the first time by the authors.

1A9	hmn ovarian cancer (cell).	CaEs-17	hmn esophageal cancer (cell).
212	inducible <i>Ha-ras</i> oncogene transformed from the NIH/3T3 cell line.	CAKI	hmn renal cancer (cell).
308	cultured mouse epidermal cells.	CAKI-1	hmn renal cancer (cell).
3LL	mus Lewis lung cancer (cell).	Calu1	hmn lung cancer (cell).
3PS	mouse leukemia (cell).	Capan1	pancreas cancer (cell).
780-6	renal cancer (cell).	Capan2	pancreas cancer (cell).
9KB	hmn epidermoid nasopharyngeal carcinoma (cell).	CaSki	hmn cervical carcinoma (cell).
9L	rat glioma (cell).	CEM	leukemia (cell).
9PS	mouse lymphocytic leukemia (cell).	CHAGO	hmn undifferentiated lung cancer (cell).
A2780	hmn ovarian cancer (cell).	CNE	hmn nasopharyngeal carcinoma (cell).
A375	hmn melanoma (cell).	Col1	hmn colorectal cancer (cell).
A431	hmn epidermic cancer (cell).	Col2	hmn colorectal cancer (cell).
A498	hmn renal cancer (cell).	COLO320DM	hmn colorectal cancer (cell).
A549	hmn non-small cell lung cancer (cell).	Colon205	colorectal cancer (cell).
ACHN	hmn renal cancer (cell).	Colon26-L5	mus colorectal cancer (cell).
AGS	gastric adenocarcinoma (cell).	COS-7	monkey kidney cells.
APM1840	hmn leukemia (cell).	CPAE	calf pulmonary arterial endothelial cells.
B16	mouse melanoma (cell).	CT-26	mus colorectal cancer (cell).
B16(F-10)	mouse melanoma (cell).	CTV1	hmn leukemia (cell).
BAEC	bovine aortic endothelial cells.	CXF94L	hmn tumor (cell).
BC	hmn breast cancer (cell).	DLD	hmn colorectal adenocarcinoma (cell).
BC-1	hmn breast cancer (cell).	DLD-1	hmn colorectal adenocarcinoma (cell).
BCA-1	hmn breast cancer (cell).	DMS114	hmn lung cancer (cell).
Bcap37	hmn breast cancer (cell).	DMS273	hmn lung cancer (cell).
Bel7402	hmn liver cancer (cell).	DU145	prostatic cancer (cell).
Bel7405	hmn liver cancer (cell).	EAC	Ehrlich ascites cancer (cell).
BGC823	hmn gastric cancer (cell).	EJ-1	hmn bladder cancer (cell).
BIU87	bladder cancer (cell).	FM3A	mus breast cancer (cell).
BL6	mouse melanoma (cell).	H.Ep.-2	hmn cutis cancer cells in throat.
Bowes	skin cancer cells.	H116	hmn colorectal cancer (cell).
Bre04	hmn breast cancer (cell).	H9	lymphocytes.
BSY1	breast cancer (cell).	HBC4	breast cancer (cell).
BT474	hmn galactophore cancer (cell).	HBC5	breast cancer (cell).
BT549	hmn galactophore cancer (cell).	HCC2998	hmn colorectal cancer (cell).
BXPC3	pancreas cancer (cell).	HCT	hmn colorectal cancer (cell).
C6	rat glioma (cell).	HCT116	hmn colorectal cancer (cell).
CA	hmn liver cancer (cell).	HCT15	hmn colorectal cancer (cell).

HCT8 hmn colorectal cancer (cell).
HEK-293 hmn epithelial kidney cell.
HEL hmn embryonic lung fibrocytes.
HeLa culture cervical epithelial cancer (cell) from Henrietta Lack.
HeLa ATCC-17 hmn cervical epithelial cancer (cell).
HeLa-S3 hmn cervical epithelial cancer (cell).
HELF normal hmn embryo lung fibroblasts.
Hep2 hmn liver cancer (cell).
Hep2,2,15 hmn liver cancer (cell) transfected with hepatitis B virus.
Hep3B hmn liver cancer (cell).
Hepa hmn liver cancer (cell).
Hepa1c1c7 mus liver cancer (cell).
Hepa59T/VGH hmn liver cancer (cell).
HepG2 hmn liver cancer (cell).
HEPZ hmn epithelial cancer (cell).
HFF hmn foreskin fibroblasts.
HGF normal hmn gingival fibroblast cells.
HL-60 hmn acute promyelocytic leukemia (cell).
HM02 hmn melanoma (cell).
HMC-1 hmn leukemic mast cells.
HMEC hmn microvascular endothelial cells.
HO-8910 hmn ovarian cancer (cell).
HOG.R5 green fluorescent protein (GFP)-based reporter cell.
HONE-1 hmn nasopharyngeal carcinoma (cell).
HOP-62 non-small cell lung cancer (cell).
Hs578T hmn breast cancer (cell).
Hs740T hmn gastric cancer (cell).
Hs742T hmn breast cancer (cell).
Hs756T hmn gastric cancer (cell).
HSC-2 hmn oral squamous cell carcinoma cells.
HSG hmn salivary gland tumor (cell).
HT sarcoma (cell).
HT1080 hmn fibrosarcoma (cell).
HT29 hmn colorectal cancer (cell).
HT3 hmn cervical carcinoma (cell).
hTERT-RPE1 hmn telomerase reverse transcriptase-retinal pigment epithelial cells.
Huh7 hmn hepatoma (cell).
HUVEC hmn umbilical vein endothelial cell.
Jurkat-T hmn T-cell leukemia (cell).
K562 hmn leukemia (cell).
K562/ADM hmn leukemia (cell) of adriamycin-resistant.
Kato3 hmn gastric cancer (cell).
KB hmn nasopharyngeal carcinoma (cell).
KB15 hmn nasopharyngeal carcinoma (cell).
KB16 hmn nasopharyngeal carcinoma (cell).
KB3 hmn nasopharyngeal carcinoma (cell).
KBV200 MDR nasopharyngeal carcinoma (cell).
KB-VIN vincristine-resistant nasopharyngeal carcinoma (cell).
Ketr3 hmn renal cancer (cell).
KG-1 hmn leukemia (cell).
KM12 hmn colorectal cancer (cell).
KM20L2 hmn colorectal cancer (cell).
KU-1 hmn bladder cancer (cell).
L₁₂₁₀ Lymphocytic leukemia (cell).
L5178Y lymphosarcoma (cell).
L-6 rat skeletal myoblasts.
L₆₁₅ mouse spleen leukemia (cell).
L₇₂₁₂ mouse leukemia (cell).
L-929 fibrosarcoma (cell).
LLC mouse Lewis lung cancer (cell).
LMTK mouse fiber cells.
LNCaP hmn prostatic cancer (cell).
LNCaP-FGC hmn prostatic cancer (cell).
LO2 hmn liver cell.
LoVo hmn colorectal cancer (cell).
LoVo/Doxo hmn colorectal cancer cell, drug-resistant subclone.
LOX melanoma (cell).
LOX-IMVI melanoma (cell).
LS174T colorectal cancer (cell).
Lu04 hmn lung cancer (cell).
Lu1 hmn lung cancer (cell).
LXFL529L hmn large cell lung cancer (cell).
M1 mus myelocytic leukemia (cell).
M14 melanoma (cell).
M4BEU hmn melanoma (cell).
M5076 ovarian sarcoma (cell).
Ma7373 mus breast cancer (cell).
MALME-3M melanoma (cell).
MBT-2 mus bladder cancer (cell).
MCF7 hmn breast cancer (cell).
MCF7/6 hmn breast cancer (cell).
MCF7/ADR-RES hmn breast cancer (cell).
MCF7-ras hmn breast cancer (cell).
MDA231 hmn breast cancer (cell).
MDA-MB-231 hmn breast cancer (cell).
MDA-MB-435 hmn breast cancer (cell).
MDCK Madin-Darby Canine.
MEL-28 hmn melanoma cell.
Meth-A Meth-A sarcoma (cell).
MGc803 hmn gastric adenocarcinoma (cell).
MH-60 mus leukemia (cell).
MI4 melanoma (cell).
MIA-PaCa-2 hmn pancreas cancer (cell).
MK1 hmn gastric cancer (cell).
MKN1 hmn gastric cancer (cell).
MKN28 hmn gastric cancer (cell).
MKN45 hmn gastric cancer (cell).
MKN7 hmn gastric cancer (cell).
MKN74 hmn gastric cancer (cell).
MM1 highly invasive clone isolated from parental rat ascites hepatoma AH130 cells.
Molt4 hmn lymphoma (cell).
Mono-Mac-6 mononuclear cells.
MQc80-3 gastric adenocarcinoma (cell).
MRC-5 hmn diploid embryonic cells.

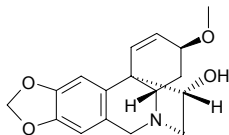
MS301 mus breast cancer (cell).
MS310 mus breast cancer (cell).
N04 hmn neuroma (cell).
NCI-H1417 hmn small cell lung cancer (cell).
NCI-H187 hmn small cell lung cancer (cell).
NCI-H226 hmn non-small cell lung cancer (cell).
NCI-H23 hmn lung cancer (cell).
NCI-H460 hmn lung cancer (cell).
NCI-H522 hmn lung cancer (cell).
NK/LY ascites cancer (cell).
NSCLC-N6 hmn non-small cell lung cancer (cell).
NUGC hmn gastric cancer (cell).
NUGC-3 hmn gastric cancer (cell).
NUGC-4 hmn gastric cancer (cell).
OVCAR-2780 ovarian adenocarcinoma (cell).
OVCAR-3 ovarian adenocarcinoma (cell).
OVCAR-4 ovarian adenocarcinoma (cell).
OVCAR-5 ovarian adenocarcinoma (cell).
OVCAR-8 ovarian adenocarcinoma (cell).
P1534 mus, transplanted leukemia (cell).
P₃₈₈ mouse lymphocytic leukemia (cell).
P₃₈₈/ADM mouse lymphocytic leukemia (cell) of adriamycin-resistant.
PACA-2 hmn pancreas cancer (cell) .
PANC1 pancreas cancer (cell).
PBMC peripheral blood mononuclear cells.
PC12 hmn lung cancer (cell).
PC3 hmn prostatic cancer (cell).
PC-6 hmn lung cancer (cell).
PLC/PRF/5 hmn liver cancer (cell).
PSN1 hmn pancreas cancer (cell).
PTX10 ovarian cancer cells with β -tubulin mutation.
QGY-7703 hmn liver cancer (cell).
RAW264.7 mouse macrophages.
RBL-2H3 rat basophilic cells.
RL33 rbt lung cancer (cell).
RPMI-7951 melanoma (cell).
RPMI-8226 leukemia (cell).
RXF-393 renal cancer (cell).
RXF-631L renal cancer (cell).
S₁₈₀ mouse sarcoma (cell).
S37 mouse sarcoma (cell).
Sea7901 hmn gastric adenocarcinoma (cell).
SCL hmn gastric cancer (cell).
SCL-37'6 hmn gastric cancer (cell).
SCL-6 hmn gastric cancer (cell).
SCL-9 hmn gastric cancer (cell).
SF268 hmn brain tumor (cell).
SF295 hmn brain tumor (cell).
SF539 hmn brain tumor (cell).
SGC hmn gastric cancer (cell).
SGC7901 hmn gastric cancer (cell).
SiHa hmn cervical carcinoma (cell).
SKBR3 hmn breast cancer (cell).
SKCO1 colorectal cancer (cell).
SK-MEL hmn caucasian melanoma (cell).
SK-MEL-2 hmn melanoma (cell).
SK-MEL-28 hmn melanoma (cell).
SK-MEL-5 hmn melanoma (cell).
SK-MES-1 bronchogenic carcinoma cell.
SK-OV-3 ovarian adenocarcinoma (cell).
SMMC-7721 hmn liver cancer (cell).
SNB75 hmn brain tumor (cell).
SNB78 hmn brain tumor (cell).
SNU638 hmn gastric adenocarcinoma (cell).
SR leukemia (cell).
St4 gastric cancer (cell).
SVR mouse endothelial cells.
SW620 hmn colorectal adenocarcinoma (cell).
T24 hmn liver cancer (cell).
T24S hmn bladder cancer (cell).
T47D hmn breast cancer (cell).
T98G hmn caucasian glioblastoma (cell).
TK10 renal cancer (cell).
Tmolt3 hmn leukemia (cell).
U14 mouse cervical carcinoma (cell).
U251 brain tumor (cell).
U373 caucasian glioblastoma (cell).
U4 mouse cervical carcinoma (cell).
U-87-MG caucasian glioblastoma (cell).
U937 hmn monocytic leukemia (cell).
UACC62 melanoma (cell).
UO-31 renal cancer (cell).
Vero green monkey kidney tumour (cell).
W₂₅₆ rat Walker sarcoma (cell).
WEHI-164 mus fibrosarcoma (cell).
WHCO1 hmn esophageal cancer (cell).
WI-38 hmn lung fibrocyte (normal hmn diploid fibrocyte).
WiDr colorectal adenocarcinoma (cell).
Wish transformed epithelial tumour (cell).
XF-498 hmn tumor (cell).
ZR-75-1 hmn breast cancer (cell).

Volume 3 Isolated Compounds (H-M)

H

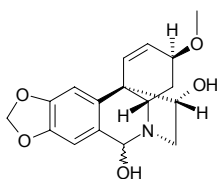
9186 Haemanthamine

Hemanthamine [466-75-1] $C_{17}H_{19}NO_4$ (301.35). mp 203~203.5°C, $[\alpha]_D^{25} = +19.7^\circ$ ($c = 3.8$, methanol), $[\alpha]_D^{25} = +33$ ($c = 1.25$, $CHCl_3$). **Pharm:** Antihypertensive (mild); antiretroviral and cytotoxic ($ID_{50} = 0.8\mu g/mL$, $TC_{50} = 1.0\mu g/mL$, $TI_{50} (TC_{50}/ID_{50}) = 1.3$)^[5026]. **Source:** XUE PIAN LIAN *Leucojum vernum* (bulb), family Amaryllidaceae spp. **Ref:** 658, 5026.



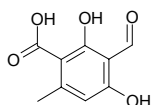
9187 Haemanthidine

Pancratine [466-73-9] $C_{17}H_{19}NO_5$ (317.34). mp 189~190°C (hemihydrate), $[\alpha]_D^{22} = -41^\circ$ ($c = 1$, $CHCl_3$). Exists in solution as a mixture of C6 epimers. **Pharm:** (-)-Haemanthidine activity: Cytotoxic (hmn prostate cancer LNCaP cell, $ED_{50} = 0.7\mu g/mL$; sarcoma cell HT, $ED_{50} = 1.6\mu g/mL$; A-431, KB, Lu1, ZR-75-1); analgesic (improved Koster trial, stronger than aspirin); sedative (mus, lengthens sleeping time induced by hexobarbital or pentobarbital.). **Source:** GAN FENG CAO *Zephyranthes candida*, SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*]. **Ref:** 6, 1719, 1720, 1721.



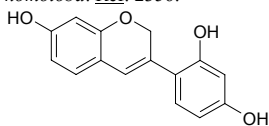
9188 Haematommic acid

$C_9H_8O_5$ (196.16). **Source:** JIN SI SHUA *Lethariella cladonioides* **Ref:** 660.



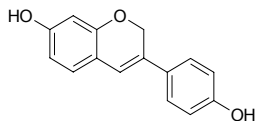
9189 Haginin D

2',4',7-Trihydroxyisoflavone $C_{15}H_{12}O_4$ (256.26). **Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, $IC_{50} = 0.2\mu mol/L$, control EGCg, $IC_{50} = 0.07\mu mol/L$). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2356.



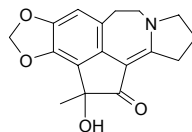
9190 Haginin E

$C_{15}H_{12}O_3$ (240.26). Amorphous powder. **Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, $IC_{50} = 0.3\mu mol/L$, control EGCg, $IC_{50} = 0.07\mu mol/L$). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2356.



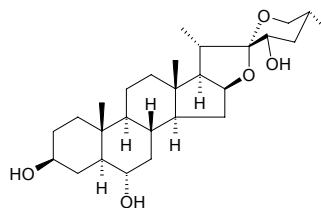
9191 Hainanensine

$C_{17}H_{17}NO_4$ (299.33). **Source:** HAI NAN CU FEI *Cephalotaxus hainanensis* [Syn. *Cephalotaxus mannii*], SAN JIAN SHAN *Cephalotaxus fortunei*. **Ref:** 660.



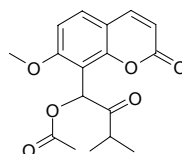
9192 Hainangenin

$C_{27}H_{44}O_5$ (448.65). **Source:** JIAN MA *Agave sisalana*, WU CI FAN MA *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*]. **Ref:** 10.



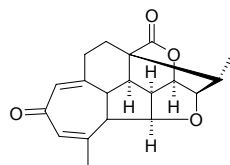
9193 Hainanmurpanin

[95360-22-8] $C_{17}H_{18}O_6$ (318.33). Crystals, mp 98~101°C, $[\alpha]_D^{28} = +7^\circ$ ($CHCl_3$). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 11.



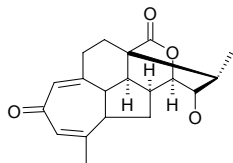
9194 Hainanolide

Harringtonolide [64761-48-4] $C_{19}H_{18}O_4$ (310.35). Pale yellow crystals (CH_2Cl_2 -MeOH), mp 285~288°C (dec), $[\alpha]_D^{30} = +83.0^\circ$ ($c = 1.5$, $CHCl_3$); mp 266~268°C. **Pharm:** Cytotoxic (KB oral epidermoid carcinoma, $ED_{50} = 0.11\mu g/mL$; Hep3B hepatoma cells, $ED_{50} = 0.05\mu g/mL$; HeLa, $ED_{50} = 0.37\mu g/mL$)^[4253]; antineoplastic (L-615, S180, W256, P388, L1210, and Lewis lung cancer); antiviral (influenza virus, Newcastle disease virus, epidemic type-B encephalitis virus and vaccinia virus, tissue culture model). **Source:** HAI NAN CU FEI *Cephalotaxus hainanensis* [Syn. *Cephalotaxus mannii*], SAN JIAN SHAN *Cephalotaxus fortunei*, TAI WAN CU FEI *Cephalotaxus wilsoniana* (twig), ZHONG GUO CU FEI ZI *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*], ZHONG GUO CU FEI ZHI YE *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*]. **Ref:** 658, 660, 4253.

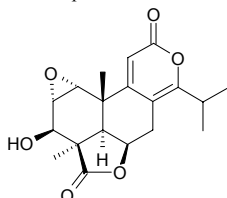


9195 Hainanolidol

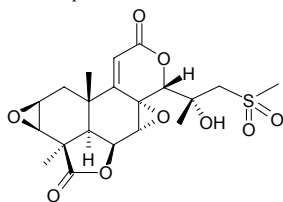
[73213-63-5] C₁₉H₂₀O₄ (312.37). Source: HAI NAN CU FEI *Cephalotaxus hainanensis* [Syn. *Cephalotaxus manni*], SAN JIAN SHAN *Cephalotaxus fortunei*. Ref: 2, 660.

**9196 Hallactone A**

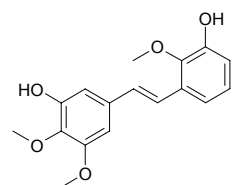
[41787-72-8] C₁₉H₂₂O₆ (346.38). Crystals, mp 266~268°C (dec). Pharm: Larvicide (toxic to larva of housefly). Source: HA SHI LUO HAN SONG *Podocarpus hallii*. Ref: 658.

**9197 Hallactone B**

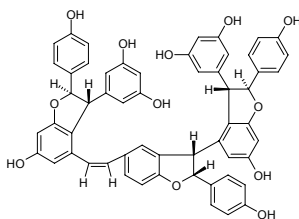
[35470-59-8] C₂₀H₂₄O₉S (440.47). Crystals, mp 325~330°C (dec). Pharm: Larvicide (toxic to larva of housefly). Source: HA SHI LUO HAN SONG *Podocarpus hallii*. Ref: 658.

**9198 Halophilol A**

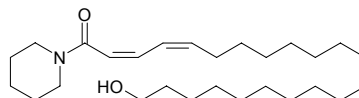
C₁₇H₁₈O₅ (302.33). Amorphous powder. Pharm: Cytotoxic (KB, IC₅₀ = 17.28 μmol/L; hmn microvascular endothelial cells HMEC, IC₅₀ = 22.47 μmol/L). Source: XI YAN YUAN WEI *Iris halophila* (seed). Ref: 5429.

**9199 Halophilol B**

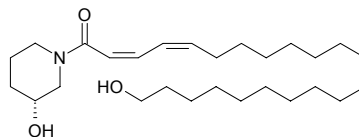
C₅₆H₄₂O₁₂ (906.95). Brown amorphous powder, [α]_D²⁵ = +152.4° (c = 1.28, MeOH). Pharm: Cytotoxic inactive (KB and HMEC). Source: XI YAN YUAN WEI *Iris halophila* (seed). Ref: 5429.

**9200 Haloxyline A**

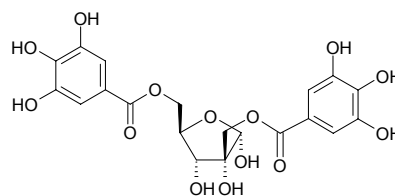
C₂₇H₄₉NO₂ (419.70). Colorless crystals, mp 161~162°C. Pharm: AChE inhibitor (*in vitro*, IC₅₀ = (25.3±0.02) μmol/L, control Galanthamine, IC₅₀ = (0.5±0.05) μmol/L); BChE inhibitor (*in vitro*, IC₅₀ = (19.0±0.03) μmol/L, control Galanthamine, IC₅₀ = (8.5±0.01) μmol/L); antifungal (*Trichophyton longifusus*, *Candida albicans*, *Aspergillus flavus*, *Microsporum canis*, *Candida glabrata*, *Fusarium solani*). Source: YAN JIAO CAO SUO SUO *Haloxylon salicornicum* (whole herb). Ref: 4460.

**9201 Haloxyline B**

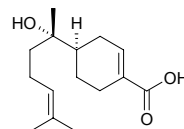
C₂₇H₄₉NO₃ (435.70). Colorless crystals, mp 142~143°C. Pharm: AChE inhibitor (*in vitro*, IC₅₀ = (20.2±0.01) μmol/L, control Galanthamine, IC₅₀ = (0.5±0.05) μmol/L); BChE inhibitor (*in vitro*, IC₅₀ = (14.7±0.02) μmol/L, control Galanthamine, IC₅₀ = (8.5±0.01) μmol/L); antifungal (*Trichophyton longifusus*, *Candida albicans*, *Aspergillus flavus*, *Microsporum canis*, *Candida glabrata*, *Fusarium solani*). Source: YAN JIAO CAO SUO SUO *Haloxylon salicornicum* (whole herb). Ref: 4460.

**9202 Hamamelitannin**

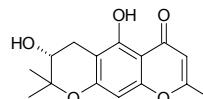
C₂₀H₂₀O₁₄ (484.37). Pharm: 5-LOX inhibitor (IC₅₀ = 1.0~18.7 μmol/L)^[4415]. Source: BAI GUO *Ginkgo biloba*, HONG LI *Quercus rubra*, MEI ZHOU JIN LV MEI *Hamamelis virginiana*, OU ZHOU LI *Castanea sativa*. Ref: 660, 1521, 4415.

**9203 Hamanasic acid A**

C₁₅H₂₄O₃ (252.36). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

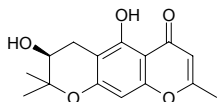
**9204 3'(R)-(+)-Hamaudol**

[204779-06-6] C₁₅H₁₆O₅ (276.29). Yellow acicular crystals, mp 187~189°C. Source: MA SHAN QIAN HU *Peucedanum mshanens*. Ref: 803.

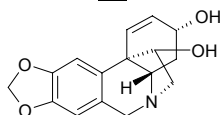


9205 3'(S)-(-)-Hamaudol

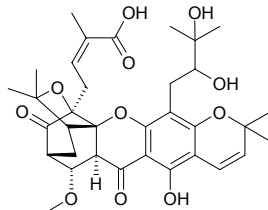
[735-46-6] C₁₅H₁₆O₅ (276.29). Needles (C₂H₅OH), mp 202~202.5°C, [α]_D²⁵ = -22.0° (c = 0.46, CHCl₃). Source: FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*]. Ref: 2.

**9206 Hamayne**

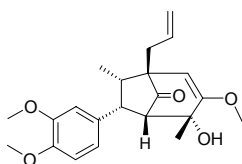
Bulbispermine; Demethylcrinamine [61948-11-6] C₁₆H₁₇NO₄ (287.32). Pharm: AChE inhibitor (IC₅₀ = (553±3)μmol/L, control Galanthamine, IC₅₀ = (1.9±0.2)μmol/L). Source: GUAN MU WEN SHU LAN *Crinum macowanii*. Ref: 4952.

**9207 Hanburinone**

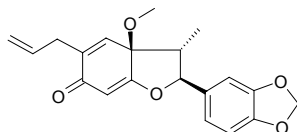
C₃₄H₄₂O₁₁ (626.71). Yellow gum, [α]_D²⁸ = -62° (c = 0.09, CHCl₃). Source: TENG HUANG SHU *Garcinia hanburyi* (fresh fruit). Ref: 4487.

**9208 Hancinol**

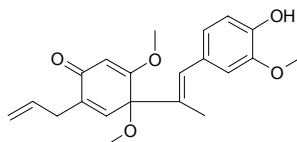
rel-(7S,8S,1'R,3'S,4'R)-1'-Allyl-7-(3,4-dimethoxyphenyl)-4'-hydroxy-5'-methoxy-8-methyl-2'-oxobicyclo[3.2.1]oct-5'-ene [108864-50-2] C₂₂H₂₈O₅ (372.47). Source: SHAN JU *Piper hancei*. Ref: 75.

**9209 Hancinone**

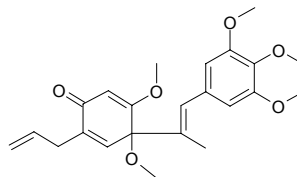
C₂₀H₂₀O₅ (340.38). Source: SHAN JU *Piper hancei*, YU LAN *Magnolia denudata* [Syn. *Magnolia heptapata*]. Ref: 54, 660, 4439.

**9210 Hancinone B**

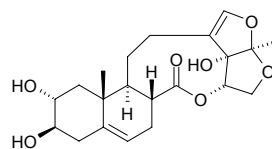
C₂₁H₂₄O₅ (356.42). Source: SHAN JU *Piper hancei*. Ref: 660.

**9211 Hancinone C**

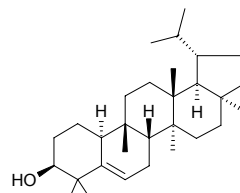
C₂₃H₂₈O₆ (400.48). Source: SHAN JU *Piper hancei*. Ref: 660.

**9212 Hancogenin B**

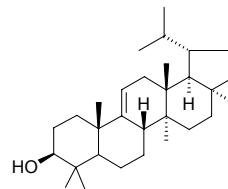
C₂₁H₂₈O₇ (392.45). Colorless acicular crystals (acetone), mp 202~203°C. Source: HUA BEI BAI QIAN *Cynanchum hancockianum*. Ref: 237.

**9213 Hancokinol**

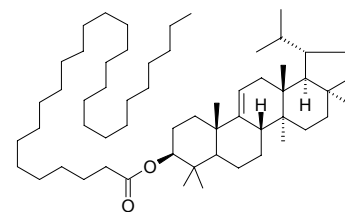
25,26-Dinor-9,13-dimethylpup-5-en-3-ol [132294-77-0] C₃₀H₅₀O (426.73). Needles (MeOH), mp 229~230°C, [α]_D²⁰ = +16.2° (c = 0.77, CHCl₃); mp 221~223°C; colorless acicular crystals (chloroform), mp 223~225°C. Source: HUA BEI BAI QIAN *Cynanchum hancockianum*, LIU YE BAI QIAN *Cynanchum stauntonii*. Ref: 510, 198, 1521.

**9214 Hancolupenol**

C₃₀H₅₀O (426.73). Colorless acicular crystals, mp 184~185°C (chloroform), [α]_D²⁹ = +14.9° (c = 0.3, chloroform). Source: HUA BEI BAI QIAN *Cynanchum hancockianum*. Ref: 198.

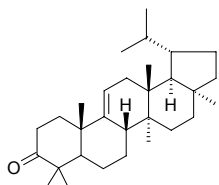
**9215 Hancolupenol octacosanate**

C₅₈H₁₀₄O₂ (833.47). Amorphous powder, mp 99~101°C (chloroform). Source: HUA BEI BAI QIAN *Cynanchum hancockianum*. Ref: 198.

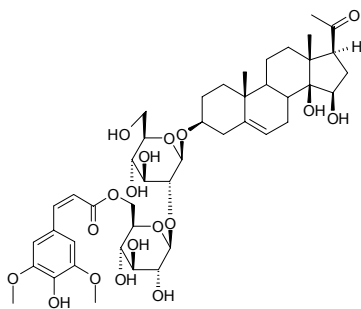


9216 Hancolupenone

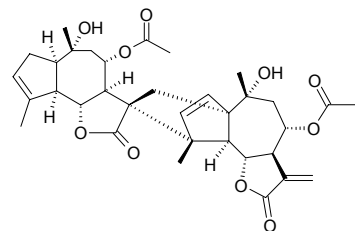
$C_{30}H_{48}O$ (424.72). Colorless acicular crystals, mp 228.0~229.5°C (chloroform), $[\alpha]_D^{29} = +14.9^\circ$ ($c = 0.2$, chloroform). Source: HUA BEI BAI QIAN *Cynanchum hancockianum*. Ref: 198.

**9217 Hancoside A**

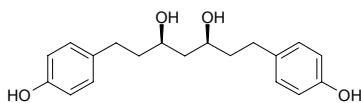
Hancoside [145701-08-2] $C_{44}H_{62}O_{18}$ (878.97). White powder, mp 185~187°C (methanol). $[\alpha]_D^{27} = -12.3^\circ$ ($c = 0.13$, dioxycyclohexane). Pharm: Anti-endotoxin. Source: HUA BEI BAI QIAN *Cynanchum hancockianum*. Ref: 237, 1071.

**9218 Handelin**

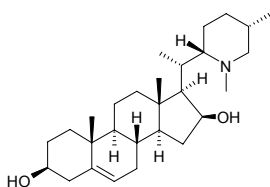
Chrysanthelide $C_{34}H_{42}O_{10}$ (610.70). Source: YE JU HUA *Chrysanthemum indicum*. Ref: 660.

**9219 Hannokinol**

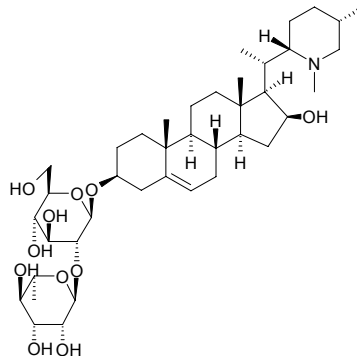
1,7-Bis(4-hydroxyphenyl)-3*R*,5*S*-heptanediol $C_{19}H_{24}O_4$ (316.40). Source: CHI YANG *Alnus japonica*. Ref: 660.

**9220 Hapepunine**

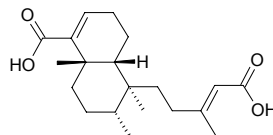
[68422-01-5] $C_{27}H_{47}NO_2$ (429.69). Needles (C_2H_5OH), mp 201~202°C, $[\alpha]_D = -72.6^\circ$. Source: ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], HEI BAI HE *Fritillaria camtschatcensis*. Ref: 2201.

**9221 Hapepunine 3-O-α-L-rhamnosyl-(1→2)-β-D-glucopyranoside**

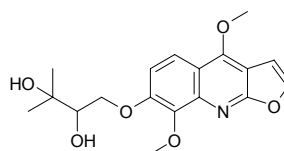
$C_{40}H_{67}NO_{11}$ (737.98). Needles, +1H₂O (MeOH aq.) mp 269~274°C (dec), $[\alpha]_D = -67.2^\circ$ ($c = 1.5$, pyridine). Source: ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 1521, 2201.

**9222 Haplopappic acid**

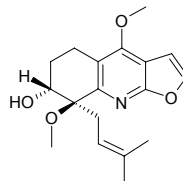
$C_{20}H_{30}O_4$ (334.46). Source: GE LUN BI YA BA DOU *Croton schiedeana* (aerial parts). Ref: 4447.

**9223 Haploperine**

Haplophytin B; Evoxine [522-11-2] $C_{18}H_{21}NO_6$ (347.37). mp 154~155°C, mp 151~152°C, $[\alpha]_D = +5^\circ$ (ethanol), $[\alpha]_D^{22} = +14.6^\circ$ (ethanol); mp 151.5~153°C, $[\alpha]_D = +63.6^\circ$ ($c = 0.33$, MeOH). Pharm: Anticonvulsant (mus and rat, caused by camphor); hypnotic (mus); sedative (mus, chloride); antibacterial inactive (various tested bacteria)^[5175]; antifungal inactive (various tested fungi)^[5175]; LD₅₀ (mus, ip) = 705mg/kg, (mus, iv) = 135mg/kg. Source: DA YE YUN XIANG CAO *Haplophyllum perforatum*, JIAN YE YUN XIANG CAO *Haplophyllum acutifolium*. Ref: 661, 1521, 5175.

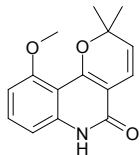
**9224 Haplophyllidine**

[18063-21-3] $C_{18}H_{23}NO_4$ (317.39). Colorless acicular crystals (petroleum ether), mp 110~111°C, $[\alpha]_D^{20} = -16.24^\circ$ ($c = 1.477$, acetone). Pharm: Anti-atropine (dog, iv, 20mg/kg); diuretic (mus); hypnotic (hypnotic synergism with solubilized hexobarbital, phenobarbital, chloral hydrate); sedative (mus). Source: DA YE YUN XIANG CAO *Haplophyllum perforatum*, *Haplophyllum glabrinum*. Ref: 658, 1521.

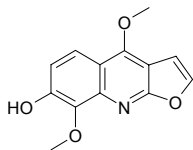


9225 Haplophytin A

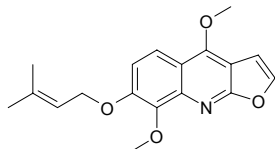
$C_{15}H_{15}NO_3$ (257.29). mp 209~210.5°C, $[\alpha]_D = 0^\circ$ ($c = 0.506$, $CHCl_3$). **Pharm:** Antibacterial inactive (various tested bacteria); antifungal inactive (various tested fungi). **Source:** JIAN YE YUN XIANG CAO *Haplophyllum acutifolium*. **Ref:** 5175.

**9226 Haplopine**

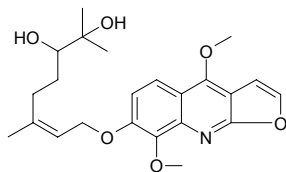
[5876-17-5] $C_{13}H_{11}NO_4$ (245.24). mp 203~204°C. **Pharm:** Phototoxic (yeast, *Saccharomyces cerevisiae*); photo-activated antibacterial (*Staphylococcus aureus*)^[4989]; photo-activated antifungal (*Candida albicans* weak)^[4989]; photo-activated DNA binding (Asc I and Sma I with restriction sequences consisting only of G and C was very weak)^[4989]; cytotoxic (P₃₈₈ cell line, ED₅₀ = 7.6 μg/mL, control Mithramycin, ED₅₀ = 0.06 μg/mL; HT29, ED₅₀ = 13.1 μg/mL, Mithramycin, ED₅₀ = 0.07 μg/mL; A549, ED₅₀ = 3.3 μg/mL, Mithramycin, ED₅₀ = 0.08 μg/mL)^[5405]. **Source:** HUA JIAO LE *Zanthoxylum cuspidatum*, SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*, *Sarcomelicope glauca*. **Ref:** 658, 1521, 4989, 5405.

**9227 Haplopine-3,3'-dimethylallylether**

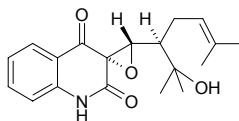
$C_{18}H_{19}NO_4$ (313.36). Yellow needles, mp 100~101°C. **Source:** GAO GUI YOU MU YUN XIANG *Teclea nobilis* (aerial parts). **Ref:** 3503.

**9228 Haplotubine**

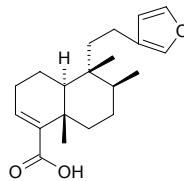
$C_{23}H_{29}NO_6$ (415.49). Amorphous yellow powder, $[\alpha]_D^{22} = -6^\circ$ ($c = 1.2$, CH_2Cl_2). **Source:** LIU ZHUANG DAN YE YUN XIANG *Ruta tuberculata* [Syn. *Haplophyllum tuberculatum*] (aerial parts). **Ref:** 5156.

**9229 Haplotubinone**

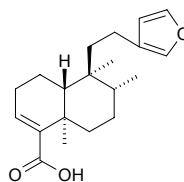
$C_{19}H_{23}NO_4$ (329.40). Colorless crystals (ether), mp 177.0~178.0°C, $[\alpha]_D^{22} = 0^\circ$ ($c = 0.500$, CH_2Cl_2). **Source:** LIU ZHUANG DAN YE YUN XIANG *Ruta tuberculata* [Syn. *Haplophyllum tuberculatum*] (aerial parts). **Ref:** 5156.

**9230 (+)-Hardwickiic acid**

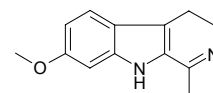
$C_{20}H_{28}O_3$ (316.44). **Source:** JIA LIAN QIAO YE *Duranta repens*. **Ref:** 4050.

**9231 (-)-Hardwickiic acid**

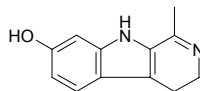
$C_{20}H_{28}O_3$ (316.44). Crystallized (MeOH-H₂O), mp 114~116°C, $[\alpha]_D^{25} = -84.7^\circ$ ($c = 1.0$, $CHCl_3$). **Source:** *Salvia wagneriana* (aerial parts). **Ref:** 4976.

**9232 Harmaline**

4,9-Dihydro-7-methoxy-1-methyl-3H-pyrido[3,4-b]indole; Harmidine; Dihydroharmine [304-21-2] $C_{13}H_{14}N_2O$ (214.27). Rhombic columnar crystals (methanol), rhombic octahedral crystals (ethanol), mp 229~231°C, slightly soluble in water, ether, soluble in ethanol.^[5507] **Pharm:** CNS activity (stimulates pallium, spinal cord and motorium to cause illusion, tremors, and paroxysmal convulsions); striated muscle stimulant (high dose); slows heart rate (frog heart *in vitro* EC = 1:25000); monoamine oxidase inhibitor; intestinal smooth muscle relaxant (small intestine, low dose); stimulates pons (causes spasm and stiffness in limbs). **Source:** LUO TUO PENG *Peganum harmala*, JI DAN GUO *Passiflora edulis*, FEN HONG SE XI FAN LIAN *Passiflora incarnata*, LUO TUO PENG ZI *Peganum harmala*. **Ref:** 6, 658, 1521, 5507.

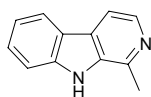
**9233 Harmalol**

[525-57-5] $C_{12}H_{12}N_2O$ (200.24). Trihydrate, red acicular crystals (C_2H_5OH aq.), absolute substance mp 212°C (dec). **Pharm:** Causes progressive paralysis of CNS (animal model); inhibits transport of active sodium (in bladder); monoamine oxidase inhibitor; Na^+, K^+ -ATP inhibitor; antihypertensive; Slows heart rate and enhances myocardial contractility (anesthetic dog, chloride). **Source:** LUO TUO PENG *Peganum harmala*, JI DAN GUO *Passiflora edulis*. **Ref:** 661, 1521.

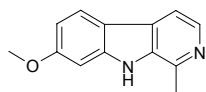


9234 Harman

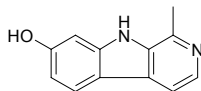
[486-84-0] C₁₂H₁₀N₂ (182.23). mp 237~238°C, mp 228°C. **Pharm:** Antifungal (*Trichophyton interdigitalis*, MIC = 1.6~200.0µg/mL); bidirectional action to nervous system (motor depressant in low dose and causes convulsion in high dose); inhibits transport of active sodium (frog, bladder); Na⁺,K⁺-ATP inhibitor (frog kidney); plant growth inhibitor; uterine stimulant. **Source:** CI JI LI *Tribulus terrestris*, CU LIU GUO *Hippophae rhamnoides*, FEN HONG SE XI FAN LIAN *Passiflora incarnata*, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], JI DAN GUO *Passiflora edulis*, LIU QIU SHE GEN CAO *Ophiorrhiza liukuensis* (whole herb), RI BEN SHE GEN CAO *Ophiorrhiza japonica*, SHA ZAO *Elaeagnus angustifolia*, YUAN ZHI *Polygala tenuifolia*, ZHU ZI SHU *Symplocos racemosa*, DONG FANG GOU TENG *Uncaria orientalis*, DUO MAI GOU TENG *Uncaria nervosa*, HOU YE GOU TENG *Uncaria callophylla*, MIAN MAO GOU TENG *Uncaria lanosa*, PO LUO ZHOU GOU TENG *Uncaria borneensis*, QIAN HUI GOU TENG *Uncaria canescens*, SUAN GOU TENG *Uncaria acida*, TUO YUAN GOU TENG *Uncaria elliptica*, XIA GOU TENG *Uncaria attenuata*, *Uncaria barbata*, occurs in many plants. **Ref:** 2, 539, 658, 4527, 5341.

**9235 Harmine**

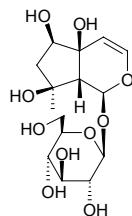
Banisterine; Leucuharmine; Telepathine; Yageine [442-51-3] C₁₃H₁₂N₂O (212.25). Crystals, mp 257~259°C, mp 264~265°C. **Pharm:** Antitrypanosomal; CVS activity (anesthetic dog, chloride, slows heart rate, increases output blood pressure, blood flow in aorta and myocardial contractility); hallucinogen (large dose); uterine relaxant; monoamine oxidase inhibitor (hmn); CNS stimulant. **Source:** CI JI LI *Tribulus terrestris*, JI DAN GUO *Passiflora edulis*, LUO TUO PENG *Peganum harmala*, LUO TUO PENG ZI *Peganum harmala*, SHA ZAO *Elaeagnus angustifolia*, SHAN YOU MA *Trema dielsiana*, XIANG TANG SONG CAO *Thalictrum foetidum*. **Ref:** 4, 6, 658, 660, 1521.

**9236 Harmol**

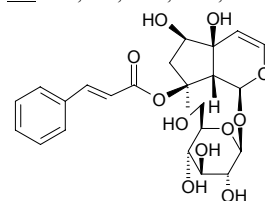
7-Hydroxyharman [149022-16-2] C₁₂H₁₀N₂O (198.23). mp 321°C, mp 304~307°C. **Source:** CU LIU GUO *Hippophae rhamnoides*, LUO TUO PENG ZI *Peganum harmala*, JI LI GEN *Tribulus terrestris*, SHA ZAO *Elaeagnus angustifolia*, FEN HONG SE XI FAN LIAN *Passiflora incarnata*. **Ref:** 6, 1521.

**9237 Harpagide**

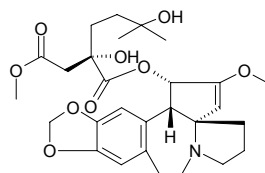
C₁₅H₂₄O₁₀ (364.35). **Pharm:** Neuroprotective (primary cultures of rat cortical cells injured by 50µmol/L glutamate, 0.1µmol/L, cell viability = 41.4%; control MK-801, cell viability = 31.8%; APV, cell viability = 5.7%; CNQX, cell viability = 28.1%)^[4660]. **Source:** BEI XUAN SHEN *Scrophularia buergeriana* (root: yield = 0.00004%)^[4660]; the compound was isolated from the plant by Isao Kitakawa et al. in 1967^[5505], TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole herb), XUAN SHEN *Scrophularia ningpoensis*. **Ref:** 660, 4483, 4660, 5505.

**9238 Harpagoside**

C₂₄H₃₀O₁₁ (494.50). [α]_D²¹ = -27.7° (c = 0.194, chloroform); -42.6° (c = 0.990, methanol); -37.5° (c = 0.670, water). **Pharm:** Analgesic (rbt ear model); anti-inflammatory (granuloma model); nicotine antagonist (gpg, ileum *in vitro*); elastase inhibitor (hmn leukocyte *in vitro*, IC₅₀ > 500µg/mL = >800µmol/L; control Caffeic acid, IC₅₀ = 86µg/mL = 475µmol/L)^[5458]; neuroprotective (primary cultures of rat cortical cells injured by 50µmol/L glutamate, 0.1µmol/L, cell viability = 38.2%; control MK-801, cell viability = 31.8%; APV, cell viability = 5.7%; CNQX, cell viability = 28.1%)^[4660]. **Source:** BEI XUAN SHEN *Scrophularia buergeriana* (root: yield = 0.00032%)^[4660], LIN SHENG XUAN SHEN *Scrophularia nodosa*, NAN FEI GOU MA *Harpagophytum procumbens*, XUAN SHEN *Scrophularia ningpoensis* (root: mean content of 22 origins = 0.136%)^[5508], *Lamium* sp. **Ref:** 658, 661, 4660, 5458, 5508.

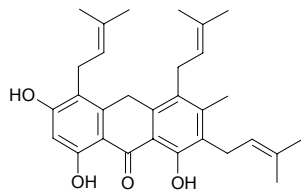
**9239 Harringtonine**

[26833-85-2] C₂₈H₃₇NO₉ (531.61). mp 73~75°C. **Pharm:** Antineoplastic (mouse leukemia L₆₁₅ and L₇₂₁₂, sarcoma S₁₈₀, rat Walker sarcoma). **Source:** BI ZI CU FEI *Cephalotaxus oliveri*, HAI NAN CU FEI *Cephalotaxus hainanensis* [Syn. *Cephalotaxus manni*] (branchlet and bark: mean content of 2 samples = 0.032%)^[5508], RI BEN CU FEI *Cephalotaxus harringtonia*, SAN JIAN SHAN *Cephalotaxus fortunei* (branchlet and bark: mean content of 2 origins = 0.021%)^[5508], ZHONG GUO CU FEI ZHI YE *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*]. **Ref:** 4, 658, 660, 5508.

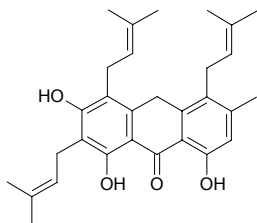


9240 Harunganol B

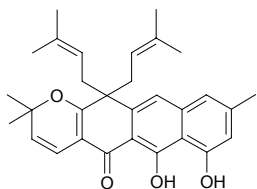
1,3,8-Trihydroxy-4,5,7-tris-(3,3-dimethylallyl)-6-methyl-anthrone $C_{30}H_{36}O_4$ (460.62). Yellow crystals (hexane-ethyl acetate), mp 200°C. **Pharm:** Antioxidant (DPPH scavenger, $IC_{50} = (64.8 \pm 5.5) \mu\text{mol/L}$; control 3-t-Butyl-4-hydroxyanisole, $IC_{50} = (44.2 \pm 1.2) \mu\text{mol/L}$). **Source:** MA DAO HA NI MU *Harungana madagascariensis* (stem cortex). **Ref:** 5286.

**9241 Harungin anthrone**

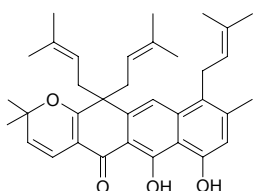
1,3,8-Trihydroxy-2,4,5-tris-(3,3-dimethylallyl)-6-methylanthrone $C_{30}H_{36}O_4$ (460.62). Brown crystals (hexane), mp 170.6°C. **Pharm:** Antioxidant (DPPH scavenger, $IC_{50} = (92.1 \pm 4.5) \mu\text{mol/L}$; control 3-t-Butyl-4-hydroxyanisole, $IC_{50} = (44.2 \pm 1.2) \mu\text{mol/L}$). **Source:** MA DAO HA NI MU *Harungana madagascariensis* (stem cortex). **Ref:** 5286.

**9242 Harunmadagascarin A**

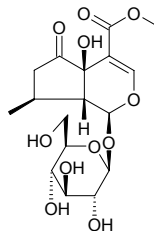
8,9-Dihydroxy-4,4-bis-(3,3-dimethylallyl)-6-methyl-2,3-(2,2-dimethylpyran o)anthrone $C_{30}H_{34}O_4$ (458.60). Orange crystals (hexane), mp 149°C. **Pharm:** Antioxidant (DPPH scavenger, $IC_{50} = (61.0 \pm 3.2) \mu\text{mol/L}$; control 3-t-Butyl-4-hydroxyanisole, $IC_{50} = (44.2 \pm 1.2) \mu\text{mol/L}$). **Source:** MA DAO HA NI MU *Harungana madagascariensis* (stem cortex). **Ref:** 5286.

**9243 Harunmadagascarin B**

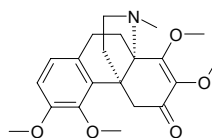
8,9-Dihydroxy-4,4,5-tris-(3,3-dimethylallyl)-6-methyl-2,3-(2,2-dimethylpyran ano)anthrone $C_{35}H_{42}O_4$ (526.72). Orange crystals (MeOH), mp 122.5°C. **Pharm:** Antioxidant (DPPH scavenger, $IC_{50} = (155.4 \pm 2.5) \mu\text{mol/L}$; control 3-t-Butyl-4-hydroxyanisole, $IC_{50} = (44.2 \pm 1.2) \mu\text{mol/L}$). **Source:** MA DAO HA NI MU *Harungana madagascariensis* (stem cortex). **Ref:** 5286.

**9244 Hastatoside**

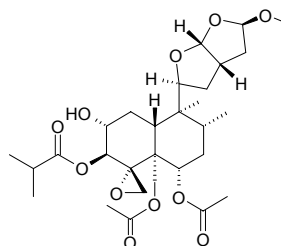
$C_{17}H_{24}O_{11}$ (404.37). **Source:** JI YE MA BIAN CAO *Verbena hastata*, MA BIAN CAO *Verbena officinalis*. **Ref:** 660.

**9245 Hasubanonine**

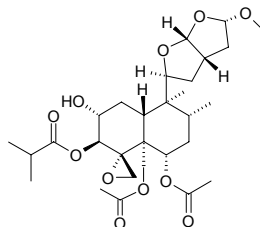
O-Methylaknadinine [1805-85-2] $C_{21}H_{27}NO_5$ (373.45). mp 116–117°C, $[\alpha]_D^{27} = -214^\circ$ ($c = 2.0$, MeOH). **Source:** QIAN JIN TENG *Stephania japonica*, AO DA LI YA QIAN JIN TENG *Stephania japonica* var. *australis*, YA LI QIAN JIN TENG *Stephania elegans*. **Ref:** 6, 1521.

**9246 Hativene A**

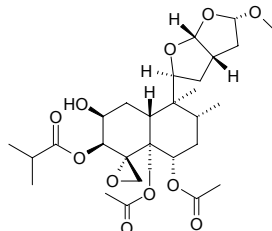
$C_{29}H_{44}O_{11}$ (568.67). Colorless oil, $[\alpha]_D^{20} = -12.1^\circ$ ($c = 0.3$, $CHCl_3$). **Source:** *Ajuga pseudoiva* (leaf). **Ref:** 2412.

**9247 Hativene B**

$C_{29}H_{44}O_{11}$ (568.67). Colorless oil, $[\alpha]_D^{20} = -2.8^\circ$ ($c = 0.12$, $CHCl_3$). **Source:** *Ajuga pseudoiva* (leaf). **Ref:** 2412.

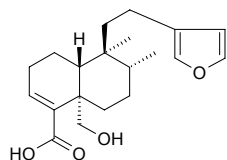
**9248 Hativene C**

$C_{29}H_{44}O_{11}$ (568.67). Colorless oil. **Source:** *Ajuga pseudoiva* (leaf). **Ref:** 2412.

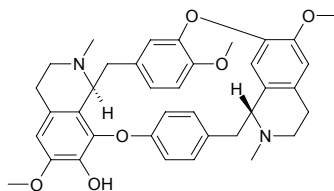


9249 Hautriwaic acid

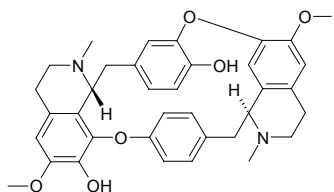
[18411-75-1] $C_{20}H_{28}O_4$ (332.44). mp 183~184°C, $[\alpha]_D = -105^\circ$. Source: CHE SANG ZI YE *Dodonaea viscosa*. Ref: 6, 1521.

**9250 Hayatidine**

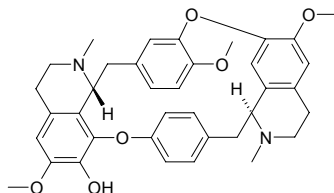
[16543-77-4] $C_{37}H_{40}N_2O_6$ (608.74). mp 179~180°C, $[\alpha]_D = -109^\circ$ (pyridine). Source: XI SHENG TENG *Cissampelos pareira*. Ref: 6, 1521.

**9251 Hayatine**

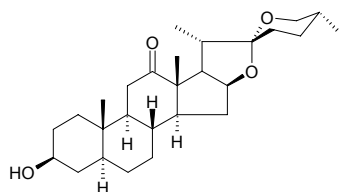
$C_{36}H_{38}N_2O_6$ (594.71). mp 281°C (dec), (\pm) 303°C (dec). Source: XI SHENG TENG *Cissampelos pareira*. Ref: 4.

**9252 Hayatinine**

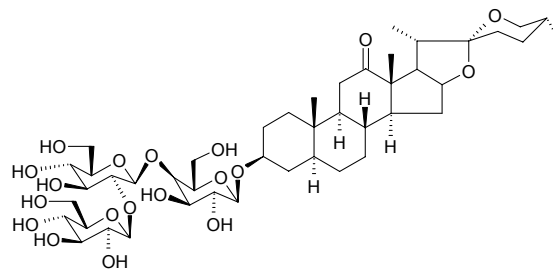
$C_{37}H_{40}N_2O_6$ (608.74). mp 231~232°C. Source: XI SHENG TENG *Cissampelos pareira*. Ref: 6.

**9253 Hecogenin**

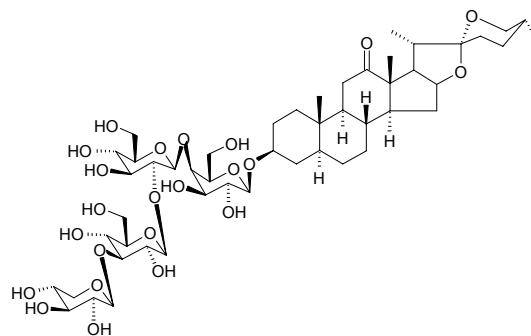
12-Oxotigogenin; 3 β -Hydroxy-5 α ,25D-spirostan-12-one [467-55-0] $C_{27}H_{42}O_4$ (430.63). mp 245°C, mp 253°C, mp 265°C, mp 268°C, $[\alpha]_D = -10^\circ$ (dioxane). Source: DONG YI HAO JIAN MA *Agave east-one*, DUAN YE LONG SHE LAN *Agave angustifolia*, FAN MA *Agave americana*, JIAN MA *Agave sisalana*, WEN ZHU *Asparagus setaceus* [Syn. *Asparagus plumosus*], WU CI FAN MA *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*], XIA YE LONG SHE LAN *Agave cantala*, YIN BIAN LONG SHE LAN *Agave angustifolia* var. *marginata*. Ref: 6, 10, 658, 1521.

**9254 Hecogenin 3-O- β -D-glucopyranosyl-(1 \rightarrow 2)- β -D-glucopyranosyl-(1 \rightarrow 4)- β -D-galactopyranoside**

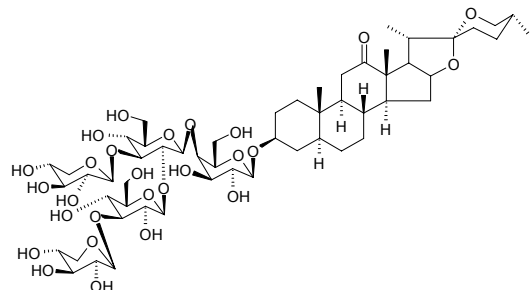
$C_{45}H_{72}O_{19}$ (917.06). Pharm: Cytotoxic (*in vitro*, HeLa, $IC_{50} = 8.6\mu\text{g/mL}$; control *cis*-Platin, $IC_{50} = 0.75\mu\text{g/mL}$). Source: WAN XIANG YU *Polianthes tuberosa* (tuber: yield = 0.0048%fw). Ref: 3002.

**9255 Hecogenin 3-O- β -D-glucopyranosyl-(1 \rightarrow 2)-[β -D-xylopyranosyl-(1 \rightarrow 3)]- β -D-glucopyranosyl-(1 \rightarrow 4)- β -D-galactopyranoside**

$C_{50}H_{80}O_{23}$ (1049.18). Pharm: Cytotoxic (*in vitro*, HeLa, $IC_{50} = 8.2\mu\text{g/mL}$; control *cis*-Platin, $IC_{50} = 0.75\mu\text{g/mL}$). Source: WAN XIANG YU *Polianthes tuberosa* (tuber: yield = 0.041%fw). Ref: 3002.

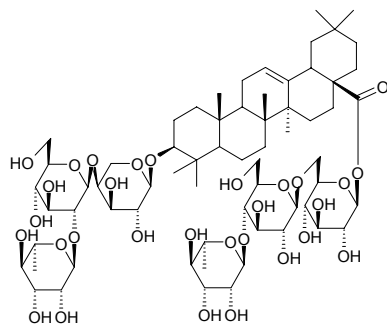
**9256 Hecogenin 3-O- β -D-xylopyranosyl-(1 \rightarrow 3)- β -D-glucopyranosyl-(1 \rightarrow 2)-[β -D-xylopyranosyl-(1 \rightarrow 3)]- β -D-glucopyranosyl-(1 \rightarrow 4)- β -D-galactopyranoside**

$C_{53}H_{88}O_{27}$ (1181.3). Pharm: Cytotoxic (*in vitro*, HeLa, $IC_{50} = 4\mu\text{g/mL}$; control *cis*-Platin, $IC_{50} = 0.75\mu\text{g/mL}$). Source: WAN XIANG YU *Polianthes tuberosa* (tuber: yield = 0.0035%fw). Ref: 3002.

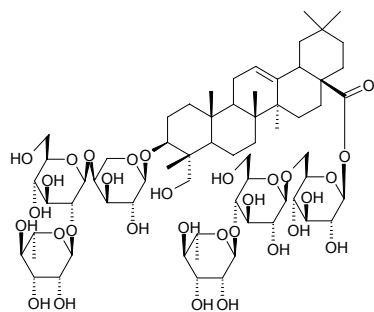


9257 Hederacolchiside E

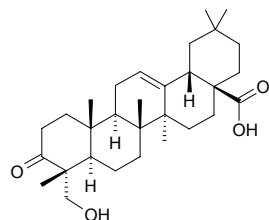
$C_{65}H_{106}O_{30}$ (1367.55). **Pharm:** Antioxidant (75 μ g/mL, total antioxidant activity (lipid peroxidation of linoleic acid emulsion) = 88%, control α -Tocopherol, total antioxidant activity = 67%; reducing power = 0.508, α -Tocopherol, reducing power = 1.929; DPPH scavenging, IC_{50} = 73.5 μ g/mL, α -Tocopherol, IC_{50} = 48.1 μ g/mL; superoxide radical scavenging, IC_{50} = 46.3 μ g/mL, α -Tocopherol, IC_{50} = 50.0 μ g/mL; iron chelating, IC_{50} = 70.8 μ g/mL, α -Tocopherol, IC_{50} = 50.0 μ g/mL; H_2O_2 scavenging, IC_{50} = 41.2 μ g/mL, α -Tocopherol, IC_{50} = 40.3 μ g/mL). **Source:** QIU SHUI XIAN CHANG CHUN TENG *Hedera colchica*. **Ref:** 4993.

**9258 Hederacolchiside F**

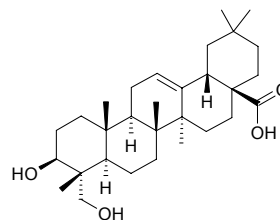
$C_{65}H_{106}O_{31}$ (1383.55). **Pharm:** Antioxidant (75 μ g/mL, total antioxidant activity (lipid peroxidation of linoleic acid emulsion) = 75%, control α -Tocopherol, total antioxidant activity = 67%; reducing power = 0.282, α -Tocopherol, reducing power = 1.929; DPPH scavenging, IC_{50} = 96.2 μ g/mL, α -Tocopherol, IC_{50} = 48.1 μ g/mL; superoxide radical scavenging, IC_{50} = 45.8 μ g/mL, α -Tocopherol, IC_{50} = 50.0 μ g/mL; iron chelating, IC_{50} = 60.5 μ g/mL, α -Tocopherol, IC_{50} = 50.0 μ g/mL; H_2O_2 scavenging, IC_{50} = 67.0 μ g/mL, α -Tocopherol, IC_{50} = 40.3 μ g/mL)^[4993]. **Source:** QIU SHUI XIAN CHANG CHUN TENG *Hedera colchica*. **Ref:** 4993.

**9259 Hederagenic acid**

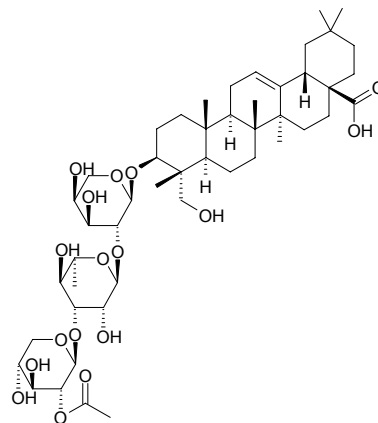
$C_{30}H_{46}O_4$ (470.70). **Source:** HONG JIA MI *Viburnum erubescens*, MA TI YE *Caltha palustris*. **Ref:** 660, 1521.

**9260 Hederagenin**

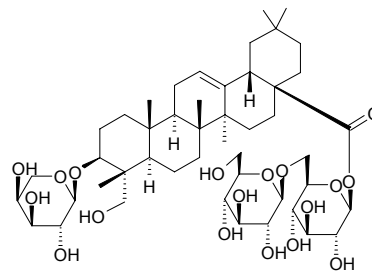
Mukurosigenin; Caulosapogenin; Hederidin; Kalosapogenin; Melanthigenin; Astrantiagenin E [465-99-6] $C_{30}H_{48}O_4$ (472.71). White powder, mp 332–334°C. **Source:** BAI TOU WENG *Pulsatilla chinensis*, CHUAN XU DUAN *Dipsacus asperoides*, GUAN MU TONG *Aristolochia manshuriensis*, HUANG HUA BAI JIANG *Patrinia scabiosaefolia*, JIN YIN HUA *Lonicera japonica*, LU CAO *Rhaponticum carthamoides*, MU TONG *Akebia quinata*, WEI LING XIAN *Clematis chinensis*. **Ref:** 2, 6, 638, 660, 698.

**9261 Hederagenin 3-O-(2-O-acetyl- β -D-xylopyranosyl)-(1 \rightarrow 3)- α -L-rhamnopyranosyl-(1 \rightarrow 2)- α -L-arabinopyranoside**

$C_{48}H_{76}O_{17}$ (925.13). White amorphous powder, $[\alpha]_D^{22} = +5.9^\circ$ ($c = 3.7$, MeOH). **Source:** AO TOU WU HUAN ZI *Sapindus emarginatus* (pericarp). **Ref:** 4123.

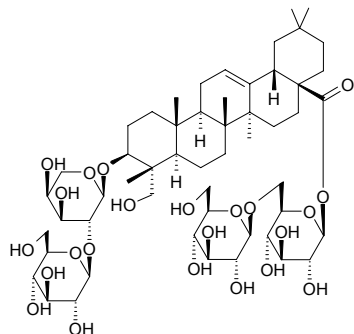
**9262 Hederagenin 3-O- α -L-arabinopyranosyl-28-O- β -D-glucopyranosyl-(1 \rightarrow 6)- β -D-glucopyranoside**

$C_{47}H_{76}O_{18}$ (929.12). **Source:** HUANG HUA BAI JIANG *Patrinia scabiosaefolia*, REN DONG TENG *Lonicera japonica*. **Ref:** 660.



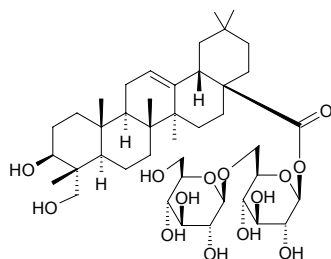
9263 Hederagenin-3-*O*- β -*D*-glucopyranosyl(1 \rightarrow 2)- α -*L*-arabinopyranosyl-28-*O*- β -*D*-glucopyranosyl(1 \rightarrow 6)- β -*D*-glucopyranoside

$C_{53}H_{86}O_{23}$ (1091.26). Source: REN DONG TENG *Lonicera japonica*. Ref: 660.



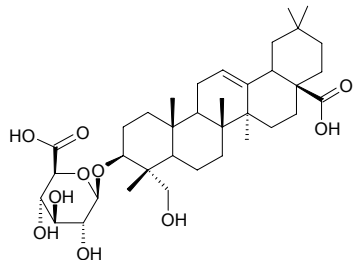
9264 Hederagenin-28-*O*- β -*D*-glucopyranosyl(1 \rightarrow 6)- β -*D*-glucopyranoside

$C_{42}H_{68}O_{14}$ (797.00). Source: CHUAN XU DUAN *Dipsacus asperoides*. Ref: 660.



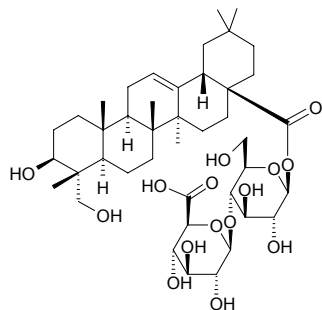
9265 Hederagenin-3-*O*- β -glucuronopyranoside

$C_{36}H_{56}O_{10}$ (648.84). White amorphous powder (MeOH), mp 224–227°C, $[\alpha]_D^{20} = +22.6^\circ$ ($c = 1.00$, MeOH). Source: CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*] (seed). Ref: 4904.



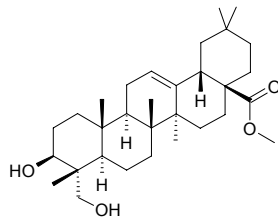
9266 Hederagenin-28-*O*- β -*D*-glucuronopyranosyl (1 \rightarrow 4)- β -*D*-glucopyranoside

$C_{42}H_{66}O_{15}$ (810.99). White powder, mp 204–206°C (dec). Source: TOU XU CONG MU *Aralia dasyphylla*. Ref: 876.



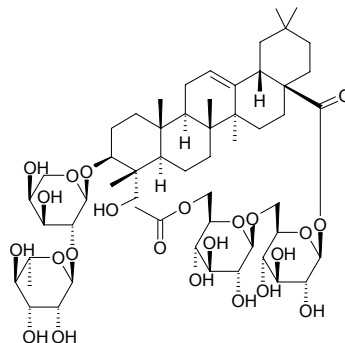
9267 Hederagenin methyl ester

$C_{31}H_{50}O_4$ (486.74). Source: XIANG SI ZI *Abrus precatorius*. Ref: 660.



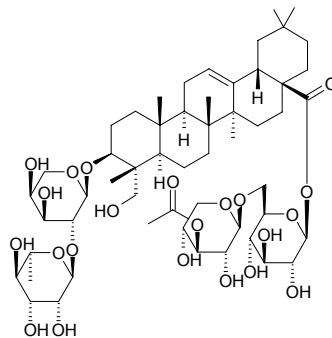
9268 Hederagenin-3-*O*- α -*L*-rhamnopyranosyl(1 \rightarrow 2)- α -*L*-arabinopyranosyl-28-*O*-6-acetyl- β -*D*-glucopyranosyl(1 \rightarrow 6)- β -*D*-glucopyranoside

$C_{55}H_{88}O_{23}$ (1117.30). Source: REN DONG TENG *Lonicera japonica*. Ref: 660.



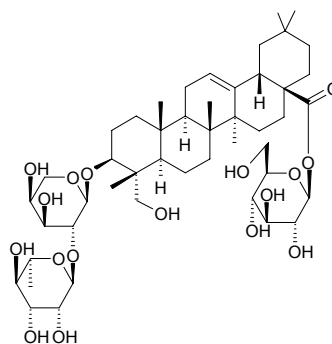
9269 Hederagenin-3-*O*- α -*L*-rhamnopyranosyl(1 \rightarrow 2)- α -*L*-arabinopyranosyl-28-*O*-3-acetyl- β -*D*-xylopyranosyl(1 \rightarrow 6)- β -*D*-glucopyranoside

$C_{54}H_{86}O_{22}$ (1087.27). Source: REN DONG TENG *Lonicera japonica*. Ref: 660.



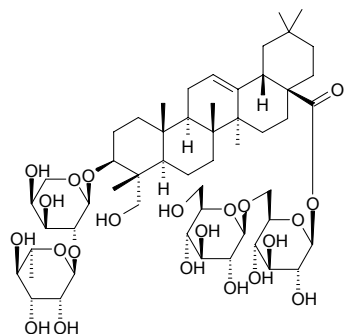
9270 Hederagenin-3-*O*- α -*L*-rhamnopyranosyl(1 \rightarrow 2)- α -*L*-arabinopyranosyl-28-*O*- β -*D*-glucopyranoside

$C_{47}H_{76}O_{17}$ (913.12). Source: REN DONG TENG *Lonicera japonica*. Ref: 660.



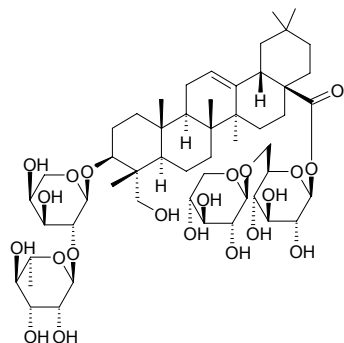
9271 deragenin-3-O- α -L-rhamnopyranosyl-(1 \rightarrow 2)- α -L-arabinopyranosyl-28-O- β -D-glucopyranosyl-(1 \rightarrow 6)- β -D-glucopyranoside

C₅₃H₈₆O₂₂ (1075.26). Source: REN DONG TENG *Lonicera japonica*. Ref: 660.



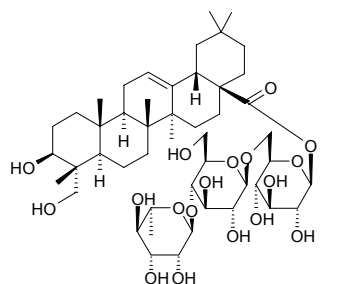
9272 Hederagenin-3-O- α -L-rhamnopyranosyl-(1 \rightarrow 2)- α -L-arabinopyranosyl-28-O- β -D-xylopyranosyl-(1 \rightarrow 6)- β -D-glucopyranoside

C₅₂H₈₄O₂₁ (1045.24). Source: LIAO DONG CONG MU YE *Aralia elata*, REN DONG TENG *Lonicera japonica*. Ref: 660, 4471.



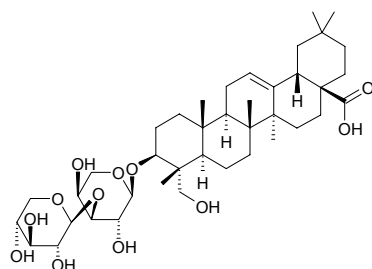
9273 Hederagenin 28-O- α -L-rhamnopyranosyl-(1 \rightarrow 4)- β -D-glucopyranosyl-(1 \rightarrow 6)- β -D-glucopyranoside

C₄₈H₇₈O₁₈ (943.15). White powder, mp 214–216 °C [α]_D²⁰ = -3.0° (c = 0.5, MeOH). Source: DONG BEI CI REN SHEN *Oplopanax elatus*. Ref: 467.



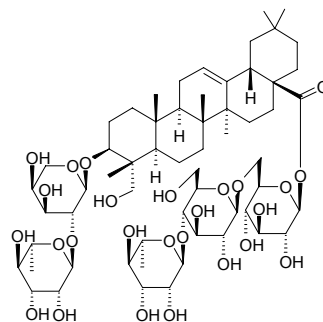
9274 Hederagenin-3-O- β -D-xylopyranosyl-(1 \rightarrow 3)- α -L-arabinopyranoside

C₄₀H₆₄O₁₂ (736.95). Source: YU ZHI ZI *Akebia quinata*. Ref: 660.



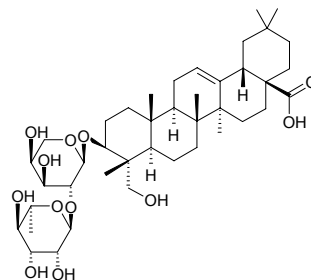
9275 Hederasaponin C

Pericarsaponin Pk C₅₉H₉₆O₂₆ (1221.41). Amorphous powder, [α]_D²⁰ = +16.2° (c = 0.10, MeOH). Pharm: Antioxidant (75 μ g/mL, total antioxidant activity (lipid peroxidation of linoleic acid emulsion) = 86%, control α -Tocopherol, total antioxidant activity = 67%; reducing power = 0.696, α -Tocopherol, reducing power = 1.929; DPPH scavenging, IC₅₀ = 82.4 μ g/mL, α -Tocopherol, IC₅₀ = 48.1 μ g/mL; superoxide radical scavenging, IC₅₀ = 45.8 μ g/mL, α -Tocopherol, IC₅₀ = 50.0 μ g/mL; iron chelating, IC₅₀ = 52.9 μ g/mL, α -Tocopherol, IC₅₀ = 50.0 μ g/mL; H₂O₂ scavenging, IC₅₀ = 59.5 μ g/mL, α -Tocopherol, IC₅₀ = 40.3 μ g/mL)^[4993]. Source: DUO YE JI DOU *Oxytropis myriophylla* (whole herb), SAN YE MU TONG *Akebia trifoliata* (stem), XI ZANG TIE XIAN LIAN *Clematis tibetana* (aerial parts), YANG CHANG CHUN TENG *Hedera helix*. Ref: 3530, 4222, 4545, 4993.



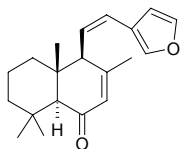
9276 α -Hederin

Kalopanaxsaponin A; Kalopanax septemlobus asponin A; Prosapogenin CP₃₆; Hederagenin-3-O- α -L-rhamnopyranosyl-(1 \rightarrow 2)- α -L-arabinopyranoside C₄₁H₆₆O₁₂ (750.98). mp 228–230°C. Pharm: Anti-inflammatory (male ICR mus, ori, dose = 50mg/kg)^[4212]; anti-inflammatory (modulator of cytokine network: prevents formation of TNF- α in RAW264.7 macrophages stimulated with LPS, IC₅₀ = 5 μ mol/L)^[4416]; antioxidant (75 μ g/mL, total antioxidant activity (lipid peroxidation of linoleic acid emulsion) = 94%, control α -Tocopherol, total antioxidant activity = 67%; reducing power = 1.412, α -Tocopherol, reducing power = 1.929; DPPH scavenging, IC₅₀ = 69.4 μ g/mL, α -Tocopherol, IC₅₀ = 48.1 μ g/mL; superoxide radical scavenging, IC₅₀ = 50.7 μ g/mL, α -Tocopherol, IC₅₀ = 50.0 μ g/mL; iron chelating, IC₅₀ = 51.4 μ g/mL, α -Tocopherol, IC₅₀ = 50.0 μ g/mL; H₂O₂ scavenging, IC₅₀ = 45.2 μ g/mL, α -Tocopherol, IC₅₀ = 40.3 μ g/mL)^[4993]. Source: CHANG CHUN TENG *Hedera nepalensis* var. *sinensis*, ZHUO SE CI QIU *Kalopanax pictum*, CI QIU SHU PI *Kalopanax septemlobus*, HONG MAO WU JIA PI *Acanthopanax giraldii* [Syn. *Acanthopanax giraldii* var. *inermis*; *Eleutherococcus giraldii*], HUANG HE MAO REN DONG *Lonicera fulvotomentosa*, HUANG HUA BAI JIANG *Patrinia scabiosaefolia*, MA TI YE *Caltha palustris*, REN DONG TENG *Lonicera japonica*, WEI LING XIAN *Clematis chinensis*, XI ZANG TIE XIAN LIAN *Clematis tibetana* (aerial parts), YANG CHANG CHUN TENG *Hedera helix*, YU ZHI ZI *Akebia quinata*. Ref: 6, 660, 3530, 4212, 4416, 4993.

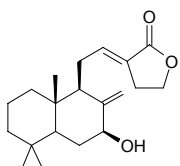


9277 Hedychenone

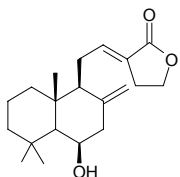
[56324-54-0] C₂₀H₂₆O₂ (298.43). Crystals (hexane), mp 135~136°C, [α]_D = +142° (CHCl₃). Source: DIAN JIANG HUA *Hedychium yunnanense*, TU LIANG JIANG *Hedychium spicatum*, TU QIANG HUO *Hedychium coronarium* (rhizome), YUAN BAN JIANG HUA *Hedychium forrestii*. Ref: 6, 322, 660, 1521, 4221.

**9278 Hedychilactone A**

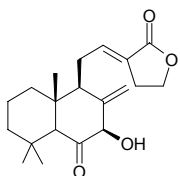
C₂₀H₃₀O₃ (318.46). Pharm: β -Hexosaminidase inhibitor (RBL-2H3 cells, 100 μ mol/L, InRt = (39.1 \pm 2.7)%, $p < 0.01$)^[4221]. Source: TU QIANG HUO *Hedychium coronarium* (rhizome). Ref: 4221.

**9279 Hedychilactone B**

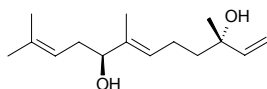
C₂₀H₃₀O₃ (318.46). Source: TU QIANG HUO *Hedychium coronarium* (rhizome). Ref: 4221.

**9280 Hedychilactone C**

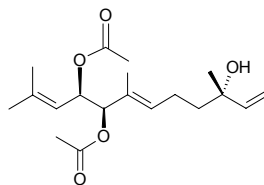
C₂₀H₂₈O₄ (332.44). Source: TU QIANG HUO *Hedychium coronarium* (rhizome). Ref: 4221.

**9281 Hedychiol A**

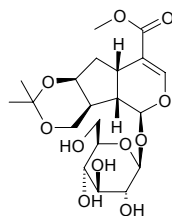
C₁₅H₂₆O₂ (238.37). Colorless oil, [α]_D²⁶ = -2.4° ($c = 0.800$, CHCl₃). Source: TU QIANG HUO *Hedychium coronarium* (rhizome). Ref: 4221.

**9282 Hedychiol B 8,9-diacetate**

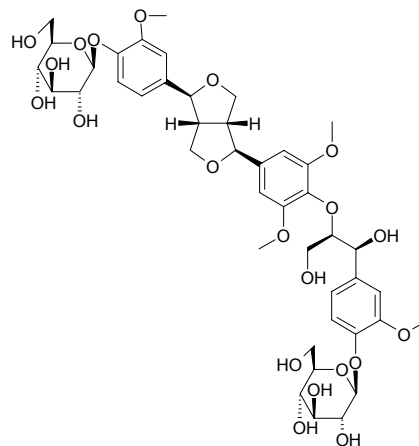
C₁₉H₃₀O₅ (338.45). Colorless oil, [α]_D²¹ = -18.8° ($c = 0.300$, CHCl₃). Pharm: β -Hexosaminidase inhibitor (RBL-2H3 cells, 100 μ mol/L, InRt = (11.4 \pm 1.2)%, $p < 0.01$)^[4221]. Source: TU QIANG HUO *Hedychium coronarium* (rhizome). Ref: 4221.

**9283 Hedyoside**

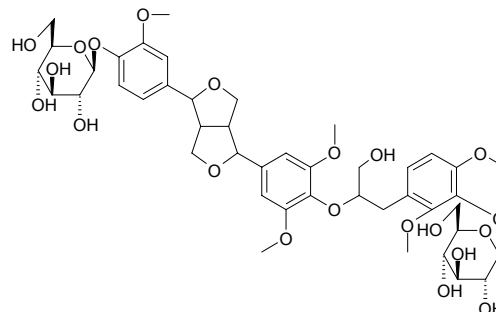
[209115-90-2] C₂₀H₃₀O₁₁ (446.46). White powder, [α]_D = -26.3° ($c = 0.049$, methanol). Source: JIN MAO ER CAO *Hedyotis chrysotricha* [Syn. *Oldenlandia chrysotricha*]. Ref: 40.

**9284 Hedytol C 4,4''-di-O- β -D-glucoopyranoside**

[107668-75-7] C₄₃H₅₆O₂₁ (908.91). Source: DU ZHONG *Eucommia ulmoides*. Ref: 2, 184.

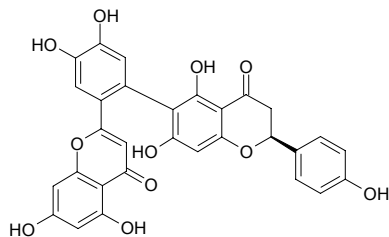
**9285 Hedyalignan A**

C₄₄H₅₈O₂₁ (922.94). White powder, mp 160~164°C, [α]_D²⁵ = +4.0° ($c = 0.22$, MeOH). Source: DUO XU YAN HUANG QI *Hedysarum polybotrys*. Ref: 2470.

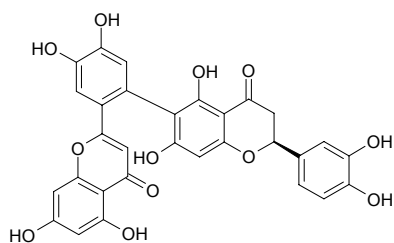


9286 Hegoflavone A

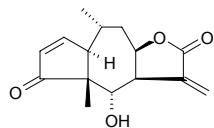
2,3-Dihydro-3''-hydroxy-6'''-biapigenin C₃₀H₂₀O₁₁ (556.49). Source: SUO LUO *Alsophila spinulosa*. Ref: 660.

**9287 Hegoflavone B**

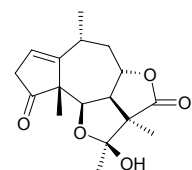
2,3-Dihydro-6,6'''-biluteolin C₃₀H₂₀O₁₂ (572.49). Source: SUO LUO *Alsophila spinulosa*. Ref: 660.

**9288 Helenalin**

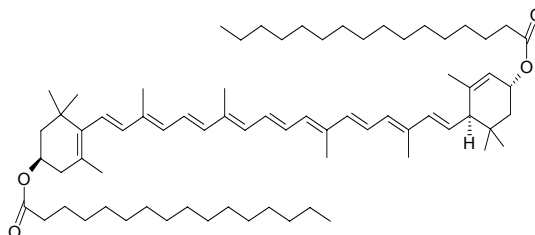
[6754-13-8] C₁₅H₁₈O₄ (262.31). Crystals (C₂H₅OH or C₆H₆), mp 225–228°C, [α]_D²⁵ = –102.8° (CHCl₃). Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 100μg/mg; *Bacillus subtilis*, MIC = 100μg/mg); antineoplastic (mus, P₃₈₈, *in vivo*); anti-inflammatory (rat swollen foot model caused by carrageenan, 2.5mg/kg, InRt = 72%, rat experimental arthritis, 2.5mg/kg, InRt = 73%); anthelmintic; cytotoxic (HeLa *in vitro*, ED₅₀ = 0.03μg/mL, normal hmn diploid fibrocyte WI-38 *in vitro*, ED₅₀ = 0.03μg/mL, hmn throat epidermic carcinoma cells H-Ep-2, ED₅₀ = 0.08μg/mL, W-18Va-2 cells, ED₅₀ = 0.07μg/mL); molluscicide; toxin (hmn, animals, fish and insects); anti-inflammatory (NF-κB pathway)^[4415]. Source: DUI XIN JU *Helenium autumnale*, FANG XIANG DUI XIN JU *Helenium aromaticum*, SHAN DI DUI XIN JU *Helenium autumnale* var. *montanum*, XI YE DUI XIN JU *Helenium tenuifolium*, XIAO TOU DUI XIN JU *Helenium microcephalum*. Ref: 4, 658, 1521, 4415.

**9289 Heleniamarin**

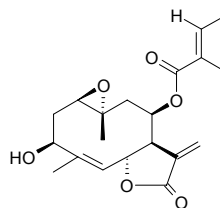
[66607-74-7] C₁₇H₂₂O₅ (306.36). Crystals (Et₂O), mp 151–153°C, [α]_D²¹ = +58.5° (c = 0.25, CHCl₃). Source: KU WEI DUI XIN JU *Helenium amarum*. Ref: 4, 1521.

**9290 Helenien**

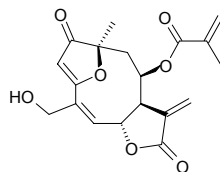
Xantofyl palmitate; Adaptinol; Aptinol [547-17-1] C₇₂H₁₁₆O₄ (1045.72). Red crystals (C₂H₅OH), mp 92°C. Pharm: Yellow pigment. Source: WAN SHOU JU *Tagetes erecta*, DUI XIN JU *Helenium autumnale*, KONG QUE CAO *Tagetes patula*, DI TANG HUA *Kerria japonica*. Ref: 6, 658, 1521.

**9291 Heliangin**

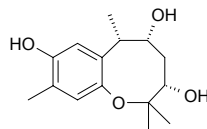
[13323-48-3] C₂₀H₂₆O₆ (362.43). Crystals (MeOH), mp 227–229°C, [α]_D²³ = –110° (c = 0.5, CHCl₃). Pharm: Plant growth regulator. Source: CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole plant: yield = 0.0012%dw)^[4762], JU YU *Helianthus tuberosus*, XIANG RI KUI YE *Helianthus annuus*, XIANG RI KUI ZI *Helianthus annuus*. Ref: 6, 658, 1521, 4762.

**9292 Heliangolide 17,18-dehydro-viguiepinin**

C₁₉H₂₀O₇ (360.37). Source: *Viguiera eriophora* ssp. *eriophora* (aerial parts). Ref: 5090.

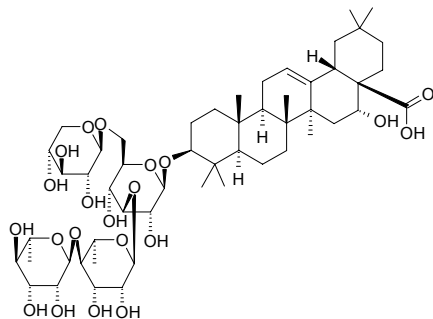
**9293 Heliannuol L**

C₁₅H₂₂O₄ (266.34). Colorless oil. Source: XIANG RI KUI YE *Helianthus annuus*. Ref: 1927.

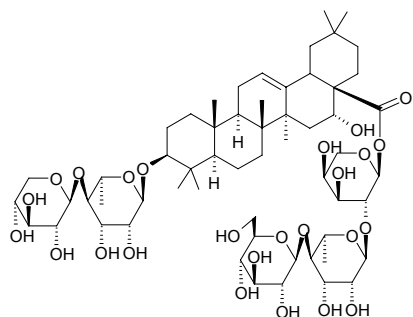


9294 Helianthoside A

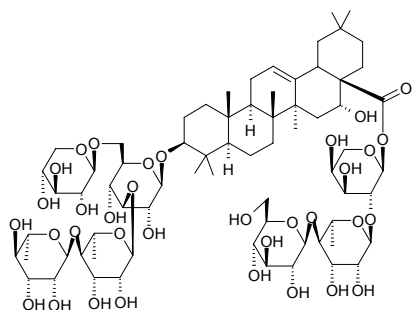
[139164-70-8] C₅₃H₈₆O₂₁ (1059.26). **Pharm:** Hemolytic. **Source:** XIANG RI KUI ZI *Helianthus annuus*. **Ref:** 658.

**9295 Helianthoside B**

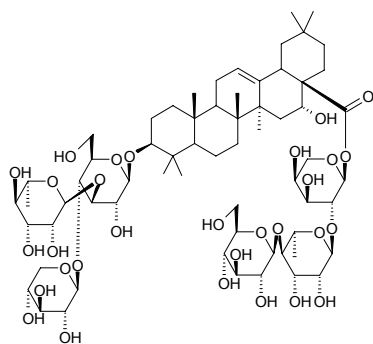
[29108-67-6] C₅₈H₉₄O₂₅ (1191.38). **Source:** XIANG RI KUI HUA *Helianthus annuus*. **Ref:** 6.

**9296 Helianthoside C**

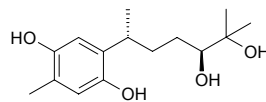
C₇₀H₁₁₄O₃₄ (1499.67). mp 215~217°C. **Source:** XIANG RI KUI HUA *Helianthus annuus*. **Ref:** 6.

**9297 Helianthussaponin 2**

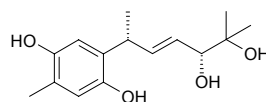
C₆₄H₁₀₄O₃₀ (1353.52). **Source:** MAI XIAN WENG *Agrostemma githago* (root). **Ref:** 5464.

**9298 Helibisabonol A**

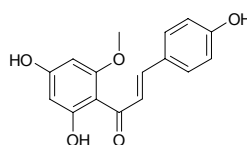
C₁₅H₂₂O₄ (268.36). Colorless oil, [α]_D²⁵ = -44.9° (c = 0.1, CH₃COCH₃). **Source:** XIANG RI KUI YE *Helianthus annuus*. **Ref:** 1927.

**9299 Helibisabonol B**

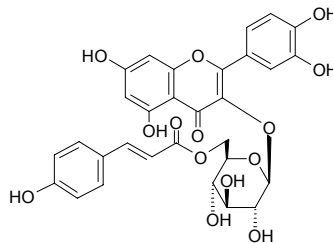
C₁₅H₂₂O₄ (266.34). Colorless oil, [α]_D²⁵ = -7.2° (c = 0.1, CH₃COCH₃). **Source:** XIANG RI KUI YE *Helianthus annuus*. **Ref:** 1927.

**9300 Helichrysetin**

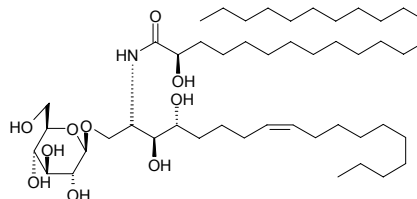
C₁₆H₁₄O₅ (286.29). **Pharm:** Cytotoxic (Colon26-L5, ED₅₀ = 64.7 μmol/L; HT1080, ED₅₀ = 40.1 μmol/L). **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00079%). **Ref:** 3042.

**9301 Helichrysoiside**

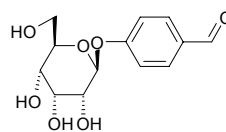
[56343-26-1] C₃₀H₂₆O₁₄ (610.53). Bright yellow lamellar crystals (with 1.5 H₂O), mp 181~184°C, [α]_D²¹ = -44° (c = 1.0, methanol). **Pharm:** Antihypertensive (rat, inhibits sympathetic nervous system and relaxes blood vessels). **Source:** ZANG HONG HUA *Crocus sativus*. **Ref:** 1029, 1173.

**9302 Helicia cerebroside A**

1-β-D-Glucopyranosyl-(2S,3S,4R,8Z)-2-[(2'R)-2'-hydroxylignocenoyl-amino]-8-octadecene-1,3,4-triol C₄₈H₉₃NO₁₀ (844.28). White crystalline powder. **Source:** SHEN LU SHAN LONG YAN *Helicia nilagirica* (leaf). **Ref:** 4843.

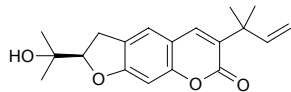
**9303 Helicide**

C₁₃H₁₆O₇ (284.27). **Source:** SHEN LU SHAN LONG YAN *Helicia nilagirica*. **Ref:** 660.

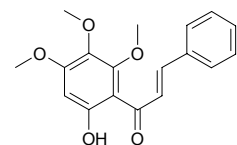


9304 Heliettin

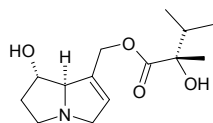
Chalepin; Rutamarin alcohol [33054-89-6] $C_{19}H_{22}O_4$ (314.38). mp 165°C. Pharm: Cytotoxic (*in vitro*); phyto-growth inhibitor (100 μ g/mL, *Amaranthus hypochondriacus*, InRt = (45.1 \pm 1.3)%), $P < 0.05$; *E. crusgalli*, InRt = (88.5 \pm 1.8)%^[5253]. Source: CHOU CAO *Ruta graveolens*, SUI ZHUANG YUN XIANG *Ruta chalepensis*, *Stauranthus perforatus* (root). Ref: 6, 658, 5253.

**9305 Helilandin B**

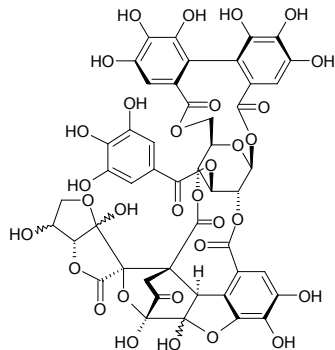
$C_{18}H_{18}O_5$ (314.34). Source: *Didymocarpus pedicellata*, *Helichrysum sutherlandii*. Ref: 660.

**9306 Heliohoustine**

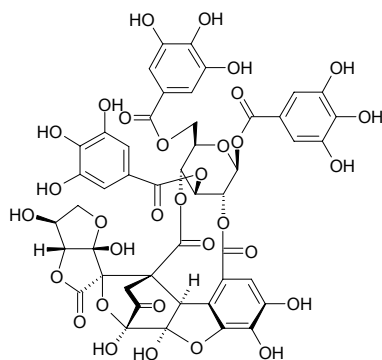
O^9 -(2*S*-2 α -Hydroxy-2,3-dimethyl-butanoyl) $C_{14}H_{23}NO_4$ (269.34). Source: XIONG ER CAO *Ageratum houstonianum* (aerial parts). Ref: 5173.

**9307 Helioscopin A**

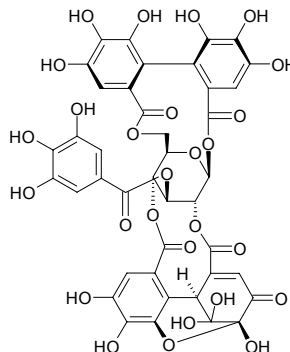
$C_{47}H_{34}O_{32}$ (1110.78). Source: ZE QI *Euphorbia helioscopia*. Ref: 660.

**9308 Helioscopin B**

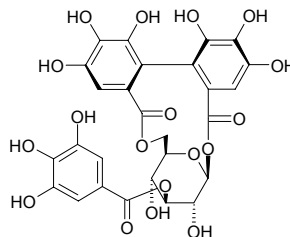
$C_{47}H_{36}O_{32}$ (1112.79). Source: ZE QI *Euphorbia helioscopia*. Ref: 660.

**9309 Helioscopin A**

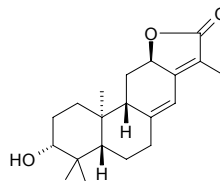
$C_{41}H_{28}O_{27}$ (952.66). Source: ZE QI *Euphorbia helioscopia*. Ref: 660.

**9310 Helioscopin B**

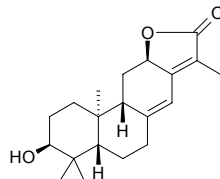
$C_{27}H_{22}O_{18}$ (634.47). Source: ZE QI *Euphorbia helioscopia*. Ref: 660.

**9311 Helioscopinolide A**

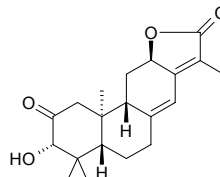
$C_{20}H_{28}O_3$ (316.44). Colorless needles. Source: DA GUO DA JI *Euphorbia wallichii* (root), ZE QI *Euphorbia helioscopia*. Ref: 660, 4585.

**9312 Helioscopinolide B**

$C_{20}H_{28}O_3$ (316.44). Source: ZE QI *Euphorbia helioscopia*. Ref: 660.

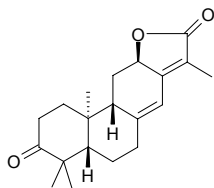
**9313 Helioscopinolide C**

$C_{20}H_{26}O_4$ (330.43). Colorless needles. Source: DA GUO DA JI *Euphorbia wallichii* (root), ZE QI *Euphorbia helioscopia*. Ref: 660, 4585.

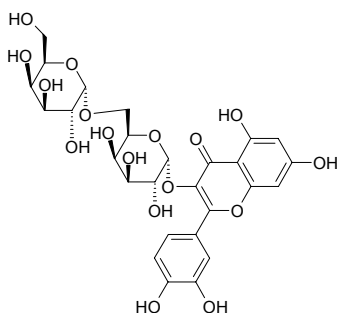


9314 Helioscopinolide E

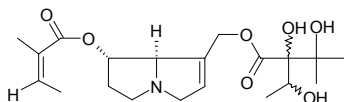
$C_{20}H_{26}O_3$ (314.43). Colorless needles. Source: DA GUO DA JI *Euphorbia wallichii* (root). Ref: 4585.

**9315 Heliosin**

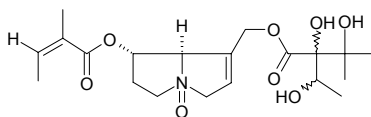
$C_{27}H_{30}O_{17}$ (626.53). Hemi-hydrate, yellow acicular crystals, mp 187°C, $[\alpha]_D = -104.4^\circ$ ($c = 0.498$, 95% ethanol). Pharm: Antitussive (used in treatment of chronic bronchitis, in 286 cases, 5 days constituting a single therapeutic course, excellent effective rate = 50%). Source: ZE QI *Euphorbia helioscopia*. Ref: 661.

**9316 Heliosupine**

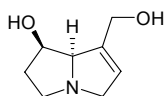
[32728-78-2] $C_{20}H_{31}NO_7$ (397.47). mp 148~149°C. Pharm: Hepatotoxin. Source: ZHUO SE LIU LI CAO *Cynoglossum pictum*, CU XI MEN FEI CAO *Symphytum asperum*, LAN JI *Echium vulgare*, NAN FANG LIU LI CAO *Cynoglossum australe*, XI MEN FEI CAO *Symphytum officinale*, YANG XIN TIAN JIE CAI *Heliotropium supinum*, YAO YONG DAO TI HU *Cynoglossum officinale*. Ref: 6, 658.

**9317 Heliosupine N-oxide**

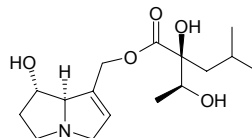
$C_{20}H_{31}NO_8$ (413.47). mp 165°C (dec). Source: YAO YONG DAO TI HU *Cynoglossum officinale*. Ref: 6.

**9318 Heliotridine**

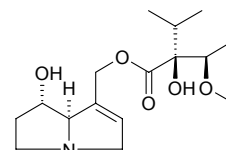
Retronecine† [480-85-3] $C_8H_{13}NO_2$ (155.20). Crystals (Me_2CO), mp 121~122°C, $[\alpha]_D^{26} = +50.2^\circ$ (ethanol). Pharm: Hepatotoxin. Source: JIA DONG FANG QIAN LI GUANG *Senecio pseudoorientalis*, *Crotalaria* sp., *Heliotropium* sp. Ref: 658, 1521.

**9319 Heliotridine 2S-hydroxy-2S-(1S-hydroxyethyl)-4-methyl-pentanoyl ester**

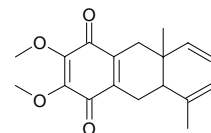
$C_{16}H_{27}NO_5$ (313.40). Yellow-orange oil, $[\alpha]_D^{25} = +14.3^\circ$ ($c = 0.1$, MeOH). Source: CU MAO NIU SHE CAO *Anchusa strigosa* (flower, leaf and root). Ref: 5298.

**9320 Heliotrine**

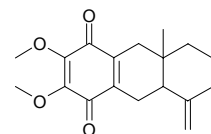
[303-33-3] $C_{16}H_{27}NO_5$ (313.40). Prisms (Me_2CO), mp 125~126°C, mp 128°C, $[\alpha]_D^{20} = +63.8^\circ$ ($CHCl_3$), $[\alpha]_D = +17.6^\circ$ (ethanol). Pharm: Antineoplastic (adenoma 755, S₁₈₀, subcutaneous Walker sarcoma and Walker sarcoma in murine muscle *in vivo*); cytotoxic (KB *in vitro*, ED₅₀ = 15µg/L); mutagen (Ames, drosophila, rat experiments); teratogen (Ames, drosophila, rat experiments). Source: A GU JI TIAN JIE CAI *Heliotropium arguzioides*, AI SHI TIAN JIE CAI *Heliotropium eichwaldii*, AO ER JIA TIAN JIE CAI *Heliotropium olgae*, DA WEI YAO *Heliotropium indicum*, DUO ZHI TIAN JIE CAI *Heliotropium ramosissimum*, OU ZHOU TIAN JIE CAI *Heliotropium europaeum*, YAN TIAN JIE CAI *Heliotropium curassavicum*, YAO YONG DAO TI HU *Cynoglossum officinale*. Ref: 5, 658.

**9321 Heliotropinone A**

7-Isopropenyl-2,3-dimethoxy-6-methyl-6-vinyl-5,6,7,8-tetrahydronaphthalene-1,4-dione $C_{18}H_{22}O_4$ (302.37). Dark yellow oil, $[\alpha]_D = 0^\circ$ ($c = 0.05$, MeOH). Pharm: Antifungal (*Cladosporium cucumerinum*, MIA = 2µg, control Nystatin, MIA = 1µg; *Candida albicans*, MIA = 4µg, Nystatin, MIA = 1µg)^[5203]; antibacterial (*Bacillus subtilis*, MIA = 0.2µg; control Chloramphenicol, MIA = 0.01µg)^[5203]. Source: LUAN YE TIAN JIE CAI *Heliotropium ovalifolium* (aerial parts). Ref: 5203.

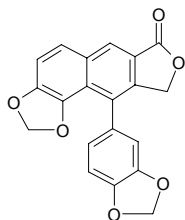
**9322 Heliotropinone B**

2,3-Dimethoxy-8α-methyl-5-methylene-5,6,7,8,8α,9,10,10a-octahydroanthracene-1,4-dione $C_{18}H_{22}O_4$ (302.37). Dark yellow oil, $[\alpha]_D = +4^\circ$ ($c = 0.05$, MeOH). Pharm: Antifungal (*Cladosporium cucumerinum*, MIA = 2µg, control Nystatin, MIA = 1µg; *Candida albicans*, MIA = 2µg, Nystatin, MIA = 1µg); antibacterial (*Bacillus subtilis*, MIA = 0.2µg; control Chloramphenicol, MIA = 0.01µg). Source: LUAN YE TIAN JIE CAI *Heliotropium ovalifolium* (aerial parts). Ref: 5203.

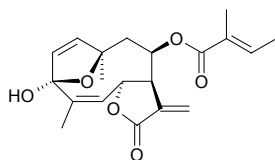


9323 Helioxanthin

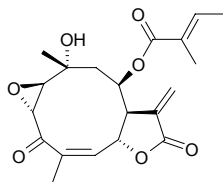
[18920-47-3] $C_{20}H_{12}O_6$ (348.32). mp 240~241°C. **Pharm:** Cytotoxic (A549, $ED_{50} = 11.3\mu\text{mol/L}$, $ED_{50} = 32.4\mu\text{g/mL}$; control Adriamycin, $ED_{50} = 0.01\mu\text{mol/L}$, $ED_{50} = 0.02\mu\text{g/mL}$; MCF7, $ED_{50} = 12.6\mu\text{mol/L}$, $ED_{50} = 36.1\mu\text{g/mL}$; Adriamycin, $ED_{50} = 0.1\mu\text{mol/L}$, $ED_{50} = 0.1\mu\text{g/mL}$; HT29, $ED_{50} = 13.4\mu\text{mol/L}$, $ED_{50} = 38.6\mu\text{g/mL}$; Adriamycin, $ED_{50} = 0.1\mu\text{mol/L}$, $ED_{50} = 0.1\mu\text{g/mL}$)^[5088]. **Source:** DA JIN NIU CAO *Polygala chinensis* [Syn. *Polygala glomerata*], QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.000067%dw)^[4783], TAI WAN SHAN *Taiwania cryptomerioides* (heartwood). **Ref:** 6, 4783, 5088.

**9324 Helivypolide D**

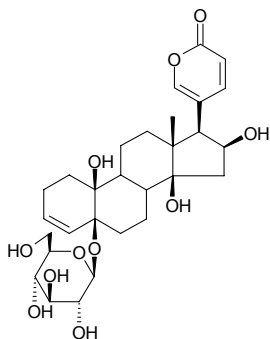
$C_{20}H_{24}O_6$ (360.41). Colorless oil. **Source:** ZAI PEI XIANG RI KUI YE *Helianthus annuus* cv. **Ref:** 2370.

**9325 Helivypolide E**

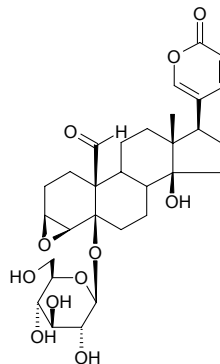
$C_{20}H_{24}O_7$ (376.41). Colorless oil. **Source:** ZAI PEI XIANG RI KUI YE *Helianthus annuus* cv. **Ref:** 2370.

**9326 Hellebortin A**

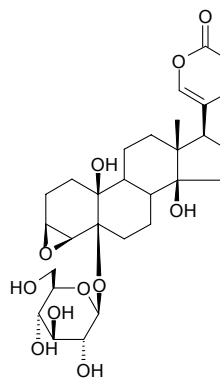
5-[β -D-Glucopyranosyloxy]-10,14,16-trihydroxy-19-nor-{5 β ,10 β ,14 β ,16 β }-bufa-3,20,22-trienolide $C_{29}H_{40}O_{11}$ (564.64). Colorless glassy solid. **Pharm:** Ecdysteroid agonist or antagonist inactive (*Drosophila melanogaster* B₁₁ cell line, 1~1000 $\mu\text{mol/L}$). **Source:** NIU QU TI GEN CAO *Helleborus torquatus* [Syn. *Helleborus serbicus*] (seed). **Ref:** 5142.

**9327 Hellebortin B**

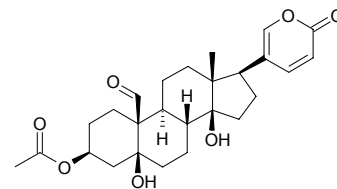
5-[β -D-Glucopyranosyloxy]-3,4-epoxy-14-hydroxy-19-oxo-bufa-20,22-dienolide $C_{30}H_{40}O_{11}$ (576.65). White glassy solid. **Source:** NIU QU TI GEN CAO *Helleborus torquatus* [Syn. *Helleborus serbicus*] (seed). **Ref:** 5142.

**9328 Hellebortin C**

5-[β -D-Glucopyranosyloxy]-3,4-epoxy-10,14-dihydroxy-19-nor-bufa-20,22-dienolide $C_{29}H_{40}O_{11}$ (564.64). Colorless glassy solid. **Source:** NIU QU TI GEN CAO *Helleborus torquatus* [Syn. *Helleborus serbicus*] (seed). **Ref:** 5142.

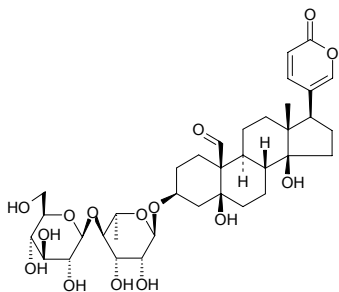
**9329 Hellebrigenin 3-acetate**

$C_{26}H_{34}O_7$ (458.56). **Pharm:** Antineoplastic. **Source:** TI GEN CAO *Helleborus niger*, TIE KUAI ZI *Helleborus thibetanus*, CHAN CHU *Bufo bufo gargarizans*; *Bufo melanostictus*. **Ref:** 658.

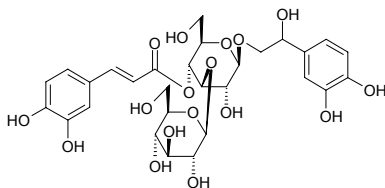


9330 Hellebrin

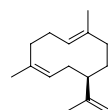
Hellebrigenin glucorhamnoside [13289-18-4] $C_{36}H_{52}O_{15}$ (724.81). mp 283~284°C. **Pharm:** Anticonvulsant (caused by pentylenetetrazol); anti-electroshock; cardiac glycoside; cytotoxic (hmn epidermoid carcinoma KB cells, *in vitro*); LD₅₀ (pgg, perfusion in stomach) = 0.85μmol/kg. **Source:** TI GEN CAO *Helleborus niger*, ZI TI GEN CAO *Helleborus purpurascens*, TIE KUAI ZI *Helleborus thibetanus*, XIANG TIE KUAI ZI *Helleborus odoratus*, MA TI YE *Caltha palustris*. **Ref:** 5, 658, 660.

**9331 Hellicoside**

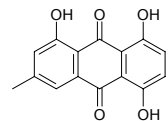
[132278-04-7] $C_{29}H_{36}O_{17}$ (656.59). Amorphous powder, mp 182.6~190.3°C, $[\alpha]_D^{23} = -27^\circ$ ($c = 1.0$, MeOH). **Pharm:** 5-LOX Inhibitor (IC₅₀ = 0.316μmol/L); aldose reductase inhibitor (IC₅₀ = 926μmol/L); cAMP phosphodiesterase inhibitor (*in vitro*, IC₅₀ = 169μmol/L); cyclo-adenyl mononucleotide phosphodiesterase inhibitor. **Source:** CHE QIAN *Plantago asiatica*. **Ref:** 658, 1096.

**9332 (+)-Helminthogermacrene**

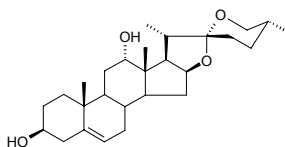
$C_{15}H_{24}$ (204.36). Colorless oil. **Source:** BO BAN HE YE TAI *Scapania undulata* (essential oil). **Ref:** 3752.

**9333 Helminthosporin**

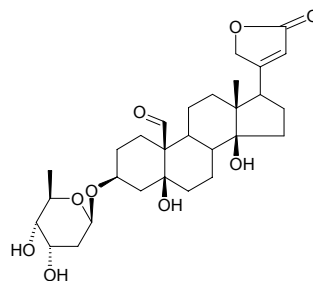
[518-80-9] $C_{15}H_{10}O_5$ (270.24). Red needles (pyriding or Et₂O), mp 228°C. **Source:** LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], WANG JIANG NAN *Cassia occidentalis*. **Ref:** 2, 1521.

**9334 Heloniogenin**

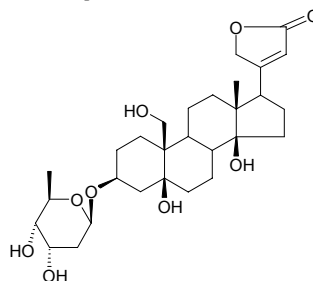
[6869-16-5] $C_{27}H_{42}O_4$ (430.63). Crystals (MeOH), mp 212~213°C, $[\alpha]_D = -91^\circ$ (CHCl₃). **Source:** LEI GONG QI *Clintonia alpina*. **Ref:** 6, 1521.

**9335 Helveticoside**

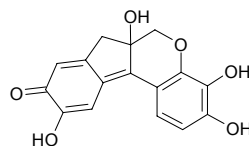
Alleoside A; Erysimin; Erysimotoxin [630-64-8] $C_{29}H_{42}O_9$ (534.65). Crystals +2H₂O (EtOH aq.), mp 168~172°C (dec), $[\alpha]_D^{20} = +43.5^\circ$ (ethanol); mp 153~157°C. **Pharm:** Cardiac glycoside; contracts blood vessels (cat heart, vasa coronaria, *in vitro*, high concentration); diuretic (mus); sedative (cat); LD₅₀ (cat) = 0.09mg/kg. **Source:** BO NIANG HAO *Descurainia sophia*, CHANG SHUO HUANG MA *Corchorus olitorius*, GUI ZHU TANG JIE *Erysimum cheiranthoides*, HUAN YANG SHEN YE TANG JIE *Erysimum crepidifolium*, HUANG BAI TANG JIE *Erysimum ochroleucum*, HUANG MA YE *Corchorus capsularis*, HUANG MA ZI *Corchorus capsularis*, TANG JIE *Erysimum diffusum*, KANG PI DU MAO XUAN HUA *Strophanthus kombe*. **Ref:** 5, 6, 658, 1521.

**9336 Helveticosol**

[18695-02-8] $C_{29}H_{44}O_9$ (536.67). Plates (H₂O), mp 147~152°C. **Source:** GUI ZHU TANG JIE *Erysimum cheiranthoides*, KANG PI DU MAO XUAN HUA *Strophanthus kombe*, *Castilla elastica*. **Ref:** 6, 1521.

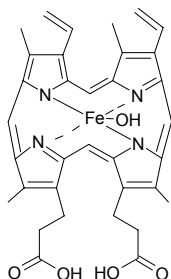
**9337 Hematein**

Hydroxybrazilein $C_{16}H_{12}O_6$ (300.27). mp > 200°C, mp 250°C (dec), insoluble in benzene, chloroform, very slightly soluble in water, slightly soluble in ethanol, ether.^[5507] **Pharm:** Anti-inflammatory (modulator of cytokine network: reduces expression of VCAM-1 in aorta of hypercholesterolemic New Zealand rabbits; reduces TNF- α -induced VCAM-1 expression in HUVECs; diminishes increase in VCAM-1 and MCP-1 levels induced by TNF- α and oxidized LDL in HUVECs, respectively, as well as reducing TNF- α and IL-1 β production in peritoneal macrophages stimulated with LPS plus IFN γ ; reduces cell surface expression of adhesion molecules, resulting in inhibition of THP-1 monocyte adhesion to TNF- α stimulated HUVECs)^[4416]. **Source:** SU MU *Caesalpinia sappan*. **Ref:** 4416, 5507.

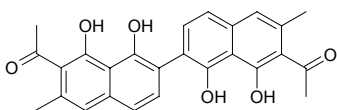


9338 Hematin

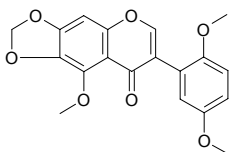
Haematin [15489-90-4] $C_{34}H_{33}FeN_4O_5$ (633.51). mp 200°C (dec). Source: NIU XUE *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 6, 1521.

**9339 Hemerocallin**

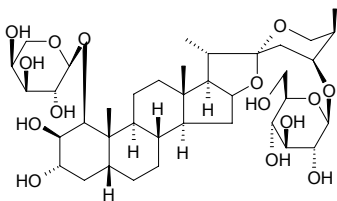
Stypanrol [99305-33-6] $C_{26}H_{22}O_6$ (430.46). Orange needles ($CHCl_3$), mp 256–266°C (dec); mp 266–269°C. Pharm: Schistosomacide (main effective component in Orange Daylily, *Hemerocallis fulva* XUAN CAO GEN, used in treatment of schistosomiasis); toxin (animal, sheep and goat, neurotoxic, cumulative poisoning, palsy and death). Source: SHE XIANG XUAN *Hemerocallis thunbergii*, XIAO XUAN CAO GEN *Hemerocallis minor*, family Liliaceae spp. Ref: 6, 658, 660, 1521.

**9340 Hemerocallone**

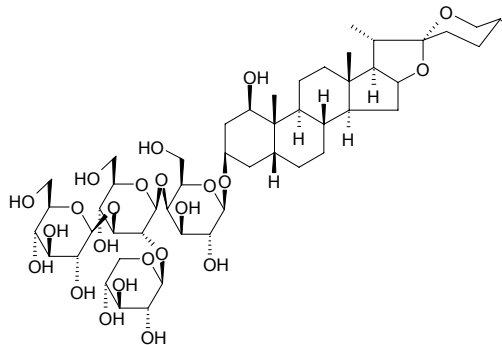
[82869-19-0] $C_{19}H_{16}O_7$ (356.34). Colorless long acicular, mp 177–179°C. Pharm: Diuretic (rat). Source: XIAO XUAN CAO GEN *Hemerocallis minor*. Ref: 658, 1521.

**9341 Hemeroside A**

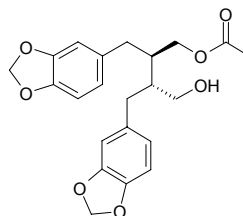
24S-Hydroxy-neotokorogenin 1-*O*- α -L-arabinopyranosyl 24-*O*- β -D-glucopyranoside $C_{38}H_{62}O_{15}$ (758.91). White powder, mp 120–125°C, $[\alpha]_D^{26} = 17.6^\circ$ ($c = 0.9$, MeOH). Source: CHONG BAN XUAN CAO *Hemerocallis fulva* var. *kwanso* (aerial parts). Ref: 3514.

**9342 Hemeroside B**

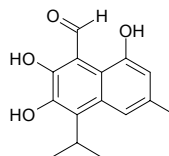
Isorhodeasapogenin 3-*O*- β -D-glucopyranosyl-(1→3)-[β -D-xylopyranosyl-(1→2)]- β -D-glucopyranosyl-(1→4)- β -D-galactopyranoside $C_{50}H_{82}O_{23}$ (1050.20). Colorless needles, mp 287–290°C, $[\alpha]_D^{26} = 56.0^\circ$ ($c = 1.5$, pyridine). Source: CHONG BAN XUAN CAO *Hemerocallis fulva* var. *kwanso* (aerial parts). Ref: 3514.

**9343 Hemiarisensin**

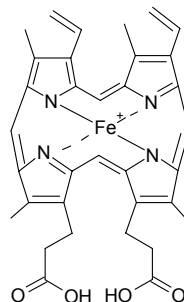
4-Acetoxy-2,3-bis(3,4-methylene-dioxybenzyl)-butan-1-ol $C_{22}H_{24}O_7$ (400.43). Source: BI CHENG QIE *Piper cubeba*. Ref: 660.

**9344 Hemigossypol**

[40817-07-0] $C_{15}H_{16}O_4$ (260.29). Yellow crystals ($CHCl_3$), mp 159–163°C (dec). Pharm: Antifungal. Source: LU DI MIAN *Gossypium hirsutum* [Syn. *Gossypium mexicanum*], MIAN HUA GEN *Gossypium herbaceum*. Ref: 6, 658.

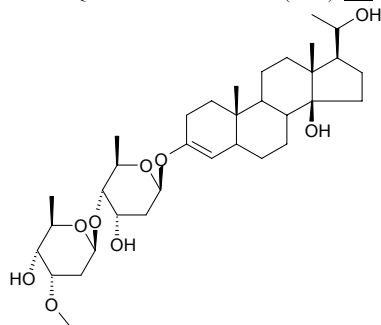
**9345 Hemin**

Haemin; Protoporphyrin iron(III) complex [16009-13-5] $C_{34}H_{32}FeN_4O_4^+$ (616.51). Source: CU LIU GUO *Hippophae rhamnoides*. Ref: 6, 1521.

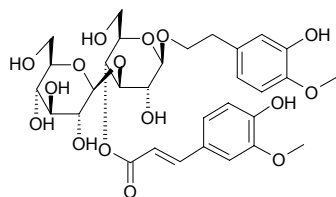


9346 Heminine

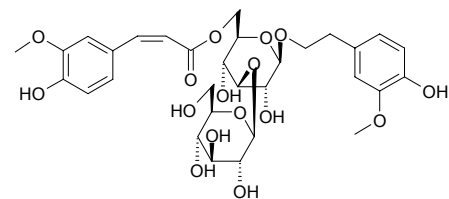
Calogenin 3-*O*- β -D-cymaropyranosyl-(1 \rightarrow 4)-*O*- β -D-digitoxopyranoside
 $C_{34}H_{56}O_9$ (608.82). mp 132°C, $[\alpha]_D = -62.5^\circ$ ($c = 0.11$, MeOH). Source: YIN DU BA QIA *Hemidesmus indicus* (stem). Ref: 5081.

**9347 Hemiphroside A**

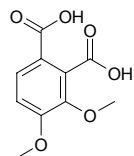
$C_{31}H_{40}O_{16}$ (668.65). Pharm: Antioxidant (hydroxyl radical scavenger, $IC_{50} = 110.5 \mu\text{mol/L}$, control Ascorbic acid, $IC_{50} = 51.8 \mu\text{mol/L}$, superoxide anion radical scavenger, $IC_{50} = 208.5 \mu\text{mol/L}$, control Ascorbic acid, $IC_{50} = 86.2 \mu\text{mol/L}$). Source: XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora* (root). Ref: 4289.

**9348 Hemiphroside C**

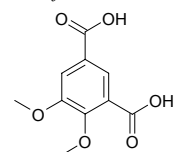
$C_{31}H_{40}O_{16}$ (668.65). Yellowish amorphous powder. Source: BIAN DA XIU QIU *Hemiphragma heterophyllum* (whole herb). Ref: 4816.

**9349 Hemipic acid**

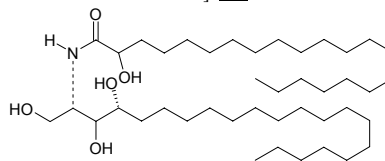
Hemipinic acid $C_{10}H_{10}O_6$ (226.19). Source: YING SU *Papaver somniferum*. Ref: 660.

**9350 m-Hemipic acid**

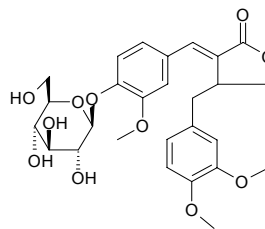
m-Hemipinic acid $C_{10}H_{10}O_6$ (226.19). Source: YING SU *Papaver somniferum*. Ref: 660.

**9351 Hemisceramide**

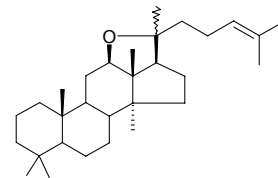
$C_{42}H_{85}NO_5$ (684.15). White powdery crystals (MeOH), mp 129–130°C. Source: NI HU CAI *Hemistepta lyrata* [Syn. *Hemistepta carthamoides*; *Saussurea carthamoides*]. Ref: 2231.

**9352 Hemislienoside**

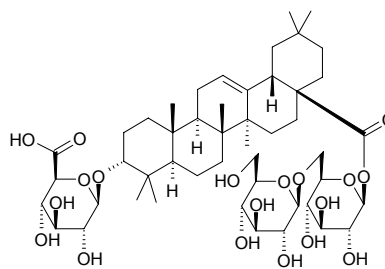
$C_{27}H_{32}O_{11}$ (532.55). Colorless granulous crystals, mp 112–113°C. Source: NI HU CAI *Hemistepta lyrata* [Syn. *Hemistepta carthamoides*; *Saussurea carthamoides*]. Ref: 2127.

**9353 Hemistriterpene ether**

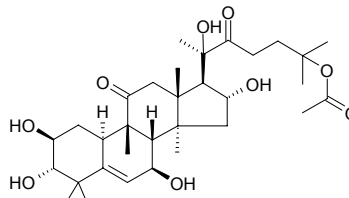
$C_{30}H_{50}O$ (426.73). Colorless granular crystals (MeOH), mp > 300°C, $[\alpha]_D^{20} = +13.6^\circ$ ($c = 0.000151$, MeOH). Source: NI HU CAI *Hemistepta lyrata* [Syn. *Hemistepta carthamoides*; *Saussurea carthamoides*]. Ref: 2231.

**9354 Hemsgiganoside B**

$C_{48}H_{76}O_{19}$ (957.13). White powder. Source: JU HUA XUE DAN *Hemsleya gigantea*. Ref: 2491.

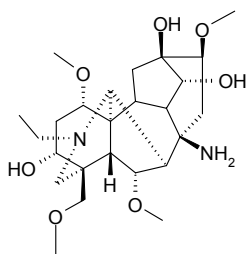
**9355 Hemslecin G**

$C_{32}H_{50}O_9$ (578.75). White powder, mp 132–138°C. Source: JU HUA XUE DAN *Hemsleya gigantea*. Ref: 2491.

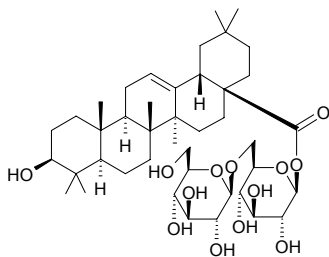


9356 Hemsleyatine

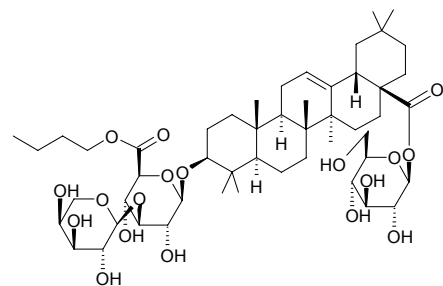
$C_{25}H_{42}N_2O_7$ (482.62). White amorphous powder, mp 89–90°C (chloroform–acetone–diethylamine), $[\alpha]_D = +36.5^\circ$ ($c = 0.55$, $CHCl_3$).
Source: GUA YE WU TOU *Aconitum hemsleyanum* (root). Ref: 4343.

**9357 Hemsloin A**

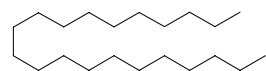
Oleanolic acid 28-*O*- β -*D*-glucopyranosyl-(1 \rightarrow 6)- β -*D*-glucopyranoside
 $C_{42}H_{68}O_{13}$ (781.00). White crystals, mp 245–250°C (dec), $[\alpha]_D^{26} = 18.52^\circ$ ($c = 0.19$, MeOH). Source: GU LIN XUE DAN *Hemsleya penxianensis* var. *gulinensis*. Ref: 2484.

**9358 Hemsloin B**

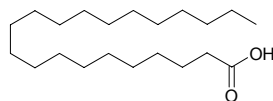
3-*alpha*-*O*-*L*-Arabinopyranosyl-(1 \rightarrow 3)-(6'-butyl ester)- β -*D*-glucopyranosyl-oleanolic acid-28-*O*- β -*D*-glucopyranoside
 $C_{51}H_{82}O_{18}$ (983.21). White powder, mp 198–200°C (dec), $[\alpha]_D^{26} = +16.62^\circ$ ($c = 0.361$, MeOH).
Source: GU LIN XUE DAN *Hemsleya penxianensis* var. *gulinensis*. Ref: 2484.

**9359 Heneicosane**

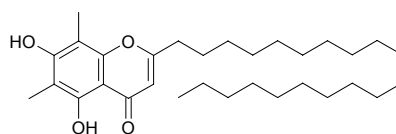
[629-94-7] $C_{21}H_{44}$ (296.58). Wax, mp 40.5°C, bp 356.5°C, bp 215°C/15mmHg, bp 129°C/0.05mmHg. Source: DANG SHEN *Codonopsis pilosula*, ROU CONG RONG *Cistanche deserticola*, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2, 1521.

**9360 Heneicosanoic acid**

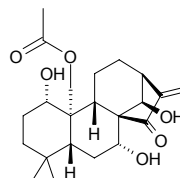
[2363-71-5] $C_{21}H_{42}O_2$ (326.57). Needles (Me₂CO), mp 73–74°C. Source: DANG SHEN *Codonopsis pilosula*, ROU CONG RONG *Cistanche deserticola*, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*]. Ref: 2, 660.

**9361 2-*n*-Heneicosyl-5,7-dihydroxy-6,8-dimethyl chromone**

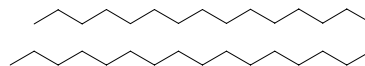
$C_{32}H_{52}O_4$ (500.77). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 660.

**9362 Henryin**

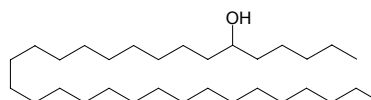
1 α ,7 α ,14 β -Trihydroxy-20-acetoxy-*ent*-kaur-16-en-15-one; Reniformin A
 $C_{22}H_{32}O_6$ (392.50). mp 201–203°C, $[\alpha]_D^{12} = -88^\circ$ ($c = 0.1$, MeOH). Pharm: Cytotoxic (*in vitro*, P₃₈₈, ED₅₀ = 0.58 μ g/mL)^[3012]. Source: WEI YE XIANG CHA CAI *Rabdosia excisa* (aerial parts: yield = 0.00003%dw), E XI XIANG CHA CAI *Isodon henryi*. Ref: 3012, 4067.

**9363 Hentriacontane**

Untriacontane [630-04-6] $C_{31}H_{64}$ (436.86). Wax, mp 68°C, bp 458°C, bp 302°C/15mmHg. Pharm: Fruit protective film. Source: FAN QIE *Lycopersicon esculentum*, ZANG HONG HUA SE SHUI QIN *Oenanthе crocata*, SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], YIN YANG HUO *Epimedium brevicornum*, RI BEN LU TI CAO *Pyrola japonica*, CHE QIAN *Plantago asiatica*. Ref: 2, 658, 660, 1521.

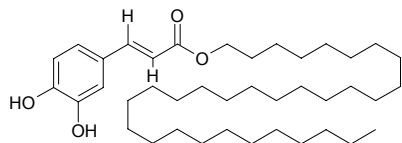
**9364 Hentriacontanol-6**

$C_{31}H_{64}O$ (452.86). Source: PU HUANG *Typha angustata*. Ref: 2.

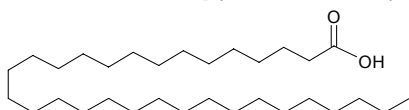


9365 Hentriacontanyl caffeate

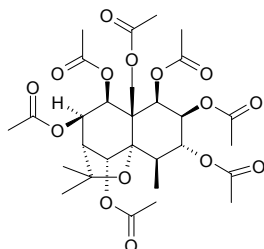
3,4-Dihydroxy-*trans*-cinnamic acid hentriacontanylester C₄₀H₇₀O₄ (615.50).
Pharm: Anti-inflammatory (COX-1 inhibitor, 1000μmol/L, InRt = (52±2)%, positive control Indomethacin, 1.7μmol/L, InRt = (43±3)%^[4413]. **Source:** LUO YE SONG YE JIN SI TAO *Hypericum laricifolium* (aerial parts). **Ref:** 4413.

**9366 Hentriacontic acid**

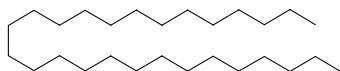
Melissic acid B [38232-01-8] C₃₁H₆₂O₂ (466.84). mp 93.5–94.0°C. **Source:** GOU QI GEN PI *Lycium chinense*, SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*]. **Ref:** 2, 660.

**9367 1β,2β,3α,5α,7β,8β,11-Heptaacetoxy-dihydroagarofuran**

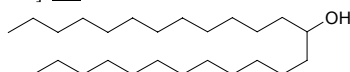
C₂₉H₄₀O₁₅ (628.63). Amorphous powder, [α]_D²⁵ = -19.7° (c = 2.1, MeOH).
Pharm: Immunosuppressant (inhibits lymphocyte transformation, 80μg/mL, InRt = 34%, control Dexamethasone, 50μg/mL, InRt = 61%). **Source:** LEI GONG TENG *Tripterygium wilfordii* (xylem). **Ref:** 4466.

**9368 n-Heptacosane**

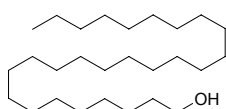
Heptacosane [593-49-7] C₂₇H₅₆ (380.75). mp 59.5°C, bp 422°C, bp 270°C/15mmHg. **Source:** SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], JIAN YE LONG XUE SHU *Dracaena cochinchinensis*. **Ref:** 2, 616, 660, 1521.

**9369 14-Heptacosanol**

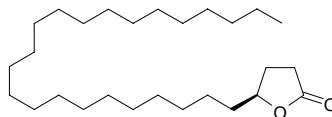
C₂₇H₅₆O (396.75). **Source:** MO HAN LIAN *Eclipta prostrata* [Syn. *Eclipta alba*]. **Ref:** 660.

**9370 Heptacosanol**

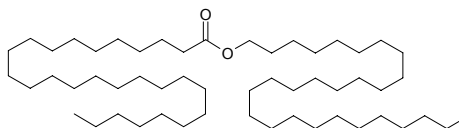
1-Heptacosanol [2004-39-9] C₂₇H₅₆O (396.75). mp 81.5°C, mp 76°C. **Source:** MAO GENG XI XIAN *Siegesbeckia orientalis* var. *glabrescens* [Syn. *Siegesbeckia glabrescens*]. **Ref:** 476.

**9371 Heptacosan-4-olide**

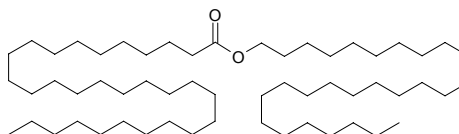
C₂₇H₅₂O₂ (408.71). **Source:** FU CHUI FE LAO JU *Flourensia cernua*. **Ref:** 3433.

**9372 Heptacosyl heptacosanate**

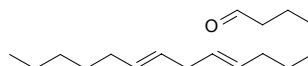
C₅₄H₁₀₈O₂ (789.46). **Source:** CHONG BAI LA *Ericerus pela*. **Ref:** 6.

**9373 Heptacosyl melissate**

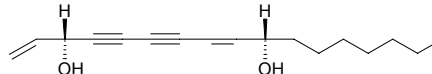
C₅₇H₁₁₄O₂ (831.54). **Source:** CHONG BAI LA *Ericerus pela*. **Ref:** 6.

**9374 (Z,Z)-8,11-Heptadecadienal**

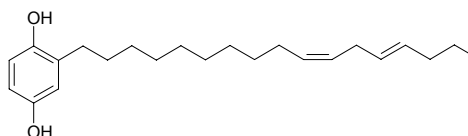
C₁₇H₃₀O (250.43). **Source:** KONG SHI CHUN *Ulva pertusa*. **Ref:** 660.

**9375 1,8-Heptadecadiene-4,6-diyne-3,10-diol**

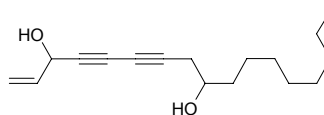
C₁₇H₂₄O₂ (260.38). **Source:** FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], REN SHEN XI YANG SHEN ZA JIAO ZHONG *Panax ginseng* x *P. quinquefolium* (hairy root). **Ref:** 2, 5495.

**9376 10'(Z),13'(E)-Heptadecadienylhydroquinone**

C₂₃H₃₆O₂ (344.54). Colorless oil. **Pharm:** Cytotoxic (*in vitro*, HeLa, IC₅₀ = 4.6μg/mL; Huh7, IC₅₀ = 6μg/mL; HCT116, IC₅₀ = 3.5μg/mL; LoVo, IC₅₀ = 5.6μg/mL; C6, IC₅₀ = 1μg/mL); antioxidant (iron/ascorbate system with linoleic acid as substrate for antioxidative potency (AOP) determination, 4mg/L, AOP = 95%; control BHT, AOP = 100%). **Source:** LIN BEI ZI *Toxicodendron succedaneum* [Syn. *Rhus succedanea*] (sap: yield = 3.15%). **Ref:** 4662.

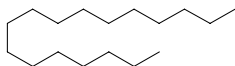
**9377 Heptadeca-1-en-4,6-diyne-3,9-diol**

C₁₇H₂₆O₂ (262.40). **Source:** FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*]. **Ref:** 2.

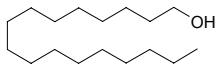


9378 Heptadecane

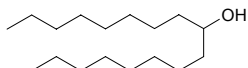
[629-78-7] C₁₇H₃₆ (240.48). Source: DANG SHEN *Codonopsis pilosula*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], ROU CONG RONG *Cistanche deserticola*, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2.

**9379 1-Heptadecanol**

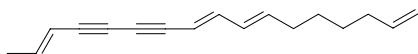
[1454-85-9] C₁₇H₃₆O (256.48). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2.

**9380 9-Heptadecanol**

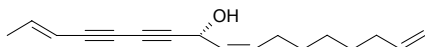
C₁₇H₃₆O (256.48). Source: BAN XIA *Pinellia ternata*. Ref: 660.

**9381 Heptadeca-1,7,9,15-tetraene-11,13-diyne***

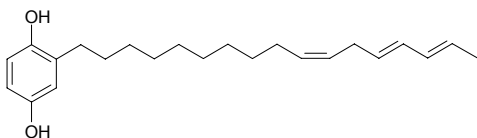
C₁₇H₂₀ (224.35). Yellowish powder, mp 72~73°C. Pharm: Cytotoxic (HL-60, IC₅₀ = 2.3 μg/mL, K562, IC₅₀ = 5.6 μg/mL). Source: GUI ZHEN CAO *Bidens bipinnata* (whole herb). Ref: 4596.

**9382 2(E),9(Z),16-Heptadecatriene-4,6-diyne-8-ol**

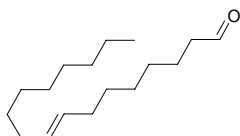
C₁₇H₂₂O (242.36). [α]_D²⁰ = +173.5° (c = 0.3, CHCl₃). Pharm: NFAT transcription factor inhibitor (IC₅₀ = (4.95±0.24) μmol/L, control Cyclosporin A, IC₅₀ = (0.31±0.01) μmol/L). Source: CHAO XIAN LUO WAN *Gymnaster koraiensis* (leaf). Ref: 4511.

**9383 10'(Z),13'(E),15'(E)-Heptadecatrienylhydroquinone**

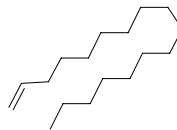
C₂₃H₃₄O₂ (342.53). Pale yellow oil. Pharm: Cytotoxic (*in vitro*, HeLa, IC₅₀ = 2.8 μg/mL; Huh7, IC₅₀ = 3.9 μg/mL; HCT116, IC₅₀ = 2 μg/mL; LoVo, IC₅₀ = 4.5 μg/mL; C6, IC₅₀ = 0.9 μg/mL); antioxidant (iron/ascorbate system with linoleic acid as substrate for antioxidative potency (AOP) determination, 4mg/L, AOP = 97%; control BHT, AOP = 100%). Source: LIN BEI ZI *Toxicodendron succedaneum* [Syn. *Rhus succedanea*] (sap: yield = 2.30%). Ref: 4662.

**9384 8-Heptadecenal**

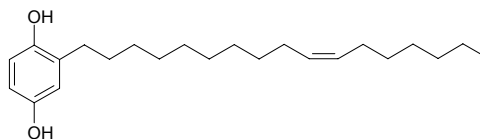
C₁₇H₃₂O (252.44). Source: JIAO MO *Monostroma nitidum*, KONG SHI CHUN *Ulva pertusa*, TIAO HU TAI *Enteromorpha clathrata*. Ref: 660.

**9385 1-Heptadecene**

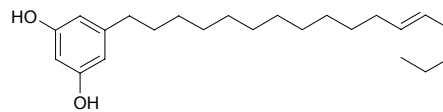
C₁₇H₃₄ (238.46). Source: HONG HUA *Carthamus tinctorius*, MIAN MA *Dryopteris filix-mas*, NIU BANG GEN *Arctium lappa*, XIAO GUO QIANG WEI GEN *Rosa cymosa*, XUE LIAN *Saussurea involucrata*. Ref: 660.

**9386 10'(Z)-Heptadecenylhydroquinone**

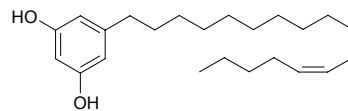
C₂₃H₃₈O₂ (346.56). Pharm: Cytotoxic (*in vitro*, HeLa, IC₅₀ = 4.7 μg/mL; Huh7, IC₅₀ = 6.4 μg/mL; HCT116, IC₅₀ = 3.4 μg/mL; LoVo, IC₅₀ = 2.9 μg/mL; C6, IC₅₀ = 1.1 μg/mL); antioxidant (iron/ascorbate system with linoleic acid as substrate for antioxidative potency (AOP) determination, 4mg/L, AOP = 60%; control BHT, AOP = 100%). Source: LIN BEI ZI *Toxicodendron succedaneum* [Syn. *Rhus succedanea*] (sap: yield = 3.15%). Ref: 4662.

**9387 5-(Heptadec-12E-enyl)resorcinol**

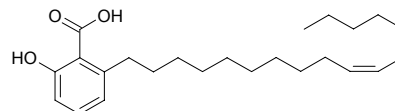
C₂₃H₃₈O₂ (346.56). Pharm: Antifungal (*Alternaria alternata*). Source: MANG GUO *Mangifera indica*. Ref: 658.

**9388 5-(Heptadec-12Z-enyl)resorcinol**

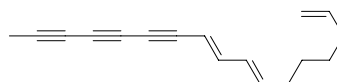
C₂₃H₃₈O₂ (346.56). Pharm: Cytotoxic (*in vitro*, A2780 ovarian cancer cell line, IC₅₀ = 9 μg/mL, marginal activity, control Actinomycin D, IC₅₀ = 1~3 ng/mL). Source: *Protorhus thouvenotii* (dried fruit). Ref: 5006.

**9389 6-(10'Z-Heptadecenyl)salicylic acid**

C₂₄H₃₈O₃ (374.57). Yellowish oil. Pharm: Prolyl endopeptidase inhibitor (*Ki* = 0.80 μmol/L, IC₅₀ = (0.62±0.02) μmol/L, control Oleic acid IC₅₀ = (31.3±2.4) μmol/L, Salicylic acid IC₅₀ = (1650±70) μmol/L, Z-Pro-prolinal IC₅₀ = (0.00219±0.00022) μmol/L). Source: BAI GUO YE *Ginkgo biloba*. Ref: 4098.

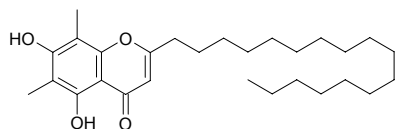
**9390 Heptadec-1,7,9-trien-11,13,15-triyne**

C₁₇H₁₈ (222.33). mp 18°C. Source: AI YE *Artemisia argyi*. Ref: 6.

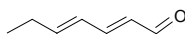


9391 2-*n*-Heptadecy-5,7-dihydroxy-6,8-dimethyl chromone

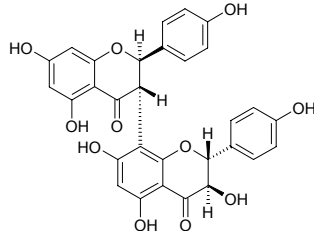
C₂₈H₄₄O₄ (444.66). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 660.

**9392 (*E,E*)-2,4-Heptadienal**

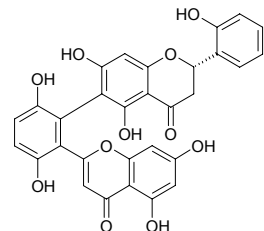
C₇H₁₀O (110.16). Source: KUN BU *Laminaria japonica*. Ref: 660.

**9393 3'',4'',4''',5'',5'',7''-Heptahydroxy-3,8''-biflavanone**

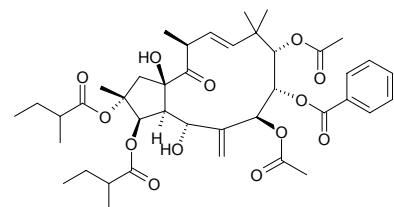
C₃₀H₂₂O₁₁ (558.50). Faint brown powder. Pharm: Antibacterial (methicillin-resistant *Staphylococcus aureus* (MRSA), MIC = 32μg/mL; vancomycin-resistant *Enterococci* sp. (VRE), MIC = 128μg/mL). Source: KE LE TENG HUANG *Garcinia kola* (root). Ref: 4495.

**9394 (1-2*S*)-1-5,11-5,1-7,11-7,1-2',11-2',11-5'-Heptahydroxy-[1-6,11-6']-flavanonylflavone**

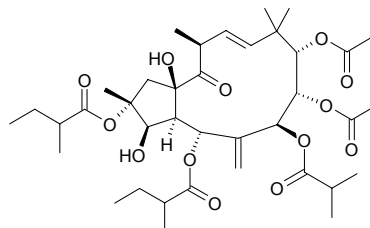
C₃₀H₂₀O₁₁ (556.49). Yellow needles (MeOH), mp 217–218°C (dec). Source: KE AI HUANG QIN *Scutellaria amabilis* (root; yield = 0.0052%dw). Ref: 2072.

**9395 (2*R*,3*R*,4*R*,5*R*,7*S*,8*S*,9*S*,11*E*,13*S*,15*R*)-2,3,5,7,8,9,15-Heptahydroxyjatropa-6(17),11-diene-14-one-7,9-diacetate-8-benzoate-2,3-bis(2-methylbutyrate)**

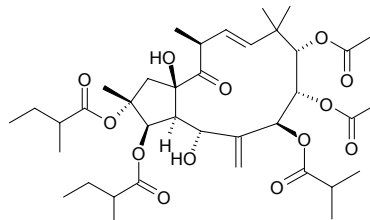
[250293-39-1] C₄₁H₅₆O₁₃ (756.90). Oil, [α]_D = +18° (*c* = 0.88, CHCl₃); [α]_D²⁵ = +18° (*c* = 0.88, CHCl₃). Pharm: NADH oxidase inhibitor (submitochondrial particles from bovine heart, IC₅₀ = (7.0±3.7)μmol/L, control Rotenone, IC₅₀ = (0.0051±0.0009)μmol/L)^[5356]. Source: DUN YE DA JI *Euphorbia obtusifolia* var. *obtusifolia*. Ref: 2365, 5356.

**9396 (2*R*,3*R*,4*R*,5*R*,7*S*,8*S*,9*S*,11*E*,13*S*,15*R*)-2,3,5,7,8,9,15-Heptahydroxyjatropa-6(17),11-diene-14-one-8,9-diacetate-7-isobutyrate-2,5-bis(2-methylbutyrate)**

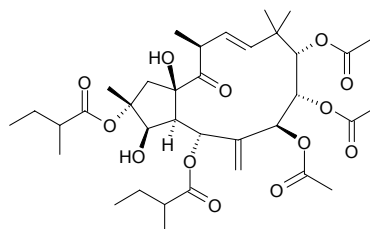
[250293-37-9] C₃₈H₅₈O₁₃ (722.88). Oil, [α]_D = +26° (*c* = 0.86, CHCl₃); [α]_D²⁵ = +26° (*c* = 0.86, CHCl₃). Pharm: NADH oxidase inhibitor (submitochondrial particles from bovine heart, IC₅₀ = (6.3±1.4)μmol/L, control Rotenone, IC₅₀ = (0.0051±0.0009)μmol/L)^[5356]. Source: DUN YE DA JI XIANG JIANG *Euphorbia obtusifoli*, DUN YE DA JI *Euphorbia obtusifolia* var. *obtusifolia*. Ref: 2365, 5356.

**9397 (2*R*,3*R*,4*R*,5*R*,7*S*,8*S*,9*S*,11*E*,13*S*,15*R*)-2,3,5,7,8,9,15-Heptahydroxyjatropa-6(17),11-diene-14-one-8,9-diacetate-7-isobutyrate-2,3-bis(2-methylbutyrate)**

[250293-40-4] C₃₈H₅₈O₁₃ (722.88). Oil, [α]_D = +8° (*c* = 2.2, CHCl₃); [α]_D²⁵ = +8° (*c* = 2.2, CHCl₃). Pharm: NADH oxidase inhibitor (submitochondrial particles from bovine heart, IC₅₀ = (5.1±0.2)μmol/L, control Rotenone, IC₅₀ = (0.0051±0.0009)μmol/L)^[5356]. Source: DUN YE DA JI *Euphorbia obtusifolia* var. *obtusifolia*. Ref: 2365, 5356.

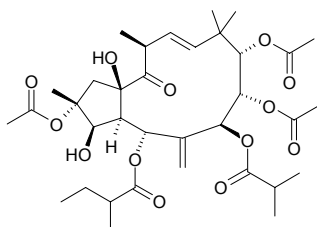
**9398 (2*R*,3*R*,4*R*,5*R*,7*S*,8*S*,9*S*,11*E*,13*S*,15*R*)-2,3,5,7,8,9,15-Heptahydroxyjatropa-6(17),11-diene-14-one-7,8,9-triacetate-2,5-bis(2-methylbutyrate)**

[250293-34-6] C₃₆H₅₄O₁₃ (694.82). Oil, [α]_D = +23° (*c* = 0.78, CHCl₃); [α]_D²⁵ = +23° (*c* = 0.78, CHCl₃). Pharm: NADH oxidase inhibitor (submitochondrial particles from bovine heart, IC₅₀ = (10.9±2.4)μmol/L, control Rotenone, IC₅₀ = (0.0051±0.0009)μmol/L)^[5356]. Source: DUN YE DA JI *Euphorbia obtusifolia* var. *obtusifolia*. Ref: 2365, 5356.



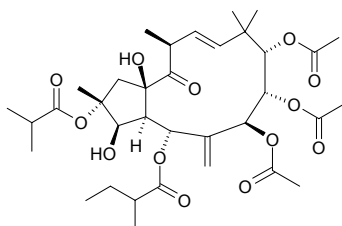
9399 (2R,3R,4R,5R,7S,8S,9S,11E,13S,15R)-2,3,5,7,8,9,15-Heptahydroxyjatropa-6(17),11-diene-14-one-2,8,9-triacetate-7-isobutyrate-5-(2-methylbutyrate)

[250293-38-0] C₃₅H₅₂O₁₃ (680.80). Oil, [α]_D = +32° (c = 0.68, CHCl₃); [α]_D²⁵ = +32° (c = 0.68, CHCl₃). **Pharm:** NADH oxidase inhibitor (submitochondrial particles from bovine heart, IC₅₀ = (12.7±3.6)μmol/L, control Rotenone, IC₅₀ = (0.0051±0.0009)μmol/L)^[5356]. **Source:** DUN YE DA JI *Euphorbia obtusifolia* var. *obtusifolia*. **Ref:** 2365, 5356.



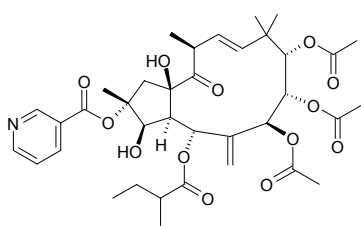
9400 (2R,3R,4R,5R,7S,8S,9S,11E,13S,15R)-2,3,5,7,8,9,15-Heptahydroxyjatropa-6(17),11-diene-14-one-7,8,9-triacetate-2-isobutyrate-5-(2-methylbutyrate)

[250293-35-7] C₃₅H₅₂O₁₃ (680.80). Oil, [α]_D = +29° (c = 0.68, CHCl₃); [α]_D²⁵ = +29° (c = 0.68, CHCl₃). **Pharm:** NADH oxidase inhibitor (submitochondrial particles from bovine heart, IC₅₀ = (13.9±1.6)μmol/L, control Rotenone, IC₅₀ = (0.0051±0.0009)μmol/L)^[5356]. **Source:** DUN YE DA JI *Euphorbia obtusifolia* var. *obtusifolia*. **Ref:** 2365, 5356.



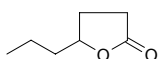
9401 (2R,3R,4R,5R,7S,8S,9S,11E,13S,15R)-2,3,5,7,8,9,15-Heptahydroxyjatropa-6(17),11-diene-14-one-7,8,9-triacetate-2-nicotinate-5-(2-methylbutyrate)

[250293-36-8] C₃₇H₄₉NO₁₃ (715.80). Oil, [α]_D = -6° (c = 0.68, CHCl₃); [α]_D²⁵ = -6° (c = 0.68, CHCl₃). **Pharm:** NADH oxidase inhibitor (submitochondrial particles from bovine heart, IC₅₀ = (13.9±1.8)μmol/L, control Rotenone, IC₅₀ = (0.0051±0.0009)μmol/L)^[5356]. **Source:** DUN YE DA JI *Euphorbia obtusifolia* var. *obtusifolia*. **Ref:** 2365, 5356.



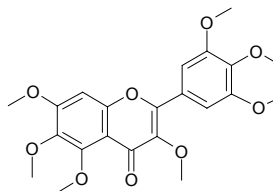
9402 γ-Heptalactone

[105-21-5] C₇H₁₂O₂ (128.17). **Source:** CHAI HU *Bupleurum chinense*. **Ref:** 2.



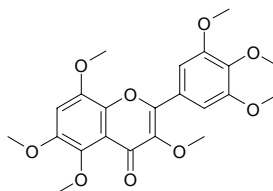
9403 3,5,6,7,3',4',5'-Heptamethoxyflavone

C₂₂H₂₄O₉ (432.43). mp 156–157°C. **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 6, 11.



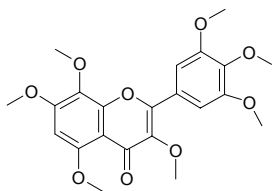
9404 3,5,6,8,3',4',5'-Heptamethoxy flavone

C₂₂H₂₄O₉ (432.43). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 660.



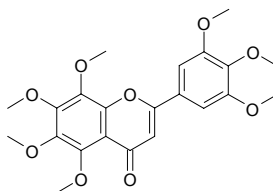
9405 3,5,7,8,3',4',5'-Heptamethoxyflavone

Hibiscetin-heptamethylether C₂₂H₂₄O₉ (432.43). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 11.



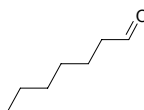
9406 5,6,7,8,3',4',5'-Heptamethoxy flavone

5'-Methoxynobiletin C₂₂H₂₄O₉ (432.43). **Pharm:** Cytotoxic (HeLa, IC₅₀ = 43.3μg/mL, control Mitomycin C, IC₅₀ = 1.7μg/mL)^[4092]. **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], TUAN JI AI NA XIANG *Blumea glomerata*. **Ref:** 660, 4092.



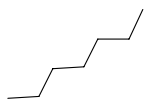
9407 Heptanal

[111-71-7] C₇H₁₄O (114.19). mp -43.3°C, bp 152.8°C, bp 59.6°C/30mmHg. **Source:** KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*]. **Ref:** 2, 660, 1521.

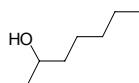


9408 Heptane

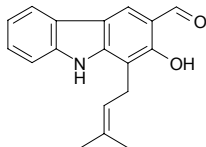
[142-82-5] C₇H₁₆ (100.21). mp -91.61°C, bp 98.3°C. Source: SHAN ZHA *Crataegus pinnatifida*, SHENG JIANG *Zingiber officinale*. Ref: 2, 1521.

**9409 2-Heptanol**

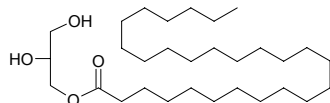
[543-49-7] C₇H₁₆O (116.21). Source: GAN JIANG *Zingiber officinale*, SHENG JIANG *Zingiber officinale*. Ref: 2, 1521.

**9410 Heptaphylline**

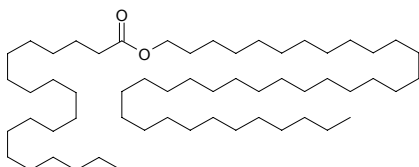
2-Hydroxy-1-(3-methyl-2-butenyl)-carbazole-3-carboxaldehyde [17750-35-5] C₁₈H₁₇NO₂ (279.34). Bright-yellow needles (Et₂O or CHCl₃-hexane), mp 171~172°C. Source: SHAN HUANG PI *Clausena excavata*, QI YE HUANG PI *Clausena heptaphylla*. Ref: 703, 1521.

**9411 (2S)-1-O-Heptacosanoyl glycerol**

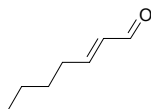
C₃₀H₆₀O₄ (484.81). White powder, mp 64~65°C. Source: XI NANG MA WEI ZAO *Sargassum parvivesiculosum*. Ref: 2591.

**9412 Heptatriacontanyl eicosanoate**

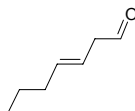
C₅₇H₁₁₄O₂ (831.54). mp 73.9°C. Source: CHANG YE AI JU *Tanacetum longifolium*. Ref: 1934.

**9413 α-Heptenal**

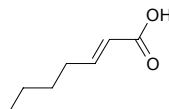
[18829-55-5] C₇H₁₂O (112.17). bp 165~167°C, bp 61~62°C/15mmHg. Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 6, 1521.

**9414 3-Heptenal**

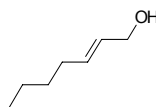
C₇H₁₂O (112.17). bp 151°C. Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 6.

**9415 2-Heptenic acid**

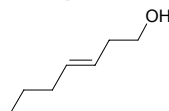
[18999-28-5] C₇H₁₂O₂ (128.17). Source: CHAI HU *Bupleurum chinense*. Ref: 2.

**9416 β-Heptenol**

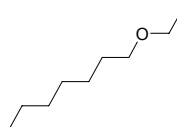
[22104-77-4] C₇H₁₄O (114.19). bp 177~179°C. Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 6, 1521.

**9417 γ-Heptenol**

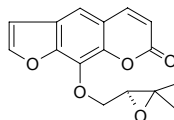
[1708-81-2] C₇H₁₄O (114.19). bp (*cis*- and *trans*-) 81~83°C/19mmHg, (*trans*-) 170~171°C. Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 6.

**9418 Heptyl ethyl ether**

[1969-43-3] C₉H₂₀O (144.26). bp 166.6°C. Source: WEN PO *Cydonia oblonga*. Ref: 6.

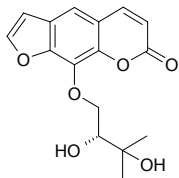
**9419 Heraclenin‡**

Epoxyimperatorin C₁₆H₁₄O₅ (286.29). Yellowish slender acicular crystals (hexane-ethyl acetate), mp (+) 111°C, (-) 106.5~108.0°C, (±) 113.0~114.5°C. [α]_{589nm}²³ = +25.8°, [α]_{500nm}²³ = +29.5°, [α]_{450nm}²³ = +41.6°, [α]_{400nm}²³ = +66.4° (c = 1.085, pyridine); [α]_D³² = +22° (pyridine). Pharm: Anti-inflammatory (rat, swollen foot model caused by carrageenan, 100mg/kg orl, InRt = 69%); antispasmodic (rat intestine *in vitro*); CVS activity (enhances arterial tension and myocardial contractility); respiratory stimulant (rat, 1~2mg/kg); T-Cell Proliferation inhibitor^[4071]. Source: GOU JU HE *Poncirus trifoliata*, YIN DU JIU LI XIANG *Murraya koenigii*, HUI BAI DU HUO *Heraclium canescens*, GUANG RONG YIN YU *Skimmia laureola*, BEI FANG DANG GUI *Angelica ursina*, SHUAN CHI QIN *Prangos pabularia*, AO PA CAO *Oppopanax chironium* (root). Ref: 6, 900, 1521, 4071. ‡Note: See compound 16447.

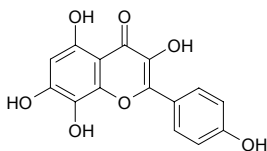


9420 Heraclenol

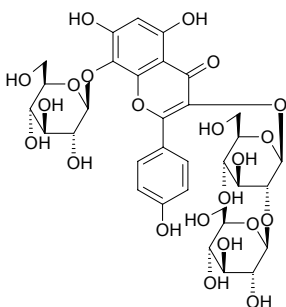
Prangenin hydrate; Komalin [2817-09-6] C₁₆H₁₆O₆ (304.30). mp 115~117°C; mp 117~118°C, [α]_D³² = +16.5° (pyridine). Source: GOU JU ZHI SHI *Poncirus trifoliata*, YAN JIAO CAO *Boenninghausenia albiflora*, YUN NAN QIANG HUO *Pleurospermum rivulorum*. Ref: 551, 1521, 2495, 3302.

**9421 Herbacetin**

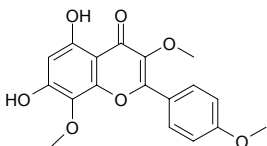
[527-95-7] C₁₅H₁₀O₇ (302.24). Pharm: Yellow pigment. Source: MA HUANG *Ephedra sinica*. Ref: 2, 658.

**9422 Herbacetin-3-β-D-(2-O-β-D-glucopyranosylglucopyranoside)-8-β-D-glucopyranoside**

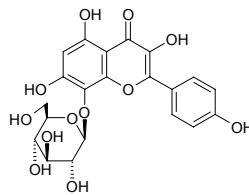
C₃₃H₄₀O₂₂ (788.67). Source: MU ZEI *Equisetum hiemale*. Ref: 2.

**9423 Herbacetin 3,8,4'-trimethyl ether**

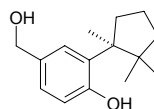
C₁₈H₁₆O₇ (344.32). Pharm: Antioxidant (Takamatsu DCFH method, myelomonocytic HL-60 cells, IC₅₀ > 62.5 μg/mL; control NDGA, IC₅₀ = (0.7±0.3) μg/mL, Vitamin C, IC₅₀ = (1.9±0.7) μg/mL, Trolox, IC₅₀ = (1.4±0.5) μg/mL)^[3850]; cytotoxic (XTT assay, HL-60 cells, IC₅₀ > 50.0 μg/mL; control NDGA, IC₅₀ = (2.6±0.2) μg/mL, Vitamin C, IC₅₀ > 10.0 μg/mL, Trolox, IC₅₀ > 10.0 μg/mL)^[3850]. Source: JIAN TENG BAI JIU CAO *Conyza stricta*, SAN CHI LA RUI A *Larrea tridentata* (leaf), SAN JIAO FEN YE JUE *Pityrogramma triangularis*, XIAO XING HUA YAN QIANG WEI *Cistus parviflorus*. Ref: 1521, 3850.

**9424 Herbacin**

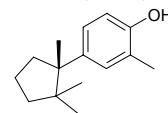
[11021-22-0] C₂₁H₂₀O₁₂ (464.39). mp 212~214°C. Source: SHU KUI HUA *Althaea rosea*. Ref: 6, 1521.

**9425 (-)-Herbertene-1,12-diol**

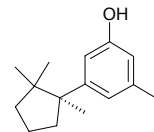
(-)-4-Hydroxymethyl-2-(1',2',2'-trimethylcyclopentyl) phenol C₁₅H₂₂O₂ (234.34). Colorless oil. Source: *Tylimanthus renifolius*. Ref: 3491.

**9426 β-Herbertenol**

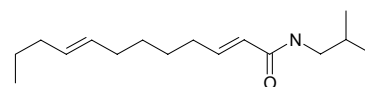
C₁₅H₂₂O (218.34). Source: DI SUO LUO *Marchantia polymorpha*. Ref: 660.

**9427 (-)-γ-Herbertenol**

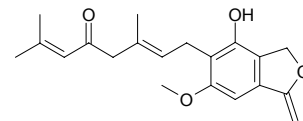
(-)-5-Methyl-3-(1',2',2'-trimethylcyclopentyl) phenol C₁₅H₂₂O (218.34). Colorless oil. Source: *Tylimanthus renifolius*. Ref: 3491.

**9428 Herculin**

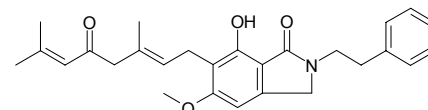
C₁₆H₂₉NO (251.42). Crystals (light petroleum), disgusting pungent odor, mp 59~60°C. Pharm: Pesticide. Source: MEI GUO CI JIAO *Zanthoxylum clava-hercules*, HUANG BAI *Phellodendron amurense*. Ref: 661.

**9429 Hericenone A**

C₁₉H₂₂O₅ (330.38). Source: HOU TOU JUN *Heridium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 660, 4513.

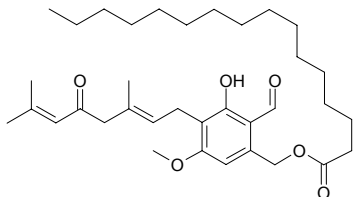
**9430 Hericenone B**

C₂₇H₃₁NO₄ (433.55). Source: HOU TOU JUN *Heridium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 660.

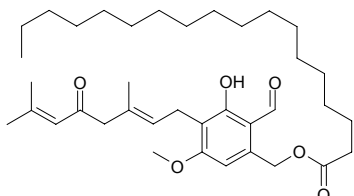


9431 Hericenone C

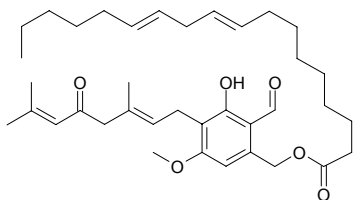
$C_{35}H_{54}O_6$ (570.82). Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 660.

**9432 Hericenone D**

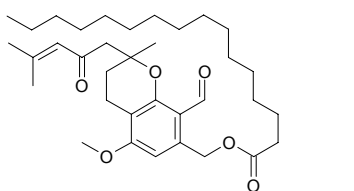
$C_{37}H_{58}O_6$ (598.87). Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 660.

**9433 Hericenone E**

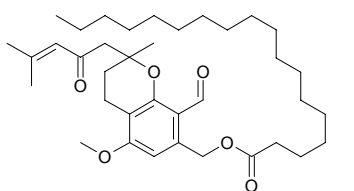
$C_{37}H_{54}O_6$ (594.84). Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 660.

**9434 Hericenone F**

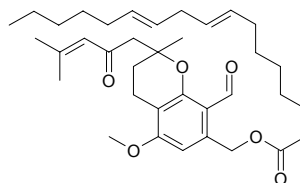
$C_{35}H_{54}O_6$ (570.82). Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 660.

**9435 Hericenone G**

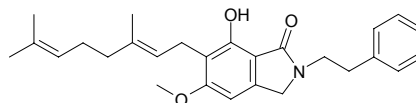
$C_{37}H_{58}O_6$ (598.87). Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 660.

**9436 Hericenone H**

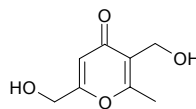
[141973-37-7] $C_{36}H_{52}O_6$ (580.81). Yellowish oil. Pharm: Inhibits biosynthesis of PGE₂ (25µg/mL, rat macrophage); NGF synthetic stimulant (induces mus spider neuroglia cell, 33µg/mL, 4 times normal NGF). Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 1521, 1095.

**9437 Hericerin**

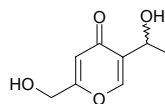
$C_{27}H_{33}NO_3$ (419.57). Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 660.

**9438 Herierin III**

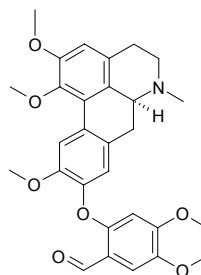
6-Methyl-2,5-dihydroxymethyl-γ-pyrone III $C_8H_{10}O_4$ (170.17). Colorless columnar crystals, mp 122~123°C. Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 161, 660.

**9439 Herierin IV**

$C_8H_{10}O_4$ (170.17). Source: HOU TOU JUN *Hericium erinaceus* [Syn. *Hydnum erinaceus*]. Ref: 660.

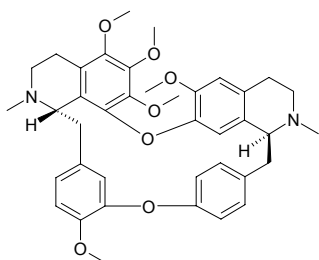
**9440 Hernandaline**

$C_{29}H_{31}NO_7$ (505.57). Source: LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*]. Ref: 660.

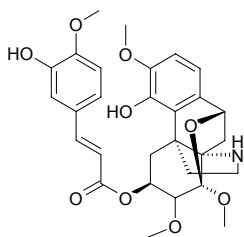


9441 Hernandezine

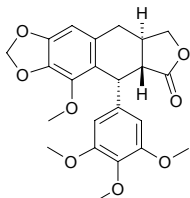
Thalicsimine; Thaliximine [6681-13-6] $C_{39}H_{44}N_2O_7$ (652.79). Crystals (hexane), mp 192~193°C, mp 122~124°C, mp 158~159°C, $[\alpha]_D^{20} = +250^\circ$ ($c = 0.2$, chloroform). **Pharm:** Antibacterial (*Mycobacterium smegmatis*, MIC = 25µg/mg; *Staphylococcus aureus*, MIC = 100µg/mg); Antifungal (*Candida albicans*, MIC = 50µg/mg); anti-inflammatory; antihypertensive (cat, iv, 1~3mg/kg); LD (cat, leads to rapid reduction of blood pressure until death) = 10mg/kg. **Source:** BAN RUI TANG SONG CAO *Thalictrum petaloideum* (root: content < 0.001%)^[5508], BING GUO TANG SONG CAO *Thalictrum podocarpum*, DA YE TANG SONG CAO *Thalictrum faberi* (root: content < 0.001%)^[5508], FEN SHI TANG SONG CAO *Thalictrum fendleri*, HE SHI TANG SONG CAO *Thalictrum hernaandezii*, JIN SI MA WEI LIAN *Thalictrum glandulosissimum* (root: content = 0.21%)^[5508], MA WEI LIAN *Thalictrum foliolosum* (root: content = 0.45%)^[5508], RU LAN *Stephania hernaendifolia*, XIA XU TANG SONG CAO *Thalictrum atriplex* (root: content = 0.09%)^[5508], XIAO GUO TANG SONG CAO *Thalictrum microgynum* (root: content < 0.001%)^[5508], YAN GUO CAO *Thalictrum thunbergii* (root: content = 0.07%)^[5508], YING SHUI HUANG LIAN *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*] (root: content < 0.001%)^[5508]. **Ref:** 6, 658, 660, 5508.

**9442 Hernaendifoline**

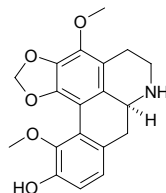
[30511-63-8] $C_{29}H_{33}NO_9$ (539.59). Crystals ($CHCl_3-Et_2O$), mp 133~135°C ($CHCl_3$ solvate), $[\alpha]_D^{32} = +48^\circ$ ($c = 0.82$, MeOH), $[\alpha]_D = -25^\circ$ (EtOH). **Source:** RU LAN *Stephania hernaendifolia*. **Ref:** 6, 1521.

**9443 Hernaandin**

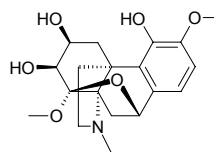
$C_{23}H_{24}O_8$ (428.44). **Source:** LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*]. **Ref:** 660.

**9444 Hernaandine**

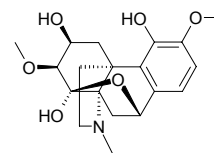
$C_{19}H_{19}NO_5$ (341.37). **Pharm:** Anti-HIV-1 inactive (HIV-1 IN inhibitor, $IC_{50} > 100\mu\text{mol/L}$, positive control Suramin, $IC_{50} = 2.4\mu\text{mol/L}$)^[4224]. **Source:** DING HU DIAO ZHANG *Lindera chunii* (root). **Ref:** 4224.

**9445 Hernaandine A**

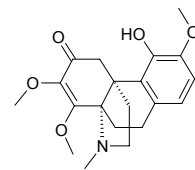
Hernaandine [32593-70-7] $C_{19}H_{25}NO_6$ (363.41). mp 197~199°C, $[\alpha]_D = -33^\circ$ (EtOH). **Source:** RU LAN *Stephania hernaendifolia*. **Ref:** 6, 1521.

**9446 Hernaandine B**

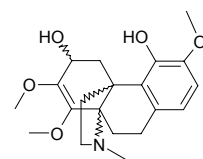
$C_{19}H_{25}NO_6$ (363.41). **Source:** RU LAN *Stephania hernaendifolia*. **Ref:** 6.

**9447 Hernaandoline**

Aknadinine [24148-86-5] $C_{20}H_{25}NO_5$ (359.43). mp 70°C, $[\alpha]_D^{29} = -283^\circ$ ($c = 0.1$, EtOH). **Source:** RU LAN *Stephania hernaendifolia*, YA LI QIAN JIN TENG *Stephania elegans*, TAI WAN QIAN JIN TENG *Stephania sasakii*. **Ref:** 6, 1521.

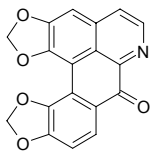
**9448 Hernaandolinol**

[35452-61-0] $C_{20}H_{27}NO_5$ (361.44). $[\alpha]_D = -97.9^\circ$ (EtOH). **Source:** RU LAN *Stephania hernaendifolia*. **Ref:** 6, 1521.

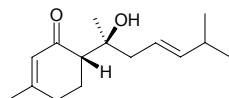


9449 Hernandonine

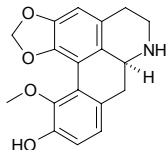
$C_{18}H_{19}NO_5$ (319.28). **Pharm:** Anti-HIV-1 (HIV-1 IN inhibitor, IC_{50} = 16.3 μ mol/L, positive control Suramin, IC_{50} = 2.4 μ mol/L). **Source:** DING HU DIAO ZHANG *Lindera chunii* (root). **Ref:** 4224.

**9450 (+)-Hernandulcin**

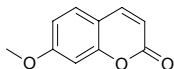
$C_{15}H_{24}O_2$ (236.36). **Source:** TIAN SHE CAO *Lippia dulcis* (aerial parts). **Ref:** 4508.

**9451 Hernangerine**

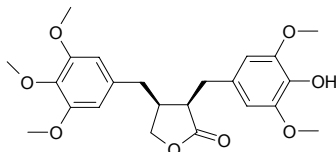
Nandigerine $C_{18}H_{17}NO_4$ (311.34). **Pharm:** Anti-HIV-1 inactive (HIV-1 IN inhibitor, IC_{50} > 100 μ mol/L, positive control Suramin, IC_{50} = 2.4 μ mol/L)^[4224]. **Source:** DING HU DIAO ZHANG *Lindera chunii* (root), LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*], YUE GUI YE *Laurus nobilis*. **Ref:** 660, 2601, 4224.

**9452 Herniarin**

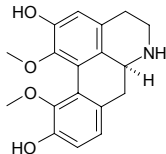
7-Methoxycoumarin [531-59-9] $C_{10}H_8O_3$ (176.17). mp 117~118°C. **Pharm:** Cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity)^[3069]. **Source:** A YA PAN ZE LAN *Eupatorium ayapana*, BO NIANG HAO *Descurainia sophia*, YA JIAO AI *Artemisia lactiflora* (whole plant: mean content in different growth period = 0.70%^[5508]), YU ZHUANG YUN XIANG *Ruta pinnata*, ZHONG GUO XIU QIU *Hydrangea chinensis* (root)^[3069]. **Ref:** 6, 660, 1521, 3069, 5508.

**9453 (-)-Hernolactone**

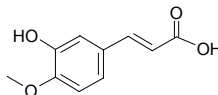
$C_{23}H_{28}O_8$ (432.47). $[\alpha]_D^{20}$ = -24.9° (c = 2.0, $CHCl_3$). **Source:** LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*] (seed). **Ref:** 5030.

**9454 Hernovine**

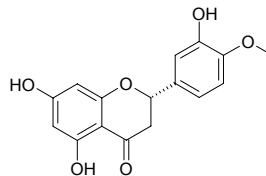
$C_{18}H_{19}NO_4$ (313.36). **Source:** LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*]. **Ref:** 660.

**9455 Hesperetic acid**

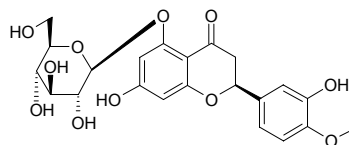
Isoferulic acid; Hesperetic acid [537-73-5] $C_{10}H_{10}O_4$ (194.19). Colorless acicular crystals, mp 225~229°C; mp 238~240°C; plates, mp 233~234°C. **Pharm:** Antipyretic; anti-inflammatory. **Source:** DA SAN YE SHENG MA *Cimicifuga heracleifolia* (dried rhizome: content = 0.20%^[5508]), DAN SHEN *Salvia miltiorrhiza*, HUANG SAN QI *Souliea vaginata* (dried rhizome: content = 0.07%^[5508]), LEI YE SHENG MA *Cimicifuga asiatica* (dried rhizome: content = 0.05%^[5508]), MAO LIAN HAO *Artemisia vestita*, NAN CHUAN SHENG MA *Cimicifuga nanchuanensis* (dried rhizome: content = 0.10%^[5508]), SAN MIAN DAO *Cimicifuga acerina* (dried rhizome: content = 0.03%^[5508]), SHENG MA *Cimicifuga foetida* (dried rhizome: content scope = 0.03%~0.26%^[5501], content = 0.13%^[5508]), TIE PO LUO *Beesia calthaeifolia* (dried rhizome: content = 0.12%^[5508]), XIE CAO *Valeriana officinalis*, XING AN SHENG MA *Cimicifuga dahurica* (dried rhizome: content = 0.26%^[5508]), YE SHENG MA *Cimicifuga simplex* (dried rhizome: content = 0.15%^[5508]), ZI BAI PI *Catalpa ovata*, ZONG ZHUANG SHENG MA *Cimicifuga racemosa*. **Ref:** 2, 6, 474, 660, 1521, 5501, 5508.

**9456 Hesperetin**

Hesperitin [520-33-2] $C_{16}H_{14}O_6$ (302.29). Triangular lamellar matter (ethanol), mp 216~218°C, $[\alpha]_D^{27}$ = -37.6° (c = 1.80, ethanol). **Pharm:** Antibacterial; antiviral; feeding-inhibitor (*Schizaphis graminis* and *Myzus persicae*); inhibits lipolysis (rat fat cells, induced by adrenaline and theocin); anti-tumor promotor; 3- α -hydroxysteroid dehydrogenase inhibitor; aldose reductase inhibitor (0.01 mg/mL, InRt = 25.6%); promotes biosynthesis of DNA (karyons of murine hepatic cells *in vitro*); anti-inflammatory (modulator of cytokine network: inhibits LPS-stimulated TNF- α release in RAW264.7 macrophages, IC_{50} \approx 50 μ mol/L)^[4416]; passive cutaneous anaphylaxis inhibitor (inhibits IgE-induced β -hexosaminidase release from RBL-2H3 cells, IC_{50} = (71 \pm 2) μ mol/L, control Azelastine, IC_{50} = (35 \pm 2) μ mol/L; PCA reaction inhibitor, 5mg/kg ip, InRt = (65.9 \pm 2.9)%^[5041]). **Source:** JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], NING MENG *Citrus limon*, TIAN CHENG *Citrus sinensis*, WU HE MI JU *Citrus unshiu* (pericarp). **Ref:** 2, 900, 1521, 4416, 5041.

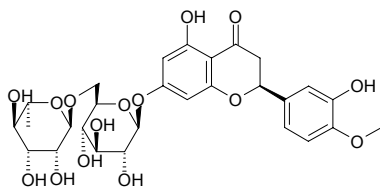
**9457 Hesperetin-5-glucoside**

[69651-80-5] $C_{22}H_{24}O_{11}$ (464.43). mp 257~258°C, $[\alpha]_D$ = -112.8° (ethanol). **Source:** TAO GEN *Prunus persica*. **Ref:** 6, 1521.

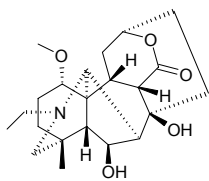


9458 Hesperidin

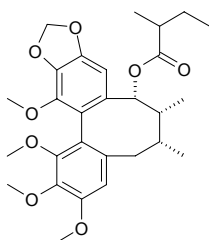
Citrus-hesperidin; Cirontin; Vitamin B; Cirantin [520-26-3] $C_{28}H_{34}O_{15}$ (610.57). Needles, mp 258–262°C (softens at 250°C), $[\alpha]_D^{20} = -47.3^\circ$ (pyridine). **Pharm:** Antiviral; aldose reductase inhibitor (rat eye lens); promotes oviposition (*Papilio xuthus* and *Papilio protenor*); frostbite preventive; enhances effects of vitamin C; passive cutaneous anaphylaxis inhibitor (inhibits IgE-induced β -hexosaminidase release from RBL-2H3 cells, $IC_{50} > 500 \mu\text{mol/L}$, control Azelastine, $IC_{50} = (35 \pm 2) \mu\text{mol/L}$; PCA reaction inhibitor, 20mg/kg orl, $\text{InRt} = (71.9 \pm 5.5)\%$)^[5041]. **Source:** BA XIAN *Galium aparine*, FO SHOU *Citrus medica* var. *sarcodactylis*, GAN PI *Citrus chachiensis* (dried ripe pericarp: content = 2.10%)^[5508], GOU JU *Poncirus trifoliata*, JI CAI *Capsella bursa-pastoris*, JIAO GAN *Citrus tankan*, JIAO GAN PI *Citrus tankan*, JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], JU PI *Citrus reticulata* (dried ripe pericarp: content scope = 3.4%–7.2%)^[5501], mean content = 5.81%^[5508], JU YUAN *Citrus medica*, LI MENG PI *Citrus limonia*, NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.000014%dw)^[4752], NING MENG *Citrus limon*, NING MENG PI *Citrus limon*, OU BO HE *Mentha longifolia*, SU ZHU YANG YANG *Galium mollugo*, WU HE MI JU *Citrus unshiu* (pericarp), ZHI KE *Citrus aurantium* (dried ripe pericarp: content = 3.10%)^[5508], ZHI SHI *Citrus aurantium* (dried ripe pericarp: content = 0.99%)^[5508]. **Ref:** 2, 4, 658, 660, 4752, 5041, 5501, 5508.

**9459 Heteratisine**

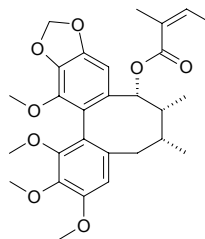
[3328-84-5] $C_{22}H_{33}NO_5$ (391.51). mp 267–269°C, $[\alpha]_D^{28} = +40^\circ$ ($c = 1$, MeOH). **Pharm:** Increases blood pressure (short acting). **Source:** YI YE WU TOU *Aconitum heterophyllum*, GAN QING WU TOU *Aconitum tanguticum*, ZE WU TOU *Aconitum zeravschanicum*. **Ref:** 658, 1521.

**9460 Heteroclitin A**

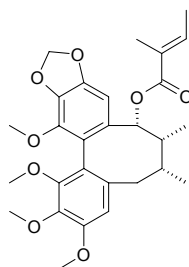
[140369-75-1] $C_{28}H_{36}O_8$ (500.59). **Source:** YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*]. **Ref:** 2436.

**9461 Heteroclitin B**

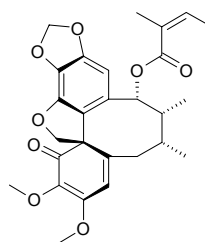
[140461-47-8] $C_{28}H_{34}O_8$ (498.58). **Source:** YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*]. **Ref:** 2436.

**9462 Heteroclitin C**

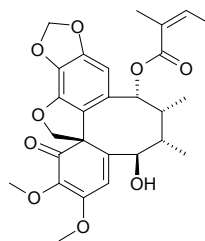
[140460-42-0] $C_{28}H_{34}O_8$ (498.58). **Source:** YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*]. **Ref:** 2436.

**9463 Heteroclitin D**

[140369-76-2] $C_{27}H_{30}O_8$ (482.54). **Pharm:** Antineoplastic (screened as potential antitumor promoters, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = (9.4±0.5)% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 70%)^[4644]. **Source:** NEI NAN WU WEI ZI *Kadsura interior* (stem), YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*]. **Ref:** 2436, 4644.

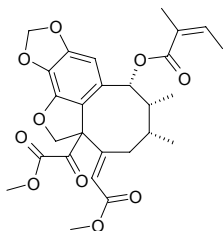
**9464 Heteroclitin E**

[140369-77-3] $C_{27}H_{30}O_9$ (498.53). **Source:** YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*]. **Ref:** 2436.

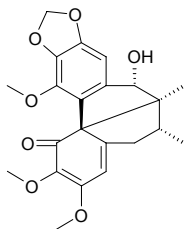


9465 Heteroclitin F

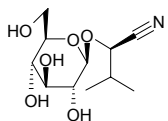
[144049-67-2] $C_{27}H_{30}O_{10}$ (514.53). **Pharm:** Antineoplastic (screened as potential antitumor promoters, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = $(16.5 \pm 0.6)\%$ (positive control value 32 pmol , $20 \text{ ng TPA} = 100\%$), viability of Raji cells = 60%)^[4644]. **Source:** NEI NAN WU WEI ZI *Kadsura interior* (stem: yield = 0.00039% dw), YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*]. **Ref:** 2436, 4644.

**9466 Heteroclitin G**

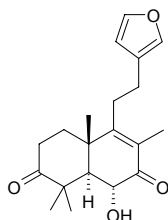
Kadsulignan K [144027-74-7] $C_{22}H_{24}O_7$ (400.43). **Source:** YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*]. **Ref:** 2436.

**9467 Heterodendrin**

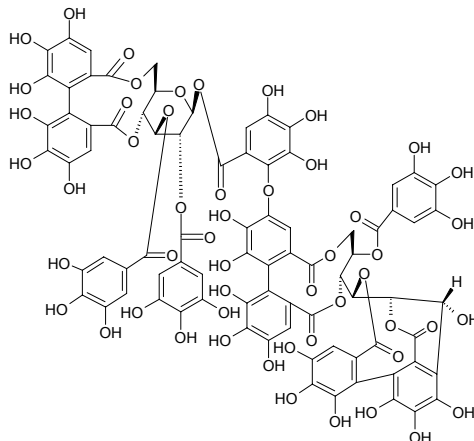
(*S*)-2-(β -*D*-Glucopyranosyloxy)-3-methylbutanenitrile [66465-22-3] $C_{11}H_{19}NO_6$ (261.28). mp $106\text{--}107^\circ\text{C}$ (as tetra-Ac), $[\alpha]_D^{25} = -45^\circ$ ($c = 0.5$, MeOH). **Pharm:** Toxin. **Source:** SHENG DI HONG JING TIAN *Rhodiola sacra*, MAI YA *Hordeum vulgare*, XI BO JIN HE HUAN *Acacia sieberiana*, *Passiflora* sp., *Acacia* sp. **Ref:** 658, 742, 1521.

**9468 Heteronone A**

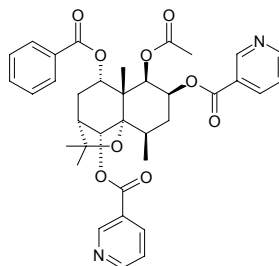
6 β -Hydroxy-labdane-15,16-epoxy-14,13(16),8(9)-trien-3,7-dione $C_{20}H_{26}O_4$ (330.43). White needles, mp $160\text{--}161^\circ\text{C}$. **Source:** YI MU CAO *Leonurus heterophyllum* [Syn. *Leonurus artemisia*] (aerial parts). **Ref:** 4428.

**9469 Heterophyllin B**

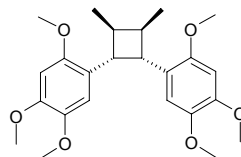
$C_{82}H_{56}O_{52}$ (1873.33). Grey-white powder, $[\alpha]_D = +104^\circ$ ($c = 1.0$, MeOH). **Source:** ZHEN *Corylus heterophylla* (leaf). **Ref:** 4584.

**9470 Heterophylline**

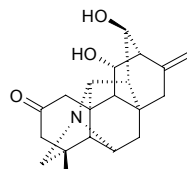
1 β -Acetoxy-9 α -benzoyloxy-2 β ,6 α -dnicotinoyloxy- β -dihydroagarofuran $C_{36}H_{38}N_2O_9$ (642.71). mp $132\text{--}135^\circ\text{C}$, $[\alpha]_D = +63.2^\circ$ ($c = 1.00$, $CHCl_3$). **Source:** YI YE MEI DENG MU *Maytenus heterophylla*. **Ref:** 5189.

**9471 Heterotropan**

$C_{24}H_{32}O_6$ (416.52). **Source:** BI CHENG QIE *Piper cubeba*. **Ref:** 660.

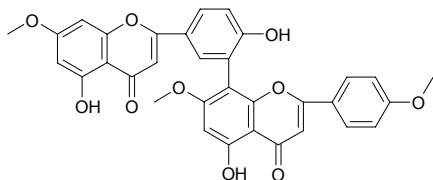
**9472 Hetisinone**

11,13-Dihydroxyhetisan-2-one; Dihydrohetisine [4829-55-4] $C_{20}H_{25}NO_3$ (327.43). Colorless crystals, mp $268\text{--}270^\circ\text{C}$; Rhombs (C_6H_6), mp $273\text{--}275^\circ\text{C}$, $[\alpha]_D = +18^\circ$. **Source:** GAN QING WU TOU *Aconitum tanguticum*, YI YE WU TOU *Aconitum heterophyllum*, KANG DING CUI QUE HUA *Delphinium tatsienense*. **Ref:** 2203.

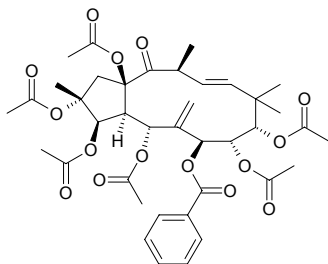


9473 Heveaflavone

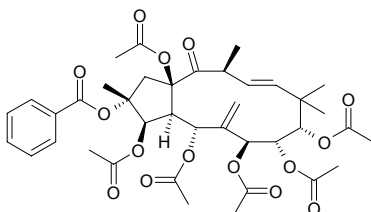
$C_{33}H_{24}O_{10}$ (580.55). Source: DA YE CAI *Selaginella doederleinii*. Ref: 660.

**9474 2 α ,3 β ,5 α ,8 α ,9 α ,15 β -Hexaacetoxy-7 β -benzyloxyjatropa-6(17), 11E-dien-14-one**

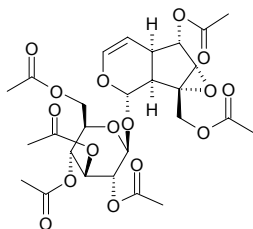
$C_{39}H_{48}O_{15}$ (756.81). Colorless crystals, mp 166–168°C, $[\alpha]_D^{25} = +12.9^\circ$ ($c = 0.50$, $CHCl_3$). Pharm: Cytotoxic (*in vitro*, B16 melanoma cell line, $IC_{50} > 5\mu g/mL$, no significant cytotoxicity)^[3078]; irritant inactive (mouse ear inflammation model, $ID_{50} > 100\mu g/ear$). Source: *Euphorbia turczaninowii* (whole herb). Ref: 3078.

**9475 3 β ,5 α ,7 β ,8 α ,9 α ,15 β -Hexaacetoxy-2 α -benzyloxyjatropa-6(17), 11E-dien-14-one**

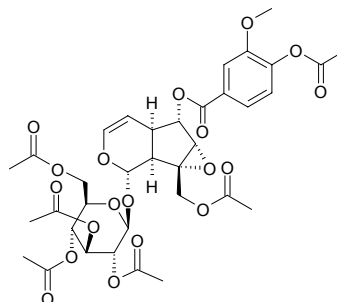
$C_{39}H_{48}O_{15}$ (756.81). Colorless crystals, mp 139–141°C, $[\alpha]_D^{25} = -59.1^\circ$ ($c = 0.62$, $CHCl_3$). Pharm: Cytotoxic (*in vitro*, B16 melanoma cell line, $IC_{50} > 5\mu g/mL$, no significant cytotoxicity)^[3078]; irritant inactive (mouse ear inflammation model, $ID_{50} > 100\mu g/ear$). Source: *Euphorbia turczaninowii* (whole herb). Ref: 3078.

**9476 Hexaacetyl catalpol**

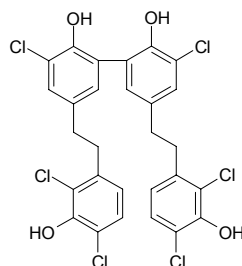
$C_{27}H_{34}O_{16}$ (614.56). Source: HU HUANG LIAN *Picrorhiza kurroa*. Ref: 660.

**9477 Hexaacetyl-6-vaniloyl catalpol**

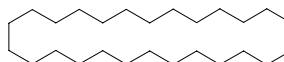
$C_{35}H_{40}O_{19}$ (764.70). Source: HU HUANG LIAN *Picrorhiza kurroa*. Ref: 660.

**9478 6,6',10,10',12,12'-Hexachloroisoperrottetin A**

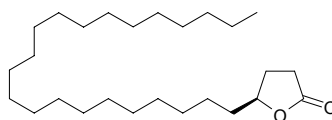
$C_{28}H_{20}Cl_6O_4$ (633.19). $[\alpha]_D^{20} = +0.0^\circ$ ($c = 0.2$, $CHCl_3$). Source: YUAN YE TAI *Jamesoniella colorata*. Ref: 3375.

**9479 n-Hexacosane**

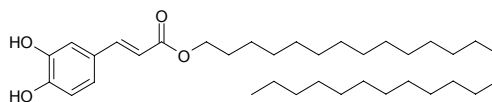
$C_{26}H_{54}$ (366.72). Source: MENG GU LI *Quercus mongolica*. Ref: 660.

**9480 Hexacosan-4-olide**

$C_{26}H_{50}O_2$ (394.69). White powder, mp 69°C (Hexane:EtOAc = 9:1). Pharm: Phytotoxin inactive (doesn't inhibit radicle growth of *Amaranthus hypochondriacus* and *Echinochloa crusgalli*)^[3433]; CaM interactor inactive^[3433]. Source: FU CHUI FE LAO JU *Flourensia cernua*. Ref: 3433.

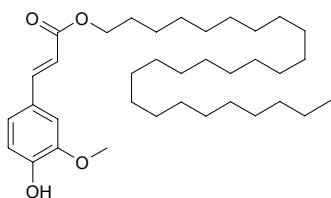
**9481 Hexacosanyl caffeate**

$C_{35}H_{60}O_4$ (544.87). Source: TAI WAN FU RONG *Hibiscus taiwanensis*. Ref: 2529.

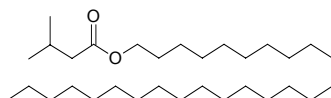


9482 Hexacosanyl ferulate

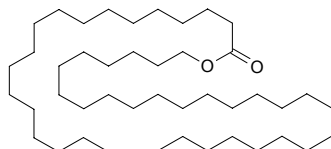
[63034-29-7] C₃₆H₆₂O₄ (558.89). Source: JIAN YE LONG XUE SHU *Dracaena cochinchinensis*. Ref: 616.

**9483 n-Hexacosanyl isovalerate**

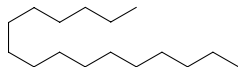
C₃₁H₆₂O₂ (466.84). Source: GAN SONG *Nardostachys chinensis*. Ref: 6.

**9484 Hexacosyl stearate**

C₄₄H₈₈O₂ (649.12). White waxy solid, mp 79~82°C. Source: HUANG LIAN HUA *Lysimachia davurica*. Ref: 2525.

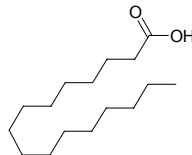
**9485 Hexadecane**

Cetane [544-76-3] C₁₆H₃₄ (226.45). mp 18.17°C, bp 287°C/160mmHg, bp 105~110°C/0.1mmHg. Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], XI YANG SHEN *Panax quinquefolium*, MEI GUI HUA *Rosa rugosa*, BI BA *Piper longum*. Ref: 2, 1521.

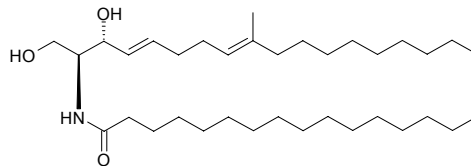
**9486 Hexadecanoic acid**

Palmitic acid; Aethalic acid; Cetylic acid [57-10-3] C₁₆H₃₂O₂ (256.43). Crystals, mp 63~64°C, bp 390°C, bp 268.5°C/100mmHg, bp 215°C/15mmHg. Pharm: Antifungal inactive (hmn pathogenic yeasts *Candida albicans*, *Candida glabrata* and *Candida tropicalis*); COX-1 and COX-2 inhibitor (IC₅₀ = 3.9~180 μmol/L, lacking selectivity)^[4415]; platelet aggregation inhibitor (washed rabbit platelets, 100 μg/mL, 100 μmol/L AA-induced, InRt = 4.5%, control 50 μmol/L Aspirin, InRt = 100%; 10 μg/mL collagen-induced, InRt = 3.9%, 100 μmol/L Aspirin, InRt = 4.9%; 0.1 U/mL thrombin-induced, InRt = 6.0%, 100 μmol/L Aspirin, InRt = 1.7%; 2 ng/mL PAF-induced, InRt = 3.5%, 100 μmol/L Aspirin, InRt = 2.1%)^[5427]; LD₅₀ (mus, iv) = 57 mg/kg. Source: BA DOU *Croton tiglium*, BAI CHANG *Acorus calamus*, BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], BING LANG *Areca catechu*, CHAI HU *Bupleurum chinense*, CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], CU LIU GUO *Hippophae rhamnoides*, DA CHE QIAN *Plantago major*, DA QING YE *Isatis indigotica*, DA ZAO *Ziziphus jujuba*, DANG GUI *Angelica sinensis*, DANG SHEN *Codonopsis pilosula*, DONG CHONG XIA CAO *Cordyceps sinensis*, DONG LING CAO *Rabdosia rubescens*, FU LING *Poria cocos*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f.

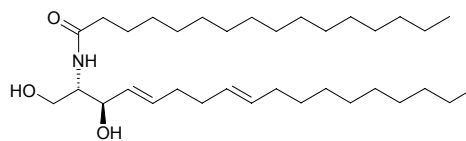
Huechingensis], GUA LOU *Trichosanthes kirilowii*, GUANG YE DING GONG TENG *Erycibe schmidtii*, HONG HUA *Carthamus tinctorius*, HUA DONG LAN CI TOU *Echinops grijsii*, HUANG QI *Astragalus membranaceus*, HUANG QIN *Scutellaria baicalensis*, LANG DANG ZI *Hyoscyamus niger* (dried ripe seed: content = 6.5%)^[5508], LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], PU HUANG *Typha angustata*, QIANG HUO *Notopterygium incisum*, QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*], QUAN XIE *Buthus martensi*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI CAO *Gynura segetum* [Syn. *Gynura japonica*] (rhizome), SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*], SHAN ZHA *Crataegus pinnatifida*, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*], TIAN HUA FEN *Trichosanthes kirilowii*, TIAN MA *Gastrodia elata*, WU SE MEI *Lantana camara* (aerial parts), XI YANG SHEN *Panax quinquefolium*, XING REN *Prunus armeniaca*, YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*], YIN YANG HUO *Epimedium brevicornum*, YU XING CAO *Houttuynia cordata*, occurs in many plants. Ref: 2, 531, 549, 551, 557, 576, 582, 585, 596, 601, 660, 1521, 2576, 4309, 4415, 5427, 5508.

**9487 (2S,3R,4E,8E)-N-Hexadecanoyl-2-amino-9-methyl-4,8-octadecadiene-1,3-diol**

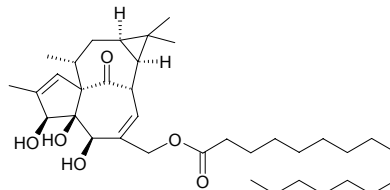
C₃₃H₆₇NO₃ (549.93). Amorphous powder, [α]_D²¹ = -11.6° (c = 0.09, CHCl₃). Source: HOU SHU SHAN GU *Panellus serotinus*. Ref: 4195.

**9488 (2S,3R,4E,8E)-2-Hexadecanoylamino-4,8-octadecadiene-1,3-diol**

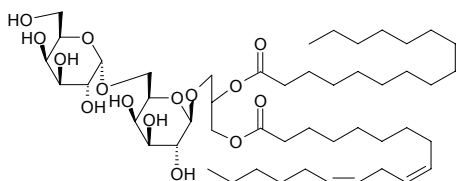
C₃₄H₆₅NO₃ (535.90). Colorless solid, mp 98~100°C, [α]_D²⁸ = +12.1° (c = 0.05, CHCl₃). Pharm: Cytotoxic (hmn peripheral blood mononuclear cells (PBMC), ED₅₀ = 20 μg/mL). Source: *Lobophytum* sp. Ref: 4432.

**9489 20-Hexadecanoylingenol**

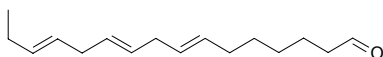
C₃₆H₅₈O₆ (586.86). Source: QIAN JIN ZI *Euphorbia lathyris*. Ref: 6.



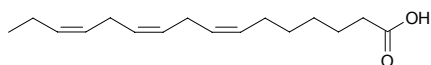
9490 1-O-Hexadecanoyl-2-O-(9Z,12Z-octadecadienyl)-3-O-[α -D-galactopyranosyl-(1''-6')-O- β -D-galactopyranosyl]-glycerol
 $C_{49}H_{88}O_{15}$ (917.24). White amorphous powder. **Pharm:** PAF antagonist.
Source: XI LAN ROU GUI *Cinnamomum zeylanicum*. **Ref:** 2199.



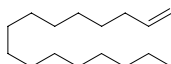
9491 7,10,13-Hexadecatrienal
 $C_{16}H_{26}O$ (234.39). **Source:** KONG SHI CHUN *Ulva pertusa*. **Ref:** 660.



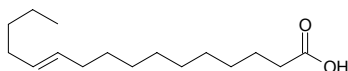
9492 7Z,10Z,13Z-Hexadecatrienoic acid
 $C_{16}H_{26}O_2$ (250.38). **Source:** FU PING *Lemna minor*. **Ref:** 660.



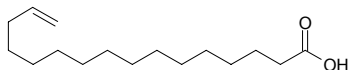
9493 1-Hexadecene
 $C_{16}H_{32}$ (224.43). **Source:** HONG HUA *Carthamus tinctorius*. **Ref:** 660.



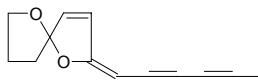
9494 11Z-Hexadecenoic acid
 $C_{16}H_{30}O_2$ (254.42). **Source:** FU PING *Lemna minor*. **Ref:** 660.



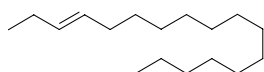
9495 ω -Hexadecenoic acid
 $C_{16}H_{30}O_2$ (254.42). **Source:** KUN BU *Laminaria japonica*. **Ref:** 660.



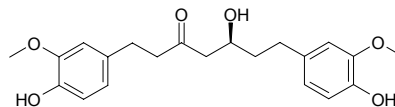
9496 2-(Hexa-2,4-dien-1-ylidene)-1,6-dioxaspiro[4.4]non-3-ene
 [50257-98-2] $C_{13}H_{12}O_2$ (200.24). Yellowish crystals (petroleum ether), mp 48.5–49.5°C, $[\alpha]_D = -45.3^\circ$ (Et₂O). **Pharm:** Anti-inflammatory; insect antifeedant. **Source:** MU⁽³⁾ JU *Matricaria chamomilla* [Syn. *Matricaria recutita*], *Chrysanthemum* spp. **Ref:** 6, 1521.



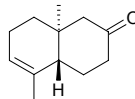
9497 Hexahydroaplotaxene
 Z-14-Heptadecene $C_{17}H_{34}$ (238.46). **Source:** DA JI⁽⁴⁾ *Cirsium japonicum*. **Ref:** 660.



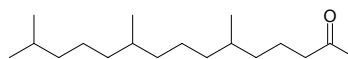
9498 Hexahydrocurcumin
 $C_{21}H_{26}O_6$ (374.44). mp 90–91°C (benzene), $[\alpha]_D^{24} = +9^\circ$. **Pharm:** Choleric (animals, *in vivo*); antihypercholesterolemic. **Source:** GAN JIANG *Zingiber officinale*, GAO LIANG JIANG *Alpinia officinarum*, JIANG HUANG *Curcuma longa*. **Ref:** 658, 660.



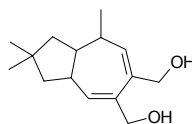
9499 (+)-3,4,4aR,7,8,8aR-Hexahydro-5,8a-dimethylnaphthalen-2(1H)-one
 $C_{12}H_{18}O$ (178.28). Colorless oil. **Source:** *Tritomaria polita* (essential oil). **Ref:** 3446.



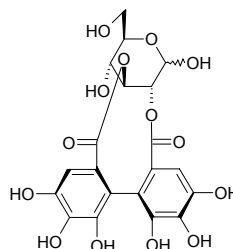
9500 Hexahydrofarnesyl acetone
 6,10,14-Trimethyl-pentadecan-2-one $C_{18}H_{36}O$ (268.49). **Source:** AI YE *Artemisia argyi*, DENG XIN CAO *Juncus effusus*, HONG CHAI HU *Bupleurum scorzonerifolium*, LING XIANG CAO *Lysimachia foenum-graecum*, WU LIAN MEI *Cayratia japonica*, XIAO GUO XIANG CAO *Lysimachia microcarpa*, XUE LIAN *Saussurea involucrata*. **Ref:** 660.

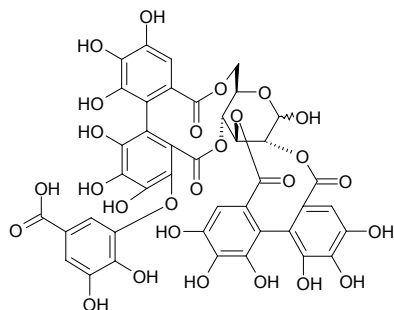
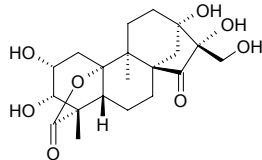
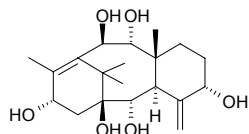
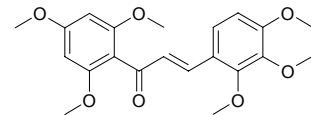
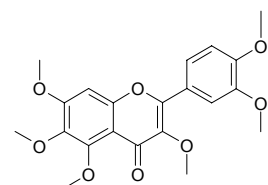
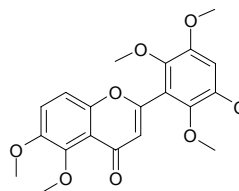
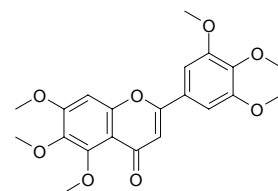
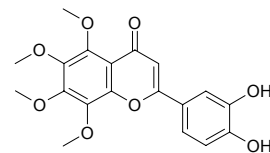
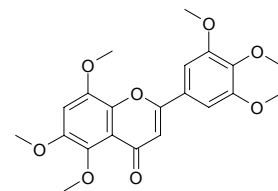
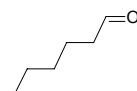


9501 1,2,3,3a,8,8a-Hexahydro-2,2,8-trimethyl-5,6-azulene-dimethanol
 $C_{15}H_{24}O_2$ (236.36). **Source:** WU WEI ZI *Schisandra chinensis*. **Ref:** 2.



9502 2,3-O-(S)-Hexahydroxydiphenyl-D-glucopyranose
 $C_{20}H_{18}O_{14}$ (482.36). **Pharm:** Antioxidant (SOD-like activity, EC₅₀ = 166 μmol/L, control Gallic acid, EC₅₀ = 31.7 μmol/L, L-Ascorbic acid, EC₅₀ = 34.6 μmol/L)^[3408]; antioxidant (DPPH free radical scavenger, EC₅₀ = 4.35 μmol/L, control Gallic acid, EC₅₀ = 5.88 μmol/L, L-Ascorbic acid, EC₅₀ = 6.25 μmol/L)^[3408]. **Source:** AN MO LE *Phyllanthus emblica* (root), BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*] (fresh fruit: yield = 0.010%fw)^[4695], HU TAO REN *Juglans regia*. **Ref:** 3065, 3408, 4695.

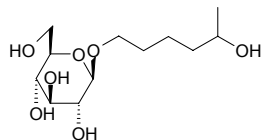


9503 2,3-O-Hexahydroxydiphenoyl-4,6-O-sanguisorboyl- (α/β)-glucoseC₄₁H₂₈O₂₇ (952.66). Source: SHEN SHENG XUAN GOU ZI *Rubus sanctus*.Ref: 3421.**9504 2 α ,3 α ,10 α ,13 α ,16 α ,17-Hexahydroxy-9 α -methyl-15-oxo-20-norkauran-19-oic acid (19,10)-lactone**C₂₀H₂₈O₈ (396.44). White amorphous solid, mp 150°C(dec), [α]_D²⁵ = +16.0° (c = 0.1, MeOH). Pharm: Cytotoxic inactive (Lu1, Col2, KB, LNCaP, hTERT-RPE1, HUVEC; control Taxol, ED₅₀ = 0.002 μ g/mL, 0.003 μ g/mL, 0.0005 μ g/mL, 0.001 μ g/mL, 0.004 μ g/mL, 0.008 μ g/mL, respectively). Source: *Parinari sprucei* (leaf). Ref: 4991.**9505 Hexahydroxytaxadiene**1 β ,2 α ,5 α ,9 α ,10 β ,13 α -Hexahydroxy-4(20),11-taxadiene C₂₀H₃₂O₆ (368.47). mp 120~121°C, [α]_D = -5.6° (CHCl₃). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 662.**9506 2,3,4,2',4',6'-Hexamethoxychalcone**C₂₁H₂₄O₇ (388.42). Pale orange-yellow solid (CHCl₃), mp 174~176°C.Source: *Andrographis neesiana* (whole herb). Ref: 4357.**9507 3,5,6,7,3',4'-Hexamethoxyflavone**C₂₁H₂₂O₈ (402.40). Pale yellow amorphous solid, mp 179~180°C. Pharm: Cytotoxic inactive (*in vitro*, Col2, ED₅₀ > 20 μ g/mL; hTERT-RPE1, ED₅₀ > 20 μ g/mL; HUVEC, ED₅₀ > 20 μ g/mL; KB, ED₅₀ > 20 μ g/mL; HUVEC, ED₅₀ > 20 μ g/mL; Lu1, ED₅₀ > 20 μ g/mL). Source: HUANG JING YE *Vitex negundo*. Ref: 4699.**9508 5,6,2',3',5',6'-Hexamethoxyflavone**C₂₁H₂₂O₈ (402.40). Yellow amorphous solid. Source: SI JI XIANG ROU GUO *Casimiroa tetrameria* (leaf). Ref: 5262.**9509 5,6,7,3',4',5'-Hexamethoxyflavone**C₂₁H₂₂O₈ (402.40). White needles (acetone). Pharm: Cytotoxic (HeLa, IC₅₀ = 42.9 μ g/mL, control Mitomycin C, IC₅₀ = 1.7 μ g/mL)^[4092]. Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], LONG XU TENG *Bauhinia championii*, SHENG HONG JI *Ageratum conyzoides*, TUAN JI AI NA XIANG *Blumea glomerata*. Ref: 660, 4092, 4548.**9510 5,6,7,8,3',4'-Hexamethoxyflavone**C₁₉H₁₈O₈ (374.35). Source: JU PI *Citrus reticulata*. Ref: 2.**9511 5,6,8,3',4',5'-Hexamethoxyflavone**C₂₁H₂₂O₈ (402.40). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 660.**9512 Hexanal**[66-25-1] C₆H₁₂O (100.16). Source: FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], SHAN XING REN *Prunus armeniaca* var. *ansu*. Ref: 2, 660.

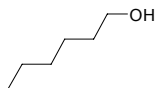
9513 Hexane-1,5-diol-1-O-β-D-glucopyranoside

$C_{12}H_{24}O_7$ (280.32). Amorphous powder, $[\alpha]_D^{21} = -19^\circ$ ($c = 0.4$, MeOH).

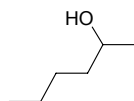
Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 3402.

**9514 Hexanol**

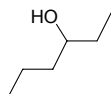
[111-27-3] $C_6H_{14}O$ (102.18). Source: FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*]. Ref: 2.

**9515 2-Hexanol**

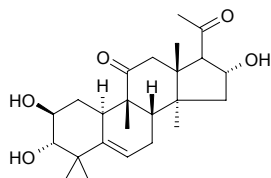
$C_6H_{14}O$ (102.18). Source: BO HE *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], HONG HUA *Carthamus tinctorius*. Ref: 660.

**9516 3-Hexanol**

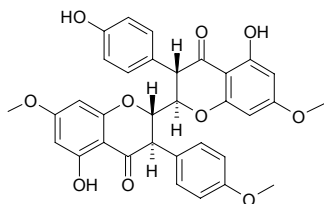
$C_6H_{14}O$ (102.18). Source: HONG HUA *Carthamus tinctorius*. Ref: 660.

**9517 Hexanorcucurbitacin F**

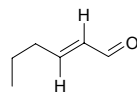
[96253-53-1] $C_{24}H_{36}O_5$ (404.55). Colorless needles (Me₂CO), mp 128~130°C, $[\alpha]_D^{28} = +140.2^\circ$ ($c = 0.180$, MeOH). Source: KU XUAN SHEN *Picria felterrae* (whole herb). Ref: 4853.

**9518 Hexaspermone C**

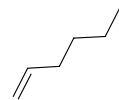
$C_{33}H_{28}O_{10}$ (584.59). Pharm: Antibacterial inactive (MDR *Staphylococcus aureus*: RN4220 strain, 64μg/mL, control Erythromycin, MIC = 128μg/mL; XU212 strain, 64μg/mL, control Tetracycline, MIC = 128μg/mL; SA-1199-B strain, 64μg/mL, control Norfloxacin, MIC = 32μg/mL). Source: CHANG E JIN LIAN MU PI *Ochna macrocalyx*, LIU ZI SAI JIN LIAN MU *Oureatea hexasperma*. Ref: 5372.

**9519 (E)-2-Hexenal**

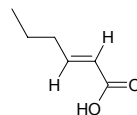
[6728-26-3] $C_6H_{10}O$ (98.15). Source: SHAN XING REN *Prunus armeniaca* var. *ansu*. Ref: 2.

**9520 1-Hexene**

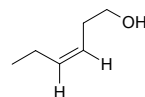
[592-41-6] C_6H_{12} (84.16). Source: JIN YIN HUA *Lonicera japonica*. Ref: 2.

**9521 trans-2-Hexenoic acid**

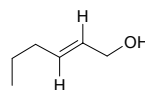
[13419-69-7] $C_6H_{10}O_2$ (114.15). mp 36~37°C, bp 217°C. Source: NIU BANG GEN *Arctium lappa*. Ref: 6.

**9522 β-Hexenol**

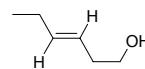
[928-96-1] $C_6H_{12}O$ (100.16). bp (*cis*-) 156~157°C. Pharm: Attractant for many plant-eating insects. Source: CI HUAI HUA *Robinia pseudoacacia*, PI PA YE *Eriobotrya japonica*, HUO XIANG *Agastache rugosus*. Ref: 6, 660, 660.

**9523 trans-2-Hexenol**

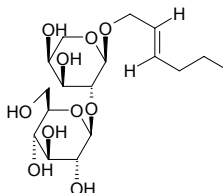
[928-95-0] $C_6H_{12}O$ (100.16). mp 158~160°C. Source: XING ZI *Prunus armeniaca*. Ref: 6.

**9524 γ-Hexenol**

trans-3-Hexen-1-ol [928-97-2] $C_6H_{12}O$ (100.16). bp 153~156°C. Source: PI PA YE *Eriobotrya japonica*, HUO XIANG *Agastache rugosus*. Ref: 6, 660.

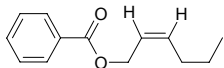
**9525 (E)-2-Hexenyl-α-L-arabinopyranosyl-(1→2)-β-D-glucopyranoside**

$C_{17}H_{30}O_{10}$ (394.42). Source: CHUAN DANG SHEN *Codonopsis tangshen*. Ref: 2, 660.

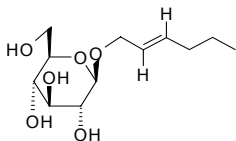


9526 2-Hexenyl benzoate

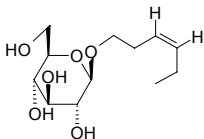
$C_{13}H_{16}O_2$ (204.27). Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*].
Ref: 6.

**9527 (E)-2-Hexenyl-β-D-glucopyranoside**

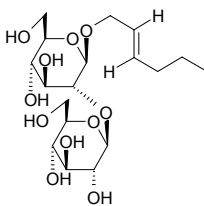
$C_{12}H_{22}O_6$ (262.31). Source: CHUAN DANG SHEN *Codonopsis tangshen*.
Ref: 2, 660.

**9528 (Z)-3-Hexenyl-β-D-glucopyranoside**

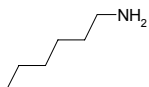
$C_{12}H_{22}O_6$ (262.31). Amorphous powder, RI(23, D) = -31°. Pharm: To induce expression of defense genes in uninfected leaves. Source: CHUAN DANG SHEN *Codonopsis tangshen*, JIN WU MAO SAO JU *Pertya glabrescens*, SHE XIANG CAO *Thymus vulgaris*. Ref: 2, 660, 2592.

**9529 (E)-2-Hexenyl-β-D-glucopyranosyl-(1→2)-β-D-glucopyranoside**

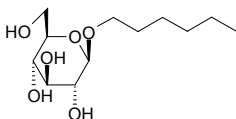
$C_{18}H_{32}O_{11}$ (424.45). Source: CHUAN DANG SHEN *Codonopsis tangshen*.
Ref: 2, 660.

**9530 Hexyl amine-1**

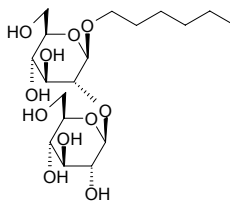
[111-26-2] $C_6H_{15}N$ (101.19). mp -19°C, bp 129-130°C/742mmHg. Source: MAI JIAO *Claviceps purpurea*. Ref: 6.

**9531 n-Hexyl-β-D-glucopyranoside**

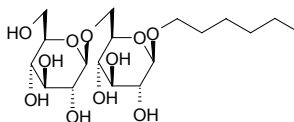
$C_{12}H_{24}O_6$ (264.32). Source: DANG SHEN *Codonopsis pilosula*. Ref: 2.

**9532 Hexyl-β-D-glucopyranosyl-(1→2)-β-D-glucopyranoside**

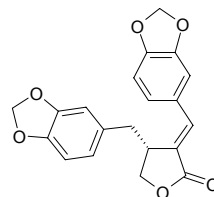
$C_{18}H_{34}O_{11}$ (426.47). Source: CHUAN DANG SHEN *Codonopsis tangshen*.
Ref: 2, 660.

**9533 Hexyl-β-D-glucopyranosyl-(1→6)-β-D-glucopyranoside**

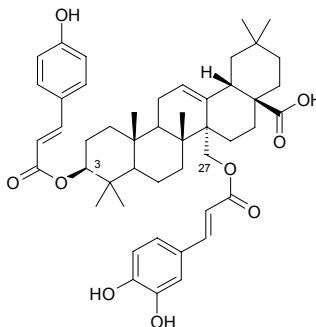
$C_{18}H_{34}O_{11}$ (426.47). Source: CHUAN DANG SHEN *Codonopsis tangshen*.
Ref: 2, 660.

**9534 (-)-(R,E)-Hibialactone**

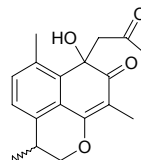
$C_{20}H_{16}O_6$ (352.35). Source: QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.00074%dw).
Ref: 4783.

**9535 Hibicusin**

$C_{48}H_{60}O_9$ (781.01). White powder, mp 211-213°C, $[\alpha]_D = +31.7^\circ$ ($c = 0.32$, MeOH). Pharm: Anti-HIV (H9 lymphocytic cells, inhibits replication, IC_{50} (concentration that inhibits uninfected H9 cell growth by 50%) > 25 μg/mL); cytotoxic (hmn, A549 $EC_{50} = 16.4 \mu\text{g/mL}$, MCF7 $EC_{50} > 20 \mu\text{g/mL}$)^[2529].
Source: TAI WAN FU RONG *Hibiscus taiwanensis*. Ref: 2529.

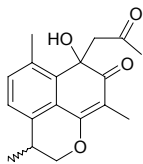
**9536 Hibicuslide A**

$C_{18}H_{20}O_4$ (300.36). Yellow syrup, $[\alpha]_D = +15^\circ$ ($c = 0.1$, MeOH). Source: TAI WAN FU RONG *Hibiscus taiwanensis*. Ref: 2529.

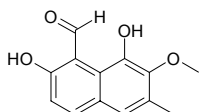


9537 Hibicuslide B

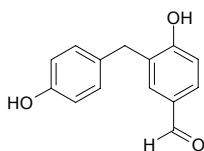
$C_{18}H_{20}O_4$ (300.36). Yellow syrup, $[\alpha]_D^{20} = +77.0^\circ$ ($c = 0.13$, MeOH). Source: TAI WAN FU RONG *Hibiscus taiwanensis*. Ref: 2529.

**9538 Hibicuslide C**

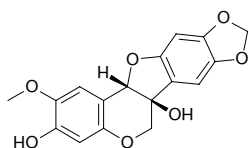
$C_{13}H_{12}O_4$ (232.24). Colorless oil. Source: TAI WAN FU RONG *Hibiscus taiwanensis*. Ref: 2529.

**9539 Hibicutaiwanin**

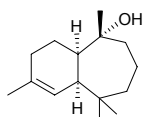
$C_{14}H_{12}O_3$ (228.25). Colorless oil. Source: TAI WAN FU RONG *Hibiscus taiwanensis*. Ref: 2529.

**9540 Hildecarpin**

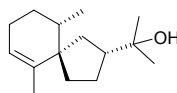
[99624-64-3] $C_{17}H_{14}O_7$ (330.30). Pharm: Insect antifeedant; antifungal. Source: XI SHI HUI MAO DOU *Tephrosia hildebrandtii*. Ref: 658.

**9541 Himachalol**

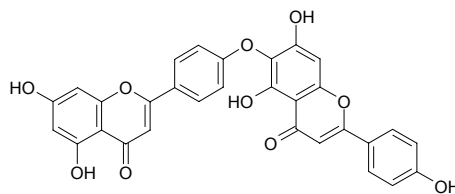
[1891-45-8] $C_{15}H_{26}O$ (222.37). White acicular crystals (ethanol), mp 67–68°C, $[\alpha]_D^{20} = +72.9^\circ$ ($c = 0.18$); colorless trapezoid crystals, mp 67°C. Pharm: Antispasmodic (ileum in gpg, jejunum in rbt, uterus in rat); smooth muscle relaxant (caused by acetylcholine, 5-HT, nicotine and $BaCl_2$); LD₅₀ (mus, orl) = 265mg/kg, (mus, ip) = 247mg/kg. Source: XUE SONG *Cedrus deodara*. Ref: 660, 661.

**9542 Hinesol**

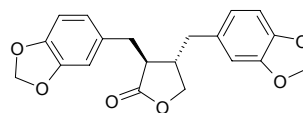
1(10)-Spirovetiven-11-ol [23811-08-7] $C_{15}H_{26}O$ (222.37). Crystals (MeOH), mp 59–60°C, $[\alpha]_D^{20} = -40.2^\circ$. Source: BEI CANG ZHU *Atractylodes chinensis* (dried rhizome: content = 3.42%^[5531]), CANG ZHU *Atractylodes lancea* (dried rhizome: content scope of 5 origins = 0.13%~1.94%, mean content = 0.71%^[5531]), GUAN CANG ZHU *Atractylodes japonica* (dried rhizome: content = 0.01%^[5531]). Ref: 2, 660, 1521, 5501, 5531.

**9543 Hinokiflavone**

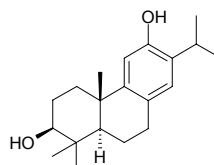
[19202-36-9] $C_{30}H_{18}O_{10}$ (538.47). mp 353–355°C (dec). Pharm: Cyclo-nucleotide phosphodiesterase inhibitor; anti-HIV (HIV-RT inhibitor). Source: BAI SHU YE *Cupressus funebris*, CE BAI YE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*], CUI YUN CAO *Selaginella uncinata* (whole herb), DU SONG SHI *Juniperus rigida*, HUI⁽⁴⁾ YE *Sobina chinensis*, JI MAO SONG *Podocarpus imbricatus*, JUAN BAI *Selaginella tamariscina*, LIN BEI ZI *Toxicodendron succedaneum* [Syn. *Rhus succedanea*], LIU SHAN *Cryptomeria fortunei*, LUO HAN SONG SHI *Podocarpus macrophyllus*, LUO HAN SONG YE *Podocarpus macrophyllus*, SHAN ZHU ZI *Garcinia multiflora*, SU TIE SHU GUO *Cycas revoluta*. Ref: 6, 580, 658, 2268, 4398.

**9544 (+)-Hinokinin**

$C_{20}H_{18}O_6$ (354.36). $[\alpha]_D^{25} = +41.5^\circ$ ($c = 0.20$, $CHCl_3$). Pharm: Cytotoxic (P₃₈₈, ED₅₀ = 1.54μg/mL, control Mithramycin, ED₅₀ = 0.08μg/mL; HT29, ED₅₀ = 4.61μg/mL, Mithramycin, ED₅₀ = 0.07μg/mL; A549, ED₅₀ = 8.01μg/mL, Mithramycin, ED₅₀ = 0.06μg/mL)^[4947]. Source: E SHEN *Anthriscus sylvestris*, PI ZHEN XING YAO HUA *Wikstroemia lanceolata* (stem and root). Ref: 4947, 5499.

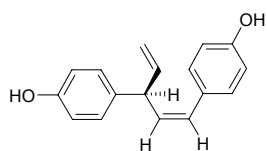
**9545 Hinokiol**

$C_{20}H_{30}O_2$ (302.46). mp 233–235°C, $[\alpha]_D^{22} = +72.5^\circ$ ($c = 0.46$, $CHCl_3$). Source: DAN HUANG XIANG CHA CAI *Isodon flavidus*. Ref: 4067.

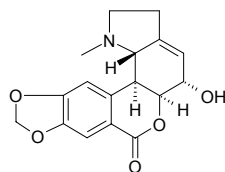


9546 cis-Hinokiresinol

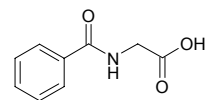
Nyasol C₁₇H₁₆O₂ (252.32). [α]_D²¹ = +137.0° (*c* = 1.40, Me₂CO). **Pharm:** cAMP phosphodiesterase inhibitor; cytotoxic (*in vitro*, HO-8910, IC₅₀ = (30.6±1.2)μmol/L, Vincristine, IC₅₀ = (25.1±1.9)μmol/L; Bel7405, IC₅₀ = (29.4±2.9)μmol/L, Vincristine, IC₅₀ = (31.4±3.4)μmol/L)^[4975]; cytotoxic (*in vitro*, HOG.R5, CC₅₀ = 15.6μg/mL (58.1μmol/L), control Ellipticine, HOG.R5, IC₅₀ = 0.02μg/mL (0.08μmol/L))^[3009]; cytotoxic inactive (KB, Col2, LNCaP, Lu1, HUVEC, IC₅₀ > 20μg/mL)^[3009]; anti-HIV (IC₅₀ = 11.7μg/mL (46.4μmol/L))^[3009]; antifungal (1~50μg/mL, inhibits mycelian growth of *Colletotrichum orbiculare*, *Phytophthora capsici*, *Pythium ultimum*, *Rhizoctonia solani*, *Cladosporium cucumerinum*, did not affect the growth of bacteria and yeast)^[3476]. **Source:** GE BI TIAN MEN *Asparagus gobicus* (root), RI BEN BIAN BAI *Chamaecyparis obtusa*, TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*] (dried root: yield = 0.00011%^[3009]), ZHAI YE NAN YANG SHAN *Araucaria angustifolia*, ZHI MU *Anemarrhena asphodeloides*. **Ref:** 658, 3009, 3476, 4975.

**9547 Hippeastrine**

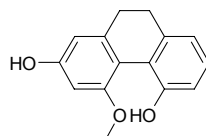
Trisphaerine; Trispherine; (+)-Hippeastrine [477-17-8] C₁₇H₁₇NO₃ (315.33). mp 214~215°C, [α]_D²² = +160° (*c* = 0.3, CHCl₃). **Pharm:** Insect antifeedant (pento-larva of *Euremahecabce mandarina*); antibacterial (*Staphylococcus aureus*, MIC = 125μg/mL)^[3829]; antifungal (*Candida albicans*, IZD = 25mm, MIC = 125μg/mL)^[3829]. **Source:** GU TING HUA *Amaryllis belladonna* (bulb), JUN ZI LAN *Clivia miniata*, SU MEN DA LA WEN SHU LAN *Crinum amabile*, XI NAN WEN SHU LAN *Crinum latifolium*, SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], HUANG SI TAN BAO *Sternbergia lutea*. **Ref:** 6, 658, 3829.

**9548 Hippuric acid**

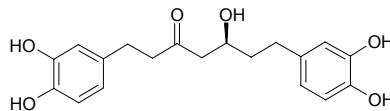
[495-69-2] C₉H₉NO₃ (179.18). mp 187°C. **Source:** REN NIAO *Homo sapiens*. **Ref:** 6.

**9549 Hircinol**

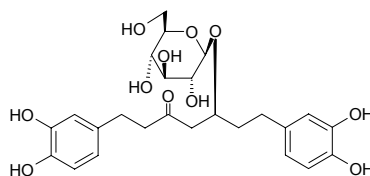
[41060-05-3] C₁₅H₁₄O₃ (242.28). **Pharm:** Antifungal (*Aspergillus niger*); inhibits fermentation of indole-3-acetic acid (IAA). **Source:** YUAN SHU YU *Dioscorea rotundata* [Syn. *Dioscorea cayenensis*]. **Ref:** 658.

**9550 Hirsutanonol**

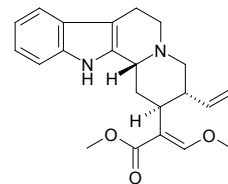
[91998-02-6] C₁₉H₂₂O₆ (346.38). **Pharm:** Antioxidant (superoxide radical scavenger, IC₅₀ = 3.0μmol/L; DPPH scavenger, IC₅₀ = 3.1μmol/L)^[4535]. **Source:** CHI YANG *Alnus japonica* (leaf). **Ref:** 4535.

**9551 Hirsutanonol-5-O-β-D-glucopyranoside**

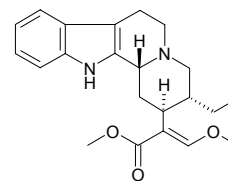
C₂₅H₃₂O₁₁ (508.53). **Pharm:** Antioxidant (3.125μg/mL, superoxide radical scavenging activity = 3.4%, control Urcumin 16.1%; 6.25μg/mL, DPPH radical scavenging activity = 3.9%, control Urcumin 50.0%). **Source:** CHI YANG *Alnus japonica* (leaf). **Ref:** 4535.

**9552 Hirsuteine**

[35467-43-7] C₂₂H₂₆N₂O₃ (366.46). mp 92~94°C. **Source:** BI LU GOU TENG *Uncaria tomentosa*, DUO MAI GOU TENG *Uncaria nervosa*, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], GUI YA NA GOU TENG *Uncaria guianensis*, HUA GOU TENG *Uncaria sinensis*, XIA GOU TENG *Uncaria attenuata*. **Ref:** 2, 660, 1521, 5341.

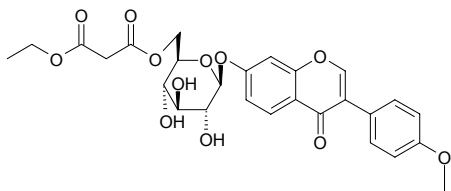
**9553 Hirsutine**

[7729-23-9] C₂₂H₂₈N₂O₃ (368.48). Crystals (Et₂O), mp 101°C, [α]_D²³ = +68.6° (*c* = 0.32, CHCl₃). **Pharm:** Calcium antagonist (anesthetic rat and dog, hypotensor and vasodilator); antiarrhythmic (mus, arrhythmia induced by aconitine, gpg, arrhythmia induced by ouabain); CNS depressant; LD₅₀ (mus, iv) = 35mg/kg, LD₅₀ (mus, ip) = 110mg/kg. **Source:** BAI GOU TENG *Uncaria sessilifrutus* [Syn. *Nauclea sessilifrutus*], BI LU GOU TENG *Uncaria tomentosa*, DUO MAI GOU TENG *Uncaria nervosa*, FENG XIANG SHU YE *Cephalanthus occidentalis*, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], GUI YA NA GOU TENG *Uncaria guianensis*, HUA GOU TENG *Uncaria sinensis*, XIA GOU TENG *Uncaria attenuata*, *Uncaria kunstleri*. **Ref:** 2, 6, 1688, 1689, 1521, 5341.

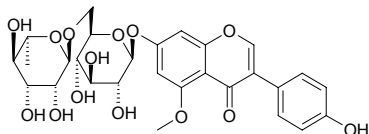


9554 Hirsutissimide A

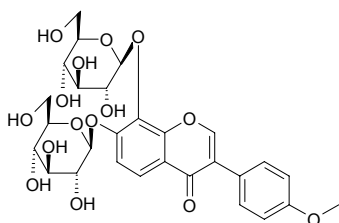
Formononetin 7-*O*- β -*D*-(6'-ethylmalonyl)-glucopyranoside C₂₇H₂₈O₁₂ (544.52). White powder, $[\alpha]_D^{25} = -26.3^\circ$ ($c = 0.13$, MeOH:H₂O = 1:0.5). Source: FENG CHENG JI XUE TENG *Millettia nitida* var. *hirsutissima* (stem). Ref: 4455.

**9555 Hirsutissimide B**

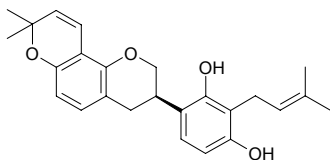
5-*O*-Methyl genistein 7-*O*- α -*L*-rhamnopyranosyl-(1 \rightarrow 6)- β -*D*-glucopyranoside C₂₈H₃₂O₁₄ (592.56). White powder, $[\alpha]_D^{25} = -73.3^\circ$ ($c = 0.19$, MeOH). Source: FENG CHENG JI XUE TENG *Millettia nitida* var. *hirsutissima* (stem). Ref: 4455.

**9556 Hirsutissimide C**

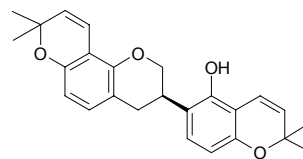
Retusin 7,8-di-*O*- β -*D*-glucopyranoside C₂₈H₃₂O₁₅ (608.56). White powder, $[\alpha]_D^{25} = -38.0^\circ$ ($c = 0.14$, MeOH:H₂O = 1:1). Source: FENG CHENG JI XUE TENG *Millettia nitida* var. *hirsutissima* (stem). Ref: 4455.

**9557 Hispaglabridin A**

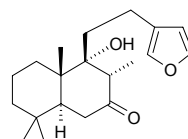
[68978-03-0] C₂₅H₂₈O₄ (392.50). Crystals (cyclohexane), mp 132~133°C, $[\alpha]_D^{25} = -8.23^\circ$ ($c = 2.43$, CHCl₃). Pharm: Antibacterial (*Staphylococcus aureus* ATCC13709, MIC = 3.12 μ g/kg; *Mycobacterium smegmatis* ATCC607, MIC = 3.12mg/kg). Source: GAN CAO *Glycyrrhiza uralensis*, GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 658, 1521.

**9558 Hispaglabridin B**

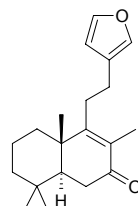
[68978-02-9] C₂₅H₂₆O₄ (390.48). Amorphous powder, $[\alpha]_D^{25} = -25.7^\circ$ ($c = 2.35$, CHCl₃). Pharm: Antibacterial (*Staphylococcus aureus* ATCC13709, MIC = 6.25 μ g/mL; *Mycobacterium smegmatis* ATCC607, MIC = 3.12 μ g/mL). Source: OU YA GAN CAO *Glycyrrhiza glabra* var. *typica*, GAN CAO *Glycyrrhiza uralensis*, GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 2, 658, 1521.

**9559 Hispanolone**

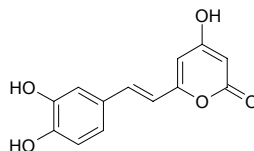
C₂₀H₃₀O₃ (318.46). Crystals. Source: YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*]. Ref: 660, 2499, 4493.

**9560 Hispanone**

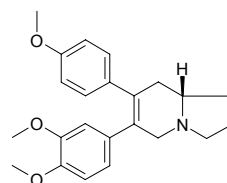
C₂₀H₂₈O₂ (300.44). Source: YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (aerial parts). Ref: 4493, 4534.

**9561 Hispidin**

C₁₃H₁₀O₅ (246.22). Pharm: Chymotrypsin inhibitor inactive (20.0 μ mol/L, InRt = (1.4 \pm 0.3)%); trypsin inhibitor inactive (20.0 μ mol/L, InRt = (1.0 \pm 0.2)%); elastase inhibitor inactive (20.0 μ mol/L, InRt = (3.1 \pm 1.3)%); PEP inhibitor (20.0 μ mol/L, InRt = (61.3 \pm 7.0)%); TACE inhibitor inactive (20.0 μ mol/L, InRt = (1.1 \pm 0.1)%); BACE1 inhibitor (20.0 μ mol/L, InRt = (63.4 \pm 3.1)%). Source: LIE TI MU CENG KONG JUN *Phellinus linteus*. Ref: 4934.

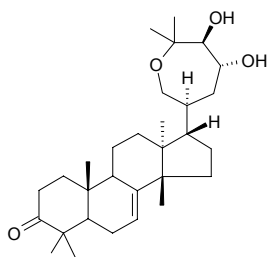
**9562 Hispidine**

C₂₃H₂₇NO₃ (365.48). Source: DUI YE RONG *Ficus hispida*. Ref: 660.

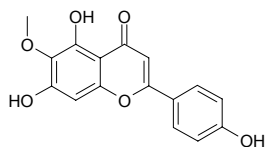


9563 Hispidone

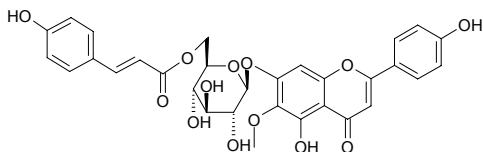
[73891-72-2] C₃₀H₄₈O₄ (472.71). Source: CHANG YE KUAN MU *Eurycoma longifolia*. Ref: 1521, 4556.

**9564 Hispidulin**

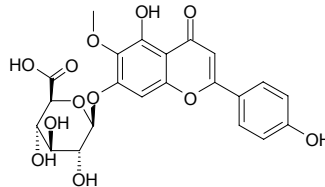
Dinatin [1447-88-7] C₁₆H₁₂O₆ (300.27). Pale yellow powder, mp 287~289°C, mp 281~282°C, mp 291~292°C, mp 304~305°C. Pharm: Antihepatotoxin; antitussive; cytotoxic (KB *in vitro*, ED₅₀ = 96µg/mL); antitussive (dispels phlegm); platelet aggregation inhibitor; binding activity to benzodiazepine receptor (IC₅₀ = (1.3±0.2)µmol/L, control Diazepam, IC₅₀ = (0.05±0.01)µmol/L)^[5378]; PFTase inhibitor (100µg/mL, InRt = 75%)^[5378]; cytotoxic (strongly inhibits growth of ZR-75-1 cells, GI₅₀ = 1.2µg/mL)^[5378]; cytotoxic inactive (hmn breast cancer cell lines: MDA-MB-231, MCF7, T47D, 20µg/mL)^[5378]; angiogenesis inhibitor inactive (chicken embryo chorioallantoic membrane (CAM) assay, 10µg)^[5378]. Source: AI YE *Artemisia argyi*, CHANG GUAN JIA MO LI *Clerodendron indicum*, CHOU MO LI *Clerodendron fragrans*, DUI XIN JU *Helenium autumnale*, LI ZHI CAO *Salvia plebeia*, SU DA QI GAN JU *Citrus sudachii*, XIU MAO DI HUANG *Digitalis ferruginea*, YA PIAN *Papaver somniferum*, YI WA JU *Iva frutescens*, YIN DU JIA JING JIE *Nepeta hindostana*, ZI MEI SHU *Millingtonia hortensis*, MAO HUA MAO DI HUANG *Digitalis lanata*, CU YING MAO TUN CAO *Ambrosia hispida*, AI YE HUANG QIN *Scutellaria przewalskii*, FU CHUI FE LAO JU *Flourensia cernua*, YAO YONG DAN SHEN YE *Salvia officinalis*, *Warionia saharae*. Ref: 5, 658, 1521, 5366, 5378, 5399.

**9565 Hispidulin 7-(6-E-p-coumaroyl-β-D-glucopyranoside)**

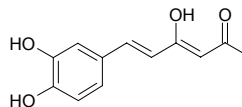
C₃₁H₂₈O₁₃ (608.56). Amorphous yellowish powder, mp 288~289°C, [α]_D²⁵ = -46.4° (c = 0.5, CHCl₃). Source: GU JING CAO *Eriocaulon buergerianum*. Ref: 1923.

**9566 Hispidulin-7-O-glucuronide**

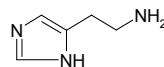
C₂₂H₂₀O₁₂ (476.40). mp 220~222°C. Source: JIN SI TAO GUO SHI *Hypericum chinense*. Ref: 6.

**9567 Hispolon**

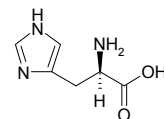
[173933-40-9] C₁₂H₁₂O₄ (220.23). Pharm: Cytotoxic (*in vitro*, A549, IC₅₀ = 0.183µmol/L; BGC823, IC₅₀ = 0.205µmol/L; MCF7, IC₅₀ = 0.025µmol/L; Bel7402, IC₅₀ = 0.038µmol/L; Ketr3, IC₅₀ = 0.206µmol/L; HCT8, IC₅₀ = 0.199µmol/L; control Topotecan, A549, IC₅₀ = 0.0032µmol/L; BGC823, IC₅₀ = 0.0043µmol/L; MCF7, IC₅₀ = 0.0018µmol/L; Bel7402, IC₅₀ = 0.0012µmol/L; Ketr3, IC₅₀ = 0.0049µmol/L; HCT8, IC₅₀ = 0.0015µmol/L)^[4747]. Source: CU YING MAO XIAN KONG JUN *Inonotus hispidus*, SANG HUANG *Phellinus igniarius* (sporocarp: yield = 0.0022%dw)^[4747]. Ref: 1521, 4747.

**9568 Histamine**

[51-45-6] C₅H₉N₃ (111.15). mp 75~80°C, mp 86°C, bp 167°C/0.8mmHg. Pharm: An important medium of inflammation and anaphylaxis; bronchial smooth muscle stimulant; irritant; vasodilator. Source: BAI QU CAI *Chelidonium majus*, BO CAI *Spinacia oleracea*, CHUN *Brasenia schreberi*, FENG DU *Apis cerana*, LI YU *Cyprinus carpio*, MAI JIAO *Claviceps purpurea*, MAN LI YU *Anguilla japonica*, MIAN HUA *Gossypium herbaceum*, QIE YE *Solanum melongena*, SAN XIAO CAO *Trifolium repens*, SHANG LU *Phytolacca esculenta* [Syn. *Phytolacca acinosa*] (dried root: content = 0.103%)^[5508], WU GONG *Scolopendra subspinipes mutilans* (dried body: mean content of 4 origins = %0.044)^[5508], XIANG JIAO *Musa paradisiaca* var. *sapientum* [Syn. *Musa sapientum*], YE DU ZHONG *Euonymus grandiflorus*, YI ZHU QIAN MA *Urtica dioica*, *Sarracenia* sp., *Drosera* sp., *Nepenthes* sp. Ref: 6, 658, 5508.

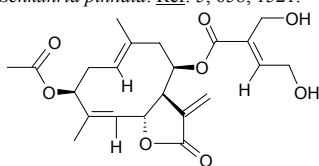
**9569 L-Histidine**

[71-00-1] C₆H₉N₃O₂ (155.16). Pharm: An essential amino acid for children; promotes ulcer healing. Source: BAN XIA *Pinellia ternata* (dried tuber: content scope of 4 origins = 0.22%~2.33%, mean content = 0.88%)^[5521], HU LU BA *Trigonella foenum-graecum*^[658], YI YE JIA FAN LV *Pseudostellaria heterophylla* (tuberoid: mean content of 5 origins = 0.0456%)^[5508]. Ref: 658, 5508, 5521.

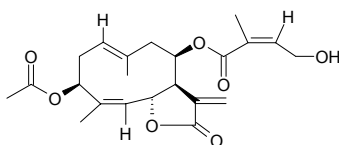


9570 Hiyodorilactone A

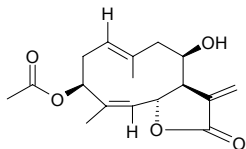
Schkuhrin I; Eucannabinolide; Hydroxychromolaenide [38458-58-1]
 $C_{22}H_{28}O_8$ (420.46). Gum or yellow oil, $[\alpha]_D = -121^\circ$ ($CHCl_3$). **Pharm:**
 Antibacterial (gram-positive bacteria); cytotoxic (KB); insect antifeedant.
Source: DA MA YE ZE LAN *Eupatorium cannabinum*, KU YE DAO ZE LAN *Eupatorium sachalinense* [Syn. *Eupatorium glehni*], SHI KU JU
Schkuhria pinnata. **Ref:** 5, 658, 1521.

**9571 Hiyodorilactone B**

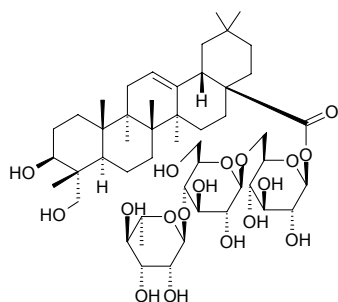
[68539-58-2] $C_{22}H_{28}O_7$ (404.46). Yellow oil, $[\alpha]_D^{24} = -140^\circ$ ($c = 0.67$, ethanol). **Pharm:** Antineoplastic. **Source:** KU YE DAO ZE LAN *Eupatorium sachalinense* [Syn. *Eupatorium glehni*]. **Ref:** 661, 1521.

**9572 Hiyodorilactone C**

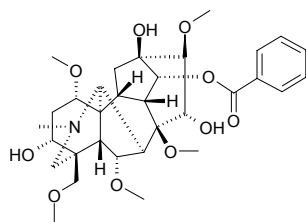
[68628-57-9] $C_{17}H_{22}O_5$ (306.36). Oil, $[\alpha]_D^{24} = -109^\circ$ ($c = 0.91$, ethanol). **Pharm:** Antineoplastic. **Source:** KU YE DAO ZE LAN *Eupatorium sachalinense* [Syn. *Eupatorium glehni*]. **Ref:** 661, 1521.

**9573 HN Saponin H**

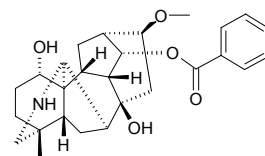
$C_{48}H_{78}O_{18}$ (943.15). **Source:** XI ZANG TIE XIAN LIAN *Clematis tibetana* (aerial parts). **Ref:** 3530.

**9574 Hokbusine A**

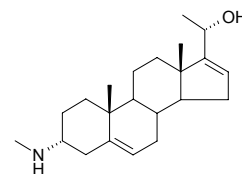
$C_{32}H_{45}NO_{10}$ (603.72). **Source:** WU TOU *Aconitum carmichaeli*. **Ref:** 660.

**9575 Hokbusine B**

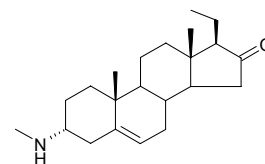
$C_{27}H_{35}NO_5$ (453.58). **Source:** WU TOU *Aconitum carmichaeli*. **Ref:** 660.

**9576 Holadysamine**

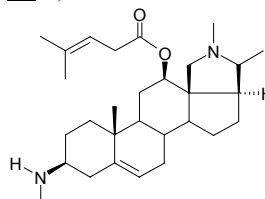
$C_{22}H_{35}NO$ (329.53). Crystals (hexane), mp $173^\circ C$, $[\alpha]_D = -78^\circ$ ($c = 1$, $CHCl_3$). **Source:** ZHI XIE MU PI *Holarrhena antiodysenterica*. **Ref:** 6, 1521.

**9577 Holadysine**

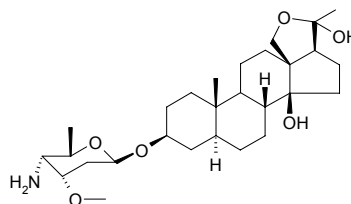
3 α -(Methylamino)pregn-5-en-16-one $C_{22}H_{35}NO$ (329.53). Crystals (hexane), mp $120^\circ C$, $[\alpha]_D = -199^\circ$ ($c = 1.2$, $CHCl_3$). **Source:** ZHI XIE MU PI *Holarrhena antiodysenterica*. **Ref:** 6, 1521.

**9578 Holarfrine**

Holarrhesine [70866-29-4] $C_{29}H_{46}N_2O_2$ (454.70). Platelets (Me_2CO), mp $116-117^\circ C$, $[\alpha]_D^{20} = -19.1^\circ$ ($c = 0.93$, $CHCl_3$). **Source:** ZHI XIE MU PI *Holarrhena antiodysenterica*, FEI ZHOU ZHI XIE MU *Holarrhena africana*. **Ref:** 6, 1521.

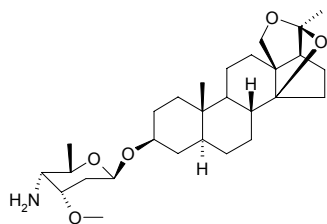
**9579 Holantosine A**

[28719-38-2] $C_{28}H_{47}NO_6$ (493.69). **Source:** ZHI XIE MU PI *Holarrhena antiodysenterica*. **Ref:** 6, 1521.

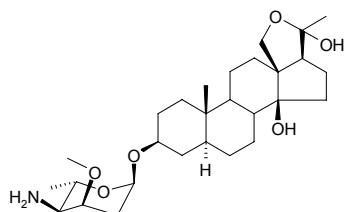


9580 Holantosine B

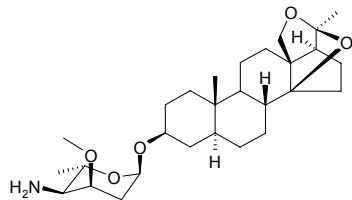
[28719-39-3] $C_{28}H_{45}NO_5$ (475.67). Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6, 1521.

**9581 Holantosine C**

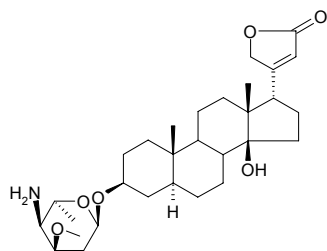
[34312-24-8] $C_{28}H_{47}NO_6$ (493.69). Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6, 1521.

**9582 Holantosine D**

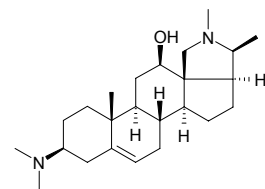
[33662-04-3] $C_{28}H_{45}NO_5$ (475.67). $[\alpha]_D = -67^\circ$ ($c = 6$, $CHCl_3$). Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6, 1521.

**9583 Holarosine A**

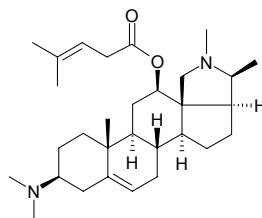
[34303-94-1] $C_{30}H_{47}NO_6$ (517.71). Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6, 1521.

**9584 Holarrhenine**

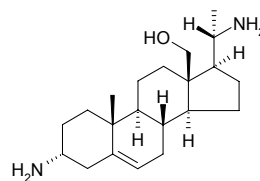
12 β -Hydroxyconessine [561-22-8] $C_{24}H_{40}N_2O$ (372.60). Needles (EtOAc), mp 197~198°C, $[\alpha]_D = -7.1^\circ$ ($CHCl_3$). Source: ZHI XIE MU PI *Holarrhena antidysenterica*, GANG GUO HE ZHI XIE MU *Holarrhena congolensis*, WEN ROU ZHI XIE MU *Holarrhena mitis*. Ref: 6, 1521.

**9585 Holarrhetine**

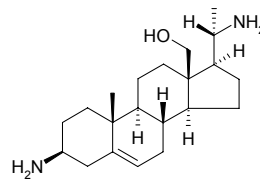
$C_{30}H_{48}N_2O_2$ (468.73). mp 74~75°C, $[\alpha]_D = -4.6^\circ$ ($c = 1.12$, EtOH), $[\alpha]_D = -14.9^\circ$ ($c = 1.12$, $CHCl_3$). Source: ZHI XIE MU PI *Holarrhena antidysenterica*, FEI ZHOU ZHI XIE MU *Holarrhena africana*. Ref: 6, 1521.

**9586 Holarrhidine**

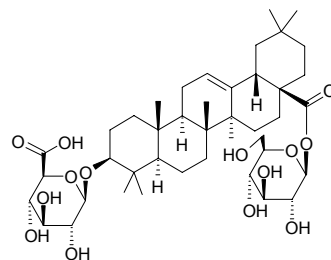
$C_{21}H_{36}N_2O$ (332.53). mp 180~181°C, $[\alpha]_D = -23^\circ$ ($CHCl_3$). Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6, 1521.

**9587 Holarrhimine**

[468-31-5] $C_{21}H_{36}N_2O$ (332.53). mp 183°C, $[\alpha]_D = -14^\circ$ ($CHCl_3$). Source: ZHI XIE MU PI *Holarrhena antidysenterica*, WEN ROU ZHI XIE MU *Holarrhena mitis*, TUI RE ZHI XIE MU *Holarrhena febrifuga*. Ref: 6, 1521.

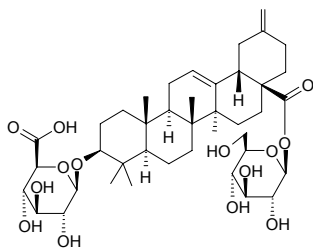
**9588 Hollow alternanthera saponin A**

Calendula officinalis Glycoside D₂. Momordin IIb [51415-02-2] $C_{42}H_{66}O_{14}$ (794.99). White amorphous powder, mp 218~220°C. Source: JIN ZHAN JU *Calendula officinalis* (flower), KONG XIN XIAN *Alternanthera philoxeroides*, LUO KUI HUA *Basella rubra* (aerial parts). Ref: 700, 3544, 3551.

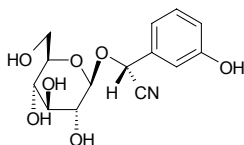


9589 Hollow alternanthera saponin D

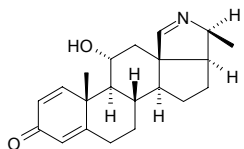
$C_{41}H_{62}O_{14}$ (778.94). White amorphous powder, mp 311~312°C. **Pharm:** Molluscicide (*Oncomelania*). **Source:** KONG XIN XIAN *Alternanthera philoxeroides*. **Ref:** 700.

**9590 Holocalin**

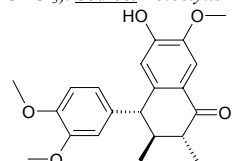
$C_{14}H_{17}NO_7$ (311.29). **Pharm:** Plant growth stimulatory or inhibitory activity (radicle length: *Lactuca sativa*, 1 μ mol/L, InRt = (31~60)%, 10 μ mol/L, InRt = (31~60)%, 100 μ mol/L, InRt = (31~60)%, 1mmol/L, InRt > 61%; *Raphanus sativus*, 1 μ mol/L, InRt = (10~30)%, 10 μ mol/L, InRt = (10~30)%, 100 μ mol/L, InRt = (31~60)%, 1mmol/L, InRt > 61%; *Allium cepa*, 1 μ mol/L, StRt or InRt < 10%, 10 μ mol/L, StRt or InRt < 10%, 100 μ mol/L, StRt or InRt < 10%, 1mmol/L, InRt = (31~60)%). **Source:** XI YANG JIE GU MU *Sambucus nigra*. **Ref:** 5217.

**9591 Holonamine**

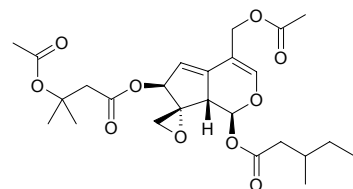
$C_{21}H_{27}NO_2$ (325.45). mp 257~259°C, $[\alpha]_D^{21} = -14.8^\circ$ ($c = 1.1$, MeOH). **Source:** ZHI XIE MU PI *Holarrena antidysenterica*. **Ref:** 6, 1521.

**9592 (+)-Holostylone**

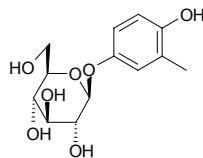
(7*R*,8*R*,8'*S*)-8,8'-Dimethyl-4-hydroxy-3',4',5-trimethoxy-2,7-cyclolignan-7-one $C_{21}H_{24}O_5$ (356.42). Amorphous yellow solid, $[\alpha]_D^{25} = -27.4^\circ$ ($c = 0.31$, $CHCl_3$). **Source:** *Holostylis reniformis* (root). **Ref:** 3784.

**9593 1-Homoacevaltrate**

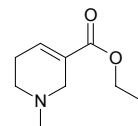
$C_{25}H_{34}O_{10}$ (494.54). Oil, $[\alpha]_D^{24} = +175.9^\circ$ ($c = 0.01$, MeOH). **Source:** ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*]. (rhizome and root: yield = 0.000007%dw). **Ref:** 4672.

**9594 Homoarbutin**

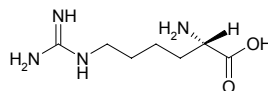
[25712-94-1] $C_{13}H_{18}O_7$ (286.28). mp 192~193°C, $[\alpha]_D^{21} = -79.2^\circ$. **Pharm:** Cytotoxic (P₃₈₈). **Source:** DA LI LU TI CAO *Pyrola forrestiana* (whole herb: content = 0.092%)^[5508], HONG HUA LU TI CAO *Pyrola incarnata*, LU XIAN CAO *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*] (whole herb: mean content = 0.102%)^[5508], PU TONG LU TI CAO *Pyrola decorata* (whole herb: content = 0.063%)^[5508], RI BEN LU TI CAO *Pyrola japonica*, XI ZANG LU TI CAO *Pyrola calliantha* var. *tibetana* (whole herb: content = 0.075%)^[5508], YUAN YE LU TI CAO *Pyrola rotundifolia*, ZHOU YE LU TI CAO *Pyrola rugosa* (whole herb: content = 0.061%)^[5508], ZI BEI LU TI CAO *Pyrola atropurpurea* (whole herb: content = 0.0051%)^[5508]. **Ref:** 6, 660, 1562, 5508.

**9595 Homoarecoline**

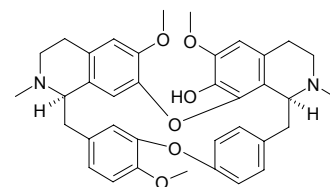
[28125-84-0] $C_9H_{15}NO_2$ (169.23). **Source:** BING LANG *Areca catechu*. **Ref:** 2.

**9596 L-Homoarginine**

[156-86-5] $C_7H_{16}N_4O_2$ (188.23). **Pharm:** Antibacterial (*Streptococcus* sp. and *Bacillus coli*); antifungal (*Candida albicans*); germination inhibitor; toxin (mus and some insects). **Source:** BIAN JIA SHAN LI DOU *Lathyrus cicera*, CAO XIANG WAN DOU *Lathyrus sativus*, *Lotus helleri*. **Ref:** 658, 1521.

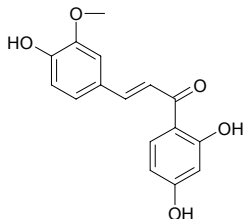
**9597 Homoaromoline**

O-Methylaromoline; Homoaromoline; Thalrugosamine; Homo-thalricrine; *N*-Methylalphandrine [17132-74-0] $C_7H_{40}N_2O_6$ (608.74). Crystals (MeOH), mp 235~237°C, $[\alpha]_D^{19} = +409^\circ$ ($CHCl_3$); mp 238~240°C, mp 235~236°C (dec). **Pharm:** Antibacterial (*Mycobacterium smegmatis*, MIC = 100 μ g/mL); antifungal (*Candida albicans*, MIC = 1000 μ g/mL); antihypertensive (anesthetic dog, 1~4mg, venae femoralis injection, blood pressure is lowered by 2.67kPa); muscle relaxant (animals, methyl iodide salt). **Source:** BAI YAO ZI *Stephania cepharantha*, YIN BU HUAN *Cyclea barbata*, TOU MING TANG SONG CAO *Thalictrum lucidum*, YAN GUO CAO *Thalictrum thunbergii*, ZOU WEN TANG SONG CAO *Thalictrum rugosum*, ZHI LI QIAN JIN TENG *Stephania erecta*, *Albertisia papuana*, *Pycnarrhena longifolia*. **Ref:** 6, 658, 1311, 1521.

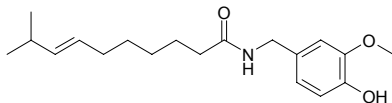


9598 Homobutein

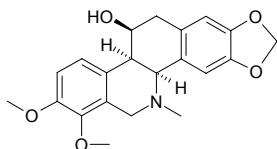
$C_{16}H_{14}O_5$ (286.29). **Pharm:** Antimalarial (*Plasmodium falciparum* D6, $IC_{50} = (15.0 \pm 2.8) \mu\text{g/mL}$, control Chloroquine, $IC_{50} = (0.009 \pm 0.002) \mu\text{g/mL}$, Quinine, $IC_{50} = (0.04 \pm 0.01) \mu\text{g/mL}$; *Plasmodium falciparum* W2, $IC_{50} = (16.1 \pm 2.1) \mu\text{g/mL}$, Chloroquine, $IC_{50} = (0.08 \pm 0.003) \mu\text{g/mL}$, Quinine, $IC_{50} = (0.21 \pm 0.01) \mu\text{g/mL}$)^[3879]. **Source:** A BI XI NI YA CI TONG *Erythrina abyssinica* (stem cortex), DI XIA CHE ZHOU CAO *Trifolium subterraneum*, GUAN MU ZHUANG CHE ZHOU CAO *Trifolium fruticosum*, *Iryanthera polyneura*, *Acacia* spp. **Ref:** 1521, 3879.

**9599 Homocapsaicin**

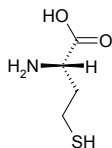
$C_{19}H_{29}NO_3$ (319.45). **Source:** HONG HAI JIAO *Capsicum annum*. **Ref:** 660.

**9600 Homochelidonine**

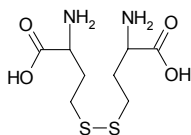
α -Homochelidonine [476-33-5] $C_{21}H_{23}NO_5$ (369.42). mp 169~170°C, mp 182°C, mp 192~193.5°C, $[\alpha]_D = +116^\circ$ (CHCl₃). **Source:** BAI QU CAI *Chelidonium majus*. **Ref:** 6, 1521.

**9601 L-Homocysteine**

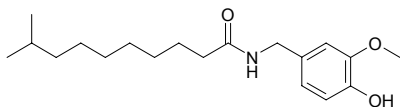
[6027-13-0] $C_4H_9NO_2S$ (135.19). **Pharm:** Flavorant. **Source:** BO CAI *Spinacia oleracea*. **Ref:** 658.

**9602 Homocystine**

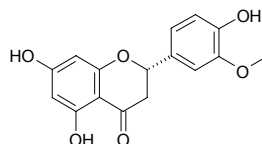
$C_8H_{16}N_2O_4S_2$ (268.36). mp L(+) 281~284°C (dec), D(-) 281~284°C (dec), (DL) 260~265°C (dec). **Source:** MO GU *Agaricus campestris*. **Ref:** 6.

**9603 Homodihydrocapsaicin**

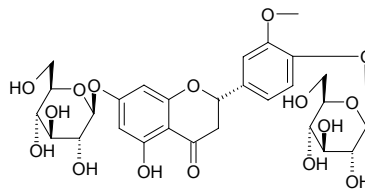
$C_{19}H_{21}NO_3$ (321.46). **Source:** HONG HAI JIAO *Capsicum annum*. **Ref:** 660.

**9604 Homoeriodictyol**

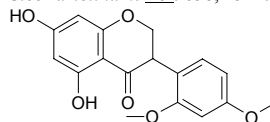
3'-O-Methyl eriodictyol; Eriodictyonone [446-71-9] $C_{16}H_{14}O_6$ (302.29). Crystals (70% acetic acid), high vacuum (0.003~0.050mm); 190~195°C sublimes as acicular crystals; diluting ethanol yield lamellar crystals; 225°C (dec, 100°C dried in vacuum), $[\alpha]_D^{20} = -28^\circ$ (ethanol). **Pharm:** Platelet aggregation inhibitor (50 $\mu\text{mol/L}$, InRt = 17%; 100 $\mu\text{mol/L}$, InRt = 50%)^[5171]; Diuretic (rbt); insect antifeedant (*Schizaphis graminum* and *Myzus persicae*). **Source:** HU JI SHENG *Viscum coloratum*, LENG ZHI HU JI SHENG *Viscum angulatum* (whole plant: yield = 0.00074%dw)^[4626], MI HUA SHI HU *Dendrobium densiflorum* (stem), SI BO LI YA AI JU *Tanacetum sibiricum* [Syn. *Filifolium sibiricum*], TIAN YE HAO *Artemisia campestris*. **Ref:** 661, 1434, 1521, 4626, 5171.

**9605 (2S)-Homoeriodictyol 7,4'-di-O-β-D-glucopyranoside**

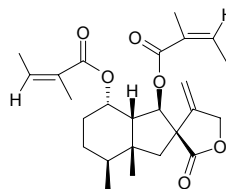
$C_{28}H_{34}O_{16}$ (626.57). Pale yellow amorphous powder. **Pharm:** Antioxidant (hydroxyl radical, $IC_{50} = 0.21 \text{ mmol/L}$, control EGCG, $IC_{50} = 0.58 \text{ mmol/L}$; superoxide anion, $IC_{50} = 0.39 \text{ mmol/L}$, EGCG, $IC_{50} = 0.53 \text{ mmol/L}$). **Source:** HU JI SHENG *Viscum coloratum* (branche and leaf: yield = 0.0015%dw). **Ref:** 920.

**9606 Homoferreirin**

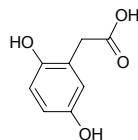
[482-01-9] $C_{17}H_{16}O_6$ (316.31). Rectangular plates (C₆H₆-petroleum ether or MeOH aq.), mp 168~169°C. **Pharm:** Antifungal. **Source:** HUI HUI DOU *Cicer arietinum*. **Ref:** 658, 1521.

**9607 Homofukinolide**

[41059-96-5] $C_{25}H_{34}O_6$ (430.55). Crystals (petroleum ether), mp 184~186°C, $[\alpha]_D^{22} = -127^\circ$ (c = 1, CHCl₃). **Source:** FENG DOU CAI *Petasites japonicus*. **Ref:** 6, 1521.

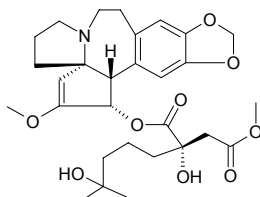
**9608 Homogentisic acid**

(2,5-Dihydroxyphenyl)acetic acid; Alcapton [451-13-8] $C_8H_8O_4$ (168.15). **Source:** BAN XIA *Pinellia ternata*. **Ref:** 2, 1521.

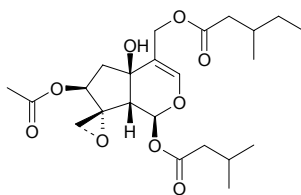


9609 Homoharringtonine

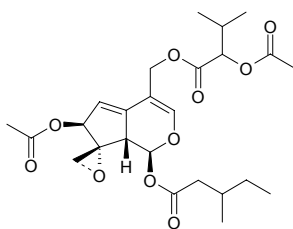
[26833-87-4] $C_{29}H_{39}NO_9$ (545.64). mp 144~146°C, $[\alpha]_D = -119^\circ$ ($c = 0.96$, $CHCl_3$). **Pharm:** Antineoplastic (curative for nonlymphatic leukemia, mus lymphatic leukemia, HeLa, L₁₂₁₀ cells and colon carcinoma). **Source:** HAI NAN CU FEI *Cephalotaxus hainanensis* [Syn. *Cephalotaxus manni*] (branchlet and bark: mean content of 2 samples = 0.041%^[5508]), HE GUO CU FEI *Cephalotaxus drupacea*, RI BEN CU FEI *Cephalotaxus harringtonia*, SAN JIAN SHAN *Cephalotaxus fortunei* (branchlet and bark: mean content of 2 origins = 0.070%^[5508]), ZHONG GUO CU FEI ZHI YE *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*]. **Ref:** 2, 4, 658, 660, 1521, 5508.

**9610 11-Homohydroxydidrovaltrate**

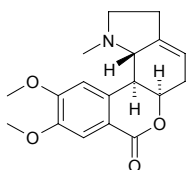
$C_{23}H_{34}O_9$ (454.52). Oil, $[\alpha]_D^{24} = -67.3^\circ$ ($c = 0.01$, MeOH). **Source:** ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*]. (rhizome and root: yield = 0.000009%dw). **Ref:** 4672.

**9611 1-Homoisoacevaltrate**

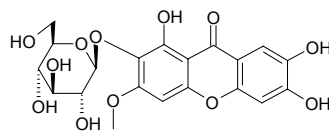
$C_{25}H_{34}O_{10}$ (494.54). Oil, $[\alpha]_D^{24} = +198.5^\circ$ ($c = 0.01$, MeOH). **Source:** ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*]. (rhizome and root: yield = 0.000008%dw). **Ref:** 4672.

**9612 Homolycorine**

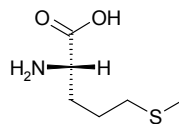
Narcipoetine [477-20-3] $C_{18}H_{21}NO_4$ (315.37). mp 175°C, $[\alpha]_D = +85^\circ$ (95% EtOH); pale-yellow crystals, 177~178°C, $[\alpha]_D^{28} = +98^\circ$ ($c = 0.1$, EtOH). **Pharm:** Antiretroviral and cytotoxic ($ID_{50} = 7.3\mu g/mL$, $TC_{50} = 12.8\mu g/mL$, TI_{50} (TC_{50}/ID_{50}) = 1.8)^[5026]. **Source:** DA YI ZHI JIAN *Lycoris aurea*, SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], HONG KOU SHUI XIAN *Narcissus poeticus*, XUE PIAN LIAN *Leucojum vernum* (bulb), family Amaryllidaceae spp. **Ref:** 6, 1521, 5026.

**9613 Homomangiferin**

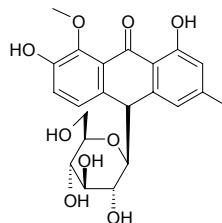
$C_{20}H_{20}O_{12}$ (452.38). **Source:** MANG GUO SHU PI *Mangifera indica*. **Ref:** 6.

**9614 Homomethionin**

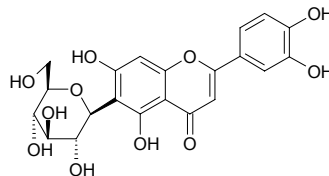
$C_6H_{13}NO_2S$ (163.24). **Source:** GAN LAN *Brassica oleracea* var. *capitata*, LA GEN *Armoracia lappathifolia*. **Ref:** 660.

**9615 Homonataloin**

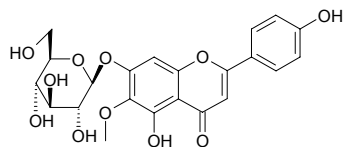
[477-66-7] $C_{22}H_{24}O_9$ (432.43). mp 202~204°C, $[\alpha]_D = -112.3^\circ$. **Source:** LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], *Aloe cremnophila*, *Aloe distans*, *Aloe jacksonii*. **Ref:** 2, 1521.

**9616 Homoorientin**

Isoorientin; Luteolin-6-C- β -D-glucopyranoside [4261-42-1] $C_{21}H_{20}O_{11}$ (448.39). Lightyellow needles, mp 235°C, $[\alpha]_D^{20} = +30.8^\circ$ ($c = 1.2$, pyridine), $[\alpha]_D^{22} = 0^\circ$ ($c = 0.73$, pyridine). **Pharm:** Phytoalexin^[4727]; β -glucosidase inhibitor^[4727]; pectinase inhibitor^[4727]. **Source:** HONG CAO *Polygonum orientale*, HU LU BA *Trigonella foenum-graecum*, HU ZHI ZI *Lespedeza bicolor*, HUANG GUA *Cucumis sativus* (leaf)^[4727], NAN ZHU ZI *Vaccinium bracteatum*, QIAO MAI JIE *Fagopyrum esculentum*, RI BEN SHUANG HU DIE *Tripterospermum japonicum*, SUAN JIAO *Tamarindus indica*, XIA KU CAO *Prunella vulgaris*, YA MA *Linum usitatissimum*, ZHANG YA CAI *Swertia pseudochinensis*. **Ref:** 6, 1521, 2508, 3533, 4727.

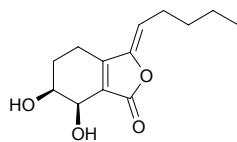
**9617 Homoplataginin**

Hispidulose [17680-84-1] $C_{22}H_{22}O_{11}$ (462.41). Yellow needles (EtOH), mp 241~242°C (dec). **Pharm:** Antitussive (dispels phlegm). **Source:** LI ZHI CAO *Salvia plebeia*, CHE QIAN *Plantago asiatica*. **Ref:** 6, 658, 660, 1521.

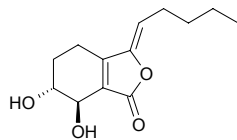


9618 Homosenkyunolide H

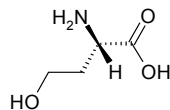
$C_{13}H_{28}O_4$ (238.29). Colorless oil. Source: DANG GUI *Angelica sinensis*. Ref: 2474.

**9619 Homosenkyunolide I**

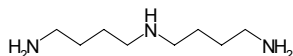
$C_{13}H_{28}O_4$ (238.29). Colorless oil. Source: DANG GUI *Angelica sinensis*. Ref: 2474.

**9620 L-Homoserine**

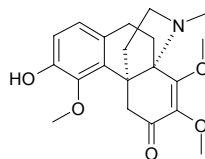
[672-15-1] $C_4H_9NO_3$ (119.12). mp (+) 203°C (dec). Pharm: Plays a key role in biosynthesis of threonine, isoleucine and methionine. Source: AN YE *Eucalyptus globulus*, DAO DOU *Canavalia gladiata*, DUO HUA HUANG JING *Polygonatum cyrtonema* [Syn. *Polygonatum multiflorum*], SAN YE SHU WEI CAO *Salvia trijuga*, WAN DOU *Pisum sativum*, ZI YUN YING ZI *Astragalus sinicus*. Ref: 6, 182, 658, 660.

**9621 sym-Homospermidine**

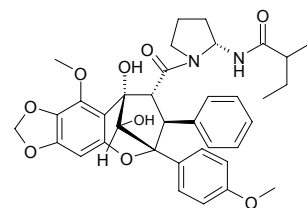
4,4'-Diaminobutylamine; 1,9-Diamino-5-azanonane [4427-76-3] $C_8H_{21}N_3$ (159.28). Source: TAN XIANG *Santalum album*, SHUI HU LU *Eichhornia crassipes* (root). Ref: 6, 1521.

**9622 Homostephanoline**

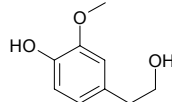
[2689-15-8] $C_{20}H_{25}NO_5$ (359.43). mp 233°C, $[\alpha]_D^{22} = -247.8^\circ$ (CHCl₃). Source: QIAN JIN TENG *Stephania japonica*. Ref: 6, 660, 1521.

**9623 Homothapsakin A**

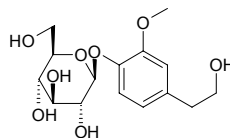
(-)-(2*R*,3*S*,4*R*,5*R*,10*S*,2'*S*)-1-[2,3,4,5-Tetrahydro-5,10-dihydroxy-2-(4-methoxyphenyl)-6-methoxy-7,8-methylenedioxy-3-phenyl-2,5-methano-1-benzoxepin-4-carbonyl]-2-(2-methylbutanoylamino)-pyrrolidine $C_{36}H_{40}N_2O_9$ (644.73). $[\alpha]_D^{20} = -135^\circ$ ($c = 0.3$, CHCl₃). Source: KE SHI MI ZI LAN *Aglaiia edulis*. Ref: 2355.

**9624 Homovanillyl alcohol**

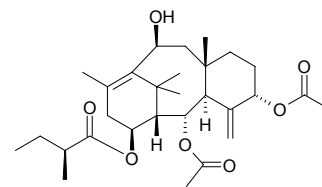
$C_9H_{12}O_3$ (168.19). Source: QIAN MA *Urtica cannabina*. Ref: 660.

**9625 Homovanillyl alcohol-4-O-glucoside**

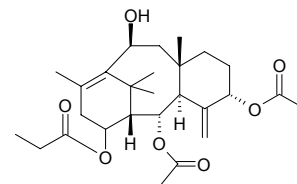
$C_{15}H_{22}O_8$ (330.34). Source: QIAN MA *Urtica cannabina*. Ref: 660.

**9626 Hongdoushan A**

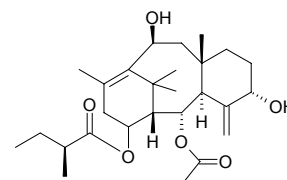
$C_{29}H_{44}O_7$ (504.67). Colorless amorphous solid, $[\alpha]_D^{25} = +81.3^\circ$ ($c = 0.06$, CHCl₃). Pharm: Cytotoxic (*in vitro*, 26-L5, EC₅₀ = 61 μg/mL; HT1080, EC₅₀ = 40.1 μg/mL; control 5-Fluorouracil, Colon26-L5, EC₅₀ = 0.29 μg/mL; HT1080, EC₅₀ = 0.07 μg/mL)^[4661]; antioxidant (DPPH scavenger, IC₅₀ > 200 μmol/L, control Caffeic acid, IC₅₀ = 25.5 μmol/L)^[5407]; NO production inhibitor (IC₅₀ = 15.0 μmol/L, control L-NMMA, IC₅₀ = 28.5 μmol/L)^[5407]. Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood: yield = 0.0018%dw). Ref: 4661, 5407.

**9627 Hongdoushan B**

$C_{27}H_{40}O_7$ (476.62). Colorless amorphous solid, $[\alpha]_D^{25} = +68.9^\circ$ ($c = 0.08$, CHCl₃). Pharm: Cytotoxic (*in vitro*, 26-L5, EC₅₀ > 100 μg/mL; HT1080, EC₅₀ = 70.4 μg/mL; control 5-Fluorouracil, Colon26-L5, EC₅₀ = 0.29 μg/mL; HT1080, EC₅₀ = 0.07 μg/mL)^[4661]; NO production inhibitor (IC₅₀ = 43.5 μmol/L, control L-NMMA, IC₅₀ = 28.5 μmol/L)^[5407]. Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood: yield = 0.0042%dw). Ref: 4661, 5407.

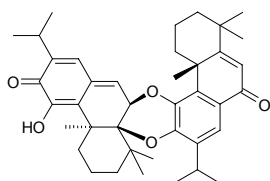
**9628 Hongdoushan C**

$C_{27}H_{42}O_6$ (462.63). Colorless amorphous solid, $[\alpha]_D^{25} = +77.4^\circ$ ($c = 0.14$, CHCl₃). Pharm: Cytotoxic (*in vitro*, 26-L5, EC₅₀ = 61.1 μg/mL; HT1080, EC₅₀ = 3.8 μg/mL; control 5-Fluorouracil, Colon26-L5, EC₅₀ = 0.29 μg/mL; HT1080, EC₅₀ = 0.07 μg/mL). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood: yield = 0.00034%dw). Ref: 4661.

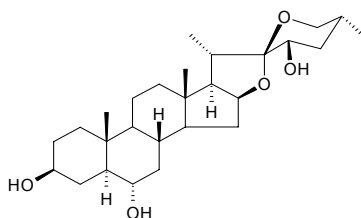


9629 Hongencaotone

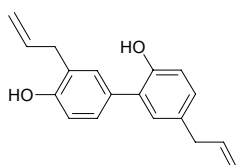
$C_{40}H_{50}O_5$ (610.84). Yellow plates (cyclohexane), mp 191–192°C, $[\alpha]_D^{25} = 588^\circ$ ($c = 0.05$, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, HL-60 and Bel7402 tumor cell lines). **Source:** HONG GEN CAO *Salvia prionitis* (root). **Ref:** 3072.

**9630 Hongguanggenin**

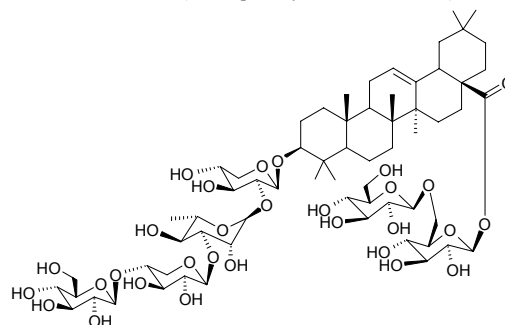
[65620-57-7] $C_{27}H_{44}O_5$ (448.65). **Source:** JIAN MA *Agave sisalana*. **Ref:** 10, 1521.

**9631 Honokiol**

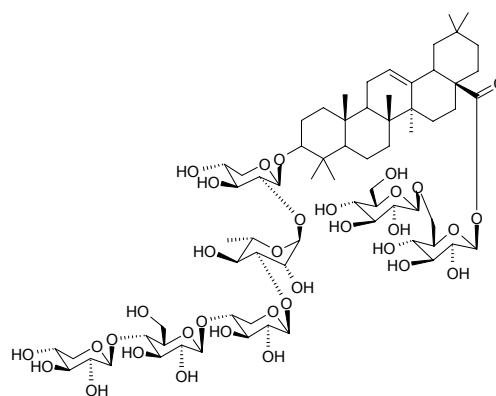
[35354-74-6] $C_{18}H_{18}O_2$ (266.34). mp 87.5°C. **Pharm:** Hepatoprotective (inhibits cellular leakage of LDH and AST, and cell death, induced by 1.5 $\mu\text{mol/L}$ tBH for 1h, effective dose = 20 $\mu\text{mol/L}$, 40 $\mu\text{mol/L}$; induced by 30 $\mu\text{mol/L}$ GalN, effective dose = 1 $\mu\text{mol/L}$, 5 $\mu\text{mol/L}$, and 20 $\mu\text{mol/L}$)^[5344]; hepatoprotective (inhibits tBH-induced lipid peroxidation, primary cultured rat hepatocytes, thiobarbituric acid reactive substance (TBARS) assay, effective dose = 5, 20 and 40 $\mu\text{mol/L}$)^[5344]; hepatoprotective (inhibits GSH depletion, GSH concentration in tBH-treated hepatocytes was significantly reduced to 17 % of that of normal hepatocytes, effective dose = 5 $\mu\text{mol/L}$, 20 $\mu\text{mol/L}$, and 40 $\mu\text{mol/L}$; induced by GalN, effective dose = 1 $\mu\text{mol/L}$, 5 $\mu\text{mol/L}$ and 20 $\mu\text{mol/L}$)^[5344]; antioxidant (protects rat heart and liver mitochondria against lipidperoxidation; hydroxyl radical scavenger)^[5362]; platelet aggregation inhibitor^[5362]; antiarrhythmic^[5362]; anti-ischemia myocardial (myocardial ischemia-reperfusion injury)^[5362]; anti-myocardial infarction (rat, reduces area of coronary artery infarction)^[5362]; increases tolerance to anoxia (rat, no significant hemodynamic change after intravenous infusion of honokiol at the dosages of 0.01 $\mu\text{g/kg}$, 0.1 $\mu\text{g/kg}$ and 1.0 $\mu\text{g/kg}$, however significantly reduces total volume of infarction at 0.1 $\mu\text{g/kg}$ or 1.0 $\mu\text{g/kg}$)^[5362]; antibacterial (gram-negative bacteria and acid-fast bacteria); anticaries (inhibits tooth decay); antifungal; CNS depressant; pesticide; skeletal muscle relaxant. **Source:** AO YE HOU PO *Magnolia biloba*, HOU PO *Magnolia officinalis* (bark: content scope of 5 origins = 1.05%–6.82%, mean content = 4.61%^[5508]), RI BEN HOU PO *Magnolia obovata* (dried bark). **Ref:** 2, 625, 658, 660, 1521, 5344, 5362, 5501, 5508.

**9632 Hookeroside A**

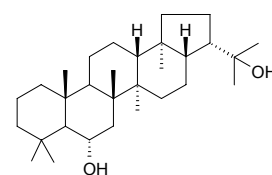
$C_{64}H_{104}O_{30}$ (1353.52). **Pharm:** Pancreatic lipase inhibitor (*in vitro*, 1 mg/mL, InRt comparing the control = 73%). **Source:** HUA BEI LAN PEN HUA *Scabiosa tschiliensis* (whole plant: yield = 0.0010%dw). **Ref:** 3021.

**9633 Hookeroside B**

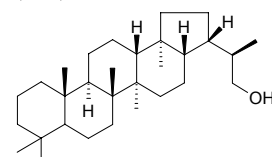
$C_{69}H_{112}O_{34}$ (1485.64). **Pharm:** Pancreatic lipase inhibitor (*in vitro*, 1 mg/mL, InRt comparing the control = 92%). **Source:** HUA BEI LAN PEN HUA *Scabiosa tschiliensis* (whole plant: yield = 0.00048%dw). **Ref:** 3021.

**9634 6 α ,22-Hopanediol**

Zeorin $C_{30}H_{52}O_2$ (444.75). **Source:** SHI DI QIAN *Reboulia hemisphaerica*, XUE LING ZHI *Arenaria kansuensis* [Syn. *Arenaria kumaonensis*]. **Ref:** 660.

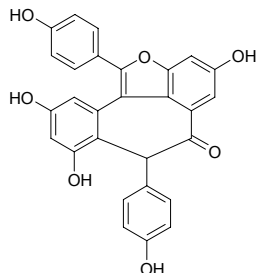
**9635 29-Hopanol**

Neriifoliol [34620-75-2] $C_{30}H_{52}O$ (428.75). Crystals, mp 242–244°C, $[\alpha]_D = +35^\circ$. **Source:** GUAN ZHONG *Dryopteris crassirhizoma*, DA YE GU SUI BU *Davallia divaricata* [Syn. *Davallia formosana*; *Davallia orientalis*]. **Ref:** 6, 660, 1521.

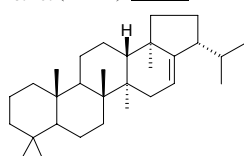


9636 Hopeafuran

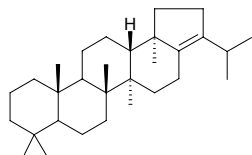
$C_{28}H_{17}O_7$ (466.45). Yellow solid, $[\alpha]_D^{24} = -46^\circ$ ($c = 0.1$, MeOH). Source: YOU YONG PO LEI *Hopea utilis* (stem wood). Ref: 3546.

**9637 Hop-16-ene**

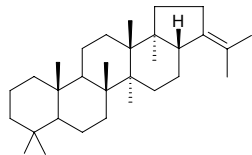
$C_{30}H_{50}$ (410.73). Source: HAI ZHOU GU SUI BU *Davallia mariesii*. Ref: 660.

**9638 Hop-17(21)-ene**

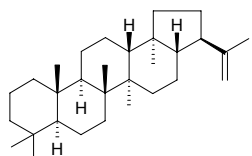
$C_{30}H_{50}$ (410.73). Source: DUO ZU JUE *Polypodium vulgare*, HAI ZHOU GU SUI BU *Davallia mariesii*, PING *Marsilea quadrifolia*, SHUI LONG GU *Polypodium niponicum*. Ref: 660.

**9639 Hop-21-ene**

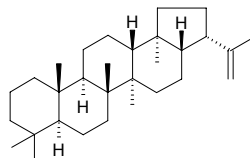
$C_{30}H_{50}$ (410.73). Source: DA YE GU SUI BU *Davallia divaricata* [Syn. *Davallia formosana*; *Davallia orientalis*], GU SUI BU *Drynaria fortunei*, HAI ZHOU GU SUI BU *Davallia mariesii*, SHUI LONG GU *Polypodium niponicum*. Ref: 660.

**9640 21 α H-22(29)-Hopene**

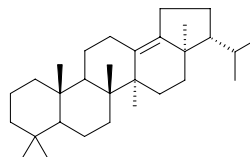
$C_{30}H_{50}$ (410.73). Crystals (Me₂CO), mp 212~214°C, $[\alpha]_D^{23} = +27.1^\circ$ (CHCl₃). Source: HAI ZHOU GU SUI BU *Davallia mariesii*. Ref: 1521.

**9641 21 β H-22(29)-Hopene**

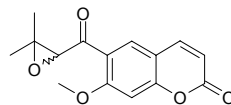
Diploptene; Hopene-B [1615-91-4] $C_{30}H_{50}$ (410.73). Crystals, mp 210~211°C, $[\alpha]_D = +61^\circ$ (CHCl₃). Source: GUAN ZHONG *Dryopteris crassirhizoma*, SHI WEI *Pyrrhosia lingua*, LU SHAN SHI WEI *Pyrrhosia shearer*, SHUI LONG GU *Polypodium niponicum*, DAN GAI TIE XIAN JUE *Adiantum monochlamys*. Ref: 6, 660, 1521.

**9642 Hopene II**

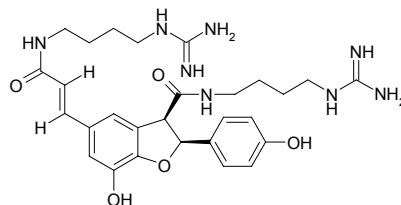
13(18)-Neohopene; Wallichene [21681-17-4] $C_{30}H_{50}$ (410.73). Crystals (Me₂CO), mp 196~197°C, $[\alpha]_D = +2^\circ$ ($c = 1.4$, CHCl₃). Source: CHUAN SHI JIAN *Pseudodrynaria coronans*, DUO ZU JUE *Polypodium vulgare*, GAO SHAN TIAO JUE *Oleandra wallichii*, HAI ZHOU GU SUI BU *Davallia mariesii*, SHUI LONG GU *Polypodium niponicum*, TIE SI QI *Adiantum pedatum*. Ref: 6, 660, 1521.

**9643 Hopeyhopin**

$C_{15}H_{14}O_5$ (274.28). Pharm: Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA: EBV-EA-positive cells = (20.6±1.3)% (viability > 80%), β -Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability > 80%), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability > 80%), compound IC₅₀ = 207mol ratio/32 pmol TPA, β -Carotene, IC₅₀ = 400mol ratio/32 pmol TPA, Curcumin, IC₅₀ = 341mol ratio/32 pmol TPA)^[5048]. Source: *Citrus medica* var. *etrog*, *Citrus sulcata*, *Citrus tamarana*. Ref: 5048.

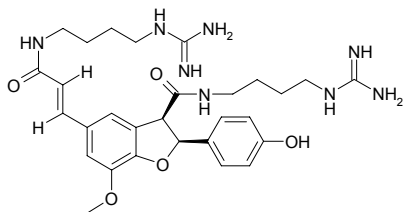
**9644 Hordatine A**

[7073-64-5] $C_{28}H_{38}N_8O_5$ (566.67). $[\alpha]_D^{26} = +69^\circ$, Di-bitter acid salt, tiny crystals (methanol), mp 127~128°C. Pharm: Antifungal. Source: MAI YA *Hordeum vulgare*. Ref: 658, 1521, 5501.

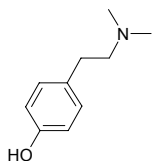


9645 Hordatine B

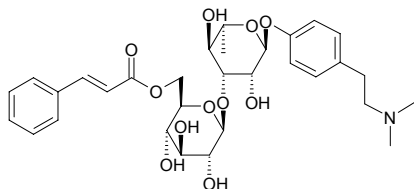
[10502-21-3] C₂₉H₄₀N₈O₅ (580.69). [α]_D²³ = +54°, Di-bitter acid salt: mp 132~135°C. **Pharm:** Antifungal. **Source:** MAI YA *Hordeum vulgare*. **Ref:** 658, 1521, 5501.

**9646 Hordenine**

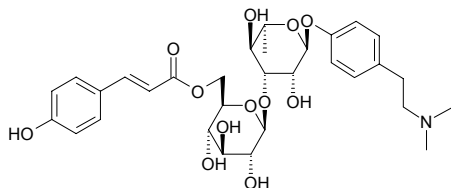
N,N-Dimethyltyramine [539-15-1] C₁₀H₁₅NO (165.24). mp 117°C, bp 173~174°C/11mmHg. **Pharm:** Antiasthmatic (cat, bronchospasm caused by proserine, ED = 0.5~1.0mg/kg, no activity in normal cat); uterine stimulant (enhances tension and movement of uterus, gpg, 1.0mg/kg); insect antifeedant; radioprotector; similar action with ephedrine. **Source:** DUAN YE SHAN MA HUANG *Desmodium tiliaefolium*, HONG MU JI CAO *Desmodium gangeticum*, JIA MU DOU *Desmodium cephalotes*, LUO TUO CI *Alhagi pseudalhagi*, LUO XUAN JIN HE HUAN *Acacia spirorbis*, MAI YA *Hordeum vulgare* (germinated fruit: content scope = 0.13%~0.25%^[5501]), XI MA DU WEI CAO *Eremurus himalaicus*, YI CAO *Phalaris arundinacea*, GAN QING WU TOU *Aconitum tanguticum*, occurs in many plants (family Cactaceae spp., family Amaryllidaceae spp., family Gramineae spp., family Fabaceae spp.). **Ref:** 6, 658, 1521, 2203, 5501.

**9647 (E)-Hordenine-(6-O-cinnamoyl-β-D-glucopyranosyl)-(1→3)-α-L-rhamnopyranoside**

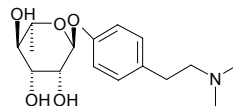
C₃₁H₄₁NO₁₁ (603.67). **Source:** DA YE CAI *Selaginella doederleinii*. **Ref:** 660.

**9648 (E)-Hordenine-[6-O-(4-hydroxycinnamoyl)-β-D-glucopyranosyl]-(1→3)-α-L-rhamnopyranoside**

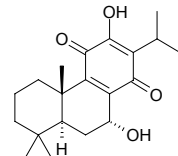
C₃₁H₄₁NO₁₂ (619.67). **Source:** DA YE CAI *Selaginella doederleinii*. **Ref:** 660.

**9649 Hordenine-O-α-L-rhamnopyranoside**

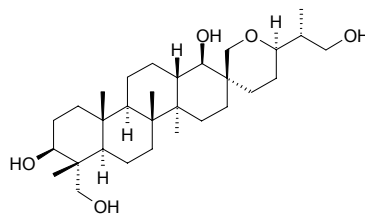
C₁₆H₂₅NO₅ (311.38). **Source:** DA YE CAI *Selaginella doederleinii*. **Ref:** 660.

**9650 Horminone**

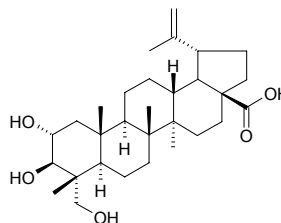
C₂₀H₂₈O₄ (332.44). **Source:** *Rabdosia* spp. **Ref:** 660.

**9651 Hosenkol A**

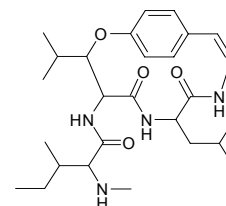
C₃₀H₅₂O₅ (492.75). **Source:** JI XING ZI *Impatiens balsamina*. **Ref:** 660.

**9652 Hovenic acid**

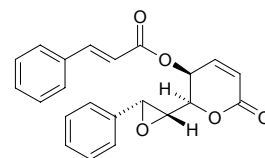
C₃₀H₄₈O₅ (488.71). **Source:** ZHI JU ZI *Hovenia dulcis*. **Ref:** 660.

**9653 Hovenine A**

N-Demethylfrangulanine [52309-78-1] C₂₇H₄₂N₄O₄ (486.66). mp 215°C. **Source:** ZHI JU GEN *Hovenia dulcis*. **Ref:** 6, 1521.

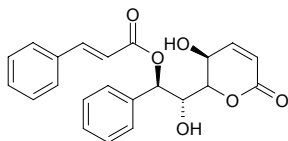
**9654 Howiinin A**

6*S*-(1*S*,2*R*-Epoxyphenethyl-5*S*-cinnamyloxy)-5,6-dihydro-2-pyrone [215055-08-6] C₂₂H₁₈O₅ (362.40). White acicular crystals, mp 176~178°C, [α]_D = +97.6° (*c* = 0.087, chloroform). **Source:** HAI NAN GE NA XIANG *Goniiothalamus howii*. **Ref:** 410.

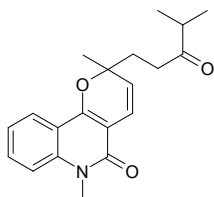


9655 Howiinol A

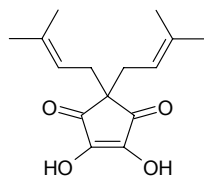
6S-(1*R*-Hydroxy-2*R*-cinnamyloxyphenethyl)-5,6-dihydro-5*S*-hydroxy-2-pyrone [190848-69-2] C₂₂H₂₀O₆ (380.40). White acicular crystals, mp 176~178°C, [α]_D²⁰ = +97.6° (*c* = 0.087, chloroform). **Pharm:** Antineoplastic (hmn tumor, *in vivo* and *in vitro*, cell proliferation inhibitor, blocks cell from G₁ to S phase, increases fluidity of L₁₂₁₀ cell membrane)^[2442]. **Source:** HAI NAN GE NA XIANG *Goniiothalamus howii*. **Ref:** 410, 1620, 2442.

**9656 Huajiaosimuline**

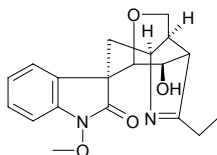
[155416-21-0] C₂₀H₂₃NO₃ (325.41). Oil. **Pharm:** Cytotoxic (hmn mammary cancer cell ZR-75-1 selective cytotoxic, ED₅₀ = 11.1 μmol/L, mus P₃₈₈, ED₅₀ = 9.8 μmol/L); platelet aggregation inhibitor (rbt, 100 μg/mL, due to arachidonic acid, InRt = 100%, due to collagen, InRt = 83.9%, due to PAF, InRt = 100%). **Source:** YE HUA JIAO PI *Zanthoxylum simulans*. **Ref:** 1052, 1120.

**9657 Hulupinic acid**

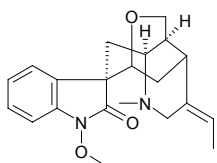
C₁₅H₂₀O₄ (264.32). Colorless needles (MeOH). **Pharm:** NO production Inhibitor inactive (*in vitro*, macrophage RAW264.7 cells, induced by LPS/IFN-γ, IC₅₀ > 100 μmol/L)^[4795]. **Source:** PI JIU HUA *Humulus lupulus* (strobile). **Ref:** 4795.

**9658 Humantenidine**

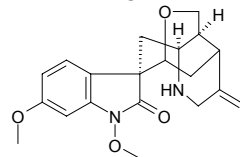
[82375-28-8] C₁₉H₂₂N₂O₄ (342.40). Gum, [α]_D²⁰ = -123°. **Source:** GOU WEN *Gelsemium elegans*. **Ref:** 14.

**9659 Humantenine**

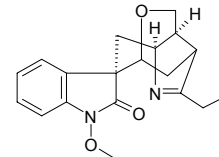
[82375-29-9] C₂₁H₂₆N₂O₃ (354.45). Gum, [α]_D²⁰ = -142°. **Source:** GOU WEN *Gelsemium elegans*. **Ref:** 14.

**9660 Humantenirine**

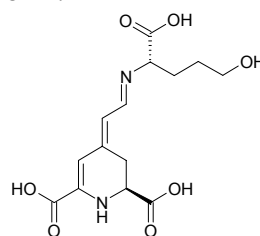
[82375-30-2] C₂₁H₂₆N₂O₄ (370.45). Needles (Me₂CO), mp 167~170°C, [α]_D²⁰ = -135° (*c* = 0.56, MeOH); mp 168~169°C. **Source:** GOU WEN *Gelsemium elegans*, *Gelsemium rankinii*. **Ref:** 14, 1521.

**9661 Humantenmine**

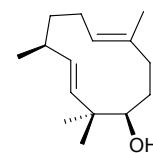
Gelsenicine [82354-38-9] C₁₉H₂₂N₂O₃ (326.40). mp 166~168°C, [α]_D²⁰ = -147°. **Pharm:** Analgesic. **Source:** GOU WEN *Gelsemium elegans*. **Ref:** 14, 1521.

**9662 Humilixanthin**

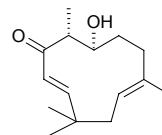
C₁₄H₁₈N₂O₇ (326.31). **Source:** DA HUA MA CHI XIAN *Portulaca grandiflora*. **Ref:** 660.

**9663 1,6-Humuladien-10-ol**

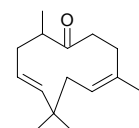
C₁₅H₂₆O (222.37). Oil, [α]_D²⁰ = +56.4° (*c* = 0.20, CHCl₃). **Source:** *Tylimanthus tenellus*. **Ref:** 4280.

**9664 2,9-Humuladien-6-ol-8-one**

C₁₅H₂₄O₂ (236.36). [α]_D²⁴ = -11.8° (*c* = 0.10, CHCl₃). **Pharm:** CYP3A4 inhibitor (IC₅₀ = 27.2 μmol/L, control Ketoconazole IC₅₀ = 0.24 μmol/L); CYP2D6 inhibitor inactive (IC₅₀ > 100 μmol/L, control Quinidine IC₅₀ = 0.068 μmol/L). **Source:** FANG XIANG JIANG *Zingiber aromaticum* (rhizome). **Ref:** 4449.

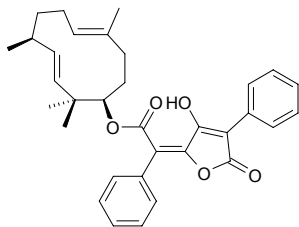
**9665 Humuladienone**

2,9-Humuladien-6-one [24405-90-1] C₁₅H₂₄O (220.36). [α]_D²⁴ = +5° (*c* = -0.7, CHCl₃). **Source:** PI JIU HUA *Humulus lupulus*. **Ref:** 1521.



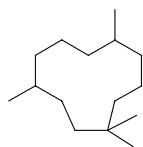
9666 Humuladien-10-yl-(3-Hydroxy-5-oxo-4-phenyl-5H-furan-2-ylidene)-phenylacetic acid-ester

$C_{33}H_{36}O_5$ (516.25). Yellow crystals, mp 116°C, $[\alpha]_D = +3.0^\circ$ ($c = 0.53$, $CHCl_3$). Source: *Tylimanthus tenellus*. Ref: 4280.



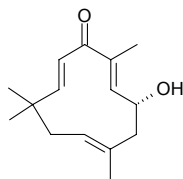
9667 Humulane

1,1,4,8-Tetramethylcycloundecane [430-19-3] $C_{15}H_{30}$ (210.41). Source: MAN SHAN HONG *Rhododendron dauricum*. Ref: 6.



9668 (5R)-2,6,9-Humulatrien-5-ol-8-one

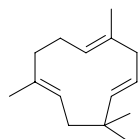
$C_{15}H_{22}O_2$ (234.34). Pharm: CYP3A4 inhibitor ($IC_{50} = 35.5\mu mol/L$, control Ketoconazole, $IC_{50} = 0.245\mu mol/L$); CYP2D6 inhibitor inactive ($IC_{50} > 100\mu mol/L$, control Quinidine, $IC_{50} = 0.078\mu mol/L$). Source: FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00031%dw). Ref: 4669.



9669 α -Humulene

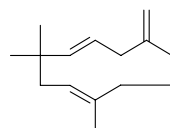
[6753-98-6] $C_{15}H_{24}$ (204.36). bp 123°C/10mmHg. Pharm: Cytotoxic (cancer cell: MCF7, $GI_{50} = (73\pm 2)\mu mol/L$, PC3, $GI_{50} = (73\pm 2)\mu mol/L$, A549, $GI_{50} = (68\pm 2)\mu mol/L$, DLD-1, $GI_{50} = (71\pm 2)\mu mol/L$, M4BEU hmn melanoma cell, $GI_{50} = (55\pm 2)\mu mol/L$, L-929, $GI_{50} = (50\pm 1)\mu mol/L$, CT-26, $GI_{50} = (53\pm 1)\mu mol/L$; normal hmn cell: fibroblasts, $GI_{50} = (85\pm 5)\mu mol/L$; control Etoposide, $GI_{50} < 1.5\mu mol/L$, Chlorambucil, $GI_{50} < 50\mu mol/L$; induces decrease in cellular GSH content and increases ROS production)^[5391]; flavorant. Source: BAI DOU KOU *Amomum kravanh* [Syn. *Amomum cardamomum*], BING PIAN *Dryobalanops aromatica*, CANG ZHU *Atractylodes lancea*, CHAI HU *Bupleurum chinense*, DA CAO KOU *Alpinia speciosa*, DA YE XIANG RU *Mosla dianthera*, DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*], DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], DU SONG SHI *Juniperus rigida*, FU JU *Citrus tangemna*,

HONG CHAI HU *Bupleurum scorzonerifolium*, HOU PO *Magnolia officinalis*, HUA DONG LAN CI TOU *Echinops grijsii*, JI NING *Mosla grosseserrata*, JIN QIAN PU *Acorus gramineus*, LIAN JIANG *Alpinia chinensis*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], PI JIU HUA *Humulus lupulus*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SHI JI NING *Mosla scabra* [Syn. *Mosla punctata*], SHI XIANG RU *Mosla chinensis* [Syn. *Orthodon chinensis*], TU DANG GUI *Aralia cordata*, WU SE MEI *Lantana camara*, WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*], XIANG ZHI LENG SHAN *Abies balsamea* (essential oil extracted from leaves), YE XIANG MAO *Cymbopogon goeringii*, YIN CHEN HAO *Artemisia capillaris*, ZHANG MU *Cinnamomum camphora*, ZHU JU *Citrus erythrosa*, occurs in many plants. Ref: 2, 6, 658, 660, 1521, 5391.



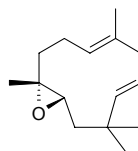
9670 β -Humulene

2,7(14),9-Humulatriene [116-04-1] $C_{15}H_{24}$ (204.36). Source: HUO XIANG *Agastache rugosus*, JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], PI JIU HUA *Humulus lupulus*, WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*]. Ref: 2, 1521.



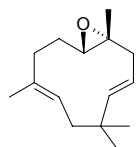
9671 Humulene epoxide I

2,3-Epoxy-6,9-humuladiene [19888-33-6] $C_{15}H_{24}O$ (220.36). Oil, bp 104~105°C/1.5mmHg, $[\alpha]_D^{30} = -22.8^\circ$ ($c = 3.6$, $CHCl_3$). Pharm: Antineoplastic (mus, liver and small intestine, glutathione S-transferase activator). Source: BAI DOU KOU *Amomum kravanh* [Syn. *Amomum cardamomum*], PI JIU HUA *Humulus lupulus*, HONG QIU JIANG *Zingiber zerumbet*. Ref: 6, 1808, 1521.



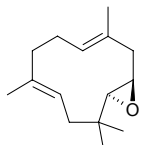
9672 Humulene epoxide II

6,7-Epoxy-2,9-humuladiene [19888-34-7] $C_{15}H_{24}O$ (220.36). Oil, bp 105~106°C/1.5mmHg, $[\alpha]_D^{30} = -31.2^\circ$ ($c = 4.2$, $CHCl_3$). Source: BAI DOU KOU *Amomum kravanh* [Syn. *Amomum cardamomum*], PI JIU HUA *Humulus lupulus*, HONG QIU JIANG *Zingiber zerumbet*. Ref: 6, 1521.

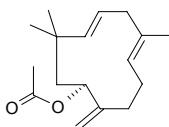


9673 Humulene epoxide III

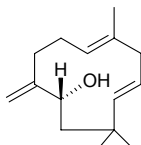
9,10-Epoxy-2,6-humuladiene [21624-36-2] $C_{15}H_{24}O$ (220.36). Oil, bp 120~130°C/15mmHg, $[\alpha]_D = +2.15^\circ$ ($c = 1.25$, $CHCl_3$). Source: BAI DOU KOU *Amomum kravanh* [Syn. *Amomum cardamomum*]. Ref: 6, 1521.

**9674 α -Humulenol acetate**

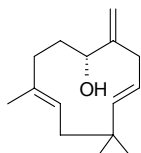
$C_{17}H_{26}O_2$ (262.40). Source: JU PI *Citrus reticulata*. Ref: 6.

**9675 Humulenol I**

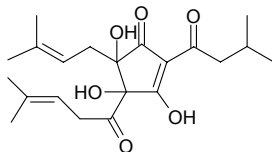
$C_{15}H_{24}O$ (220.36). Source: PI JIU HUA *Humulus lupulus*. Ref: 660.

**9676 Humulenol II**

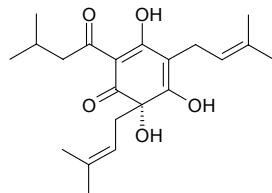
$C_{15}H_{24}O$ (220.36). Source: PI JIU HUA *Humulus lupulus*. Ref: 660.

**9677 Humulinone**

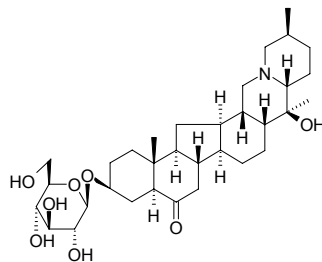
$C_{21}H_{30}O_6$ (378.47). Source: PI JIU HUA *Humulus lupulus* (strobile). Ref: 4789.

**9678 Humulone**

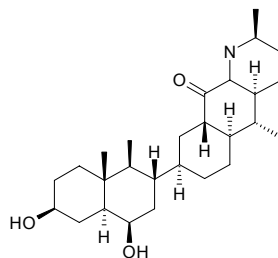
$C_{21}H_{30}O_5$ (362.47). mp 63~65°C. Pharm: Antibiotic (inhibits gram-positive bacteria including *Bacillus anthracis*, *Bacillus cereus*, *Bacillus diphtheriae*, *Diplococcus pneumoniae*, *Staphylococcus aureus*, and *Mycobacterium tuberculosis*); main bitter component in beer. Source: LU CAO *Rhaponticum carthamoides*, PI JIU HUA *Humulus lupulus*. Ref: 6, 658.

**9679 Hupehemonoside**

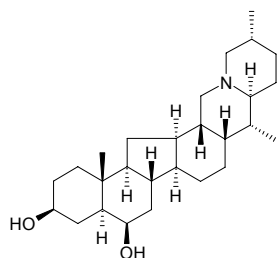
$C_{33}H_{53}NO_8$ (591.79). Colorless amorphous powder, mp 206~208°C, $[\alpha]_D^{27} = -48.3^\circ$ ($c = 0.46$, methanol). Source: HU BEI BEI MU *Fritillaria hupehensis*. Ref: 206.

**9680 Hupehenidine**

[123857-37-4] $C_{27}H_{45}NO_3$ (431.66). mp 174~175°C, $[\alpha]_D = -82.6^\circ$ ($c = 0.05$, MeOH). Source: HU BEI BEI MU *Fritillaria hupehensis*, E BEI BEI MU *Fritillaria ebeiensis*. Ref: 2201, 1521.

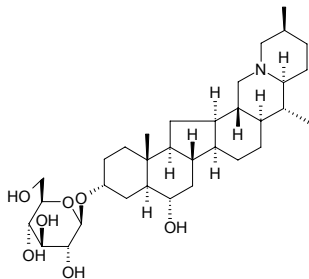
**9681 Hupehenine**

Persicanidine A [139757-61-2] $C_{27}H_{45}NO_2$ (415.67). Colorless prisms (MeOH), mp 208°C (dec), $[\alpha]_D^{30} = -7.8^\circ$ ($c = 0.23$, $CHCl_3$). Pharm: cAMP phosphodiesterase inhibitor ($IC_{50} = 247 \mu\text{mol/L}$). Source: HU BEI BEI MU *Fritillaria hupehensis* (bulb: mean content of 9 samples = 0.082%^[5508]), TAO BEI MU *Fritillaria persica*. Ref: 660, 1755, 3608, 5508.

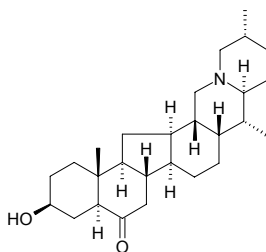


9682 Hupeheninoside

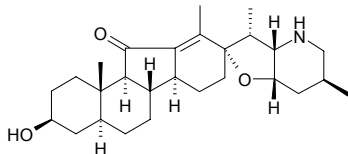
5 α ,14 α -Cevanine-6 α -hydroxyl-3 α - β -D-glucoside [98985-22-9] C₃₃H₅₅NO₇ (577.81). Colorless prismatic crystals, mp 241~244°C, [α]_D²⁰ = -41° (c = 0.16, methanol). **Pharm:** cAMP phosphodiesterase inhibitor (IC₅₀ = 127 μ mol/L) **Source:** HU BEI BEI MU *Fritillaria hupehensis*. **Ref:** 30, 1755, 1521.

**9683 Hupehenirine**

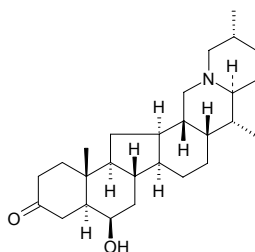
C₂₇H₄₃NO₂ (413.65). **Source:** HU BEI BEI MU *Fritillaria hupehensis*. **Ref:** 660.

**9684 Hupehenisine**

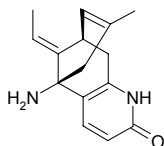
C₂₇H₄₁NO₃ (427.63). **Source:** HU BEI BEI MU *Fritillaria hupehensis*. **Ref:** 59, 660.

**9685 Hupehenizine**

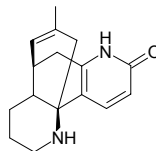
C₂₇H₄₃NO₂ (413.65). **Source:** HU BEI BEI MU *Fritillaria hupehensis*. **Ref:** 660.

**9686 Huperzine A**

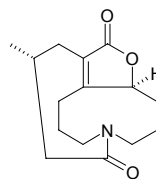
Selagine C₁₅H₁₈N₂O (242.32). mp 224~226°C. **Pharm:** Cholinesterase inhibitor (marked activity). **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: mean content of 3 origins = 0.020%^[5508]), XIAO JIE JIN CAO *Huperzia selago* [Syn. *Lycopodium selago*]. **Ref:** 6, 660, 1521, 5508.

**9687 Huperzine B**

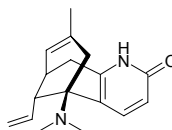
C₁₆H₂₀N₂O (256.35). **Pharm:** Cholinesterase inhibitor (marked activity). **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. **Ref:** 660, 1521.

**9688 Huperzine R**

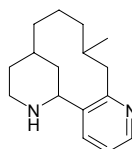
C₁₅H₂₁NO₃ (263.34). Colorless prisms (petroleum ether-acetone), mp 189~191°C, [α]_D²⁵ = -0.115° (c = 0.417, CHCl₃). **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.00017%dw). **Ref:** 4636.

**9689 Huperzinine**

[119188-49-7] C₁₇H₂₂N₂O (270.38). White thin acicular crystals, mp 251~253°C, [α]_D²⁵ = -25.3° (c = 0.1456, chloroform). **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. **Ref:** 108.

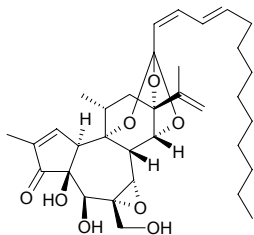
**9690 Huperzinine C**

C₁₆H₂₄N₂ (244.38). White granular crystals (petroleum ether), mp 42~44°C. **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. **Ref:** 4831.

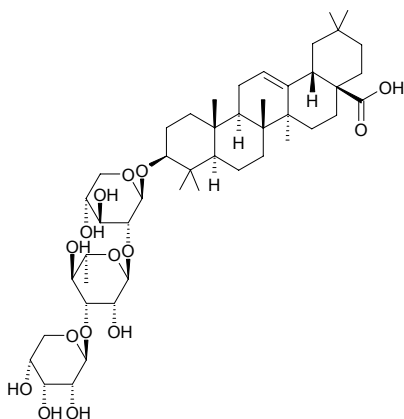


9691 Huratoxin

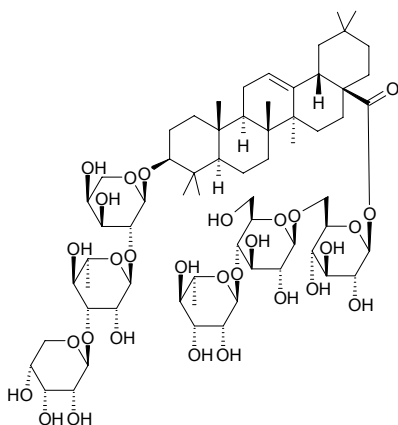
[33465-16-6] C₃₄H₄₈O₈ (584.76). Glassy resin, [α]_D²⁸ = +55.1° (*c* = 2.7, chloroform). **Pharm:** Fish toxin. **Source:** SHA HE SHU *Hura crepitans*. **Ref:** 658, 1521.

**9692 Huzhangoside A**

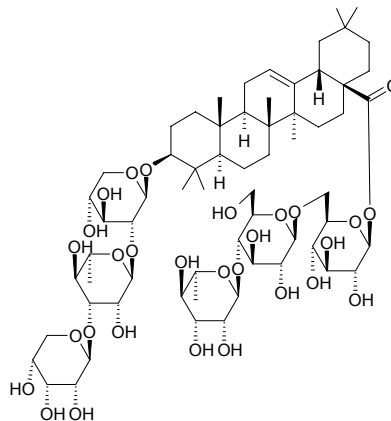
C₄₆H₇₄O₁₅ (867.09). **Source:** HU ZHANG CAO *Anemone rivularis* (root). **Ref:** 660.

**9693 Huzhangoside B**

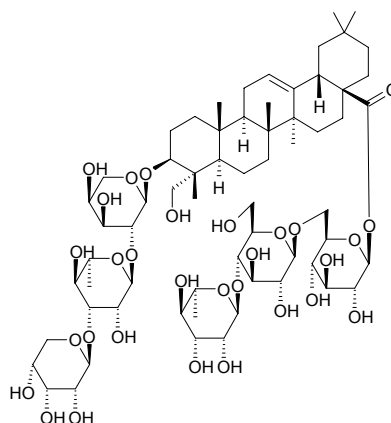
C₆₄H₁₀₄O₂₉ (1337.53). **Source:** HU ZHANG CAO *Anemone rivularis* (root). **Ref:** 660.

**9694 Huzhangoside C**

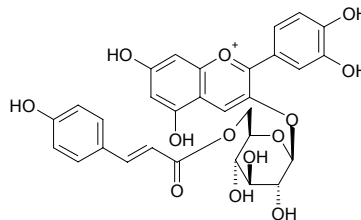
C₆₄H₁₀₄O₂₉ (1337.53). **Source:** HU ZHANG CAO *Anemone rivularis* (root). **Ref:** 660.

**9695 Huzhangoside D**

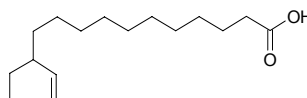
[96315-53-6] C₆₄H₁₀₄O₃₀ (1353.52). **Source:** HU ZHANG CAO *Anemone rivularis* (root), XI ZANG TIE XIAN LIAN *Clematis tibetana* (aerial parts). **Ref:** 660, 1521, 3530.

**9696 Hyacinthin**

Cyanidin-3-*O*- β -*D*-(6-*O*-*p*-coumaroyl)-glucoside C₃₀H₂₇O₁₃⁺ (595.54). **Source:** FENG XIN ZI *Hyacinthus orientalis*, PU⁽²⁾ TAO *Vitis vinifera*. **Ref:** 660, 1521.

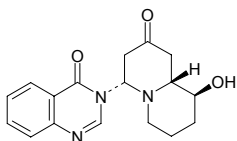
**9697 Hydnocarpic acid**

[459-67-6] C₁₆H₂₈O₂ (252.40). mp (\pm) 59.0–59.5°C, (+) 59–60°C. **Pharm:** Antileprotic (infected mouse, sc or ip, inhibits *Mycobacterium leprae*). **Source:** DA FENG ZI *Hydnocarpus anthelminticus* (seed: content scope = 23.78%–28.28%^[5501]). **Ref:** 6, 5501.

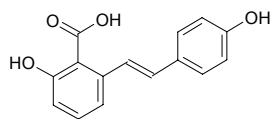


9698 Hydrachine A

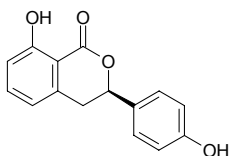
3-[9 β -Hydroxy-2-oxo-4a-quinolizidyl]-4-quinazolinone C₁₇H₁₉N₃O₃ (313.36). Semisolid, [α]_D²⁵ = +25.32° (*c* = 0.2, CHCl₃). **Pharm:** Cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity). **Source:** ZHONG GUO XIU QIU *Hydrangea chinensis* (root). **Ref:** 3069.

**9699 Hydrangeic acid**

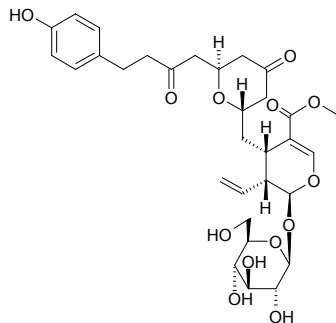
[491-79-2] C₁₅H₁₂O₄ (256.26). mp 181°C. **Source:** BA XIAN HUA *Hydrangea macrophylla*. **Ref:** 6.

**9700 Hydrangenol**

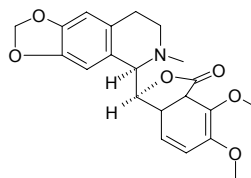
[480-47-7] C₁₅H₁₂O₄ (256.26). mp 181°C. **Pharm:** Antifungal; allergen (one of allergens in *Hydrangea macrophylla* BA XIAN HUA); cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity)^[3069]. **Source:** BA XIAN HUA *Hydrangea macrophylla*, SE BO GE XIU QIU *Hydrangea macrophylla* var. *thunbergii*, ZHONG GUO XIU QIU *Hydrangea chinensis* (root)^[3069]. **Ref:** 6, 658, 1521, 3069.

**9701 Hydrangenoside A**

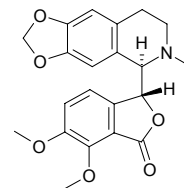
C₃₁H₄₀O₁₃ (620.66). **Pharm:** Cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity). **Source:** ZHONG GUO XIU QIU *Hydrangea chinensis* (root). **Ref:** 3069.

**9702 β -Hydrastine**

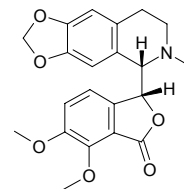
C₂₁H₂₃NO₆ (385.42). mp 130~132°C, [α]_D²⁰ = -57.0° (*c* = 0.2, CHCl₃). **Pharm:** Antibacterial (oral pathogens: *Streptococcus mutans*, MIC > 500 μ g/mL, control Chlorhexidine gluconate, MIC = 1.25 μ g/mL; *Fusobacterium nucleatum*, MIC > 500 μ g/mL, Chlorhexidine gluconate, MIC = 2.5 μ g/mL). **Source:** BAI MAO GEN⁽⁴⁾ *Hydrastis canadensis* (root). **Ref:** 5418.

**9703 (1R,9R)-Hydrastine**

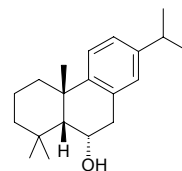
C₂₁H₂₁NO₆ (383.40). Trapezoid prismatic crystals (ethanol), mp 132°C, [α]_D²⁰ = -50° (*c* = 0.3, absolute ethanol); ~12.5 (*c* = 0.4, 97% ethanol). **Pharm:** Antiseptic; hemostatic; mydriatic. **Source:** BAI MAO GEN⁽⁴⁾ *Hydrastis canadensis*. **Ref:** 658, 754.

**9704 D-(1S,9R)-Hydrastine**

C₂₁H₂₁NO₆ (383.40). **Pharm:** anthelmintic (tapeworm, 0.3% solution, death rate = 68.9%~70.2%). **Source:** ZHI LI ZI JIN *Corydalis stricta*. **Ref:** 5501.

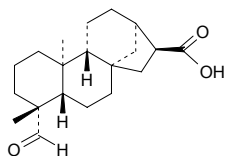
**9705 5 β -Hydro-8,11,13-abietatrien-6 α -ol**

[136378-62-6] C₂₀H₃₀O (286.46). Acicular crystals (petroleum ether), mp 129~130°C, [α]_D²⁶ = +30.8° (*c* = 0.003, chloroform). **Pharm:** Anti-inflammatory (rat, swollen foot model caused by carrageenan, 50mg/kg, InRt = 18.1%). **Source:** HU JI SHENG *Viscum coloratum*. **Ref:** 1039.

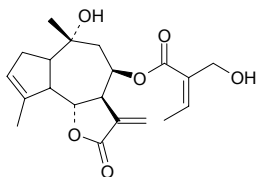


9706 16 α -Hydro-19-*al-ent*-kauran-17-oic acid

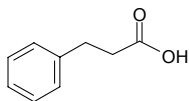
$C_{20}H_{30}O_3$ (318.46). **Pharm:** Platelet aggregation selected inhibitor (washed rabbit platelets, 200 μ mol/L: 100 μ mol/L AA induced, InRt = 100%; 10 μ g/mL collagen induced, InRt = 100%; 1ng/mL PAF induced, InRt = 11.8%; 0.05U/mL thrombin induced, InRt = 6.8%)^[4654]; antioxidant (inhibits superoxide anion generation, fMLP/CB, IC₅₀ = (6.95 \pm 0.39) μ g/mL, p <0.001, control DPI, IC₅₀ = (0.13 \pm 0.06) μ g/mL, p <0.001)^[4950]. **Source:** FAN LI ZHI *Annona squamosa* (stem: yield = 0.20%fw). **Ref:** 4654, 4950.

**9707 1,10-Hydrobahia**

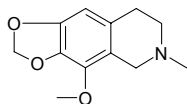
$C_{20}H_{26}O_6$ (362.43). **Source:** HUA ZE LAN *Eupatorium chinense* (whole herb, yield = 0.0036%). **Ref:** 4739.

**9708 Hydrocinnamic acid**

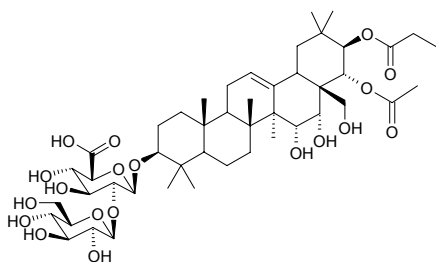
[501-52-0] $C_9H_{10}O_2$ (150.18). mp 48.5°C. **Source:** CHEN XIANG *Aquilaria agallocha*. **Ref:** 6.

**9709 Hydrocotarnine**

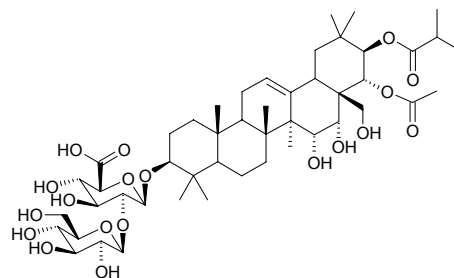
[550-10-7] $C_{12}H_{15}NO_3$ (221.26). mp 55~56°C. **Source:** YA PIAN *Papaver somniferum*. **Ref:** 6.

**9710 Hydrocotyloside I**

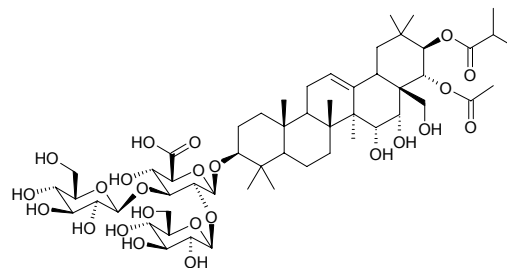
3-*O*- β -*D*-Glucopyranosyl-(1 \rightarrow 2)- β -*D*-glucuronopyranosyl-22-*O*-acetyl-21-*O*-propanoyl-3 β ,15 β ,16 α ,21 β ,22 α ,28-hexahydroxyolean-12-ene $C_{47}H_{74}O_{19}$ (943.1). Amorphous powder, $[\alpha]_D^{23} = -1.1^\circ$ ($c = 0.46$, MeOH). **Source:** TIAN HU SUI *Hydrocotyle sibthorpioides* (whole herb: yield = 0.00051%dw). **Ref:** 3013.

**9711 Hydrocotyloside II**

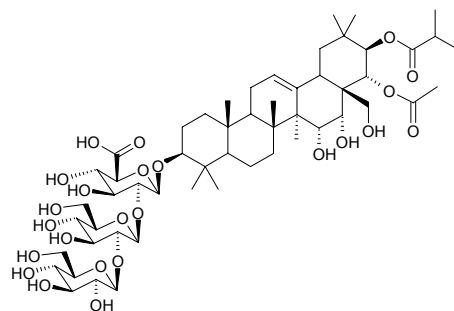
3-*O*- β -*D*-Glucopyranosyl-(1 \rightarrow 2)- β -*D*-glucuronopyranosyl-22-*O*-acetyl-21-*O*-(2-methylpropanoyl)-3 β ,15 α ,16 α ,21 β ,22 α ,28-hexahydroxyolean-12-ene $C_{48}H_{76}O_{19}$ (957.13). Amorphous powder, $[\alpha]_D^{23} = -1.5^\circ$ ($c = 0.91$, MeOH). **Source:** TIAN HU SUI *Hydrocotyle sibthorpioides* (whole herb: yield = 0.011%dw). **Ref:** 3013.

**9712 Hydrocotyloside III**

3-*O*-[β -*D*-Glucopyranosyl-(1 \rightarrow 3)]- β -*D*-glucopyranosyl-(1 \rightarrow 2)- β -*D*-glucuronopyranosyl-22-*O*-acetyl-21-*O*-(2-methylpropanoyl)-3 β ,15 α ,16 α ,21 β ,22 α ,28-hexahydroxyolean-12-ene $C_{54}H_{86}O_{24}$ (1119.27). Amorphous powder, $[\alpha]_D^{23} = -0.8^\circ$ ($c = 0.86$, MeOH). **Source:** TIAN HU SUI *Hydrocotyle sibthorpioides* (whole herb: yield = 0.0011%dw). **Ref:** 3013.

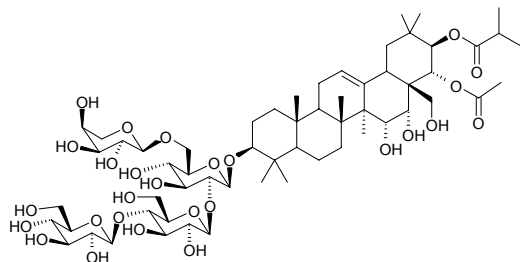
**9713 Hydrocotyloside IV**

3-*O*- β -*D*-Glucopyranosyl-(1 \rightarrow 2)- β -*D*-glucopyranosyl-(1 \rightarrow 2)- β -*D*-glucuronopyranosyl-22-*O*-acetyl-21-*O*-(2-methylpropanoyl)-3 β ,15 α ,16 α ,21 β ,22 α ,28-hexahydroxyolean-12-ene $C_{54}H_{86}O_{24}$ (1119.27). Amorphous powder, $[\alpha]_D^{23} = -1.1^\circ$ ($c = 0.63$, MeOH). **Source:** TIAN HU SUI *Hydrocotyle sibthorpioides* (whole herb: yield = 0.0019%dw). **Ref:** 3013.

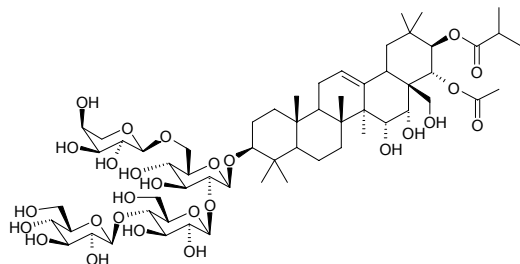


9714 Hydrocotyloside V

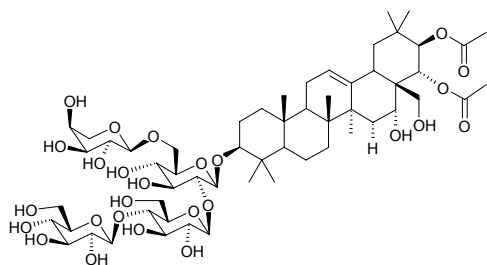
3-*O*-[α -*L*-Arabinopyranosyl-(1 \rightarrow 6)]-[β -*D*-glucopyranosyl-(1 \rightarrow 4)]- β -*D*-glucopyranosyl-(1 \rightarrow 2)- β -*D*-glucopyranosyl-22-*O*-acetyl-21-*O*-(2-methylpropanoyl)-3 β ,15 α ,16 α ,21 β ,22 α ,28-hexahydroxyolean-12-ene C₅₉H₉₆O₂₇ (1237.41). Amorphous powder, $[\alpha]_D^{23} = -1.5^\circ$ ($c = 0.85$, MeOH). **Source:** TIAN HU SUI *Hydrocotyle sibthorpioides* (whole herb: yield = 0.0046%dw). **Ref:** 3013.

**9715 Hydrocotyloside VI**

3-*O*- α -[*L*-Arabinopyranosyl-(1 \rightarrow 6)]-[β -*D*-glucopyranosyl-(1 \rightarrow 4)]- β -*D*-glucopyranosyl-(1 \rightarrow 2)- β -*D*-glucopyranosyl-22-*O*-acetyl-21-*O*-(2-methylbutanoyl)-3 β ,15 α ,16 α ,21 β ,22 α ,28-hexahydroxyolean-12-ene C₆₀H₉₈O₂₇ (1251.43). Amorphous powder, $[\alpha]_D^{23} = -1.2^\circ$ ($c = 0.34$, MeOH). **Source:** TIAN HU SUI *Hydrocotyle sibthorpioides* (whole herb: yield = 0.00042%dw). **Ref:** 3013.

**9716 Hydrocotyloside VII**

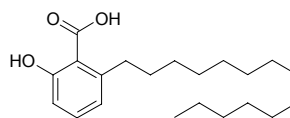
3-*O*-[α -*L*-Arabinopyranosyl-(1 \rightarrow 6)]-[β -*D*-glucopyranosyl-(1 \rightarrow 4)]- β -*D*-glucopyranosyl-(1 \rightarrow 2)- β -*D*-glucopyranosyl-21-*O*-acetyl-22-*O*-acetyl-3 β ,16 α ,21 β ,22 α ,28-pentahydroxyolean-12-ene C₅₇H₉₂O₂₆ (1193.35). Amorphous powder, $[\alpha]_D^{23} = -1.5^\circ$ ($c = 0.81$, MeOH). **Source:** TIAN HU SUI *Hydrocotyle sibthorpioides* (whole herb: yield = 0.0072%dw). **Ref:** 3013.

**9717 Hydrocyanic acid**

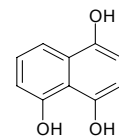
[74-90-8] CHN (27.03). mp -13.3°C , bp 25.7°C . **Source:** BA DAN XING REN *Prunus amygdalus*, CI NAN SHE TENG *Celastrus flagellaris*, DA CHAO CAI *Vicia sativa*, HAI JIU CAI *Triglochin maritimum*, LUO XIN FU *Astilbe chinensis*, MANG GUO HE *Mangifera indica*, MANG GUO YE *Mangifera indica*, PI PA HE *Eriobotrya japonica*, QIU MU GUA *Chaenomeles lagenaria* [Syn. *Chaenomeles speciosa*], WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*], WU MEI *Prunus mume*, YING TAO *Prunus pseudocerasus*, YU LI REN *Prunus japonica* [Syn. *Cerasus japonica*], YUE SI GUA *Luffa acutangula*. **Ref:** 6, 660.

**9718 Hydroginkgolonic acid**

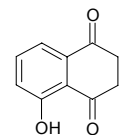
C₂₁H₃₄O₃ (334.50). mp $74\sim 76^\circ\text{C}$. **Source:** BAI GUO *Ginkgo biloba*. **Ref:** 6.

**9719 α -Hydrojuglone**

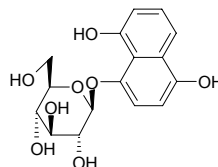
[481-40-3] C₁₀H₈O₃ (176.17). mp $168\sim 169^\circ\text{C}$. **Pharm:** Hemostatic (rbt, 10mg/kg iv, bleeding time reduced 20%). **Source:** HU TAO REN *Juglans regia*, HU TAO QING PI *Juglans regia*. **Ref:** 6, 658.

**9720 β -Hydrojuglone**

C₁₀H₈O₃ (176.17). mp $96\sim 97^\circ\text{C}$. **Pharm:** Antibacterial. **Source:** HU TAO REN *Juglans regia*, HU TAO QING PI *Juglans regia*. **Ref:** 6, 658.

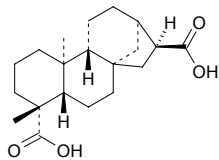
**9721 α -Hydrojuglone glucoside**

C₁₆H₁₈O₈ (338.32). **Source:** HU TAO YE *Juglans regia*. **Ref:** 6.

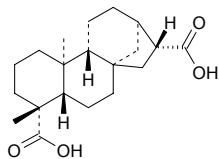


9722 16 α -Hydro-ent-kauran-17,19-dioic acid

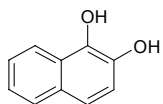
C₂₀H₃₀O₄ (334.46). Source: FAN LI ZHI *Annona squamosa* (stem: yield = 0.00033%fw). Ref: 4654.

**9723 16 β -Hydro-ent-kauran-17,19-dioic acid**

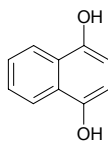
C₂₀H₃₀O₄ (334.46). Pharm: Platelet aggregation selected inhibitor (washed rabbit platelets, 200 μ mol/L: 100 μ mol/L AA induced, InRt = 15.4%; 10 μ g/mL collagen induced, InRt = 56.9%; 1ng/mL PAF induced, InRt = 15.2%; 0.05U/mL thrombin induced, InRt = 6.0%)^[4654]; antioxidant (inhibits superoxide anion generation, fMPLP/CB, IC₅₀ = (3.52 \pm 0.52) μ g/mL, p <0.001, control DPI, IC₅₀ = (0.13 \pm 0.06) μ g/mL, p <0.001)^[4950]. Source: FAN LI ZHI *Annona squamosa* (stem: yield = 0.0012%fw). Ref: 4654, 4950.

**9724 1,2-Hydronaphthoquinone**

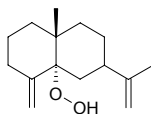
[574-00-5] C₁₀H₈O₂ (160.17). mp 60°C. Source: MAO GAO CAI *Drosera peltata* var. *lunata*. Ref: 6.

**9725 1,4-Hydronaphthoquinone**

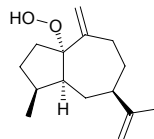
[571-60-8] C₁₀H₈O₂ (160.17). mp 175°C. Source: MAO GAO CAI *Drosera peltata* var. *lunata*. Ref: 6.

**9726 5 α -Hydroperoxy-eudesma-4(15),11-diene**

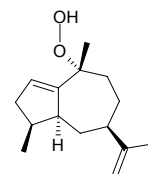
C₁₅H₂₄O₂ (242.36). Colorless oil. Source: HUANG HUA HAO *Artemisia annua* (seed). Ref: 3435.

**9727 1 α -Hydroperoxy-guaia-10(15),11-diene**

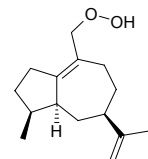
C₁₅H₂₄O₂ (236.36). Colorless oil, [α]_D = +71.8° (c = 0.58, EtOH). Pharm: Antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, *in vitro*, MLC = 1.7mmol/L)^[2551]. Source: GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*]. Ref: 2551.

**9728 10 α -Hydroperoxy-guaia-1,11-diene**

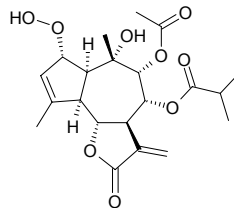
C₁₅H₂₄O₂ (236.36). Colorless oil, [α]_D = +24.5° (c = 0.35, EtOH). Pharm: Antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, *in vitro*, MLC = 0.84mmol/L). Source: GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*]. Ref: 2551.

**9729 15 α -Hydroperoxy-guaia-1(10),11-diene**

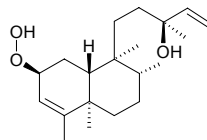
C₁₅H₂₄O₂ (236.36). Colorless oil, [α]_D = +7.3° (c = 0.23, EtOH). Pharm: Antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, *in vitro*, MLC = 1.7mmol/L). Source: GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*]. Ref: 2551.

**9730 2 α -Hydroperoxy-8-O-isobutyryl-9 α -acetoxycumambrin B**

C₂₁H₂₈O₉ (424.45). Source: *Anthemis carpatica* (aerial parts). Ref: 3974.

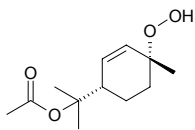
**9731 (-)-2 β -Hydroperoxykolavelool**

C₂₀H₃₄O₃ (322.49). Colorless amorphous solid, [α]_D²⁵ = -20.0° (c = 0.10, CHCl₃). Source: BA XI MA DOU LING *Aristolochia chamissonis*. Ref: 1904.

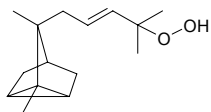


9732 (1R,4S)-1-Hydroperoxy-p-menth-2-en-8-ol acetate

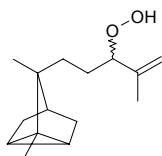
$C_{12}H_{20}O_4$ (228.29). Colorless needles (petroleum ether), mp 87.5~88.5°C, $[\alpha]_D = -7.9^\circ$ ($c = 0.61$, EtOH). **Pharm:** Antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, MLC = 1.4 μ mol/L). **Source:** YUE GUI YE *Laurus nobilis*. **Ref:** 4248.

**9733 11-Hydroperoxy- α -santal-9-ene**

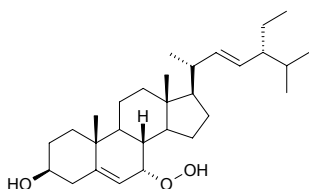
$C_{15}H_{24}O_2$ (236.36). Oil, $[\alpha]_D = +15.0^\circ$ ($c = 2.8$, $CHCl_3$). **Source:** DU AI BA JIAO *Illicium tsangii*. **Ref:** 1866.

**9734 10 ξ -Hydroperoxy- α -santal-11-ene**

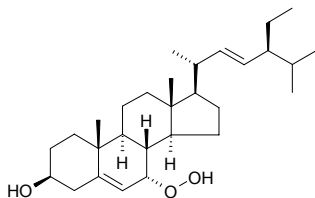
$C_{15}H_{24}O_2$ (236.36). Oil, $[\alpha]_D = -2.8^\circ$ ($c = 0.58$, $CHCl_3$). **Source:** DU AI BA JIAO *Illicium tsangii*. **Ref:** 1866.

**9735 (24R)-7 α -Hydroperoxystigmasta-5,22-dien-3 β -ol**

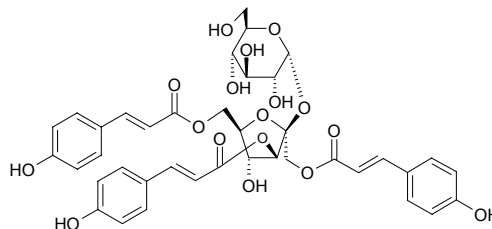
$C_{29}H_{48}O_3$ (444.70). $[\alpha]_D^{21} = -48.3^\circ$ ($c = 0.4$, $CHCl_3$). **Source:** SAN QI CAO *Gynura segetum* [Syn. *Gynura japonica*] (rhizome). **Ref:** 5427.

**9736 (22E,24S)-7 α -Hydroperoxystigmasta-5,22-dien-3 β -ol**

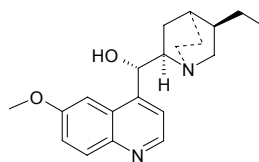
$C_{29}H_{48}O_3$ (444.70). Colorless powder (MeOH), mp 147~150°C, $[\alpha]_D^{21} = -56.5^\circ$ ($c = 0.032$, $CHCl_3$). **Pharm:** Platelet aggregation inhibitor (washed rabbit platelets, 20 μ g/mL, 100 μ mol/L AA-induced, AggRt = 2.9%, control 50 μ mol/L Aspirin, AggRt = 100%; 10 μ g/mL collagen-induced, AggRt = 4.7%, 100 μ mol/L Aspirin, AggRt = 4.9%; 0.1 U/mL thrombin-induced, AggRt = 8.1%, 100 μ mol/L Aspirin, AggRt = 1.7%; 2 ng/mL PAF-induced, AggRt = 2.9%, 100 μ mol/L Aspirin, AggRt = 2.1%). **Source:** SAN QI CAO *Gynura segetum* [Syn. *Gynura japonica*] (rhizome). **Ref:** 5427.

**9737 Hydropiperoside**

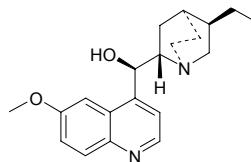
$C_{39}H_{40}O_{17}$ (780.74). Amorphous powder, $[\alpha]_D = 61.86^\circ$ ($c = 0.31$, MeOH). **Source:** SHUI LIAO *Polygonum hydropiper* (root), YU LIAO *Polygonum lapathifolium* (aerial parts). **Ref:** 660, 3091.

**9738 Hydroquinidine**

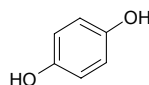
[1435-55-8] $C_{20}H_{26}N_2O_2$ (326.44). mp 168~169°C. **Pharm:** Antiarrhythmic; antimalarial. **Source:** ZHENG JI NA SHU *Cinchona officinalis*, JIN JI LE *Cinchona ledgeriana*. **Ref:** 6, 658.

**9739 Hydroquinine**

[522-66-7] $C_{20}H_{26}N_2O_2$ (326.44). mp 172.3°C. **Pharm:** Antimalarial; decolorant. **Source:** JIN JI LE *Cinchona ledgeriana*. **Ref:** 6, 658.

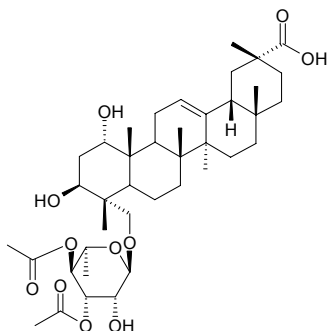
**9740 Hydroquinone**

1,4-Benzenediol; *p*-Quinol [123-31-9] $C_6H_6O_2$ (110.11). mp 170.3°C. **Pharm:** Antibacterial; antineoplastic; antimitotic; cytotoxic (rat, liver carcinoma cells); urease inhibitor; antihypertensive; LD₅₀ (rat, orl) = 320 mg/kg. **Source:** DUO ZHI SONG *Pinus resinosa*, HUI QIN *Pimpinella anisum*, JI SHI TENG *Paederia scandens*, JI SHI TENG GUO *Paederia scandens*, JIA NA DA CANG ER *Xanthium canadense*, MAN SHAN HONG *Rhododendron dauricum*, MI PU LUO TI YA MU *Protea mellifera*, QIAN LI GUANG *Senecio scandens* [Syn. *Senecio chinensis*], XI YANG LI *Pyrus communis*, YUE JU YE *Vaccinium vitis-idaea*. **Ref:** 6, 658.



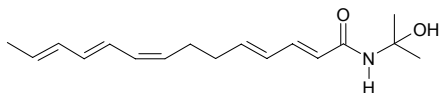
9741 1 α ,3 β -Hydroxyimberbic acid-23-O- α -L-3,4-diacetylramnopyranoside

1 α ,3 β ,23-Trihydroxy-olean-12-en-29-oate-23-O- α -L-3,4-diacetylramnopyranoside C₄₀H₆₂O₁₁ (718.93). Yellow amorphous solid, mp 190°C, [α]_D²⁵ = +56.8° (*c* = 0.22, MeOH). Source: WU MAO FENG CHE ZI *Combretum imberbe*. Ref: 2068.



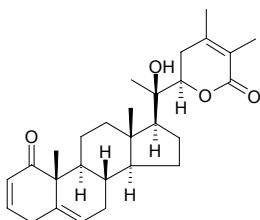
9742 Hydroxy- γ -Sanshool

C₁₇H₂₅NO₂ (275.39). Pharm: Platelet aggregation inhibitor. Source: QUAN YUAN YE HUA JIAO *Zanthoxylum integrifoliolum*. Ref: 2176.



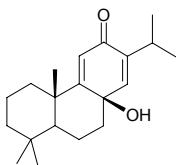
9743 20 β -Hydroxy-1-oxo-(22*R*)-witha-2,5,24-trienolide

C₂₈H₃₈O₄ (438.61). [α]_D²⁵ = +34° (*c* = 0.053, CHCl₃). Source: NING GU SHUI QIE *Withania coagulans*. Ref: 3378.



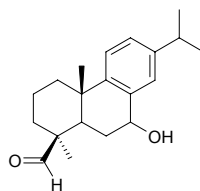
9744 8 β -Hydroxy-9(11),13-abietadien-12-one

C₂₀H₃₀O₂ (302.46). Amorphous solid, mp 180°C, [α]_D²⁵ = -140° (*c* = 1.0, CHCl₃). Source: CHANG GENG CU FEI *Cephalotaxus harringtonia* var. *drupacea*. Ref: 5401.



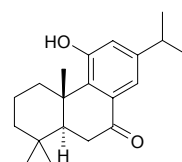
9745 7 β -Hydroxyabieta-8,11,13-trien-19-al

C₂₀H₂₈O₂ (300.44). Oil. Source: LONG BAI *Juniperus chinensis* var. *kaizuka* (leaf: yield = 0.000044%dw). Ref: 3050.



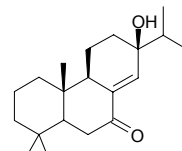
9746 11-Hydroxyabieta-8,11,13-trien-7-one

C₂₀H₂₈O₂ (300.44). Amorphous solid, [α]_D²³ = +22.3° (*c* = 0.3, CHCl₃). Source: TAI WAN SHAN *Taiwania cryptomerioides* (bark). Ref: 4443.



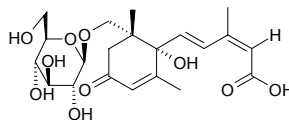
9747 13 β -Hydroxyabiet-8(14)-en-7-one

C₂₀H₃₂O₂ (304.48). Colorless oil, [α]_D = +45.0° (*c* = 0.34, CHCl₃). Pharm: Cytotoxic (A549, IC₅₀ > 5 μ g/mL; H116, IC₅₀ > 5 μ g/mL; PSN1, IC₅₀ > 5 μ g/mL; T98G, IC₅₀ > 5 μ g/mL; SKBR3, IC₅₀ > 5 μ g/mL). Source: BEI FEI XUE SONG *Cedrus atlantica* (cone). Ref: 5248.



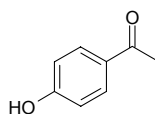
9748 (1'*S*,6'*R*)-8'-Hydroxyabscisic acid β -*D*-glucoside

(1'*S*,6'*R*,2*Z*,4*Z*)-5-[(1'-Hydroxy-2',6'-dimethyl-6'-hydroxymethyl-4'-oxo-8'- β -*D*-glucosyl)-cyclohex-2'-en-1'-yl]-3-methyl-penta-2,4-dienoic acid C₂₁H₃₀O₁₀ (442.47). Ambar gum, [α]_D = +196.5° (*c* = 0.13, MeOH). Source: E LI *Persea americana* [Syn. *Persea gratissima*] (seed). Ref: 3796.



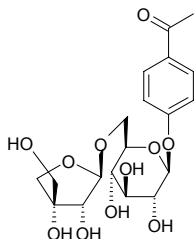
9749 *p*-Hydroxyacetophenone

[99-93-4] C₈H₈O₂ (136.15). mp 109°C. Pharm: Choleric. Source: HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*] (aerial parts: content scope = 0.005%~0.04%^[5501]). Ref: 2, 6, 5501.



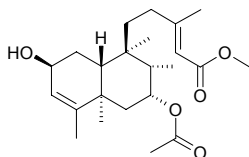
9750 4-Hydroxyacetophenone 4-O-(6-O- β -D-apiofuranosyl)- β -D-glucopyranoside

$C_{19}H_{26}O_{11}$ (430.41). **Pharm:** Antitrypanosomal (*Trypanosoma b. rhodesiense*, $IC_{50} > 100\mu\text{g/mL}$, control Melarsoprol, $IC_{50} = 0.00098\mu\text{g/mL}$; *Trypanosoma cruzi*, $IC_{50} > 90\mu\text{g/mL}$, control Benznidazole, $IC_{50} = 1.06\mu\text{g/mL}$); antileishmanial (*Leishmania donovani*, $IC_{50} = 11.2\mu\text{g/mL}$, control Miltefosine, $IC_{50} = 0.102\mu\text{g/mL}$); antimalarial (*Plasmodium falciparum*, $IC_{50} > 50\mu\text{g/mL}$, control Artemisinin, $IC_{50} = 0.0022\mu\text{g/mL}$); cytotoxic (L6, $IC_{50} > 90\mu\text{g/mL}$, control Podophyllotoxin, $IC_{50} = 0.008\mu\text{g/mL}$). **Source:** ZONG KUI CAO SU *Phlomis brunneogaleata*. **Ref:** 5009.



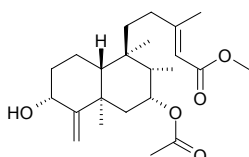
9751 2 β -Hydroxy-7-acetoxy-3,13-clerodadien-15-oic acid methyl ester

$C_{23}H_{36}O_5$ (392.54). $[\alpha]_D^{22} = -31.7^\circ$ ($c = 0.59$, CHCl_3). **Source:** GAO YI ZHI HUANG HUA *Solidago altissima*. **Ref:** 2366.



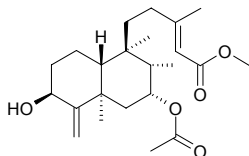
9752 3 α -Hydroxy-7-acetoxy-4(18),13-clerodadien-15-oic acid methyl ester

$C_{23}H_{36}O_5$ (392.54). $[\alpha]_D^{24} = -1.7^\circ$ ($c = 0.24$, CHCl_3). **Source:** GAO YI ZHI HUANG HUA *Solidago altissima*. **Ref:** 2366.



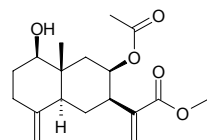
9753 3 β -Hydroxy-7-acetoxy-4(18),13-clerodadien-15-oic acid methyl ester

$C_{23}H_{36}O_5$ (392.54). **Source:** GAO YI ZHI HUANG HUA *Solidago altissima*. **Ref:** 2366.



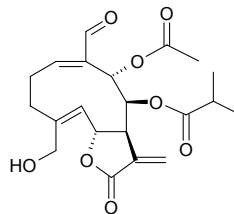
9754 1 β -Hydroxy-8 β -acetoxyisocostic acid methyl ester

$C_{18}H_{26}O_5$ (322.40). Colorless gum, $[\alpha]_D^{25} = -38.0^\circ$ ($c = 0.72$, CHCl_3). **Source:** JIN FEI CAO *Inula japonica*. **Ref:** 5422.



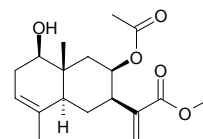
9755 15-Hydroxy-9 α -acetoxy-8 β -isobutyryloxy-14-oxo-melampolide

$C_{21}H_{26}O_8$ (406.44). **Source:** XI XIAN *Siegesbeckia orientalis*. **Ref:** 660.



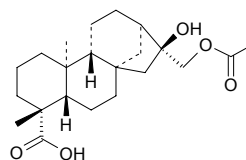
9756 1 β -Hydroxy-8 β -acetoxyisocostic acid methyl ester

$C_{18}H_{26}O_5$ (322.40). Colorless gum, $[\alpha]_D^{25} = -21.9^\circ$ ($c = 0.42$, CHCl_3). **Source:** JIN FEI CAO *Inula japonica*. **Ref:** 5422.



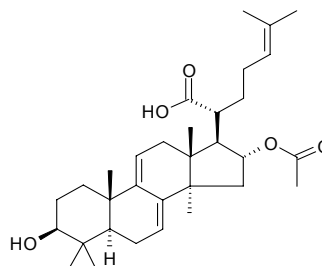
9757 16 β -Hydroxy-17-acetoxy-ent-kauran-19-oic acid

$C_{22}H_{34}O_5$ (378.51). **Pharm:** Platelet aggregation selected inhibitor (washed rabbit platelets, $200\mu\text{mol/L}$: $100\mu\text{mol/L}$ AA induced, $\text{InRt} = 10.8\%$; $10\mu\text{g/mL}$ collagen induced, $\text{InRt} = 30.1\%$; 1ng/mL PAF induced, $\text{InRt} = 11.1\%$; 0.05U/mL thrombin induced, $\text{InRt} = 8.0\%$)^[4654]; antioxidant (inhibits superoxide anion generation, fMLP/CB , $IC_{50} = (2.40 \pm 0.16)\mu\text{g/mL}$, $p < 0.001$, control DPI, $IC_{50} = (0.13 \pm 0.06)\mu\text{g/mL}$, $p < 0.001$)^[4950]. **Source:** FAN LI ZHI *Annona squamosa* (stem: yield = 0.00060%fw). **Ref:** 4654, 4950.



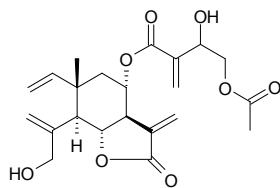
9758 3 β -Hydroxy-16 α -acetoxy-lanosta-7,9(11),24-trien-21-oic acid

$C_{32}H_{48}O_5$ (512.74). Colorless acicular crystals, mp $269\sim 270^\circ\text{C}$. **Source:** FU LING *Poria cocos*. **Ref:** 809.



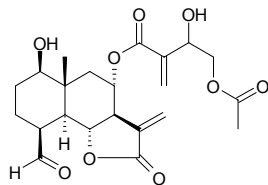
9759 8 α -(3-Hydroxy-4-acetoxy-2-methylene-butanoyloxy)-dehydro-melitensin

C₂₂H₂₈O₈ (420.46). **Pharm:** Antifungal (*Aspergillus niger*, MIC = 0.5 μ g/mL, control Miconazole, MIC = 1.5 μ g/mL; *Aspergillus ochraceus*, MIC = 0.25 μ g/mL, Miconazole, MIC = 1.5 μ g/mL; *Aspergillus versicolor*, MIC = 0.5 μ g/mL, Miconazole, MIC = 2 μ g/mL; *Aspergillus flavus*, MIC = 0.5 μ g/mL, Miconazole, MIC = 0.5 μ g/mL; *Penicillium ochrochloron*, MIC = 0.5 μ g/mL, Miconazole, MIC = 2 μ g/mL; *Penicillium funiculosum*, MIC = 1 μ g/mL, Miconazole, MIC = 2 μ g/mL; *Trichoderma viride*, MIC = 0.5 μ g/mL, Miconazole, MIC = 2 μ g/mL; *Cladosporium cladosporioides*, MIC = 0.5 μ g/mL, Miconazole, MIC = 0.03 μ g/mL; *Alternaria alternata*, MIC = 0.03 μ g/mL, Miconazole, MIC = 0.5 μ g/mL). **Source:** *Centaurea thessala* ssp. *drakiensis* (aerial parts). **Ref:** 5115.



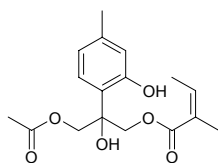
9760 8 α -(3'-Hydroxy-4'-acetoxy-2'-methylene-butanoyloxy)4-epi-sonchucarpolide

C₂₂H₂₈O₉ (436.46). Oil, $[\alpha]_D^{20} = +29.3^\circ$ ($c = 0.15$, CHCl₃). **Pharm:** Antifungal (*Aspergillus niger*, MIC = 0.5 μ g/mL, control Miconazole, MIC = 1.5 μ g/mL; *Aspergillus ochraceus*, MIC = 1 μ g/mL, Miconazole, MIC = 1.5 μ g/mL; *Aspergillus versicolor*, MIC = 1 μ g/mL, Miconazole, MIC = 2 μ g/mL; *Aspergillus flavus*, MIC = 1 μ g/mL, Miconazole, MIC = 0.5 μ g/mL; *Penicillium ochrochloron*, MIC = 1 μ g/mL, Miconazole, MIC = 2 μ g/mL; *Penicillium funiculosum*, MIC = 1 μ g/mL, Miconazole, MIC = 2 μ g/mL; *Trichoderma viride*, MIC = 1 μ g/mL, Miconazole, MIC = 2 μ g/mL; *Cladosporium cladosporioides*, MIC = 1 μ g/mL, Miconazole, MIC = 0.03 μ g/mL; *Alternaria alternata*, MIC = 0.06 μ g/mL, Miconazole, MIC = 0.5 μ g/mL). **Source:** *Centaurea attica* ssp. *attica* (aerial parts). **Ref:** 5115.



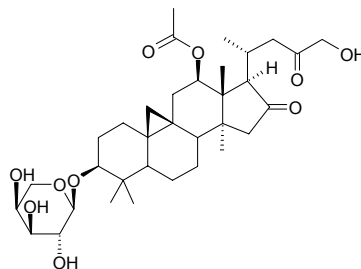
9761 8-Hydroxy-10-acetoxythymol 9-O-angelate

C₁₇H₂₂O₆ (322.36). $[\alpha]_D^{23} = -7.9^\circ$ ($c = 1.2$, CHCl₃). **Source:** PEI LAN *Eupatorium fortunei* (aerial parts). **Ref:** 3077.



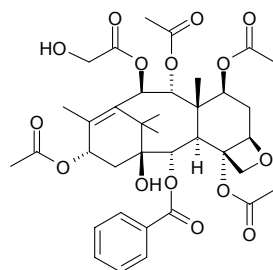
9762 24-Hydroxy-12 β -acetoxy-25,26,27-trinorcyloartan-16,23-dione 3 β -O- α -L-arabinopyranoside

C₃₄H₅₂O₁₀ (620.79). White powder (MeOH), mp 233~235°C. **Source:** XING AN SHENG MA *Cimicifuga dahurica* (rhizome). **Ref:** 4140.



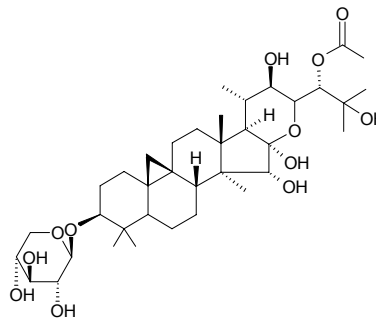
9763 10-Hydroxyacetylbaaccatin VI

C₃₇H₄₆O₁₅ (730.77). **Source:** JIA NA DA HONG DOU SHAN *Taxus canadensis*. **Ref:** 662.



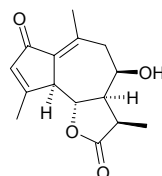
9764 (22R)-22-Hydroxy-24-O-acetylhydroshengmanol 3-O- β -D-xylopyranoside

C₃₇H₆₀O₁₂ (696.88). White powder (MeOH), mp 226~228°C. **Source:** SAN MIAN DAO *Cimicifuga acerina*. **Ref:** 873.



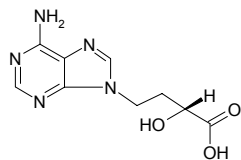
9765 Hydroxyachillin

C₁₄H₁₆O₄ (248.28). **Pharm:** NO production inhibitor (LPS-induced, concentration-dependent manner, IC₅₀ = 2.8 μ mol/L or 21.2 μ mol/L); PGE₂ production inhibitor (LPS-induced, concentration-dependent manner, IC₅₀ = 10.8 μ mol/L or 28.6 μ mol/L). **Source:** XIAO YE JU HAO *Tanacetum microphyllum* (aerial parts). **Ref:** 4918.

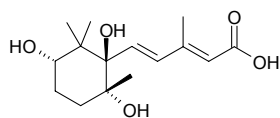


9766 (2R)-Hydroxy-4-(9-adenyl)butyric acid

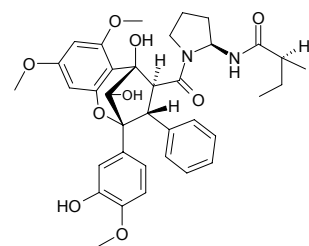
$C_9H_{11}N_5O_3$ (237.22). Source: XIANG XUN *Lentinus edodes*. Ref: 6.

**9767 sec-Hydroxyaegnetic acid**

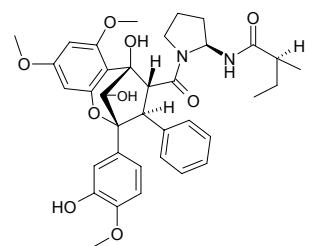
$C_{15}H_{24}O_5$ (284.36). Source: SHU DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 660.

**9768 3'-Hydroxyaglaine B**

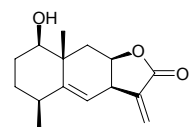
$C_{36}H_{42}N_2O_9$ (646.74). $[\alpha]_D^{20} = -11.4^\circ$ ($c = 0.25$, $CHCl_3$). Source: MI ZI LAN *Aglaia odorata*. Ref: 2289.

**9769 3'-Hydroxyaglaine C**

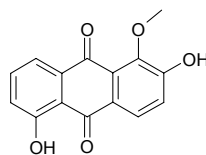
$C_{36}H_{42}N_2O_9$ (646.74). $[\alpha]_D^{20} = -103.4^\circ$ ($c = 0.43$, $CHCl_3$). Source: MI ZI LAN *Aglaia odorata*. Ref: 2289.

**9770 1β-Hydroxy-alantolactone**

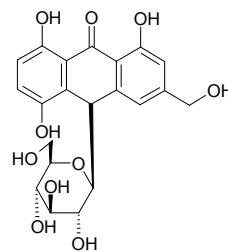
$C_{15}H_{20}O_3$ (248.32). Source: JIN FEI CAO *Inula japonica*. Ref: 5422.

**9771 5-Hydroxyalizarin-1-methylether**

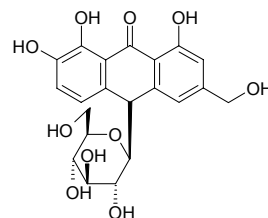
$C_{15}H_{10}O_5$ (270.24). Source: HU CI *Dammacanthus indicus*. Ref: 6.

**9772 5-Hydroxyaloin A**

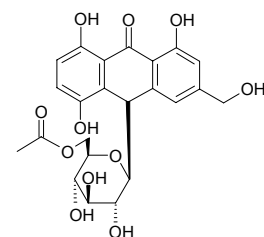
$C_{21}H_{22}O_{10}$ (434.4). Source: MA SHI LU HUI *Aloe marlothii*. Ref: 726.

**9773 7-Hydroxyaloin A**

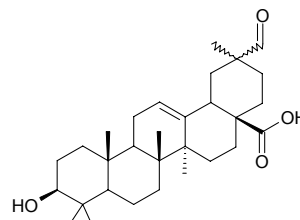
$C_{21}H_{22}O_{10}$ (434.40). Source: LU HUI *Aloe vera* [Syn. *Aloe barbadensis*]. Ref: 2.

**9774 5-Hydroxyaloin A 6'-O-acetate**

$C_{23}H_{24}O_{11}$ (476.44). Source: MA SHI LU HUI *Aloe marlothii*. Ref: 726.

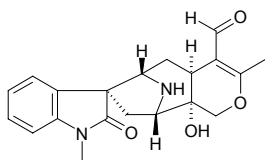
**9775 3β-Hydroxy-29(or 30)-al-olean-12-en-28-oic acid**

$C_{30}H_{46}O_4$ (470.70). Source: BAI MU TONG *Akebia trifoliata* var. *australis*. Ref: 660.

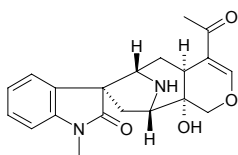


9776 16-Hydroxylstonal

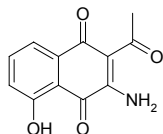
$C_{20}H_{22}N_2O_4$ (354.41). White amorphous powder, $[\alpha]_D^{25} = +153^\circ$ ($c = 0.26$, $CHCl_3$). **Source:** DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf; yield = 0.0036%). **Ref:** 3020.

**9777 16-Hydroxylstonisine**

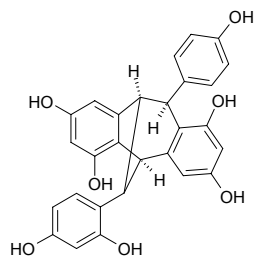
$C_{20}H_{22}N_2O_4$ (354.41). White amorphous powder, $[\alpha]_D^{25} = +170^\circ$ ($c = 0.15$, $CHCl_3$). **Source:** DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf; yield = 0.0016%). **Ref:** 3020.

**9778 5-Hydroxy-3-amino-2-acetyl-1,4-naphthoquinone**

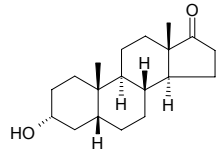
$C_{12}H_9NO_4$ (231.21). **Source:** *Goniothalamus* sp. **Ref:** 2447.

**9779 2b-Hydroxyampelopsin F**

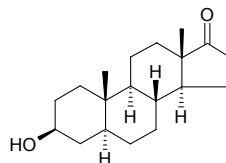
$C_{28}H_{22}O_7$ (470.48). Pale brownish amorphous solid. **Pharm:** Protein glycation (Maillard reaction) inhibitor (10 μ g/mL, InRt = 70%, protein glycation is one of the causes of diabetic complications and aging of the skin)^[3550]. **Source:** MA LAI XI YA MAI MA TENG *Gnetum gnemonoides* (stem), XIAN ZHOU MAI MA TENG *Gnetum gnemon* (root), XIAO YE MAI MA TENG *Gnetum parvifolium* [Syn. *Gnetum indicum*] (bark). **Ref:** 3550, 4200.

**9780 3 α -Hydroxy-5 β -androstan-17-one**

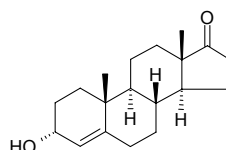
$C_{19}H_{30}O_2$ (290.45). **Source:** SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. **Ref:** 2.

**9781 3 β -Hydroxy-5 α -androstan-17-one**

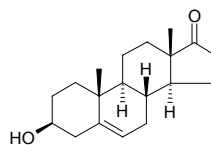
$C_{19}H_{30}O_2$ (290.45). **Source:** SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. **Ref:** 2.

**9782 3 α -Hydroxy-androst-4-ene-17-one**

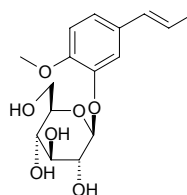
$C_{19}H_{28}O_2$ (288.43). **Source:** SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. **Ref:** 2, 660.

**9783 3 β -Hydroxy-androst-5-ene-17-one**

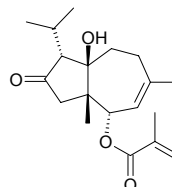
$C_{19}H_{28}O_2$ (288.43). **Source:** SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. **Ref:** 2.

**9784 (E)-3-Hydroxyanethole β -D-glucopyranoside**

$C_{16}H_{22}O_7$ (326.35). Amorphous powder, $[\alpha]_D^{23} = -28^\circ$ ($c = 0.4$, MeOH). **Source:** HUI QIN *Pimpinella anisum* (fruit). **Ref:** 3402.

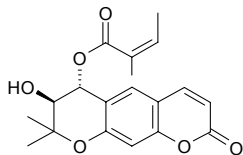
**9785 5 β -Hydroxy-10 α -O-angeloyl-3-oxodauc-8-ene**

$C_{20}H_{30}O_4$ (334.46). Colorless cubes (EtOAc), mp 62~63°C, $[\alpha]_D^{21} = -222.56^\circ$ ($c = 1.22$, $CHCl_3$). **Source:** DIAN QIN *Sinodielsia yunnanensis* (root and rhizome). **Ref:** 5470.

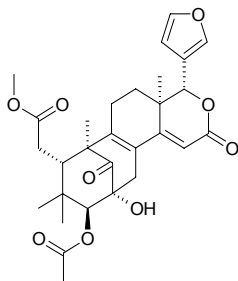


9786 3'(S)-Hydroxy-4'(R)-angeloyloxy-3',4'-dihydroxanthyletin

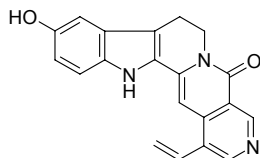
$C_{19}H_{20}O_6$ (344.37). White powder, mp 100~102°C. Source: QIAN HU *Angelica decursiva* [Syn. *Peucedanum decursivum*]. Ref: 874.

**9787 2-Hydroxyangustidenolide**

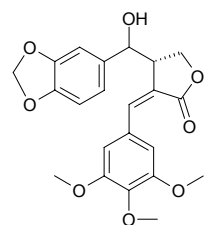
[26906-60-5] $C_{29}H_{34}O_9$ (526.59). Crystals (MeOH), mp 210~220°C, $[\alpha]_D^{25} = +101^\circ$ ($c = 2$, $CHCl_3$). Source: QIAN HU *Angelica decursiva* [Syn. *Peucedanum decursivum*] Ref: 2082.

**9788 10-Hydroxyangustine**

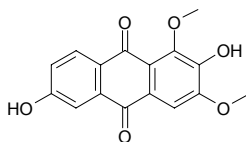
$C_{20}H_{15}N_3O_2$ (329.36). Pharm: Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). Source: KUAN YE WU TAN *Nauclea latifolia*. Ref: 2178.

**9789 7-Hydroxyanthropodorhizol**

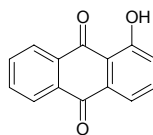
$C_{22}H_{22}O_8$ (414.42). Source: E SHEN *Anthriscus sylvestris*. Ref: 5499.

**9790 6-Hydroxy-anthragallol-1,3-dimethylether**

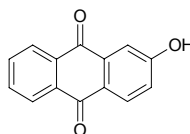
$C_{16}H_{12}O_6$ (300.27). Source: HAI BA JI *Morinda citrifolia* (fruit). Ref: 4542.

**9791 α -Hydroxyanthraquinone**

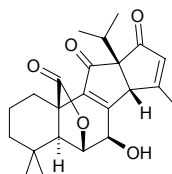
[129-43-1] $C_{14}H_8O_3$ (224.22). mp 193°C (sub). Source: BA JI TIAN *Morinda officinalis*, WANG JIANG NAN *Cassia occidentalis*. Ref: 6, 228.

**9792 2-Hydroxyanthraquinone**

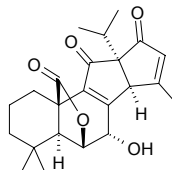
[605-32-3] $C_{14}H_8O_3$ (224.22). mp 306°C, 320°C. Source: YANG JIAO TENG *Morinda umbellata*. Ref: 6.

**9793 *rel*-(5S,6S,7R,10R,12S,13R)-7-Hydroxyapiana-8,14-diene-11,16-dion-(22,6)-olide**

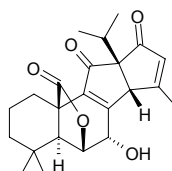
$C_{23}H_{28}O_5$ (384.48). Amorphous solid, $[\alpha]_D^{27} = +89.2^\circ$ ($c = 0.251$, $CHCl_3$). Source: YAO YONG DAN SHEN YE *Salvia officinalis*. Ref: 5226.

**9794 *rel*-(5S,6S,7S,10R,12R,13S)-7-Hydroxyapiana-8,14-diene-11,16-dion-(22,6)-olide**

$C_{23}H_{28}O_5$ (384.48). Amorphous solid, $[\alpha]_D^{27} = +18.8^\circ$ ($c = 0.136$, $CHCl_3$). Source: YAO YONG DAN SHEN YE *Salvia officinalis*. Ref: 5226.

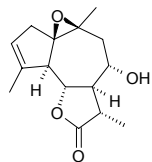
**9795 *rel*-(5S,6S,7S,10R,12S,13R)-7-Hydroxyapiana-8,14-diene-11,16-dion-(22,6)-olide**

$C_{23}H_{28}O_5$ (384.48). Colorless needles (benzene-acetone), mp 245°C, $[\alpha]_D^{27} = +131.3^\circ$ ($c = 0.420$, $CHCl_3$). Source: YAO YONG DAN SHEN YE *Salvia officinalis*. Ref: 5226.

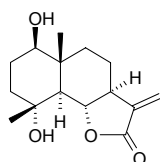


9796 8 α -Hydroxyarborescin

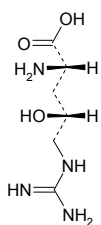
C₁₅H₂₂O₄ (264.32). Source: YI KUA *Artemisia myriantha* (aerial parts). Ref: 4618.

**9797 1 β -Hydroxyarbusculin A**

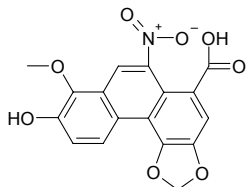
C₁₅H₂₂O₄ (266.34). Colorless acicular crystals, mp 194~196°C. Source: YUN NAN HAN XIAO *Michelia yunnanensis*. Ref: 426.

**9798 γ -Hydroxyarginine**

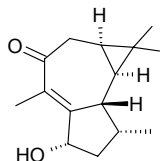
[61370-10-3] C₆H₁₄N₄O₃ (190.20). Pharm: Enzymatic substrate (arginase, arginine decarboxylase, *L*-amino-acidoxidase); germination inhibitor (toxic to plants). Source: DA CHAO CAI *Vicia sativa*, BING DOU *Lens culinaris*, *Vicia* sp. Ref: 6, 658, 1521.

**9799 7-Hydroxy-aristolochic acid A**

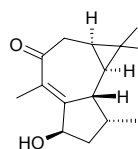
[79185-75-4] C₁₇H₁₁NO₈ (357.28). Source: MA DOU LING *Aristolochia debilis* [Syn. *Aristolochia longa*], HAN FANG JI *Aristolochia heterophylla*. Ref: 517, 660.

**9800 2 α -Hydroxyaromadendr-1(10)-en-9-one**

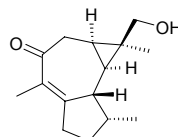
C₁₅H₂₂O₂ (234.34). Cubes (acetone), mp 72~74°C, [α]_D²⁵ = -91° (*c* = 18.6, CHCl₃). Pharm: Insecticidal (adult *Cylas formicarius elegantulus*, 0.04mg/insect, 24h mortality = 0%, 48h mortality = 30%, 72h mortality = 80%). Source: *Curvularia lunata*. Ref: 5140.

**9801 2 β -Hydroxyaromadendr-1(10)-en-9-one**

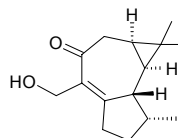
C₁₅H₂₂O₂ (234.34). Cubes (acetone), mp 85~86°C, [α]_D²⁵ = -186° (*c* = 6.3, CHCl₃). Pharm: Insecticidal (adult *Cylas formicarius elegantulus*, 0.04mg/insect, 24h mortality = 0%, 48h mortality = 30%, 72h mortality = 100%). Source: *Curvularia lunata*. Ref: 5140.

**9802 13-Hydroxyaromadendr-1(10)-en-9-one**

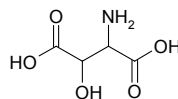
C₁₅H₂₂O₂ (234.34). Oil, [α]_D²⁵ = -118° (*c* = 4.4, CHCl₃). Pharm: Insecticidal (adult *Cylas formicarius elegantulus*, 0.04mg/insect, 24h mortality = 10%, 48h mortality = 40%, 72h mortality = 100%). Source: *Curvularia lunata*. Ref: 5140.

**9803 14-Hydroxyaromadendr-1(10)-en-9-one**

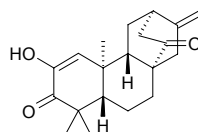
C₁₅H₂₂O₂ (234.34). Cubes (EtOH), mp 61~62°C, [α]_D²⁵ = -98° (*c* = 3.9, CHCl₃). Pharm: Insecticidal (adult *Cylas formicarius elegantulus*, 0.04mg/insect, 24h mortality = 0%, 48h mortality = 30%, 72h mortality = 80%). Source: *Curvularia lunata*. Ref: 5140.

**9804 erythro- β -Hydroxy-*L*-aspartic acid**

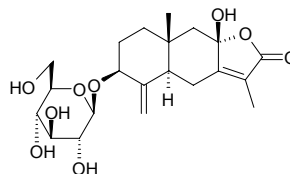
[4294-45-5] C₄H₇NO₃ (149.10). mp 210°C. Source: ZI YUN YING ZI *Astragalus sinicus*. Ref: 6.

**9805 ent-2-Hydroxyatis-1,16(17)-dien-3,14-dione**

C₂₀H₂₆O₃ (314.43). White powder. Source: DA GUO DA JI *Euphorbia wallichii* (root). Ref: 4585.

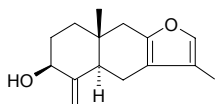
**9806 (3*S*)-3-Hydroxyatractylenolide III 3-*O*- β -D-glucopyranoside**

C₂₁H₃₀O₉ (426.47). Amorphous powder, [α]_D²² = +95° (*c* = 1.1, MeOH). Source: GUAN CANG ZHU *Atractylodes japonica* (fresh rhizome). Ref: 4310.

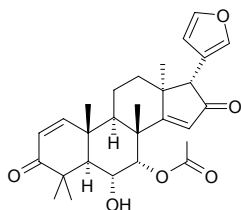


9807 3 β -Hydroxyatractylone

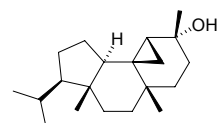
C₁₅H₂₀O₂ (232.33). **Source:** CANG ZHU *Atractylodes lancea*. **Ref:** 2.

**9808 6 α -Hydroxyazadiradione**

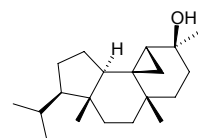
C₂₈H₃₄O₆ (466.58). Pale yellow gum, [α]_D = +23° (*c* = 0.312, CHCl₃). **Source:** *Quivisia papinae* (seed). **Ref:** 3759.

**9809 13 α -Hydroxyazorellane**

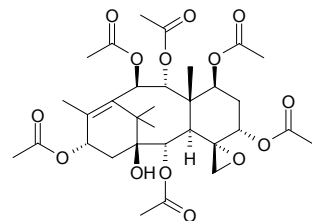
C₂₀H₃₄O (290.49). **Pharm:** Trichomonocidal (*Trichomonas vaginalis*, LD₅₀ = 119 μ mol/L). **Source:** *Azorella yareta* (aerial parts). **Ref:** 5125.

**9810 13 β -Hydroxyazorellane**

C₂₀H₃₄O (290.49). Needles, mp 95–96°C (petrol–EtOAc), [α]_D²⁴ = +17.2° (*c* = 0.23, CHCl₃). **Pharm:** Trichomonocidal (*Trichomonas vaginalis*, LD₅₀ = 100 μ mol/L). **Source:** *Azorella yareta* (aerial parts). **Ref:** 5125.

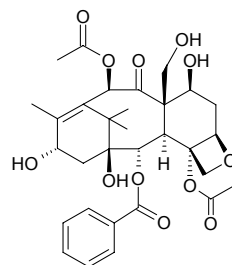
**9811 1 β -Hydroxybaccatin I**

[30244-37-2] C₃₂H₄₄O₁₄ (652.70). **Pharm:** Antioxidant (DPPH free radical scavenger, IC₅₀ > 200 μ mol/L, control Caffeic acid, IC₅₀ = 25.5 μ mol/L); NO production inhibitor (IC₅₀ = 92.0 μ mol/L, control *L*-NMMA, IC₅₀ = 28.5 μ mol/L)^[5407]. **Source:** JIANG GUO ZI SHAN *Taxus baccata*, XI MA LA YA HONG DOU SHAN *Taxus wallichiana*, MEI LI HONG DOU SHAN *Taxus mairei*, YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood). **Ref:** 300, 662, 5407.

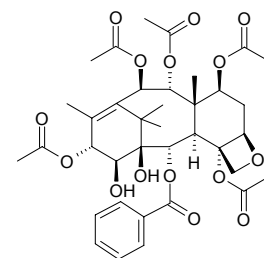
**9812 19-Hydroxybaccatin III**

C₃₁H₃₈O₁₂ (602.64). **Pharm:** Cytotoxic (*in vitro*, 30 μ g/mL: A498, InRt = 26.7%; NCI-H226, InRt = 44.6%; A549, InRt = 0%; PC3, InRt = 47.7%; control Taxol, 30 μ g/mL: A498, InRt = 98.2%; NCI-H226, InRt = 71.2%; A549, InRt = 79.7%; PC3, InRt = 91.7%)^[4800]. **Source:** JIANG GUO ZI

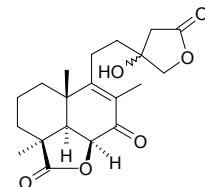
SHAN *Taxus baccata*, SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (twig and leaf: yield = 0.00002%dw)^[4666, 4800], XI MA LA YA HONG DOU SHAN *Taxus wallichiana*, YUN NAN HONG DOU SHAN *Taxus yunnanensis*. **Ref:** 662, 4666, 4800.

**9813 14 β -Hydroxybaccatin VI**

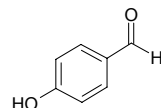
C₃₇H₄₆O₁₅ (730.77). Colorless needles, mp 241–243°C [α]_D^{15.8} = +9.42° (*c* = 0.57, MeOH). **Source:** HONG DOU SHAN *Taxus chinensis*. **Ref:** 2488.

**9814 13-Hydroxy ballonigrinolide**

[71135-32-5] C₂₀H₂₆O₆ (362.43). White crystals. **Source:** BO SI YI MU CAO *Leonurus persicus*. **Ref:** 2499.

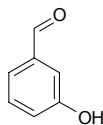
**9815 *p*-Hydroxybenzaldehyde**

[123-08-0] C₇H₆O₂ (122.12). **Pharm:** Cytotoxic inactive (Colon26-L5, HT1080, 100 μ mol/L)^[3042]; cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity)^[3069]. **Source:** ER RUI HE LIAN DOU *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*] (whole herb: yield = 0.000028%dw)^[4758], KAI KOU JIAN *Tupistra chinensis* (underground part)^[4676], MU ZEI *Equisetum hiemale*, PI JIU HUA *Humulus lupulus* (strobile)^[4789], PU HUANG *Typha angustata*, RI BEN HUANG BAI *Phellodendron japonicum* (leaf), SANG HUANG *Phellinus ignarius* (sporocarp: yield = 0.00066%dw)^[4747], TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00015%dw)^[4722], TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root), TIAN MA *Gastrodia elata*, YI ZHU QIAN MA *Urtica dioica*, YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00193%)^[3042], ZHONG GUO XIU QIU *Hydrangea chinensis* (root)^[3069]. **Ref:** 2, 660, 3042, 3069, 4488, 4502, 4676, 4722, 4747, 4758, 4789.

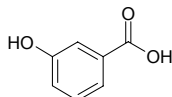


9816 *m*-Hydroxybenzaldehyde

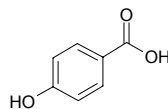
$C_7H_6O_2$ (122.12). Source: DI SUO LUO *Marchantia polymorpha*. Ref: 660.

**9817 *m*-Hydroxybenzoic acid**

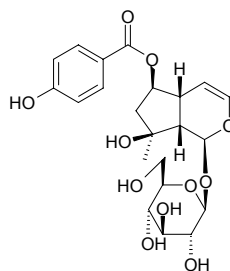
m-Salicylic acid [99-06-9] $C_7H_6O_3$ (138.12). Source: MU ZEI *Equisetum hiemale*. Ref: 2.

**9818 *p*-Hydroxybenzoic acid**

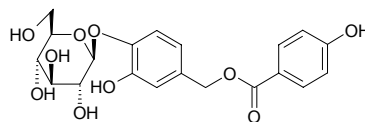
p-Salicylic acid [99-96-7] $C_7H_6O_3$ (138.12). White crystals (water), mp 216–218°C. Pharm: Prostaglandin synthetase activator; antimutagenic; antidote (mus, cobra-poisoning); inhibits sickling action of cells; NO production inhibitor inactive (LPS-activated macrophage-like J774.1 cells, $IC_{50} = 150\mu\text{g/mL}$, control *L*-NMMA, $IC_{50} = 27.4\mu\text{g/mL}$)^[4473]; antioxidant (DPPH scavenger, $IC_{50} = 87.6\mu\text{mol/L}$, control Vitamin E, $IC_{50} = 27.0\mu\text{mol/L}$)^[4502]. Source: BAN BIAN LIAN *Lobelia chinensis* [Syn. *Lobelia radicans*], DA CHE QIAN *Plantago major*, DUO HUA SHAO YAO *Paeonia emodi* (fruit), ER RUI HE LIAN DOU *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*] (whole herb: yield = 0.00042%dw)^[4758], GE YE MI HOU TAO *Actinidia rubricaulis* var. *coriacea* (ripe fruit: content = 0.19%)^[5508], GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.00001%)^[4706], HE SE ZHONG HUA SHU *Tabebuia avellanadae* (inner bark), HONG HUA JIAO *Zanthoxylum rubescens*, HUA NAN MI HOU TAO *Actinidia glaucophylla* (ripe fruit: content = 0.17%)^[5508], JI MAO SONG *Podocarpus imbricatus*, JIN HUA MI HOU TAO *Actinidia chrysantha* (ripe fruit: content = 0.24%)^[5508], JIN HUANG GE JUN *Thelephora aurantiotincta*, JING LI MI HOU TAO *Actinidia callosa* var. *henryi* (ripe fruit: content = 0.24%)^[5508], KUO YE MI HOU TAO *Actinidia latifolia* (ripe fruit: content = 0.14%)^[5508], LV BEI GUI HUA *Excoecaria cochinchinensis* var. *viridis*, MAN JING ZI *Vitex trifolia*, MAO HUA MI HOU TAO *Actinidia eriantha* (ripe fruit: content = 0.08%)^[5508], MEI WEI MI HOU TAO *Actinidia deliciosa* (ripe fruit: content = 0.25%)^[5508], MENG ZI CAO HU JIAO *Peperomia duclouxii* (whole herb: yield = 0.00055%)^[4733], MI HOU LI *Actinidia arguta* (ripe fruit: content = 0.17%)^[5508], MI HOU TAO *Actinidia chinensis* (ripe fruit: content = 0.23%)^[5508], MU TIAN LIAO *Actinidia polygama* (ripe fruit: content = 0.09%)^[5508], MU ZEI *Equisetum hiemale*, MU ZEI MA HUANG *Ephedra equisetina*, PU⁽²⁾ TAO *Vitis vinifera*, RI BEN HUANG BAI *Phellodendron japonicum* (leaf), SI ZI TAN *Pterocarpus santalinus*, TAI WAN FU RONG *Hibiscus taiwanensis*, TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00037%dw)^[4722], TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root), TIAN QIAO MAI GEN *Fagopyrum cymosum* [Syn. *Polygonum cymosum*], XUAN FU HUA *Inula britannica*, ZANG HONG HUA *Crocus sativus* (pollen), ZONG LV PI *Trachycarpus fortunei* (petiole and fibre of sheath, roasted petiole: mean content of 5 origins = 1.14%)^[5508], occurs in many plants. Ref: 2, 415, 544, 562, 594, 658, 660, 2529, 3423, 3802, 4233, 4473, 4488, 4502, 4544, 4706, 4722, 4733, 4758, 5508.

**9819 6-O-(4-Hydroxybenzoyl)-ajugol**

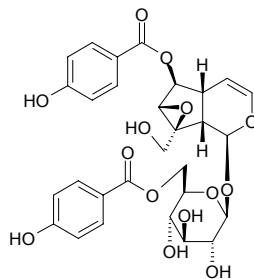
$C_{22}H_{28}O_{11}$ (468.46). Pharm: NO production inhibitor (LPS-activated macrophage-like J774.1 cells, $IC_{50} = 26.1\mu\text{g/mL}$, control *L*-NMMA, $IC_{50} = 27.4\mu\text{g/mL}$)^[4473]. Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*], HE SE ZHONG HUA SHU *Tabebuia avellanadae* (inner bark). Ref: 2, 4473.

**9820 *p*-Hydroxybenzoyl calleryanin**

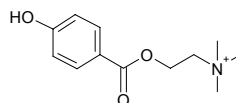
$C_{20}H_{22}O_{10}$ (422.39). Source: YE LI ZHI YE *Pyrus calleryana*. Ref: 6.

**9821 6'-O-*p*-Hydroxybenzoylcatalposide**

$C_{29}H_{30}O_{14}$ (602.55). Amorphous powder, $[\alpha]_D^{25} = -123.5^\circ$ ($c = 0.2$, MeOH). Source: ZI YE *Catalpa ovata* (leaf, fallen leaf). Ref: 3536, 4290.

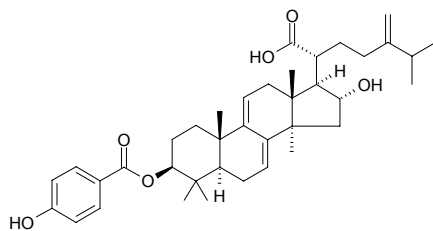
**9822 4-Hydroxybenzoyl choline**

$C_{12}H_{18}NO_3^+$ (224.28). Source: BAI JIE ZI *Sinapis alba* [Syn. *Brassica alba*; *Brassica hirta*]. Ref: 660.

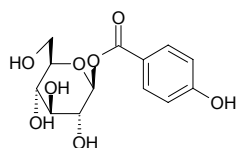


9823 3 β -p-Hydroxybenzoyldehydrotumulosic acid

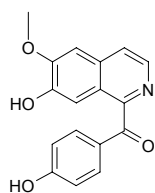
[213764-76-2] C₃₈H₅₂O₆ (604.83). Colorless acicular crystals (pyridine-*n*-hexane), mp 242~244°C, [α]_D = 40° (*c* = 0.2, MeOH). Source: FU LING *Poria cocos*. Ref: 711.

**9824 1-O-(4-Hydroxybenzoyl)- β -D-glucose**

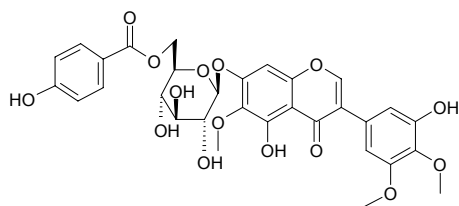
C₁₃H₁₆O₈ (300.27). Source: ZANG HONG HUA *Crocus sativus* (pollen). Ref: 4233.

**9825 1-(4-Hydroxybenzoyl)-7-hydroxy-6-methoxyisoquinoline**

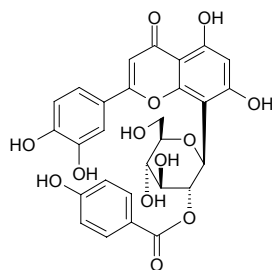
C₁₇H₁₃NO₄ (295.30). Red needles, mp 230~232°C. Source: BIAN FU GE GEN *Menispermum dauricum*. Ref: 3792.

**9826 6''-O-p-Hydroxybenzoyliridin**

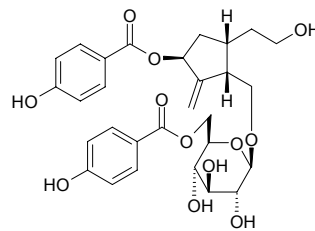
C₃₁H₃₀O₁₅ (642.58). Pale yellow amorphous powder, [α]_D = +3.4° (*c* = 0.5, MeOH). Source: SHE GAN *Belamcanda chinensis* (rhizome). Ref: 4128.

**9827 2''-O-p-Hydroxybenzoylorientin**

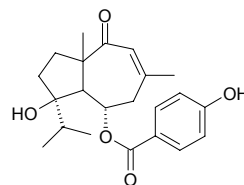
C₂₈H₂₄O₁₃ (568.50). Yellow amorphous powder. Source: ZUI GAO MU JING YE *Vitex altissima* (leaf). Ref: 5309.

**9828 7-O-p-Hydroxybenzoylovatol 1-O-(6'-O-p-hydroxybenzoyl)- β -D-glucopyranoside**

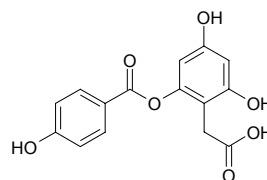
C₂₉H₃₄O₁₂ (574.59). Amorphous powder, [α]_D²⁵ = +22.2° (*c* = 0.3, MeOH). Source: ZI YE *Catalpa ovata* (leaf, fallen leaf). Ref: 3536, 4290.

**9829 5a-p-Hydroxybenzoyloxydauc-2-ene-1-one**

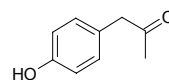
C₂₂H₂₈O₅ (372.47). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3977.

**9830 2-O-(4-Hydroxybenzoyl)-2,4,6-trihydroxyphenylacetic acid**

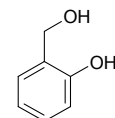
C₁₅H₁₂O₇ (304.26). Solid. Source: LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*] (petal). Ref: 4965.

**9831 p-Hydroxybenzyl acetone**

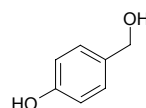
C₉H₁₀O₂ (150.18). Source: BAN ZHI LIAN *Scutellaria barbata* [Syn. *Scutellaria rivularis*]. Ref: 660.

**9832 2-Hydroxybenzyl alcohol**

C₇H₈O₂ (124.14). Source: QIAN MA *Urtica cannabina*. Ref: 660.

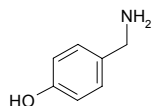
**9833 p-Hydroxybenzyl alcohol**

[623-05-2] C₇H₈O₂ (124.14). Source: SHAN HU LAN *Galeola faberi*, TIAN MA *Gastrodia elata*, YI ZHU QIAN MA *Urtica dioica*. Ref: 2, 280, 660.

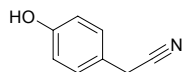


9834 4-Hydroxybenzylamine

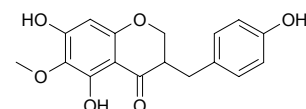
C_7H_9NO (123.16). mp 114–115°C (dec). Source: QIAO MAI *Fagopyrum esculentum*. Ref: 6.

**9835 4-Hydroxybenzyl cyanide**

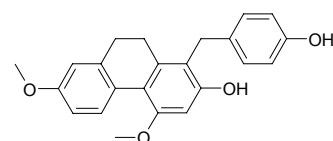
C_8H_7NO (133.15). Source: FEN CHA DANG GUI *Angelica furcijuga* (flower). Ref: 4454.

**9836 3-(4-Hydroxybenzyl)-5,7-dihydroxy-6-methoxychroman-4-one**

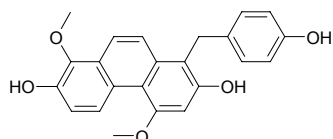
$C_{17}H_{16}O_6$ (316.31). Yellow plates (CH_2Cl_2), mp 189–200°C. Source: *Scilla nervosa* (bulb). Ref: 2381.

**9837 1-(4-Hydroxybenzyl)-4,7-dimethoxy-9,10-dihydrophenanthrene-2-ol**

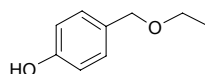
$C_{23}H_{22}O_4$ (362.43). Pale yellow amorphous powder. Source: LAN YU BAI JI *Bletilla formosana* (whole herb). Ref: 4500.

**9838 1-(4-Hydroxybenzyl)-4,8-dimethoxyphenanthrene-2,7-diol**

$C_{23}H_{20}O_5$ (376.41). Source: LAN YU BAI JI *Bletilla formosana* (whole herb). Ref: 4500.

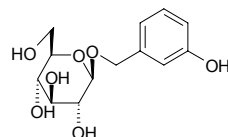
**9839 p-Hydroxybenzyl ethyl ether**

$C_9H_{12}O_2$ (152.19). Source: TIAN MA *Gastrodia elata*. Ref: 2.

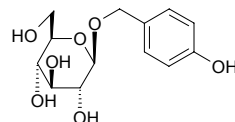
**9840 3-Hydroxybenzyl-1-O-beta-D-glucopyranoside**

$C_{13}H_{18}O_7$ (286.28). Colorless oil. Pharm: Plant growth stimulatory or inhibitory activity (radicle length: *Lactuca sativa*, 1 μmol/L, StRt = (10–30)%, 10 μmol/L, StRt = (10–30)%, 100 μmol/L, StRt or InRt < 10%, 1 mmol/L, StRt or InRt < 10%; *Raphanus sativus*, 1 μmol/L, StRt or InRt < 10%, 10 μmol/L, StRt or InRt < 10%, 100 μmol/L, InRt = (10–30)%, 1 mmol/L, InRt = (10–30)%; *Allium cepa*, 1 μmol/L, StRt or InRt < 10%, 10 μmol/L, StRt or

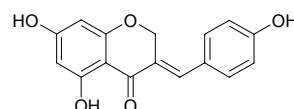
InRt < 10%, 100 μmol/L, StRt or InRt < 10%, 1 mmol/L, InRt = (10–30)%)^[5217]. Source: RI BEN ZHANG YA CAI *Swertia japonica*, XI YANG JIE GU MU *Sambucus nigra*. Ref: 2528, 5217.

**9841 4-Hydroxybenzyl-O-beta-D-glucopyranoside**

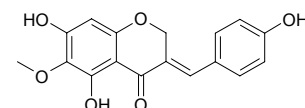
$C_{13}H_{18}O_7$ (286.28). Source: SHI LUO ZI *Anethum graveolens* (fruit). Ref: 4177.

**9842 3-(4-Hydroxybenzylidene)-5,7-dihydroxychroman-4-one**

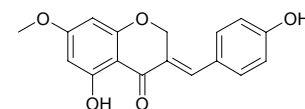
$C_{16}H_{12}O_5$ (284.27). Yellow powder, mp 208–211°C. Source: *Scilla nervosa* (bulb). Ref: 2381.

**9843 3-(4-Hydroxybenzylidene)-5,7-dihydroxy-6-methoxychroman-4-one**

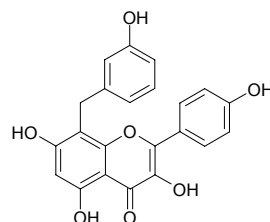
$C_{17}H_{14}O_6$ (314.30). Yellow powder, mp 242–245°C. Source: *Scilla nervosa* (bulb). Ref: 2381.

**9844 3-(4-Hydroxybenzylidene)-5-hydroxy-7-methoxychroman-4-one**

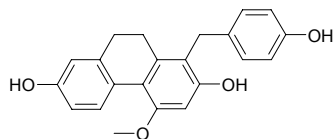
$C_{17}H_{14}O_5$ (298.30). Yellow gum. Source: *Scilla nervosa* (bulb). Ref: 2381.

**9845 8-C-p-Hydroxybenzylkaempferol**

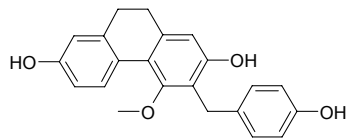
$C_{22}H_{16}O_7$ (392.37). Source: LAN YU BAI JI *Bletilla formosana* (whole herb). Ref: 4500.



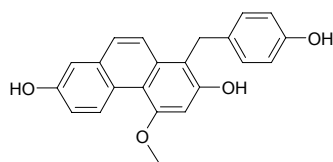
9846 1-(*p*-Hydroxybenzyl)-4-methoxy-9,10-dihydrophenanthrene-2,7-diol
 $C_{22}H_{20}O_4$ (348.40). Colorless needles. **Pharm:** Antiallergic β -Hexosaminidase inhibitor (rat basophilic RBL-2H3 cells, inhibits release of β -hexosaminidase, 100 μ mol/L, InRt = (80.4 \pm 3.3) μ mol/L, $p < 0.01$; 300 μ mol/L control Ketotifen fumarate, InRt = (72.5 \pm 0.9) μ mol/L, $p < 0.01$)^[5022]. **Source:** LAN YU BAI JI *Bletilla formosana* (whole herb), SHOU ZHANG SHEN *Gymnadenia conopsea* (tuber). **Ref:** 4500, 5022.



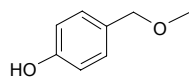
9847 3-(*p*-Hydroxybenzyl)-4-methoxy-9,10-dihydrophenanthrene-2,7-diol
 $C_{22}H_{20}O_4$ (348.40). **Source:** BAI JI *Bletilla striata*. **Ref:** 660.



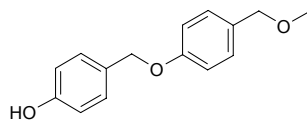
9848 1-*p*-Hydroxybenzyl-4-methoxyphenanthrene-2,7-diol
 $C_{22}H_{18}O_4$ (346.39). Yellow needles. **Pharm:** Antiallergic β -Hexosaminidase inhibitor (rat basophilic RBL-2H3 cells, inhibits release of β -hexosaminidase, 100 μ mol/L, InRt = (97.5 \pm 1.1) μ mol/L, $p < 0.01$; 300 μ mol/L control Ketotifen fumarate, InRt = (72.5 \pm 0.9) μ mol/L, $p < 0.01$)^[5022]. **Source:** BAI JI *Bletilla striata*, LAN YU BAI JI *Bletilla formosana* (whole herb), SHOU ZHANG SHEN *Gymnadenia conopsea* (tuber). **Ref:** 660, 4500, 5022.



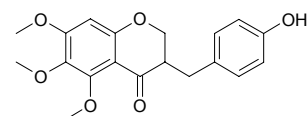
9849 4-Hydroxybenzyl methyl ether
 $C_8H_{10}O_2$ (138.17). **Source:** TIAN MA *Gastrodia elata*. **Ref:** 2.



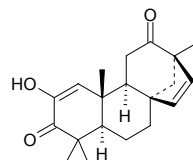
9850 4-(4'-Hydroxybenzyloxy)benzyl methyl ether
 $C_{15}H_{16}O_3$ (244.29). **Source:** TIAN MA *Gastrodia elata*. **Ref:** 2.



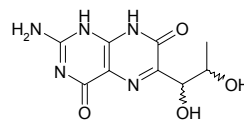
9851 3-(4-Hydroxybenzyl)-5,6,7-trimethoxychroman-4-one
 $C_{19}H_{20}O_6$ (344.37). Yellow oil, $[\alpha]_D^{25} = -231.9^\circ$ ($c = 0.13$, MeOH). **Source:** *Scilla nervosa* (bulb). **Ref:** 2381.



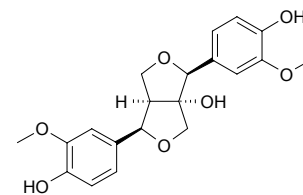
9852 2-Hydroxy-1,15-beyeradiene-3,12-dione
 $C_{20}H_{26}O_3$ (314.43). Colorless oil, $[\alpha]_D^{25} = -22.4^\circ$ ($c = 0.53$, $CHCl_3$). **Source:** HAI QI *Excoecaria agallocha* (root: yield = 0.0018%dw). **Ref:** 4613.



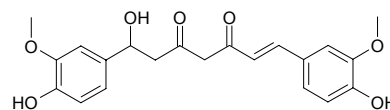
9853 7-Hydroxybiopterin
 Ichthyopterine [490-58-4] $C_9H_{11}N_5O_4$ (253.22). mp > 300°C (dec). **Source:** JIN YU *Carassius auratus*, QING WA *Rana nigromaculata*; *Rana plancyi*. **Ref:** 6.



9854 (+)-1-Hydroxy-2,6-bis-epi-pinoresinol
 $C_{20}H_{22}O_7$ (374.39). **Pharm:** Antitubercular (*Mycobacterium tuberculosis*, MIC = 127 μ g/mL, cytotoxic, Vero cells, IC₅₀ = 91.0 μ g/mL, SI (IC₅₀/MIC) = 0.72, positive control Rifampin, MIC = 0.03 μ g/mL, IC₅₀ = 98.3 μ g/mL, SI = 3300). **Source:** SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root). **Ref:** 4986.

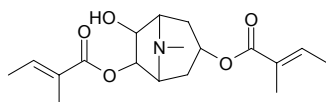


9855 1 ζ -Hydroxy-1,7-bis(4-hydroxy-3-methoxyphenyl)-6-heptene-3,5-dione
 1 ζ -Hydroxydihydrocurcumin $C_{21}H_{22}O_7$ (386.41). Yellow powder, mp 92~94°C. **Pharm:** Neuroprotective (*in vitro* protects PC12 cells from β -Amyloid insult: anti- β A(25-35), ED₅₀ = (30.7 \pm 3.3) μ g/mL; anti- β A(1-41), ED₅₀ = (44.3 \pm 3.1) μ g/mL; control Congo red: anti- β A(25-35), ED₅₀ = (37.5 \pm 5.4) μ g/mL; anti- β A(1-41), ED₅₀ = (39.2 \pm 5.2) μ g/mL)^[4643]. **Source:** GAO LIANG JIANG *Alpinia officinarum*, JIANG HUANG *Curcuma longa* (turmeric powder: yield = 0.00008%dw). **Ref:** 660, 4643.

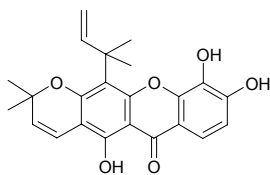


9856 7-Hydroxy-3,6-bis(tigloyloxy)tropane

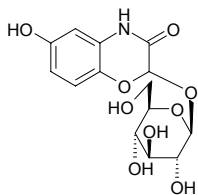
$C_{18}H_{27}NO_5$ (337.42). Source: MAO MAN TUO LUO GEN *Datura innoxia*.
Ref: 6, 660.

**9857 3-Hydroxyblancoxanthone**

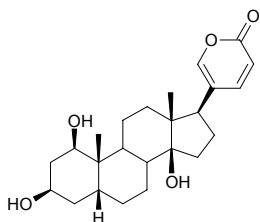
Macluraxanthone $C_{23}H_{22}O_6$ (394.43). Yellowish powder. Pharm: Antimalarial; anthelmintic (termites); larvicide (toxic to mosquito larvae); cytotoxic (HSC-2 cells, $CC_{50} > 0.51$ mmol/L; HGF, $CC_{50} > 0.51$ mmol/L)^[3025]; antibacterial inactive (*Staphylococcus aureus*, 20µg/disk; *Escherichia coli*, 20µg/disk; *Vibrio anguillarum*, 20µg/disk)^[3866]; antifungal inactive (*Candida tropicalis*, 20µg/disk)^[3866]; antioxidant (DPPDPH scavenger, 50µmol/L, ScRt = 75.9%, $IC_{50} = 19.0$ µmol/L; control BHT, 50µmol/L, ScRt = 51.7%, $IC_{50} = 28.9$ µmol/L)^[4423]. Source: GOU JI *Cudrania cochinchinensis* (root: yield = 0.00006%dw), HAI TANG GUO *Calophyllum inophyllum* (root cortex and nuts), HUANG NIU MU *Cratoxylum cochinchinense* (root), LUAN YE TENG HUANG *Garcinia ovalifolia*, SANG CHENG *Maclura pomifera*, *Calophyllum blancoi* (root). Ref: 658, 3025, 3866, 4441, 4423.

**9858 6-Hydroxy blepharin**

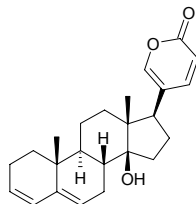
2-*O*-β-*D*-Glucopyranosyl-6-hydroxy-2*H*-1,4-benzoxazin-3(4*H*)-one
 $C_{14}H_{17}NO_9$ (343.29). White solid. Source: YOU CHOU YE ZHI MA *Lamium galeobdolon* (aerial parts). Ref: 3504.

**9859 1β-Hydroxybufalin**

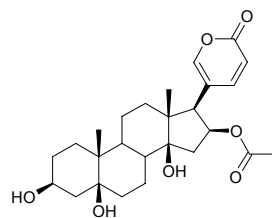
$C_{24}H_{34}O_5$ (402.54). Colorless solid, $[\alpha]_D^{21} = -18.7^\circ$ ($c = 0.1$, CH_3OH). Pharm: Cytotoxic (*in vitro*, KB, $IC_{50} = 0.19$ µg/mL; HL-60, $IC_{50} < 0.01$ µg/mL; MH-60, $IC_{50} > 25$ µg/mL; BXPC3, $IC_{50} = 0.024$ µg/mL; MCF7, $IC_{50} = 0.012$ µg/mL; SF268, $IC_{50} = 0.0044$ µg/mL; NCI-H460, $IC_{50} = 0.014$ µg/mL; KM20L2, $IC_{50} = 0.011$ µg/mL; DU145, $IC_{50} = 0.005$ µg/mL). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 3082.

**9860 14β-Hydroxybufa-3,5,20,22-tetraenolide**

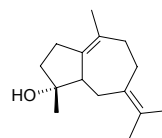
$C_{24}H_{30}O_3$ (366.50). Off-white powdery solid, mp 215–217°C. Source: CHU TU HAI CONG *Urginea epigea* (bulb). Ref: 3882.

**9861 5β-Hydroxybufotalin**

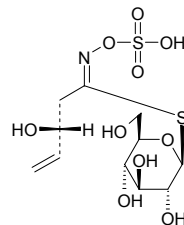
$C_{26}H_{36}O_7$ (460.57). Pharm: Cytotoxic (*in vitro*, KB, $IC_{50} = 0.2$ µg/mL; HL-60, $IC_{50} < 0.01$ µg/mL; MH-60, $IC_{50} > 25$ µg/mL; BXPC3, $IC_{50} = 0.11$ µg/mL; MCF7, $IC_{50} = 0.046$ µg/mL; SF268, $IC_{50} = 0.033$ µg/mL; NCI-H460, $IC_{50} = 0.048$ µg/mL; KM20L2, $IC_{50} = 0.034$ µg/mL; DU145, $IC_{50} = 0.024$ µg/mL). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 3082.

**9862 4-Hydroxy-β-bulnesene**

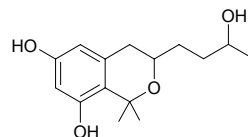
$C_{15}H_{24}O$ (220.36). Source: SHUANG YE XI XIN *Asarum caulescens*. Ref: 660.

**9863 2-Hydroxybut-3-enyl glucosinolate**

Progoitrin $C_{11}H_{19}NO_{10}S_2$ (389.40). Source: JIE CAI *Brassica juncea*. Ref: 660.

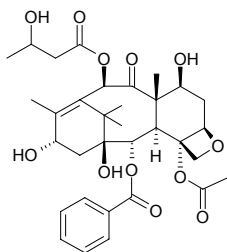
**9864 3-(3-Hydroxybutyl)-1,1-dimethylisochroman-6,8-diol**

$C_{15}H_{22}O_4$ (266.34). White solid, $[\alpha]_D^{20} = -10.0^\circ$ ($c = 0.05$, MeOH). Source: MU LAN⁽³⁾ *Bruguiera gymnorrhiza* (stem). Ref: 5057.

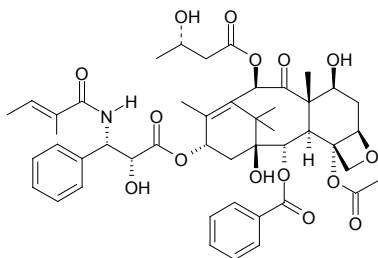


9865 10-(β -Hydroxybutyryl)-10-deacetylbaccatin I

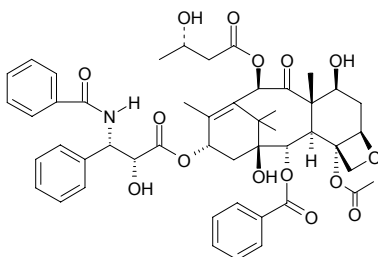
$C_{33}H_{42}O_{12}$ (630.70). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**9866 10-(β -Hydroxybutyryl)-10-deacetylcophalommannine**

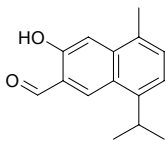
$C_{49}H_{57}NO_{15}$ (875.98). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**9867 10-(β -Hydroxybutyryl)-10-deacetyltaxol**

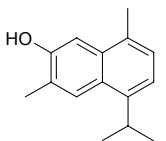
$C_{49}H_{55}NO_{15}$ (897.98). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**9868 7-Hydroxycadalenal**

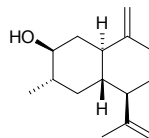
$C_{15}H_{16}O_2$ (228.29). mp 85°C. Source: LANG YU PI *Ulmus parvifolia*. Ref: 6.

**9869 7-Hydroxycadalene**

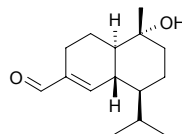
7-Hydroxycadalene [2102-75-2] $C_{15}H_{18}O$ (214.31). White rhombic crystals (hexane), mp 118.0–119.5°C. Pharm: Antibacterial (gram-positive bacteria, MIC = 6.25–12.5 μ g/mL); antioxidant (10 μ g/mL, InRt = 70%); cytotoxic (HeLa, IC₅₀ = 1.96 μ g/mL, BT-20, IC₅₀ = 2.86 μ g/mL). Source: JI SU ZI *Cornus capitata* [Syn. *Dendrobenthamia capitata*], MU MIAN HUA *Bombax malabaricum* [Syn. *Gossampinus malabarica*]. Ref: 1066, 1083, 1142, 1143.

**9870 (4S)-3 β -Hydroxycadina-10(15),12(13)-diene**

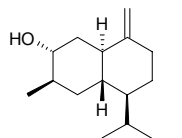
$C_{15}H_{24}O$ (220.36). Amorphous crystals, mp 79–83°C, $[\alpha]_D = +121^\circ$ ($c = 0.015$, CHCl₃). Pharm: Insecticidal (adult *Cylas formicarius elegantulus*, 0.27mg/insect, 24h, mortality = 0%, 48h mortality = 15%, control Farnesyl methyl ether, 0.27mg/insect, 24h, mortality = 85%, 48h mortality = 100%). Source: BAI JIANG JUN *Beauveria bassiana*. Ref: 3949.

**9871 10 α -Hydroxycadin-4-en-15-al**

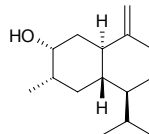
$C_{15}H_{24}O_2$ (236.36). Colorless amorphous solid, $[\alpha]_D^{26} = -12.8^\circ$ ($c = 0.08$, CHCl₃). Source: YI NIAN PENG *Erigeron annuus* (aerial parts). Ref: 4338.

**9872 (4R)-3 α -Hydroxycadin-10(15)-ene**

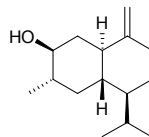
$C_{15}H_{26}O$ (222.37). Amorphous crystals, mp 132–135°C, $[\alpha]_D = -13^\circ$ ($c = 0.05$, CHCl₃). Pharm: Phytogrowth inhibitor (*Raphanus sativus* seeds, IC₅₀ = 0.25 μ g/mL, control Colchicine, IC₅₀ = 0.40 μ g/mL); insecticidal (adult *Cylas formicarius elegantulus*, 0.27mg/insect, 24h, mortality = 15%, 48h mortality = 20%, control Farnesyl methyl ether, 0.27mg/insect, 24h, mortality = 85%, 48h mortality = 100%). Source: BAI JIANG JUN *Beauveria bassiana*. Ref: 3949.

**9873 (4S)-3 α -Hydroxycadin-10(15)-ene**

$C_{15}H_{26}O$ (222.37). Oil. Pharm: Phytogrowth inhibitor (*Raphanus sativus* seeds, IC₅₀ = 0.25 μ g/mL, control Colchicine, IC₅₀ = 0.40 μ g/mL); insecticidal (adult *Cylas formicarius elegantulus*, 0.18mg/insect, 24h, mortality = 85%, 48h mortality = 100%, control Farnesyl methyl ether, 0.18mg/insect, 24h, mortality = 65%, 48h mortality = 95%). Source: BAI JIANG JUN *Beauveria bassiana*. Ref: 3949.

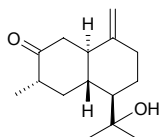
**9874 (4S)-3 β -Hydroxycadin-10(15)-ene**

$C_{15}H_{26}O$ (222.37). Gum. Pharm: Insecticidal (adult *Cylas formicarius elegantulus*, 0.27mg/insect, 24h, mortality = 60%, 48h mortality = 100%, control Farnesyl methyl ether, 0.27mg/insect, 24h, mortality = 85%, 48h mortality = 100%). Source: BAI JIANG JUN *Beauveria bassiana*. Ref: 3949.

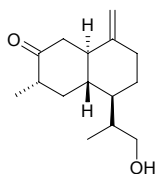


9875 (4S)-12-Hydroxycadin-10(15)-en-3-one

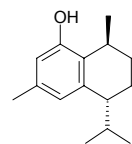
$C_{15}H_{24}O_2$ (236.36). Plates, mp 58~61°C, $[\alpha]_D = -101^\circ$ ($c = 0.082$, $CHCl_3$). **Pharm:** Phytogrowth inhibitor (*Raphanus sativus* seeds, $IC_{50} = 4.90\mu g/mL$, control Colchicine, $IC_{50} = 0.40\mu g/mL$); insecticidal (adult *Cylas formicarius elegantulus*, 0.18mg/insect, 24h, mortality = 45%, 48h mortality = 55%, control Farnesyl methyl ether, 0.18mg/insect, 24h, mortality = 65%, 48h mortality = 95%). **Source:** BAI JIANG JUN *Beauveria bassiana*. **Ref:** 3949.

**9876 (4S)-13-Hydroxycadin-10(15)-en-3-one**

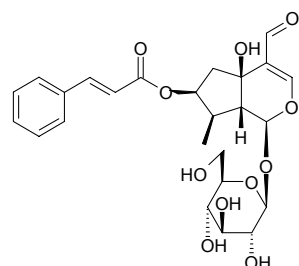
$C_{15}H_{24}O_2$ (236.36). Gum. **Pharm:** Phytogrowth inhibitor (*Raphanus sativus* seeds, $IC_{50} = 1.75\mu g/mL$, control Colchicine, $IC_{50} = 0.40\mu g/mL$); insecticidal (adult *Cylas formicarius elegantulus*, 0.27mg/insect, 24h, mortality = 15%, 48h mortality = 35%, control Farnesyl methyl ether, 0.27mg/insect, 24h, mortality = 85%, 48h mortality = 100%). **Source:** BAI JIANG JUN *Beauveria bassiana*. **Ref:** 3949.

**9877 (+)-8-Hydroxycalamenone**

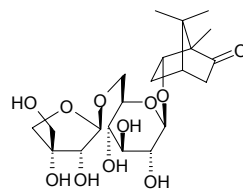
$C_{15}H_{22}O$ (218.34). **Pharm:** Antibacterial; fish toxin; toxin. **Source:** CONG JIAN MU *Dysoxylum alliaceum*, RUI JIAO JIAN MU *Dysoxylum acutangulum*. **Ref:** 658.

**9878 5-Hydroxycampenoside**

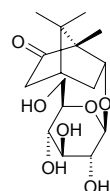
$C_{25}H_{30}O_{11}$ (506.51). **Source:** ZI WEI JING YE *Campsis grandiflora*. **Ref:** 660.

**9879 (1R,4S,6S)-6-Hydroxycamphor-β-D-apiofuranosyl-(1→6)-β-D-glucopyranoside**

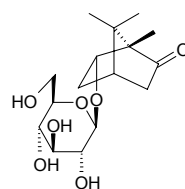
$C_{21}H_{34}O_{11}$ (462.50). Amorphous powder, $[\alpha]_D^{21} = -73^\circ$ ($c = 0.5$, MeOH). **Source:** HU SUI ZI *Coriandrum sativum*. **Ref:** 4302.

**9880 (1S,4R,6S)-6-Hydroxycamphor-β-D-glucopyranoside**

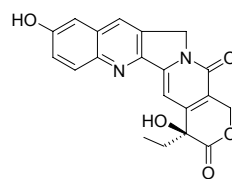
$C_{16}H_{26}O_7$ (330.38). **Source:** SUO SHA MI *Amomum xanthioides* (seed). **Ref:** 4365.

**9881 (1R,4S,6S)-6-Hydroxycamphor-β-D-glucopyranoside**

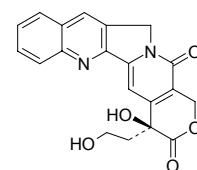
$C_{16}H_{26}O_7$ (330.38). **Source:** SUO SHA MI *Amomum xanthioides* (seed). **Ref:** 4365.

**9882 10-Hydroxycamptothecin**

$C_{20}H_{16}N_2O_5$ (364.36). mp 268~270°C. **Pharm:** Antineoplastic; mutagen. **Source:** XI SHU *Camptotheca acuminata*. **Ref:** 4, 658.

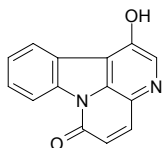
**9883 18-Hydroxycamptothecin**

[116139-46-9] $C_{20}H_{16}N_2O_5$ (364.36). Yellow acicular crystals, mp 256~258°C, $[\alpha]_D^{11} = -21.4^\circ$ ($c = 0.11$, pyridine). **Pharm:** Cytotoxic (P₃₈₈). **Source:** XI SHU *Camptotheca acuminata*. **Ref:** 98.

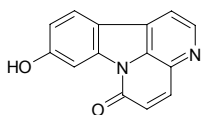


9884 1-Hydroxycanthin-6-one

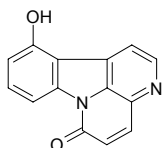
$C_{14}H_8N_2O_2$ (236.23). Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.000014%dw), *Eurycoma* sp. Ref: 4556, 4728.

**9885 9-Hydroxycanthin-6-one**

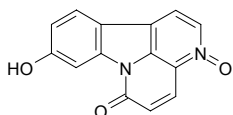
$C_{14}H_8N_2O_2$ (236.23). Pharm: Cytotoxic (*in vitro*, A549, ED_{50} = 10 μ g/mL; MCF7, ED_{50} = 19.6 μ g/mL; HIV, no significant effect)^[4728]; antimalarial (*Plasmodium falciparum* W2, IC_{50} = 2.3 μ g/mL)^[4728]. Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.00086%dw), *Eurycoma harmandiana* (root). Ref: 4728, 5137.

**9886 11-Hydroxycanthin-6-one**

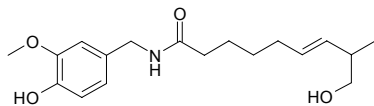
$C_{14}H_8N_2O_2$ (236.23). Source: *Eurycoma* sp. Ref: 4556.

**9887 9-Hydroxycanthin-6-one 3-N-oxide**

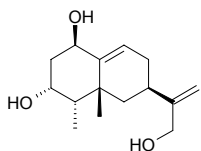
$C_{14}H_8N_2O_3$ (252.23). Pharm: Antimalarial inactive (*Plasmodium falciparum* clones W2, D6, and TM91C235)^[4728]. Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.000057%dw), *Eurycoma* sp. Ref: 4556, 4728.

**9888 ω -Hydroxycapsaicin**

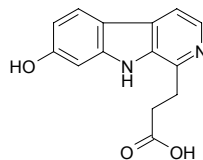
$C_{18}H_{27}NO_4$ (321.42). Light yellow oil, $[\alpha]_D^{20}$ = +3.5° (c = 0.28, $CHCl_3$) Source: HONG HAI JIAO *Capsicum annuum* (fruit: yield = 0.00007%). Ref: 4710.

**9889 13-Hydroxycapsidiol**

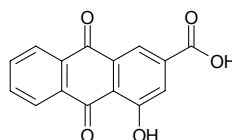
$C_{15}H_{24}O_3$ (252.36). Source: HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.0016%dw). Ref: 4779.

**9890 7-Hydroxy- β -carboline-1-propionic acid**

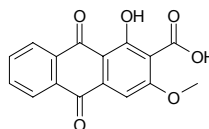
$C_{14}H_{12}N_2O_3$ (256.26). Amorphous powder. Source: *Eurycoma harmandiana* (root), *Eurycoma* sp. Ref: 4556, 5137.

**9891 4-Hydroxy-2-carboxyanthraquinone**

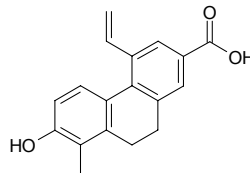
$C_{15}H_8O_5$ (268.32). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 660.

**9892 1-Hydroxy-2-carboxy-3-methoxyanthraquinone**

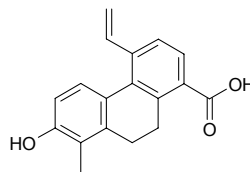
$C_{16}H_{10}O_6$ (298.25). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 660.

**9893 2-Hydroxy-7-carboxy-1-methyl-5-ethenyl-9,10-dihydrophenanthrene**

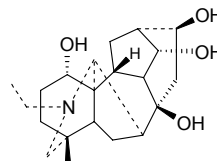
$C_{18}H_{16}O_3$ (280.33). Source: DENG XIN CAO *Juncus effusus*. Ref: 660.

**9894 2-Hydroxy-8-carboxy-1-methyl-5-ethenyl-9,10-dihydrophenanthrene**

$C_{18}H_{16}O_3$ (280.33). Source: DENG XIN CAO *Juncus effusus*. Ref: 660.

**9895 16 β -Hydroxycardiopetaline**

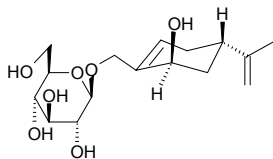
$C_{21}H_{33}NO_4$ (363.50). Amorphous solid, $[\alpha]_D^{20}$ = -11.3° (c = 0.15, $CHCl_3$). Source: BAN HUA WU TOU *Aconitum variegatum* (aerial parts). Ref: 5270.



9896 (4R,6S)-7-Hydroxycarveol 7-O- β -D-glucopyranoside

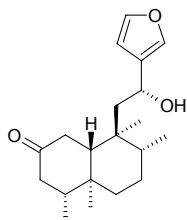
$C_{16}H_{26}O_7$ (330.38). Amorphous powder, $[\alpha]_D^{24} = +12^\circ$ ($c = 0.4$, MeOH).

Source: GE LU ZI *Carum carvi* (fruit). Ref: 4153.

**9897 (12R)-12-Hydroxy cascarillon**

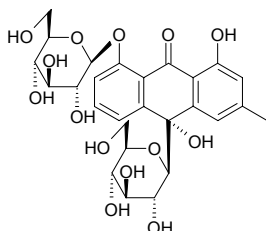
$C_{20}H_{30}O_3$ (318.46). $[\alpha]_D = -47.6^\circ$ ($c = 0.31$, $CHCl_3$). Source: GE LUN BI YA

BA DOU *Croton schiedeana*. Ref: 2049.

**9898 10-Hydroxycascaroside C**

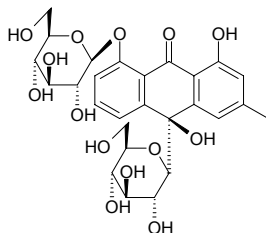
$C_{27}H_{32}O_{14}$ (580.55). Pale yellow amorphous, $[\alpha]_D^{21} = -41.2^\circ$ ($c = 0.051$,

MeOH). Source: ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (root). Ref: 4273.

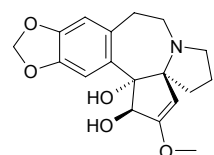
**9899 10-Hydroxycascaroside D**

$C_{27}H_{32}O_{14}$ (580.55). Pale yellow amorphous, $[\alpha]_D^{21} = -81.9^\circ$ ($c = 0.085$,

MeOH). Source: ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (root). Ref: 4273.

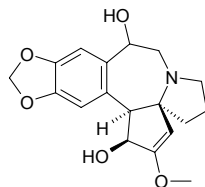
**9900 4-Hydroxycephalotaxine**

[84567-08-8] $C_{18}H_{21}NO_5$ (331.37). Source: SAN JIAN SHAN *Cephalotaxus fortunei*. Ref: 2, 660.

**9901 11-Hydroxycephalotaxine**

[49686-55-7] $C_{18}H_{21}NO_5$ (331.37). Source: SAN JIAN SHAN *Cephalotaxus*

fortunei, SAN JIAN SHAN *Cephalotaxus fortunei* (drupe: yield = 0.00012%)^[4675], ZHONG GUO CU FEI ZHI YE *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*]. Ref: 2, 660, 1521, 4675.

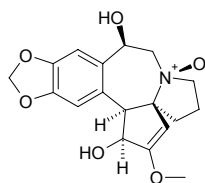
**9902 11- β -Hydroxycephalotaxine β -N-oxide**

$C_{18}H_{21}NO_6$ (347.37). Amorphous solid, $[\alpha]_D^{21} = -94^\circ$ ($c = 0.5$, $CHCl_3$). Pharm:

Cytotoxic (*in vitro*, nasopharynx KB cells, $IC_{50} = 31 \mu g/mL$, weak activity).

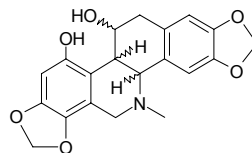
Source: SAN JIAN SHAN *Cephalotaxus fortunei* (drupe: yield = 0.00036%).

Ref: 4675.

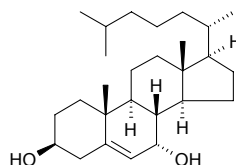
**9903 10-Hydroxychelidonine**

$C_{20}H_{19}NO_6$ (369.38). mp 203~204°C, $[\alpha]_D^{20} = +107^\circ$ ($c = 0.28$, $CHCl_3$).

Source: BAI QU CAI *Chelidonium majus*. Ref: 1521.

**9904 7 α -Hydroxycholesterol**

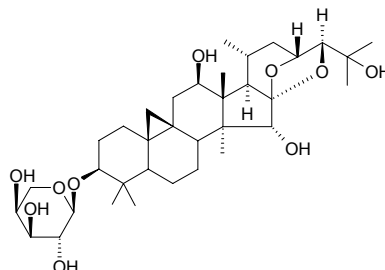
$C_{27}H_{46}O_2$ (402.67). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 6.

**9905 12 β -Hydroxycimigenol 3-O- α -L-arabinopyranoside**

$C_{35}H_{58}O_{10}$ (363.83). Pharm: Cytotoxic (HSC-2 cells, $IC_{50} = 74 \mu mol/L$, control

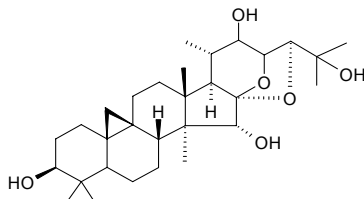
Etoposide, $IC_{50} = 24 \mu mol/L$; HGF cells, $IC_{50} = 352 \mu mol/L$). Source: ZONG

ZHUANG SHENG MA *Cimicifuga racemosa* (rhizome). Ref: 4158.

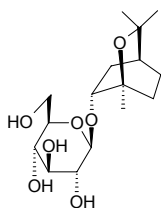


9906 (2R)-22-Hydroxycimigenol

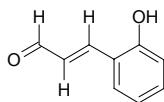
$C_{30}H_{48}O_6$ (504.71). White powder, mp 270~273°C. Source: SAN MIAN DAO *Cimicifuga acerina*. Ref: 873.

**9907 (1R,2R,4S)-2-Hydroxy-1,8-cineole β-D-glucopyranoside**

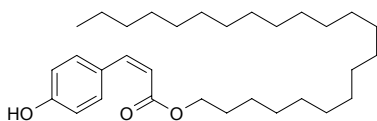
$C_{16}H_{28}O_7$ (332.40). Source: GUAN CANG ZHU *Atractylodes japonica* (fresh rhizome). Ref: 4310.

**9908 2'-Hydroxycinnamaldehyde**

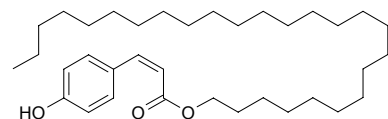
$C_9H_8O_2$ (148.16). Bright crystals (acetone-hexane), mp 131~132°C. Pharm: Farnesyl-protein transferase inhibitor (ox brain, IC_{50} = 22μg/mL). Source: GUI ZHI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*]. Ref: 1163.

**9909 4'-Hydroxy-cis-cinnamic acid docosyl ester**

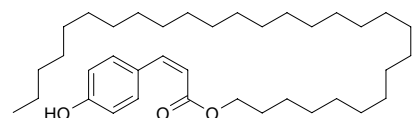
$C_{31}H_{52}O_3$ (472.76). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**9910 4'-Hydroxy-cis-cinnamic acid hexacosyl ester**

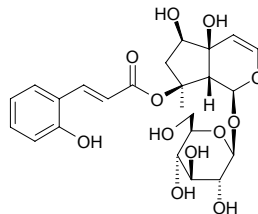
$C_{35}H_{60}O_3$ (528.87). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**9911 4'-Hydroxy-cis-cinnamic acid octacosyl ester**

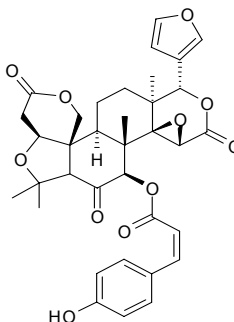
$C_{37}H_{64}O_3$ (556.92). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**9912 8-O-(2-Hydroxycinnamoyl)harpagide**

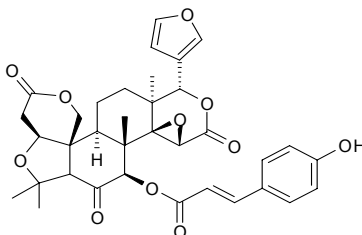
$C_{24}H_{30}O_{12}$ (510.50). Gum, $[\alpha]_D^{25}$ = -35.73° (c = 0.187, MeOH). Source: XUAN SHEN *Scrophularia ningpoensis*. Ref: 1855.

**9913 cis-p-Hydroxycinnamoylrutaevin**

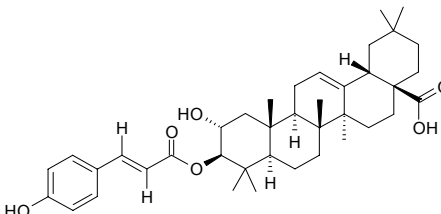
Rutaevin (*Z*)-*p*-hydroxycinnamate [195392-12-2] $C_{35}H_{36}O_{11}$ (632.67). Source: WEI KONG CAO *Microula sikkimensis*. Ref: 720.

**9914 trans-p-Hydroxycinnamoylrutaevin**

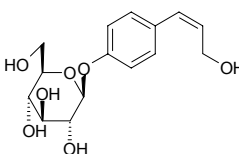
Rutaevin (*E*)-*p*-hydroxycinnamate [195392-13-3] $C_{35}H_{36}O_{11}$ (632.67). Source: WEI KONG CAO *Microula sikkimensis*. Ref: 720.

**9915 3-O-p-Hydroxy-trans-cinnamoylmaslinic acid**

$C_{39}H_{54}O_6$ (618.86). Source: LI MU *Lyonia ovalifolia*. Ref: 6.

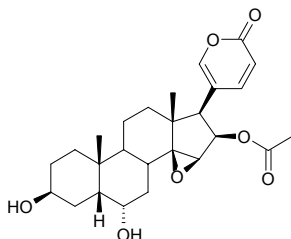
**9916 (Z)-4-Hydroxycinnamyl alcohol 4-O-β-D-glucopyranoside**

$C_{15}H_{20}O_7$ (312.32). Amorphous powder, $[\alpha]_D^{22}$ = -63° (c = 0.2, MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 4242.

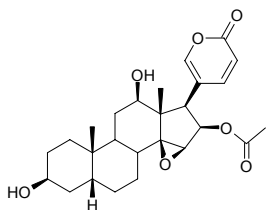


9917 6 α -Hydroxycinobufagin

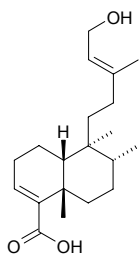
$C_{26}H_{34}O_7$ (458.56). Colorless solid, $[\alpha]_D^{21} = -3.2^\circ$ ($c = 0.1$, CH_3OH). **Pharm:** Cytotoxic (*in vitro*, KB, $IC_{50} = 0.87\mu g/mL$; HL-60, $IC_{50} = 0.038\mu g/mL$; MH-60, $IC_{50} > 25\mu g/mL$; BXPC3, $IC_{50} = 0.46\mu g/mL$; MCF7, $IC_{50} = 0.36\mu g/mL$; SF268, $IC_{50} = 0.32\mu g/mL$; NCI-H460, $IC_{50} = 0.74\mu g/mL$; KM20L2, $IC_{50} = 0.28\mu g/mL$; DU145, $IC_{50} = 0.21\mu g/mL$). **Source:** CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. **Ref:** 3082.

**9918 12 β -Hydroxycinobufagin**

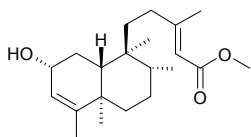
$C_{26}H_{34}O_7$ (458.56). **Pharm:** Cytotoxic (*in vitro*, KB, $IC_{50} = 0.79\mu g/mL$; HL-60, $IC_{50} < 0.01\mu g/mL$; MH-60, $IC_{50} > 25\mu g/mL$). **Source:** CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. **Ref:** 3082.

**9919 (+)-15-Hydroxy-cis-cleroda-3,13-dien-18-oic acid**

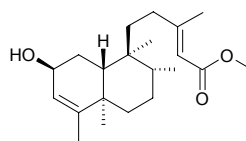
$C_{20}H_{32}O_3$ (320.48). **Source:** GE LUN BI YA BA DOU *Croton schiedeanus* (aerial parts). **Ref:** 4447.

**9920 2 α -Hydroxy-3,13-clerodadien-15-oic acid methyl ester**

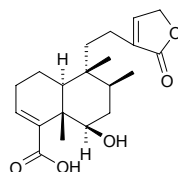
$C_{27}H_{34}O_3$ (334.50). $[\alpha]_D^{24} = -78.3^\circ$ ($c = 0.41$, $CHCl_3$). **Source:** GAO YI ZHI HUANG HUA *Solidago altissima*. **Ref:** 2366.

**9921 2 β -Hydroxy-3,13-clerodadien-15-oic acid methyl ester**

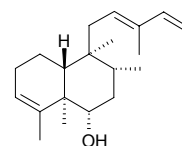
$C_{27}H_{34}O_3$ (334.50). $[\alpha]_D^{24} = -5.9^\circ$ ($c = 0.8$, $CHCl_3$). **Source:** GAO YI ZHI HUANG HUA *Solidago altissima*. **Ref:** 2366.

**9922 (-)-6 β -Hydroxy-5 β ,8 β ,9 β ,10 α -cleroda-3,13-dien-16,15-olid-18-oic acid**

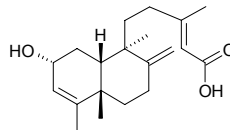
$C_{20}H_{28}O_5$ (348.44). Colorless gummy solid, $[\alpha]_D^{24} = -75^\circ$ ($c = 0.2$, $MeOH$). **Pharm:** α -Glucosidase inhibitor ($IC_{50} = (577.7 \pm 19.0)\mu mol/L$, control Deoxynojirimycin, $IC_{50} = (425.6 \pm 8.1)\mu mol/L$). **Source:** JIA LIAN QIAO YE *Duranta repens*. **Ref:** 4050.

**9923 6 α -Hydroxy-3,12E,14-clerodatriene**

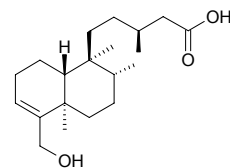
$C_{20}H_{32}O$ (288.48). $[\alpha]_D^{20} = -40.9^\circ$ ($c = 0.13$, $CHCl_3$). **Source:** *Heteroscyphus billardieri*, *Plagiochila deltoidea*. **Ref:** 4284.

**9924 2- α -Hydroxy-cis-cleroda-3,13(Z),8(17)-trien-15-oic acid**

$C_{20}H_{30}O_3$ (318.46). Colorless oil, $[\alpha]_D^{25} = -35.0^\circ$ ($c = 0.5$, $CHCl_3$). **Pharm:** Antibacterial (*Bacillus cereus*, MIC = 0.625 μg , control Tetracyclin, MIC = 0.25 μg ; *Bacillus coagulans*, MIC = 0.625 μg , Tetracyclin, MIC = 0.25 μg ; *Bacillus subtilis*, MIC = 1.25 μg , Tetracyclin, MIC = 0.25 μg ; *Micrococcus luteus*, MIC = 0.625 μg , Tetracyclin, MIC = 0.25 μg ; *Staphylococcus aureus*, MIC = 0.625 μg , Tetracyclin, MIC = 5.0 μg)^[5419]. **Source:** *Haplopappus foliosus*. **Ref:** 5419.

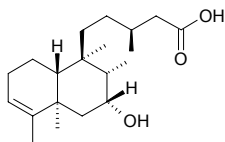
**9925 ent-18-Hydroxy-3-cleroden-15-oic acid**

$C_{20}H_{34}O_3$ (322.49). **Source:** *Nuxia sphaerocephala* (leaf). **Ref:** 4419.

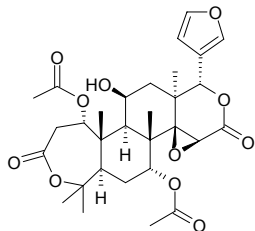


9926 (13S)-ent-7 β -Hydroxy-3-cleroden-15-oic acid

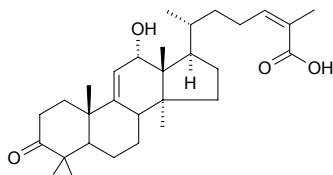
$C_{20}H_{34}O_3$ (322.49). Colorless oil, $[\alpha]_D^{20} = -32.3^\circ$ ($c = 0.4$, $CHCl_3$). **Pharm:** Antimalarial (*Plasmodium falciparum* FcB1, $IC_{50} = (14.6 \pm 1.4) \mu g/mL$, control Chloroquine, $IC_{50} = (0.05 \pm 0.002) \mu g/mL$). **Source:** *Nuxia sphaerocephala* (leaf). **Ref:** 4419.

**9927 11 β -Hydroxycneurin G**

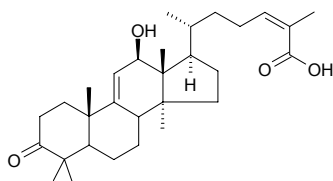
$C_{30}H_{38}O_{11}$ (574.63). Colorless prisms ($CHCl_3$ -MeOH), mp 279–281°C, $[\alpha]_D^{23} = -41.1^\circ$ ($c = 0.1$, $CHCl_3$). **Source:** ZHONG GUO YANG CHUN *Cedrela sinensis* (leaf). **Ref:** 3883.

**9928 12 α -Hydroxycoccinic acid**

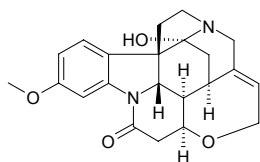
$C_{30}H_{46}O_4$ (470.70). **Pharm:** Antineoplastic^[2523]; anti-HIV^[2523]. **Source:** LENG FAN TUAN *Kadsura coccinea* [syn. *Kadsura chenensis*; *Kadsura hainanensis*], YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*]. **Ref:** 2436, 2523.

**9929 12 β -Hydroxycoccinic acid**

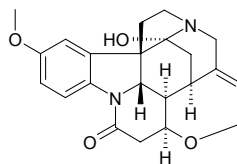
$C_{30}H_{46}O_4$ (470.70). **Pharm:** Antineoplastic^[2523]; anti-HIV^[2523]. **Source:** LENG FAN TUAN *Kadsura coccinea* [syn. *Kadsura chenensis*; *Kadsura hainanensis*], YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*]. **Ref:** 2436, 2523.

**9930 16-Hydroxy- α -colubrine**

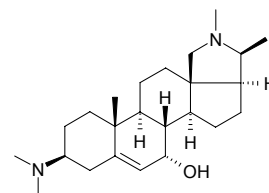
[34479-58-8] $C_{22}H_{24}N_2O_4$ (380.45). **Source:** MA QIAN ZI *Strychnos nux-vomica*. **Ref:** 6.

**9931 16-Hydroxy- β -colubrine**

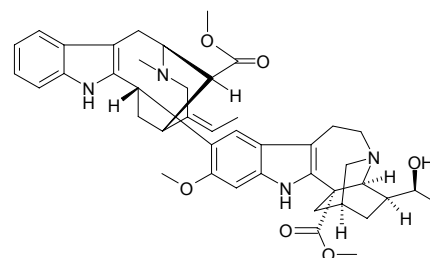
[29079-34-3] $C_{22}H_{24}N_2O_4$ (380.45). **Source:** MA QIAN ZI *Strychnos nux-vomica*. **Ref:** 6.

**9932 7 α -Hydroxyconessine**

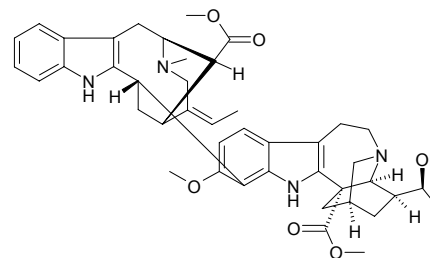
$C_{24}H_{40}N_2O$ (372.60). mp 176–178°C, $[\alpha]_D^{20} = -61^\circ$ ($c = 0.95$, $CHCl_3$). **Source:** ZHI XIE MU PI *Holarrhena antidysenterica*. **Ref:** 6, 1521.

**9933 19'(S)-Hydroxyconoduramine**

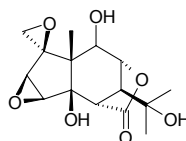
$C_{43}H_{52}N_4O_6$ (720.92). Light yellowish oil, $[\alpha]_D = -43^\circ$ ($c = 0.63$, $CHCl_3$). **Source:** SAN FANG HUA XU HONG YUE GUI *Tabernaemontana corymbosa*. **Ref:** 3403.

**9934 19'(S)-Hydroxyconodurine**

$C_{43}H_{52}N_4O_6$ (720.92). Light yellowish oil, $[\alpha]_D = -69^\circ$ ($c = 0.12$, $CHCl_3$). **Source:** SAN FANG HUA XU HONG YUE GUI *Tabernaemontana corymbosa*. **Ref:** 3403.

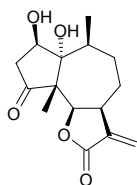
**9935 Hydroxycoriatin**

$C_{15}H_{20}O_7$ (312.32). White acicular crystals, mp 260°C (dec). **Source:** MA SANG *Coriaria sinica* [Syn. *Coriaria nepalensis*]. **Ref:** 413.

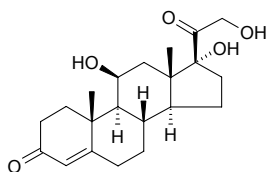


9936 2 β -Hydroxycoronopilin

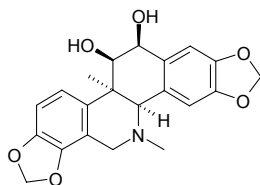
C₁₅H₂₀O₅ (280.32). Colorless needles (EtOAc), mp 185–187°C. Source: YIN JIAO JU *Parthenium hysterophorus* (aerial parts). Ref: 5106.

**9937 17-Hydroxycorticosterone**

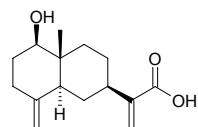
17-Oxycorticosterone C₂₁H₃₀O₅ (362.47). mp 220°C. Source: NIU SHEN *Bos taurus domesticus*; *Bubalus bubalis*, REN NIAO *Homo sapiens*, ZHI XIE MU *PI Holarrhena antidysenterica*. Ref: 6.

**9938 12-Hydroxycorynoline**

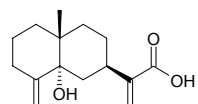
C₂₁H₂₁NO₆ (383.40). Source: KU DI DING *Corydalis bungeana*, ZI HUA YU DENG CAO *Corydalis incisa* Ref: 660.

**9939 1 β -Hydroxycostic acid**

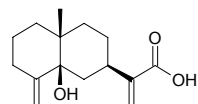
C₁₅H₂₂O₃ (250.34). Source: LIU LENG JU *Laggera alata* (aerial parts: yield = 0.00076%dw). Ref: 4709.

**9940 5 α -Hydroxycostic acid**

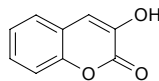
C₁₅H₂₂O₃ (250.34). Source: LIU LENG JU *Laggera alata* (aerial parts: yield = 0.00055%dw). Ref: 4709.

**9941 5 β -Hydroxycostic acid**

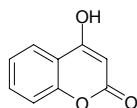
C₁₅H₂₂O₃ (250.34). Source: LIU LENG JU *Laggera alata* (aerial parts: yield = 0.00038%dw). Ref: 4709.

**9942 3-Hydroxycoumarin**

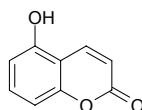
[1939-19-5] C₉H₆O₃ (162.15). Source: SANG YE *Morus alba*. Ref: 6.

**9943 4-Hydroxycoumarin**

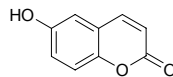
[1076-38-6] C₉H₆O₃ (162.15). Source: SANG YE *Morus alba*. Ref: 6.

**9944 5-Hydroxycoumarin**

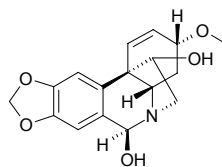
[6093-67-0] C₉H₆O₃ (162.15). Pharm: Cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity)^[3069]. Source: SANG YE *Morus alba*, ZHONG GUO XIU QIU *Hydrangea chinensis* (root)^[3069]. Ref: 6, 3069.

**9945 6-Hydroxycoumarin**

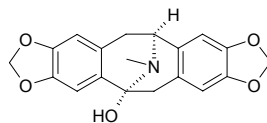
C₉H₆O₃ (162.15). Source: SANG YE *Morus alba*. Ref: 6.

**9946 6-Hydroxycrinamine**

C₁₇H₁₉NO₅ (317.34). Pharm: AChE inhibitor (IC₅₀ = (490±7)μmol/L, control Galanthamine, IC₅₀ = (1.9±0.2)μmol/L)^[4952]. Source: LIN JING ZHONG ZI WEN SHU LAN *Crinum bulbispermum*. Ref: 4952.

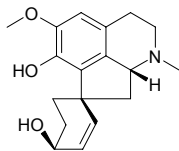
**9947 (-)-12-Hydroxycrychine**

C₁₉H₁₇NO₅ (339.35). Colorless needles (MeOH), mp 173–174°C, [α]_D = -143.0° (c = 0.2764, MeOH). Source: HOU KE GUI *Cryptocarya chinensis* (wood). Ref: 3092.

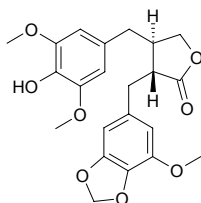


9948 1-Hydroxycyprochine

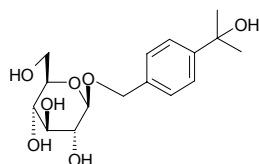
$C_{18}H_{23}NO_3$ (301.39). Colorless needles (acetone), mp 117–119°C, $[\alpha]_D = +65.32^\circ$ ($c = 0.322$, MeOH). Source: HOU KE GUI *Cryptocarya chinensis* (leaf). Ref: 4129.

**9949 (8*R*,8'*R*)-4-Hydroxycubebinone**

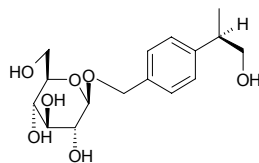
$C_{22}H_{24}O_8$ (416.43). Pale yellow oil, $[\alpha]_D^{25} = -30.0^\circ$ ($c = 0.08$, $CHCl_3$). Pharm: CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4, $IC_{50} = 7.4\mu\text{mol/L}$; CYP2D6, $IC_{50} > 100\mu\text{mol/L}$; control Ketoconazole, CYP3A4, $IC_{50} = 0.72\mu\text{mol/L}$; control Quinidine, CYP2D6, $IC_{50} = 0.082\mu\text{mol/L}$)^[4797]. Source: BI CHENG QIE *Piper cubeba* (fruit: yield = 0.00011%dw). Ref: 4797.

**9950 8-Hydroxycuminyl β-D-glucopyranoside**

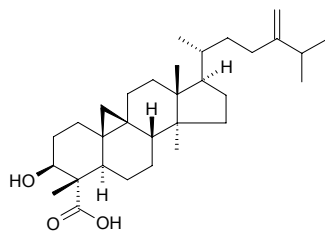
$C_{16}H_{24}O_7$ (328.37). Amorphous powder, $[\alpha]_D^{24} = -40^\circ$ ($c = 0.5$, MeOH). Source: ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.

**9951 (8*R*)-9-Hydroxycuminyl β-D-glucopyranoside**

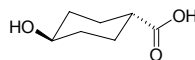
$C_{16}H_{24}O_7$ (328.37). Amorphous powder, $[\alpha]_D^{24} = -44^\circ$ ($c = 1.5$, MeOH). Source: ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.

**9952 3β-Hydroxy-5α-cycloart-24(31)-en-28-oic acid**

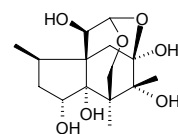
$C_{31}H_{50}O_3$ (470.74). Pharm: Anti-HIV-1 (syncytium assay: $IC_{50} = 120.1\mu\text{g/mL}$, $EC_{50} = 58.1\mu\text{g/mL}$; HIV-1 RT assay: $200\mu\text{g/mL}$, $\text{InRt} = 93.6\%$, $IC_{50} = 43.5\mu\text{g/mL}$, Fagaronine chloride $IC_{50} = 10.9\mu\text{g/mL}$, Nevirapine $IC_{50} = 1.8\mu\text{g/mL}$). Source: TAI GUO ZHI ZI *Gardenia thailandica* (leaf and twig). Ref: 4963.

**9953 trans-4-Hydroxycyclohexane-1-carboxylic acid**

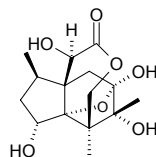
$C_7H_{12}O_3$ (144.17). Source: DU ZHONG YE *Eucommia ulmoides*. Ref: 660.

**9954 3α-Hydroxycycloparvifloralone**

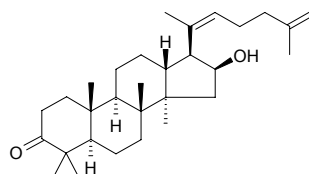
$C_{15}H_{24}O_7$ (316.35). Colorless amorphous powder, $[\alpha]_D^{19} = +11^\circ$ ($c = 1.35$, CH_3OH). Pharm: Neurotrophic bioassay inactive (primary culture of rat cortical neurons, 0.1–10 $\mu\text{mol/L}$). Source: *Illicium merrillianum* (pericarp: yield = 0.034%dw). Ref: 3046.

**9955 10β-Hydroxycyclopseudoanisatin**

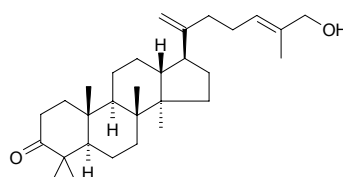
$C_{15}H_{22}O_7$ (314.34). Source: *Illicium merrillianum* (pericarp). Ref: 4257.

**9956 16β-Hydroxy-dammara-20(22),25-dien-3-one**

$C_{30}H_{48}O_2$ (440.72). Colorless acicular crystals (MeOH), mp 182°C, $[\alpha]_D^{21.5} = +58^\circ$ ($c = 1.0$, $CHCl_3$). Source: XIANG GANG JIAN MU *Dysoxylum hongkongense*. Ref: 422.

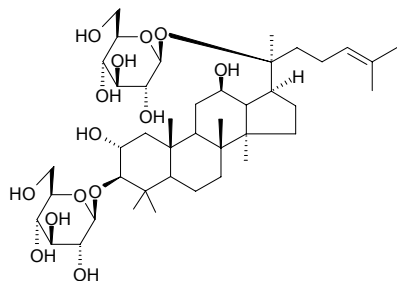
**9957 26-Hydroxy-dammara-20,24-dien-3-one**

$C_{30}H_{48}O_2$ (440.72). Colorless acicular crystals (MeOH), mp 69°C, $[\alpha]_D^{21.5} = +58^\circ$ ($c = 1.0$, $CHCl_3$). Source: XIANG GANG JIAN MU *Dysoxylum hongkongense*. Ref: 422.

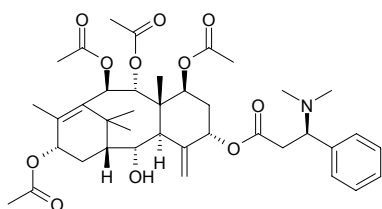


9958 2 α ,3 β ,12 β ,20(S)-3-Hydroxydammar-24-en-20-O- β -D-glucopyranoside

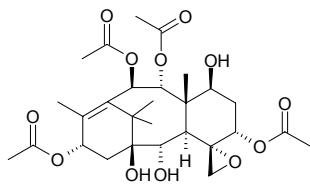
C₄₂H₇₂O₁₄ (801.03). White powder, mp 207–209°C, [α]_D²⁰ = +3.8° (*c* = 0.1, MeOH). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2516.

**9959 2 α -Hydroxy-2' β -Deacetylaustrospicatine**

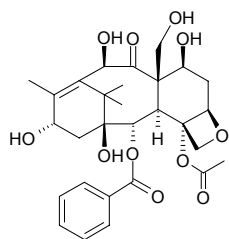
C₃₉H₅₃NO₁₁ (711.86). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. Ref: 662.

**9960 1 β -Hydroxy-2 α ,7 β -deacetylbaccatin I**

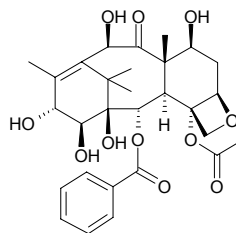
C₂₈H₄₀O₁₂ (568.62). Amorphous solid, [α]_D^{21.7} = +63.83° (*c* = 0.047, acetone). Source: HONG DOU SHAN *Taxus chinensis*. Ref: 2490.

**9961 19-Hydroxy-10-deacetylbaccatin III**

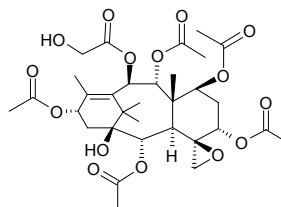
C₂₉H₃₆O₁₁ (560.60). Pharm: Cytotoxic (*in vitro*, 30 μg/mL: A498, InRt = 16.6%; NCI-H226, InRt = 32.0%; A549, InRt = 0%; PC3, InRt = 2.3%; control Taxol, 30 μg/mL: A498, InRt = 98.2%; NCI-H226, InRt = 71.2%; A549, InRt = 79.7%; PC3, InRt = 91.7%). Source: SU MEN DA LA HONG DOU SHAN *Taxus sumatrana* (leaf and twig). Ref: 4800.

**9962 14 β -Hydroxy-10-deacetylbaccatin III**

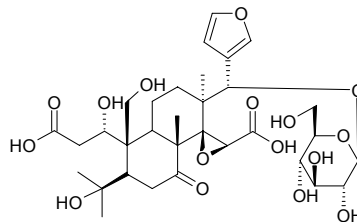
C₂₉H₃₆O₁₁ (560.60). Source: XI MA LA YA HONG DOU SHAN *Taxus wallichiana*. Ref: 662.

**9963 1 β -Hydroxy-10-deacetyl-10-glycolylbaccatin I**

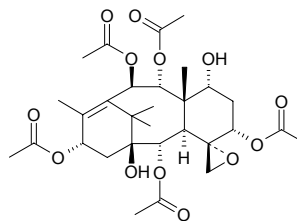
C₃₂H₄₄O₁₅ (668.70). Gum. Source: JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle leaf). Ref: 3958.

**9964 19-Hydroxydeacetylnomilinic acid-17- β -D-glucopyranoside**

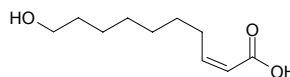
C₃₂H₄₆O₁₆ (686.71). Source: ZHI SHI *Citrus aurantium*. Ref: 660.

**9965 1 β -Hydroxy-7 β -deacetyoxy-7 α -hydroxybaccatin I**

C₃₀H₄₂O₁₃ (610.66). Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

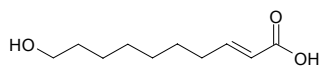
**9966 ω -cis-Hydroxy- Δ^2 -decenoic acid**

C₁₀H₁₈O₃ (186.25). mp (*trans*) 64–65°C. Source: FENG RU *Apis cerana*. Ref: 6.

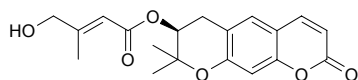


9967 ω -trans-Hydroxy- Δ^2 -decanoic acid

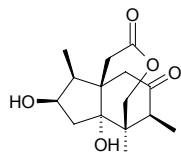
[765-01-5] C₁₀H₁₈O₃ (186.25). Source: FENG JIAO *Apis mellifera ligustica* (bee glue: content = 0.22%^[5508]), FENG RU *Apis cerana*. Ref: 6, 5508.

**9968 4''-Hydroxydecursin**

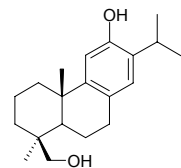
C₁₉H₂₀O₆ (344.37). Colorless needles (MeOH), mp 101~103°C, [α]_D = +59° (*c* = 0.5, CHCl₃). Pharm: Neuroprotective (primary cultures of rat cortical cells, control, cell viability = 100%, injured by glutamate, cell viability = 0%, 0.1 μmol/L, cell viability = (38.4±4.0)%, *p*<0.05, 1 μmol/L, cell viability = (34.1±3.5)%, *p*<0.05, 10 μmol/L, cell viability = (35.1±4.5)%, *p*<0.05). Source: CHAO XIAN DANG GUI *Angelica gigas* (root: yield = 0.001%dw). Ref: 4796.

**9969 2β-Hydroxy-3,6-dedioxypseudoanisatin**

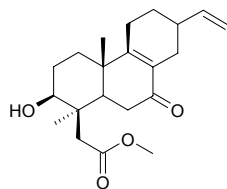
C₁₅H₂₂O₅ (282.34). [α]_D²² = -22.0° (*c* = 1.08, MeOH). Source: *Illicium merrillianum* (pericarp). Ref: 4257.

**9970 12-Hydroxydehydroabietinol**

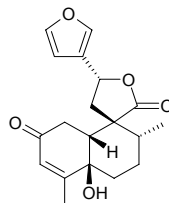
C₂₀H₃₀O₂ (302.46). Source: YUN NAN FEI SHU *Torreya yunnanensis* (leaf and twig: yield = 0.0012%dw). Ref: 4707.

**9971 3β-Hydroxy-cis-dehydrocrotonin**

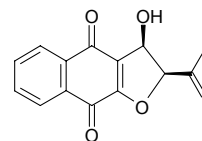
C₂₁H₃₀O₄ (346.47). Source: *Croton joufra*. Ref: 4552.

**9972 5β-Hydroxy-cis-dehydrocrotonin**

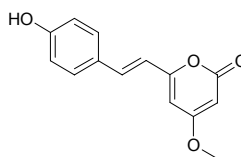
C₁₉H₂₂O₅ (330.38). Colorless needles, mp 182~183°C (MeOH-ether), [α]_D = +14.6° (*c* = 0.8, CHCl₃). Source: GE LUN BI YA BA DOU *Croton schiedeanus*. Ref: 2049.

**9973 3-Hydroxydehydro-iso- α -lapachone**

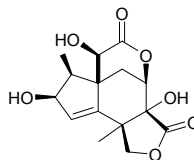
C₁₅H₁₂O₄ (256.26). Source: CAI DOU SHU *Radermachera sinica*. Ref: 660.

**9974 4'-Hydroxy-5,6-dehydrokawain**

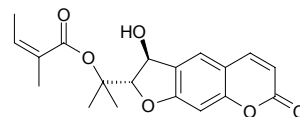
C₁₄H₁₂O₄ (244.25). Pharm: Cytotoxic (Colon26-L5, ED₅₀ = 20.7 μmol/L; HT1080, ED₅₀ = 20.1 μmol/L)^[3042]. Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00185%). Ref: 3042.

**9975 (2S)-Hydroxy-3,4-dehydronomajucin**

C₁₅H₁₈O₇ (310.31). Pharm: Neurotrophic (primary cultures of fetal rat cortical neuron, 0.1-10 μmol/L, significantly promotes neurite outgrowth)^[4621]. Source: JIA DI FENG PI *Illicium jiadifengpi* (pericarp: yield = 0.0049%dw). Ref: 4621.

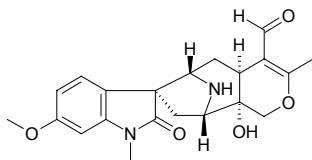
**9976 (3'S)-Hydroxydeltoin**

C₁₉H₂₀O₆ (344.37). White powder, [α]_{589nm} = -45°. Source: FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*]. Ref: 3508.

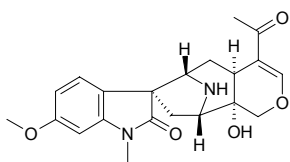


9977 16-Hydroxy-N(4)-demethylalstophyllal oxindole

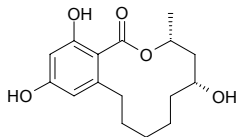
$C_{21}H_{24}N_2O_5$ (384.44). White amorphous powder, $[\alpha]_D^{25} = +203^\circ$ ($c = 0.11$, $CHCl_3$). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0016%). Ref: 3020.

**9978 16-Hydroxy-N(4)-demethylalstophylline oxindole**

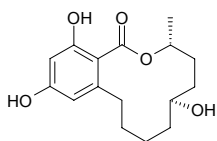
$C_{21}H_{24}N_2O_5$ (384.44). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0019%). Ref: 3020.

**9979 (3R),(5R)-5-Hydroxy-de-O-methylasiodiplodin**

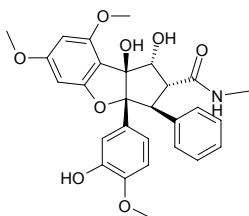
$C_{16}H_{22}O_5$ (294.35). Colorless powder, mp 158–160°C, $[\alpha]_D^{25} = +19.6^\circ$ ($c = 0.5$, MeOH). Pharm: Potato micro-tuber inducer (100 μmol/L, control Jasmonic acid, 1 μmol/L, Theobroxide, 10 μmol/L). Source: *Lasiodiplodia theobromae*. Ref: 3966.

**9980 (3R),(6R)-6-Hydroxy-de-O-methylasiodiplodin**

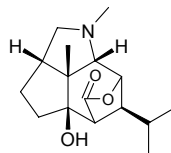
$C_{16}H_{22}O_5$ (294.35). Colorless powder, mp 200–201°C, $[\alpha]_D^{25} = -5.36^\circ$ ($c = 0.4$, MeOH). Pharm: Potato micro-tuber inducer (100 μmol/L, control Jasmonic acid, 1 μmol/L, Theobroxide, 10 μmol/L). Source: *Lasiodiplodia theobromae*. Ref: 3966.

**9981 3'-Hydroxy-N-demethylrocaglamide**

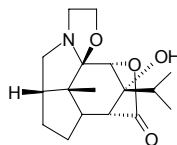
[222854-53-7] $C_{28}H_{29}NO_8$ (507.55). $[\alpha]_D^{20} = -59.5^\circ$ ($c = 0.25$, $CHCl_3$). Source: MI ZI LAN *Aglaia odorata*. Ref: 2289.

**9982 6-Hydroxydendrobine**

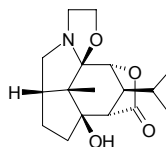
Dendramine $C_{16}H_{25}NO_3$ (279.38). Source: SHI HU⁽⁴⁾ *Dendrobium nobile*. Ref: 660.

**9983 4-Hydroxydendroxine**

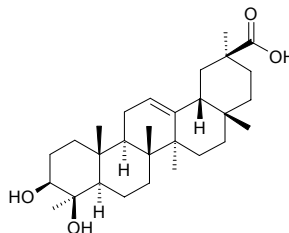
$C_{17}H_{25}NO_4$ (307.39). Source: SHI HU⁽⁴⁾ *Dendrobium nobile*. Ref: 660.

**9984 6-Hydroxydendroxine**

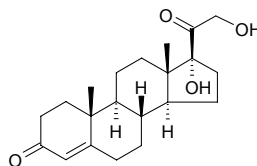
$C_{17}H_{25}NO_4$ (307.39). Source: SHI HU⁽⁴⁾ *Dendrobium nobile*. Ref: 6.

**9985 24-Hydroxy-11-deoxoglycyrrhetic acid**

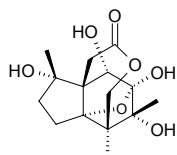
$C_{29}H_{46}O_4$ (458.69). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 2, 660.

**9986 17-Hydroxy-11-deoxy-corticosterone**

$C_{21}H_{30}O_4$ (346.47). mp 207–208°C. Source: NIU SHEN *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 6.

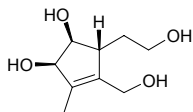
**9987 8α-Hydroxy-10-deoxycyclomerrillianolide**

$C_{15}H_{22}O_7$ (314.34). $[\alpha]_D^{20} = -49.0^\circ$ ($c = 1.55$, MeOH). Source: *Illicium merrillianum* (pericarp). Ref: 4257.

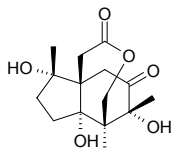


9988 7-Hydroxy-10-deoxyeucommiol

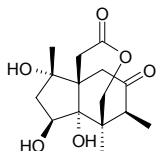
$C_9H_{16}O_4$ (188.23). Yellow oil, $[\alpha]_D^{17} = -53.44^\circ$ ($c = 1.06$, MeOH). Source: DIAO DENG SHU *Kigelia pinnata*. Ref: 3418.

**9989 1 α -Hydroxy-3-deoxypseudoanisatin**

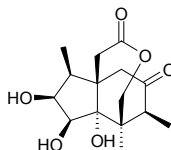
1 α -Hydroxy-3-deoxypseudoanisatin $C_{15}H_{22}O_6$ (298.34). Source: MIN WAN BA JIAO *Illicium minwanense* (pericarp: yield = 0.00055%dw), *Illicium merrillianum* (pericarp: yield = 0.00025%dw). Ref: 3046, 4697.

**9990 1 α -Hydroxy-6-deoxypseudoanisatin**

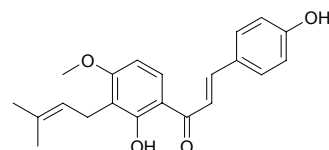
$C_{15}H_{22}O_6$ (298.34). $[\alpha]_D^{21} = 7.6^\circ$ ($c = 1.50$, MeOH). Source: MIN WAN BA JIAO *Illicium minwanense* (pericarp: yield = 0.00095%dw). Ref: 4697.

**9991 (2S)-Hydroxy-6-deoxypseudoanisatin**

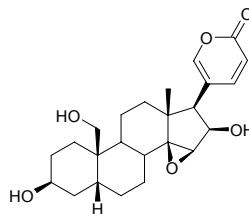
$C_{15}H_{22}O_6$ (298.34). mp 223~224°C, $[\alpha]_D^{20} = -23.3^\circ$ ($c = 0.38$, MeOH). Source: MIN WAN BA JIAO *Illicium minwanense* (pericarp: yield = 0.0013%dw). Ref: 4697.

**9992 4-Hydroxyderricin**

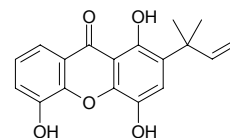
$C_{21}H_{22}O_4$ (338.41). Pharm: Antineoplastic and antimetastatic (25mg/kg or 50mg/kg bid, inhibits tumor growth on 8 to 14days, prolongs survival time and increased the survival rate compared to those in mouse after the removal of tumors and inhibits metastasis to the lung in tumor-removed mouse and the increase of lung weight; 50mg/kg bid orl, reduces tumor weight at 15days was of 4-hydroxyderricin). Source: BIN HAI DANG GUI *Angelica keiskei* (root). Ref: 4945.

**9993 19-Hydroxydesacetylcinobufagin**

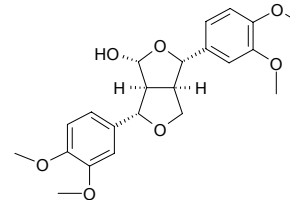
Desacetylcinobufaginol $C_{24}H_{32}O_6$ (416.52). Pharm: Cytotoxic (*in vitro*, KB, $IC_{50} = 3.9\mu\text{g/mL}$; HL-60, $IC_{50} = 0.49\mu\text{g/mL}$; MH-60, $IC_{50} > 25\mu\text{g/mL}$). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 3082.

**9994 12b-Hydroxy-des-D-ring-garcigerin A**

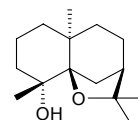
$C_{18}H_{16}O_5$ (312.33). Pharm: Neurite outgrowth activity (NGF-mediated, PC12D cells, $EC = 10\mu\text{mol/L}$)^[3473]. Source: DA YE TENG HUANG *Garcinia xanthochymus* (wood), *Garcinia vilsersiana* (bark). Ref: 3473, 3902.

**9995 (+)-4-Hydroxy-2,6-di(3,4-dimethoxy)phenyl-3,7-dioxabicyclo[3.3.0]octane**

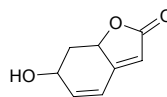
$C_{22}H_{26}O_7$ (402.45). White powder (MeOH), mp 171~173°C, $[\alpha]_D^{22} = +29.5^\circ$ ($c = 0.45$, CHCl_3). Source: JU DA LAN CI TOU *Echinops giganteus* (root). Ref: 3828.

**9996 4-Hydroxydihydroagarofuran**

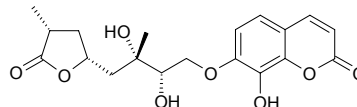
$C_{15}H_{26}O_2$ (238.37). mp 130~131°C. Source: CHEN XIANG *Aquilaria agallocha*. Ref: 6, 13.

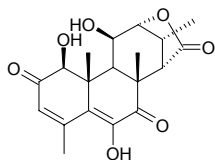
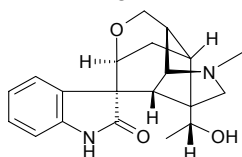
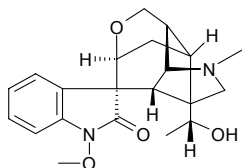
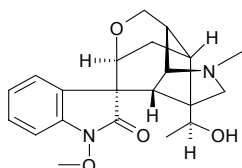
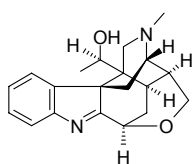
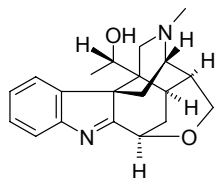
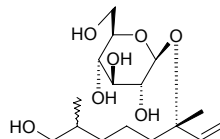
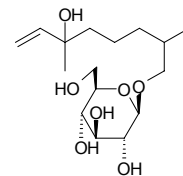
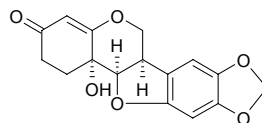
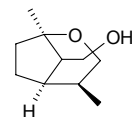
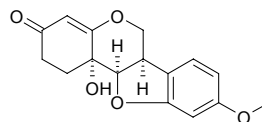
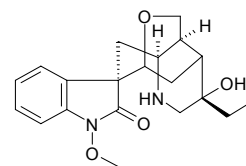
**9997 6-Hydroxy-7,7 α -dihydro-2(6H)-benzofuranone**

$C_8H_8O_3$ (152.15). Colorless needles (*n*-hexane), mp 112~114°C, $[\alpha]_D^{25} = +69.4^\circ$ ($c = 0.036$, MeOH). Source: MA YE QIAN LI GUANG *Senecio cannabifolius*. Ref: 4809.

**9998 8-Hydroxy-3'',4''-dihydrocapnolactone-2',3'-diol**

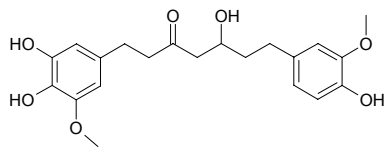
$C_{19}H_{22}O_8$ (378.38). Colorless semisolid. Source: JI XIAO XIAO YUN XIANG MU *Micromelum minutum* (leaf). Ref: 3467.



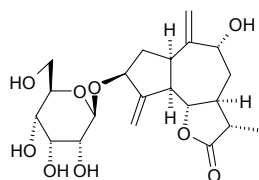
9999 6-Hydroxy-5,6-dihydroeurycomalactoneC₁₉H₂₂O₇ (362.38). Source: *Eurycoma* sp. Ref: 4556.**10000 19-(R)-Hydroxydihydrogelsemine**C₂₀H₂₄N₂O₃ (340.43). mp 230–232°C, [α]_D = –20°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.**10001 19-(R)-Hydroxydihydrogelsevirine**C₂₁H₂₆N₂O₄ (370.45). mp 210–212°C, [α]_D = –34°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.**10002 19-(S)-Hydroxydihydrogelsevirine**C₂₁H₂₆N₂O₄ (370.45). Amorphous, [α]_D = –68°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.**10003 19-(R)-Hydroxydihydrokoumine**C₂₀H₂₄N₂O₂ (324.43). mp 198–200°C, [α]_D = –232.7°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.**10004 19-(S)-Hydroxydihydrokoumine**C₂₀H₂₄N₂O₂ (324.43). mp 270–272°C, [α]_D = –184.6°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.**10005 (3S)-8-Hydroxy-6,7-dihydrolinalol 3-O-β-D-glucopyranoside**C₁₆H₃₀O₇ (334.41). Amorphous powder, [α]_D²¹ = –8° (c = 0.5, MeOH). Source: HU SUI ZI *Coriandrum sativum*. Ref: 4302.**10006 8-Hydroxy-6,7-dihydrolinalool 8-O-glucopyranoside**C₁₆H₃₀O₇ (334.41). Gum. Source: XIANG SI CAO *Comyza bonariensis* [Syn. *Erigeron bonariensis*; *Erigeron linifolius*; *Erigeron crispus*] (aerial parts). Ref: 5206.**10007 11b-Hydroxy-11b,1-dihydromaackiain**C₁₆H₁₄O₆ (302.29). Pharm: Hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by *D*-galactosamine (GalN), 100 μmol/L, InRt = (8.4±0.5)%, inactive, control Silybin, 100 μmol/L, InRt = (77.0±5.5)%). Source: GUANG BU DING GONG TENG *Erycibe expansa*. Ref: 4095.**10008 7-Hydroxydihydrumatatabiether**C₁₀H₁₈O₂ (170.25). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 6.**10009 11b-Hydroxy-11b,1-dihydromedicarpin**C₁₆H₁₆O₅ (288.30). Pharm: Hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by *D*-galactosamine (GalN), 100 μmol/L, InRt = (6.5±0.8)%, inactive, control Silybin, 100 μmol/L, InRt = (77.0±5.5)%). Source: GUANG BU DING GONG TENG *Erycibe expansa*. Ref: 4095.**10010 20-Hydroxydihydrorankinidine**[135626-62-9] C₂₀H₂₆N₂O₄ (358.44). mp 173–174°C, [α]_D = –165°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.

10011 5-Hydroxy-1-(3,4-dihydroxy-5-methoxyphenyl)-7-(4-hydroxy-3-methoxyphenyl)heptan-3-one

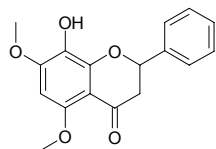
$C_{21}H_{26}O_7$ (390.44). Colorless oil. Source: SHENG JIANG *Zingiber officinale*. Ref: 3803.

**10012 9 α -Hydroxy-11 β ,13-dihydrozaluzanin C 3-O- β -allopyranoside**

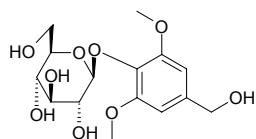
$C_{21}H_{30}O_9$ (426.47). Solid. Source: KAN CHA JIA MAO LIAN CAI *Picris kamschatica*. Ref: 1932.

**10013 2'-Hydroxy-3',5'-diimethoxyflavanone**

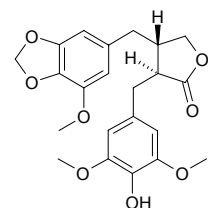
$C_{17}H_{16}O_5$ (300.31). Pale yellow crystals, mp 166~168°C. Source: TIAN ZI YU PAN *Uvaria dulcis* (leaf). Ref: 3928.

**10014 4-Hydroxy-3,5-dimethoxybenzyl alcohol 4-O- β -D-glucopyranoside**

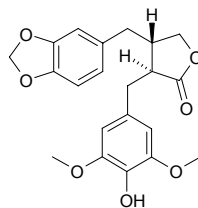
Di-O-Methylcrenatin $C_{15}H_{22}O_9$ (346.34). White powder, mp 175~177°, $[\alpha]_D^{21} = -21^\circ$. Source: HU SUI ZI *Coriandrum sativum*, XIAO YE SHI NAN *Photinia parvifolia* (stem). Ref: 4302, 4553.

**10015 (2S,3S)-2-(4-Hydroxy-3,5-dimethoxybenzyl)-3-(5-methoxy-3,4-methylenedioxybenzyl)butyrolactone**

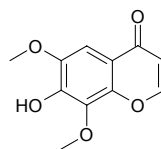
$C_{22}H_{24}O_8$ (416.43). Pale yellow gum, $[\alpha]_D^{25} = +30.5^\circ$ ($c = 0.38$, $CHCl_3$). Source: MENG ZI CAO HU JIAO *Peperomia duclouxii* (whole herb: yield = 0.00036%). Ref: 4733.

**10016 (2S,3S)-2-(4-Hydroxy-3,5-dimethoxybenzyl)-3-(3,4-methylenedioxybenzyl)butyrolactone**

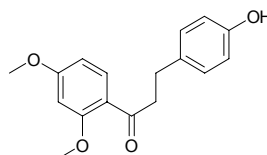
$C_{21}H_{22}O_7$ (386.41). Pale yellow gum, $[\alpha]_D^{25} = +34.8^\circ$ ($c = 0.253$, $CHCl_3$). Source: MENG ZI CAO HU JIAO *Peperomia duclouxii* (whole herb: yield = 0.00024%). Ref: 4733.

**10017 7-Hydroxy-6,8-dimethoxy coumarin**

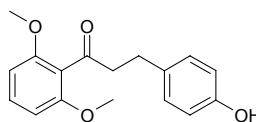
[486-21-5] $C_{11}H_{10}O_5$ (222.20). Yellowish acicular crystals, mp 146~148°C. Source: MAO LIAN HAO *Artemisia vestita*, HUANG HUA HAO *Artemisia annua*. Ref: 474, 660.

**10018 4-Hydroxy-2',4'-dimethoxydihydrochalcone**

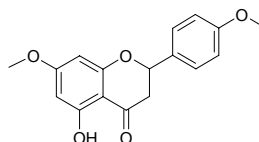
$C_{17}H_{18}O_4$ (286.33). Amorphous powder. Source: LIN JING ZHONG ZI WEN SHU LAN *Crinum bulbispermum* (bulb). Ref: 3997.

**10019 4-Hydroxy-2',6'-dimethoxydihydrochalcone**

$C_{17}H_{18}O_4$ (286.33). White columnar crystals, mp 129~130°C (EtOH). Source: JIAN YE LONG XUE SHU *Dracaena cochinchinensis*. Ref: 414.

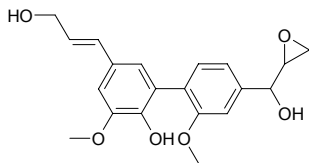
**10020 5-Hydroxy-4',7-dimethoxydihydroflavone**

$C_{17}H_{16}O_5$ (300.31). Pharm: Cytotoxic (*in vitro*, SMMC-7721, $IC_{50} > 200\mu g/mL$; HO-8910, $IC_{50} > 200\mu g/mL$; control Vincristine, SMMC-7721, $IC_{50} = 30.35\mu g/mL$; HO-8910, $IC_{50} = 20.74\mu g/mL$). Source: CHANG YE TIAN MING JING *Carpesium longifolium* (aerial parts: yield = 0.0008%dw). Ref: 4736.

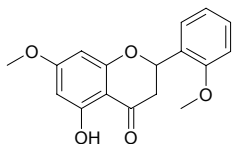


10021 2-Hydroxy-3,2'-dimethoxy-4'-(2,3-epoxy-1-hydroxypropyl)-5-(3-hydroxy-1-propenyl) biphenyl

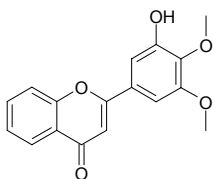
$C_{20}H_{22}O_6$ (358.39). Source: *Eurycoma* sp. Ref: 4556.

**10022 5-Hydroxy-7,2'-dimethoxyflavone**

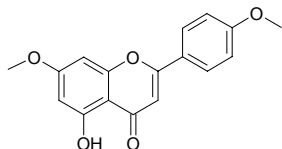
$C_{17}H_{14}O_5$ (300.31). Pale yellow amorphous solid (MeOH), mp 222–224°C. Source: *Andrographis rothii* (whole herb). Ref: 4311.

**10023 3'-Hydroxy-4',5'-dimethoxyflavone**

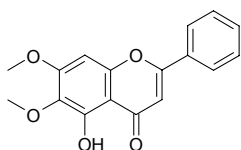
$C_{17}H_{14}O_5$ (298.30). White crystalline solid ($CHCl_3$). Source: HUANG HUA JIU LUN CAO *Primula veris* [Syn. *Primula officinalis*] (leaf). Ref: 5275.

**10024 5-Hydroxy-4',7-dimethoxy-flavone**

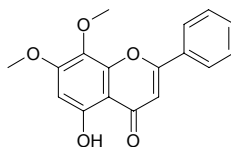
Apigenin-4',7-dimethyl ether [5128-44-9] $C_{17}H_{14}O_5$ (298.30). mp 171–172°C. Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*], MI DIE XIANG *Rosmarinus officinalis*, WU JU LOU DOU CAI *Aquilegia ecalcarata* (whole herb: yield = 0.00014%dw)^[3029], XIONG RUI ZHUANG SHU WEI CAO *Salvia staminea*, YE TAI *Trocholejeunea sandvicensis*, *Nuxia sphaerocephala* (leaf). Ref: 6, 660, 3029, 3909, 4419, 5400.

**10025 5-Hydroxy-6,7-dimethoxyflavone**

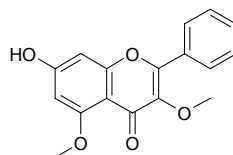
$C_{17}H_{14}O_5$ (298.30). Source: BAN BIAN SU *Elsholtzia ciliata*, SHI XIANG RU *Mosla chinensis* [Syn. *Orthodon chinensis*]. Ref: 660.

**10026 5-Hydroxy-7,8-dimethoxyflavone**

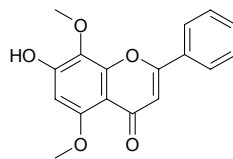
7-O-Methylwogonin [3570-62-5] $C_{17}H_{14}O_5$ (298.30). Source: HUANG QIN *Scutellaria baicalensis*, SHEN CHANG CHUAN XIN LIAN *Andrographis elongata* (whole herb). Ref: 2, 4149.

**10027 7-Hydroxy-3,5-dimethoxyflavone**

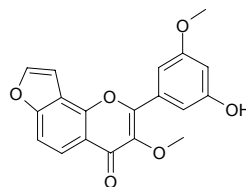
$C_{17}H_{14}O_5$ (298.30). Source: GAO LIANG JIANG *Alpinia officinarum*. Ref: 660.

**10028 7-Hydroxy-5,8-dimethoxyflavone**

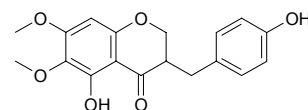
$C_{17}H_{14}O_5$ (298.30). Source: BAN ZHI LIAN *Scutellaria barbata* [Syn. *Scutellaria rivularis*], ZI BEI HUANG QIN *Scutellaria discolor*. Ref: 660.

**10029 3'-Hydroxy,3,5'-dimethoxy furo[8,7:4'',5'']flavone**

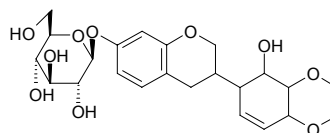
$C_{19}H_{14}O_6$ (338.32). White crystals (MeOH), mp 230°C. Source: SHUI LIU DOU *Pongamia pinnata* (fruit). Ref: 3767.

**10030 5-Hydroxy-6,7-dimethoxy-3-(4'-hydroxybenzyl)-4-chromanone**

$C_{18}H_{18}O_6$ (330.34). Yellow powder, mp 74–76°C (dec), $[\alpha]_D^{25} = +345.3^\circ$ ($c = 0.43$, MeOH). Source: HE CAO YE JIA BEI FANG FENG *Ledebouria graminifolia* (tuber). Ref: 3368.

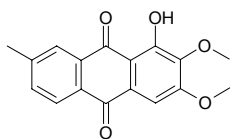
**10031 2'-Hydroxy-3',4'-dimethoxy-isoflavane-7-O-β-D-glucoside**

$C_{23}H_{32}O_{10}$ (468.51). Source: HUANG QI *Astragalus membranaceus*. Ref: 2.

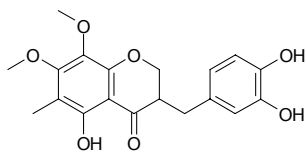


10032 1-Hydroxy-2,3-dimethoxy-7-methyl-9,10-anthraquinone

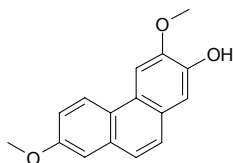
$C_{17}H_{14}O_5$ (298.30). Red needles (acetone), mp 159~161°C. Source: NAN SHAN HUA *Prismatomeris tetrandra* (root). Ref: 4521.

**10033 5-Hydroxy-7,8-dimethoxy-6-methyl-3-(3',4'-dihydroxybenzyl)chroman-4-one**

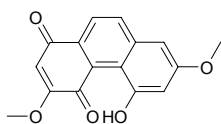
$C_{19}H_{20}O_7$ (360.37). Source: MAI DONG *Ophiopogon japonicus*. Ref: 660.

**10034 2-Hydroxy-3,7-dimethoxyphenanthrene**

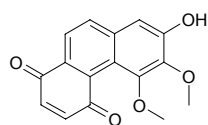
$C_{16}H_{14}O_3$ (254.29). Source: DI SUO LUO *Marchantia polymorpha*. Ref: 660.

**10035 5-Hydroxy-3,7-dimethoxy-1,4-phenanthrenequinone**

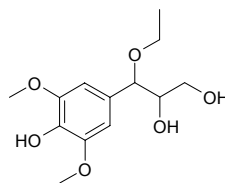
$C_{16}H_{12}O_5$ (284.27). Pharm: VHR DS-PTPase inhibitor ($IC_{50} > 200 \mu\text{mol/L}$, control RK-682, $IC_{50} = 11.6 \mu\text{mol/L}$); PTP1B inhibitor ($IC_{50} > 200 \mu\text{mol/L}$); Ppase1 inhibitor ($IC_{50} > 200 \mu\text{mol/L}$). Source: XI JING SHI HU *Dendrobium moniliforme* (stem). Ref: 5025.

**10036 7-Hydroxy-5,6-dimethoxy-1,4-phenanthrene-quinone**

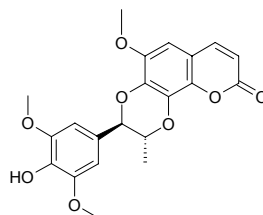
$C_{16}H_{12}O_5$ (284.27). Pharm: VHR DS-PTPase inhibitor ($IC_{50} = (3.0 \pm 0.2) \mu\text{mol/L}$, control RK-682, $IC_{50} = 11.6 \mu\text{mol/L}$)^[5025]; PTP1B inhibitor ($IC_{50} = (38.0 \pm 1.5) \mu\text{mol/L}$); Ppase1 inhibitor ($IC_{50} > 200 \mu\text{mol/L}$). Source: XI JING SHI HU *Dendrobium moniliforme* (stem). Ref: 5025.

**10037 threo-3-(4-Hydroxy-3,5-dimethoxyphenyl)-3-ethoxypropane-1,2-diol**

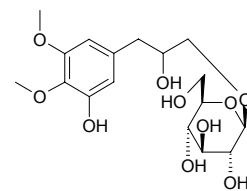
$C_{13}H_{20}O_6$ (272.3). Amorphous white powder, $[\alpha]_D^{25} = +28^\circ$ ($c = 0.10$, CHCl_3). Source: TIAN XIAN GUO *Ficus beecheyana* [Syn. *Ficus erecta* var. *beecheyana*] (root; yield = 0.0037%dw). Ref: 4657.

**10038 2-(4-Hydroxy-3,5-dimethoxy-phenyl)-10-methoxy-3-methyl-2,3-dihydro-1,4,5-trioxaphenanthren-6-one**

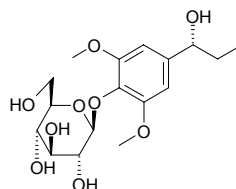
$C_{21}H_{20}O_8$ (400.39). Pale yellow solid, mp 240~244°C, $[\alpha]_D = -6.4^\circ$ ($c = 0.7$, $\text{CHCl}_3:\text{MeOH} = 1:1$). Pharm: Antioxidant (*in vitro*, rat liver microsomes lipid peroxidation, $IC_{50} = 1.4 \mu\text{g/mL}$); MAO inhibitor inactive ($70 \mu\text{g/mL}$). Source: MU JIN HUA *Hibiscus syriacus*. Ref: 3088.

**10039 1'-(3-Hydroxy-4,5-dimethoxyphenyl)propane-2',3'-diol 3'-O-β-D-glucopyranoside**

$C_{17}H_{26}O_{10}$ (390.39). Amorphous powder, $[\alpha]_D^{23} = -6^\circ$ ($c = 0.1$, MeOH). Source: YIN DU ZANG HUI XIANG *Carum ajowan* (fruit). Ref: 3547.

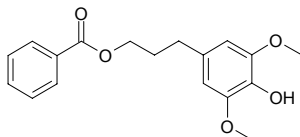
**10040 (1'R)-1'-(4-Hydroxy-3,5-dimethoxyphenyl)propan-1'-ol 4-O-β-D-glucopyranoside**

$C_{17}H_{26}O_9$ (374.39). Amorphous powder, $[\alpha]_D^{23} = -10^\circ$ ($c = 1.0$, MeOH). Source: HU SUI ZI *Coriandrum sativum*. Ref: 4302.

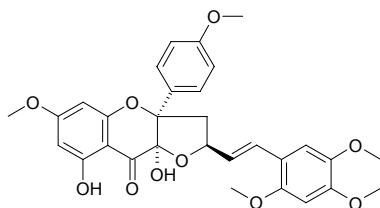


10041 3'-(4''-Hydroxy-3'',5''-dimethoxyphenyl)-propyl benzoate

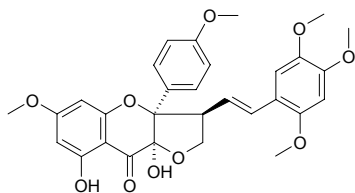
$C_{18}H_{20}O_5$ (316.36). Pale yellow amorphous mass. **Pharm:** Antifungal (*Candida albicans*, $IC_{50} = (11.41 \pm 1.44) \mu\text{g/mL}$, control Amphotericin B, $IC_{50} = (0.04 \pm 0.00) \mu\text{g/mL}$); Anti-inflammatory (COX-1 inhibitor, $IC_{50} = (4.95 \pm 0.58) \mu\text{g/mL}$, control Aspirin, $IC_{50} = (4.22 \pm 0.48) \mu\text{g/mL}$; COX-2 inhibitor, $IC_{50} = (2.11 \pm 0.12) \mu\text{g/mL}$, Aspirin, $IC_{50} = (13.66 \pm 0.59) \mu\text{g/mL}$). **Source:** *Croton hutchinsonianus* (branche: yield = 0.0031%dw). **Ref:** 1571.

**10042 rel-5-Hydroxy-7,4'-dimethoxy-2''S-(2,4,5-trimethoxy-E-styryl)-tetrahydrofuro[4''R,5''R:2,3]flavanonol**

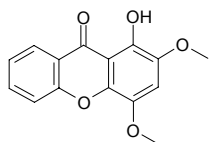
$C_{30}H_{30}O_{10}$ (550.57). Amorphous yellow powder, $[\alpha]_D^{21} = 0^\circ$ ($c = 0.3$, CHCl_3). **Source:** SHAN SHAN JIANG *Alpinia flabellata* (leaf: yield = 0.00040%dw). **Ref:** 4614.

**10043 rel-5-Hydroxy-7,4'-dimethoxy-3''S-(2,4,5-trimethoxy-E-styryl)-tetrahydrofuro[4''R,5''R:2,3]flavanonol**

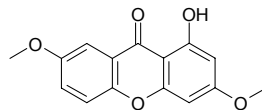
$C_{30}H_{30}O_{10}$ (550.57). Amorphous yellow powder, $[\alpha]_D^{21} = +5.1^\circ$ ($c = 0.2$, CHCl_3). **Source:** SHAN SHAN JIANG *Alpinia flabellata* (leaf: yield = 0.00031%dw). **Ref:** 4614.

**10044 1-Hydroxy-2,4-dimethoxyxanthone**

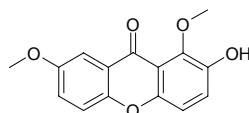
$C_{15}H_{12}O_5$ (272.26). Yellow needles, with yellow fluorescence, mp 165~169°C. **Source:** JIA HUANG HUA YUAN ZHI *Polygala fallax* [Syn. *Polygala aureocauda*]. **Ref:** 2517.

**10045 1-Hydroxy-3,7-dimethoxyxanthone**

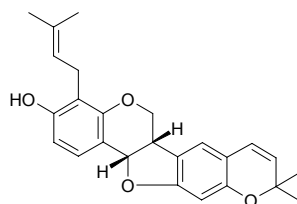
$C_{15}H_{12}O_5$ (272.26). **Source:** YUAN ZHI *Polygala tenuifolia*. **Ref:** 660.

**10046 2-Hydroxy-1,7-dimethoxyxanthone**

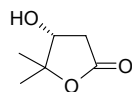
$C_{15}H_{12}O_5$ (272.26). **Source:** CHAN YI TENG *Securidaca inappendiculata* (stem). **Ref:** 5238.

**10047 3-Hydroxy-4-(3,3-dimethylallyl)-4'',5''-dehydropyrano [8,9:2'',3''][6aR,11aR]-pterocarpane**

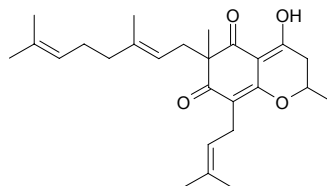
$C_{25}H_{26}O_4$ (390.48). White amorphous powder, mp 74~75°C, $[\alpha]_D^{25} = -36.1^\circ$ ($c = 0.3$, MeOH). **Pharm:** Cytotoxic (KB, $IC_{50} = (52.3 \pm 4.1) \mu\text{mol/L}$, control Helenalin, $IC_{50} = (0.64 \pm 0.08) \mu\text{mol/L}$, Melphalan, $IC_{50} = (6.0 \pm 0.5) \mu\text{mol/L}$; Mono-Mac-6, $IC_{50} > 75 \mu\text{mol/L}$, Helenalin, $IC_{50} = (3.1 \pm 0.3) \mu\text{mol/L}$; Jurkat-T, $IC_{50} = (53.6 \pm 1.1) \mu\text{mol/L}$, Helenalin, $IC_{50} = (1.14 \pm 0.08) \mu\text{mol/L}$, Melphalan, $IC_{50} = (9.1 \pm 0.8) \mu\text{mol/L}$)^[5077]. **Source:** *Bituminaria morisiana* (leaf). **Ref:** 5077.

**10048 (+)-(3R)-3-Hydroxy-4,4-dimethyl-4-butyrolactone**

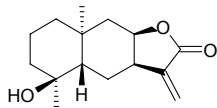
$C_6H_{10}O_3$ (130.14). Colorless oil, $[\alpha]_D^{25} = 53^\circ$ ($c = 0.34$, CHCl_3). **Source:** DA YE BAI TOU WENG *Anaphalis margaritacea*. **Ref:** 3853.

**10049 4-Hydroxy-2,6-dimethyl-6-(3,7-dimethyl-2,6-octadienyl)-8-(3-methyl-2-butenyl)-2H-1-benzopyran-5,7(3H,6H)-dione**

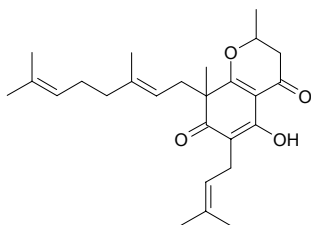
$C_{26}H_{36}O_4$ (412.57). Yellow oil, $[\alpha]_D^{25} = -1.31^\circ$ ($c = 0.57$, CHCl_3). **Source:** BAI BEI YE *Mallous apelta*. **Ref:** 755.



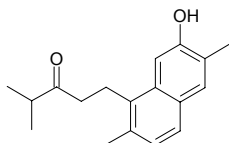
10050 4 β -Hydroxy-4,10 α -dimethyl-7 α H,8 α H-eudesman-11-ene-8,12-olide
 C₁₅H₂₂O₃ (250.34). Gum. Source: HE AN FU LAO JU *Flourensia riparia*
 (aerial parts). Ref: 3820.



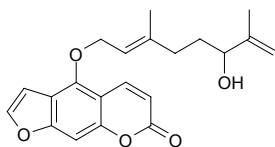
10051 5-Hydroxy-2,8-dimethyl-6-(3-methyl-2-butenyl)-8-(3,7-dimethyl-2,6-octadienyl)-2H-1-benzopyran-4,7(3H,8H)-dione
 C₂₆H₃₆O₄ (412.57). Yellow oil, [α]_D²⁵ = -22° (c = 0.29, CHCl₃). Source: BAI
 BEI YE *Mallotus apelta*. Ref: 755.



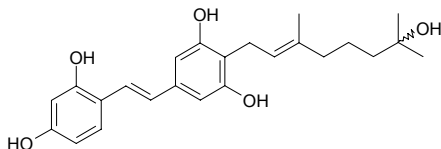
10052 1-(7-Hydroxy-2,6-dimethyl-1-naphthyl)-4-methyl-3-pentanone
 20(10→5)-Abeo-4,5-seco-5(10),6,8,11,13-podocarpapentaen-3-one C₁₈H₂₂O₂
 (270.37). White amorphous solid, mp 98~102°C. Pharm: Cytotoxic (*in vitro*,
 pulmonary adenocarcinoma A549 cells, IC₅₀ > 100 μmol/L; hepatocarcinoma
 Bel7402 cells, IC₅₀ = 34.7 μmol/L; gastric carcinoma BGC823 cells, IC₅₀ =
 35.2 μmol/L; colorectal adenocarcinoma HCT8 cells, IC₅₀ = 23.1 μmol/L;
 ovarian cancer A2780 cells, IC₅₀ > 100 μmol/L). Source: YI YE QIU
Securinega suffruticosa (callus). Ref: 4544.



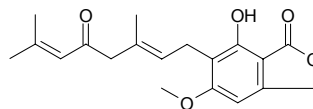
10053 5-(6-Hydroxy-3,7-dimethylocta-2,7-dienyloxy)psoralen
 C₂₁H₂₂O₅ (354.41). White solid. Pharm: Insect antifeedant (larvae of
Spodoptera littoralis, Feeding Index = (25±19)% at 0.001 mol/L; larvae of
Heliothis virescens, Feeding Index = (13±10)% at 0.001 mol/L). Source:
Tetradium daniellii (dried fruit). Ref: 3370.



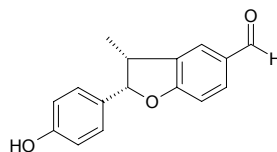
10054 4-[(2''E)-7''-Hydroxy-3'',7''-dimethyloct-2''-enyl]-2'',3,4',5-tetrahydroxy-trans-stilbene
 C₂₄H₃₀O₅ (398.50). Yellowish powder. Pharm: Tyrosinase inhibitor (IC₅₀ =
 96 μmol/L). Source: GAO HUANG LU SANG *Chlorophora excelsa*
 (heartwood). Ref: 4326.



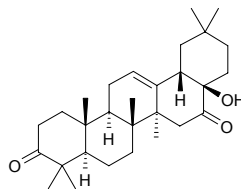
10055 3-Hydroxy-4-(3,7-dimethyl-5-oxo-2,6-octadienyl)-5-methoxybenzo[1,2-c]furan-2-one
 C₁₉H₂₂O₅ (330.38). Source: HOU TOU JUN *Hericium erinaceus* [Syn.
Hydnum erinaceus]. Ref: 660.



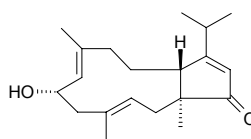
10056 (7S,8R)-4-Hydroxy-8',9'-dinor-4',7-epoxy-8,3'-neolignan-7'-aldehyde
 C₁₆H₁₄O₃ (254.29). Yellow oil, [α]_D²¹ = -30.1° (c = 0.10, MeOH). Source:
Piper regnelli (root). Ref: 2358.



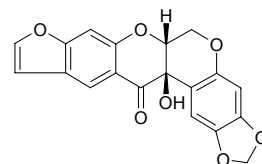
10057 17 β -Hydroxy-3,16-dioxo-28-norolean-12-ene
 C₂₉H₄₄O₃ (440.67). Glassy amorphous solid, [α]_D²⁰ = +39°C (c = 0.12,
 CHCl₃). Source: XIAO SHE JU GEN *Microglossa pyriformis*. Ref: 5374.



10058 (1S*,6S*,11S*)-6-Hydroxydolabella-3E,7E,12-trien-14-one
 C₂₀H₃₀O₂ (302.46). Clear film, [α]_D²⁰ = -142° (c = 0.23, CHCl₃). Source:
 fungus *Stachybotrys chartarum*. Ref: 5104.

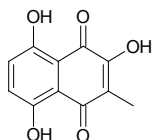


10059 12 α -Hydroxydoloneone
 C₁₉H₁₂O₇ (352.30). Needles (CHCl₃-MeOH), mp 14~195°C, mp 180~181°C,
 [α]_D = +42°. Pharm: Antiviral (HSV-1, IC₅₀ = 25.5 μg/mL, HSV-2, 50 μg/mL,
 InRt = 42.5%)^[4180]. Source: DI GUA ZI *Pachyrhizus erosus*, *Neorautanenia*
edulis, DOU SHU *Pachyrhizus erosus* (seed). Ref: 6, 1521, 4180.

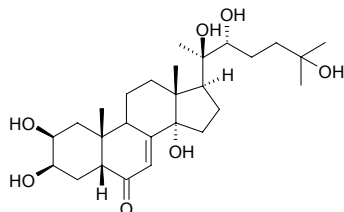


10060 Hydroxydroserone

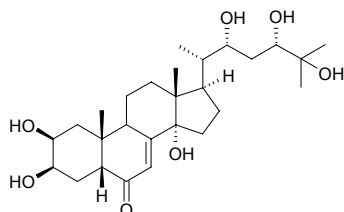
$C_{11}H_8O_5$ (220.18). Red plates (AcOH), mp 192~193°C. Source: MAO GAO CAI *Drosera peltata* var. *lunata*, HUI TE KE MAO GAO CAI *Drosera whittakeri*. Ref: 621, 1521.

**10061 20-Hydroxyecdysone**

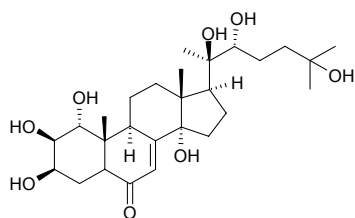
$C_{27}H_{44}O_7$ (480.65). Source: GUAN HUA ROU CONG RONG *Cistanche tubulosa*, YING ZI CAO *Silene fortunei* (root: yield = 0.0032%dw). Ref: 2448, 4658.

**10062 24-Hydroxyecdysone**

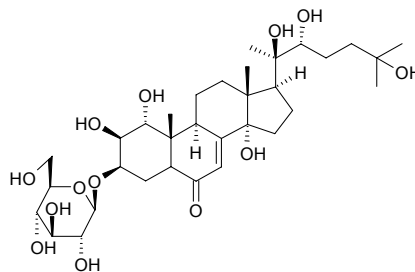
$C_{27}H_{44}O_7$ (480.65). Source: DUO ZU JUE *Polypodium vulgare*. Ref: 1521.

**10063 1 α ,20R-Hydroxyecdysone**

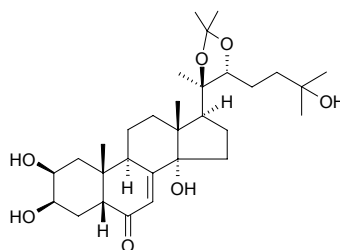
1 α ,20R-Dihydroxyecdysone $C_{27}H_{44}O_8$ (496.65). White powder. Pharm: Ecdysteroid agonist (*Drosophila melanogaster* B₁₁ cell line, EC₅₀ = 7.5nmol/L)^[5142]. Source: MAO JIAN QIU LUO *Lychnis coronaria*, NIU QU TI GEN CAO *Helleborus torquatus* [Syn. *Helleborus serbicus*] (seed). Ref: 2189, 5142.

**10064 20-Hydroxyecdysone 3-O- β -D-glucoside**

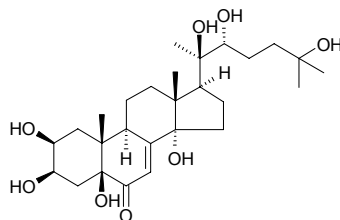
1 α ,20R-Dihydroxyecdysone 3-O- β -D-glucoside $C_{33}H_{54}O_{13}$ (658.79). Pharm: Ecdysteroid agonist (*Drosophila melanogaster* B₁₁ cell line, EC₅₀ = 13 μ mol/L). Source: NIU QU TI GEN CAO *Helleborus torquatus* [Syn. *Helleborus serbicus*] (seed). Ref: 5142.

**10065 20-Hydroxyecdysone-20,22-monoacetonide**

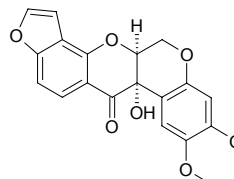
$C_{30}H_{48}O_7$ (520.71). Source: YI BAO MA HUA TOU *Serratula strangulata* (root stem). Ref: 5244.

**10066 5 β -Hydroxyecdysterone**

5 β ,20R-Dihydroxyecdysone $C_{27}H_{44}O_8$ (496.65). mp 256°C. Source: SHUI LONG GU *Polypodium niponicum*. Ref: 6.

**10067 6 α ,12 α ,12 α -Hydroxyelliptone**

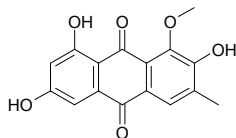
$C_{20}H_{16}O_7$ (368.35). Colorless oil, $[\alpha]_D^{25} = -4.4^\circ$ ($c = 0.068$, CHCl₃). Pharm: Anti-tumor promotor (*in vivo*, mouse skin tumor, inhibits TPA-induced EBV-EA activation, 100 mol ratio/32pmol TPA, EBV-EA positive cells = 66.4% viability, positive control β -Carotene, EBV-EA positive cells = 82.7% viability). Source: YU TENG *Derris trifoliata* (stem). Ref: 4982.



10068 2-Hydroxyemodin 1-methyl ether

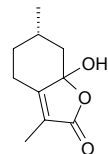
$C_{16}H_{12}O_6$ (300.27). Yellow needles (EtOAc-*n*-hexane), mp 292~294°C.

Pharm: Cytotoxic (*in vitro*, Calu1, $IC_{50} = (21\pm 5)\mu\text{mol/L}$; HeLa, $IC_{50} = (50\pm 6)\mu\text{mol/L}$; K562, $IC_{50} > 100\mu\text{mol/L}$; Raji, $IC_{50} < 6.25\mu\text{mol/L}$; Vero, $IC_{50} = (32.5\pm 4.5)\mu\text{mol/L}$; Wish, $IC_{50} = (55\pm 6)\mu\text{mol/L}$). **Source:** YI HE GUO *Ventilago leiocarpa* (stem). **Ref:** 3057.

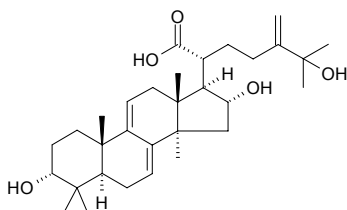
**10069 3-Hydroxy-4(8)-ene-*p*-menthane-3(9)-lactone**

$C_{10}H_{14}O_3$ (182.22). Colorless plate crystals, $[\alpha]_D^{18} = +60.21^\circ$ ($c = 0.68$, MeOH).

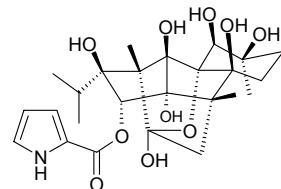
Source: JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*]. **Ref:** 2158.

**10070 25-Hydroxy-3-epidehydrotumulosic acid**

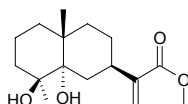
$C_{31}H_{48}O_5$ (500.73). **Pharm:** Antineoplastic (EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = 0% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 70%; reference compound β -Carotene, relative percentage = 8.6%). **Source:** FU LING *Poria cocos* (sclerotium: yield = 0.00011%dw). **Ref:** 4616.

**10071 9-Hydroxy-9-epi-10-epi-ryanodine**

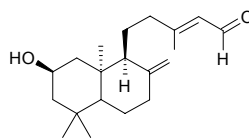
$C_{25}H_{35}NO_{10}$ (509.56). Crystals ($\text{CHCl}_3:\text{Me}_2\text{CO} = 3:1$), mp 178°C, $[\alpha]_D = +11^\circ$ ($c = 1.0$). **Pharm:** Cardiac contraction inhibitor (guinea-pig papillary muscle, causes a prolongation of the latency time and decrease of contraction force, $EC_{50} = 1800\text{nmol/L}$). **Source:** QU CHONG CAO *Spigelia anthelmia* (aerial parts). **Ref:** 5139.

**10072 5 α -Hydroxy-4-epi-ilicic acid methyl ester**

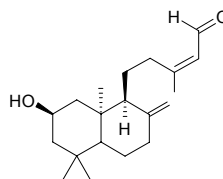
$C_{16}H_{26}O_4$ (292.38). Colorless needles (MeOH), mp 120~121°C, $[\alpha]_D^{20} = +13.4^\circ$ ($c = 0.49$, MeOH). **Source:** LIU LENG JU *Laggera alata* (aerial parts: yield = 0.0009%dw). **Ref:** 4709.

**10073 2 β -Hydroxy-9-epi-ent-labda-8(17),13(E)-dien-15-al**

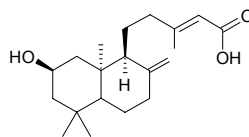
$C_{20}H_{32}O_2$ (304.48). **Source:** BU MEI HE BAO HUA *Calceolaria inamoena* (aerial parts). **Ref:** 3788.

**10074 2 β -Hydroxy-9-epi-ent-labda-8(17),13(Z)-dien-15-al**

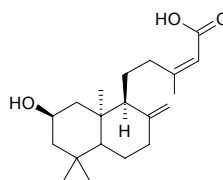
$C_{20}H_{32}O_2$ (304.48). **Source:** BU MEI HE BAO HUA *Calceolaria inamoena* (aerial parts). **Ref:** 3788.

**10075 2 β -Hydroxy-9-epi-ent-labda-8(17),13(E)-dien-15-oic acid**

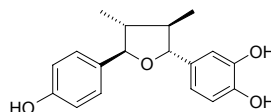
$C_{20}H_{32}O_3$ (320.48). **Source:** BU MEI HE BAO HUA *Calceolaria inamoena* (aerial parts). **Ref:** 3788.

**10076 2 β -Hydroxy-9-epi-ent-labda-8(17),13(Z)-dien-15-oic acid**

$C_{21}H_{34}O_3$ (334.50). **Source:** BU MEI HE BAO HUA *Calceolaria inamoena* (aerial parts). **Ref:** 3788.

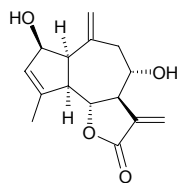
**10077 3''-Hydroxy-4-epi-larreatricin**

3-Hydroxy-8-epi-larreatricin $C_{18}H_{20}O_4$ (300.36). **Pharm:** Antioxidant (Takamatsu DCFH method, myelomonocytic HL-60 cells, $IC_{50} = (1.3\pm 0.3)\mu\text{g/mL}$; control NDGA, $IC_{50} = (0.7\pm 0.3)\mu\text{g/mL}$, Vitamin C, $IC_{50} = (1.9\pm 0.7)\mu\text{g/mL}$, Trolox, $IC_{50} = (1.4\pm 0.5)\mu\text{g/mL}$)^[3850]; cytotoxic (XTT assay, HL-60 cells, $IC_{50} = (13.6\pm 0.8)\mu\text{g/mL}$; control NDGA, $IC_{50} = (2.6\pm 0.2)\mu\text{g/mL}$, Vitamin C, $IC_{50} > 10.0\mu\text{g/mL}$, Trolox, $IC_{50} > 10.0\mu\text{g/mL}$)^[3850]. **Source:** SAN CHI LA RUI A *Larrea tridentata* (leaf). **Ref:** 1521, 3850.

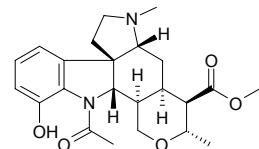


10078 2 β -Hydroxyepiligustrin

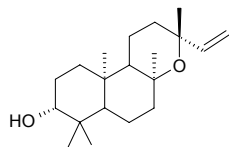
C₁₅H₁₈O₄ (262.31). Source: *Anthemis carpatica* (aerial parts). Ref: 3974.

**10079 12-Hydroxy-19-epi-malagashanine**

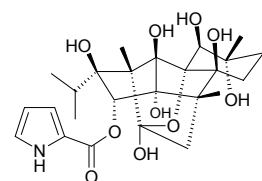
C₂₃H₃₀N₂O₅ (414.51). Crystals (*n*-hexane), mp 93–95°C, [α]_D²⁰ = –69.4° (*c* = 0.3, CHCl₃). Source: *Strychnos myrtoides*. Ref: 2297.

**10080 ent-3 β -Hydroxy-13-epi-manoyl oxide**

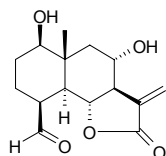
C₂₀H₃₄O₂ (306.49). Colorless needles (MeOH), mp 82–84°C, [α]_D²⁵ = –15.2° (*c* = 1.3, CHCl₃). Source: HAI QI *Excoecaria agallocha* (root). Ref: 5114.

**10081 9-Hydroxy-10-epi-ryanodine**

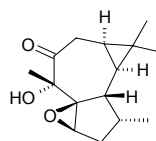
C₂₅H₃₅NO₁₀ (509.56). Crystals (CHCl₃:Me₂CO = 3:1), mp 169°C, [α]_D = +2° (*c* = 0.1). Source: QU CHONG CAO *Spigelia anthelmia* (aerial parts). Ref: 5139.

**10082 8 α -Hydroxy-4-epi-sonchucarpolide**

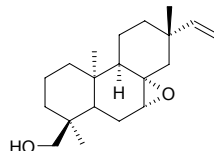
C₁₅H₂₀O₅ (280.32). Oil, [α]_D²⁰ = +7.1° (*c* = 0.18, CHCl₃). Pharm: Antifungal (*Aspergillus niger*, MIC = 0.25 μ g/mL, control Miconazole, MIC = 1.5 μ g/mL; *Aspergillus ochraceus*, MIC = 0.25 μ g/mL, Miconazole, MIC = 1.5 μ g/mL; *Aspergillus versicolor*, MIC = 0.125 μ g/mL, Miconazole, MIC = 2 μ g/mL; *Aspergillus flavus*, MIC = 0.25 μ g/mL, Miconazole, MIC = 0.5 μ g/mL; *Penicillium ochrochloron*, MIC = 0.25 μ g/mL, Miconazole, MIC = 2 μ g/mL; *Penicillium funiculosum*, MIC = 1 μ g/mL, Miconazole, MIC = 2 μ g/mL; *Trichoderma viride*, MIC = 0.25 μ g/mL, Miconazole, MIC = 2 μ g/mL; *Cladosporium cladosporioides*, MIC = 0.5 μ g/mL, Miconazole, MIC = 0.03 μ g/mL; *Alternaria alternata*, MIC = 0.5 μ g/mL, Miconazole, MIC = 0.5 μ g/mL). Source: *Centaurea thessala* ssp. *drakiensis* (aerial parts). Ref: 5115.

**10083 10 α -Hydroxy-1,2-epoxyaromadendran-9-one**

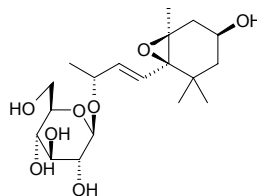
C₁₅H₂₂O₃ (250.34). Oil, [α]_D²⁵ = –12° (*c* = 0.85, CHCl₃). Source: *Curvularia lunata*. Ref: 5140.

**10084 18-Hydroxy-7 α ,8 α -epoxy-9-epi-ent-pimara-15-ene**

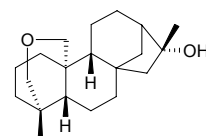
C₂₀H₃₂O₂ (304.48). Source: TENG CANG CHI MEI *Gibberella fujikuroi*. Ref: 3916.

**10085 (3S,5S,6R,9R)-3-Hydroxy-5,6-epoxy- β -ionol-9-O- β -glucopyranoside**

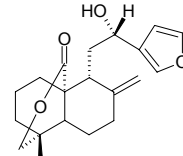
C₁₉H₃₂O₈ (388.46). [α]_D²¹ = –52.5° (*c* = 0.8, MeOH). Source: JIN HUANG CAO SU *Phlomis aurea* (leaf). Ref: 5093.

**10086 16-Hydroxy-19,20-epoxy-kaurane**

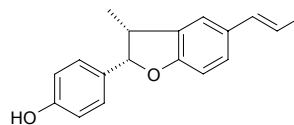
C₂₀H₃₂O₂ (304.48). Colorless acicular crystals (CHCl₃), mp 177–179°C. Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 683.

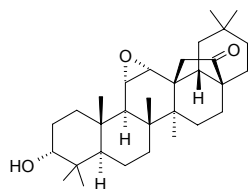
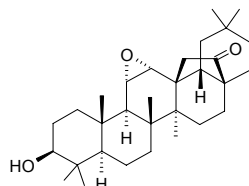
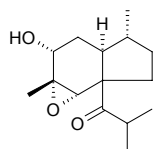
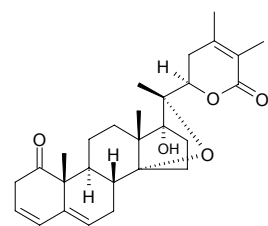
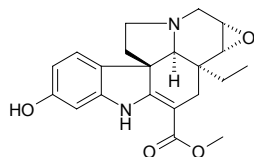
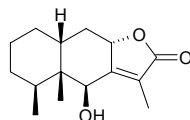
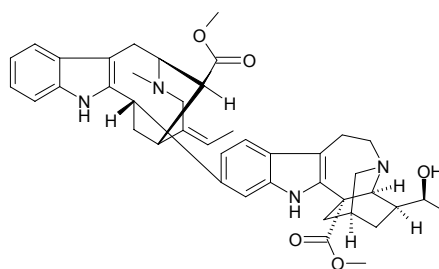
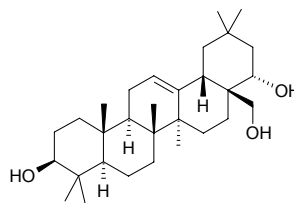
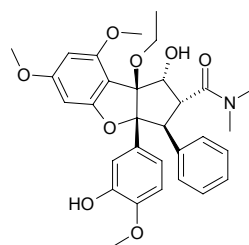
**10087 12(S)-Hydroxy-15,16-epoxy-8(17),13(16),14-ent-labdatrien-20,19-olide**

C₂₀H₂₆O₄ (330.43). Colorless oil, [α]_D²⁵ = –25.7° (*c* = 0.31, CHCl₃). Pharm: Phytotoxin (*Raphidocelis subcapitata*, IC₅₀ = 4.40 μ mol/L). Source: FU YE YAN ZI CAI *Potamogeton natans*. Ref: 5184.

**10088 (7S,8R)-4-Hydroxy-4',7-epoxy-8,3'-neolignan-(7E)-ene**

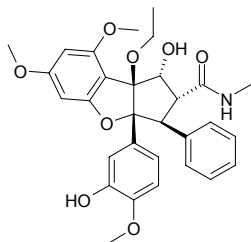
C₁₈H₁₈O₂ (266.34). White amorphous, [α]_D²¹ = +85.5° (*c* = 0.06, MeOH). Source: *Piper regnellii* (root). Ref: 2358.



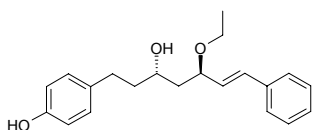
10089 3 α -Hydroxy-11 α ,12 α -epoxy-oleanane-28,13 β -olideC₃₁H₄₈O₃ (468.73). **Pharm:** Cytotoxic (leukemia cells L₁₂₁₀, IC₅₀ = 30 μ g/mL).**Source:** *Juliania adstringens* (bark). **Ref:** 3786.**10090 3 β -Hydroxy-11 α ,12 α -epoxy-oleanane-28,13 β -olide**C₃₁H₄₈O₃ (468.73). **Source:** *Juliania adstringens* (bark). **Ref:** 3786.**10091 3 α -Hydroxy-4 α ,5 α -epoxy-7-oxo-(8[7→6]-abeoamorphane**C₁₅H₂₄O₃ (252.36). Colorless oil, [α]_D = -9.3° (*c* = 0.9, CHCl₃). **Source:**HUANG HUA HAO *Artemisia annua* (seed). **Ref:** 3435.**10092 17 β -Hydroxy-14 α ,20 α -epoxy-1-oxo-(22*R*)-witha-3,5,24-trienolide**C₂₈H₃₆O₅ (452.60). [α]_D²⁵ = -11° (*c* = 0.0062, CHCl₃-MeOH). **Source:** NINGGU SHUI QIE *Withania coagulans*. **Ref:** 3378.**10093 11-Hydroxy-14,15 α -epoxytabersonine**[140680-64-4] C₂₁H₂₄N₂O₄ (368.43). White crystals, mp 216°C (dec), [α]_D =-350° (*c* = 1.0, chloroform). **Pharm:** Antineoplastic (P₃₈₈); spermaticidal (*in vitro*, 0.2mg/mL). **Source:** CHUAN SHAN CHENG *Melodinus hemsleyanus*.**Ref:** 1093, 1183.**10094 6-Hydroxyeremophilinolide**[10250-03-0] C₁₅H₂₂O₃ (250.34). Crystals (Et₂O), mp 208°C, [α]_D = +205.8°(*c* = 1.0, chloroform). **Source:** FENG DOU CAI *Petasites japonicus*, BAI HUA FENG DOU CAI *Petasites albus*, HU LU QI *Ligularia fischeri*. **Ref:** 6, 1521.**10095 19'(S)-Hydroxyervahanine A**C₄₂H₅₀N₄O₅ (690.89). Light yellowish oil, [α]_D = -105° (*c* = 0.16, CHCl₃).**Source:** SAN FANG HUA XU HONG YUE GUI *Tabernaemontana corymbosa*. **Ref:** 3403.**10096 22 α -Hydroxyerythrodiol**12-Oleanene-3,22,28-triol; Sapogenin ST-I [20475-26-7] C₃₀H₅₀O₃ (458.73).Crystals (MeOH), mp 279~282°C, [α]_D²⁰ = +37° (*c* = 1, pyridine). **Source:**CHA MEI *Camellia sasanqua*, CHA ZI XIN *Camellia oleifera*, HU ZHI ZI *Lespedeza bicolor*. **Ref:** 6, 1521.**10097 3'-Hydroxy-8 β -ethyl ether-rocaglic acid dimethylamide**[259143-55-0] C₃₁H₃₅NO₈ (549.63). **Pharm:** Insecticidal inactive (neonatelarvae of *Spodoptera littoralis*)^[2376]. **Source:** *Aglaiia duperreana* **Ref:** 2376.

10098 3'-Hydroxy-8b-ethyl ether-rocaglic acid methylamide

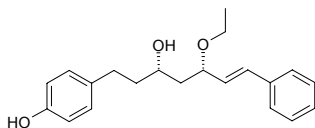
[259143-56-1] C₃₀H₃₃NO₈ (535.60). **Pharm:** Insecticidal inactive (neonate larvae of *Spodoptera littoralis*). **Source:** *Aglaia duperreana*. **Ref:** 2376.

**10099 (3S,5R)-3-Hydroxy-5-ethoxy-1-(4-hydroxyphenyl)-7-phenyl-6E-heptene**

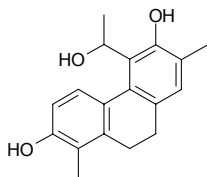
C₂₁H₂₆O₃ (326.44). Light yellow amorphous solid, [α]_D²⁵ = +49.5° (c = 0.10, MeOH). **Pharm:** Cytotoxic inactive (Colon26-L5, HT1080, 100μmol/L). **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.000093%). **Ref:** 3042.

**10100 (3S,5S)-3-Hydroxy-5-ethoxy-1-(4-hydroxyphenyl)-7-phenyl-6E-heptene**

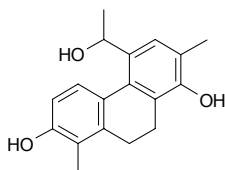
C₂₁H₂₆O₃ (326.44). Light yellow amorphous solid, [α]_D²⁵ = +73.9° (c = 0.04, MeOH). **Pharm:** Cytotoxic (Colon26-L5, ED₅₀ = 94.6μmol/L; HT1080, ED₅₀ > 100μmol/L). **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.000093%). **Ref:** 3042.

**10101 5-(1-Hydroxyethyl)-2,6-dihydroxy-1,7-dimethyl-9,10-dihydro-phenanthrene**

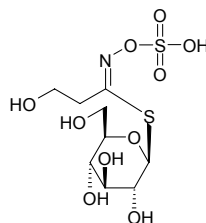
C₁₈H₂₀O₃ (284.36). **Source:** DENG XIN CAO *Juncus effusus*. **Ref:** 660.

**10102 5-(1-Hydroxyethyl)-2,8-dihydroxy-1,7-dimethyl-9,10-dihydro-phenanthrene**

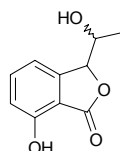
C₁₈H₂₀O₃ (284.36). **Source:** DENG XIN CAO *Juncus effusus*. **Ref:** 660.

**10103 2-Hydroxyethyl glucosinolate**

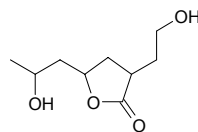
C₉H₁₇NO₁₀S₂ (363.36). **Source:** MA BING LANG *Capparis masaikai*. **Ref:** 660.

**10104 3ξ-(1ξ-Hydroxyethyl)-7-hydroxy-1-isobenzofuranone**

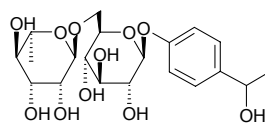
C₁₀H₁₀O₄ (194.19). Brown solid, mp 102–103°C, [α]_D²⁰ = –50.0° (c = 0.08, CHCl₃). **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 100μg/mL, MIC = 0.474μmol/L, control Kanamycin, MIC = 3.13μg/mL; *Bacillus subtilis*, MIC = 50μg/mL, MIC = 0.237μmol/L, Kanamycin, MIC = 6.25μg/mL; *Escherichia coli*, MIC = 50μg/mL, MIC = 0.237μmol/L, Kanamycin, MIC = 12.5μg/mL; *Proteus vulgaris*, MIC = 50μg/mL, MIC = 0.237μmol/L, Kanamycin, MIC = 12.5μg/mL); antifungal (*Aspergillus niger*, MIC = 100μg/mL, MIC = 0.474μmol/L; *Candida albicans*, MIC = 100μg/mL, MIC = 0.474μmol/L, control Fluconazole, MIC = 25μg/mL, MIC = 0.082μmol/L). **Source:** YIN DU JIU LI XIANG *Murraya koenigii* (stem cortex). **Ref:** 5299.

**10105 3-(2'-Hydroxyethyl)-5-(2''-hydroxypropyl)-dihydrofuran-2(3H)-one**

C₉H₁₆O₄ (188.23). Yellow oil, [α]_D²³ = +77.94° (c = 1.36, MeOH). **Source:** DIAO DENG SHU *Kigelia pinnata*. **Ref:** 3418.

**10106 1-(1-Hydroxyethyl)-4β-rutinosyloxybenzene**

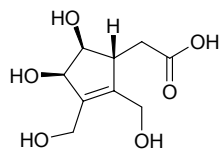
C₂₀H₃₀O₁₁ (446.46). **Source:** MANG QI GU *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*]. **Ref:** 660.



10107 7-Hydroxy eucommic acid

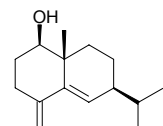
$C_9H_{14}O_6$ (218.21). Yellowish-brown oil, $[\alpha]_D^{17} = -73.16^\circ$ ($c = 1.45$, MeOH).

Source: DIAO DENG SHU *Kigelia pinnata*. Ref: 3418.

**10108 1 β -Hydroxy-4(15),5-eudesmadiene**

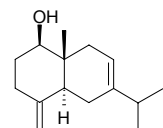
$C_{15}H_{24}O$ (220.36). Colorless oil, $[\alpha]_D = +6.9^\circ$ ($c = 0.3$, $CHCl_3$). Source:

HUANG HUA HAO *Artemisia annua* (seed). Ref: 3435.

**10109 1 β -Hydroxy-4(15),7-eudesmadiene**

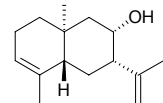
$C_{15}H_{24}O$ (220.36). Colorless oil; $[\alpha]_D^{17} = +5^\circ$ ($c = 0.30$, $CHCl_3$); colorless needles (petroleum ether–EtOAc), $[\alpha]_D^{20} = -18^\circ$ ($c = 0.1$, $CHCl_3$). Source:

HUANG HUA HAO *Artemisia annua* (seed), YI NIAN PENG *Erigeron annuus* (aerial parts), ZHONG JIAN JIN JI ER *Caragana intermedia* (aerial parts). Ref: 3435, 4786, 5073.

**10110 (+)-8 α -Hydroxy-eudesma-3,11-diene**

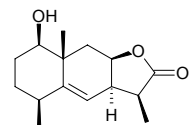
$C_{15}H_{24}O$ (220.36). Colorless oil. Source: *Tritomaria polita* (essential oil).

Ref: 3446.

**10111 1 β -Hydroxy-4 α ,11 α -eudesma-5-en-12,8 β -olide**

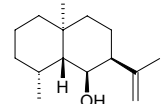
$C_{15}H_{22}O_3$ (250.34). Colorless gum, $[\alpha]_D^{20} = +17.2^\circ$ ($c = 0.58$, $CHCl_3$). Source:

JIN FEI CAO *Inula japonica*. Ref: 5422.

**10112 (+)-6 β -Hydroxy-eudesm-11-ene**

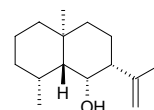
$C_{15}H_{26}O$ (222.37). Colorless oil. Source: *Tritomaria polita* (essential oil).

Ref: 3446.

**10113 (–)-6 α -Hydroxy-eudesm-11-ene**

$C_{15}H_{26}O$ (222.37). Colorless oil. Source: *Tritomaria polita* (essential oil).

Ref: 3446.

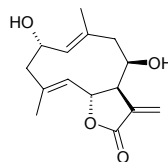
**10114 2 α -Hydroxyeupatolide**

$C_{15}H_{20}O_4$ (264.32). Source: CHENG GAN SHENG MA *Eupatorium*

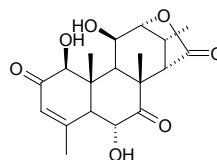
lindleyanum (whole herb: yield = 0.00091%dw)^[4762], HUA ZE LAN

Eupatorium chinense (whole herb: yield = 0.0314%)^[4739]. Ref: 4739,

4762.

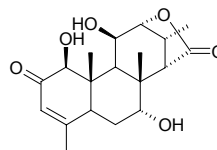
**10115 6 α -Hydroxyeurycomalactone**

$C_{19}H_{24}O_7$ (364.40). Source: *Eurycoma* sp. Ref: 4556.

**10116 7 α -Hydroxyeurycomalactone**

$C_{19}H_{26}O_6$ (350.42). Pharm: Cytotoxic (P₃₈₈ cells, IC₅₀ = 0.11 μ g/mL)^[4556].

Source: *Eurycoma* sp. Ref: 4556.

**10117 Hydroxyevodiamine**

Rhetsinine [526-43-2] $C_{19}H_{17}N_3O_2$ (319.37). Yellow crystals ($CHCl_3$ –EtOH),

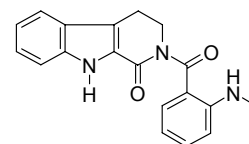
mp 206–207°C (192°C dec). Source: HUA NAN WU ZHU YU *Evodia*

austrosinensis (dried and almost ripe fruit: content = 0.08%)^[5508], WU ZHU YU

Evodia rutaecarpa (dried and almost ripe fruit: content scope of 2 origins =

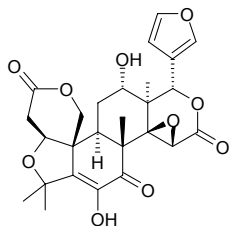
0.35%–0.55%, mean content = 0.45%)^[5508], *Zanthoxylum rhesta* (trunk bark).

Ref: 2, 347, 1521, 5508.

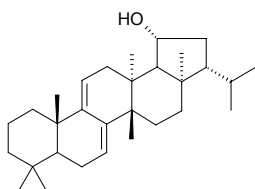


10118 12 α -Hydroxyevodol

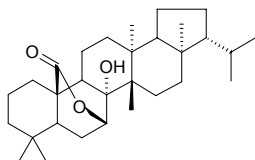
C₂₆H₂₈O₁₀ (500.51). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2, 877.

**10119 19 α -Hydroxyferna-7,9(11)-diene**

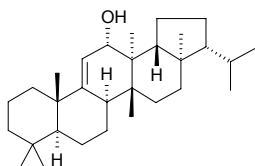
C₃₀H₄₈O (424.72). mp 213~214°C. Source: BIAN YE TIE XIAN JUE *Adiantum caudatum* (fresh frond). Ref: 5187.

**10120 8 α -Hydroxyfernan-25,7 β -olide**

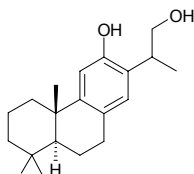
C₃₀H₄₈O₃ (456.72). mp 268~271°C. Source: BIAN YE TIE XIAN JUE *Adiantum caudatum* (fresh frond). Ref: 5187.

**10121 12 α -Hydroxyfern-9(11)-ene**

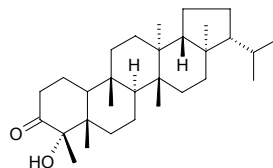
C₃₀H₅₀O (426.73). mp 110~113°C. Source: BING YE SUO LUO *Yathea podophylla* (fresh frond). Ref: 4401.

**10122 16-Hydroxy ferruginol**

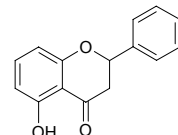
C₂₀H₃₀O₂ (302.46). mp 83~85°C, [α]_D²² = +55.9° (*c* = 0.54, CHCl₃). Source: DAN HUANG XIANG CHA CAI *Isodon flavidus*. Ref: 4067.

**10123 4 α -Hydroxyfilican-3-one**

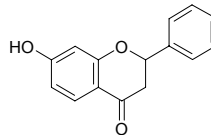
C₃₀H₅₀O₂ (442.73). Source: ZHU ZONG CAO *Adiantum capillus-veneris* (fresh frond). Ref: 4230.

**10124 5-Hydroxyflavanone**

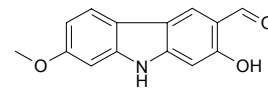
C₁₅H₁₂O₃ (240.26). Pale yellow needles (MeOH), mp 124°C, [α]_D¹⁸ = -11.0° (*c* = 0.1, CHCl₃). Pharm: MAO-A inhibitor (rat brain mitochondrial enzyme, IC₅₀ = 39.6 μ g/mol/L); MAO-B inhibitor (rat brain mitochondrial enzyme, IC₅₀ = 3.8 μ g/mol/L). Source: HUANG LONG DAN *Gentiana lutea*. Ref: 3838.

**10125 7-Hydroxyflavanone**

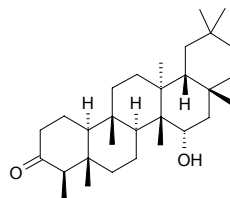
C₁₅H₁₂O₃ (240.26). Source: JIAO ZHI HUANG TAN *Dalbergia cochinchinensis* (stem: yield = 0.0013%dw). Ref: 4716.

**10126 2-Hydroxy-3-formyl-7-methoxycarbazole**

[119736-83-3] C₁₄H₁₁NO₄ (241.25). Crystals (acetone), mp 226~227°C. Pharm: Cytotoxic (BST, LC₅₀ 35.1mg/L, 9KB, ED₅₀ = 5.7 μ g/mL, KBMRI, ED₅₀ = 4.48 μ g/mL, A549, ED₅₀ = 2.74 μ g/mL, HT29, ED₅₀ = 4.00 μ g/mL); antibacterial (*Mycobacterium tuberculosis*, MIC = 100 μ g/mL, control Isoniazide, MIC = 0.040~0.090 μ g/mL, kanamycin sulfate, MIC = 2.0~5.0 μ g/mL)^[5367]; antifungal (*Candida albicans*, IC₅₀ = 2.8 μ g/mL, control Amphotericin, IC₅₀ = 0.01 μ g/mL)^[5367]. Source: SHAN HUANG PI *Clausena excavata*, YUAN DONG JIU LI XIANG *Murraya siamensis*. Ref: 1065, 1073, 5367.

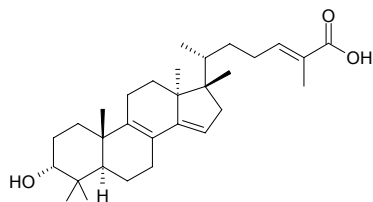
**10127 15 α -Hydroxyfriedelane-3-one**

C₃₀H₅₀O₂ (442.73). Pharm: DPPH scavenger inactive (for 40 μ mol/L DPPH radical, SC₅₀ > 40 μ mol/L). Source: SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). Ref: 4378.

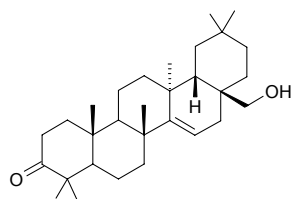


10128 (24E)-3 α -Hydroxy-17,14-friedo-lanostan-8,14,24-trien-26-oic acid

C₃₀H₄₆O₃ (454.70). White solid, mp 231~232°C, [α]_D²⁹ = -59° (c = 0.84, MeOH). Source: SHAN FENG GUO *Garcinia hombroniana* (pericarp). Ref: 5085.

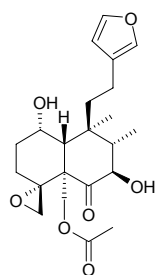
**10129 28-Hydroxy-D-friedo-olean-14-en-3-one**

C₃₀H₄₈O₂ (440.72). Source: YANG MEI SHU PI *Myrica rubra*. Ref: 660.

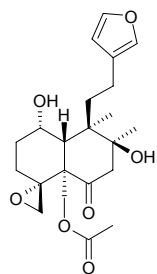
**10130 7 β -Hydroxyfruticolone**

C₂₂H₃₀O₇ (406.48). White amorphous solid, [α]_D²⁵ = +22.0° (c = 0.11, CHCl₃).

Pharm: Insect antifeedant (fifth instar larvae of *Spodoptera littoralis*, dual-choice feeding assays, dose = 10 μ g/cm², FR₅₀ = 0.57 \pm 0.04). Source: GUAN CONG XIANG KE KE *Teucrium fruticans*. Ref: 3761.

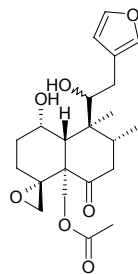
**10131 8 β -Hydroxyfruticolone**

C₂₂H₃₀O₇ (406.48). Pharm: Insect antifeedant (fifth instar larvae of *Spodoptera littoralis*, dual-choice feeding assays, dose = 10 μ g/cm², FR₅₀ = 0.57 \pm 0.17). Source: GUAN CONG XIANG KE KE *Teucrium fruticans*. Ref: 3761.

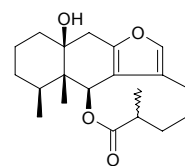
**10132 11-Hydroxyfruticolone**

C₂₂H₃₀O₇ (406.48). White amorphous solid, [α]_D²⁵ = +45.0° (c = 0.12, CHCl₃).

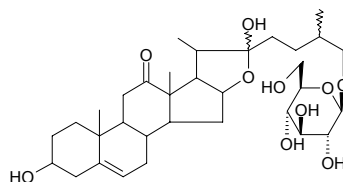
Pharm: Insect antifeedant (fifth instar larvae of *Spodoptera littoralis*, dual-choice feeding assays, dose = 10 μ g/cm², FR₅₀ = 0.45 \pm 0.07). Source: GUAN CONG XIANG KE KE *Teucrium fruticans*. Ref: 3761.

**10133 10 β -Hydroxyfuranoremphilan-6 β -yl-2' ξ -methylbutanoate**

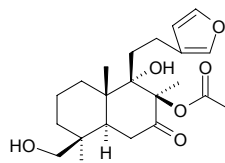
C₂₀H₃₀O₄ (334.46). Source: LIAN PENG CAO *Farfugium japonicum*. Ref: 6.

**10134 22-Hydroxy-25(R,S)-furost-5-en-12-on-3 β ,22,26-triol 26-O- β -D-glucopyranoside**

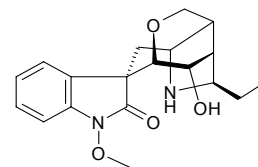
C₃₃H₅₂O₁₀ (608.79). Colorless needles, mp 142~143°C, [α]_D¹⁷ = -0.024° (c = 0.11, MeOH). Source: YU ZHU *Polygonatum odoratum* [Syn. *Polygonatum officinale*] (rhizome). Ref: 4813.

**10135 19-Hydroxygaleopsin**

C₂₀H₃₀O₆ (392.50). White powder. Source: WEI YI MU CAO *Leonurus cardiaca*. Ref: 2499.

**10136 14-Hydroxygelsedine**

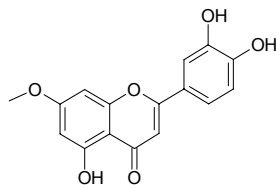
C₁₉H₂₄N₂O₄ (344.41). mp 214~216°C. Source: GOU WEN *Gelsemium elegans*. Ref: 14.



10137 Hydroxygenkwainin

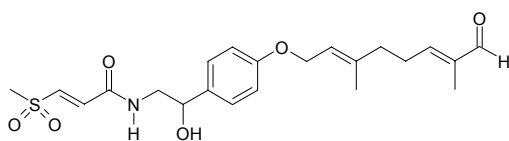
$C_{16}H_{12}O_6$ (300.27). mp 283~285°C. **Pharm:** Antitussive (dispels phlegm).

Source: YUAN HUA *Daphne genkwa* (dried bud: mean content of 19 origins = 0.221%^[5535], content = 0.24%^[5508], leaf: mean content = 0.32%^[5508]). **Ref:** 6, 5508, 5535.

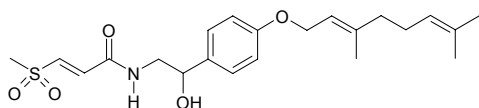
**10138 β -Hydroxygerambullal**

(*E*)-3-(Methylsulfonyl)propenoic acid (2*E*,6*E*)-2-[4-(3,7-dimethyl-8-oxo-2,6-octadienyloxy)-phenyl]-2-hydroxyethyl amide $C_{22}H_{29}NO_6S$ (435.54).

Colorless oil, $[\alpha]_D^{20} = +21^\circ$ ($c = 0.4$, $CHCl_3$). **Source:** LV ZI SHAN XIAO JU *Glycosmis chlorosperma* (leaf). **Ref:** 3956.

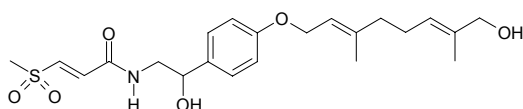
**10139 β -Hydroxygerambullin**

(*E*)-3-(Methylsulfonyl)propenoic acid (*E*)-2-[4-(3,7-dimethyl-2,6-octadienyloxy)-phenyl]-2-hydroxyethyl amide $C_{22}H_{31}NO_5S$ (421.56). Colorless crystals (Et_2O), mp 126~128°C, $[\alpha]_D^{20} = +25^\circ$ ($c = 0.2$, $CHCl_3$). **Source:** LV ZI SHAN XIAO JU *Glycosmis chlorosperma* (leaf). **Ref:** 3956.

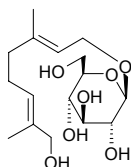
**10140 β -Hydroxygerambullol**

(*E*)-3-(Methylsulfonyl)propenoic acid (2*E*,6*E*)-2-[4-(8-hydroxy-3,7-dimethyl-2,6-octadienyloxy)-phenyl]-2-hydroxyethyl amide $C_{22}H_{31}NO_6S$ (437.56).

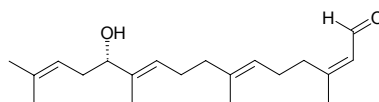
Colorless crystals ($Et \odot$), mp 131~133°C, $[\alpha]_D^{20} = +38^\circ$ ($c = 0.2$, $CHCl_3$). **Source:** LV ZI SHAN XIAO JU *Glycosmis chlorosperma* (leaf). **Ref:** 3956.

**10141 8-Hydroxygeraniol-1- β -D-glucopyranoside**

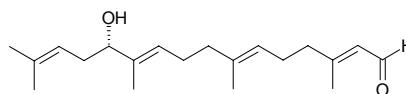
$C_{16}H_{28}O_7$ (332.40). **Source:** ROU CONG RONG *Cistanche deserticola*, GUAN HUA ROU CONG RONG *Cistanche tubulosa*. **Ref:** 2448.

**10142 *cis*-(*S*)-12-Hydroxygeranylgeranial**

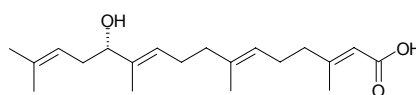
$C_{20}H_{32}O_2$ (304.48). Oil. **Source:** SHUANG CHA ZAO *Bifurcaria bifurcata*. **Ref:** 5146.

**10143 *trans*-(*S*)-12-Hydroxygeranylgeranial**

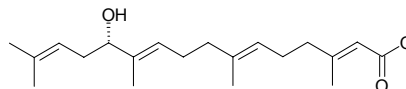
$C_{20}H_{32}O_2$ (304.48). Oil, $[\alpha]_D^{25} = -3^\circ$ ($c = 1.0$, CH_2Cl_2). **Source:** SHUANG CHA ZAO *Bifurcaria bifurcata*. **Ref:** 5146.

**10144 (*S*)-12-Hydroxygeranylgeranic acid**

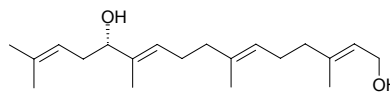
$C_{20}H_{32}O_3$ (320.48). **Source:** SHUANG CHA ZAO *Bifurcaria bifurcata*. **Ref:** 5146.

**10145 (*S*)-12-Hydroxygeranylgeranic acid methyl ester**

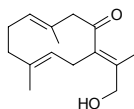
$C_{21}H_{34}O_3$ (334.50). Oil, $[\alpha]_D^{25} = -7.7^\circ$ ($c = 5.5$, CH_2Cl_2). **Source:** SHUANG CHA ZAO *Bifurcaria bifurcata*. **Ref:** 5146.

**10146 (*S*)-12-Hydroxygeranylgeraniol**

$C_{20}H_{34}O_2$ (306.49). **Source:** SHUANG CHA ZAO *Bifurcaria bifurcata*. **Ref:** 5146.

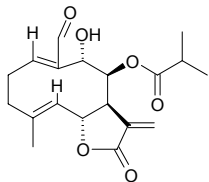
**10147 13-Hydroxygermacrone**

$C_{15}H_{22}O_2$ (234.34). **Pharm:** NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100 μ mol/L, InRt = (50.7 \pm 1.9)%), control *L*-NMMA, 100 μ mol/L, InRt = (79.2 \pm 0.9)%, $p < 0.01$)^[4150]. **Source:** PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. **Ref:** 1521, 4150.

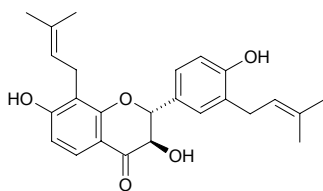


10148 9-Hydroxyglabratolide

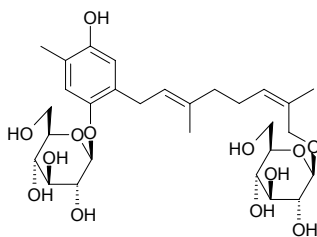
[75744-68-2] C₁₉H₂₄O₆ (348.40). Amorphous gum. **Pharm:** Antineoplastic (mus, P₃₈₈, *in vivo*); cytotoxic (hmn nasopharyngeal carcinoma cells, *in vitro*, ED₅₀ = 2.0 μg/mL). **Source:** GUANG CI BAO JU *Acanthospermum glabratum*. **Ref:** 661.

**10149 3-Hydroxyglabrol**

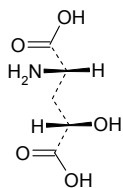
[74148-41-7] C₂₅H₂₈O₅ (408.50). White crystals (benzene–ethyl acetate), mp 117–119°C, [α]_D²⁰ = –17.65° (c = 1.02, chloroform). **Pharm:** Antibacterial (*Staphylococcus aureus* ATCC 13709, *Mycobacterium smegmatis* ATCC 607, MIC = 6.25 mg/mL for both). **Source:** GAN CAO *Glycyrrhiza uralensis*, GUANG GUO GAN CAO *Glycyrrhiza glabra*, OU YA GAN CAO *Glycyrrhiza glabra* var. *typica*. **Ref:** 2, 661, 2431.

**10150 4-Hydroxy-2-[(2E,6Z)-8-β-D-glucopyranosyloxy-3,7-dimethylocta-2,6-dien-1-yl]-5-methylphenyl β-D-glucopyranoside**

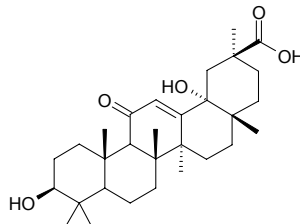
C₂₉H₄₄O₁₃ (600.67). mp 106–111°C, [α]_D³¹ = –29.4° (c = 0.1, MeOH). **Source:** RI BEN LU TI CAO *Pyrola japonica* (whole herb). **Ref:** 4294.

**10151 γ-Hydroxy glutamic acid**

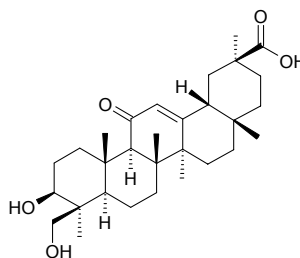
[3913-68-6] C₅H₉NO₅ (163.13). mp (L~) 183–185°C. **Source:** XUAN CAO GEN *Hemerocallis fulva*. **Ref:** 6.

**10152 18α-Hydroxy glycyrrhetic acid**

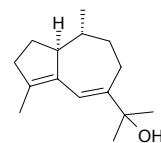
C₃₀H₄₆O₅ (486.70). **Source:** GUANG GUO GAN CAO *Glycyrrhiza glabra*. **Ref:** 660.

**10153 24-Hydroxyglycyrrhetic acid**

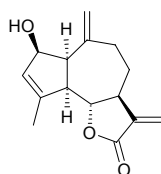
[20528-69-2] C₃₀H₄₆O₅ (486.70). **Source:** GUANG GUO GAN CAO *Glycyrrhiza glabra*. **Ref:** 2, 660.

**10154 11-Hydroxyguaia-4,6-diene**

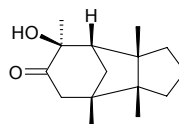
C₁₅H₂₄O (220.36). Colorless oil, [α]_D = –55° (c = 0.25). **Source:** *Letowianthus stellatus* (root cortex). **Ref:** 3944.

**10155 5αH-2β-Hydroxyguaia-3(4),10(14),11(13)-trien-6α,12-olide**

C₁₅H₁₈O₃ (246.31). **Pharm:** Cytotoxic (KB ATCC CCL17, IC₅₀ = 2.6 μg/mL). **Source:** *Warionia saharae*. **Ref:** 5399.

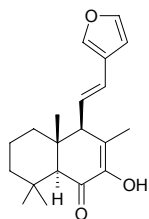
**10156 8β-Hydroxy gymnomitrian-9-one**

C₁₅H₂₄O₂ (236.36). **Source:** SHI DI QIAN *Reboulia hemisphaerica*. **Ref:** 660.

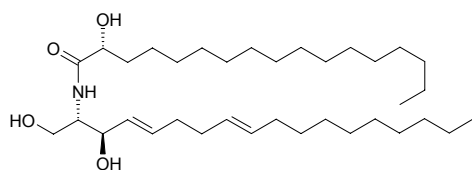


10157 7-Hydroxyhedychenone

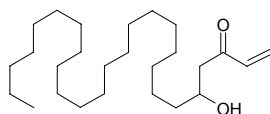
C₂₀H₂₆O₃ (314.43). Source: TU QIANG HUO *Hedychium coronarium* (rhizome). Ref: 4221.

**10158 (2*S*,3*R*,4*E*,8*E*)-(2'*R*)-2'-Hydroxyheptadecanoylamino]-4,8-octadecadiene-1,3-diol**

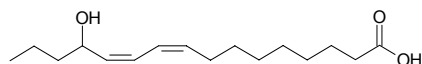
C₃₅H₆₇NO₄ (565.93). Colorless solid, mp 111~112°C, [α]_D²⁸ = -11.0° (c = 0.5, CHCl₃). Source: *Lobophytum* sp. Ref: 4432.

**10159 5-Hydroxy-hexacos-1-en-3-one**

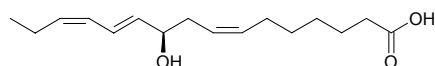
C₂₆H₅₀O₂ (394.69). White waxy solid. Pharm: Antibacterial (*Bacillus cereus*, MIC = 32μg/mL, control Chloramphenicol, MIC = 4μg/mL; *Escherichia coli*, MIC = 64μg/mL, Chloramphenicol, MIC = 2μg/mL; *Staphylococcus epidermidis*, MIC = 16μg/mL, Chloramphenicol, MIC = 4μg/mL); cytotoxic inactive (KB, L-6); antimalarial inactive (*Plasmodium falciparum* K1, *Plasmodium falciparum* NF54); antitrypanosomal inactive (*Trypanosoma brucei rhodesiense*, *Trypanosoma cruzi*); antifungal inactive (*Candida albicans*). Source: CI DOU KOU *Amomum aculeatum* (rhizome). Ref: 5176.

**10160 13-Hydroxy-9,11-hexadecadienoic acid**

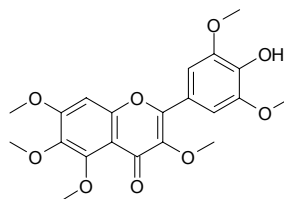
C₁₆H₂₈O₃ (268.40). Source: CU LIU GUO *Hippophae rhamnoides*. Ref: 2.

**10161 (10*R*)-Hydroxyhexadeca-7*Z*,11*E*,13*Z*-trienoic acid**

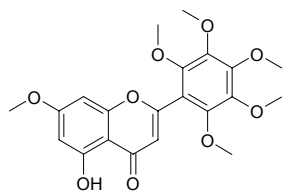
C₁₆H₂₆O₃ (266.38). Source: FU PING *Lemna minor*. Ref: 660.

**10162 4'-Hydroxy-3,5,6,7,3',5'-hexamethoxyflavone**

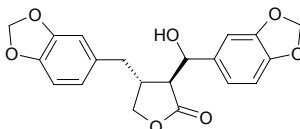
C₂₁H₂₂O₉ (418.40). Source: JIU LI XIANG GEN *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 660.

**10163 5-Hydroxy-7,2',3',4',5',6'-hexamethoxyflavone**

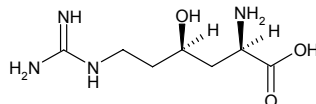
C₂₁H₂₂O₉ (418.40). Pale yellow rods, mp 176.0~176.4°C (EtOAc). Pharm: Anti-HIV-1 inactive. Source: TAI GUO ZHI ZI *Gardenia thailandica* (leaf and twig). Ref: 4963.

**10164 7-Hydroxyhinokinin**

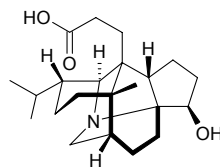
C₂₀H₁₈O₇ (370.36). Source: QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.000021%dw). Ref: 4783.

**10165 (+)-γ-Hydroxy-L-homoarginine**

[1616-99-5] C₇H₁₆N₄O₃ (204.23). Pharm: Involves in many plant metabolism processes. Source: BING DOU *Lens culinaris*, WAN DOU *Pisum sativum*, *Lathyrus* sp., *Vicia* sp. Ref: 658.

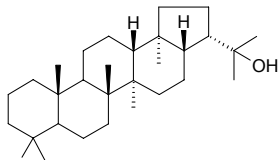
**10166 17-Hydroxyhomodaphniphylic acid**

C₂₂H₃₃NO₃ (361.53). Microcrystals (MeOH), mp 97~99°C, [α]_D = -17° (c = 0.2, MeOH). Source: NIU ER FENG ZI *Daphniphyllum calycinum* (fruit: yield = 0.00013%). Ref: 4754.

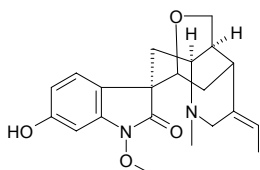


10167 Hydroxyhopane

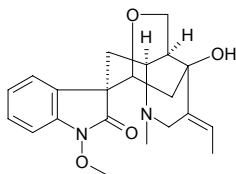
Diplopterol [1721-59-1] C₃₀H₅₂O (428.75). mp 254–256°C. Source: GUAN ZHONG *Dryopteris crassirhizoma*. Ref: 6.

**10168 11-Hydroxyhumantenine**

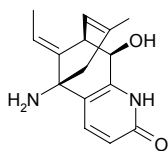
C₂₁H₂₆N₂O₄ (370.45). mp 176–177°C, [α]_D = –130°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.

**10169 15-Hydroxyhumantenine**

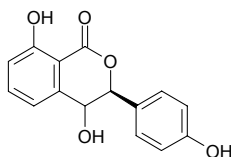
C₂₁H₂₆N₂O₄ (370.45). mp 213–215°C, [α]_D = –82.2°. Source: GOU WEN *Gelsemium elegans*. Ref: 14.

**10170 6β-Hydroxyhuperzine A**

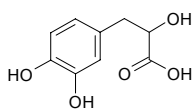
C₁₅H₁₈N₂O₂ (258.32). Source: XIAO JIE JIN CAO *Huperzia selago* [Syn. *Lycopodium selago*]. Ref: 660.

**10171 4-Hydroxyhydrangenol**

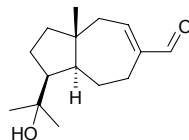
C₁₅H₁₂O₅ (272.26). Source: CHANG SHAN *Dichroa febrifuga*. Ref: 660.

**10172 α-Hydroxyhydrocaffeic acid**

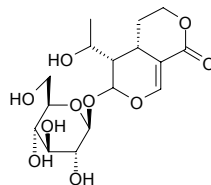
C₉H₁₀O₅ (198.18). Source: MI DIE XIANG *Rosmarinus officinalis*. Ref: 6.

**10173 11-Hydroxy-12-hydroisodaucenal**

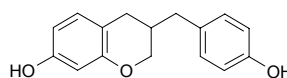
C₁₅H₂₄O₂ (236.36). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**10174 8-Hydroxy-10-hydrosweroside**

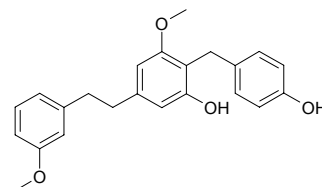
C₁₆H₂₄O₁₀ (376.36). Source: XI ZANG QIN JIAO *Gentiana tibetica*. Ref: 702.

**10175 7-Hydroxy-3-(4-hydroxybenzyl)chromane**

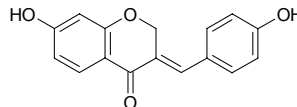
C₁₆H₁₆O₃ (256.30). Source: LONG XUE SHU *Dracaena draco* (stem cortex). Ref: 4696.

**10176 5-Hydroxy-4-(p-hydroxybenzyl)-3',3'-dimethoxybibenzyl**

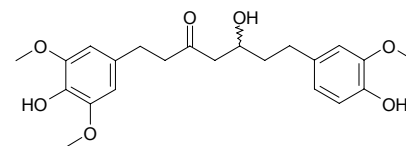
C₂₃H₂₄O₄ (364.45). White powder, soluble in methanol, mp 173–174°C. Source: BAI JI *Bletilla striata*. Ref: 2223.

**10177 7-Hydroxy-3-(4'-hydroxybenzylidene)-chroman-4-one**

C₁₆H₁₂O₄ (268.27). Source: SU MU *Caesalpinia sappan*. Ref: 660.

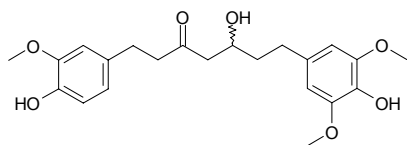
**10178 5ξ-Hydroxy-1-(4-hydroxy-3,5-dimethoxyphenyl)-7-(4-hydroxy-3-methoxyphenyl)-3-heptanone**

C₂₂H₂₈O₇ (404.46). Source: GAN JIANG *Zingiber officinale*. Ref: 660.



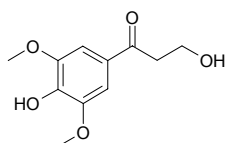
10179 5 ζ -Hydroxy-7-(4-hydroxy-3,5-dimethoxyphenyl)-1-(4-hydroxy-3-methoxyphenyl)-3-heptanone

C₂₂H₂₈O₇ (404.46). Source: GAN JIANG *Zingiber officinale*. Ref: 660.



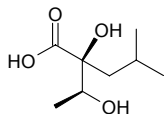
10180 3-Hydroxy-1-(4-hydroxy-3,5-dimethoxyphenyl)-1-propanone

C₁₁H₁₄O₅ (226.23). Source: TIAN XIAN GUO *Ficus beecheyana* [Syn. *Ficus erecta* var. *beecheyana*] (root: yield = 0.0086%dw). Ref: 4657.



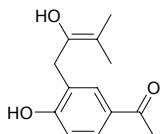
10181 erythro-2-Hydroxy-2-(1-hydroxyethyl)-4-methylpentanoic acid

C₈H₁₆O₄ (176.21). White oil, [α]_D²⁵ = -2.0° (c = 0.1, MeOH). Source: CU MAO NIU SHE CAO *Anchusa strigosa*. Ref: 5441.



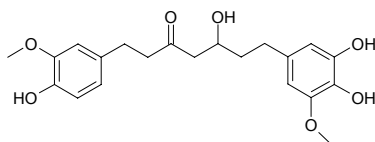
10182 4-Hydroxy-3-(2-hydroxy-3-isopentenyl)acetophenone

C₁₃H₁₆O₃ (220.27). Pharm: Anti-inflammatory (inhibits arachidonic acid metabolism, calcium ionophore-stimulated leukocytes, inhibits LTB₄ production, concentration-dependent manner, IC₅₀ = 111 μmol/L). Source: YI DA LI LA JU *Helichrysum italicum* Ref: 4415.



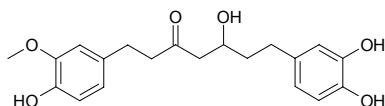
10183 5-Hydroxy-1-(4-hydroxy-3-methoxyphenyl)-7-(3,4-dihydroxy-5-methoxyphenyl)heptan-3-one

C₂₁H₂₆O₇ (390.44). Colorless oil. Source: SHENG JIANG *Zingiber officinale*. Ref: 3803.



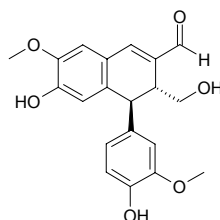
10184 5-Hydroxy-1-(4-hydroxy-3-methoxyphenyl)-7-(3,4-dihydroxyphenyl)heptan-3-one

C₂₀H₂₄O₆ (360.41). Colorless needles, mp 163~164°C, [α]_D¹⁶ = 0 (c = 0.74, EtOH). Source: SHENG JIANG *Zingiber officinale*. Ref: 3803.



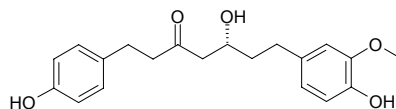
10185 6-Hydroxy-4-(4-hydroxy-3-methoxyphenyl)-3-hydroxymethyl-7-methoxy-3,4-dihydro-2-naphthaldehyde

C₂₀H₂₀O₆ (356.38). Pharm: Antioxidant (ferric thiocyanate method, 0.5mmol/L, stronger than control Vitamin E; DPPH radical scavenger, DPPH 0.1mmol/L, 0.02mmol/L, stronger than control L-Cysteine). Source: HUANG JING ZHONG ZI *Vitex negundo* (seed: yield = 0.022%). Ref: 4791.



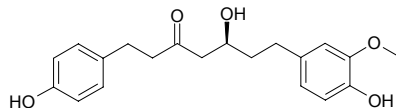
10186 5R-Hydroxy-7-(4-hydroxy-3-methoxyphenyl)-1-(4-hydroxyphenyl)-3-heptanone

C₂₀H₂₄O₅ (344.41). Pale yellow liquid, [α]_D²⁵ = +1.05° (c = 0.80, EtOH); [α]_D²⁶ = +1.3° (c = 0.06, EtOH). Pharm: Antiemetic (young male chicks, copper sulfate induced emesis assay, 50mg/kg, lnRt = 38.3%, p < 0.001)^[4649]. Source: GAO LIANG JIANG *Alpinia officinarum* (rhizome: yield = 0.0022%dw)^[4649], HUANG QI II *Engelhardia roxburghiana* (root). Ref: 4649, 5059.



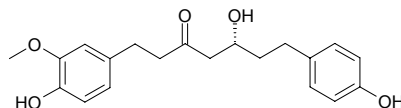
10187 5S-Hydroxy-7-(4-hydroxy-3-methoxyphenyl)-1-(4-hydroxyphenyl)-3-heptanone

C₂₀H₂₄O₅ (344.41). Yellow oil, [α]_D²⁵ = -2.52° (c = 0.09, MeOH). Pharm: Cytotoxic inactive (MTT assay, HT29 cell line, MCF7 cell line)^[4321]. Source: HU TAO QIU *Juglans mandshurica* (root). Ref: 4321.



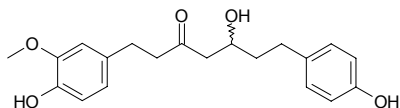
10188 5R-Hydroxy-1-(4-hydroxy-3-methoxyphenyl)-7-(4-hydroxyphenyl)-3-heptanone

C₂₀H₂₄O₅ (344.41). Pharm: Antiemetic inactive (young male chicks, copper sulfate induced emesis assay, 50mg/kg, lnRt = 12.4%)^[4649]. Source: GAO LIANG JIANG *Alpinia officinarum* (rhizome: yield = 0.00068%dw). Ref: 4649.



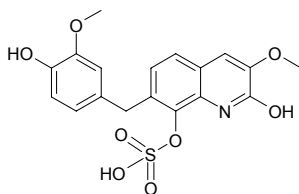
10189 5 ζ -Hydroxy-1-(4-hydroxy-3-methoxyphenyl)-7-(4-hydroxyphenyl)-3-heptanone

C₂₀H₂₄O₅ (344.41). Source: GAN JIANG *Zingiber officinale*. Ref: 660.



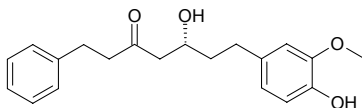
10190 2-Hydroxy-7-[(4-hydroxy-3-methoxyphenyl)methyl]-3-methoxy-8-quinolyl sulfate

C₁₈H₁₇NO₈S (407.40). Yellow powder, mp 192–194°C. Source: WU GONG *Scelopendra subspinipes mutilans* (whole body). Ref: 4104.



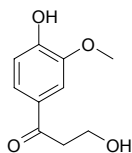
10191 5-Hydroxy-7-(4''-hydroxy-3''-methoxy-phenyl)-1-phenyl-3-heptanone

C₂₀H₂₄O₄ (328.41). Colorless oleaginous liquid, [α]_D²⁰ = -13.9° (*c* = 1.15, CHCl₃); yellow oil, [α]_D²⁰ = +6° (*c* = 1.0, MeOH). Pharm: 5 α -Reductase inhibitor (rat prostate 5 α -Reductase, IC₅₀ = (220±40)μmol/L, control Curcumin, IC₅₀ > 1000μmol/L, Finasteride, IC₅₀ = 0.01μmol/L)^[5345]. Source: GAO LIANG JIANG *Alpinia officinarum*. Ref: 435, 5345.



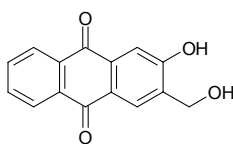
10192 3-Hydroxy-1-(4'-hydroxy-3'-methoxyphenyl) propan-1-one

C₁₀H₁₂O₄ (196.20). Source: *Eurycoma* sp. Ref: 4556.



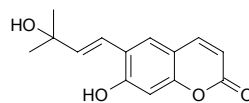
10193 2-Hydroxy-3-hydroxymethyl anthraquinone

C₁₅H₁₀O₄ (254.24). Source: BA JI TIAN *Morinda officinalis*. Ref: 660.



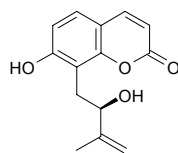
10194 (E)-7-Hydroxy-6-(3-hydroxy-methyl-1-butenyl)-2H-1-benzopyran-2-one

C₁₄H₁₄O₄ (246.27). mp 156–160°C. Source: RI BEN BAI SONG FENG CAO *Boenninghausenia albiflora* var. *japonica*, YAN JIAO CAO *Boenninghausenia albiflora*. Ref: 2495.



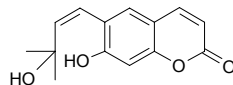
10195 (R)-(+)-7-Hydroxy-8-(2-hydroxy-3-methyl-3-butenyl)-2H-1-benzopyran-2-one

C₁₄H₁₄O₄ (246.27). Source: TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf; yield = 0.00015%dw). Ref: 4722.



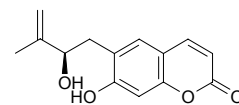
10196 (Z)-7-Hydroxy-6-(3-hydroxy-methyl-1-butenyl)-2H-1-benzopyran-2-one

C₁₄H₁₄O₄ (246.27). mp 139.0–140.5°C. Source: RI BEN BAI SONG FENG CAO *Boenninghausenia albiflora* var. *japonica*, YAN JIAO CAO *Boenninghausenia albiflora*. Ref: 2495.



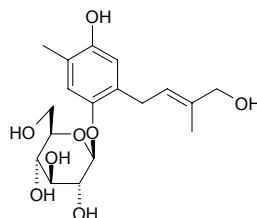
10197 7-Hydroxy-6-(2-(R)-hydroxy-3-methylbut-3-enyl)coumarin

C₁₄H₁₄O₄ (246.27). Pharm: AChE inhibitor (*in vitro*, IC₅₀ = 130μmol/L)^[3058]. Source: CHAO XIAN DANG GUI *Angelica gigas* (underground part). Ref: 3058.



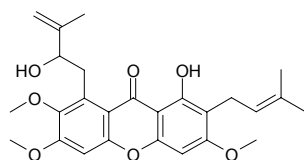
10198 4-Hydroxy-2-[(E)-4-hydroxy-3-methyl-2-butenyl]-5-methyl-phenyl β-D- glucopyranoside

C₁₈H₂₆O₈ (370.40). mp 121–123°C, [α]_D¹⁹ = -27.2° (*c* = 0.13, MeOH). Source: RI BEN LU TI CAO *Pyrola japonica* (whole herb). Ref: 4294.



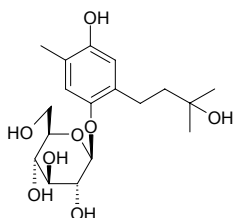
10199 1-Hydroxy-8-(2-hydroxy-3-methylbut-3-enyl)-3,6,7-trimethoxy-2-(3-methylbut-2-enyl)-xanthone

$C_{26}H_{30}O_7$ (454.52). Pale yellow gum. $[\alpha]_D^{25} = +26$ ($c = 0.2$, $CHCl_3$). Source: DAO NIAN ZI *Garcinia mangostana*. Ref: 1964.



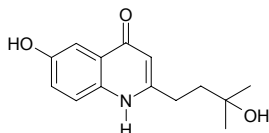
10200 4-Hydroxy-2-[3-hydroxy-3-methylbutyl]-5-methylphenyl β -D-glucopyranoside

$C_{18}H_{28}O_8$ (372.42). mp 100–105°C, $[\alpha]_D^{25} = -36.4^\circ$ ($c = 0.1$, MeOH). Source: RI BEN LU TI CAO *Pyrola japonica* (whole herb). Ref: 4294.



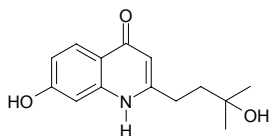
10201 6-Hydroxy-2-(3-hydroxy-3-methylbutyl)-4-quinolone

$C_{14}H_{17}NO_3$ (247.30). Yellow powder. Source: *Spathelia excelsa* (leaf). Ref: 5297.



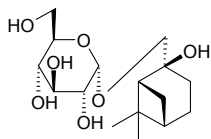
10202 7-Hydroxy-2-(3-hydroxy-3-methylbutyl)-4-quinolone

$C_{14}H_{17}NO_3$ (247.30). Yellow powder. Source: *Spathelia excelsa* (leaf). Ref: 5297.



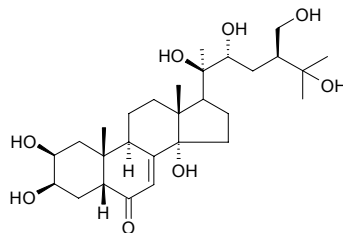
10203 2 β -Hydroxy-2 α -hydroxymethyl-6,6-dimethyl bicyclo[3.1.1]heptane-2 α -O-glucoside

$C_{16}H_{28}O_7$ (332.40). Source: YI ZHU QIAN MA *Urtica dioica*. Ref: 660.



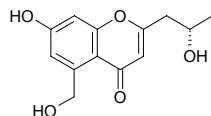
10204 20-Hydroxy 24-hydroxymethyl ecdysone

$C_{28}H_{46}O_8$ (510.67). Faint yellow amorphous solid. Source: DUO CI HUANG HUA REN *Sida spinosa*. Ref: 2043.



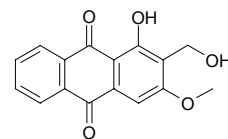
10205 (2'S)-7-Hydroxy-5-hydroxymethyl-2-(2'-hydroxypropyl) chromone

$C_{13}H_{14}O_5$ (250.25). mp 208–210°C, $[\alpha]_D^{28} = +38.4^\circ$ ($c = 0.8$, MeOH). Source: PO LUO MEN ZAO JIA *Cassia fistula* (seed; yield = 0.00026%). Ref: 4642.



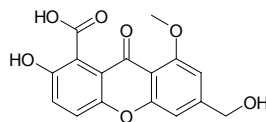
10206 1-Hydroxy-2-hydroxymethyl-3-methoxyanthraquinone

$C_{16}H_{12}O_5$ (284.27). Pharm: Cytotoxic (KB, $ED_{50} > 25\mu g/mL$, control Doxorubicin, $ED_{50} = 0.12\mu g/mL$; Hep3B, $ED_{50} = 0.60\mu g/mL$, Doxorubicin, $ED_{50} = 0.14\mu g/mL$; Colon205, $ED_{50} = 0.58\mu g/mL$, Doxorubicin, $ED_{50} = 0.10\mu g/mL$; HeLa, $ED_{50} = 9.15\mu g/mL$, Doxorubicin, $ED_{50} = 0.11\mu g/mL$). Source: GUANG JING QIAN CAO *Rubia wallichiana* (stem). Ref: 4369.



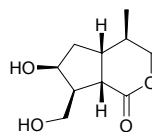
10207 2-Hydroxy-6-hydroxymethyl-8-methoxy-9-oxo-9H-xanthen-1-carboxylic acid

$C_{16}H_{12}O_7$ (316.27). Stable pale yellow amorphous solid Pharm: Cytotoxic inactive (brine shrimp *Artemia salina* lethality assay, 20 $\mu g/mL$ or 200 $\mu g/mL$). Source: *Xylaria* sp. Ref: 3845.



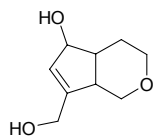
10208 (4R,5R,7S,8S,9S)-7-Hydroxy-8-hydroxymethyl-4-methyl-perhydrocyclopenta[c]pyran-1-one

$C_{10}H_{16}O_4$ (200.24). Pharm: Antitubercular (*Mycobacterium tuberculosis*, MIC > 128 $\mu g/mL$, cytotoxic, Vero cells, $IC_{50} > 102\mu g/mL$, positive control Rifampin, MIC = 0.03 $\mu g/mL$, $IC_{50} = 98.3\mu g/mL$, SI = 3300). Source: SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root). Ref: 4986.

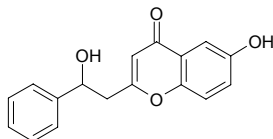


10209 7-Hydroxy-9-hydroxymethy-3-oxo-bicyclo[4.3.0]-8-nonene

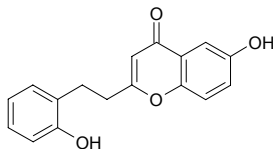
$C_9H_{14}O_3$ (170.21). Source: XUAN SHEN *Scrophularia ningpoensis*. Ref: 660.

**10210 6-Hydroxy-2-(2-hydroxy-2-phenylethyl)chromone**

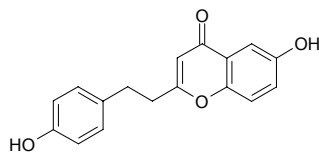
$C_{17}H_{14}O_4$ (282.30). White powder, mp 96–98°C, $[\alpha]_D^{25} = -3.0^\circ$ ($c = 0.66$, MeOH). Source: BAI MU XIANG *Aquilaria sinensis* (Withered wood). Ref: 4339.

**10211 6-Hydroxy-2-[2-(2-hydroxyphenyl) ethyl]chromone**

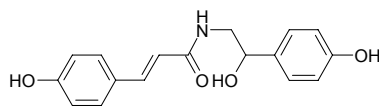
$C_{17}H_{14}O_4$ (282.30). Colorless needles, mp 185–186°C (MeOH). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 4173.

**10212 6-Hydroxy-2-[2-(4-hydroxyphenyl) ethyl]chromone**

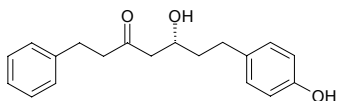
$C_{17}H_{14}O_4$ (282.30). Colorless needles, mp 215–218°C (MeOH). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 4173.

**10213 N-[β-Hydroxy-β-(4-hydroxyphenyl)]ethyl-4-hydroxy cinnamide**

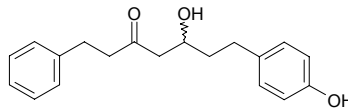
$C_{17}H_{17}NO_4$ (299.33). Source: MAI DONG *Ophiopogon japonicus*. Ref: 660.

**10214 5R-Hydroxy-7-(4''-hydroxyphenyl)-1-phenyl-3-heptanone**

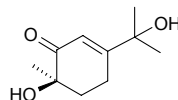
$C_{19}H_{22}O_3$ (298.39). Yellow oil, $[\alpha]_D^{20} = -13^\circ$ ($c = 1.0$, $CHCl_3$). Pharm: 5α-Reductase inhibitor (rat prostate 5α-Reductase, $IC_{50} = (220 \pm 60) \mu\text{mol/L}$, control Curcumin, $IC_{50} > 1000 \mu\text{mol/L}$, Finasteride, $IC_{50} = 0.01 \mu\text{mol/L}$)^[5345]. Source: GAO LIANG JIANG *Alpinia officinarum*. Ref: 5345.

**10215 5-Hydroxy-7-(4''-hydroxyphenyl)-1-phenyl-3-heptanone**

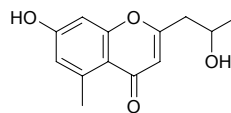
$C_{19}H_{22}O_3$ (298.39). Pharm: Antiemetic (young male chicks, copper sulfate induced emesis assay, 20mg/kg, InRt = 71.0%, $p < 0.001$)^[4649]. Source: GAO LIANG JIANG *Alpinia officinarum* (rhizome: yield = 0.041%dw^[4649]). Ref: 660, 4649.

**10216 (R)-6-Hydroxy-3-hydroxypropan-2-yl)-6-methylcyclohex-2-enone**

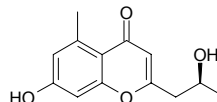
$C_{10}H_{16}O_3$ (184.24). White solid. Source: TIAN SHAN LING ZI QIN *Pleurospermum lindleyanum* (whole herb). Ref: 4558.

**10217 7-Hydroxy-2-(2-hydroxy)propyl-5-methyl-benzopyran-γ-one**

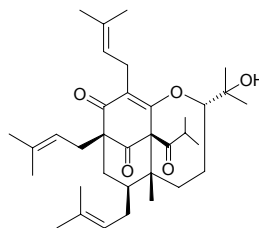
$C_{13}H_{14}O_4$ (234.25). Source: DA HUANG *Rheum officinale*. Ref: 2.

**10218 (2'S)-7-Hydroxy-2-(2'-hydroxypropyl)-5-methylchromone**

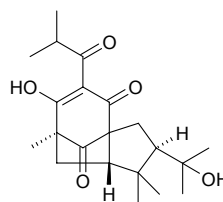
$C_{13}H_{14}O_4$ (234.25). Source: PO LUO MEN ZAO JIA *Cassia fistula* (seed: yield = 0.00029%). Ref: 4642.

**10219 8-Hydroxyhyperforin-8,1-hemiacetal**

[262857-89-6] $C_{35}H_{52}O_5$ (552.80). Viscous oil, $[\alpha]_D^{20} = +34^\circ$ ($c = 1$, $CHCl_3$). Source: GUAN YE LIAN QIAO *Hypericum perforatum* (aerial parts: yield = 0.0012%dw). Ref: 1521, 3032.

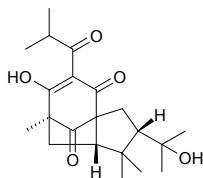
**10220 1'-Hydroxyialibinone A**

$C_{21}H_{30}O_5$ (362.47). Pharm: Antioxidant inactive (PMN cellular chemiluminescence assay, FMLP-induced and OZ-induced oxidative burst)^[5371]. Source: *Hypericum papuanum* Ref: 5371.

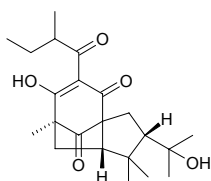


10221 1'-Hydroxyialbinone B

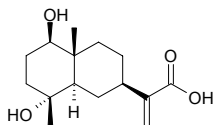
$C_{21}H_{30}O_5$ (362.47). **Pharm:** Antioxidant inactive (PMN cellular chemiluminescence assay, FMLP-induced and OZ-induced oxidative burst). **Source:** *Hypericum papuanum* **Ref:** 5371.

**10222 1'-Hydroxyialbinone D**

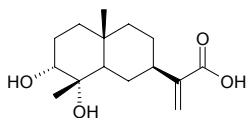
$C_{22}H_{32}O_5$ (376.50). **Pharm:** Antioxidant inactive (PMN cellular chemiluminescence assay, FMLP-induced and OZ-induced oxidative burst). **Source:** *Hypericum papuanum* **Ref:** 5371.

**10223 1β-Hydroxyilicic acid**

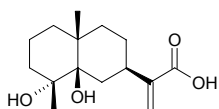
$C_{15}H_{24}O_4$ (268.36). **Source:** LIU LENG JU *Laggetera alata* (aerial parts: yield = 0.0006%dw). **Ref:** 4709.

**10224 3α-Hydroxyilicic acid**

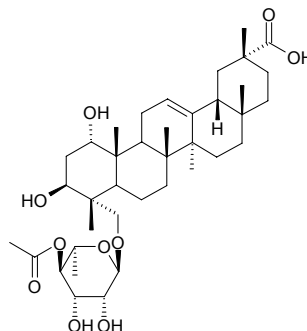
$C_{15}H_{24}O_4$ (268.36). Colorless needles, mp 177~178°C, $[\alpha]_D^{20} = -48^\circ$ ($c = 0.3$, $CHCl_3$). **Source:** LIU LENG JU *Laggetera alata* (aerial parts: yield = 0.00117%dw). **Ref:** 4709.

**10225 5β-Hydroxyilicic acid**

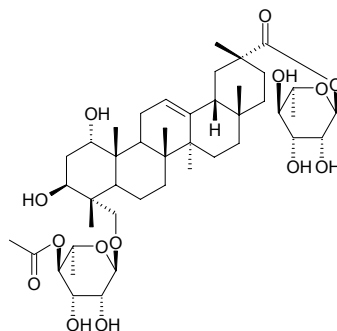
$C_{15}H_{24}O_4$ (268.36). Colorless needles (Me_2CO), mp 160~161.5°C, $[\alpha]_D^{20} = +5.39^\circ$ ($c = 0.8$, MeOH). **Source:** LIU LENG JU *Laggetera alata* (aerial parts: yield = 0.0011%dw). **Ref:** 4709.

**10226 1α,3β-Hydroxyimberbic acid-23-O-α-L-4-acetyl-rhamnopyranoside**

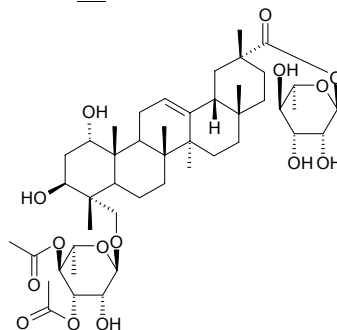
1α,3β,23-Trihydroxy-olean-12-en-29-oate-23-O-α-L-4-acetyl-rhamnopyranoside $C_{38}H_{60}O_{10}$ (676.90). White amorphous solid, mp 198°C, $[\alpha]_D^{21} = +41.8^\circ$ ($c = 0.311$, MeOH). **Source:** A KA XI A LAN REN *Terminalia stuhlmannii*. **Ref:** 2068.

**10227 1α,3β-Hydroxyimberbic acid-23-O-α-[L-4-acetyl-rhamnopyranosyl]-29-O-α-rhamnopyranoside**

1α,3β,23-Trihydroxy-olean-12-en-29-oate-23-O-α-L-4-acetyl-29-dirhamnopyranoside $C_{44}H_{70}O_{14}$ (823.04). Peach amorphous solid, mp 196°C, $[\alpha]_D^{22} = +15.0^\circ$ ($c = 0.133$, MeOH). **Source:** WU MAO FENG CHE ZI *Combretum imberbe*. **Ref:** 2068.

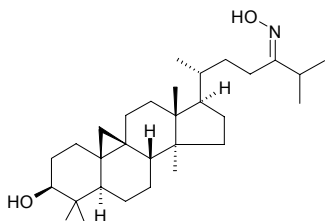
**10228 1α,3β-Hydroxyimberbic acid-23-α-L-[3,4-diacetyl-rhamnopyranosyl]-29-O-α-rhamnopyranoside**

1α,3β,23-Trihydroxy-olean-12-en-29-oate-23-O-α-L-3,4-diacetyl-29-dirhamnopyranoside $C_{46}H_{72}O_{15}$ (865.08). Yellow amorphous solid, mp 178°C, $[\alpha]_D^{22} = +16.2^\circ$ ($c = 0.401$, MeOH). **Source:** WU MAO FENG CHE ZI *Combretum imberbe*. **Ref:** 2068.

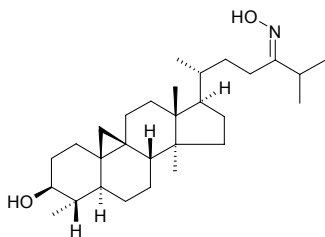


10229 24-Hydroxyiminocycloart-3-ol

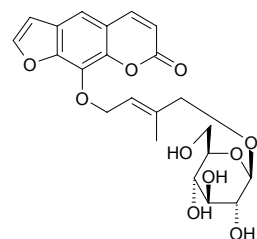
$C_{30}H_{51}NO_2$ (457.75). Amorphous powder. **Pharm:** Cytotoxic (Meth-A sarcoma cell line, $ED_{50} = 9.5\mu\text{g/mL}$, LLC cell line, $ED_{50} = 7.4\mu\text{g/mL}$). **Source:** QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*] (aerial parts). **Ref:** 3510.

**10230 24-Hydroxyimino-29-norcycloart-3-ol**

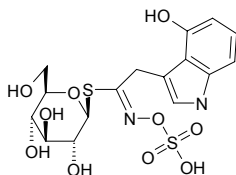
$C_{29}H_{49}NO_2$ (443.72). Amorphous powder, $[\alpha]_D^{24} = +35.4^\circ$ ($c = 0.35$, $CHCl_3$). **Pharm:** Cytotoxic (Meth-A sarcoma cell line, $ED_{50} = 5.5\mu\text{g/mL}$, LLC cell line, $ED_{50} = 6.4\mu\text{g/mL}$). **Source:** QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*] (aerial parts). **Ref:** 3510.

**10231 4''-Hydroxyimperatorin 4''-O-β-D-glucopyranoside**

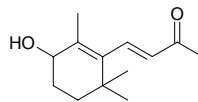
$C_{22}H_{24}O_{10}$ (448.43). **Pharm:** Antioxidant (DPPH scavenger, $EC_{50} > 50\mu\text{g/mL}$, $50\mu\text{g/mL}$ InRt = 42%, control Ascorbic acid, $EC_{50} = 1.6\mu\text{g/mL} = 9.1\mu\text{mol/L}$). **Source:** BEI SHA SHEN *Glehnia littoralis* (underground part). **Ref:** 4154.

**10232 4-Hydroxy-3-indolyl methyl glucosinolate**

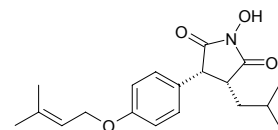
$C_{16}H_{20}N_2O_{10}S_2$ (464.47). **Source:** JIE ZI *Brassica juncea*. **Ref:** 660.

**10233 3-Hydroxy-β-ionone**

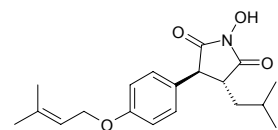
$C_{13}H_{20}O_2$ (208.30). **Source:** GOU QI ZI *Lycium chinense*. **Ref:** 660.

**10234 3R*,4R*-1-Hydroxy-3-isobutyl-4-[4-(3-methyl-2-butenyloxy)phenyl]pyrrolidine-2,5-dione**

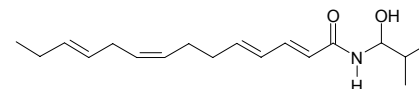
$C_{19}H_{25}NO_4$ (331.42). Colorless oil, $[\alpha]_D^{23} = +3.0^\circ$ ($c = 0.2$, MeOH). **Source:** *Antrodia camphorata* (fruit). **Ref:** 3003.

**10235 3R*,4S*-1-Hydroxy-3-isobutyl-4-[4-(3-methyl-2-butenyloxy)phenyl]pyrrolidine-2,5-dione**

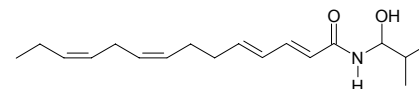
$C_{19}H_{25}NO_4$ (331.42). Colorless oil, $[\alpha]_D^{23} = +2.5^\circ$ ($c = 0.2$, MeOH). **Pharm:** Cytotoxic (*in vitro*, LLC cell line, $ED_{50} > 10\mu\text{g/mL}$; control Adriamycin, $ED_{50} = 0.14\mu\text{g/mL}$). **Source:** *Antrodia camphorata* (fruit). **Ref:** 3003.

**10236 (2E,4E,8Z,11E)-2'-Hydroxy-N-isobutyl-2,4,8,11-tetradecatetra-enamide**

$C_{18}H_{29}NO_2$ (291.44). **Pharm:** Platelet aggregation inhibitor. **Source:** QUAN YUAN YE HUA JIAO *Zanthoxylum integrifolium*. **Ref:** 2176.

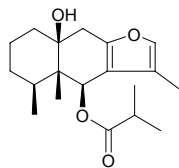
**10237 (2E,4E,8Z,11Z)-2'-Hydroxy-N-isobutyl-2,4,8,11-tetradecatetra-enamide**

$C_{18}H_{29}NO_2$ (291.44). **Pharm:** Platelet aggregation inhibitor. **Source:** QUAN YUAN YE HUA JIAO *Zanthoxylum integrifolium*. **Ref:** 2176.

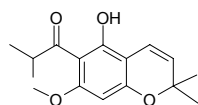


10238 10 β -Hydroxy-6 β -isobutyryl furanoeremophilane

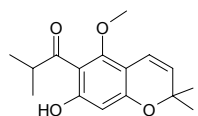
C₁₉H₂₈O₄ (320.43). Pharm: Toxin (mus, ip, LD₅₀ = 400mg/kg); hepatotoxin.
Source: GUANG SI SHI JU *Tetradymia glabrata*. Ref: 658.

**10239 5-Hydroxy-6-isobutyryl-7-methoxy-2,2-dimethylbenzopyran**

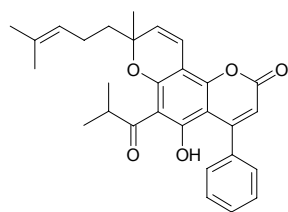
C₁₆H₂₀O₄ (276.34). Viscous oil. Source: *Hypericum polyanthemum* (aerial parts). Ref: 5168.

**10240 7-Hydroxy-6-isobutyryl-5-methoxy-2,2-dimethylbenzopyran**

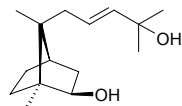
C₁₆H₂₀O₄ (276.34). Viscous oil. Source: *Hypericum polyanthemum* (aerial parts). Ref: 5168.

**10241 5-Hydroxy-6-isobutyryl-8-methyl-8-(4-methylpent-3-enyl)-4-phenyl-2H-pyrano[2,3-h]chromen-2-one**

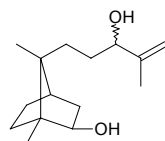
C₂₉H₃₀O₅ (458.56). Yellow gum. Source: TIE LI MU *Mesua ferrea* (blossom).
Ref: 3870.

**10242 11-Hydroxy-isocampheren-9-ene**

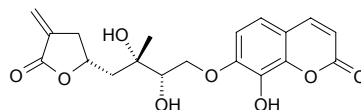
C₁₅H₂₆O₂ (238.37). Oil, [α]_D = +18.4° (c = 0.46, CHCl₃). Source: DU AI BA JIAO *Illicium tsangii*. Ref: 1866.

**10243 10ξ-Hydroxy-isocampheren-11-ene**

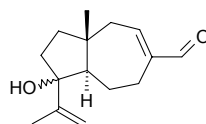
11-Campherene-4,10-diol C₁₅H₂₆O₂ (238.37). Oil, [α]_D = -11.6° (c = 0.1, CHCl₃). Source: DU AI BA JIAO *Illicium tsangii*. Ref: 1866.

**10244 8-Hydroxyisocapnolactone-2',3'-diol**

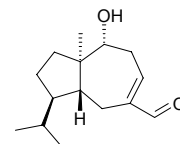
C₁₉H₂₀O₈ (376.37). White needles, mp 72~73°C. Source: JI XIAO XIAO YUN XIANG MU *Micromelum minutum* (leaf). Ref: 3467.

**10245 Hydroxyisodaucenal**

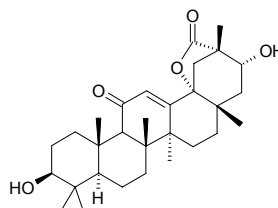
C₁₅H₂₂O₂ (234.34). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**10246 1 α -Hydroxyisodauc-4-en-15-al**

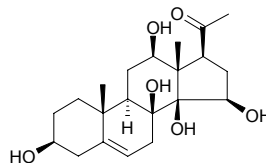
C₁₅H₂₄O₂ (236.36). Source: YI NIAN PENG *Erigeron annuus* (aerial parts), SU MEN BAI JIU CAO *Erigeron sumatrensis* (aerial parts). Ref: 4338.

**10247 21 α -Hydroxyisoglabrolide**

C₃₀H₄₄O₅ (484.68). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*.
Ref: 2, 660.

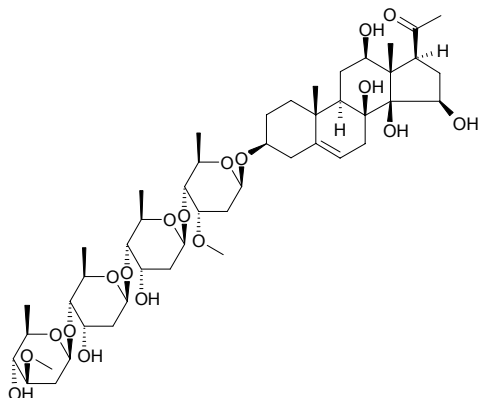
**10248 15 β -Hydroxyisolineolon**

15 β -Hydroxyisolineolone C₂₁H₃₂O₆ (380.49). Amorphous powder, [α]_D²¹ = +55.9° (c = 0.47, MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



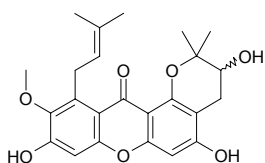
10249 15- β -Hydroxyisolinecolon 3-O- β -D-oleandropyranosyl-(1 \rightarrow 4)- β -D-digitoxopyranosyl-(1 \rightarrow 4)- β -D-digitoxopyranosyl-(1 \rightarrow 4)- β -D-cymaropyranoside

C₄₇H₇₆O₁₈ (929.12). Amorphous powder, $[\alpha]_D^{27} = +25.4^\circ$ ($c = 0.40$, MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



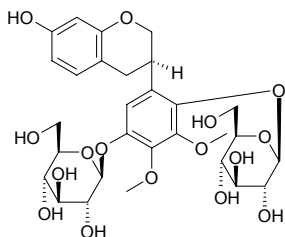
10250 11-Hydroxy-1-isomangostin

C₂₄H₂₆O₇ (426.47). Pharm: Cytotoxic (KB cancer cell lines, IC₅₀ = 13.14 μ g/mL, control Ellipticine, IC₅₀ = 1.33 μ g/mL; BC-1, IC₅₀ = 18.53 μ g/mL, Ellipticine, IC₅₀ = 1.46 μ g/mL; NCI-H187, inactive). Source: DAO NIAN ZI *Garcinia mangostana* (young fruit; yield = 0.080%dw). Ref: 1619.



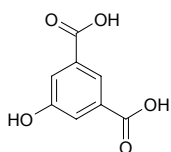
10251 5'-Hydroxy-isomucronulatol-2',5'-di-O-glucoside

C₂₉H₃₈O₁₆ (642.62). Source: MENG GU HUANG QI *Astragalus mongholicus*. Ref: 660.



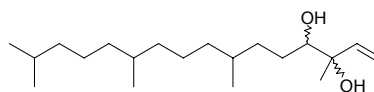
10252 5-Hydroxyisophthalic acid

5-Hydroxy-1,3-benzenedicarboxylic acid [618-83-7] C₈H₆O₅ (182.13). mp 284–285°C. Source: HUANG JING YE *Vitex negundo*. Ref: 6.



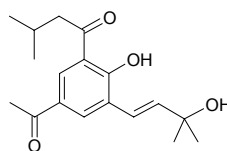
10253 (4R)-4-Hydroxyisophytol

C₂₀H₄₀O₂ (312.54). Source: FU PING *Lemma minor*. Ref: 660.



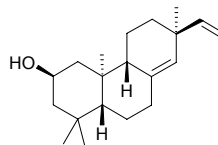
10254 Hydroxyisopiloselloidone

[54963-60-9] C₁₈H₂₄O₄ (304.39). mp 97°C. Source: MAO DA DING CAO *Gerbera piloselloides*. Ref: 6.



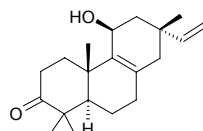
10255 (2R)-ent-2-Hydroxyisopimara-8(14),15-diene

C₂₀H₃₂O (288.48). Crystals, mp 104–105°C, $[\alpha]_D = -9.6^\circ$ ($c = 0.81$). Source: JI RUAN RONG TAI *Trichoclea mollissima*. Ref: 3489.



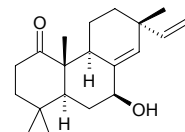
10256 11 β -Hydroxy-8,15-isopimaradiene-3-one

C₂₀H₃₀O₂ (302.46). Resinous substance, $[\alpha]_D^{22} = +22.8^\circ$ ($c = 0.34$, CHCl₃). Source: XIA JI XIAN WEN XIANG CHA CAI *Isodon lophanthoides* var. *gerardiana*. Ref: 4067.



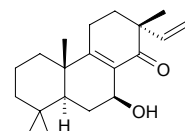
10257 7 β -Hydroxyisopimara-8(14),15-dien-1-one

C₂₀H₃₀O₂ (302.46). Amorphous powder, $[\alpha]_D = -3.1^\circ$ ($c = 0.7$, CHCl₃). Pharm: Antifungal (TLC bioautographic assay, plant pathogenic fungus *Cladosporium cucumerinum*, MA= 0.5 μ g, yeast *Candida albicans*, MA= 0.5 μ g). Source: PU FU QIANG DAO YAO *Hypoestes serpens*. Ref: 3438.



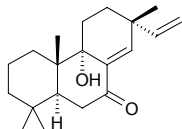
10258 7 β -Hydroxyisopimara-8,15-dien-14-one

C₂₀H₃₀O₂ (302.46). Amorphous powder, $[\alpha]_D = +55.5^\circ$ ($c = 0.8$, CHCl₃). Pharm: Antifungal (TLC bioautographic assay, plant pathogenic fungus *Cladosporium cucumerinum*, MA= 1 μ g, yeast *Candida albicans*, MA= 1 μ g); AChE inhibitor (TLC bioautographic assay, MA= 0.5 μ g). Source: PU FU QIANG DAO YAO *Hypoestes serpens*. Ref: 3438.

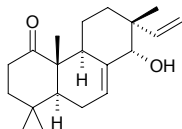


10259 9 α -Hydroxyisopimara-8(14),15-dien-7-one

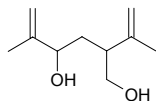
C₂₀H₃₀O₂ (302.46). Amorphous solid, [α]_D²³ = -30.0° (c = 0.6, CHCl₃). [Source](#): TAI WAN SHAN *Taiwania cryptomerioides* (bark). [Ref](#): 4443.

**10260 14 α -Hydroxyisopimara-7,15-dien-1-one**

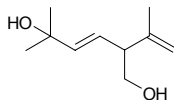
C₂₀H₃₀O₂ (302.46). Amorphous powder, [α]_D = +18.0° (c = 0.9, CHCl₃). [Pharm](#): Antifungal (TLC bioautographic assay, plant pathogenic fungus *Cladosporium cucumerinum*, MA = 0.5 μ g, yeast *Candida albicans*, MA = 0.5 μ g); AChE inhibitor (TLC bioautographic assay, MA = 0.2 μ g). [Source](#): FU QIANG DAO YAO *Hypoestes serpens*. [Ref](#): 3438.

**10261 4-Hydroxy-2-isopropenyl-5-methylene-hexan-1-ol**

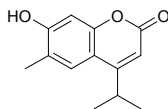
C₁₀H₁₈O₂ (170.25). Colorless oil, [α]_D = -9.3° (c = 0.3, CHCl₃). [Source](#): HUANG HUA HAO *Artemisia annua* (seed). [Ref](#): 3435.

**10262 trans-5-Hydroxy-2-isopropenyl-5-methylhex-3-en-1-ol**

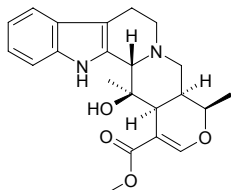
C₁₀H₁₈O₂ (170.25). Oil. [Source](#): HUANG HUA HAO *Artemisia annua* (aerial parts). [Ref](#): 5224.

**10263 7-Hydroxy-4-isopropyl-6-methyl coumarin**

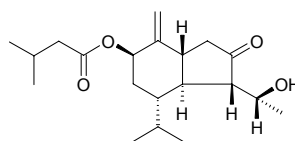
C₁₃H₁₄O₃ (218.25). [Source](#): JIN JI WEI BA CAO GEN *Macrothelypteris oligophlebia*. [Ref](#): 660.

**10264 14- β -Hydroxy-3-isoraunicine**

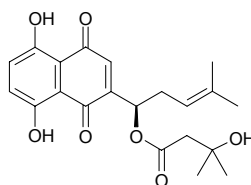
C₂₂H₂₆N₂O₄ (382.46). [Source](#): TUO YUAN GOU TENG *Uncaria elliptica*. [Ref](#): 5341.

**10265 14(R)-Hydroxy-7 β -isovaleryloxyoplop-8(10)-en-2-one**

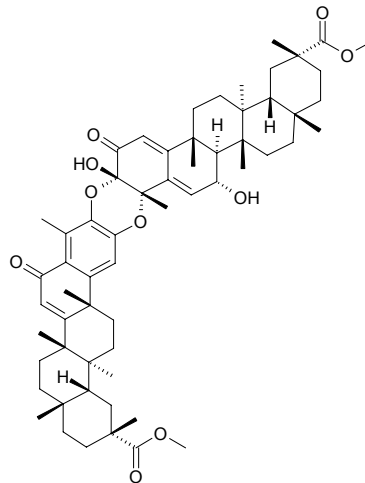
C₂₀H₃₂O₄ (336.48). Colorless oil, [α]_D¹⁹ = -57.6° (c = 0.2, CHCl₃). [Source](#): KUAN DONG HUA *Tussilago farfara* (flower bud). [Ref](#): 3531.

**10266 β -Hydroxyisovalerylshikonin**

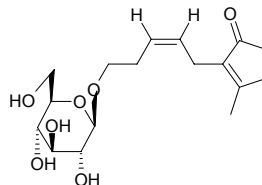
C₂₁H₂₄O₇ (388.42). [Source](#): DIAN ZI CAO *Onosma paniculatum* (root: content = 0.009%^[5508]), JIA ZI CAO *Arnebia guttata* (root: content = 0.042%^[5508]), XIN ZANG JIA ZI CAO *Arnebia euchroma* (root: mean content of 3 origins = 0.158%^[5508]), ZI CAO *Lithospermum erythrorhizon* (root: content = 0.131%^[5508]). [Ref](#): 2, 660, 5508.

**10267 7 α -Hydroxyisoxuxuarine Ea**

C₆₀H₈₀O₁₀ (961.30). Yellow amorphous solid. [Source](#): QIU SHI MEI DENG MU *Maytenus chuchuhuasca* (bark). [Ref](#): 4295.

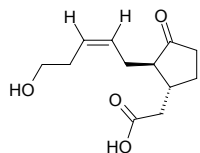
**10268 (Z)-5'-Hydroxyjasmane 5'-O- β -D-glucopyranoside**

C₁₇H₂₆O₇ (342.39). Amorphous powder, [α]_D²² = -24°. [Source](#): SHE XIANG CAO *Thymus vulgaris*. [Ref](#): 2592.

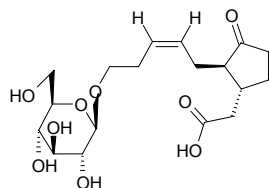


10269 (1R,2R)-5'-Hydroxyjasmonic acid

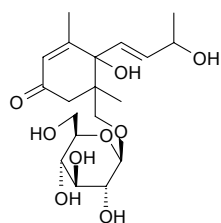
$C_{12}H_{18}O_4$ (226.27). Amorphous powder, $[\alpha]_D^{24} = -67^\circ$. Source: SHE XIANG CAO *Thymus vulgaris*, fungus *Botryodiplodia theobromae*. Ref: 2592.

**10270 (1R,2R)-5'-Hydroxyjasmonic acid 5'-O-β-D-glucopyranoside**

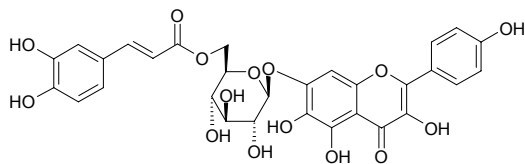
$C_{18}H_{28}O_9$ (388.42). Amorphous powder, $[\alpha]_D^{24} = -72^\circ$. Source: SHE XIANG CAO *Thymus vulgaris*, BAI SU YE *Perilla frutescens*. Ref: 2592.

**10271 6-Hydroxy-junipeonolide**

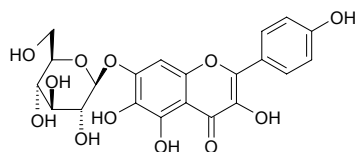
$C_{19}H_{30}O_9$ (402.45). Source: SHAN YANG DOU *Galega officinalis*, FEI NI JI CI BAI *Juniperus phoenicea*. Ref: 1867.

**10272 6-Hydroxykaempferol-7-O-(6-O-caffeoyl-β-D-glucopyranoside)**

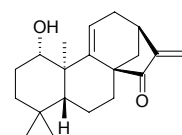
$C_{30}H_{26}O_{15}$ (626.53). Pharm: Antioxidant (DPPH scavenger, $IC_{50} = (5.27 \pm 0.12) \mu\text{mol/L}$, control Quercetin, $IC_{50} = (6.11 \pm 0.53) \mu\text{g/mL}$). Source: ZUI DA WAN SHOU JU *Tagetes maxima* (aerial parts). Ref: 5318.

**10273 6-Hydroxykaempferol-7-O-glucoside**

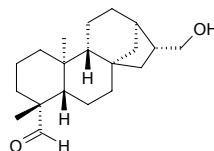
[70056-55-2] $C_{21}H_{20}O_{12}$ (464.39). Yellow acicular crystals. Source: HONG HUA *Carthamus tinctorius*, WAN SHOU JU *Tagetes erecta*. Ref: 644, 1521.

**10274 ent-1β-Hydroxy-9(11),16-kauradien-15-one**

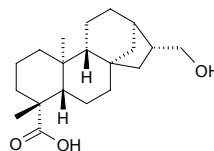
$C_{20}H_{28}O_2$ (300.44). mp 138–140°C, $[\alpha]_D^{20} = +238.7^\circ$ ($c = 6.05$, $CHCl_3$). Pharm: Cytotoxic (hmn leukemia cell line HL-60, $IC_{50} = 7.0 \mu\text{mol/L}$). Source: XIN XI LAN YE TAI *Jungermannia* sp. Ref: 4390.

**10275 17-Hydroxy-16β-ent-kauran-19-al**

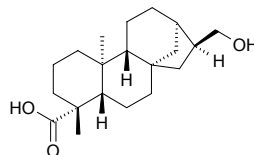
$C_{20}H_{30}O_2$ (304.48). Pharm: Platelet aggregation inhibitor inactive (washed rabbit platelets, 200 $\mu\text{mol/L}$: 100 $\mu\text{mol/L}$ AA induced, InRt = 0.5%; 10 $\mu\text{g/mL}$ collagen induced, InRt = 4.9%; 1 ng/mL PAF induced, InRt = 10.3%; 0.05 U/mL thrombin induced, InRt = 3.2%). Source: FAN LI ZHI *Annona squamosa* (stem: yield = 0.00040%fw). Ref: 4654.

**10276 17-Hydroxy-16β-ent-kauran-19-oic acid**

$C_{20}H_{32}O_3$ (320.48). Pharm: Platelet aggregation selected inhibitor (washed rabbit platelets, 200 $\mu\text{mol/L}$: 100 $\mu\text{mol/L}$ AA induced, InRt = 4.1%; 10 $\mu\text{g/mL}$ collagen induced, InRt = 23.8%; 1 ng/mL PAF induced, InRt = 7.4%; 0.05 U/mL thrombin induced, InRt = 2.8%)^[4654]; antioxidant (inhibits superoxide anion generation, fMLP/CB, $IC_{50} = (3.6 \pm 0.8) \mu\text{g/mL}$, $p < 0.001$, control DPI, $IC_{50} = (0.13 \pm 0.06) \mu\text{g/mL}$, $p < 0.001$)^[4950]. Source: FAN LI ZHI *Annona squamosa* (stem: yield = 0.00053%fw). Ref: 4654, 4950.

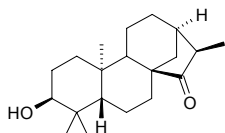
**10277 (-)-17-Hydroxy-16β-kauran-19-oic acid**

16*aH*-17-Hydroxy-*ent*-kauran-19-oic acid $C_{20}H_{32}O_3$ (320.48). Pharm: Antiproliferative and cytotoxic (*in vitro*, L-929, $GI_{50} = 42.4 \mu\text{g/mL}$; K562, $GI_{50} = 32.8 \mu\text{g/mL}$; HeLa, $CC_{50} = 43 \mu\text{g/mL}$; control Paclitaxel, L-929, $GI_{50} = 0.1 \mu\text{g/mL}$; K562, $GI_{50} = 0.01 \mu\text{g/mL}$; HeLa, $CC_{50} = 0.01 \mu\text{g/mL}$)^[4770]. Source: FAN LI ZHI *Annona squamosa* (stem: yield = 0.00040%fw)^[4654], MU LAN⁽³⁾ *Bruguiera gymnorrhiza* (stem: yield = 0.00015%), XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*]. Ref: 2, 660, 4654, 4770.

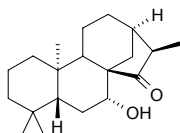


10278 (16R)-ent-3 α -Hydroxykauran-15-one

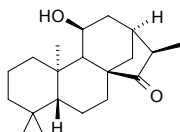
$C_{22}H_{32}O_2$ (304.48). Oil, $[\alpha]_D^{19} = -45.1^\circ$ ($c = 0.96$). Source: JIE XING YE TAI *Jungermannia truncata*. Ref: 4201.

**10279 (16R)-ent-7 β -Hydroxykauran-15-one**

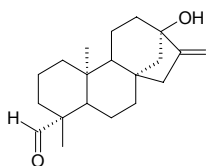
$C_{22}H_{32}O_2$ (304.48). Pharm: Cytotoxic inactive (hmn leukemia cell HL-60, $10\mu\text{mol/L}$). Source: JIE XING YE TAI *Jungermannia truncata*. Ref: 4201.

**10280 (16R)-ent-11 α -Hydroxykauran-15-one**

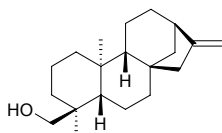
$C_{22}H_{32}O_2$ (304.48). Pharm: Cytotoxic inactive (hmn leukemia cell HL-60, $10\mu\text{mol/L}$). Source: JIE XING YE TAI *Jungermannia truncata*. Ref: 4201.

**10281 13-Hydroxy-16-ent-kauran-19-al**

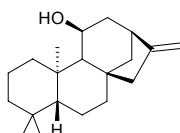
$C_{20}H_{30}O_2$ (302.46). Pharm: Antiproliferative and cytotoxic (*in vitro*, L-929, $GI_{50} = 11.5\mu\text{g/mL}$; K562, $GI_{50} = 10.5\mu\text{g/mL}$; HeLa, $CC_{50} = 42.3\mu\text{g/mL}$; control Paclitaxel, L-929, $GI_{50} = 0.1\mu\text{g/mL}$; K562, $GI_{50} = 0.01\mu\text{g/mL}$; HeLa, $CC_{50} = 0.01\mu\text{g/mL}$). Source: MU LAN⁽³⁾ *Bruguiera gymnorrhiza* (stem; yield = 0.00015%). Ref: 4770.

**10282 ent-18-Hydroxykaur-16-ene**

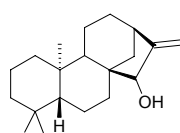
$C_{20}H_{32}O$ (288.48). Source: DONG JIN BA DOU *Croton tonkinensis* (leaf). Ref: 4444.

**10283 ent-11 α -Hydroxy-16-karene**

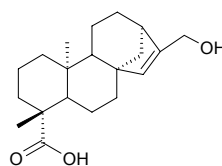
$C_{20}H_{32}O$ (288.48). Source: JIE XING YE TAI *Jungermannia truncata*. Ref: 4201.

**10284 ent-15 α -Hydroxy-16-karene**

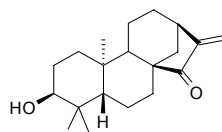
$C_{20}H_{32}O$ (288.48). Source: JIE XING YE TAI *Jungermannia truncata*. Ref: 4201.

**10285 (-)-17-Hydroxy-kaur-15-en-19-oic acid**

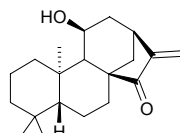
$C_{20}H_{30}O_3$ (318.46). White solid, mp $187\sim 188^\circ\text{C}$, $[\alpha]_D^{20} = -101.6^\circ$ ($c = 1$, CHCl_3). Pharm: Na^+, K^+ -ATP inhibitor (crude enzyme Na^+, K^+ -ATPase from rat brain, $IC_{50} = 600\mu\text{mol/L}$). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*] (semi-synthetic derivative). Ref: 5404.

**10286 ent-3 α -Hydroxy-16-karen-15-one**

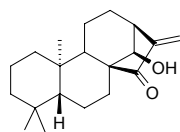
$C_{20}H_{30}O_2$ (302.46). Source: JIE XING YE TAI *Jungermannia truncata*. Ref: 4201.

**10287 ent-11 α -Hydroxy-16-karen-15-one**

$C_{20}H_{30}O_2$ (302.46). Pharm: Cytotoxic (hmn leukemia cell HL-60, $IC_{50} = 0.82\mu\text{mol/L}$, induces apoptosis^[4201]); cytotoxic (hmn leukemia cell line HL-60, $IC_{50} = 0.49\mu\text{mol/L}$)^[4390]; apoptosis enhancer (hmn leukemia cells, TNF- α and CPT-induced apoptosis, selectively inhibits NF- κ B-dependent anti-apoptotic proteins)^[5011]. Source: JIE XING YE TAI *Jungermannia truncata*, XIN XI LAN YE TAI *Jungermannia* sp. Ref: 4201, 4390, 5011.

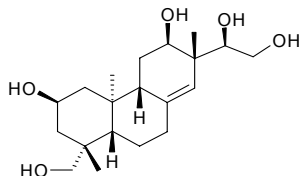
**10288 ent-14 α -Hydroxy-16-karen-15-one**

$C_{20}H_{30}O_2$ (302.46). Source: JIE XING YE TAI *Jungermannia truncata*. Ref: 4201.

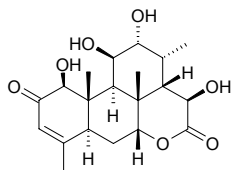


10289 12-Hydroxykirenon

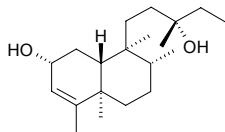
$C_{20}H_{34}O_5$ (354.49). White grain crystals, mp 217~219°C. Source: XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*]. Ref: 800.

**10290 15β-Hydroxyklaineanone**

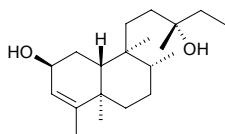
$C_{20}H_{28}O_7$ (380.44). Pharm: Plant growth inhibitor (Cucumber seedling, root growth, $IC_{50} = (10.5 \pm 0.5) \mu\text{mol/L}$, shoot growth, $IC_{50} = (23.7 \pm 0.5) \mu\text{mol/L}$; Rice seedling, root growth, $IC_{50} > 200 \mu\text{mol/L}$, shoot growth, $IC_{50} > 200 \mu\text{mol/L}$)^[5215]. Source: CHANG YE KUAN MU *Eurycoma longifolia* (leaf), *Eurycoma* sp. Ref: 4556, 5215.

**10291 (+)-2α-Hydroxykolavelool**

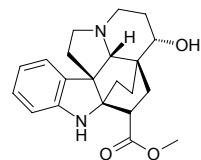
13-Epi-roseosta-chenol $C_{20}H_{34}O_2$ (306.49). Colorless amorphous solid, $[\alpha]_D^{25} = +10.0^\circ$ ($c = 0.10$, CHCl_3). Source: BA XI MA DOU LING *Aristolochia chamissonis*. Ref: 1904.

**10292 (-)-2β-Hydroxykolavelool**

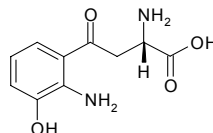
$C_{20}H_{34}O_2$ (306.49). Colorless amorphous solid, $[\alpha]_D^{25} = -38.5^\circ$ ($c = 0.09$, CHCl_3). Source: BA XI MA DOU LING *Aristolochia chamissonis*. Ref: 1904.

**10293 15α-Hydroxykopsinine**

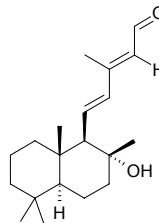
$C_{21}H_{26}N_2O_3$ (354.45). Source: HONG HUA RUI MU *Kopsia fruticosa* (leaf). Ref: 3830.

**10294 3-Hydroxykynurenine**

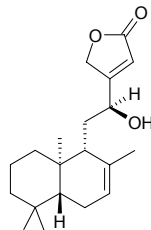
[606-14-4] $C_{10}H_{12}N_2O_4$ (224.22). mp (-) 185~190°C, (\pm) 223°C (dec). Source: YUAN CAN ZI *Bombyx mori*. Ref: 6.

**10295 8α-Hydroxy-11E,13Z-labdadien-15-al**

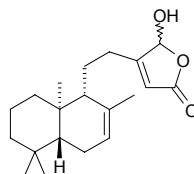
$C_{20}H_{32}O_2$ (304.48). Amorphous, $[\alpha]_D^{27} = +87.5^\circ$ ($c = 0.20$, CHCl_3). Source: TAI WAN SHAN MU *Cunninghamia konishii* (wood). Ref: 4176.

**10296 ent-12R-Hydroxyabda-7,13-dien-15,16-olide**

$C_{20}H_{30}O_3$ (318.46). White crystals ($\text{MeOH-H}_2\text{O}$), mp 108~110°C, $[\alpha]_D = -5.4^\circ$ (CHCl_3 , $c = 0.19$). Pharm: Antitrypanosomal (protozoan parasite *Trypanosoma cruzi*, *in vitro*, 250 $\mu\text{g/mL}$, 100% lysis); cytotoxic inactive (Lu1, 20 $\mu\text{g/mL}$, control Ellipticine, $ED_{50} = 0.02 \mu\text{g/mL}$; Col2, 20 $\mu\text{g/mL}$, Ellipticine, $ED_{50} = 0.3 \mu\text{g/mL}$; KB, 20 $\mu\text{g/mL}$, Ellipticine, $ED_{50} = 0.04 \mu\text{g/mL}$; LN CaP, 20 $\mu\text{g/mL}$, Ellipticine, $ED_{50} = 0.8 \mu\text{g/mL}$; KB in absence of 1 $\mu\text{g/mL}$ vinblastine, 20 $\mu\text{g/mL}$, Ellipticine, $ED_{50} = 0.3 \mu\text{g/mL}$; KB in presence of 1 $\mu\text{g/mL}$ vinblastine, 20 $\mu\text{g/mL}$, Ellipticine, $ED_{50} = 0.2 \mu\text{g/mL}$; BC1, 20 $\mu\text{g/mL}$, Ellipticine, $ED_{50} = 0.5 \mu\text{g/mL}$). Source: *Alomia myriadenia* (aerial parts). Ref: 3479.

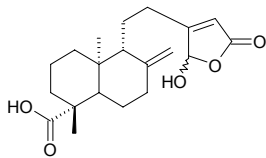
**10297 ent-16-Hydroxyabda-7,13-dien-15,16-olide**

$C_{20}H_{30}O_3$ (318.46). White crystals ($\text{MeOH-H}_2\text{O}$), mp 128~129°C, $[\alpha]_D = +40.9^\circ$ (MeOH , $c = 0.21$). Pharm: Cytotoxic (Lu1, $ED_{50} = 0.3 \mu\text{g/mL}$, control Ellipticine, $ED_{50} = 0.02 \mu\text{g/mL}$; Col2, $ED_{50} = 1.2 \mu\text{g/mL}$, Ellipticine, $ED_{50} = 0.3 \mu\text{g/mL}$; KB, $ED_{50} = 1.7 \mu\text{g/mL}$, Ellipticine, $ED_{50} = 0.04 \mu\text{g/mL}$; LNCaP, $ED_{50} = 4.2 \mu\text{g/mL}$, Ellipticine, $ED_{50} = 0.8 \mu\text{g/mL}$; KB in absence of 1 $\mu\text{g/mL}$ vinblastine, $ED_{50} = 1.4 \mu\text{g/mL}$, Ellipticine, $ED_{50} = 0.3 \mu\text{g/mL}$; KB in presence of 1 $\mu\text{g/mL}$ vinblastine, $ED_{50} = 9.9 \mu\text{g/mL}$, Ellipticine, $ED_{50} = 0.2 \mu\text{g/mL}$; BC1, $ED_{50} = 2.6 \mu\text{g/mL}$, Ellipticine, $ED_{50} = 0.5 \mu\text{g/mL}$); antitrypanosomal (protozoan parasite *Trypanosoma cruzi*, *in vitro*, 250 $\mu\text{g/mL}$, 100% lysis). Source: *Alomia myriadenia* (aerial parts). Ref: 3479.

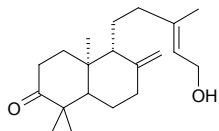


10298 16-Hydroxy-8(17),13-*ent*-labdadien-15,16-olide-19-oic acid

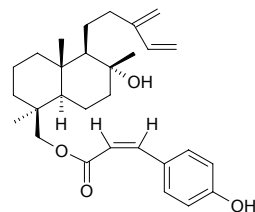
$C_{20}H_{28}O_5$ (348.44). Pale-yellow gum, $[\alpha]_D^{25} = -36.6^\circ$ ($c = 0.32$, MeOH).
 Source: BI CHI YAN ZI CAI *Potamogeton pectinatus* (whole herb). Ref: 3488.

**10299 *ent*-15-Hydroxyabda-8(17),13*E*-dien-3-one**

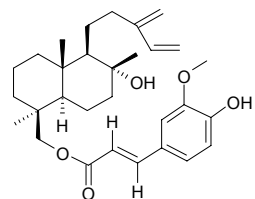
$C_{20}H_{32}O_2$ (304.48). Colorless needles (MeOH), mp 117–118°C, $[\alpha]_D^{25} = -9.2^\circ$ ($c = 0.8$, $CHCl_3$). Source: HAI QI *Excoecaria agallocha* (root). Ref: 5114.

**10300 8 α -Hydroxyabda-13(16),14-dien-19-yl-(*Z*)-4-hydroxycinnamate**

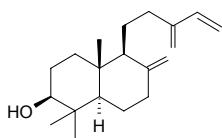
$C_{29}H_{40}O_4$ (452.64). Solid, mp = 206–208°C, $[\alpha]_D^{25} = +6.5^\circ$ ($c = 1.65$, MeOH).
 Source: HONG GUI *Chamaecyparis formosensis*. Ref: 2315.

**10301 8 α -Hydroxyabda-13(16),14-dien-19-yl-(*E*)-4-hydroxy-3-methoxy-cinnamate**

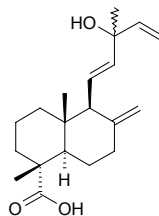
$C_{30}H_{42}O_5$ (482.67). Solid, mp = 110–112°C, $[\alpha]_D^{25} = +6.2^\circ$ ($c = 0.7$, MeOH).
 Source: HONG GUI *Chamaecyparis formosensis*. Ref: 2315.

**10302 3 β -Hydroxy-labda-8(17),13(16),14-triene**

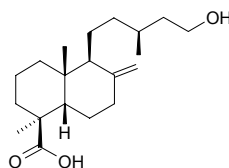
$C_{20}H_{32}O$ (288.48). $[\alpha]_D^{20} = +12.1^\circ$ ($c = 1.3$, $CHCl_3$). Source: YUAN YE TAI *Jamesoniella colorata*. Ref: 3375.

**10303 (13*R*)-13-Hydroxy-8(17),11*E*,14-labdatrien-18-oic acid**

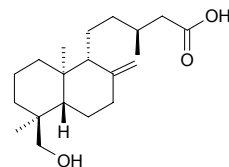
$C_{20}H_{30}O_3$ (318.46). Amorphous, $[\alpha]_D^{26} = +51.7^\circ$ ($c = 0.17$, $CHCl_3$). Source: TAI WAN SHAN MU *Cunninghamia konishii* (wood). Ref: 4176.

**10304 *ent*-15-Hydroxy-8(17)-labden-19-oic acid**

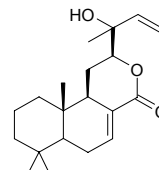
$C_{20}H_{34}O_3$ (322.49). Source: *Nuxia sphaerocephala* (leaf). Ref: 4419.

**10305 *ent*-18-Hydroxy-8(17)-labden-15-oic acid**

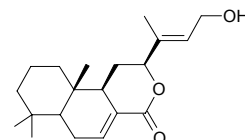
$C_{20}H_{34}O_3$ (322.49). Source: *Nuxia sphaerocephala* (leaf). Ref: 4419.

**10306 13-Hydroxyabda-7,14-diene-17,12-olide**

$C_{20}H_{30}O_3$ (318.46). mp 105–107°C, $[\alpha]_D^{20} = +19.826^\circ$ ($c = 1.1$, $CHCl_3$).
 Pharm: Cytotoxic inactive (*in vitro*, BT474, CHAGO, HepG2, Kato3, SW620: > 10 $\mu\text{g/mL}$). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. Ref: 5363.

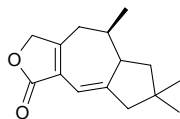
**10307 15-Hydroxyabda-7,13(*E*)-diene-17,12-olide**

$C_{20}H_{30}O_3$ (318.46). mp 128–130°C, $[\alpha]_D^{20} = -3.44^\circ$ ($c = 1.31$, $CHCl_3$). Pharm: Cytotoxic (*in vitro*, BT474, IC₅₀ = 5.9 $\mu\text{g/mL}$, control Doxorubicin hydrochloride, IC₅₀ = 0.08 $\mu\text{g/mL}$; CHAGO, IC₅₀ = 6.0 $\mu\text{g/mL}$, Doxorubicin hydrochloride, IC₅₀ = 2.3 $\mu\text{g/mL}$; HepG2, IC₅₀ > 10 $\mu\text{g/mL}$, Doxorubicin hydrochloride, IC₅₀ = 0.9 $\mu\text{g/mL}$; Kato3, IC₅₀ = 7.6 $\mu\text{g/mL}$, Doxorubicin hydrochloride, IC₅₀ = 1.7 $\mu\text{g/mL}$; SW620, IC₅₀ = 6.0 $\mu\text{g/mL}$, Doxorubicin hydrochloride, IC₅₀ = 1.1 $\mu\text{g/mL}$). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. Ref: 5363.

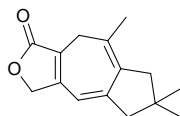


10308 5-Hydroxy-lactara-6,8-dien-13-oic acid γ -lactone

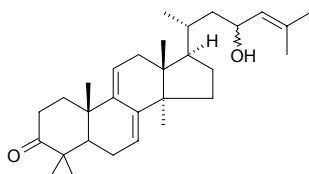
$C_{15}H_{20}O_2$ (232.33). Source: RONG BAI RU GU *Lactarius vellereus*. Ref: 660.

**10309 13-Hydroxy-lactara-2,6,8-trien-5-oic acid γ -lactone**

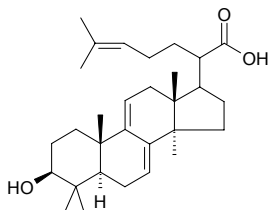
$C_{15}H_{18}O_2$ (230.31). Source: RONG BAI RU GU *Lactarius vellereus*. Ref: 660.

**10310 23-Hydroxy-5 α -lanosta-7,9(11),24-triene-3-one**

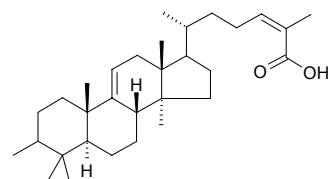
$C_{30}H_{46}O_2$ (438.70). Colorless needles (methanol), mp 95°C, $[\alpha]_D = -32.25^\circ$ ($c = 0.01$, $CHCl_3$). Pharm: Antileishmanial (*Leishmania donovani* promastigotes, $IC_{50} = 7.2\mu\text{mol/L}$, SI = 4.19; control Pentamidine, $IC_{50} = 0.40\mu\text{mol/L}$, SI = 0.42, amastigotes, $IC_{50} = 74.4\mu\text{mol/L}$, SI = 0.40; control Pentostam, $IC_{50} = 9.75\mu\text{g/mL}$, SI = 34.90); antimalarial (*Plasmodium falciparum* K1, $IC_{50} = 95\mu\text{mol/L}$, SI = 0.32; control Chloroquine, $IC_{50} = 0.59\mu\text{mol/L}$, SI = 272); antitrypanosomal (*Trypanosoma brucei brucei* blood stream trypomastigotes, $IC_{50} = 5\mu\text{mol/L}$, SI = 6.0; control Pentamidine, $IC_{50} = 0.00034\mu\text{mol/L}$, SI = 500); cytotoxic (KB cells, $IC_{50} = 30.2\mu\text{mol/L}$, control Pentamidine, $IC_{50} = 0.17\mu\text{mol/L}$). Source: *Guarea rhopalocarpa* (leaf). Ref: 5127.

**10311 3 β -Hydroxylanosta-7,9(11),24-trien-21-oic acid**

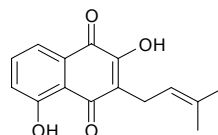
$C_{30}H_{46}O_3$ (454.70). mp 257~259°C. Source: FU LING *Poria cocos*. Ref: 2, 6.

**10312 3 β -Hydroxy-lanost-9(11),24(25)-dien-26-oic acid**

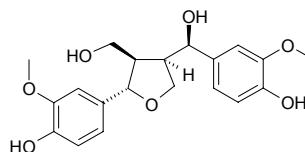
$C_{31}H_{50}O_2$ (454.74). Source: XIAO HUA WU WEI ZI *Schisandra micrantha* (stem and leaf). Ref: 4389.

**10313 5-Hydroxylapachol**

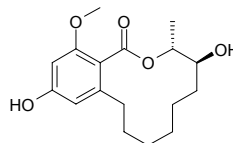
$C_{15}H_{14}O_4$ (258.28). orange needles, mp 142~144°C. Source: YOU MU *Tectona grandis*. Ref: 1902.

**10314 (7'R)-7'-Hydroxylariciresinol**

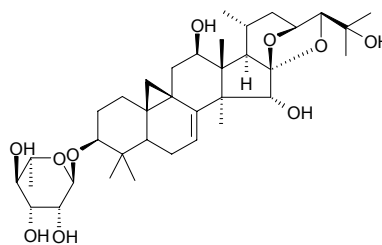
$C_{20}H_{24}O_7$ (376.41). Pharm: Hepatoprotective (mouse, 50mg/kg, TNF- α level = $(288\pm 187)\text{pg/mL}$, 10 mg/kg, TNF- α level = $(310\pm 179)\text{pg/mL}$)^[4917]; antioxidant (DPPH free radical scavenger, $IC_{50} = 44.7\mu\text{mol/L}$, control Caffeic acid, $IC_{50} = 25.5\mu\text{mol/L}$)^[5407]; NO production inhibitor ($IC_{50} = 178\mu\text{mol/L}$, control L-NMMA, $IC_{50} = 28.5\mu\text{mol/L}$)^[5407]. Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood). Ref: 4917, 5407.

**10315 (3R),(4S)-4-Hydroxylasiodiopodin**

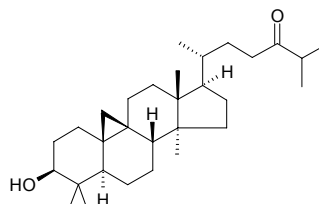
$C_{17}H_{24}O_5$ (308.38). White powder, mp 217~218°C, $[\alpha]_D^{25} = +2.0^\circ$ ($c = 1.0$, MeOH). Pharm: Potato micro-tuber inducer (100 $\mu\text{mol/L}$, control Jasmonic acid, 1 $\mu\text{mol/L}$, Theobroxide, 10 $\mu\text{mol/L}$). Source: *Lasiodiopodia theobromae*. Ref: 3966.

**10316 12 β -Hydroxylcimigenol 3-O- α -L-arabinopyranoside**

$C_{36}H_{56}O_{10}$ (648.84). Source: XING AN SHENG MA *Cimicifuga dahurica* (rhizome). Ref: 4140.

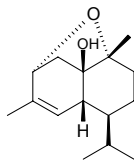
**10317 3 β -Hydroxyleycloart-24-one**

$C_{30}H_{50}O_2$ (442.73). Pharm: Cytotoxic (Meth-A sarcoma cell line, $ED_{50} = 9.0\mu\text{g/mL}$, LLC cell line, $ED_{50} = 9.0\mu\text{g/mL}$). Source: QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*] (aerial parts). Ref: 3510.



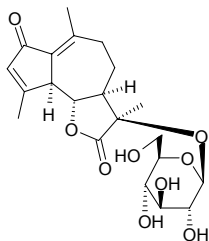
10318 10-Hydroxylentideusether

$C_{15}H_{24}O_2$ (236.36). Source: BAO PI GU *Lentinus lepideus*. Ref: 660.

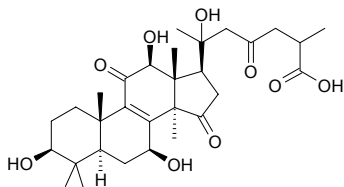
**10319 11 β -Hydroxyleukodin 11-O- β -glucopyranoside**

$C_{21}H_{28}O_9$ (424.45). Colorless gum, $[\alpha]_D^{28} = +25.2^\circ$ ($c = 0.33$, MeOH).

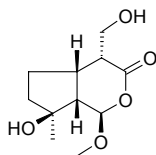
Source: DAO LUAN YE PU GONG YING GEN *Taraxacum obovatum*. Ref: 5357.

**10320 20-Hydroxylganoderic acid G**

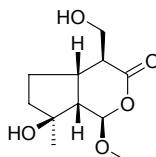
$C_{30}H_{44}O_9$ (548.68). Pale yellow needles (MeOH-H₂O), mp 175-177°C, $[\alpha]_D^{25} = +42^\circ$ ($c = 0.12$, MeOH). Source: LING ZHI *Ganoderma lucidum* (dried sporocarp; yield = 0.0004%). Ref: 4603.

**10321 (1R,4R,4aS,7S,7aS)-7-Hydroxyl-4-hydroxymethyl-7-methyl-1-methoxyl-1,4,4a,7a-tetrahydrocyclopenta[e]-pyran-3-one**

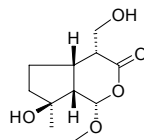
$C_{11}H_{18}O_5$ (230.26). Colorless gum, $[\alpha]_D^{25} = +23.9$ ($c = 0.45$, CHCl₃). Source: GUANG YAO DA HUANG HUA *Cymbaria mongolica*. Ref: 2001.

**10322 (1R,4S,4aS,7S,7aS)-7-hydroxyl-4-hydroxymethyl-7-methyl-1-methoxyl-1,4,4a,7a-tetrahydrocyclopenta[e]-pyran-3-one**

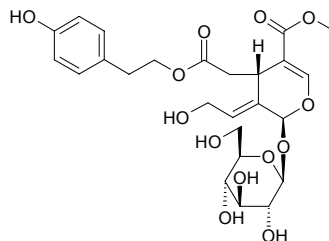
$C_{11}H_{18}O_5$ (230.26). White amorphous powder, $[\alpha]_D^{25} = +33.5$ ($c = 0.35$, CHCl₃). Source: GUANG YAO DA HUANG HUA *Cymbaria mongolica*. Ref: 2001.

**10323 (1S,4R,4aS,7S,7aS)-7-Hydroxyl-4-hydroxymethyl-7-methyl-1-methoxyl-1,4,4a,7a-tetrahydrocyclopenta[e]-pyran-3-one**

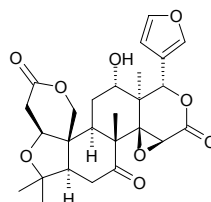
$C_{11}H_{18}O_5$ (230.26). Colorless gum, $[\alpha]_D^{25} = +23.7^\circ$ ($c = 0.25$, CHCl₃). Source: GUANG YAO DA HUANG HUA *Cymbaria mongolica*. Ref: 2001.

**10324 10-Hydroxyligustroside**

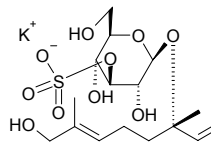
$C_{25}H_{32}O_{13}$ (540.53). Source: NV ZHEN ZI *Ligustrum lucidum*. Ref: 660.

**10325 12 α -Hydroxylimonin**

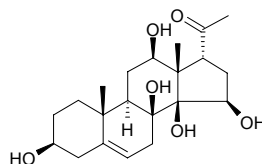
$C_{26}H_{30}O_9$ (486.52). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2, 877.

**10326 (3S,6E)-8-Hydroxylinalool 3-O- β -D-(3-O-Potassium sulfo) glucopyranoside**

$C_{16}H_{27}KO_{10}S$ (450.55). Amorphous powder, $[\alpha]_D^{21} = -12^\circ$ ($c = 0.9$, MeOH). Source: HU SUI ZI *Coriandrum sativum*. Ref: 4302.

**10327 15 β -Hydroxylineolon**

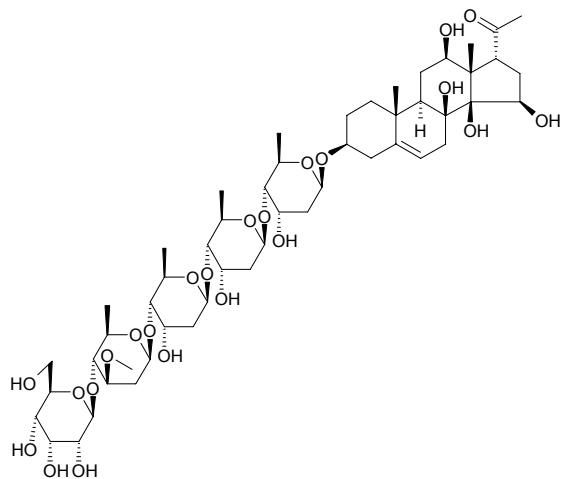
15 β -Hydroxylineolone $C_{21}H_{32}O_6$ (380.49). Amorphous powder, $[\alpha]_D^{21} = -3.4^\circ$ ($c = 0.85$, MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



10328 15- β -Hydroxylineolon 3-O- β -D-allopyranosyl-(1 \rightarrow 4)- β -D-oleandropyranosyl-(1 \rightarrow 4)- β -D-digitoxopyranosyl-(1 \rightarrow 4)- β -D-digitoxopyranoside

C₅₂H₈₄O₂₃ (1077.24). Amorphous powder, $[\alpha]_D^{27} = +1.6^\circ$ ($c = 0.41$, MeOH).

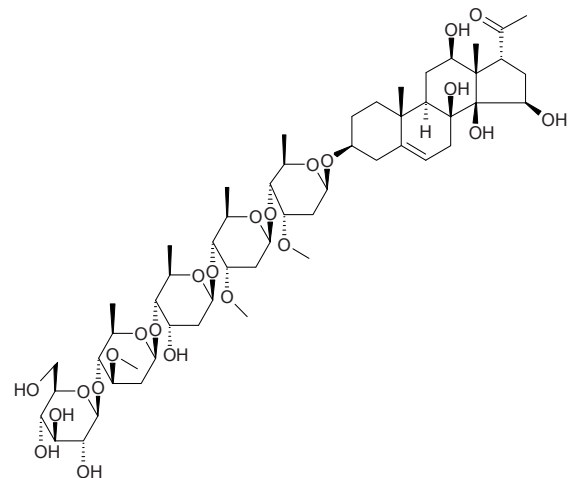
Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



10329 15- β -Hydroxylineolon 3-O- β -D-glucopyranosyl-(1 \rightarrow 4)- β -D-oleandropyranosyl-(1 \rightarrow 4)- β -D-digitoxopyranosyl-(1 \rightarrow 4)- β -D-cymaropyranosyl-(1 \rightarrow 4)- β -D-cymaropyranoside

C₅₄H₈₈O₂₃ (1105.29). Amorphous powder, $[\alpha]_D^{21} = +7.9^\circ$ ($c = 0.63$, MeOH).

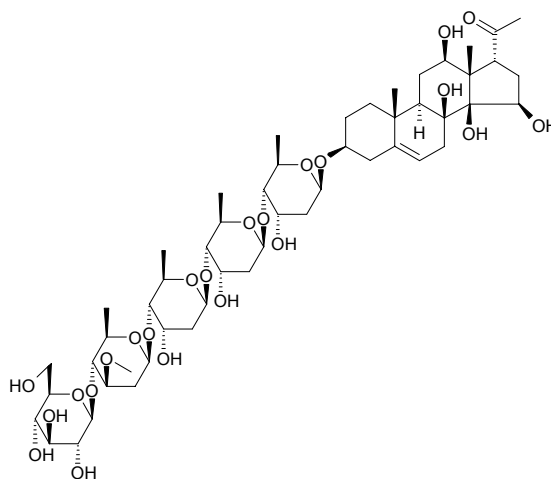
Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



10330 15- β -Hydroxylineolon 3-O- β -D-glucopyranosyl-(1 \rightarrow 4)- β -D-oleandropyranosyl-(1 \rightarrow 4)- β -D-digitoxopyranosyl-(1 \rightarrow 4)- β -D-digitoxopyranoside

C₅₂H₈₄O₂₃ (1077.24). Amorphous powder, $[\alpha]_D^{21} = +1.9^\circ$ ($c = 0.84$, MeOH).

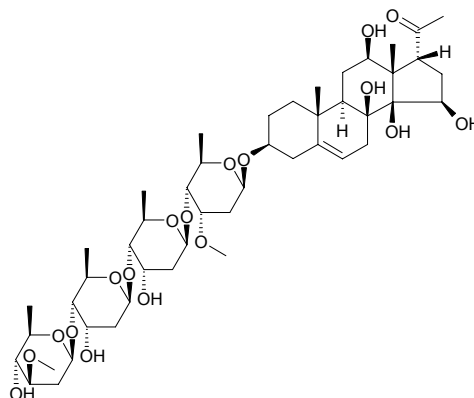
Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



10331 15- β -Hydroxylineolon 3-O- β -D-oleandropyranosyl-(1 \rightarrow 4)- β -D-digitoxopyranosyl-(1 \rightarrow 4)- β -D-digitoxopyranosyl-(1 \rightarrow 4)- β -D-cymaropyranoside

C₄₇H₇₆O₁₈ (929.12). Amorphous powder, $[\alpha]_D^{27} = +3.7^\circ$ ($c = 0.79$, MeOH).

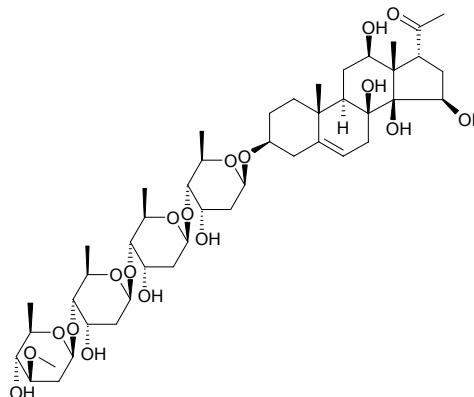
Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



10332 15- β -Hydroxylineolon 3-O- β -D-oleandropyranosyl-(1 \rightarrow 4)- β -D-digitoxopyranosyl-(1 \rightarrow 4)- β -D-digitoxopyranosyl-(1 \rightarrow 4)- β -D-digitoxopyranoside

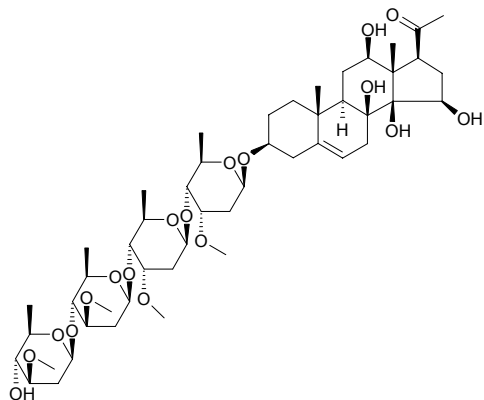
C₄₆H₇₄O₁₈ (915.09). Amorphous powder, $[\alpha]_D^{27} = -0.53^\circ$ ($c = 1.23$, MeOH).

Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



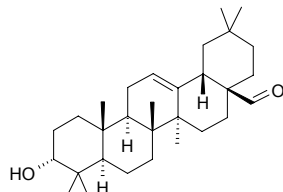
10333 15- β -Hydroxylineolon 3-O- β -D-oleandropyranosyl-(1 \rightarrow 4)- β -D-oleandropyranosyl-(1 \rightarrow 4)- β -D-cymaropyranosyl-(1 \rightarrow 4)- β -D-cymaropyranoside

C₄₉H₈₀O₁₈ (957.17). Amorphous powder, $[\alpha]_D^{27} = -2.2^\circ$ ($c = 0.80$, MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



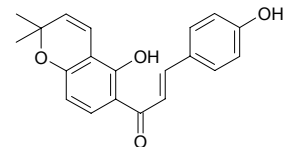
10334 3 β -Hydroxy-olean-12-en-28-al

C₃₀H₄₈O₂ (440.72). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.



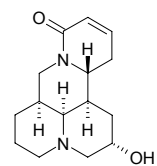
10335 4-Hydroxyonchocarpin

C₂₀H₁₈O₄ (322.36). Source: *Glycyrrhiza* sp. Ref: 2431.



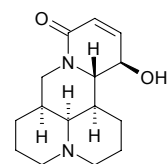
10336 (-)-9 α -Hydroxylsophocarpine

C₁₅H₂₂N₂O₂ (262.35). Colorless crystals (benzene), mp 120°C, $[\alpha]_D^{25} = -44.2^\circ$ ($c = 0.36$, EtOH). Source: BAI CI HUA *Sophora viciifolia*. Ref: 1888.



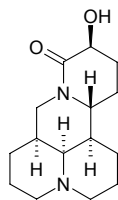
10337 (-)-12 β -Hydroxylsophocarpine

C₁₅H₂₂N₂O₂ (262.35). Colorless crystals (benzene), mp 146°C, $[\alpha]_D^{25} = -215.1^\circ$ ($c = 0.22$, EtOH). Source: BAI CI HUA *Sophora viciifolia*. Ref: 1888.



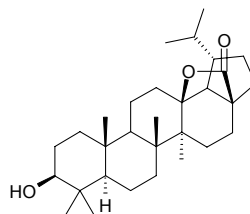
10338 (-)-14 β -Hydroxylsophoridine

C₁₅H₂₄N₂O₂ (264.37). Colorless needles (CH₂Cl₂-*n*-hexane), mp. 90°C, $[\alpha]_D^{25} = -94.8^\circ$ ($c = 0.47$, EtOH). Source: BAI CI HUA *Sophora viciifolia*. Ref: 1888.



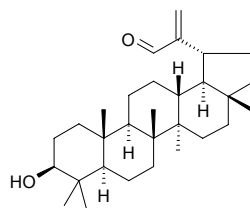
10339 3 β -Hydroxylupane-13 β ,28-lactone

C₃₀H₄₈O₃ (456.72). Source: WU YA GUO *Dillenia indica*. Ref: 660.



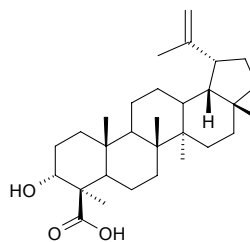
10340 3 β -Hydroxy-lup-20(29)-en-30-al

C₃₀H₄₈O₂ (440.72). Pharm: Cytotoxic (NSCLC-N6 cell line, IC₅₀ = (11 \pm 0.02) μ g/mL)^[3806]; antimalarial (*Plasmodium falciparum* FcB1, IC₅₀ = (3.15 \pm 0.07) μ g/mL, control Chloroquine, IC₅₀ = (0.05 \pm 0.002) μ g/mL; *Plasmodium falciparum* FcM29, IC₅₀ = (4.06 \pm 0.53) μ g/mL)^[4419]. Source: JU MI JIN HE HUAN *Acacia mellifera* (stem cortex), *Nuxia sphaerocephala* (leaf). Ref: 3806, 4419.



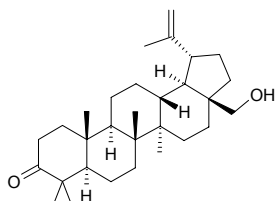
10341 3 α -Hydroxy-lup-20(29)-en-24-oic acid

C₃₀H₄₈O₃ (456.72). Colorless crystals (MeOH), $[\alpha]_D^{25} = +16^\circ$ ($c = 1.15$, CHCl₃). Source: RU XIANG *Boswellia carterii*. Ref: 2050.

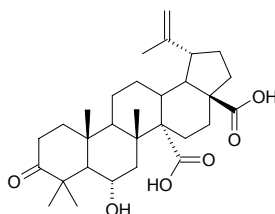


10342 28-Hydroxy-lup-20(29)-en-3-one

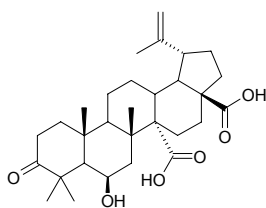
$C_{30}H_{48}O_2$ (440.72). **Pharm:** Cytotoxic (NSCLC-N6 cell line, $IC_{50} = (30 \pm 0.04) \mu\text{g/mL}$). **Source:** JU MI JIN HE HUAN *Acacia mellifera* (stem cortex). **Ref:** 3806.

**10343 6 α -Hydroxylup-20(29)-en-3-oxo-27,28-dioic acid**

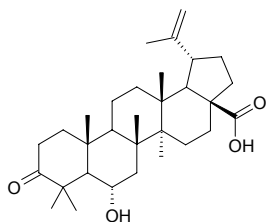
$C_{30}H_{44}O_6$ (500.68). Amorphous powder, $[\alpha]_D^{26} = +70.6^\circ$ ($c = 0.05$, CHCl_3). **Pharm:** Cytotoxic inactive (*in vitro*, gastric tumour NUGC, $10 \mu\text{mol/L}$, $\text{InRt} < 50\%$; control Antinomycin D, $10 \mu\text{mol/L}$, $\text{InRt} = (98\sim 100)\%$). **Source:** XIANG QI JIA MI *Viburnum odoratissimum* (leaf and flower: yield = 0.0055%). **Ref:** 4638.

**10344 6 β -Hydroxylup-20(29)-en-3-oxo-27,28-dioic acid**

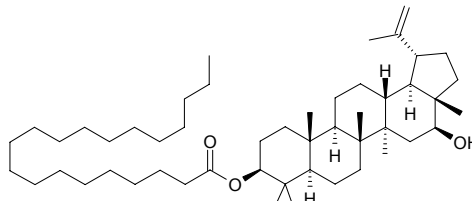
$C_{30}H_{44}O_6$ (500.68). Amorphous powder, $[\alpha]_D^{26} = -17.5^\circ$ ($c = 0.05$, CHCl_3). **Pharm:** Cytotoxic (*in vitro*, gastric tumour NUGC, $10 \mu\text{mol/L}$, $\text{InRt} = 80\%$; control Antinomycin D, $10 \mu\text{mol/L}$, $\text{InRt} = (98\sim 100)\%$). **Source:** XIANG QI JIA MI *Viburnum odoratissimum* (leaf and flower: yield = 0.009%). **Ref:** 4638.

**10345 6 α -Hydroxylup-20(29)-en-3-oxo-28-oic acid**

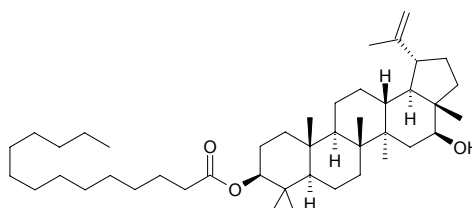
$C_{31}H_{48}O_4$ (484.73). **Source:** XIANG QI JIA MI *Viburnum odoratissimum* (leaf and flower). **Ref:** 4638.

**10346 16 β -Hydroxylupeol 3-O-eicosanoate**

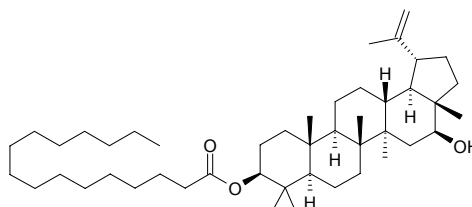
$C_{50}H_{88}O_3$ (737.26). mp $90\sim 91^\circ\text{C}$, $[\alpha]_D = +31.2^\circ$ ($c = 0.1$, CHCl_3). **Source:** SAI ER WEI YA SHI CAO *Achillea alexandri-regis* (dried aerial parts). **Ref:** 2545.

**10347 16 β -Hydroxylupeol 3-O-myristate**

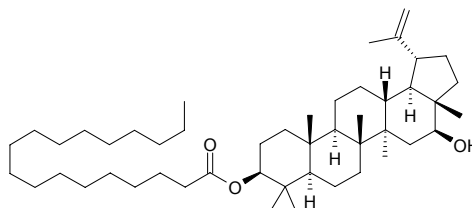
$C_{44}H_{76}O_3$ (653.09). **Source:** SAI ER WEI YA SHI CAO *Achillea alexandri-regis* (dried aerial parts). **Ref:** 2545.

**10348 16 β -Hydroxylupeol 3-O-palmitate**

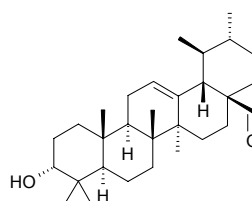
$C_{46}H_{80}O_3$ (681.15). Colorless powder. **Source:** SAI ER WEI YA SHI CAO *Achillea alexandri-regis* (dried aerial parts). **Ref:** 2545.

**10349 16 β -Hydroxylupeol 3-O-stearate**

$C_{48}H_{84}O_3$ (709.20). mp $90\sim 91^\circ\text{C}$, $[\alpha]_D = +33.2^\circ$ ($c = 0.1$, CHCl_3). **Source:** SAI ER WEI YA SHI CAO *Achillea alexandri-regis* (dried aerial parts). **Ref:** 2545.

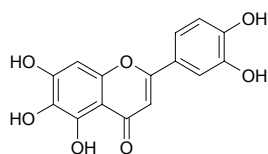
**10350 3 β -Hydroxy-urs-12-en-28-al**

$C_{30}H_{48}O_2$ (440.72). **Source:** XIA KU CAO *Prunella vulgaris*. **Ref:** 2508.

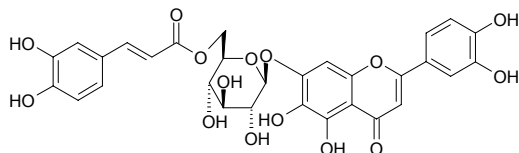


10351 6-Hydroxyluteolin

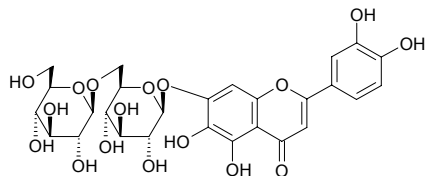
Demethylpedalitin; 6-Hydroxyluteolol; 5,6,7,3',4'-Pentahydroxyflavone [18003-33-3] C₁₅H₁₀O₇ (302.24). Plates (EtOAc), mp 284°C. **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 0.01%; *Corynebacterium acnes*, MIC = 0.02%; *Bacillus pyocyaneus*, MIC = 0.01%; *Staphylococcus epidermidis*, MIC = 0.0025%; *S. thomophilus*, MIC = 0.02%); antifungal (*Trichophyton rubrum*, MIC = 0.01%); antioxidant; α -glucosidase inhibitor (mus small intestines, IC₅₀ = 29 μ mol/L, 50 μ mol/L, InRt = 60%); invertase inhibitor (IC₅₀ = 13 μ mol/L, 50 μ mol/L, InRt = 82%); aldose reductase inhibitor (ox eye lens, IC₅₀ = 0.46 μ mol/L, rat eye lens, IC₅₀ = 0.2 μ mol/L, 10 μ mol/L, InRt = 86.7%, 1 μ mol/L, InRt = 53.3%); LD₅₀ (mus, orl) \geq 3000mg/kg. **Source:** CHE QIAN *Plantago asiatica*, DA CHE QIAN *Plantago major*, CHOU MO LI *Clerodendron fragrans*, YI ZHI XIANG *Veronica spuria*, MAO HUA MAO DI HUANG *Digitalis lanata*. **Ref:** 6, 660, 900, 1521.

**10352 6-Hydroxyluteolin 7-O-(6''-O-(E)-caffeoyl)- β -glucopyranoside**

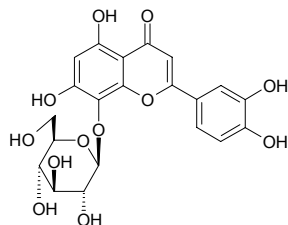
C₃₀H₂₆O₁₅ (626.53). Pale yellow solid (MeOH). **Source:** CHANG WEI PO PO NA *Veronica longifolia*, *Veronica liwanensis*. **Ref:** 3486.

**10353 6-Hydroxyluteolin-7-diglucoside**

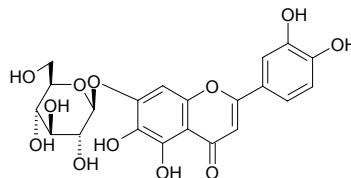
C₂₇H₃₀O₁₇ (626.53). **Source:** A LA BO PO PO NA *Veronica persica*, BEI SHUI KU MAI *Veronica anagallis-aquatica*, DA HUA XUAN FU HUA CAO *Inula britannica*. **Ref:** 660.

**10354 8-Hydroxyluteolin-8- β -D-glucopyranoside**

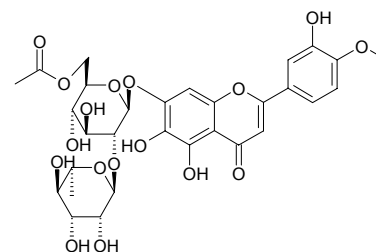
C₂₁H₂₀O₁₂ (464.39). mp 269–271°C. **Source:** FU PING *Lemna minor*. **Ref:** 6.

**10355 6-Hydroxyluteolin-7-O-glucoside**

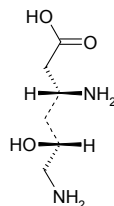
C₂₁H₂₀O₁₂ (464.39). **Source:** BEI SHUI KU MAI *Veronica anagallis-aquatica*, **Ref:** 660.

**10356 6-Hydroxyluteolin 4'-methyl ether 7-O- α -rhamnopyranosyl (1'' \rightarrow 2'')-[6''-O-acetyl- β -glucopyranoside]**

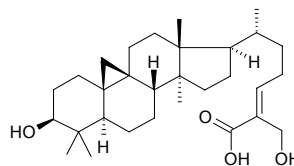
C₃₀H₃₄O₁₇ (666.60). Yellow solid (MeOH). **Source:** CHANG WEI PO PO NA *Veronica longifolia*, *Veronica liwanensis*. **Ref:** 3486.

**10357 δ -Hydroxyllysine**

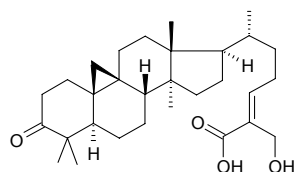
C₆H₁₄N₂O₃ (162.19). **Source:** MO GU *Agaricus campestris*. **Ref:** 6, 1521.

**10358 Hydroxymangiferolic acid**

C₃₀H₄₈O₄ (472.71). mp 201–204°C. **Source:** MANG GUO SHU PI *Mangifera indica*. **Ref:** 6.

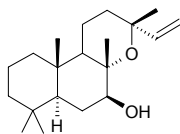
**10359 Hydroxymangiferonic acid**

C₃₀H₄₆O₄ (470.70). mp 190–192°C. **Source:** MANG GUO SHU PI *Mangifera indica*. **Ref:** 6.

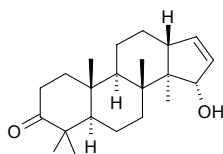


10360 7 β -Hydroxymanoyl oxide

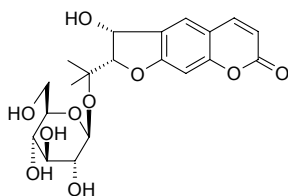
C₂₀H₃₄O₂ (306.49). Amorphous solid, $[\alpha]_D^{23} = +35.2^\circ$ ($c = 0.5$, CHCl₃). Source: TAI WAN SHAN *Taiwania cryptomerioides* (bark). Ref: 4443.

**10361 15 α -Hydroxymansumbinone**

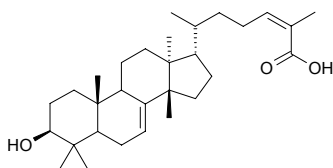
C₂₂H₃₄O₂ (330.52). Colorless crystals (*n*-hexane:CH₂Cl₂ = 4:1), mp 149~150°, $[\alpha]_D^{22} = +18^\circ$ ($c = 0.8$, CHCl₃). Source: KEN NI YA MO YAO *Commiphora kua* var. *gowllo*. Ref: 1991.

**10362 (3*R'*)-Hydroxymarmesin 4'-*O*- β -D-glucopyranoside**

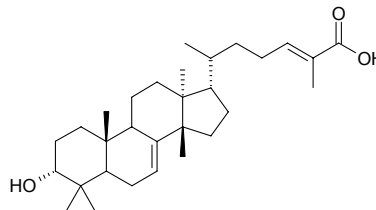
C₂₀H₂₄O₁₀ (424.41). mp 267~269°C, $[\alpha]_D^{22} = -19^\circ$. Pharm: Antioxidant (DPPH scavenger, EC₅₀ > 50 μ g/mL, 50 μ g/mL InRt = 24%, control Ascorbic acid, EC₅₀ = 1.6 μ g/mL = 9.1 μ mol/L)^[4154]. Source: BEI SHA SHEN *Glehnia littoralis* (underground part), BEI SHA SHEN *Glehnia littoralis* (fruit). Ref: 3525, 4154.

**10363 3 β -Hydroxy-masticadienolic acid**

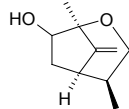
Masticadienolic acid C₃₀H₄₈O₃ (456.72). Pharm: Anti-inflammatory (*in vivo*, prevents ear oedema formation caused by PMA and synthesis of LOX products, especially LTC₄ and COX metabolites derived from arachidonic acid)^[4415]. Source: RU DU XIANG *Pistacia terebinthus*, *Juliania adstringens* (bark). Ref: 3786, 4415.

**10364 3 α -Hydroxymasticadienonic acid**

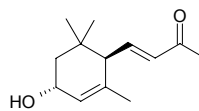
Schinol C₃₀H₄₈O₃ (456.72). mp 143~145°C, $[\alpha]_D^{25} = -95.5^\circ$ ($c = 0.13$, CHCl₃). Pharm: Gastroprotective (30 mg/kg, Gp = (69.8 \pm 5.8)%; control Carbenoxolone, Gp = (88.4 \pm 5.4)%), $p < 0.05$)^[5461]; cytotoxic (leukemia cells L1210, IC₅₀ = 20 μ g/mL)^[3786]. Source: SHOU LIAN LIANG YI MU *Amphipterygium adstringens* (stem cortex), *Juliania adstringens* (bark). Ref: 3786, 5461.

**10365 5-Hydroxymatatabiether**

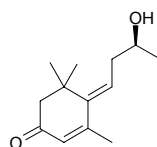
C₁₀H₁₆O₂ (168.24). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 6.

**10366 (3*R*,6*R*,7*E*)-3-Hydroxy-4,7-megastigmadien-9-one**

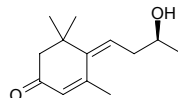
C₁₃H₂₀O₂ (208.30). Colorless oil, $[\alpha]_D^{25} = +37.1^\circ$ ($c = 0.21$, CH₂Cl₂). Pharm: Phytotoxin (inhibits germination and growth of *Lactuca sativa*). Source: PA KE YE XIANG SHU *Cestrum parqui* (leaf). Ref: 3776.

**10367 (6*Z*,9*S*)-9-Hydroxy-4,6-megastigmadien-3-one**

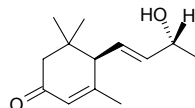
C₁₃H₂₀O₂ (208.30). Colorless oil, $[\alpha]_D^{25} = +4.7^\circ$ ($c = 0.42$, CH₂Cl₂). Pharm: Phytotoxin (inhibits germination and growth of *Lactuca sativa*). Source: PA KE YE XIANG SHU *Cestrum parqui* (leaf). Ref: 3776.

**10368 (6*Z*,9*S*)-9-Hydroxy-4,6-megastigmadien-3-one**

C₁₃H₂₀O₂ (208.30). Colorless oil, $[\alpha]_D^{25} = +28.5^\circ$ ($c = 0.37$, CH₂Cl₂). Pharm: Phytotoxin (inhibits germination and growth of *Lactuca sativa*). Source: PA KE YE XIANG SHU *Cestrum parqui* (leaf). Ref: 3776.

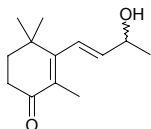
**10369 (6*R*,7*E*,9*R*)-9-Hydroxy-4,7-megastigmadien-3-one**

C₁₃H₂₀O₂ (208.30). Colorless oil, $[\alpha]_D^{25} = +292.0^\circ$ ($c = 0.42$, CH₂Cl₂). Pharm: Phytotoxin (inhibits germination and growth of *Lactuca sativa*). Source: PA KE YE XIANG SHU *Cestrum parqui* (leaf). Ref: 3776.

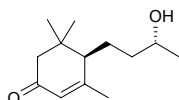


10370 (7E,9Z)-9-Hydroxy-5,7-megastigmadien-4-one

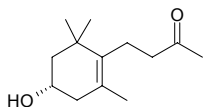
$C_{13}H_{20}O_2$ (208.30). Colorless oil, $[\alpha]_D^{25} = +101.1^\circ$ ($c = 0.39$, CH_2Cl_2). Source: PA KE YE XIANG SHU *Cestrum parqui* (leaf). Ref: 3776.

**10371 (6R,9R)-9-Hydroxy-4-megastigmen-3-one**

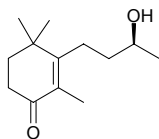
$C_{13}H_{22}O_2$ (210.32). Colorless oil, $[\alpha]_D^{25} = +83.6^\circ$ ($c = 0.61$, CH_2Cl_2). Pharm: Phytotoxin (inhibits germination and growth of *Lactuca sativa*). Source: PA KE YE XIANG SHU *Cestrum parqui* (leaf). Ref: 3776.

**10372 3-Hydroxymegastigm-5-en-9-one**

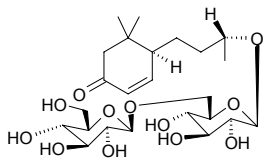
$C_{13}H_{22}O_2$ (210.32). Oil, $[\alpha]_D^{25} = +34.5^\circ$ ($c = 0.5$, $CHCl_3$). Source: HONG GUI *Chamaecyparis formosensis*. Ref: 2315.

**10373 (S)-9-Hydroxymegastigm-5-en-4-one**

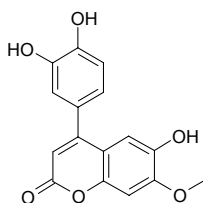
$C_{13}H_{22}O_2$ (210.32). Oil, $[\alpha]_D^{25} = +8.1^\circ$ ($c = 0.4$, $CHCl_3$). Source: HONG GUI *Chamaecyparis formosensis*. Ref: 2315.

**10374 (6R,9R)-9-Hydroxy-4-megastigmen-3-one 9-O-β-D-glucopyranosyl-(1→6)-β-D-glucopyranoside**

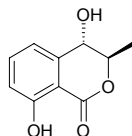
$C_{24}H_{40}O_{12}$ (520.58). Pharm: Cytotoxic (*in vitro*, HeLa, $IC_{50} = 20.05\mu g/mL$; control Cisplatin, HeLa, $IC_{50} = 0.75\mu g/mL$). Source: HU BEI HUANG JING *Polygonatum zanlanscianense* (rhizome: yield = 0.00140%dw). Ref: 4788.

**10375 3'-Hydroxymelanettin**

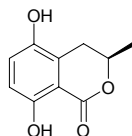
[200391-95-3] $C_{16}H_{12}O_6$ (300.27). Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 716.

**10376 (-)-(3R,4S)-4-Hydroxymellein**

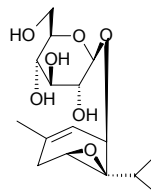
$C_{10}H_{10}O_4$ (194.19). $[\alpha]_D^{23} = -26.3^\circ$ ($c = 0.05$, $CHCl_3$). Pharm: Antioxidant inactive (DPPH scavenger, $25\mu g/mL$, ScRt = 5.7%, control BHT $25\mu g/mL$, ScRt = 18.6%); antioxidant (TBARS assay, inhibits peroxidation of linolenic acid, $37mg/mL$, InRt = 18.4%, BHT $37mg/mL$, InRt = 73.9%). Source: fungus *Epicoccum* sp. Ref: 5445.

**10377 (-)-(3R)-5-Hydroxymellein**

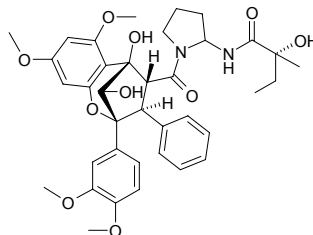
$C_{10}H_{10}O_4$ (194.19). Amorphous powder, $[\alpha]_D^{23} = -19.8^\circ$ ($c = 0.05$, CH_2Cl_2). Pharm: Antioxidant (DPPH scavenger, $25\mu g/mL$, ScRt = 22.4%, control BHT $25\mu g/mL$, ScRt = 18.6%); antioxidant (TBARS assay, inhibits peroxidation of linolenic acid, $37mg/mL$, InRt = 30.4%, BHT $37mg/mL$, InRt = 73.9%). Source: fungus *Epicoccum* sp. Ref: 5445.

**10378 3β-Hydroxy-p-menth-1-en-4β,5β-oxide 3-O-β-D-glucopyranoside**

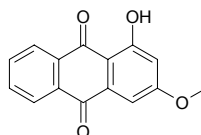
$C_{16}H_{26}O_7$ (330.38). Amorphous powder, $[\alpha]_D^{24} = +45^\circ$ ($c = 0.5$, MeOH). Source: YIN DU ZANG HUI XIANG *Carum ajowan* (fruit). Ref: 3547.

**10379 19-Hydroxy-3'-methoxyaglaïne C**

$C_{37}H_{44}N_2O_{10}$ (676.77). $[\alpha]_D^{20} = -111.1^\circ$ ($c = 0.18$, $CHCl_3$). Source: MI ZI LAN *Aglaia odorata*. Ref: 2289.

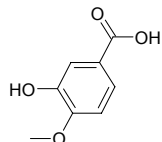
**10380 1-Hydroxy-3-methoxyanthraquinone**

$C_{15}H_{10}O_4$ (254.24). Pharm: Cytotoxic (KB, $ED_{50} > 25\mu g/mL$, control Doxorubicin, $ED_{50} = 0.12\mu g/mL$; Hep3B, $ED_{50} > 25\mu g/mL$, Doxorubicin, $ED_{50} = 0.14\mu g/mL$; Colon205, $ED_{50} > 25\mu g/mL$, Doxorubicin, $ED_{50} = 0.10\mu g/mL$; HeLa, $ED_{50} > 25\mu g/mL$, Doxorubicin, $ED_{50} = 0.11\mu g/mL$). Source: GUANG JING QIAN CAO *Rubia wallichiana* (stem). Ref: 4369.

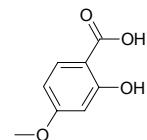


10381 3-Hydroxy-4-methoxy benzoic acid

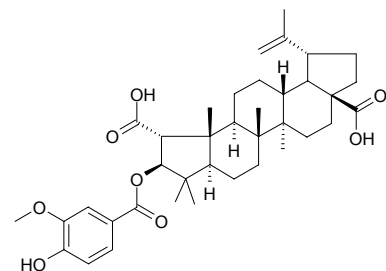
Isovanillic acid $C_8H_8O_4$ (168.15). **Pharm:** Cytotoxic inactive (MCF7, $IC_{50} > 100\mu\text{mol/L}$, control Adriamycin, $IC_{50} = (1.5\pm 0.2)\mu\text{mol/L}$; K562, $IC_{50} > 100\mu\text{mol/L}$, Adriamycin, $IC_{50} = (0.07\pm 0.01)\mu\text{mol/L}$; Bowes, $IC_{50} > 100\mu\text{mol/L}$, Adriamycin, $IC_{50} = (0.45\pm 0.01)\mu\text{mol/L}$; T24S, $IC_{50} > 100\mu\text{mol/L}$, Adriamycin, $IC_{50} = (5.8\pm 0.6)\mu\text{mol/L}$; A549, $IC_{50} > 100\mu\text{mol/L}$, Adriamycin, $IC_{50} = (15.8\pm 6.7)\mu\text{mol/L}$). **Source:** KAI KOU JIAN *Tupistra chinensis* (underground part), XUAN SHEN *Scrophularia ningpoensis*. **Ref:** 4676, 5288.

**10382 2-Hydroxy-4-methoxybenzoic acid**

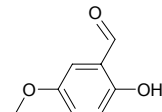
$C_8H_8O_4$ (168.15). **Source:** DIAN NAN HONG HOU KE *Calophyllum polyanthum* (seed: yield = 0.010%dw). **Ref:** 4767.

**10383 3-O-(4-Hydroxy-3-methoxybenzoyl)ceanothic acid**

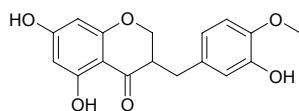
3-O-Vanillylceanothic acid $C_{38}H_{52}O_8$ (636.83). Colorless solid, mp 183–185°C. $[\alpha]_D^{27} = -22.0^\circ$ ($c = 0.229$, MeOH). **Pharm:** Antimalarial (antiplasmodial *in vitro*, *Plasmodium falciparum*, $IC_{50} = 3.7\mu\text{g/mL}$); antibacterial (*Mycobacterium tuberculosis*, MIC = 25 $\mu\text{g/mL}$). **Source:** JIAN PU ZHAI ZAO *Ziziphus cambodiana* (root cortex: yield = 0.0002%dw). **Ref:** 2091.

**10384 2-Hydroxy-5-methoxy-benzyldehyde**

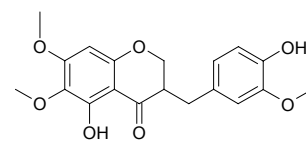
$C_8H_8O_3$ (152.15). **Source:** MAO GUO QI *Acer nikoense* (stem cortex). **Ref:** 4304.

**10385 3-(3-Hydroxy-4-methoxybenzyl)-5,7-dihydroxychroman-4-one**

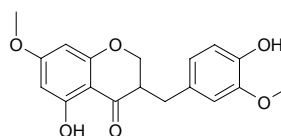
$C_{17}H_{16}O_6$ (316.31). White powder, mp 140–142°C. **Source:** *Scilla nervosa* (bulb). **Ref:** 2381.

**10386 3-(4-Hydroxy-3-methoxybenzyl)-5-hydroxy-6,7-dimethoxychroman-4-one**

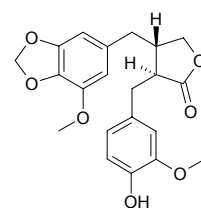
$C_{19}H_{20}O_7$ (360.37). Yellow oil, $[\alpha]_D^{25} = -10.7^\circ$ ($c = 0.56$, MeOH). **Source:** *Scilla nervosa* (bulb). **Ref:** 2381.

**10387 3-(4-Hydroxy-3-methoxybenzyl)-5-hydroxy-7-methoxychroman-4-one**

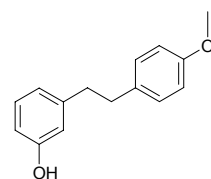
$C_{18}H_{18}O_6$ (330.34). Colorless oil. **Source:** *Scilla nervosa* (bulb). **Ref:** 2381.

**10388 (2S,3S)-2-(4-Hydroxy-3-methoxybenzyl)-3-(5-methoxy-3,4-methylenedioxybenzyl)butyrolactone**

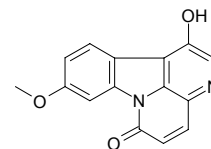
$C_{21}H_{22}O_7$ (386.41). Colorless gum, $[\alpha]_D^{25} = +26.4^\circ$ ($c = 0.293$, $CHCl_3$). **Source:** MENG ZI CAO HU JIAO *Peperomia duclouxii* (whole herb: yield = 0.0003%). **Ref:** 4733.

**10389 3-Hydroxy-4'-methoxybibenzyl**

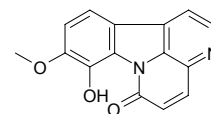
$C_{15}H_{16}O_2$ (228.29). **Source:** *Plagiochila rutilans*. **Ref:** 5144.

**10390 1-Hydroxy-9-methoxycanthin-6-one**

$C_{15}H_{10}N_2O_3$ (266.26). Yellow powder (MeOH), mp 235–237°C. **Source:** CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.000036%dw), *Eurycoma* sp. **Ref:** 4556, 4728.

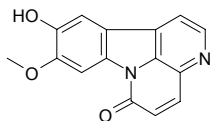
**10391 8-Hydroxy-9-methoxycanthin-6-one**

$C_{15}H_{10}N_2O_3$ (266.26). **Source:** CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.000024%dw), *Eurycoma* sp. **Ref:** 4556, 4728.

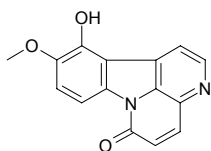


10392 10-Hydroxy-9-methoxycanthin-6-one

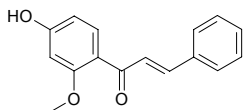
$C_{15}H_{10}N_2O_3$ (266.26). Source: *Eurycoma* sp. Ref: 4556.

**10393 11-Hydroxy-10-methoxycanthin-6-one**

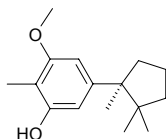
$C_{15}H_{10}N_2O_3$ (266.26). Source: *Eurycoma* sp. Ref: 4556.

**10394 4'-Hydroxy-2'-methoxychalcone**

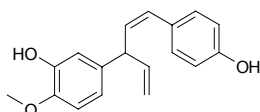
$C_{16}H_{14}O_3$ (254.29). Pharm: Testosterone 5 α -reductase inhibitor (25 μ g/mL, InRt = 19.5%, 50 μ g/mL, InRt = 20.7%, 100 μ g/mL, InRt = 22.8%; control Glycyrrhetic acid, 25 μ g/mL, InRt = 31.7%, 50 μ g/mL, InRt = 64.7%, 100 μ g/mL, InRt = 87.1%). Source: JIAO ZHI HUANG TAN *Dalbergia cochinchinensis* (stem: yield = 0.0013%dw). Ref: 4716.

**10395 2-Hydroxy-4-methoxycuparene**

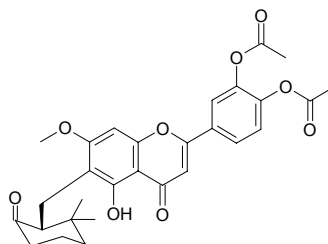
$C_{16}H_{24}O_2$ (248.37). Oil, $[\alpha]_D^{20} = -52.2^\circ$ ($c = 1.8$, MeOH). Source: *Bazzania decrescens*. Ref: 4458.

**10396 3'-Hydroxy-4'-methoxy-4'-dehydroxynyasol**

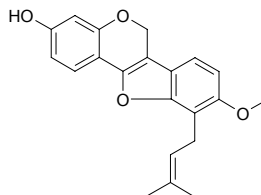
1-[4-Hydroxyphenoxy]-3-[3-hydroxy-4-methoxyphenyl]penta-1,4-diene
 $C_{18}H_{18}O_3$ (282.34). White powder, $[\alpha]_D^{20} = +85.8^\circ$ ($c = 0.09$, MeOH). Pharm: Cytotoxic (*in vitro*, Lu1, $IC_{50} = 7.2\mu$ g/mL (25.5 μ mol/L), LNCaP, $IC_{50} = 11.6\mu$ g/mL (41.1 μ mol/L), Col2, $IC_{50} = 11.7\mu$ g/mL (41.4 μ mol/L), HUVEC, $IC_{50} = 16.4\mu$ g/mL (58.1 μ mol/L), KB, $IC_{50} = 9\mu$ g/mL (31.9 μ mol/L), HOG.R5, $IC_{50} = 3.4\mu$ g/mL (12 μ mol/L), control Ellipticine: Lu1, $IC_{50} = 0.02\mu$ g/mL (0.08 μ mol/L), LNCaP, $IC_{50} = 0.8\mu$ g/mL (3.25 μ mol/L), Col2, $IC_{50} = 0.3\mu$ g/mL (1.22 μ mol/L), HUVEC, $IC_{50} = 0.09\mu$ g/mL (0.37 μ mol/L), KB, $IC_{50} = 0.04\mu$ g/mL (0.16 μ mol/L), HOG.R5, $IC_{50} = 0.02\mu$ g/mL (0.08 μ mol/L)). Source: TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*] (dried root: yield = 0.00005%dw). Ref: 3009.

**10397 5-Hydroxy-7-methoxy-3',4'-diacetoxy-6-(6,6-dimethyl-2-oxocyclohexylmethyl)flavone**

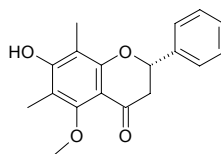
$C_{29}H_{30}O_9$ (522.56). Pale yellow powder. Source: RU DI WU GONG *Helminthostachys zeylanica* (rhizome). Ref: 3484.

**10398 3-Hydroxy-9-methoxy-10-(3,3-dimethylallyl)pteroicarpene**

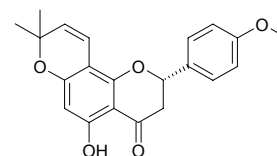
$C_{21}H_{20}O_4$ (336.39). Amorphous powder. Pharm: Antimalarial (antiplasmodial *in vitro*, *Plasmodium falciparum*, W2 strain, $IC_{50} = (20.6\pm 3.2)\mu$ mol/L, control Quinine, $IC_{50} = ((0.21\pm 0.01)\mu$ mol/L; D6 strain, $IC_{50} = (21.9\pm 3.3)\mu$ mol/L, Quinine, $IC_{50} = ((0.042\pm 0.002)\mu$ mol/L). Source: A BI XI NI YA CI TONG *Erythrina abyssinica* (root cortex). Ref: 5420.

**10399 7-Hydroxy-5-methoxy-6,8-dimethylflavanone**

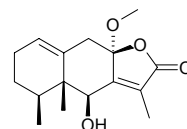
$C_{18}H_{18}O_4$ (298.34). $[\alpha]_D^{25} = -2.1^\circ$ ($c = 0.4$, acetone). Source: YANG PU TAO YE *Syzygium samarangense*. Ref: 4100.

**10400 5-Hydroxy-4'-methoxy-2'',2''-dimethylpyrano-(7,8:6'',5'')flavanone**

$C_{21}H_{20}O_5$ (352.39). Colorless powder, mp 153~155 $^\circ$ C, $[\alpha]_D^{20} = -48^\circ$ ($c = 0.1$, $CHCl_3$). Source: ZHEN YE XUE TONG *Macaranga conifera*. Ref: 1929.

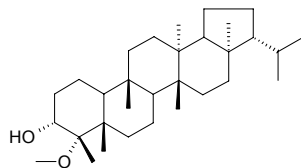
**10401 6 β -Hydroxy-8 α -methoxyeremophila-1(10),7(11)-dien-12,8 β -olide**

$C_{16}H_{22}O_4$ (278.35). Source: *Ligularia virgaurea* ssp. *oligocephala* (whole herb). Ref: 4981.

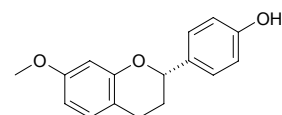


10402 3 α -Hydroxy-4-methoxyfilicane

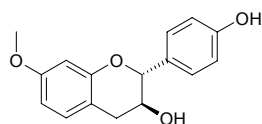
C₃₁H₅₄O₂ (458.77). mp 198–204°C. Source: BIAN YE TIE XIAN JUE *Adiantum caudatum* (fresh frond). Ref: 5187.

**10403 4'-Hydroxy-7-methoxyflavan**

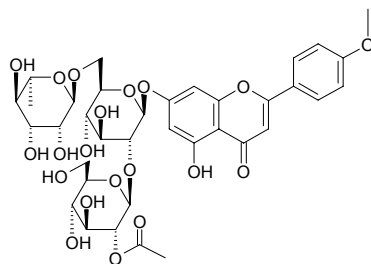
C₁₆H₁₆O₃ (256.30). Colorless prisms (hexane–acetone), mp 115–117°C, [α]_D²⁶ = –12° (*c* = 0.1, MeOH). Pharm: Cytotoxic (Meth-A cell, ED₅₀ > 10 μg/mL, control Adriamycin, ED₅₀ < 0.09 μg/mL; LLC cell, ED₅₀ > 10 μg/mL, control Adriamycin, ED₅₀ = 0.1 μg/mL). Source: RI BEN WEN SHU LAN *Crinum asiaticum* var. *japonicum* (bulb). Ref: 4125.

**10404 4'-Hydroxy-7-methoxyflavan-3-ol**

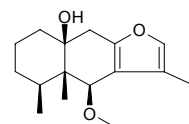
C₁₆H₁₆O₄ (272.30). Amorphous powder. Source: LIN JING ZHONG ZI WEN SHU LAN *Crinum bulbispermum* (bulb). Ref: 3997.

**10405 5-Hydroxy-4-methoxy-flavone-7-O- α -L-rhamnopyranosyl-(1 \rightarrow 6)[2-O-acetyl- β -D-glucopyranosyl-(1 \rightarrow 2)]- β -D-glucopyranoside**

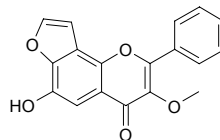
C₃₆H₄₄O₂₀ (796.74). White powder crystals, mp 246–248°C. Source: YAN XIANG JU *Chrysanthemum lavandulifolium*. Ref: 388.

**10406 10 β -Hydroxy-6 β -methoxy-furanoeremophilane**

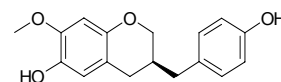
C₁₆H₂₄O₃ (264.37). Source: LIAN PENG CAO *Farfugium japonicum*. Ref: 6.

**10407 6-Hydroxy,3-methoxy furo[8,7:4'',5''']flavone**

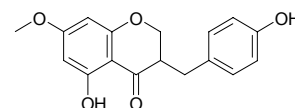
C₁₈H₁₂O₅ (308.29). Yellow crystals (DMSO), mp 283°C. Source: SHUI LIU DOU *Pongamia pinnata* (fruit). Ref: 3767.

**10408 6-Hydroxy-7-methoxy-3-(4'-hydroxybenzyl) chroman**

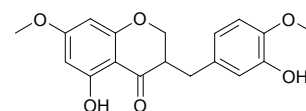
C₁₇H₁₈O₄ (286.33). Colorless short columnar crystals, mp 195–197°C (CHCl₃). Source: JIAN YE LONG XUE SHU *Dracaena cochinchinensis*. Ref: 414.

**10409 5-Hydroxy-7-methoxy-3-(4'-hydroxybenzyl)-4-chromanone**

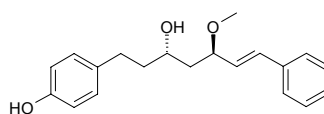
C₁₇H₁₆O₅ (300.31). White powder, mp 160–162°C, [α]_D²⁵ = –54.6° (*c* = 0.78, MeOH). Source: HE CAO YE JIA BEI FANG FENG *Ledebouria graminifolia* (tuber). Ref: 3368.

**10410 5-Hydroxy-7-methoxy-3-(3-hydroxy-4-methoxybenzyl)-chroman-4-one**

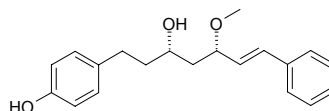
C₁₈H₁₈O₆ (330.34). Pale-yellow crystals, [α]_D = –36° (*c* = 0.55, MeOH). Source: *Scilla nervosa*. Ref: 2328.

**10411 (3*S*,5*R*)-3-Hydroxy-5-methoxy-1-(4-hydroxyphenyl)-7-phenyl-6*E*-heptene**

C₂₀H₂₄O₃ (312.41). Light brown amorphous solid, [α]_D²⁵ = +21.3° (*c* = 0.13, MeOH). Pharm: Cytotoxic inactive (Colon26-L5, HT1080, 100 μmol/L). Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00018%). Ref: 3042.

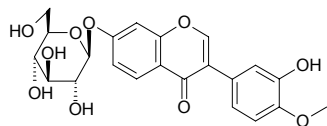
**10412 (3*S*,5*S*)-3-Hydroxy-5-methoxy-1-(4-hydroxyphenyl)-7-phenyl-6*E*-heptene**

C₂₀H₂₄O₃ (312.41). Light brown amorphous solid, [α]_D²⁵ = +21.0° (*c* = 0.08, MeOH). Pharm: Cytotoxic (Colon26-L5, ED₅₀ = 86.4 μmol/L; HT1080, ED₅₀ > 100 μmol/L). Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00015%). Ref: 3042.

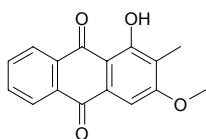


10413 3'-Hydroxy-4'-methoxyisoflavone-7-O-β-D-glucoside

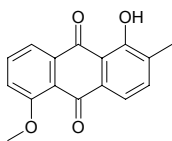
C₂₂H₂₂O₁₀ (446.41). Source: MENG GU HUANG QI *Astragalus mongholicus*.
Ref: 2, 660.

**10414 1-Hydroxy-3-methoxy-2-methylanthraquinone**

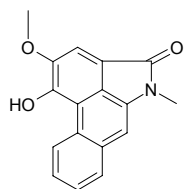
C₁₆H₁₂O₄ (268.27). Pharm: Cytotoxic (KB, ED₅₀ > 25 μg/mL, control Doxorubicin, ED₅₀ = 0.12 μg/mL; Hep3B, ED₅₀ > 25 μg/mL, Doxorubicin, ED₅₀ = 0.14 μg/mL; Colon205, ED₅₀ > 25 μg/mL, Doxorubicin, ED₅₀ = 0.10 μg/mL; HeLa, ED₅₀ = 24.5 μg/mL, Doxorubicin, ED₅₀ = 0.11 μg/mL).
Source: GUANG JING QIAN CAO *Rubia wallichiana* (stem). Ref: 4369.

**10415 1-Hydroxy-5-methoxy-2-methylanthraquinone**

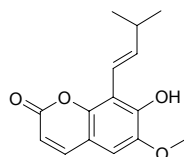
C₁₆H₁₂O₄ (268.27). Source: GUANG JING QIAN CAO *Rubia wallichiana* (stem). Ref: 4369.

**10416 4-Hydroxy-3-methoxy-N-methylaristolactam**

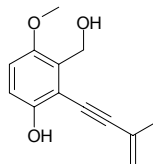
C₁₇H₁₃NO₃ (279.30). Source: TAI WAN HU JIAO *Piper taiwanense* (stem).
Ref: 4938.

**10417 7-Hydroxy-6-methoxy-8-(3-methylbut-2-enyl)coumarin**

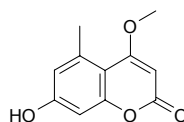
C₁₅H₁₆O₄ (260.29). Source: GUANG JING QIAN CAO *Rubia wallichiana* (stem). Ref: 4369.

**10418 2-Hydroxy-5-methoxy-6-(3-methylbut-3-en-1-ynyl)benzylalcohol**

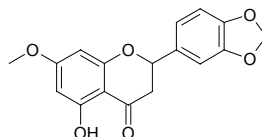
C₁₃H₁₄O₃ (218.25). Source: MAO REN GE JUN *Stereum hirsutum*. Ref: 3930.

**10419 7-Hydroxy-4-methoxy-5-methylcoumarin**

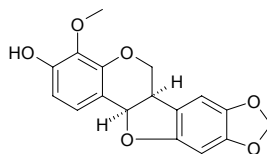
[41680-12-0] C₁₁H₁₀O₄ (206.20). Source: HU ZHANG *Polygonum cuspidatum*. Ref: 2.

**10420 5-Hydroxy-7-methoxy-3',4'-methylenedioxy isoflavone**

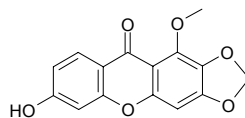
C₁₇H₁₄O₆ (314.30). Colorless needles (MeOH), mp 232–234°C. Source: JIN QUE GEN *Caragana sinica*. Ref: 489.

**10421 (-)-3-Hydroxy-4-methoxy-8-9-methylenedioxy pterocarpan**

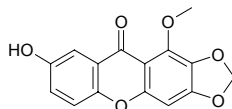
[69626-65-9] C₁₇H₁₄O₆ (314.29). Acicular crystals (methanol), mp 156–159°C, [α]_D²⁰ = -166.6° (c = 0.12, chloroform). Pharm: Induces quinone reductase (mus hepatic cells Hepalcic 7 μmol/L, CD 14.7 μmol/L). Source: HUI YE GEN *Tephrosia purpurea*. Ref: 1057, 1101.

**10422 6-Hydroxy-1-methoxy-2,3-methylenedioxyxanthone**

C₁₅H₁₀O₆ (286.24). Yellow needles, mp 228–230°C. Source: JIA HUANG HUA YUAN ZHI *Polygala fallax* [Syn. *Polygala aureocauda*]. Ref: 2517.

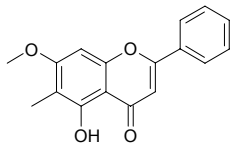
**10423 7-Hydroxy-1-methoxy-2,3-methylenedioxy xanthone**

C₁₅H₁₀O₆ (286.24). Light yellow acicular crystals (chloroform–methanol), mp 228–230°C. Source: HUANG HUA YUAN ZHI *Polygala arillata*. Ref: 382.

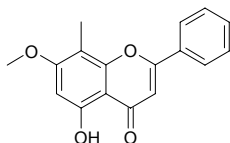


10424 5-Hydroxy-7-methoxy-6-methylflavone

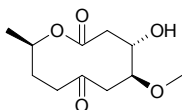
[55969-57-8] C₁₇H₁₄O₄ (282.30). Source: YUAN ZHI YE AO ZHOU CHA *Leptospermum polygalifolium* ssp. *polygalifolium* (foliage). Ref: 3485.

**10425 5-Hydroxy-7-methoxy-8-methylflavone**

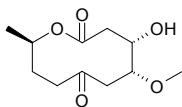
[14004-48-9] C₁₇H₁₄O₄ (282.30). Source: YUAN ZHI YE AO ZHOU CHA *Leptospermum polygalifolium* ssp. *polygalifolium* (foliage). Ref: 3485.

**10426 4-Hydroxy-5-methoxy-10-methyl-oxecane-2,7-dione A**

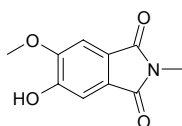
C₁₁H₁₈O₅ (230.26). Colorless gum, [α]_D²⁹ = +59° (c 0.017, MeOH). Pharm: Antimalarial inactive (*Plasmodium falciparum* K1, 20 μ g/mL; control Dihydroartemisinin, IC₅₀ = 1.2ng/mL). Source: YONG CHONG CAO *Cordyceps militaris*. Ref: 4784.

**10427 4-Hydroxy-5-methoxy-10-methyl-oxecane-2,7-dione B**

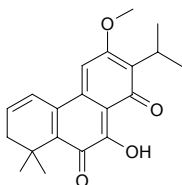
C₁₁H₁₈O₅ (230.26). Colorless gum, [α]_D²⁹ = -67° (c 0.015, MeOH). Pharm: Antimalarial inactive (*Plasmodium falciparum* K1, 20 μ g/mL; control Dihydroartemisinin, IC₅₀ = 1.2ng/mL). Source: YONG CHONG CAO *Cordyceps militaris*. Ref: 4784.

**10428 6-Hydroxy-5-methoxy-N-methylphthalimide**

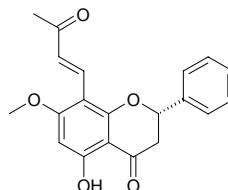
C₁₀H₉NO₄ (207.19). Light yellow needles (CHCl₃), mp 213–215°C. Source: BIAN FU GE GEN *Menispermum dauricum*. Ref: 3792.

**10429 7-Hydroxy-12-methoxy-20-nor-abieta-1,5(10),7,9,12-pentaen-6,14-dione**

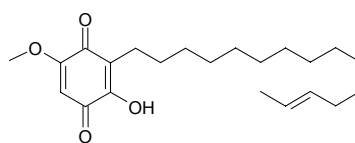
C₂₀H₂₂O₄ (326.40). Source: TU ER QI SHU WEI CAO *Salvia cilicica*. Ref: 1930.

**10430 (2S)-5-Hydroxy-7-methoxy-8-[(E)-3-oxo-1-butenyl]flavanone**

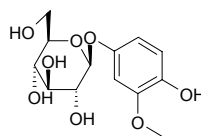
Anticancer Flavonoid PMV70P691-019 C₂₀H₁₈O₅ (338.36). White amorphous powder, mp 156–157°C, [α]_D²⁰ = -98° (c = 0.1, CHCl₃). Pharm: Antineoplastic (Inhibition of DMBA-induced preneoplastic lesions *in vitro*, MMOC assay, IC₅₀ = 14.9 μ mol/L; control Sulforaphane, IC₅₀ = 11 μ mol/L)^[4718]; cytotoxic (quinone reductase induction assay in cultured Hepa1c17 mouse hepatoma cells)^[5038]. Source: DU HUI MAO DOU *Tephrosia toxicaria* (stem: yield = 0.00019%dw). Ref: 4718, 5038.

**10431 2-Hydroxy-5-methoxy-3-pentadecenyl benzoquinone**

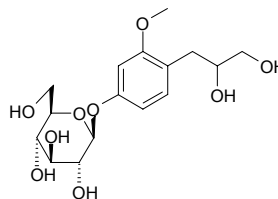
[82380-21-0] C₂₂H₃₄O₄ (362.51). mp 67°C. Source: ZI JIN NIU *Ardisia japonica*. Ref: 6.

**10432 4-Hydroxy-3-methoxyphenol β -D-glucopyranoside**

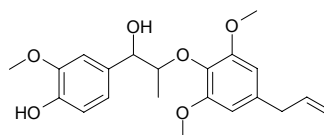
Tachioside C₁₃H₁₈O₈ (302.28). Source: GUAN CANG ZHU *Atractylodes japonica* (fresh rhizome), HU ZHANG *Polygonum cuspidatum*. Ref: 4186, 4310.

**10433 1'-(4-Hydroxy-2-methoxyphenyl)propane-2',3-diol 4-O- β -D-glucopyranoside**

C₁₆H₂₄O₉ (360.36). Amorphous powder, [α]_D²⁴ = -29° (c = 1.1, MeOH). Source: SHI LUO ZI *Anethum graveolens* (fruit). Ref: 4177.

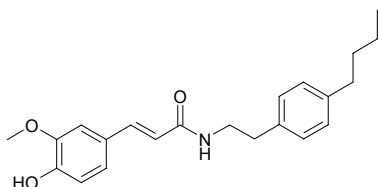
**10434 erythro-1-(4-Hydroxy-3-methoxyphenyl)-2-(4-allyl-2,6-dimethoxyphenoxy) propan-1-ol**

C₂₁H₂₆O₆ (374.44). Colorless amorphous, [α]_D²⁴ = +3° (c = 0.05, CHCl₃). Pharm: Antioxidant (DPPH scavenger). Source: FENG CHAO CAO *Leucas aspera* (whole herb). Ref: 4344.



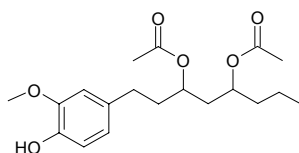
10435 7'-(4'-Hydroxy,3'-methoxyphenyl)-N-[(4-butylphenyl)ethyl]propanamide

$C_{22}H_{27}NO_3$ (353.47). Colorless solid. **Pharm:** α -Glucosidase inhibitor (type VI, $IC_{50} = 45.67\mu\text{mol/L}$, control 1-Deoxyojirimycin, $IC_{50} = 300\mu\text{mol/L}$); thrombin inhibitor inactive; β -glucuronidase inhibitor inactive. **Source:** YUN NAN TU SI ZI *Cuscuta reflexa*. **Ref:** 4155.



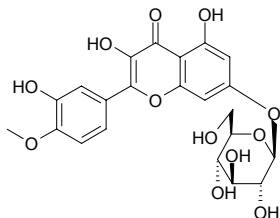
10436 1-(4-Hydroxy-3-methoxyphenyl)-3,5-diacetoxyoctane

$C_{19}H_{28}O_6$ (352.43). **Source:** SHENG JIANG *Zingiber officinale*. **Ref:** 2.



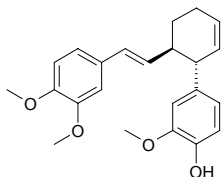
10437 2-(3-Hydroxy-4-methoxyphenyl)-3,5-dihydroxy-7-O- β -D-glucopyranoside-4H-1-benzopyran-4-one

$C_{22}H_{22}O_{12}$ (478.41). **Pharm:** α -Glucosidase inhibitor (type VI, $IC_{50} = 0.24\text{mmol/L}$, control 1-Deoxyojirimycin, $IC_{50} = 0.3\text{mmol/L}$); thrombin inhibitor inactive; β -glucuronidase inhibitor inactive. **Source:** YUN NAN TU SI ZI *Cuscuta reflexa*. **Ref:** 4155.



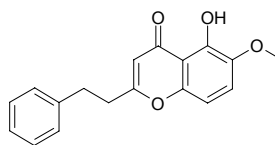
10438 (\pm)-trans-3-(4-Hydroxy-3-methoxyphenyl)-4-[(E)-3,4-dimethoxystyryl]cyclohex-1-ene

$C_{23}H_{26}O_4$ (366.46). **Pharm:** Cytotoxic (A549, $IC_{50} = 23.0\mu\text{mol/L}$, control Ellipticine, $IC_{50} = 0.8\mu\text{mol/L}$; Col2, $IC_{50} = 30.6\mu\text{mol/L}$, Ellipticine, $IC_{50} = 1.6\mu\text{mol/L}$; SNU638, $IC_{50} = 18.0\mu\text{mol/L}$, Ellipticine, $IC_{50} = 1.6\mu\text{mol/L}$; HT1080, $IC_{50} = 21.3\mu\text{mol/L}$, Ellipticine, $IC_{50} = 1.2\mu\text{mol/L}$)^[4081], COX-2 inhibitor (RAW264.7 cells, LPS-induced PGE₂ production, $IC_{50} = 3.64\mu\text{mol/L}$, control Celecoxib, $IC_{50} = 0.52\text{nmol/L}$)^[4532]. **Source:** YE JIANG *Zingiber cassumunar* (rhizome). **Ref:** 4081, 4532.



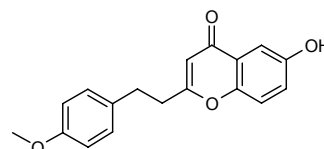
10439 5-Hydroxy-6-methoxy-2-(2-phenylethyl)chromone

$C_{18}H_{16}O_4$ (296.33). Yellow needles, mp 129°C. **Source:** BAI MU XIANG *Aquilaria sinensis* (Withered wood). **Ref:** 4339.



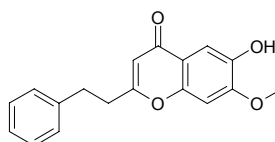
10440 6-Hydroxy-2-[2-(4'-methoxyphenyl)ethyl]chromone

$C_{18}H_{16}O_4$ (296.33). Colorless lump crystals, mp 167~168°C. **Source:** BAI MU XIANG *Aquilaria sinensis*. **Ref:** 13, 140, 660.



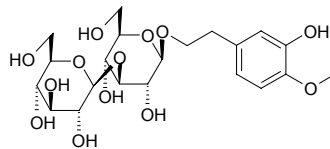
10441 6-Hydroxy-7-methoxy-2-(2-phenylethyl)chromone

$C_{18}H_{16}O_4$ (296.33). Colorless needles, mp 187~188°C (MeOH). **Source:** CHEN XIANG *Aquilaria agallocha*. **Ref:** 4173.



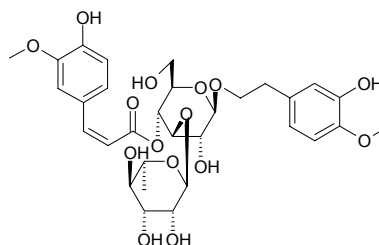
10442 2-(3-Hydroxy-4-methoxyphenyl)-ethyl-O- β -D-glucopyranosyl (1→3)- β -D-glucopyranoside

$C_{21}H_{32}O_{13}$ (492.48). White amorphous powder, mp 202~204°C. **Pharm:** Antioxidant (hydroxyl radical scavenger, $IC_{50} = 112.5\mu\text{mol/L}$, control Ascorbic acid, $IC_{50} = 51.8\mu\text{mol/L}$, superoxide anion radical scavenger, $IC_{50} = 195.0\mu\text{mol/L}$, control Ascorbic acid, $IC_{50} = 86.2\mu\text{mol/L}$)^[4289]. **Source:** XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora* (root). **Ref:** 4289, 4817.



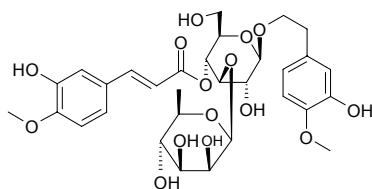
10443 2-(3-Hydroxy-4-methoxyphenyl) ethyl O- α -L-rhamnopyranosyl-(1→3)-(4-O-cis-feruloyl)- β -D-glucopyranoside

$C_{31}H_{40}O_{15}$ (652.66). **Source:** ZI YE *Catalpa ovata* (fallen leaf). **Ref:** 4290.



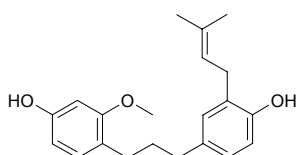
10444 2-(3-Hydroxy-4-methoxyphenyl)-ethyl-1-O- α -L-rhamnosyl-(1 \rightarrow 3)- β -D-(4-feruloyl)-glucoside

C₃₁H₄₀O₁₅ (652.66). Source: HUANG QIN *Scutellaria baicalensis*. Ref: 2.



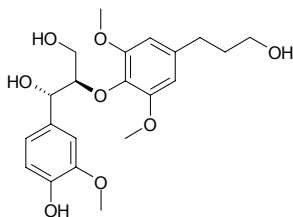
10445 1-(4-Hydroxy-2-methoxyphenyl)-3-(4-hydroxy-3-prenylphenyl)propane

C₂₁H₂₆O₃ (326.44). Brown powder, mp 85–86°C. Pharm: Aromatase inhibitor inactive (*in vitro*, IC₅₀ > 40 μmol/L; control Aminoglutethimide, IC₅₀ = 6.4 μmol/L)^[3090]. Source: GOU SHU *Broussonetia papyrifera*. Ref: 3090.



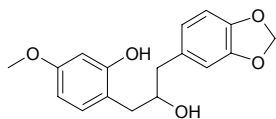
10446 1-(4'-Hydroxy-3'-methoxyphenyl)-2-[4''-(3-hydroxypropyl)-2'',6''-dimethoxyphenoxy]propane-1,3-diol

C₂₁H₂₈O₈ (408.45). [α]_D²⁰ = +3.3° (c = 0.61, MeOH). Pharm: Cytotoxic inactive (100 μg/mL: KB, LNCaP, and Col2 cells)^[5336]. Source: YUE NAN LIE LAN *Bursera tonkinensis* (root). Ref: 5336.



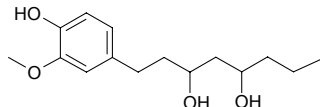
10447 1-(2-Hydroxy-4-methoxyphenyl)-3-(3,4-methylenedioxyphenyl)propan-2-ol

C₁₇H₁₈O₅ (302.33). Light yellow crystals (C₆H₆-EtOAc), mp 116°C, [α]_D²⁵ = -4.8° (c = 1.043, MeOH). Source: MENG MAI ROU DOU KOU *Myristica malabarica* (heartwood). Ref: 3906.



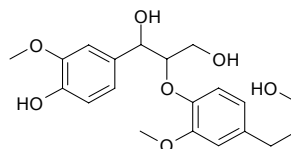
10448 1-(4-Hydroxy-3-methoxyphenyl)-3,5-octane-diol

C₁₅H₂₄O₄ (268.36). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.



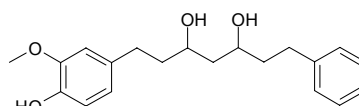
10449 1-(4-Hydroxy-3-methoxyphenyl)-2-[4-(ω-hydroxypropyl)-2-methoxyphenoxy]propane-1,3-diol

C₂₀H₂₆O₇ (378.43). Source: HOU PO *Magnolia officinalis*. Ref: 2.



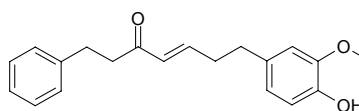
10450 1-(4-Hydroxy-3-methoxyphenyl)-7-phenyl-3,5-heptanediol

C₂₀H₂₆O₄ (330.43). Yellow liquid, [α]_D²⁵ = +6.87° (c = 0.40, CHCl₃). Pharm: Antiemetic (young male chicks, copper sulfate induced emesis assay, 50mg/kg, InRt = 45.7%, p < 0.001)^[4649]. Source: GAO LIANG JIANG *Alpinia officinarum* (rhizome: yield = 0.00031%dw). Ref: 4649.



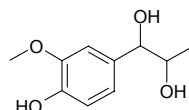
10451 7-(4''-Hydroxy-3''-methoxyphenyl)-1-phenyl-hept-4-en-3-one

C₂₀H₂₂O₃ (310.40). Colorless oleaginous liquid. Source: GAO LIANG JIANG *Alpinia officinarum*. Ref: 435.



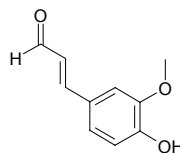
10452 1-(4-Hydroxy-3-methoxyphenyl)propan-1,2-diol

C₁₀H₁₄O₄ (198.22). Colorless oil. Source: SHENG JIANG *Zingiber officinale*. Ref: 3803.



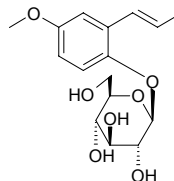
10453 3-(4-Hydroxy-3-methoxyphenyl)-2-propenal

Coniferaldehyde [20649-42-7] C₁₀H₁₀O₃ (178.19). Light-yellow needles (pet. ether), mp 84°C. Source: Occurs in wood. Ref: 1521.



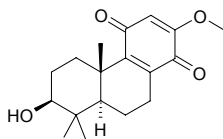
10454 (E)-1'-(2-Hydroxy-5-methoxyphenyl)propene β-D-glucopyranoside

C₁₆H₂₂O₇ (326.35). Amorphous powder, [α]_D²⁵ = -34° (c = 0.2, MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 3402.

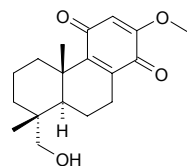


10455 3 β -Hydroxy-13-methoxy-8,12-podocarpadiene-11,14-dione

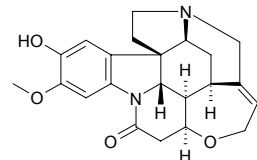
C₁₈H₂₄O₄ (304.39). Yellow powder, mp 184~186°C, [α]_D²⁴ = +11.1° (c = 0.45, CHCl₃). Source: TAI WAN SHAN *Taiwania cryptomerioides* (bark). Ref: 4113.

**10456 18-Hydroxy-13-methoxy-8,12-podocarpadiene-11,14-dione**

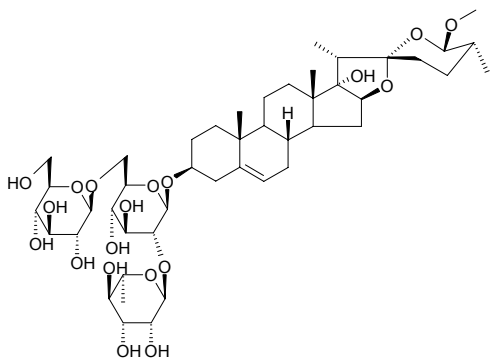
C₁₈H₂₄O₄ (304.39). Yellow powder, [α]_D²⁴ = +11.5° (c = 0.40, CHCl₃). Source: TAI WAN SHAN *Taiwania cryptomerioides* (bark). Ref: 4113.

**10457 2-Hydroxy-3-methoxystrychnine**

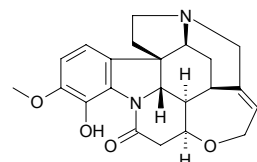
C₂₂H₂₄N₂O₄ (380.45). Source: MA QIAN ZI *Strychnos nux-vomica*. Ref: 2.

**10458 (25R,26R)-17 α -Hydroxy-26-methoxyspirost-5-en-3 β -yl-O- α -L-rhamnopyranosyl-(1 \rightarrow 2)-O- β -D-glucopyranosyl-(1 \rightarrow 6)]- β -D-glucopyranoside**

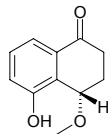
[244160-63-2] C₄₆H₇₄O₁₉ (931.09). Amorphous solid, [α]_D²⁷ = -42.1° (c = 0.14, MeOH:H₂O = 1:1). Source: QING LIANG BAI HE *Lilium candidum*. Ref: 2303.

**10459 4-Hydroxy-3-methoxystrychnine**

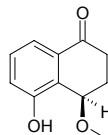
C₂₂H₂₄N₂O₄ (380.45). Source: CHANG ZI MA QIAN *Strychnos wallichiana*, MA QIAN ZI *Strychnos nux-vomica*. Ref: 2, 660.

**10460 (-)-5-Hydroxy-4-methoxy-1-tetralone**

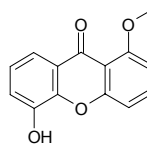
(4S)-5-Hydroxy-4-methoxy- α -tetralone C₁₁H₁₂O₃ (192.22). Colorless needles (CH₂Cl₂-MeOH), mp 110~112°C, [α]_D²⁶ = -27.8° (c = 0.088, EtOH); amorphous powder, [α]_D = 0° (CHCl₃). Source: DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (fruit), HUANG QI II *Engelhardia roxburghiana* (root). Ref: 4492, 5059.

**10461 (4R)-5-Hydroxy-4-methoxy- α -tetralone**

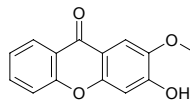
C₁₁H₁₂O₃ (192.22). Amorphous powder, [α]_D = 0° (CHCl₃). Source: DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (fruit). Ref: 4492.

**10462 5-Hydroxy-1-methoxyxanthone**

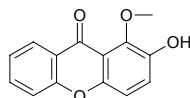
C₁₄H₁₀O₄ (242.23). Pharm: Cytotoxic (P₃₈₈ ED₅₀ = 7.28 μ g/mL, control Mithramycin ED₅₀ = 0.06 μ g/mL, HT29 ED₅₀ = 4.74 μ g/mL, control Mithramycin ED₅₀ = 0.08 μ g/mL). Source: TAI WAN LV DAO TENG HUANG *Garcinia linii*. Ref: 4094.

**10463 6-Hydroxy-7-methoxyxanthone**

C₁₄H₁₀O₄ (242.23). Pharm: Antifungal (*Aspergillus fumigatus* CBS113.26, MIC₈₀ = 16 μ g/mL, control Amphotericin B, MIC₈₀ = 8 μ g/mL; *Aspergillus flavus* IHEM37.19, MIC₈₀ = 16 μ g/mL, Amphotericin B, MIC₈₀ = 8 μ g/mL; *Aspergillus niger* IHEM2951, MIC₈₀ = 31 μ g/mL, Amphotericin B, MIC₈₀ = 16 μ g/mL; *Aspergillus terreus* 5029.2000, MIC₈₀ = 125 μ g/mL; Amphotericin B, MIC₈₀ = 16 μ g/mL; *Candida albicans* ATCC663.90, MIC₈₀ = 31 μ g/mL; Amphotericin B, MIC₈₀ = 1 μ g/mL). Source: SU GE LAN HU TONG *Calophyllum caledonicum* (stem cortex). Ref: 4995.

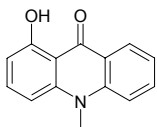
**10464 7-Hydroxy-8-methoxyxanthone**

C₁₄H₁₀O₄ (242.23). Pharm: Antifungal (*Aspergillus fumigatus* CBS113.26, MIC₈₀ = 31 μ g/mL, control Amphotericin B, MIC₈₀ = 8 μ g/mL; *Aspergillus flavus* IHEM37.19, MIC₈₀ = 31 μ g/mL, Amphotericin B, MIC₈₀ = 8 μ g/mL; *Aspergillus niger* IHEM2951, MIC₈₀ = 62 μ g/mL, Amphotericin B, MIC₈₀ = 16 μ g/mL; *Aspergillus terreus* 5029.2000, MIC₈₀ = 250 μ g/mL; Amphotericin B, MIC₈₀ = 16 μ g/mL; *Candida albicans* ATCC663.90, MIC₈₀ = 62 μ g/mL; Amphotericin B, MIC₈₀ = 1 μ g/mL). Source: SU GE LAN HU TONG *Calophyllum caledonicum* (stem cortex). Ref: 4995.

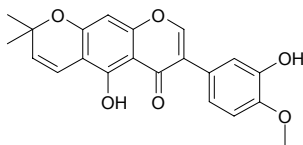


10465 1-Hydroxy-10-methylacridone

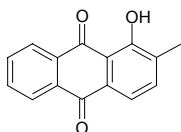
$C_{14}H_{11}NO_2$ (225.25). Yellow amorphous powder. **Pharm:** Antileishmanial (*Leishmania major* promastigote, 10 μ mol/L, survival = (90.0 \pm 5.0)%, 1 μ mol/L, survival = (95.5 \pm 3.8)%, control Amphotericin B, 10 μ mol/L, survival = (0.2 \pm 0.04)%, 1 μ mol/L, survival = (71.9 \pm 4.4)%); antifungal (silica gel TLC, *Cladosporium cucumerinum*, MIA = 10 μ g, control Nystatin, MIA = 0.2 μ g). **Source:** *Thamnosma rhodesica* (root). **Ref:** 3797.

**10466 3'-Hydroxy-4'-O-methylalpinumisoflavone**

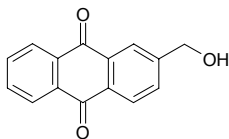
$C_{21}H_{18}O_6$ (366.37). Yellowish crystals (petrol), mp 151~153°C. **Source:** *Milletia thonningii*. **Ref:** 2326.

**10467 1-Hydroxy-2-methyl-anthraquinone**

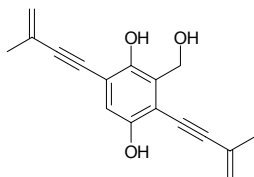
[6268-09-3] $C_{15}H_{10}O_3$ (238.25). mp 184~185°C. **Pharm:** Cytotoxic (KB, ED_{50} > 25 μ g/mL, control Doxorubicin, ED_{50} = 0.12 μ g/mL; Hep3B, ED_{50} > 25 μ g/mL, control Doxorubicin, ED_{50} = 0.14 μ g/mL; Colon205, ED_{50} > 25 μ g/mL, control Doxorubicin, ED_{50} = 0.10 μ g/mL; HeLa, ED_{50} > 25 μ g/mL, control Doxorubicin, ED_{50} = 0.11 μ g/mL)^[4369]. **Source:** BA JI TIAN *Morinda officinalis*, GUANG JING QIAN CAO *Rubia wallichiana* (stem), YANG JIAO TENG *Morinda umbellata*. **Ref:** 6, 228, 4369.

**10468 2-Hydroxymethylantraquinone**

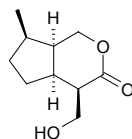
[17241-59-7] $C_{15}H_{10}O_3$ (238.25). **Pharm:** Cytotoxic (mus, P_{388}). **Source:** BAI YAN TENG *Morinda parvifolia*. **Ref:** 658.

**10469 3-(Hydroxymethyl)-2,5-bis(3-methylbut-3-en-1-ynyl)benzene-1,4-diol**

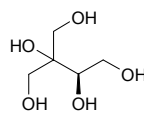
$C_{17}H_{16}O_3$ (268.33). **Source:** MAO REN GE JUN *Stereum hirsutum*. **Ref:** 3930.

**10470 (4R)-4-Hydroxymethylboschnialactone**

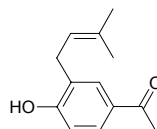
$C_{10}H_{16}O_3$ (184.24). Colorless needles; mp 46~47 °C (CHCl₃), $[\alpha]_D^{23}$ = -35.8° (c = 0.1, MeOH) **Source:** CAO CONG RONG *Boschniakia rossica* (whole herb). **Ref:** 4266.

**10471 (3R)-2-Hydroxymethylbutane-1,2,3,4-tetrol**

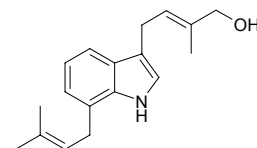
$C_5H_{12}O_5$ (152.15). Colorless syrup, $[\alpha]_D^{22}$ = +4°. **Source:** BEI SHA SHEN *Glehnia littoralis* (fruit), SHI LUO ZI *Anethum graveolens* (fruit). **Ref:** 3525, 4177.

**10472 4-Hydroxy-3-(3-methyl-2-butenyl)acetophenone**

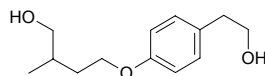
$C_{13}H_{16}O_2$ (204.27). **Pharm:** Anti-inflammatory (inhibits arachidonic acid metabolism, calcium ionophore-stimulated leukocytes, inhibits LTB₄ production, concentration-dependent manner, IC_{50} = 24 μ mol/L). **Source:** YI DA LI LA JU *Helichrysum italicum* **Ref:** 4415.

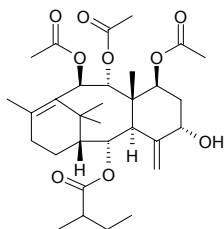
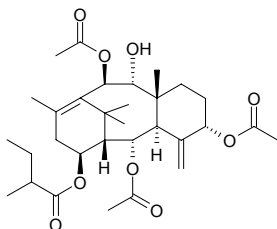
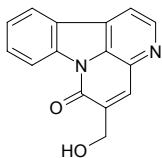
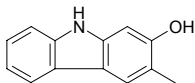
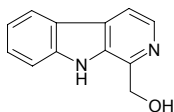
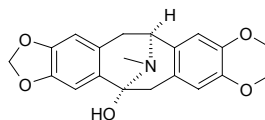
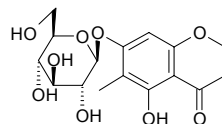
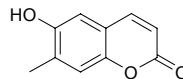
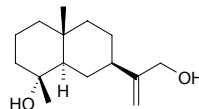
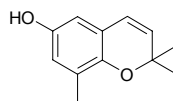
**10473 (E)-3-(3-Hydroxymethyl-2-butenyl)-7-(3-methyl-2-butenyl)-1H-indole**

$C_{18}H_{23}NO$ (269.39). Colorless oil. **Pharm:** Anti-HIV (CC_{50} = 13.66 μ g/mL, IC_{50} = 1.17 μ g/mL, SI = 11.68; control AZT, CC_{50} = 794.2 μ g/mL, IC_{50} = 0.131 μ g/mL, SI = 6100)^[5266]. **Source:** MENG DA NA SHAN XIAO JU *Glycosmis montana* (twig and leaf). **Ref:** 5266.

**10474 4'-(4''-Hydroxy-3''-methylbutyloxy)-2-phenylethanol**

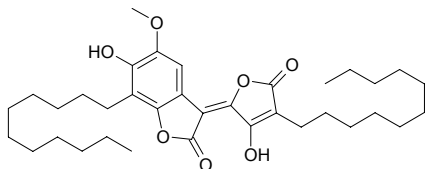
$C_{13}H_{20}O_3$ (224.30). White amorphous powder, $[\alpha]_D^{23}$ = -37° (c = 0.1, MeOH). **Source:** *Fagara xanthoxyloides*. **Ref:** 5385.



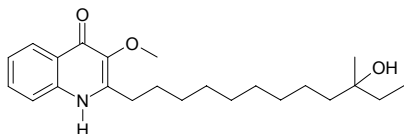
10475 5 α -Hydroxy-2 α -(α -methylbutyryl)-oxy-7 β ,9 α ,10 β -triacetoxy-4(20),11-taxadieneC₃₁H₄₆O₉ (562.71). [Source](#): JIANG GUO ZI SHAN *Taxus baccata*. [Ref](#): 662.**10476 9 α -Hydroxy-14 β -(2-methylbutyryl)-oxy-2 α ,5 α ,10 β -tri acetoxy-taxa-4(20),11-diene**C₃₁H₄₆O₉ (562.71). [Source](#): MEI LI HONG DOU SHAN *Taxus mairei*. [Ref](#): 662.**10477 5-Hydroxymethylcanthin-6-one**C₁₅H₁₀N₂O₂ (250.26). [Source](#): CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.000014%dw), *Eurycoma* sp. [Ref](#): 4556, 4728.**10478 2-Hydroxy-3-methylcarbazole**3-Methylcarbazol-2-ol [24224-30-4] C₁₃H₁₁NO (197.34). [Source](#): SHAN HUANG PI *Clausena excavata*. [Ref](#): 703.**10479 1-Hydroxymethyl- β -carboline**[17337-22-3] C₁₂H₁₀N₂O (198.23). [Source](#): KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. [Ref](#): 12.**10480 (-)-12-Hydroxy-O-methylcaryachine**C₂₀H₂₁NO₅ (355.39). Colorless needles (MeOH), mp 201~202°C, [α]_D = -171.5° (c = 0.1284, MeOH). [Source](#): HOU KE GUI *Cryptocarya chinensis* (wood). [Ref](#): 3092.**10481 5-Hydroxy-6-methylchromone-7-O- β -D-glucoside**C₁₆H₂₀O₉ (356.33). Colorless acicular crystals, mp 194~196°C. [Source](#): HUANG SHAN *Pseudotsuga sinensis*. [Ref](#): 2229.**10482 6-Hydroxy-7-methylcoumarin**C₁₀H₈O₃ (176.17). [Source](#): YIN CHEN HAO *Artemisia capillaris*. [Ref](#): 2.**10483 4 α -Hydroxy-4 β -methylidihydrocostol**C₁₅H₂₆O₂ (238.37). [Pharm](#): Cytotoxic (*in vitro*, HepG₂, CD₅₀ > 100 μ g/mL; HeLa, CD₅₀ > 100 μ g/mL; OVCAR-3, CD₅₀ > 100 μ g/mL; control Cisplatin, HepG₂, CD₅₀ = 2.8 μ g/mL; HeLa, CD₅₀ = 5.2 μ g/mL; OVCAR-3, CD₅₀ = 3 μ g/mL). [Source](#): MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*] (root: yield = 0.0048%dw). [Ref](#): 4720.**10484 6-Hydroxy-8-methyl-2,2-dimethyl-2H-benzopyran**C₁₂H₁₄O₂ (190.24). [Pharm](#): Antibacterial (*Escherichia coli* ATCC 11775, MIC > 750 μ g/mL, control Ciproflaxin, MIC = 0.63 μ g/mL; *Klebsiella pneumoniae* NCTC 9633, MIC > 187 μ g/mL, Ciproflaxin, MIC = 0.20 μ g/mL; *Enterococcus faecalis* ATCC 29212, MIC = 375 μ g/mL, Ciproflaxin, MIC = 6.25 μ g/mL; *Staphylococcus aureus* ATCC 6538, MIC = 131 μ g/mL, Ciproflaxin, MIC = 0.31 μ g/mL; *Bacillus cereus* ATCC 11778, MIC = 75 μ g/mL, Ciproflaxin, MIC = 2.5 μ g/mL; *Staphylococcus epidermidis* ATCC 2223, MIC = 187 μ g/mL, Ciproflaxin, MIC = 1.25 μ g/mL; *Cryptococcus neoformans* ATCC 90112, MIC = 75 μ g/mL, Ciproflaxin, MIC = 2.5 μ g/mL); antifungal (*Candida albicans* ATCC10231, MIC = 37 μ g/mL, control Amphotericin B, MIC = 1.25 μ g/mL). [Source](#): XUAN CHUI GEN NAI LA CAO *Gunnera perpensa* (stem and leaf). [Ref](#): 5314.

10485 10-Hydroxy-4-O-methyl-2,11-diundecylgomphilactone

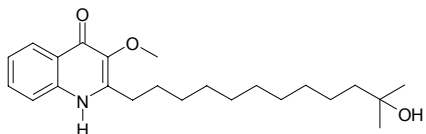
$C_{35}H_{52}O_7$ (584.8). Orange solid ($CHCl_3$), mp 103~105°C. **Pharm:** Cytotoxic inactive (*in vitro*, HL-60, $IC_{50} > 100\mu g/mL$; Bel7402, $IC_{50} > 100\mu g/mL$; HeLa, $IC_{50} > 100\mu g/mL$; U937, $IC_{50} > 100\mu g/mL$; control Colchicine, HL-60, $IC_{50} = 1.6\mu g/mL$; Bel7402, $IC_{50} = 0.4\mu g/mL$; HeLa, $IC_{50} = 0.1\mu g/mL$; U937, $IC_{50} = 0.1\mu g/mL$). **Source:** LA ZHU GUO *Aegiceras corniculatum* (stem and twig; yield = 0.000033%). **Ref:** 4746.

**10486 2-(10-Hydroxy-10-methyldodecanyl)-3-methoxy-4-quinolone**

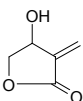
$C_{23}H_{35}NO_3$ (373.54). Colorless oil, $[\alpha]_D^{25} = +5.4^\circ$ ($c = 0.02$, $CHCl_3$). **Source:** *Spathelia excelsa* (leaf). **Ref:** 5297.

**10487 2-(11-Hydroxy-11-methyldodecanyl)-3-methoxy-4-quinolone**

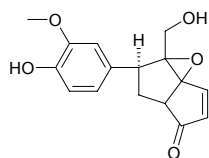
$C_{23}H_{35}NO_3$ (373.54). Colorless oil. **Source:** *Spathelia excelsa* (leaf). **Ref:** 5297.

**10488 β-Hydroxy-α-methylene-γ-butyrolactone**

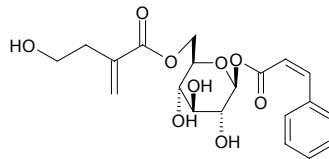
$C_5H_6O_3$ (114.10). **Source:** XIAO YE HUA *Spiraea prunifolia*. **Ref:** 6.

**10489 5-Hydroxymethyl-6-endo-(3'-methoxy-4'-hydroxyphenyl)-8-oxabicyclo[3.2.1]oct-3-en-2-one**

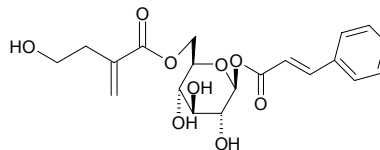
$C_{16}H_{16}O_5$ (288.30). **Source:** CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. **Ref:** 2.

**10490 6-O-(4'-Hydroxy-2'-methylene-butyryl)-1-O-cis-cinnamoyl-β-D-glucopyranose**

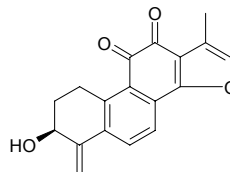
$C_{20}H_{24}O_9$ (408.41). **Source:** ZHEN ZHU XIU XIAN JU *Spiraea thunbergii*. **Ref:** 3782.

**10491 6-O-(4'-Hydroxy-2'-methylene-butyryl)-1-O-trans-cinnamoyl-β-D-glucopyranose**

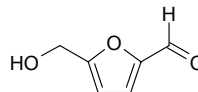
$C_{20}H_{24}O_9$ (408.41). **Source:** ZHEN ZHU XIU XIAN JU *Spiraea thunbergii*. **Ref:** 3782.

**10492 3-β-Hydroxymethylenetanshiquinone**

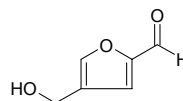
$C_{18}H_{14}O_4$ (294.31). Red acicular crystals (MeOH), mp 185~190°C, $[\alpha]_D^{25} = 0^\circ$ ($c = 0.05$, MeOH). **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 721.

**10493 5-Hydroxymethyl furaldehyde**

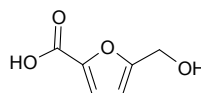
[67-47-0] $C_6H_6O_3$ (126.11). Brownish red liquid. **Source:** BEI CANG ZHU *Atractylodes chinensis*, DANG SHEN *Codonopsis pilosula*, DU ZHONG *Eucommia ulmoides*, PO LUO MEN ZAO JIA *Cassia fistula* (seed: yield = 0.00017%)^[4642], SHU DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*] (tuberoid: mean content of 3 origins = 0.032%)^[5508]. **Ref:** 2, 2510, 4642, 5508.

**10494 4-Hydroxymethyl-2-furaldehyde**

$C_6H_6O_3$ (126.11). Yellowish oleaginous substance. **Source:** CAO SU *Phlomis umbrosa*. **Ref:** 672.

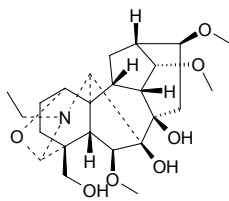
**10495 5-(Hydroxymethyl)-furan-2-carboxylic acid**

$C_6H_6O_4$ (142.11). **Source:** fungus *Epicoccum* sp. **Ref:** 5445.

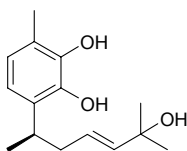


10496 18-Hydroxy-14-O-methylgadesine

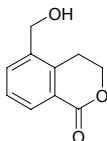
C₂₄H₃₇NO₇ (451.56). Colorless needles (*n*-hexane–ethyl acetate), mp 108–110°C, [α]_D²⁵ = +50.0° (*c* = 0.8, CHCl₃). Source: DONG FANG FEI YAN CAO *Consolida orientalis* (aerial parts). Ref: 4283.

**10497 6-Hydroxy-2-methyl-5-(5'-hydroxy-1'(R),5'-dimethylhex-3'-enyl)-phenol**

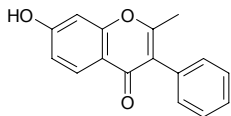
C₁₅H₂₂O₃ (250.34). Yellow oil, [α]_D²⁵ = –35° (*c* = 1.0, CH₂Cl₂). Source: KU A MO YAO *Commiphora kua* (resin). Ref: 4334.

**10498 5-Hydroxymethylisochroman-1-one**

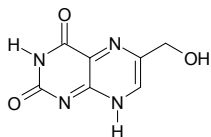
C₁₀H₁₀O₃ (178.19). Source: RI BEN ZHANG YA CAI *Swertia japonica*. Ref: 2528.

**10499 7-Hydroxy-2-methyl isoflavone**

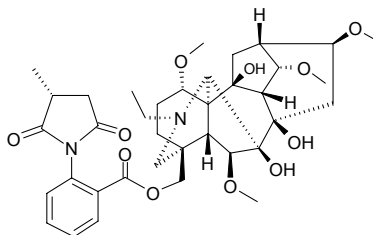
C₁₆H₁₂O₃ (252.27). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 660.

**10500 6-Hydroxymethylumazin**

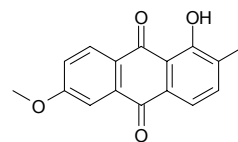
[10129-99-4] C₇H₆N₄O₃ (194.15). mp 260–262°C (dec). Source: BO CAI *Spinacia oleracea*. Ref: 6, 1521.

**10501 10-Hydroxy-methyllycaconitine**

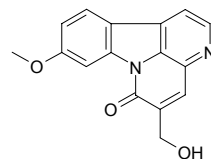
C₃₇H₅₀N₂O₁₁ (698.82). Amorphous, [α]_D²⁰ = +51.0° (CHCl₃). Source: SHEN LIE CUI QUE HUA *Delphinium dissectum*, GAO DA CUI QUE HUA *Delphinium excelsum*. Ref: 2055.

**10502 1-Hydroxy-2-methyl-6-methoxyanthraquinone**

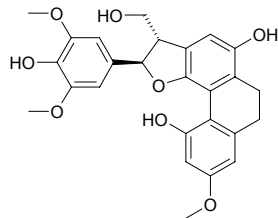
C₁₆H₁₂O₄ (268.27). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 660.

**10503 5-Hydroxymethyl-9-methoxycanthin-6-one**

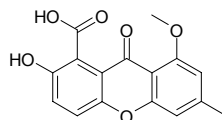
C₁₆H₁₂N₂O₃ (280.29). Yellow powder (MeOH), mp 235°C (dec). Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.000033%dw), *Eurycoma* sp. Ref: 4556, 4728.



10504 (2*R,3*S**)-3-Hydroxymethyl-9-methoxy-2-(4'-hydroxy-3',5'-dimethoxyphenyl)-2,3,6,7-tetrahydrophenanthro[4,3-*b*]furan-5,11-diol**
C₂₆H₂₆O₈ (466.49). Gum, [α]_D²⁷ = –3.5° (*c* = 0.85, CHCl₃). Source: QIAO SHI DOU LAN *Bulbophyllum vaginatum* (whole herb). Ref: 4768.

**10505 2-Hydroxy-6-methyl-8-methoxy-9-oxo-9*H*-xanthene-1-carboxylic acid**

C₁₆H₁₂O₆ (300.27). Stable pale yellow amorphous solid. Pharm: Cytotoxic inactive (brine shrimp *Artemia salina* lethality assay, 20μg/mL or 200μg/mL). Source: *Xylaria* sp. Ref: 3845.



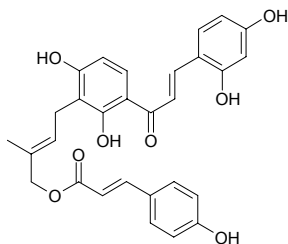
10506 3'-[γ -Hydroxymethyl-(*E*)- γ -methylallyl]-2,4,2',4'-tetrahydroxy-chalcone 11'-*O*-coumarate

Anticancer Flavonoid PMV70P691-021 C₂₉H₂₆O₈ (502.53). Orange powder.

Pharm: Aromatase inhibitor (*in vitro*, IC₅₀ = 0.5 μ mol/L; control

Aminoglutethimide, IC₅₀ = 6.4 μ mol/L). **Source:** GOU SHU

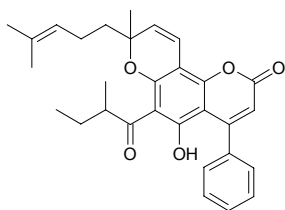
Broussonetia papyrifera. **Ref:** 3090, 5038.



10507 5-Hydroxy-8-methyl-6-(2-methylbutanoyl)-8-(4-methylpent-3-enyl)-4-phenyl-2*H*-pyrano[2,3-*h*]chromen-2-one

C₃₀H₃₂O₅ (472.59). Yellow gum. **Source:** TIE LI MU *Mesua ferrea* (blossom).

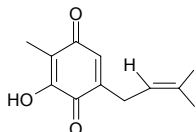
Ref: 3870.



10508 3-Hydroxy-2-methyl-5-(3-methyl-2-butenyl)benzo-1,4-quinone

C₁₂H₁₄O₃ (206.24). **Source:** XUAN CHUI GEN NAI LA CAO *Gunnera*

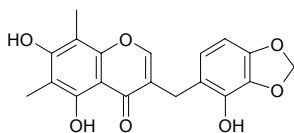
perpensa (stem and leaf). **Ref:** 5314.



10509 2'-Hydroxymethylphopogonone A

C₁₉H₁₆O₇ (356.34). **Source:** MAI DONG *Ophiopogon japonicus* (tuber). **Ref:**

4663.



10510 5-Hydroxy-2-methyl-6-(11'-oxododecyl)-pyridine

C₁₈H₂₉NO₂ (291.44). Pale oil. **Pharm:** Cytotoxic inactive (P₃₈₈, IC₅₀ > 20 μ g/mL,

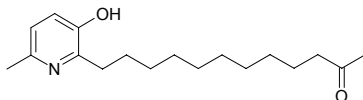
control 5-FU, IC₅₀ = 0.99 μ g/mL; KB, IC₅₀ > 20 μ g/mL, Doxorubicin, IC₅₀ =

0.57 μ g/mL; BC-1, IC₅₀ > 20 μ g/mL, Doxorubicin, IC₅₀ = 0.21 μ g/mL); cytotoxic

(brine shrimp lethality, IC₅₀ = 56.0 μ g/mL, control Monocrotophos, IC₅₀ =

0.24 μ g/mL). **Source:** ZHUANG GUAN FAN XIE *Senna spectabilis* (flower).

Ref: 5480.



10511 5-Hydroxy-2-methyl-6-(11'-oxododecyl)-pyridine *N*-oxide

C₁₈H₂₉NO₃ (307.44). White crystals, mp 71~72°C. **Pharm:** Cytotoxic (P₃₈₈,

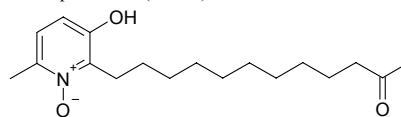
IC₅₀ = 4.8 μ g/mL, control 5-FU, IC₅₀ = 0.99 μ g/mL; KB, IC₅₀ = 2.0 μ g/mL,

Doxorubicin, IC₅₀ = 0.57 μ g/mL; BC-1, IC₅₀ = 4.1 μ g/mL, Doxorubicin, IC₅₀ =

0.21 μ g/mL); cytotoxic (brine shrimp lethality, IC₅₀ = 9.7 μ g/mL, control

Monocrotophos, IC₅₀ = 0.24 μ g/mL). **Source:** ZHUANG GUAN FAN XIE

Senna spectabilis (flower). **Ref:** 5480.



10512 10 α -Hydroxy-9 α -methyl-15-oxo-20-nor-kauran-19-oic acid methyl ester-16 α -yl-14' α ,16' α ,17'-trihydroxy-15'-oxo-*ent*-kaur-11'-*en*-19'-oate

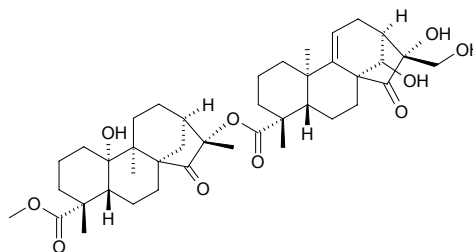
C₄₁H₅₈O₁₀ (710.91). White crystals, mp 100~105°C, [α]_D²⁵ = +35.0° (*c* = 0.1,

MeOH). **Pharm:** Cytotoxic inactive (Lu1, Col2, KB, LNCaP, hTERT-RPE1,

HUVEC; control Taxol, ED₅₀ = 0.002 μ g/mL, 0.003 μ g/mL, 0.0005 μ g/mL,

0.001 μ g/mL, 0.004 μ g/mL and 0.008 μ g/mL, respectively). **Source:** *Parinari*

sprucei (leaf). **Ref:** 4991.

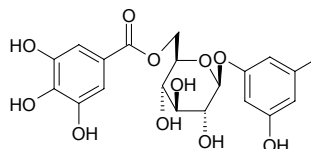


10513 3-Hydroxy-5-methylphenol 1-*O*- β -D-(6'-galloyl)glucopyranoside

C₂₀H₂₂O₁₁ (438.39). Off-white amorphous powder, [α]_D²⁶ = -20.3° (*c* = 0.22,

MeOH). **Source:** YANG TONG *Cleyera ochracea* [Syn. *Cleyera japonica*]

(leaf and branch). **Ref:** 4148.

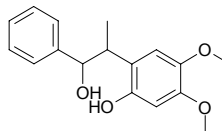


10514 2-(2-Hydroxy-1-methyl-2-phenylethyl)-4,5-dimethoxyphenol

C₁₇H₂₀O₄ (288.35). Amorphous solid; mp 37~45°C, [α]_D²⁵ = -44.9° (*c* = 0.25,

CHCl₃). **Source:** JIAO ZHI HUANG TAN *Dalbergia cochinchinensis* (stem;

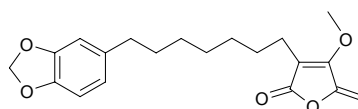
yield = 0.0011% dw). **Ref:** 4716.



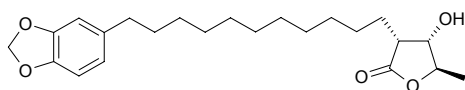
10515 3-Hydroxy-4-methyl-2-(7'-piperonyl-*n*-heptyl)-butenolide

Iryelliptin B C₂₀H₂₄O₅ (344.41). Viscous oil. **Source:** SU LI NAN ROU DOU

KOU *Virola surinamensis* [Syn. *Myristica surinamensis*]. **Ref:** 2580.

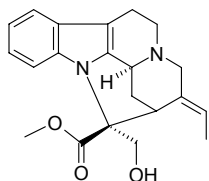


10516 (2S,3R,4S)-3-Hydroxy-4-methyl-2-(11'-piperonyl-n-undecyl)butanolid
Juruenolide E C₂₃H₃₄O₅ (390.52). Viscous oil, [α]_D = +7°, (c = 0.10, MeOH).
Source: SU LI NAN ROU DOU KOU *Virola surinamensis* [Syn. *Myristica surinamensis*]. Ref: 2580.



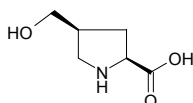
10517 16-Hydroxymethylpleiocarpamine

C₂₁H₂₄N₂O₃ (352.44). Source: HONG HUA RUI MU *Kopsia fruticosa* (leaf).
Ref: 3830.



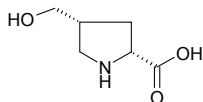
10518 cis-4-Hydroxymethylproline

[2370-39-0] C₆H₁₁NO₃ (145.16). mp 257~258°C (dec). Source: PI PA HE *Eriobotrya japonica*. Ref: 6.



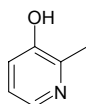
10519 trans-4-Hydroxymethylproline

C₆H₁₁NO₃ (145.16). mp 227.5~229.0°C. Source: PI PA HE *Eriobotrya japonica*. Ref: 6.



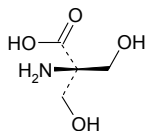
10520 3-Hydroxy-2-methylpyridine

C₆H₇NO (109.13). Source: MENG GU HUANG QI *Astragalus mongholicus*, ZHANG YE BAN XIA *Pinellia pedatisecta*. Ref: 660, 1400.



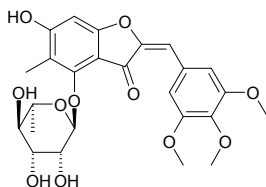
10521 α-Hydroxymethylserine

C₄H₉NO₄ (135.12). Source: TIAN HUA FEN *Trichosanthes kirilowii*. Ref: 2.



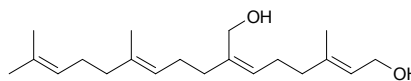
10522 6-Hydroxy-5-methyl-3',4',5'-trimethoxyaurone 4-O-α-L-rhamnopyranoside

C₂₅H₂₈O₁₁ (504.50). Source: SI ZI TAN *Pterocarpus santalinus* (wood). Ref: 3889.



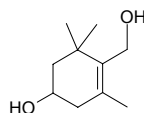
10523 (E,Z,E)-7-Hydroxymethyl-3,11,15-trimethyl-2,6,10,14-hexadecatetraen-1-ol

C₂₀H₃₄O₂ (306.49). Oil. Source: JIN QIN ZHUANG BA DOU *Croton sublyratus*. Ref: 661.



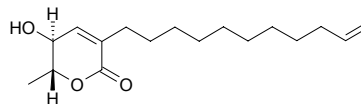
10524 4-Hydroxymethyl-3,5,5-trimethylcyclohex-3-enol

C₁₀H₁₈O₂ (170.25). Source: ZANG HONG HUA *Crocus sativus* (stigma; yield = 0.00011% dw). Ref: 4653.



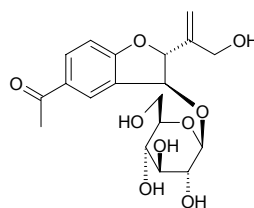
10525 5-Hydroxy-6-methyl-3-(undec-10-enyl)-5,6-dihydropyran-2-one

C₁₇H₂₈O₃ (280.41). Colorless oily liquid, [α]_D = +10.75° (c = 0.002, CHCl₃).
Source: QING XIANG MU JIANG ZI *Litsea euosma* (twig and leaf). Ref: 4576.



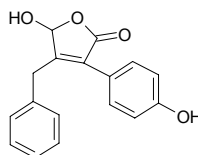
10526 (2R*,3S*)-1-(2-[1-(Hydroxymethyl)viny]-3-[β-D-glucosyloxy]-2,3-dihydrobenzo[b]furan-5-yl)-1-ethanone

C₁₉H₂₄O₉ (396.40). Pharm: Anti-Inflammatory (anti-oedema, control oedema = (7.8±0.3)mg, 100µg/cm², oedema = (5.6±0.5)mg, p<0.05, reduction = 28%, Indomethacin oedema = (3.4±0.3)mg, p<0.05, reduction = 56%). Source: GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root). Ref: 4985.



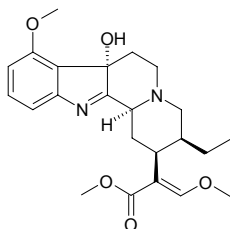
10527 9-Hydroxymicroperforanone

EQ-8 C₁₇H₁₄O₄ (232.30). White powder, [α]_D²⁵ = 0° (c = 0.030, MeOH).
Source: *Gelasinospora santi-florii*. Ref: 2103.

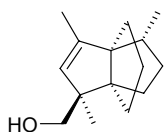


10528 7-Hydroxymitragynine

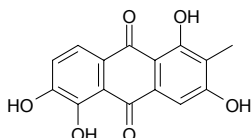
$C_{23}H_{30}N_2O_5$ (414.51). **Pharm:** Opioid agonist (gpg ileum, $pEC_{50} = 8.38 \pm 0.12$, control Morphine, $pEC_{50} = 7.15 \pm 0.05$). **Source:** MEI LI MAO ZHU MU *Mitragyna speciosa* (leaf). **Ref:** 5069.

**10529 14-Hydroxymodhephene**

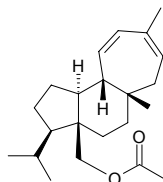
$C_{15}H_{24}O$ (220.36). Colorless oil, $[\alpha]_{589nm} = -13^\circ$, $[\alpha]_{578nm} = -13^\circ$, $[\alpha]_{546nm} = -15^\circ$, $[\alpha]_{436nm} = -27^\circ$, $[\alpha]_{365nm} = -44^\circ$ ($c = 1.37$, $CHCl_3$). **Source:** JUAN MAO KUO BAO JU *Pluchea sericea*. **Ref:** 2277.

**10530 3-Hydroxymorindone**

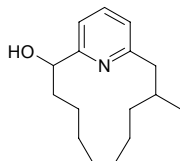
$C_{15}H_{10}O_6$ (286.24). **Source:** HONG YA DA JI *Knoxia valerianoides*. **Ref:** 660.

**10531 20-Hydroxymulin-11,13-dienyl acetate**

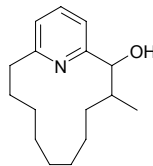
$C_{22}H_{34}O_2$ (330.52). Colorless oil, $[\alpha]_D^{25} = +89.28^\circ$ ($c = 0.168$, $CHCl_3$). **Pharm:** Antimalarial (*in vivo Plasmodium berghei* NK65 on infected mouse, ip 10mg/(kg·d), growth InRt on parasite erythrocytic life cycle = 29%; control Chloroquine, $IC_{50} = 2.5mg/(kg·d)$). **Source:** MI XIAO YING QIN *Azorella compacta* (aerial parts). **Ref:** 3815.

**10532 Hydroxymuscovopyridine A**

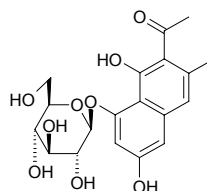
[89368-39-8] $C_{16}H_{25}NO$ (247.38). **Source:** SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. **Ref:** 2.

**10533 Hydroxymuscovopyridine B**

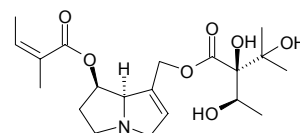
[89368-40-1] $C_{16}H_{25}NO$ (247.38). **Source:** SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. **Ref:** 2.

**10534 6-Hydroxymusizin-8-O-β-D-glucoside**

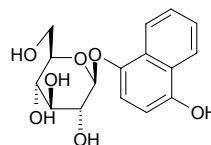
$C_{19}H_{22}O_9$ (394.38). **Source:** DA HUANG *Rheum officinale*. **Ref:** 2.

**10535 Hydroxymyoscorpine**

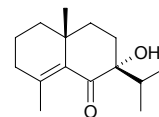
[126642-92-0] $C_{20}H_{31}NO_7$ (397.47). $[\alpha]_D = +2.2^\circ$ ($c = 0.2$, EtOH). **Source:** ZI CAO *Lithospermum erythrorhizon*. **Ref:** 2193.

**10536 4-Hydroxy-1-naphthalenyl-β-D-glucopyranoside**

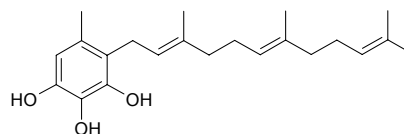
$C_{16}H_{18}O_7$ (322.32). **Source:** HU TAO REN *Juglans regia*. **Ref:** 660.

**10537 7α-Hydroxyneocalamone**

$C_{15}H_{24}O_2$ (236.36). **Source:** JI JI *Chloranthus serratus*. **Ref:** 660.

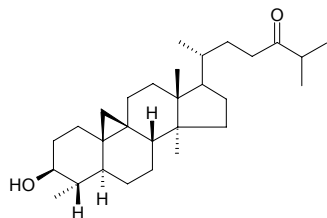
**10538 3-Hydroxyneogrifolin**

$C_{22}H_{32}O_3$ (344.50). White amorphous powder. **Source:** RE BEN MO GU *Albatrellus ovinus*. **Ref:** 2005.

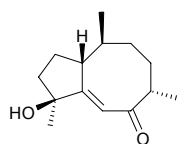


10539 3 β -Hydroxy-29-norcycloart-24-one

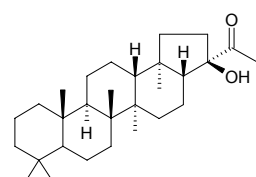
C₂₉H₄₈O₂ (428.70). Amorphous powder, $[\alpha]_D^{24} = +42.6^\circ$ ($c = 0.19$, CHCl₃). **Pharm:** Cytotoxic (Meth-A sarcoma cell line, ED₅₀ > 10 μ g/mL, LLC cell line, ED₅₀ > 10 μ g/mL). **Source:** QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*] (aerial parts). **Ref:** 3510.

**10540 4-Hydroxy-14-nor-5-dumorten-7-one**

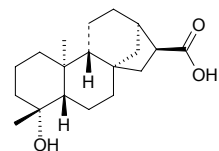
C₁₄H₂₂O₂ (222.33). Oil. **Source:** MAO DI QIAN *Dumortiera hirsuta*. **Ref:** 2283.

**10541 21-Hydroxy-30-norhopan-22-one**

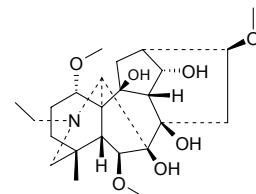
C₂₉H₄₈O₂ (428.70). mp 281~284°C. **Source:** ZHU ZONG CAO *Adiantum capillus-veneris*. **Ref:** 6.

**10542 4 α -Hydroxy-19-nor-ent-kauran-17-oic acid**

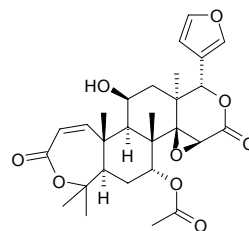
C₁₉H₃₀O₃ (306.45). **Pharm:** Platelet aggregation selected inhibitor (washed rabbit platelets, 200 μ mol/L: 100 μ mol/L AA induced, InRt = 4.5%; 10 μ g/mL collagen induced, InRt = 30.5%; 1 ng/mL PAF induced, InRt = 13.3%; 0.05 U/mL thrombin induced, InRt = 2.0%)^[4654], antioxidant (inhibits superoxide anion generation, fMLP/CB, IC₅₀ = (1.14 \pm 0.31) μ g/mL, $p < 0.001$, control DPI, IC₅₀ = (0.13 \pm 0.06) μ g/mL, $p < 0.001$)^[4950]. **Source:** FAN LI ZHI *Annona squamosa* (stem; yield = 0.067%fw). **Ref:** 4654, 4950.

**10543 10-Hydroxynudicaulidine**

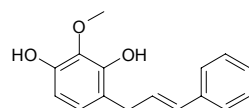
C₂₄H₃₉NO₇ (453.58). Amorphous, $[\alpha]_D^{20} = +26.3^\circ$ (CHCl₃). **Source:** GAO DA CUI QUE HUA *Delphinium excelsum*. **Ref:** 2055.

**10544 11 β -Hydroxy-7 α -obacunyl acetate**

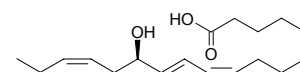
C₂₈H₃₄O₉ (514.58). Colorless prisms (CHCl₃/MeOH), mp 245~248°C, $[\alpha]_D^{23} = +21.2^\circ$ ($c = 0.1$, CHCl₃). **Source:** ZHONG GUO YANG CHUN *Cedrela sinensis* (leaf). **Ref:** 3883.

**10545 Hydroxyobtustylene**

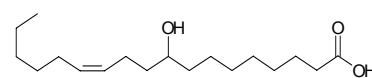
C₁₆H₁₆O₃ (256.30). **Pharm:** Platelet aggregation inhibitor (induced by arachidonic acid); prostaglandin biosynthesis inhibitor. **Source:** JIANG ZHEN XIANG *Dalbergia odorifera*. **Ref:** 660.

**10546 13(R)-Hydroxy-octadeca-(9Z,11E,15Z)-trien-oic acid**

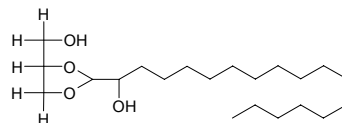
C₁₈H₃₀O₃ (294.44). Yellow oil, $[\alpha]_D^{25} = -4.3^\circ$ ($c = 0.37$, CHCl₃). **Source:** GUANG YE YAN ZI CAI *Potamogeton lucens* (whole herb). **Ref:** 3795.

**10547 9-D-Hydroxy-cis-12-octadecenoic acid**

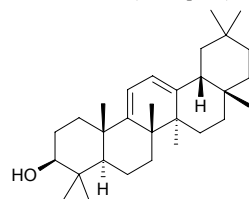
[38231-95-7] C₁₈H₃₄O₃ (298.47). mp (+) 30~32°C. **Source:** ZHI XIE MU PI *Holarhena antidysenterica*. **Ref:** 6.

**10548 1,2-O-[2'-Hydroxyoctadecyl]-glycerol**

C₂₁H₄₂O₄ (358.57). White powder. **Source:** DENG XIN LIU SHAN HU *Junceella juncea*. **Ref:** 2547.

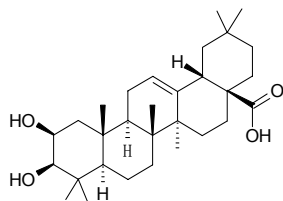
**10549 3 β -Hydroxy-olean-9(11),12-diene**

C₃₀H₄₈O (424.72). White crystals (EtOAc), easily soluble in CHCl₃ and MeOH, mp 280~282°C. **Source:** SI CHUAN QING FENG TENG *Sabia schumanniana* (aerial parts). **Ref:** 4883.

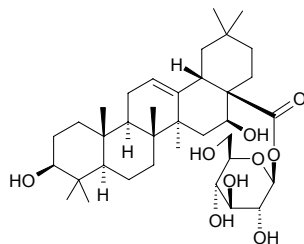


10550 2 β -Hydroxyoleanolic acid

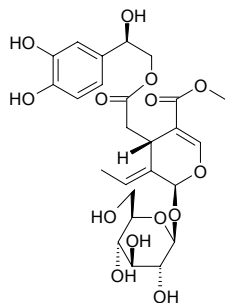
C₃₀H₄₈O₄ (472.71). Source: MI DIE XIANG *Rosmarinus officinalis*. Ref: 6.

**10551 16 β -Hydroxy-18 β H-oleanolic acid-28-O- β -D-glucopyranoside**

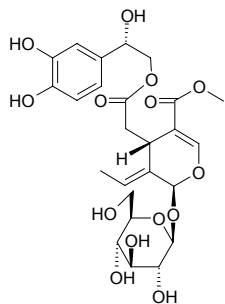
C₃₆H₅₈O₉ (634.86). White powder, mp 274~276°C. Source: TOU XU CONG MU *Aralia dasyphylla*. Ref: 398.

**10552 (2''R)-2''-Hydroxyoleuropein**

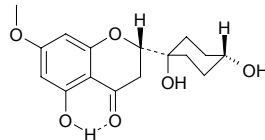
C₂₅H₃₂O₁₄ (556.53). Colorless amorphous powder, [α]_D²⁸ = -152° (c = 0.30, MeOH). Source: MEI GUO BAI CEN *Fraxinus americana* (leaf). Ref: 5091.

**10553 (2''S)-2''-Hydroxyoleuropein**

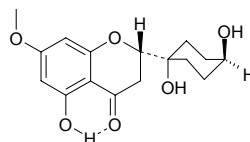
C₂₅H₃₂O₁₄ (556.53). Colorless amorphous powder, [α]_D²⁹ = -140° (c = 0.24, MeOH). Source: MEI GUO BAI CEN *Fraxinus americana* (leaf). Ref: 5091.

**10554 (2S)-cis-4'-Hydroxy-ongokein**

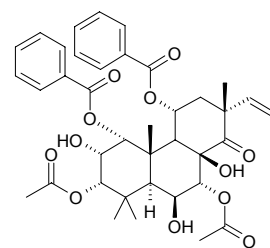
(2S)-5-Hydroxy-2-(cis-1',4'-dihydroxycyclohexyl)-7-methoxychroman-4-one C₁₆H₂₀O₆ (308.33). White crystals, mp 105~108°C, [α]_D = +47° (c = 1.7). Source: EN GE MU *Ongokea gore* (stem cortex and root). Ref: 5308.

**10555 (2S)-trans-4'-Hydroxy-ongokein**

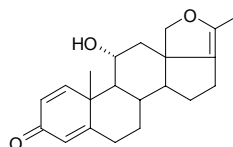
(2S)-5-Hydroxy-2-(trans-1',4'-dihydroxycyclohexyl)-7-methoxychroman-4-one C₁₆H₂₀O₆ (308.33). White amorphous powder, mp 68~71°C, [α]_D = +68° (c = 0.69). Source: EN GE MU *Ongokea gore* (stem cortex and root). Ref: 5308.

**10556 6-Hydroxyorthosiphon B**

C₃₈H₄₄O₁₂ (692.77). Colorless amorphous solid, [α]_D²⁵ = -53.4° (c = 0.027, CHCl₃). Source: XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts). Ref: 4322.

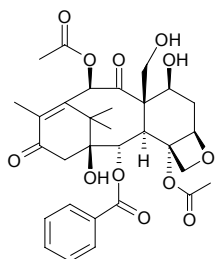
**10557 11 α -Hydroxy 18,20-oxido-3-oxo-pregna-1,4,17(20)-triene**

C₂₁H₂₆O₃ (326.44). Orange red plates (MeOH), mp 108~110°C. Source: DUAN ROU MAO ZHI XIE MU *Holarrhena pubescens* (bark). Ref: 5231.

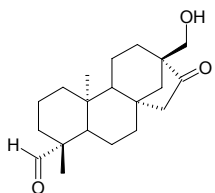


10558 19-Hydroxy-13-oxobaccatin III

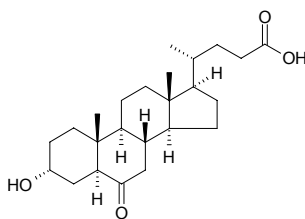
$C_{31}H_{36}O_{12}$ (600.63). **Pharm:** Cytotoxic (*in vitro*, 30 $\mu\text{g/mL}$: A498, InRt = 79.8%; NCI-H226, InRt = 84.7%; A549, InRt = 45.4%; PC3, InRt = 88.2%; control Taxol, 30 $\mu\text{g/mL}$: A498, InRt = 98.2%; NCI-H226, InRt = 71.2%; A549, InRt = 79.7%; PC3, InRt = 91.7%)^[4800]. **Source:** SU MEN DA LA HONG DOU SHAN *Taxus sumatrana*. **Ref:** 662, 4800.

**10559 (4R,5S,8R,9R,10S,13S)-ent-17-Hydroxy-16-oxobeyeran-19-al**

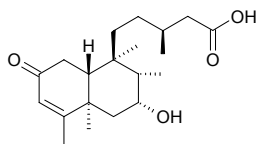
$C_{20}H_{30}O_3$ (318.46). White amorphous solid, $[\alpha]_D^{20} = -35.0^\circ$ ($c = 0.3$, CHCl_3). **Pharm:** Antiproliferative and cytotoxic (*in vitro*, L-929, $\text{GI}_{50} = 45.4 \mu\text{g/mL}$; K562, $\text{GI}_{50} = 50 \mu\text{g/mL}$; HeLa, $\text{CC}_{50} = 37.7 \mu\text{g/mL}$; control Paclitaxel, L-929, $\text{GI}_{50} = 0.1 \mu\text{g/mL}$; K562, $\text{GI}_{50} = 0.01 \mu\text{g/mL}$; HeLa, $\text{CC}_{50} = 0.01 \mu\text{g/mL}$). **Source:** MU LAN⁽³⁾ *Bruguiera gymnorrhiza* (stem, yield = 0.00046%). **Ref:** 4770.

**10560 3 α -Hydroxy-6-oxo-5 α -cholanolic acid**

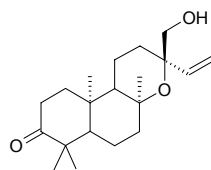
$C_{24}H_{38}O_4$ (390.57). mp 194°C. **Source:** YE ZHU DAN *Sus scrofa*, ZHU DAN *Sus scrofa domestica*. **Ref:** 6.

**10561 ent-7 β -Hydroxy-2-oxo-3-cleroden-15-oic acid**

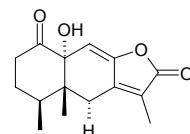
$C_{20}H_{32}O_4$ (336.48). Colorless oil, $[\alpha]_D^{20} = -30^\circ$ ($c = 0.195$, CHCl_3). **Pharm:** Antimalarial (*Plasmodium falciparum* FcB1, $\text{IC}_{50} = (4.3 \pm 0.9) \mu\text{g/mL}$, control Chloroquine, $\text{IC}_{50} = (0.05 \pm 0.002) \mu\text{g/mL}$). **Source:** *Nuxia sphaerocephala* (leaf). **Ref:** 4419.

**10562 ent-16-Hydroxy-3-oxo-13-epi-manoyl oxide**

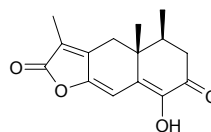
$C_{20}H_{32}O_3$ (320.48). Colorless needles (MeOH), mp 134–136°C, $[\alpha]_D^{25} = -20.2^\circ$ ($c = 0.3$, CHCl_3). **Source:** HAI QI *Excoecaria agallocha* (root). **Ref:** 5114.

**10563 10 α -Hydroxy-1-oxoeremophila-7(11),8(9)-dien-12, 8-olide**

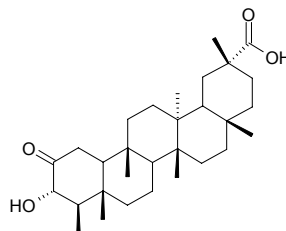
$C_{15}H_{18}O_4$ (262.31). **Source:** *Ligularia virgaurea* ssp. *oligocephala* (whole herb). **Ref:** 4981.

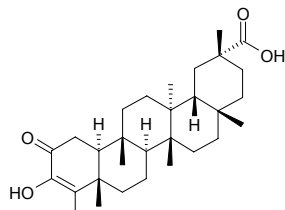
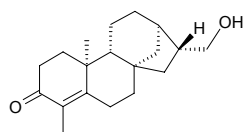
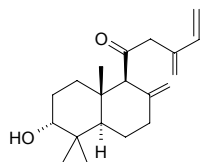
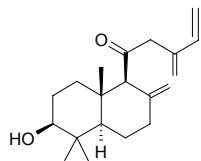
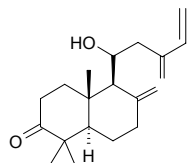
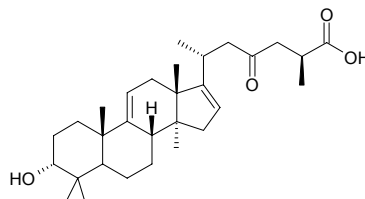
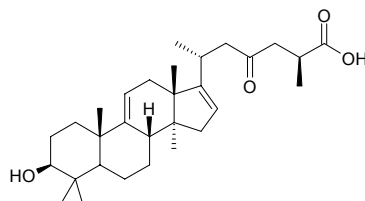
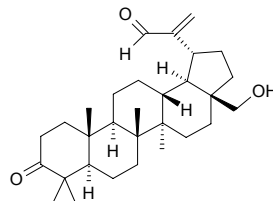
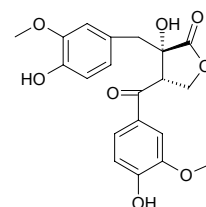
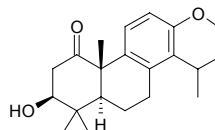
**10564 1-Hydroxy-2-oxoeremophil-1(10),7(11),8(9)-trien-12(8)-olide**

$C_{15}H_{16}O_4$ (260.29). Crystalline yellow solid, mp 198–200°C, $[\alpha]_D = -187^\circ$ ($c = 1$, CH_2Cl_2). **Pharm:** Phytogrowth inhibitor (inhibits radicle growth of *Amaranthus hypochondriacus*, $\text{IC}_{50} = 6.57 \mu\text{mol/L}$); calmodulin-dependent cAMP phosphodiesterase inhibitor ($\text{IC}_{50} = (10.2 \pm 7.6) \mu\text{mol/L}$, control Chlorpromazine, $\text{IC}_{50} = (18.4 \pm 2.7) \mu\text{mol/L}$). **Source:** *Malbranchea aurantiaca*. **Ref:** 5273.

**10565 3 α -Hydroxy-2-oxofriedelane-20 α -carboxylic acid**

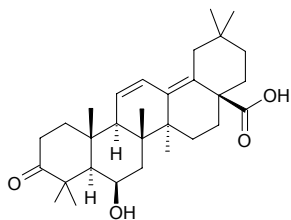
$C_{30}H_{48}O_4$ (472.71). Needles, mp 305–307°C (lit. mp 313–315°C), $[\alpha]_D = +90^\circ$ ($c = 1.0$, CHCl_3). **Pharm:** Antibacterial (*Staphylococcus aureus*, $\text{IC}_{50} > 12.5 \mu\text{g/mL}$, control MA, $\text{IC}_{50} = 12.5 \mu\text{g/mL}$; *Pseudomonas aeruginosa*, $\text{IC}_{50} > 25 \mu\text{g/mL}$, MA, $\text{C}_{50} = 12.5 \mu\text{g/mL}$; *Cryptococcus neoformans*, $\text{IC}_{50} > 50 \mu\text{g/mL}$, MA, $\text{IC}_{50} > 12.5 \mu\text{g/mL}$); antifungal inactive (*Candida albicans*, $\text{IC}_{50} > 50 \mu\text{g/mL}$, control MA, $\text{IC}_{50} > 12.5 \mu\text{g/mL}$). **Source:** YI YE MEI DENG MU *Maytenus heterophylla*. **Ref:** 5189.



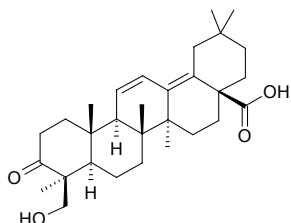
10566 3-Hydroxy-2-oxo-3-friedelen-20 α -carboxylic acidC₃₀H₄₆O₄ (470.70). Colorless acicular crystals, mp 318~320°C (MeOH).Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 670.**10567 16 β H,17-Hydroxy-3-oxo-19-nor-ent-kaur-4-ene**C₁₉H₂₈O₂ (288.43). Colorless oil, [α]_D²⁵ = -72.0° (*c* = 0.47, CHCl₃). Pharm:Antibacterial (*Staphylococcus aureus*, MIC < 1.5mg/mL; *Bacillus cereus*, *Pseudomonas aeruginosa* and *Escherichia coli*, MIC = 2.0~2.5mg/mL).Source: *Antennaria geyeri* (aerial parts). Ref: 3853.**10568 3 α -Hydroxy-11-oxo-labda-8(17),13(16),14-triene**C₂₀H₃₀O₂ (302.46). [α]_D²⁰ = +9.8° (*c* = 1.5, CHCl₃). Source: YUAN YE TAI*Jamesoniella colorata*. Ref: 3375.**10569 3 β -Hydroxy-11-oxo-labda-8(17),13(16),14-triene**C₂₀H₃₀O₂ (302.46). [α]_D²⁰ = +47.0° (*c* = 1.5, CHCl₃). Source: YUAN YE TAI*Jamesoniella colorata*. Ref: 3375.**10570 11-Hydroxy-3-oxo-labda-8(17),13(16),14-triene**C₂₀H₃₀O₂ (302.46). [α]_D²⁰ = +8.14° (*c* = 1.2, CHCl₃). Source: YUAN YE TAI*Jamesoniella colorata*. Ref: 3375.**10571 (25R)-3 α -Hydroxy-23-oxo-9,16-lanostadien-26-oic-acid**C₃₀H₄₆O₄ (470.70). Gum, [α]_D²⁵ = +17.5° (*c* = 0.013, CHCl₃). Source: MEI LITENG HUANG *Garcinia speciosa* (bark). Ref: 3762.**10572 (25R)-3 β -Hydroxy-23-oxo-9,16-lanostadien-26-oic acid**C₃₀H₄₆O₄ (470.70). White powder, mp 218~220°C, [α]_D²⁹ = +58° (*c* = 0.34,MeOH); mp 220~222°C, [α]_D²⁰ = -61° (*c* = 0.013, MeOH). Source: SHAN FENG GUO*Garcinia hombroniana* (pericarp), MEI LI TENG HUANG *Garcinia speciosa* (bark). Ref: 3762, 5085.**10573 28-Hydroxy-3-oxo-lup-20-(29)-en-30-al**C₃₀H₄₆O₃ (454.70). Colorless gummy substance, [α]_D²⁰ = +9.62° (*c* = 1.0,CHCl₃). Pharm: Cytotoxic (NSCLC-N6 cell line, IC₅₀ = (15±0.06)μg/mL).Source: JU MI JIN HE HUAN *Acacia mellifera* (stem cortex). Ref: 3806.**10574 (8S,8'S)-(+)-8-Hydroxy-oxomatairesinol**C₂₀H₂₀O₈ (388.38). Pale yellow amorphous powder, [α]_D²⁵ = +97.3° (*c* = 0.83,MeOH); [α]_D²⁵ = +95.1° (*c* = 0.83, THF). Source: YI YE TIE SHAN *Tsuga**heterophylla* (sapwood). Ref: 3965.**10575 3 β -Hydroxy-1-oxo-13-O-methyltotarol**C₂₁H₃₀O₃ (330.47). Solid, mp = 179~180.6°C, [α]_D²⁵ = +3.5° (*c* = 1.3, MeOH).Source: HONG GUI *Chamaecyparis formosensis*. Ref: 2315.

10576 6 β -Hydroxy-3-oxo-11,13(18)-oleanadien-28-oic acid

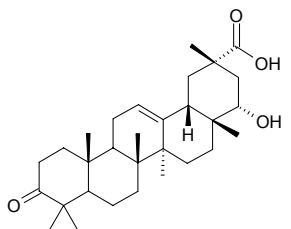
$C_{30}H_{44}O_4$ (468.68). Colorless prisms; mp 235–237°C, $[\alpha]_D^{20} = -60.4^\circ$ ($c = 0.31$, $CHCl_3$). Source: XUAN CHUI JIA MI *Viburnum suspensum*. Ref: 1966.

**10577 24-Hydroxy-3-oxo-11,13(18)-oleanadien-28-oic acid**

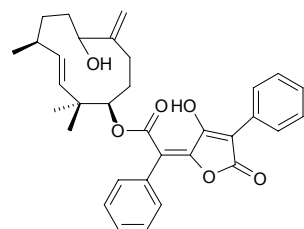
$C_{30}H_{44}O_4$ (468.68). Colorless prisms, mp 217–218°C, $[\alpha]_D^{20} = -86.5^\circ$ ($c = 0.38$, $CHCl_3$). Source: XUAN CHUI JIA MI *Viburnum suspensum*. Ref: 1966.

**10578 22 α -Hydroxy-3-oxoolean-12-en-29-oic acid**

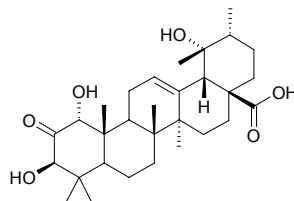
$C_{30}H_{46}O_4$ (470.70). Pharm: DPPH scavenger inactive (for 40 μ mol/L DPPH radical, $SC_{50} > 40 \mu$ mol/L). Source: SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). Ref: 4378.

**10579 (3-Hydroxy-5-oxo-4-phenyl-5H-furan-2-ylidene)-phenylacetic Acid 6-hydroxy-1,7(11)-humuladienyl-10-yl ester**

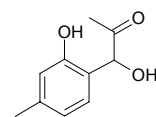
$C_{33}H_{36}O_6$ (528.65). Oil, $[\alpha]_D = -87.5^\circ$ ($c = 0.4$, $CHCl_3$). Source: Tylimanthus *tenellus*. Ref: 4280.

**10580 1 α -Hydroxy-2-oxopomolic acid**

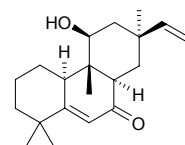
$C_{30}H_{46}O_6$ (502.70). Pharm: Immunosuppressant (hmn mononuclear cells antiproliferation, involving T lymphocytes, B lymphocytes, and macrophages isolated from peripheral blood, $IC_{50} = 32.5 \mu$ mol/L; control Cyclosporine A, $IC_{50} = 0.012 \mu$ mol/L). Source: TAI WAN PI PA *Eriobotrya deflexa* (leaf). Ref: 3064.

**10581 2-(1'-Hydroxy-2'-oxopropyl)-5-methylphenol**

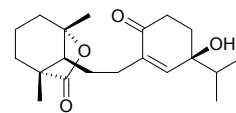
$C_{10}H_{12}O_3$ (180.21). $[\alpha]_D^{21} = -13.1^\circ$ ($c = 0.64$, $CHCl_3$). Source: PEI LAN *Eupatorium fortunei* (aerial parts). Ref: 3077.

**10582 11 β -Hydroxy-7-oxo-rosa-5,15-diene**

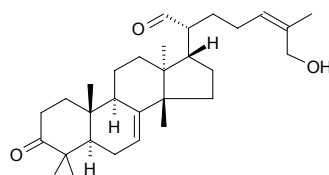
$C_{20}H_{30}O_2$ (302.46). $[\alpha]_D^{20} = +76^\circ$ ($c = 0.41$, $CHCl_3$). Source: *Gackstroemia decipiens*. Ref: 3907.

**10583 13S-Hydroxy-9-oxo-9,10-seco-abiet-8(14)-en-18,10 α -olide**

$C_{20}H_{30}O_4$ (334.46). Colorless oil, $[\alpha]_D^{23} = -4.8^\circ$ ($c = 0.46$, $CHCl_3$). Pharm: EBV-EA inhibitor (TPA-induced, $IC_{50} = 273$ mol ratio/32pmol TPA, control Curcumin, $IC_{50} = 341$ mol ratio/32pmol TPA). Source: SA HA LIN YUN SHAN *Picea glehnii* (stem cortex). Ref: 5028.

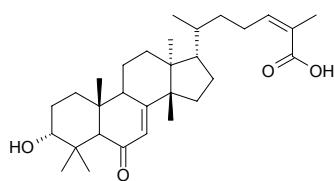
**10584 (24Z)-26-Hydroxy-3-oxo-7,24-tirucalladien-21-al**

(24Z)-26-Hydroxy-3-oxo-7,24-euphadien-21-al [121063-65-8] $C_{30}H_{46}O_3$ (454.70). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

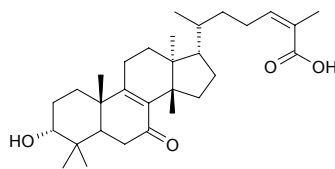


10585 3 α -Hydroxy-6-oxo-7,24Z-tirucalladien-26-oic acid

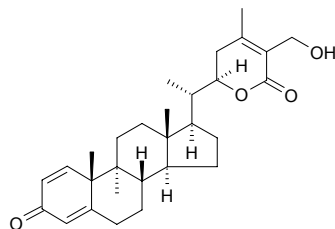
C₃₀H₄₆O₄ (470.70). Colorless powder, mp 233~234°C, [α]_D = -29.9° (*c* = 0.5, MeOH). Source: *Juliania adstringens* (bark). Ref: 3786.

**10586 3 α -Hydroxy-7-oxo-8,24Z-tirucalladien-26-oic acid**

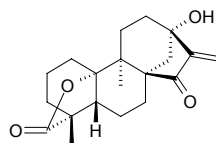
C₃₀H₄₆O₄ (470.70). Colorless powder, mp 235~240°C, [α]_D = -45.1° (*c* = 0.1, MeOH). Source: *Juliania adstringens* (bark). Ref: 3786.

**10587 27-Hydroxy-3-oxo-witha-1,4,24-trienolide**

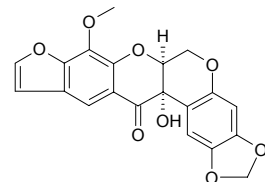
C₂₈H₃₈O₄ (438.61). Source: CUI MIAN SHUI QIE *Withania somnifera* (leaf). Ref: 5329.

**10588 13-Hydroxy-15-oxozoapatlin**

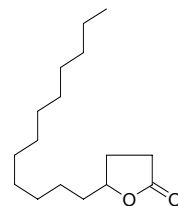
C₂₀H₂₆O₄ (330.43). Pharm: Antineoplastic (*in vivo* hollow fiber test, 25~100mg/kg, active with KB and LNCaP cells); cytotoxic (cultured KB, ED₅₀ = 1.2μg/mL, LNCaP, ED₅₀ = 1.5μg/mL, Lu1, ED₅₀ = 5.2μg/mL). Source: *Parinari sprucei* (leaf). Ref: 4991.

**10589 12 α -Hydroxypachyrhizone**

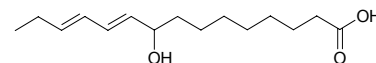
12 α -Hydroxypachyrhizone C₂₀H₁₄O₈ (382.33). mp 214°C. Pharm: Antiviral (HSV-1, IC₅₀ = 18.0μg/mL; HSV-2, IC₅₀ = 18.5μg/mL)^[4180]. Source: DI GUA ZI *Pachyrhizus erosus*. Ref: 6, 4180.

**10590 γ -Hydroxypalmitic acid lactone**

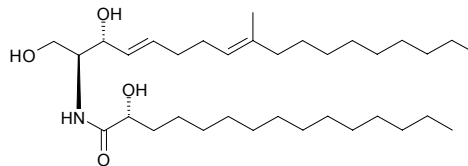
C₁₆H₃₀O₂ (254.42). mp 40.7~41.3°C. Source: HONG MU JI CAO *Desmodium gangeticum*. Ref: 6.

**10591 9-Hydroxy-10,12-pentadecadienoic acid**

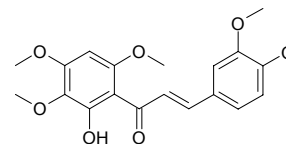
C₁₅H₂₆O₃ (254.37). Source: CU LIU GUO *Hippophae rhamnoides*. Ref: 2.

**10592 (2S,2'R,3R,4E,8E)-N-2'-Hydroxypentadecanoyl-2-amino-9-methyl-4,8-octadecadiene-1,3-diol**

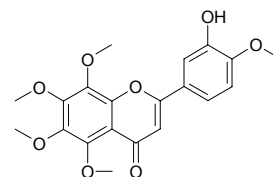
C₃₄H₆₅NO₄ (551.90). Amorphous powder, [α]_D²¹ = +7.0° (*c* = 0.1, CHCl₃). Source: BAO BAN E GAO *Amanita pantherina*, *Sarcodon aspratus*. Ref: 4195.

**10593 2'-Hydroxy-3,4,3',4',6'-pentamethoxychalcone**

C₂₀H₂₂O₇ (374.39). Pale yellow needles, mp 134~136°C. Source: RU JU *Citrus kinokuni* (peel). Ref: 4132.

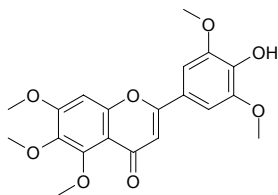
**10594 3'-Hydroxy-5,6,7,8,4'-pentamethoxyflavone**

[112448-39-2] C₂₀H₂₀O₈ (388.37). Colorless rhombic crystals (hexane-ethyl acetate), mp 139~140°C. Pharm: Cytotoxic (mus myelocytic leukemia cells, strongly induces cell differentiation, 50μmol/L, growing rate = 37%, activity of macrophages > 25%, 5μmol/L, growing rate = 50%, activity of macrophages > 10%). Source: JU PI *Citrus reticulata*. Ref: 997, 1063.

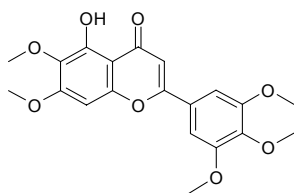


10595 4'-Hydroxy-5,6,7,3',5'-pentamethoxyflavone

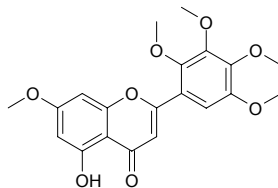
$C_{20}H_{20}O_8$ (388.38). **Pharm:** Cytotoxic (HeLa, $IC_{50} = 51.2\mu\text{g/mL}$, control Mitomycin C, $IC_{50} = 1.7\mu\text{g/mL}$). **Source:** TUAN JI AI NA XIANG *Blumea glomerata*. **Ref:** 4092.

**10596 5-Hydroxy-6,7,3',4',5'-pentamethoxyflavone**

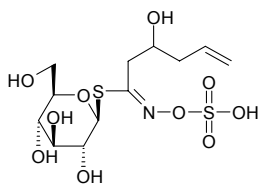
$C_{20}H_{20}O_8$ (388.38). **Source:** ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*]. **Ref:** 626.

**10597 5-Hydroxy-7,2',3',4',5'-pentamethoxyflavone**

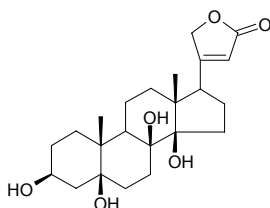
$C_{20}H_{20}O_8$ (388.38). **Pharm:** Anti-HIV-1 inactive. **Source:** TAI GUO ZHI ZI *Gardenia thailandica* (leaf and twig). **Ref:** 4963.

**10598 2-Hydroxypent-4-enylglucosinate**

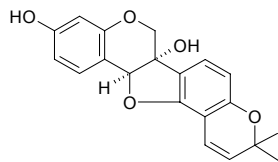
$C_{12}H_{21}NO_{10}S_2$ (403.43). **Source:** JIE CAI *Brassica juncea*. **Ref:** 660.

**10599 8-Hydroxy-periplogenin**

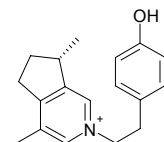
$C_{23}H_{34}O_6$ (406.52). mp 234–236°C, $[\alpha]_D = +32.4^\circ$. **Source:** XI NAN GANG LIU *Periploca forrestii*. **Ref:** 2498.

**10600 Hydroxyphaseollin**

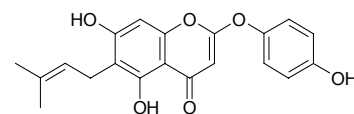
6 α -Hydroxyphaseollin $C_{20}H_{18}O_5$ (338.36). Adhesive oil, $[\alpha]_D^{20} = -207^\circ$ (ethyl acetate). **Pharm:** Antifungal (*Botrytis cinerea*). **Source:** HEI DA DOU *Glycine max*. **Ref:** 661.

**10601 N-(p-Hydroxyphenethyl)actinidine**

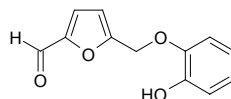
Valerianae alkaloid A [15794-92-0] $C_{18}H_{22}NO^+$ (268.38). mp 201–203°C (dec). **Pharm:** Cholinesterase inhibitor. **Source:** XIE CAO *Valeriana officinalis*. **Ref:** 6, 658, 660.

**10602 2-(p-Hydroxyphenoxy)-5,7-dihydroxy-6-isopentenylchromone**

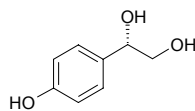
$C_{20}H_{18}O_6$ (354.36). Yellow-white powder. **Source:** CHAO XIAN YIN YANG HUO *Epimedium koreanum*. **Ref:** 417.

**10603 5-(2-Hydroxyphenoxy)methylfurfural**

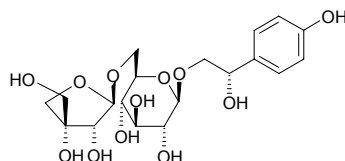
$C_{12}H_{10}O_4$ (218.21). mp 102–103°C. **Source:** PO LUO MEN ZAO JIA *Cassia fistula* (seed: yield = 0.00070%). **Ref:** 4642.

**10604 1'-(4-Hydroxyphenyl)ethane-1',2'-diol**

$C_8H_{10}O_3$ (154.17). mp 128–132°C, $[\alpha]_D^{24} = +10^\circ$. **Source:** HU SUI ZI *Coriandrum sativum* (whole herb). **Ref:** 4302.

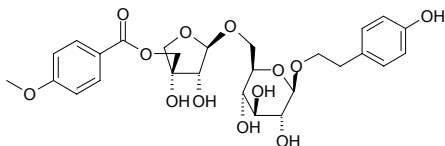
**10605 (1'S)-1'-(4-Hydroxyphenyl)ethane-1',2'-diol 2'-O- β -D-Apiofuranosyl-(1 \rightarrow 6)- β -D-glucopyranoside**

$C_{19}H_{28}O_{12}$ (448.43). Amorphous powder, $[\alpha]_D^{22} = -38^\circ$ ($c = 0.5$, MeOH). **Source:** HU SUI ZI *Coriandrum sativum*. **Ref:** 4302.



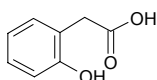
10606 2-(4-Hydroxyphenyl)ethyl-1-O- β -D-[5-O-(4-methoxybenzoyl)]-apiofuranosyl-(1 \rightarrow 6)- β -D-glucopyranoside

$C_{27}H_{34}O_{13}$ (566.56). Amorphous powder, $[\alpha]_D^{22} = -55.4^\circ$ ($c = 1.93$, MeOH). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells, $IC_{50} = 55.1 \mu\text{g/mL}$, control *L*-NMMA, $IC_{50} = 27.4 \mu\text{g/mL}$)^[4473]. **Source:** BAN ZHEN ZHONG HUA SHU *Tabebuia impetiginosa* (bark), HE SE ZHONG HUA SHU *Tabebuia avellanedae* (inner bark). **Ref:** 3817, 4473.



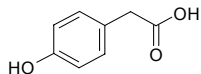
10607 2-Hydroxyphenyl acetic acid

[614-75-5] $C_8H_8O_3$ (152.15). mp 147~149°C. **Source:** LUO XIN FU *Astilbe chinensis*. **Ref:** 6.



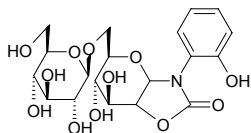
10608 p-Hydroxyphenyl acetic acid

[156-38-7] $C_8H_8O_3$ (152.15). mp 148~150°C. **Source:** QIAN LI GUANG *Senecio scandens* [Syn. *Senecio chinensis*], LI MENG YE *Citrus limonia*, LI MENG GEN *Citrus limonia*. **Ref:** 6.



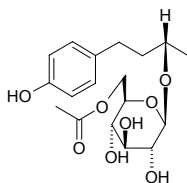
10609 1-(2-Hydroxyphenylamino)-1-deoxy-beta-gentiobioside 1,2-carbamate

$C_{19}H_{25}NO_{12}$ (459.41). **Source:** YU SHU SHU *Zea mays* (root). **Ref:** 5212.



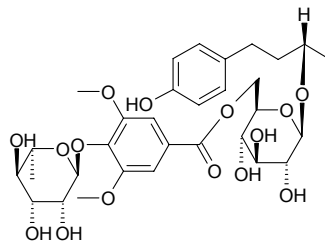
10610 (S)-4-(4-Hydroxyphenyl)-2-butanol 2-O-(6-O-acetyl)-beta-D-glucopyranoside

$C_{18}H_{26}O_8$ (370.40). Colorless powder, $[\alpha]_D^{25} = -40.2^\circ$ ($c = 0.8$, MeOH). **Source:** MA SHI DA HUANG *Rheum maximowiczii* (root). **Ref:** 5136.



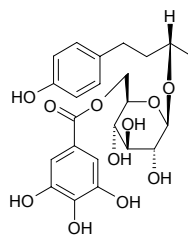
10611 (S)-4-(4-Hydroxyphenyl)-2-butanol 2-O-[6-O-(3,5-dimethoxy-4-O-alpha-L-rhamnopyranosylgalloyl)-beta-D-glucopyranoside]

$C_{31}H_{42}O_{15}$ (654.67). Pale yellow oil, $[\alpha]_D^{25} = -13.8^\circ$ ($c = 1.3$, MeOH). **Source:** MA SHI DA HUANG *Rheum maximowiczii* (root). **Ref:** 5136.



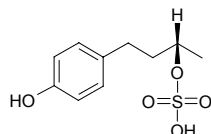
10612 (S)-4-(4-Hydroxyphenyl)-2-butanol 2-O-(6-O-galloyl)-beta-D-glucopyranoside

$C_{23}H_{28}O_{11}$ (480.47). Pale orange oil, $[\alpha]_D^{25} = -41.6^\circ$ ($c = 1.0$, MeOH). **Source:** MA SHI DA HUANG *Rheum maximowiczii* (root). **Ref:** 5136.



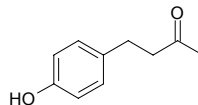
10613 (S)-4-(4-Hydroxyphenyl)-2-butanol 2-O-sulfate

$C_{10}H_{14}O_5S$ (246.28). Hygroscopic white amorphous powder, $[\alpha]_D^{25} = +20.9^\circ$ ($c = 1.3$, MeOH). **Source:** MA SHI DA HUANG *Rheum maximowiczii* (root). **Ref:** 5136.



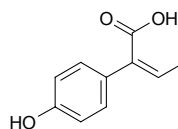
10614 4-(4-Hydroxyphenyl)-2-butanone

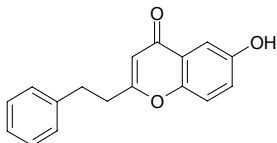
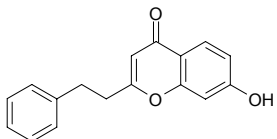
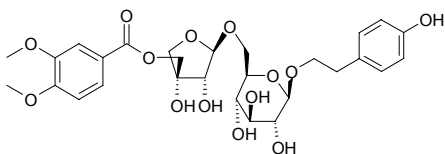
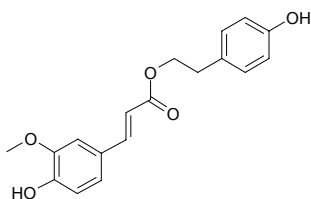
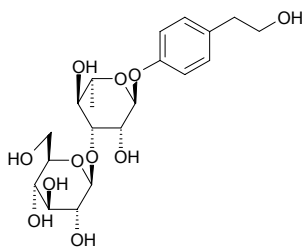
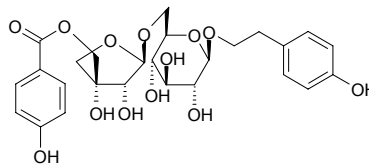
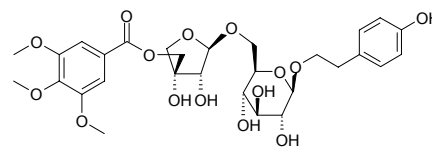
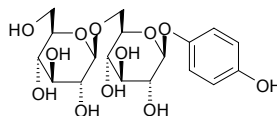
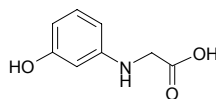
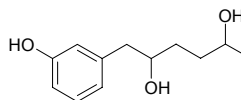
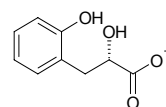
$C_{10}H_{12}O_2$ (164.21). **Source:** MAO GUO QI *Acer nikoense* (stem cortex). **Ref:** 4304.



10615 p-Hydroxyphenyl crotonic acid

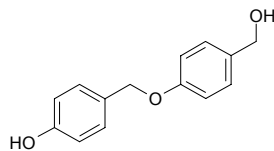
$C_{10}H_{10}O_3$ (178.19). **Source:** ZHI MU *Anemarrhena asphodeloides*. **Ref:** 660.



10616 6-Hydroxy-2-(2-phenylethyl) chromone[84294-90-6] C₁₇H₁₄O₃ (266.30). Colorless acicular crystals, mp 214~215°C.Source: BAI MU XIANG *Aquilaria sinensis*. Ref: 13, 660.**10617 7-Hydroxy-2-(2-phenylethyl)chromone**C₁₇H₁₄O₃ (266.30). Colorless needles, mp 163~164°C (MeOH). Source:CHEN XIANG *Aquilaria agallocha*. Ref: 4173.**10618 2-(4-Hydroxyphenyl)ethyl 1-O-β-D-[5-O-(3,4-dimethoxybenzoyl)]-apiofuranosyl-(1→6)-β-D-glucopyranoside**C₂₈H₃₆O₁₄ (596.59). Amorphous powder, [α]_D²² = -51.6° (c = 2.15, MeOH).Pharm: NO production inhibitor (LPS-activated macrophage-like J774.1 cells, IC₅₀ = 31.1 μg/mL, control *L*-NMMA, IC₅₀ = 27.4 μg/mL)^[4473]. Source: BAN ZHEN ZHONG HUA SHU *Tabebuia impetiginosa* (bark), HE SE ZHONG HUA SHU *Tabebuia avellanedae* (inner bark). Ref: 3817, 4473.**10619 (4-Hydroxyphenyl)ethyl trans-ferulate**C₁₈H₁₈O₅ (314.34). Source: XIONG RUI ZHUANG ZHI GUAN CAO*Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.0010%dw). Ref: 3053.**10620 4-Hydroxyphenylethyl 4-O-β-D-glucopyranosyl-(1→3)-O-α-L-rhamnopyranoside**C₂₀H₃₀O₁₁ (446.16). Amorphous powder, [α]_D²⁷ = -25.1° (c = 3.07, MeOH).Source: CAO MAO JIA DU JUAN *Barleria strigosa*. Ref: 4288.**10621 2-(4-Hydroxyphenyl)ethyl-1-O-β-D-[5-O-(4-hydroxybenzoyl)]-apiofuranosyl-(1→6)-β-D-glucopyranoside**C₂₆H₃₂O₁₃ (552.54). Colorless amorphous solid, [α]_D²⁵ = -26.2° (c = 0.029,MeOH). Pharm: NO production inhibitor (LPS-activated macrophage-like J774.1 cells, IC₅₀ = 22.0 μg/mL, control *L*-NMMA, IC₅₀ = 27.4 μg/mL). Source: HE SE ZHONG HUA SHU *Tabebuia avellanedae* (inner bark). Ref: 4473.**10622 2-(4-Hydroxyphenyl)ethyl 1-O-β-D-[5-O-(3,4,5-trimethoxybenzoyl)]-apiofuranosyl-(1→6)-β-D-glucopyranoside**C₂₉H₃₈O₁₅ (626.62). Amorphous powder, [α]_D²² = -54° (c = 0.51, MeOH). Source:BAN ZHEN ZHONG HUA SHU *Tabebuia impetiginosa* (bark). Ref: 3817.**10623 4-Hydroxyphenyl-β-gentiobioside**C₁₈H₂₆O₁₂ (434.40). Source: YUE JU YE *Vaccinium vitis-idaea*. Ref: 6.**10624 m-Hydroxyphenylglycine**C₈H₉NO₃ (167.17). Source: ZE QI *Euphorbia helioscopia*. Ref: 6.**10625 1-(3-Hydroxyphenyl)-hexane-2,5-diol**C₁₂H₁₈O₃ (210.28). White solid, [α]_D²⁰ = -5.7° (c = 0.40, MeOH). Source: MULAN⁽³⁾ *Bruguiera gymnorrhiza* (stem). Ref: 5057.**10626 (2S)-(O-Hydroxyphenyl)lactate**C₉H₉O₄⁻ (181.17). Colorless powder, [α]_D = +77° (c = 0.07, MeOH). Pharm:Tyrosinase inhibitor (333.3 μmol/L, InRt = 7.5%; control Kojic acid, 333.3 μmol/L, InRt = 59.8%). Source: ZANG HONG HUA *Crocus sativus* (pollen). Ref: 4233.

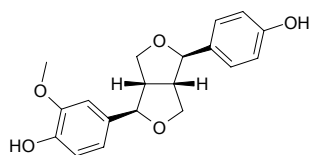
10627 4-[(4-hydroxyphenyl)methoxy]benzenemethanol

$C_{14}H_{14}O_3$ (230.27). Colorless flake crystals, mp 132~134°C. Source: AO SHE LAN *Coeloglossum viride* [Syn. *Coeloglossum viride* var. *bracteatum*]. Ref: 2248.

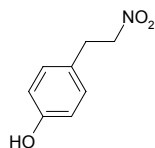
**10628 (1S,2R,5S,6R)-2-(4-Hydroxyphenyl)-6-(3-methoxy-4-hydroxyphenyl)-3,7-dioxabicyclo[3.3.0]octane**

$C_{19}H_{20}O_5$ (328.37). White amorphous solid, $[\alpha]_D^{23} = -66.9^\circ$ ($c = 0.28$, $CHCl_3$).

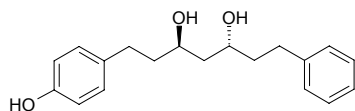
Pharm: Inhibits inducible nitric oxide synthase (iNOS) expression (lipopolysaccharide (LPS)-induced, RAW264.7 cells). Source: DUAN SHE GU *Balanophora abbreviata*. Ref: 2582.

**10629 2-(4-Hydroxyphenyl)-1-nitroethane**

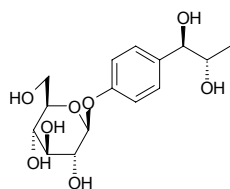
$C_8H_9NO_3$ (167.17). Pale yellow oil. Pharm: Antibacterial inactive (TLC, *Bacillus subtilis*, *Staphylococcus aureus*, *Escherichia coli*, 31.4 μ g/cm²); antifungal inactive (TLC, *Candida albicans*, *Fusarium oxysporum*, *Cladosporium herbarum*, 31.4 μ g/cm²). Source: MEI ZHOU GUAN YIN LIAN *Lysichitum americanum* (leaf). Ref: 3897.

**10630 (3R,5R)-1-(4-Hydroxyphenyl)-7-phenyl-3,5-heptanediol**

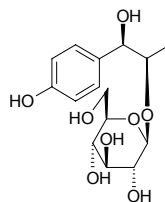
$C_{19}H_{24}O_3$ (300.4). Pharm: Antiemetic (young male chicks, copper sulfate induced emesis assay, 50mg/kg, InRt = 37.7%, $p < 0.001$). Source: GAO LIANG JIANG *Alpinia officinarum* (rhizome: yield = 0.0017%dw). Ref: 4649.

**10631 erythro-1'-(4-Hydroxyphenyl)propane-1',2'-diol-4-O-β-D-glucopyranoside**

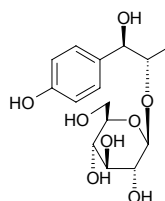
$C_{15}H_{22}O_8$ (330.34). Amorphous powder, $[\alpha]_D^{22} = -38^\circ$ ($c = 0.7$, MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 4242.

**10632 (1'R,2'R)-1'-(4-Hydroxyphenyl)propane-1',2'-diol-2'-O-β-D-glucopyranoside**

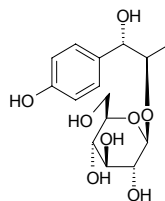
$C_{15}H_{22}O_8$ (330.34). Amorphous powder, $[\alpha]_D^{22} = -51^\circ$ ($c = 0.8$, MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 4242.

**10633 (1'R,2'S)-1'-(4-Hydroxyphenyl)propane-1',2'-diol-2'-O-β-D-glucopyranoside**

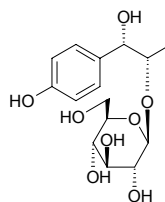
$C_{15}H_{22}O_8$ (330.34). Amorphous powder, $[\alpha]_D^{21} = -33^\circ$ ($c = 0.3$, MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 4242.

**10634 (1'S,2'R)-1'-(4-Hydroxyphenyl)propane-1',2'-diol-2'-O-β-D-glucopyranoside**

$C_{15}H_{22}O_8$ (330.34). Amorphous powder, $[\alpha]_D^{21} = -16^\circ$ ($c = 0.2$, MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 4242.

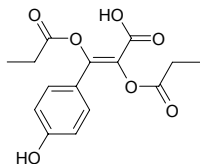
**10635 (1'S,2'S)-1'-(4-Hydroxyphenyl)propane-1',2'-diol-2'-O-β-D-glucopyranoside**

$C_{15}H_{22}O_8$ (330.34). Amorphous powder, $[\alpha]_D^{22} = +21^\circ$ ($c = 1.0$, MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 4242.

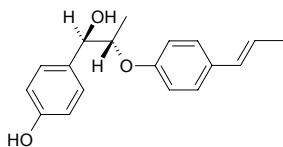


10636 3-(4-Hydroxyphenyl)-trans-propenoic acid-2,3-dihydroxypropyl ester

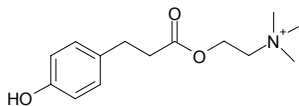
$C_{15}H_{16}O_7$ (308.29). Source: PU HUANG *Typha angustata*. Ref: 2.

**10637 threo-(7S,8R)-1-(4-Hydroxyphenyl)-2-[4-(E)-propenylphenoxy]-propan-1-ol**

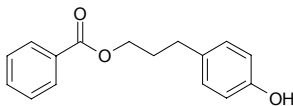
$C_{18}H_{20}O_3$ (284.36). Yellow oil; $[\alpha]_D^{20} = +24.99^\circ$ ($c = 0.5$, $CHCl_3$). Pharm: Inhibitory activity against NFAT transcription ($IC_{50} = (15.6 \pm 0.4) \mu\text{mol/L}$, control Cyclosporin A, $IC_{50} = (0.29 \pm 0.01) \mu\text{mol/L}$). Source: HUA CHA BIAO *Ribes fasciculatum* var. *chinense*. Ref: 2536.

**10638 3-(4-Hydroxyphenyl)propionyl choline**

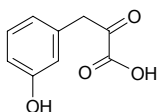
$C_{14}H_{22}NO_3^+$ (252.34). Amorphous solid. Pharm: Tyrosine kinase inhibitor ($IC_{50} = 508 \mu\text{mol/L}$, interleukin-2 inducible T-cell kinase). Source: MO LEI NAN YANG SHEN *Polyscias murrayi*. Ref: 5252.

**10639 3'-(4''-Hydroxyphenyl)-propyl benzoate**

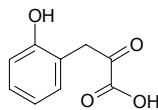
$C_{16}H_{16}O_3$ (256.30). Pale yellow oil. Pharm: Antifungal (*Candida albicans*, $IC_{50} = (5.36 \pm 0.01) \mu\text{g/mL}$, control Amphotericin B, $IC_{50} = (0.04 \pm 0.00) \mu\text{g/mL}$); Anti-inflammatory (COX-1 inhibitor, inactive, control Aspirin, $IC_{50} = (4.22 \pm 0.48) \mu\text{g/mL}$; COX-2 inhibitor, $IC_{50} = (1.88 \pm 0.17) \mu\text{g/mL}$, Aspirin, $IC_{50} = (13.66 \pm 0.59) \mu\text{g/mL}$). Source: *Croton hutchinsonianus* (branche: yield = 0.0005%dw). Ref: 1571.

**10640 m-Hydroxyphenylpyruvic acid**

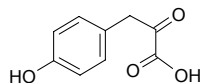
$C_9H_8O_4$ (180.16). Source: NING MENG GEN *Citrus limon*. Ref: 6.

**10641 o-Hydroxyphenylpyruvic acid**

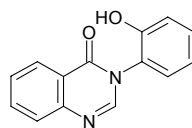
$C_9H_8O_4$ (180.16). Source: NING MENG GEN *Citrus limon*. Ref: 6.

**10642 p-Hydroxyphenylpyruvic acid**

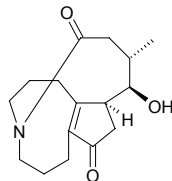
[156-39-8] $C_9H_8O_4$ (180.16). mp 220°C . Source: LI MENG GEN *Citrus limonia*. Ref: 6.

**10643 3-(2'-Hydroxyphenyl)-4-(3H)-quinazolinone**

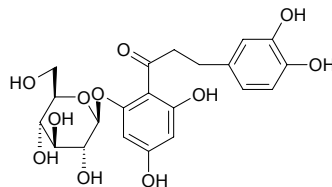
$C_{14}H_{10}N_2O_2$ (238.25). White granular solid. Source: BAN LAN GEN *Isatis indigotica*. Ref: 2161.

**10644 8β-Hydroxy phlegmariurine B**

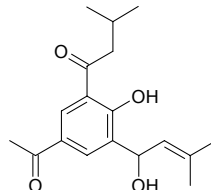
$C_{15}H_{21}NO_3$ (263.34). Colorless needles (alcohol), mp $281\sim 283^\circ\text{C}$, $[\alpha]_D^{25} = -205^\circ$ ($c = 0.20$, alcohol). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 2471.

**10645 3-Hydroxyphlorizin**

$C_{21}H_{24}O_{11}$ (452.42). Source: DUO SUI SHI KE YE *Lithocarpus polystachyus*. Ref: 660.

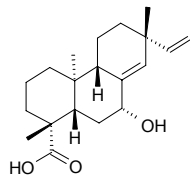
**10646 Hydroxypiloselloidone**

[54963-61-0] $C_{18}H_{24}O_4$ (304.39). Oil, $[\alpha]_D^{24} = -50.4^\circ$ ($c = 4.46$, $CHCl_3$). Source: MAO DA DING CAO *Gerbera piloselloides* (root). Ref: 6, 660.

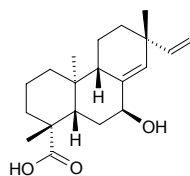


10647 7 α -Hydroxy-L-pimara-8(14),15-dien-19-oic acid

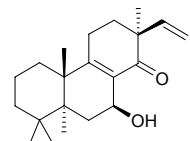
[23807-89-8] C₂₀H₃₀O₃ (318.46). mp 292~294°C (dec), [α]_D = -70.4° (pyridine). Source: TU DANG GUI *Aralia cordata*. Ref: 6, 1521.

**10648 7 β -Hydroxy-L-pimara-8(14),15-dien-19-oic acid**

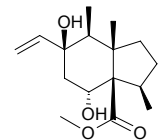
[23807-91-2] C₂₀H₃₀O₃ (318.46). mp 218°C, [α]_D = -62.8° (pyridine). Source: TU DANG GUI *Aralia cordata*. Ref: 6, 1521.

**10649 7 β -Hydroxypimara-8,15-dien-14-one**

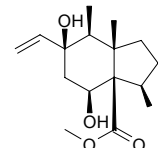
C₂₀H₃₀O₂ (302.46). Viscous oil, [α]_D²⁵ = +77° (c = 0.2, MeOH). Source: *Strychnos vanprukii* (stem). Ref: 3471.

**10650 7 α -Hydroxypinguisenol-12-methyl ester**

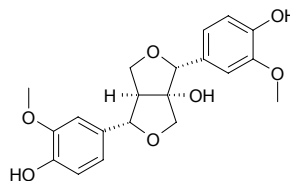
C₁₆H₂₆O₄ (282.38). Colorless amorphous powder, [α]_D²² = -72.1° (c = 0.51, CHCl₃). Source: SHANG ZUO JIAN YE GUANG E TAI *Porella acutifolia* ssp. *tosana*. Ref: 3932.

**10651 7 β -Hydroxypinguisenol-12-methyl ester**

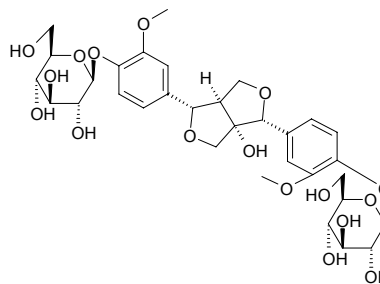
C₁₆H₂₆O₄ (282.38). Colorless amorphous powder, [α]_D²² = -44.2° (c = 0.52, CHCl₃). Source: SHANG ZUO JIAN YE GUANG E TAI *Porella acutifolia* ssp. *tosana*. Ref: 3932.

**10652 (+)-1-Hydroxypinoresinol**

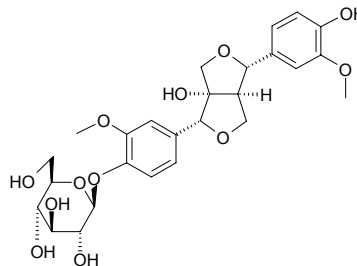
8'-Hydroxypinoresinol C₂₀H₂₂O₇ (374.39). Pharm: Antitubercular (*Mycobacterium tuberculosis*, MIC > 128μg/mL, cytotoxic, Vero cells, IC₅₀ = 96.9μg/mL, positive control Rifampin, MIC = 0.03μg/mL, IC₅₀ = 98.3μg/mL, SI = 3300)^[4986]. Source: SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root), XIE CAO *Valeriana officinalis* (root). Ref: 4656, 4986.

**10653 (+)-1-Hydroxypinoresinol-4',4''-di-O- β -D-glucopyranoside**

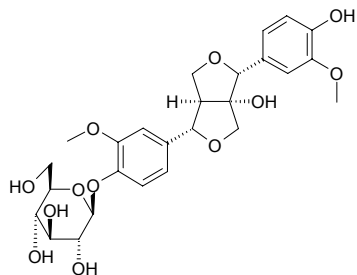
C₃₂H₄₂O₁₇ (698.68). Source: DU ZHONG *Eucommia ulmoides*. Ref: 2.

**10654 (+)-1-Hydroxypinoresinol-4'-O- β -D-glucopyranoside**

8'-Hydroxypinoresinol-4'-O- β -D-glucoside C₂₆H₃₂O₁₂ (536.54). Source: DU ZHONG *Eucommia ulmoides*, XIE CAO *Valeriana officinalis* (root)^[4656]. Ref: 2, 4656.

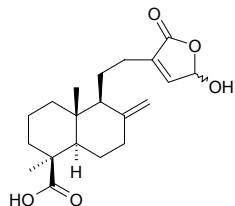
**10655 (+)-1-Hydroxypinoresinol-4''-O- β -D-glucopyranoside**

8-Hydroxypinoresinol-4''-O- β -D-glucoside C₂₆H₃₂O₁₂ (536.54). Source: DU ZHONG *Eucommia ulmoides*, XIE CAO *Valeriana officinalis* (root)^[4656]. Ref: 2, 4656.

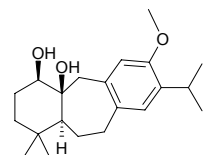


10656 15 ξ -Hydroxypinusolidic acid

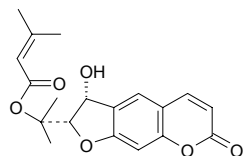
$C_{20}H_{28}O_5$ (348.44). Colorless oil, $[\alpha]_D^{25} = +30^\circ$ ($c = 0.65$, $CHCl_3$), $[\alpha]_D^{25} = +30.5^\circ$ ($c = 1.0$, $CHCl_3$). **Pharm:** Antimalarial (*in vitro*, *Plasmodium falciparum* strain 3D7, $IC_{50} = (51 \pm 3)\mu g/mL = (145 \pm 9)\mu mol/L$). **Source:** CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*]. **Ref:** 3022.

**10657 1 β -Hydroxypisiferanol**

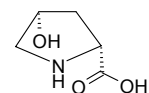
$C_{21}H_{32}O_3$ (332.49). Needles, $[\alpha]_D^{25} = +30.5^\circ$ ($c = 0.35$, MeOH). **Source:** HONG GUI *Chamaecyparis formosensis*. **Ref:** 2315.

**10658 (+)-(2'S,3'R)-3'-Hydroxyprantschimgin**

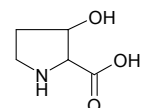
$C_{19}H_{20}O_6$ (344.37). mp 177~179°C (CCl_4), $[\alpha]_D^{20} = +15^\circ$ ($c = 1.2$, $CHCl_3$). **Source:** DUAN LIE PIAN LEI A WEI *Ferulago brachyloba* (root), JU MAO LEI A WEI *Ferulago capillaries* (root). **Ref:** 3938.

**10659 cis-4-Hydroxyproline**

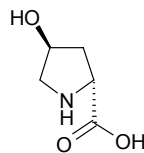
$C_5H_9NO_3$ (131.13). mp D(+) 237~241°C, L(-) 238~241°C, DL 250°C. **Source:** TAN XIANG *Santalum album*. **Ref:** 6.

**10660 3-Hydroxyproline**

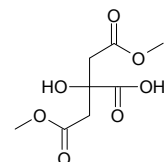
4-Hydroxy-2-pyrrolidinecarboxylic acid $C_5H_9NO_3$ (131.13). mp (*L-trans*) 228~235°C (dec), (*DL-trans*) 224~230°C, (*L-cis*) 245~255°C (dec), (*DL-cis*) 225~235°C (dec). **Source:** HUANG MING JIAO *Bos taurus domesticus*, WU LI *Ophiocephalus argus*, XIANG GU *Elephas maximus*. **Ref:** 6.

**10661 trans-4-Hydroxyproline**

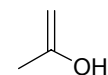
[51-35-4] $C_5H_9NO_3$ (131.13). mp D(+) 274°C, L(-) 274°C, DL 261°C. **Source:** TAN XIANG *Santalum album*. **Ref:** 6.

**10662 2-Hydroxy-1,2,3-propanetricarboxylic acid-1,3-dimethylester**

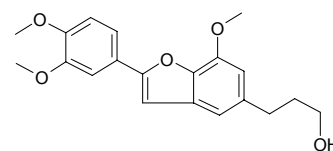
$C_8H_{12}O_7$ (220.18). **Source:** TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). **Ref:** 5319.

**10663 2-Hydroxy-propylene**

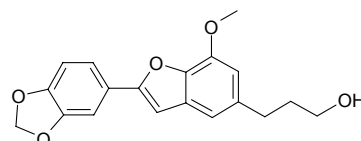
C_3H_6O (58.08). **Source:** DA SUAN *Allium sativum*. **Ref:** 2.

**10664 5-(3''-Hydroxypropyl)-7-methoxy-2-(3',4'-dimethoxyphenyl) benzofuran**

$C_{20}H_{22}O_5$ (342.40). White powder. **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 10 $\mu g/mL$., control Chloramphenicol, MIC = 5 $\mu g/mL$); antifungal (*Candida albicans*, MIC = 12 $\mu g/mL$, control Chloramphenicol, MIC = 5 $\mu g/mL$; *Cladosporium sphaerospermum*, MIA = 5 μg , control Nystatin, MIA = 1 μg). **Source:** XIU SE AN XI XIANG *Styrax ferrugineus* (leaf). **Ref:** 5100.

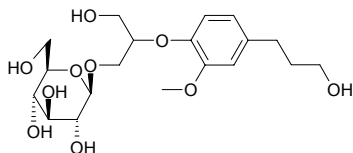
**10665 5-(3''-Hydroxypropyl)-7-methoxy-2-(3',4'-methylenedioxyphenyl) benzofuran**

Egonol [530-22-3] $C_{19}H_{18}O_5$ (326.35). White amorphous powder, plates (butanol), mp 117.5~118°C. **Pharm:** Anticomplement activity ($IC_{50} = 33\mu mol/L$, control Rosmarinic acid $IC_{50} = 182\mu mol/L$)^[4096]; antibacterial (*Staphylococcus aureus*, MIC = 10 $\mu g/mL$., control Chloramphenicol, MIC = 5 $\mu g/mL$)^[5100]; antifungal (*Candida albicans*, MIC = 10 $\mu g/mL$, control Chloramphenicol, MIC = 5 $\mu g/mL$; *Cladosporium sphaerospermum*, MIA = 5 μg , control Nystatin, MIA = 1 μg)^[5100]. **Source:** RI BEN AN XI XIANG JING PI *Styrax japonica*, TAI WAN AN XI XIANG *Styrax formosanus*, XIU SE AN XI XIANG *Styrax ferrugineus* (leaf), YU LING HUA *Styrax obassia*. **Ref:** 1521, 4096, 5100.



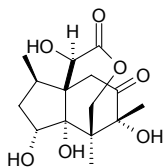
10666 2-[4-(3-Hydroxypropyl)-2-methoxyphenoxy]-1,3-propanediol 1-O-glucoside

$C_{19}H_{30}O_{10}$ (418.44). $[\alpha]_D^{25} = -2.0^\circ$ ($c = 0.10$, MeOH). Source: SHAN FAN GEN *Symplocos caudata*. Ref: 2535.



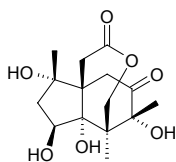
10667 10β-Hydroxypseudoanisatin

$C_{15}H_{22}O_7$ (314.34). Source: *Illicium merrillianum* (pericarp). Ref: 4257.



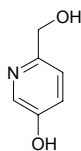
10668 1α-Hydroxypseudoanisatin

$C_{15}H_{22}O_7$ (314.34). Source: MIN WAN BA JIAO *Illicium minwanense* (pericarp; yield = 0.00065%dw). Ref: 4697.



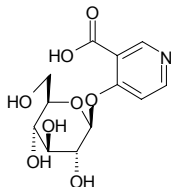
10669 5-Hydroxy-2-pyridinemethanol

$C_6H_7NO_2$ (125.13). Source: DANG SHEN *Codonopsis pilosula*. Ref: 2.



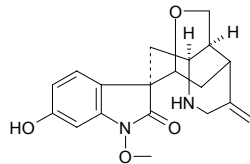
10670 4-Hydroxypyridyl-3-oic acid 4-O-glucopyranoside

$C_{12}H_{15}NO_8$ (301.26). Colorless needles, mp 203–205°C, $[\alpha]_D^{25} = -250.4^\circ$ ($c = 1.35$, MeOH). Source: XIANG SI CAO *Conyza bonariensis* [Syn. *Erigeron bonariensis*; *Erigeron linifolius*; *Erigeron crispus*] (aerial parts). Ref: 5206.



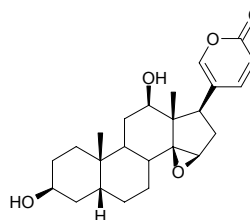
10671 11-Hydroxyrankinidine

[122590-03-8] $C_{20}H_{24}N_2O_4$ (356.43). mp 212–214°C, $[\alpha]_D = -135^\circ$. Source: GOU WEN *Gelsemium elegans*. Ref: 14.



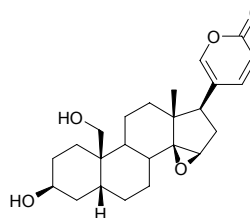
10672 12β-Hydroxyresibufogenin

$C_{24}H_{32}O_5$ (400.52). Pharm: Cytotoxic (*in vitro*, KB, $IC_{50} = 0.97\mu\text{g/mL}$; HL-60, $IC_{50} = 0.045\mu\text{g/mL}$; MH-60, $IC_{50} > 25\mu\text{g/mL}$; BXPC3, $IC_{50} = 0.12\mu\text{g/mL}$; MCF7, $IC_{50} = 0.066\mu\text{g/mL}$; SF268, $IC_{50} = 0.046\mu\text{g/mL}$; NCI-H460, $IC_{50} = 0.017\mu\text{g/mL}$; KM20L2, $IC_{50} = 0.012\mu\text{g/mL}$; DU145, $IC_{50} = 0.041\mu\text{g/mL}$). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 3082.



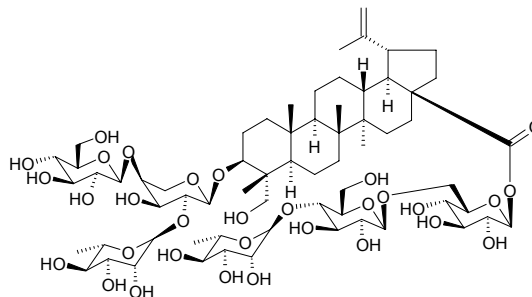
10673 19-Hydroxyresibufogenin

Resibufaginol $C_{24}H_{32}O_5$ (400.52). Pharm: Cytotoxic (*in vitro*, KB, $IC_{50} = 1.2\mu\text{g/mL}$; HL-60, $IC_{50} = 0.48\mu\text{g/mL}$; MH-60, $IC_{50} > 25\mu\text{g/mL}$; BXPC3, $IC_{50} = 0.63\mu\text{g/mL}$; MCF7, $IC_{50} = 0.33\mu\text{g/mL}$; SF268, $IC_{50} = 0.25\mu\text{g/mL}$; NCI-H460, $IC_{50} = 0.44\mu\text{g/mL}$; KM20L2, $IC_{50} = 0.45\mu\text{g/mL}$; DU145, $IC_{50} = 0.38\mu\text{g/mL}$). Source: CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*. Ref: 3082.



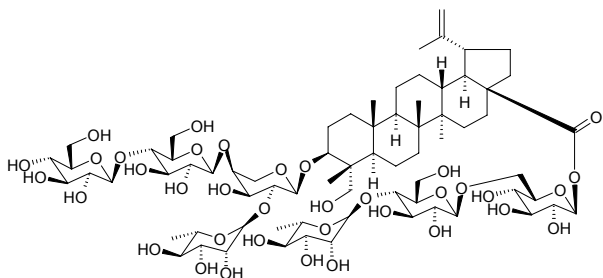
10674 23-Hydroxy-3β-[(O-α-L-rhamnopyranosyl-(1→2)-O-β-D-glucopyranosyl-(1→4)]-α-L-arabinopyranosyl]oxy]lup-20(29)-en-28-oic acid 28-O-α-L-rhamnopyranosyl-(1→4)-O-β-D-glucopyranosyl-(1→6)-β-D-glucopyranosyl ester

$C_{65}H_{106}O_{31}$ (1383.55). Amorphous solid, $[\alpha]_D^{26} = -38.4^\circ$ ($c = 0.10$, MeOH). Source: BAI TOU WENG *Pulsatilla chinensis*. Ref: 3086.



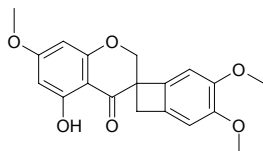
10675 23-Hydroxy-3β-[(O-α-L-rhamnopyranosyl-(1→2)-O-[O-β-D-glucopyranosyl-(1→4)-β-D-glucopyranosyl-(1→4)]-α-L-arabinopyranosyl)oxy]lup-20(29)-en-28-oic acid 28-O-α-L-rhamnopyranosyl-(1→4)-O-β-D-glucopyranosyl-(1→6)-β-D-glucopyranosyl ester

C₇₁H₁₁₆O₃₆ (1545.69). Amorphous solid, $[\alpha]_D^{26} = -38.0^\circ$ ($c = 0.10$, MeOH). Source: BAI TOU WENG *Pulsatilla chinensis*. Ref: 3086.



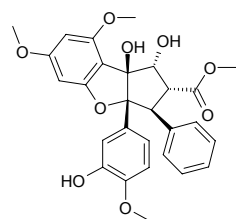
10676 5-Hydroxy-3',4',7-trimethoxyspiro[2H-1-benzopyran-7'-bicyclo[4.2.0]octa[1,3,5]-trien]-4-one

C₁₉H₁₈O₆ (342.35). White powder, mp 150~153°C, $[\alpha]_D^{25} = +60.0^\circ$ ($c = 0.033$, MeOH). Source: HE CAO YE JIA BEI FANG FENG *Ledebouria graminifolia* (tuber). Ref: 3368.



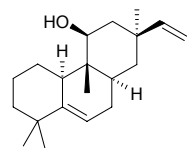
10677 3'-Hydroxyrocaglate

Methyl 3'-hydroxyaglafolin [222854-54-8] C₂₈H₂₈O₉ (508.53). $[\alpha]_D^{20} = -54.9^\circ$ ($c = 0.18$, CHCl₃). Pharm: Insecticidal (neonate larvae of *Spodoptera littoralis*, EC₅₀ = 0.27mg/L, LC₅₀ = 1.1mg/L, control Azadirachtin, EC₅₀ = 0.06mg/L, LC₅₀ = 0.7mg/L)^[3978]. Source: MI ZI LAN *Aglaia odorata*, *Aglaia spectabilis* (bark), *Aglaia duperreana*. Ref: 2289, 3978.



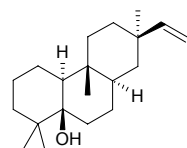
10678 11β-Hydroxy-rosa-5,15-diene

C₂₀H₃₂O (288.48). Source: *Gackstroemia decipiens*. Ref: 3907.



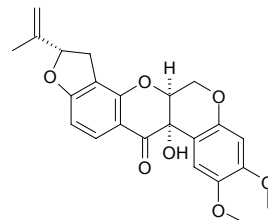
10679 5β-Hydroxy-ros-15-ene

C₂₀H₃₄O (290.49). Source: *Gackstroemia decipiens*. Ref: 3907.



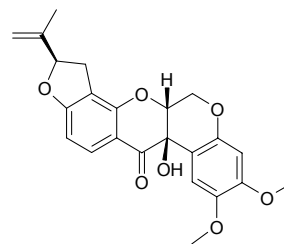
10680 12α-Hydroxyrotenone

Rotenolone [509-96-6] C₂₃H₂₂O₇ (410.43). Yellowish solid, mp 88°C. Pharm: Cytotoxic (KB, ED₅₀ = 0.01~0.30μg/mL); pesticide; acaricide; nematocide (0.1mg/mL cultured with larva of *Toxocara canis*, 3 hours later RM = 33, 6 hours later RM = 0, MLC = 5μmol/L). Source: DI GUA ZI *Pachyrhizus erosus*, HUI YE GEN *Tephrosia purpurea*, KU TAN ZI *Milletia pachycarpa*, *Tephrosia* sp. Ref: 658, 900, 1521.



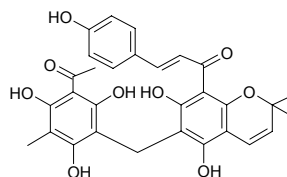
10681 12α-Hydroxyrotenone

C₂₃H₂₂O₇ (410.43). Pharm: Antiviral (HSV-1, 50μg/mL, inactive; HSV-2, 50μg/mL, inactive). Source: DI GUA ZI *Pachyrhizus erosus*. Ref: 4180.



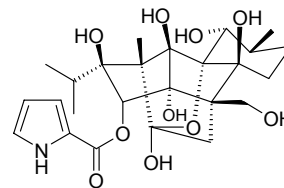
10682 4-Hydroxyrottlerin

[23693-75-7] C₃₀H₂₈O₉ (532.55). mp 208~210°C. Source: LV SONG QIU *Mallotus philippinensis*. Ref: 6, 1521.



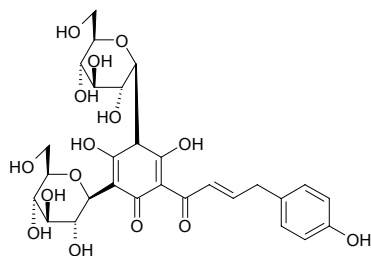
10683 20-Hydroxyryanodine

C₂₅H₃₅NO₁₀ (509.56). Crystals (CHCl₃:MeOH = 3:1), mp 188°C, $[\alpha]_D = +8^\circ$ ($c = 1.0$). Pharm: Cardiac contraction inhibitor (guinea-pig papillary muscle, causes a prolongation of the latency time and decrease of contraction force, EC₅₀ = 1100nmol/L). Source: QU CHONG CAO *Spigelia anthelmia* (aerial parts). Ref: 5139.

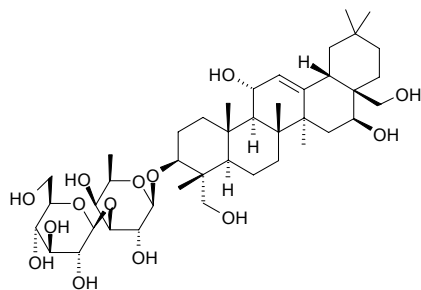


10684 Hydroxysafflor yellow A

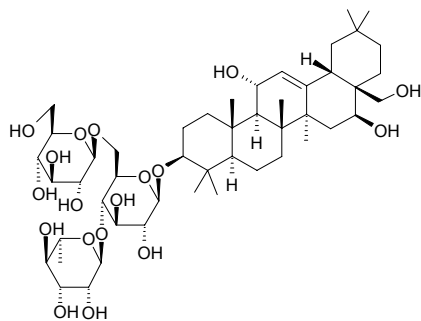
HSYA $C_{28}H_{34}O_{15}$ (610.57). Yellow amorphous powder, $[\alpha]_D^{25} = -54.3^\circ$ ($c = 0.1$, MeOH). **Pharm:** Antithrombotic (markedly extends coagulation time in mouse); neuroprotective (potential exists for development of new agents for treating stroke; *in vivo*: male Wistar-Kyoto (WKY) rats with middle cerebral artery occlusion, sublingual vein injection of HSYA at doses of 3.0mg/kg, HSYA exerts significant neuroprotective effects by significantly decreasing neurological deficit scores and reducing infarct area compared with the saline group; at a dose of 6.0mg/kg, HSYA shows similar potency as 0.2mg/kg Nimodipine; *in vitro*: cultured fetal cortical cells, inhibits neuron damage glutamate-induced and NaCN-induced, for glutamate-induced case, effect is much better than that of NaCN-induced neuron damage). **Source:** HONG HUA *Carthamus tinctorius*. **Ref:** 5395.

**10685 Hydroxysaikosaponin A**

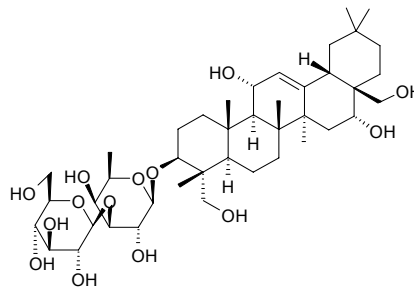
$C_{42}H_{70}O_{14}$ (799.02). **Source:** ZI HU *Bupleurum falcatum*. **Ref:** 2247.

**10686 Hydroxysaikosaponin C**

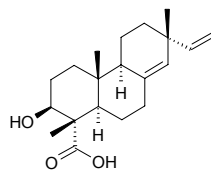
$C_{48}H_{80}O_{18}$ (945.16). **Source:** ZI HU *Bupleurum falcatum*. **Ref:** 2247.

**10687 Hydroxysaikosaponin D**

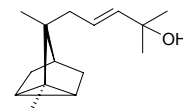
$C_{42}H_{70}O_{14}$ (799.02). **Source:** ZI HU *Bupleurum falcatum*. **Ref:** 2247.

**10688 3β-Hydroxysandara copimarinic acid**

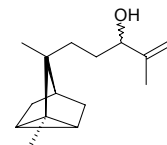
[59219-64-6] $C_{20}H_{30}O_3$ (318.46). mp 261°C. **Pharm:** Anti-HIV-1 inactive (*in vitro*)^[4234]. **Source:** DU SONG SHI *Juniperus rigida*, XI FANG CI BAI *Juniperus occidentalis* (leaf). **Ref:** 6, 1521, 4234.

**10689 11-Hydroxy-α-santal-9-ene**

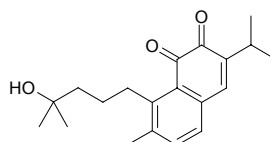
α-Photosantalol A $C_{15}H_{24}O$ (220.36). Oil, $[\alpha]_D = +22.4^\circ$ ($c = 4.8$, $CHCl_3$). **Source:** DU AI BA JIAO *Illicium tsangii*. **Ref:** 1866.

**10690 10ξ-Hydroxy-α-santal-11-ene**

α-Photosantalol B diastereoisomer $C_{15}H_{24}O$ (220.36). Oil, $[\alpha]_D = +0.9^\circ$ ($c = 6.0$, $CHCl_3$). **Source:** DU AI BA JIAO *Illicium tsangii*. **Ref:** 1866.

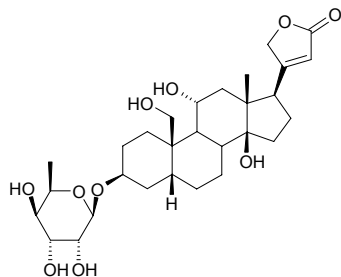
**10691 4-Hydroxysaprorthoquinone**

$C_{20}H_{26}O_3$ (314.43). Red syrup. **Pharm:** Topoisomerase I inhibitor (*in vitro*, $IC_{50} = 0.8 \mu\text{mol/L}$). **Source:** HONG GEN CAO *Salvia prionitis* (root; yield = 0.0012%dw). **Ref:** 4635.

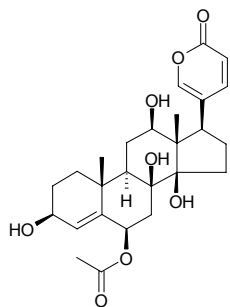


10692 19-Hydroxy-sarmentogenin-3 β -O- β -6-deoxyglucoside

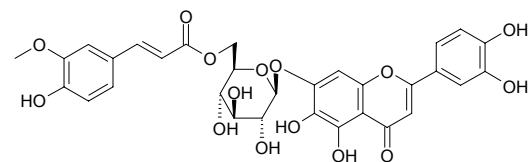
C₂₉H₄₄O₁₀ (552.67). White powder, $[\alpha]_D^{24} = -36.0^\circ$ ($c = 1.0$, MeOH). **Pharm:** Cytotoxic (KB, IC₅₀ = (0.199 \pm 0.008) μ mol/L, control Podophyllotoxin, IC₅₀ = 0.014 μ mol/L). **Source:** GAO MEI YING BAN *Crossopetalum gaumeri* (root). **Ref:** 3969.

**10693 12 β -Hydroxyscillirosidin**

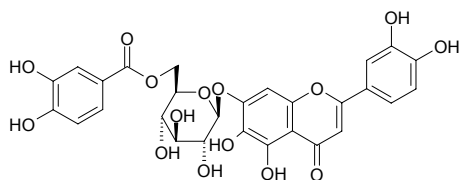
6 β -Acetoxy-3 β ,8 β ,12 β ,14 β -tetrahydroxybufa-4,20,22-trienolide C₂₆H₃₄O₈ (474.56). Powdery solid. **Source:** GAO HAI CONG *Urginea altissima* (bulb), *Drimia robusta* (bulb). **Ref:** 5193.

**10694 3'-Hydroxyscutellarein 7-O-(6''-O-trans-feruloyl)- β -glucopyranoside**

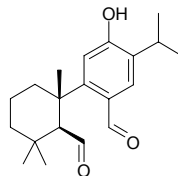
C₃₁H₂₈O₁₅ (640.56). Pale yellow amorphous powder, $[\alpha]_D^{23} = -151.2^\circ$ ($c = 0.16$, MeOH). **Pharm:** Antioxidant (DPPH scavenger, DPPH radical 15 μ mol/L: 10 μ mol/L, ScRt = 49.1%; control BHA, 10 μ mol/L, ScRt = 23.0%; Vitamin E, 10 μ mol/L, ScRt = 41.1%). **Source:** JIA HUI SE JIU LI XIANG PO PO NA *Veronica thymoides* ssp. *pseudocinerea*. **Ref:** 3846.

**10695 3'-Hydroxyscutellarein 7-O-(6''-O-protocatechuoyl)- β -glucopyranoside**

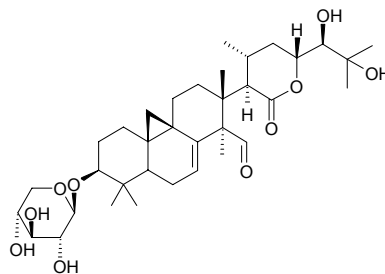
C₂₈H₂₄O₁₅ (600.49). Pale yellow amorphous powder, $[\alpha]_D^{23} = -199.3^\circ$ ($c = 0.43$, pyridine). **Pharm:** Antioxidant (DPPH scavenger, DPPH radical 15 μ mol/L: 10 μ mol/L, ScRt = 50.0%; control BHA, 10 μ mol/L, ScRt = 23.0%; Vitamin E, 10 μ mol/L, ScRt = 41.1%). **Source:** JIA HUI SE JIU LI XIANG PO PO NA *Veronica thymoides* ssp. *pseudocinerea*. **Ref:** 3846.

**10696 12-Hydroxy-6,7-secoabieta-8,11,13-triene-6,7-dial**

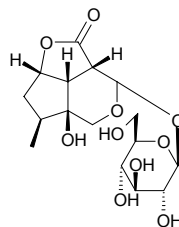
[28767-65-9] C₂₀H₂₈O₃ (316.44). **Source:** TAI WAN CUI BAI *Calocedrus macrolepis* var. *formosana* (leaf). **Ref:** 4298.

**10697 24-Hydroxy-15,16-seco-cycloart-7-en 3-O-xyloside**

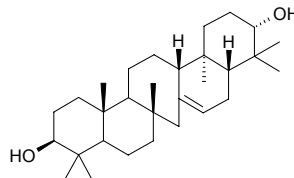
C₃₅H₅₄O₁₀ (634.81). White needles, $[\alpha]_D = -39.8^\circ$ (MeOH). **Source:** *Cimicifuga* sp. (rhizome). **Ref:** 4396.

**10698 9-Hydroxysemperoside**

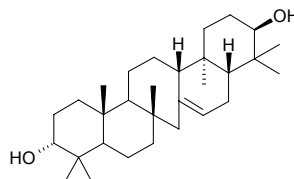
C₁₆H₂₄O₁₀ (376.36). Colorless needles, mp 132~134°C. **Source:** CHANG LV GOU WEN *Gelsemium sempervirens*, MA BIAN CAO *Verbena officinalis* (while herb). **Ref:** 1521, 4902.

**10699 21 α -Hydroxyserrat-14-en-3 β -ol**

C₃₀H₅₀O₂ (442.73). **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.0017%dw). **Ref:** 4729.

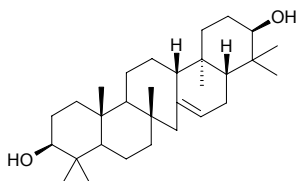
**10700 21 β -Hydroxyserrat-14-en-3 α -ol**

C₃₀H₅₀O₂ (442.73). **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.00027%dw). **Ref:** 4729.

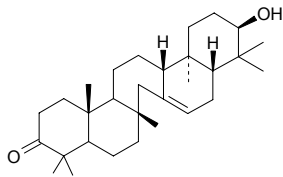


10701 21 β -Hydroxyserrat-14-en-3 β -ol

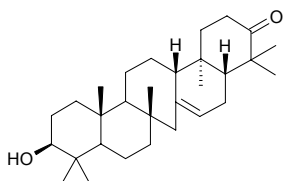
C₃₀H₅₀O₂ (442.73). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.0048%dw). Ref: 4729.

**10702 21 β -Hydroxyserrat-14-en-3-one**

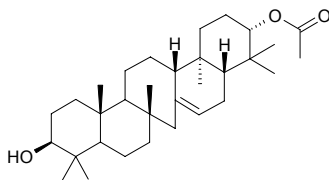
C₃₀H₄₈O₂ (440.72). Source: RI BEN YU LIN SONG *Picea jezoensis* (cuticle). Ref: 3076.

**10703 3 β -Hydroxyserrat-14-en-21-one**

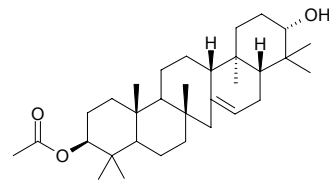
C₃₀H₄₈O₂ (440.72). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.00033%dw). Ref: 4729.

**10704 3 β -Hydroxyserrat-14-en-21 α -yl acetate**

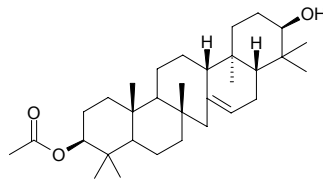
C₃₂H₅₂O₃ (484.77). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.00096%dw). Ref: 4729.

**10705 21 α -Hydroxyserrat-14-en-3 β -yl acetate**

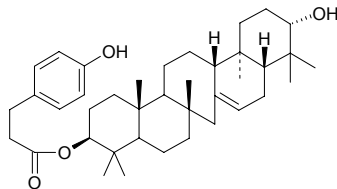
C₃₂H₅₂O₃ (484.77). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.00006%dw). Ref: 4729.

**10706 21 β -Hydroxyserrat-14-en-3 β -yl acetate**

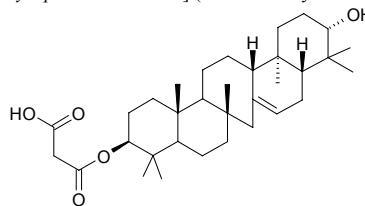
C₃₂H₅₂O₃ (484.77). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.00014%dw). Ref: 4729.

**10707 21 α -Hydroxyserrat-14-en-3 β -yl *p*-dihydrocoumarate**

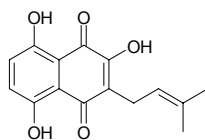
C₃₉H₅₈O₄ (590.89). Colorless needles (CHCl₃-CH₃OH), mp 296–298°C, [α]_D²⁰ = -20.5° (c = 0.47, C₅D₅N). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.000092%dw). Ref: 4729.

**10708 21 α -Hydroxyserrat-14-en-3 β -yl propanedioic acid monoester**

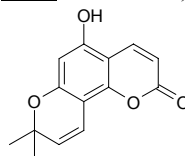
C₃₃H₅₂O₅ (528.78). White powder (CHCl₃-CH₃OH), mp 306–310°C, [α]_D²⁰ = -19° (c = 0.23, C₅D₅N). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.0001%dw). Ref: 4729.

**10709 Hydroxysesamone**

2,5,8-Trihydroxy-3-(3-methyl-2-butenyl)-1,4-naphthoquinone C₁₅H₁₄O₅ (274.28). Red needles (*n*-hexane-CHCl₃), mp 145–146°C. Pharm: Antifungal (*Cladosporium fulvum*, 1 μ g/spot). Source: HU MA GEN *Sesamum indicum*. Ref: 5234.

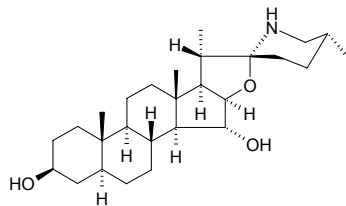
**10710 5-Hydroxyseselin**

C₁₄H₁₂O₄ (244.25). Pharm: Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA: EBV-EA-positive cells = (43.7 \pm 1.6)% (viability > 80%), β -Carotene, EBV-EA-positive cells = (34.3 \pm 1.1)% (viability > 80%), Curcumin, EBV-EA-positive cells = (22.8 \pm 1.8)% (viability > 80%), compound IC₅₀ = 430mol ratio/32 pmol TPA, β -Carotene, IC₅₀ = 400mol ratio/32 pmol TPA, Curcumin, IC₅₀ = 341mol ratio/32 pmol TPA). Source: *Citrus sulcata*, *Citrus tamarana*. Ref: 5048.

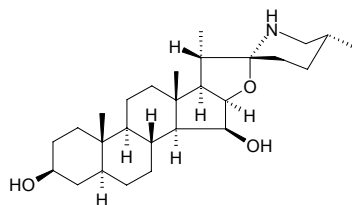


10711 15 α -Hydroxysoladulcidine

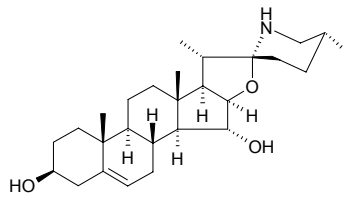
[16137-74-9] C₂₇H₄₅NO₃ (431.66). mp 167~168°C, mp 209~212 °C (double mp). Source: QIAN NIAN BU LAN XIN *Solanum dulcamara*. Ref: 6, 660.

**10712 15 β -Hydroxysoladulcidine**

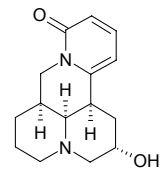
[16137-76-1] C₂₇H₄₅NO₃ (431.66). Source: QIAN NIAN BU LAN XIN *Solanum dulcamara*. Ref: 1521.

**10713 15 α -Hydroxysolasodine**

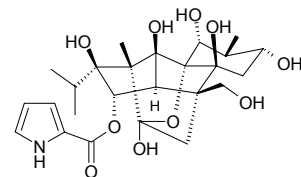
C₂₇H₄₃NO₃ (429.65). Prisms, mp 212~216°C, [α]_D²¹ = -84.5° (c = 0.68, CHCl₃). Source: QIAN NIAN BU LAN XIN *Solanum dulcamara*. Ref: 6, 1521.

**10714 9 α -Hydroxysophoramine**

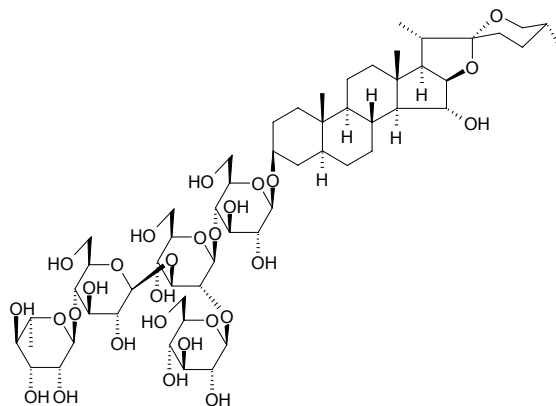
C₁₅H₂₀N₂O₂ (260.34). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 2, 1521.

**10715 8 α -Hydroxyspiganthine**

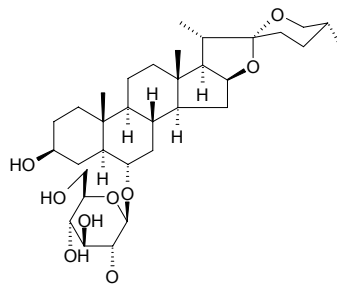
C₂₅H₃₅NO₁₀ (509.56). Crystals (CHCl₃:Me₂CO = 3:1), mp 255~257°C, [α]_D = +26° (c = 0.1). Source: QU CHONG CAO *Spigelia anthelmia* (aerial parts). Ref: 5139.

**10716 (25R)-15 α -Hydroxy-5 α -spirostan-3 β -yl O- β -D-glucopyranosyl-(1 \rightarrow 2)-O-[O- α -L-rhamnopyranosyl-(1 \rightarrow 4)- β -D-glucopyranosyl-(1 \rightarrow 3)]-O- β -D-glucopyranosyl-(1 \rightarrow 4)- β -D-galactopyranoside**

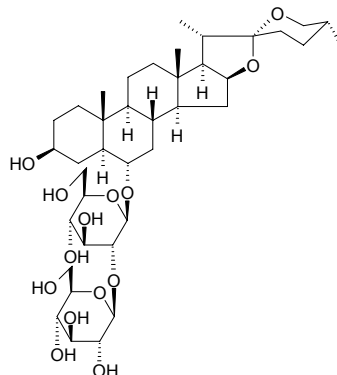
C₅₇H₉₄O₂₈ (1227.37). Amorphous solid, [α]_D²⁵ = -36.0° (c = 0.10, MeOH). Pharm: Cytotoxic (hmn oral squamous cell HSC-2, LD₅₀ = 7.7 μ g/mL; normal hmn gingival fibroblast HGF cell, LD₅₀ = 43 μ g/mL). Source: *Camassia leichtlinii* (bulb). Ref: 3535.

**10717 (25R)-3 β -Hydroxy-5 α -spirostan-6 α -yl O- β -D-glucopyranoside**

C₃₃H₅₄O₉ (594.79). Pharm: Cytotoxic (hmn oral squamous cell HSC-2, LD₅₀ = 70 μ g/mL; normal hmn gingival fibroblast HGF cell, LD₅₀ = 148 μ g/mL). Source: *Camassia leichtlinii* (bulb). Ref: 3535.

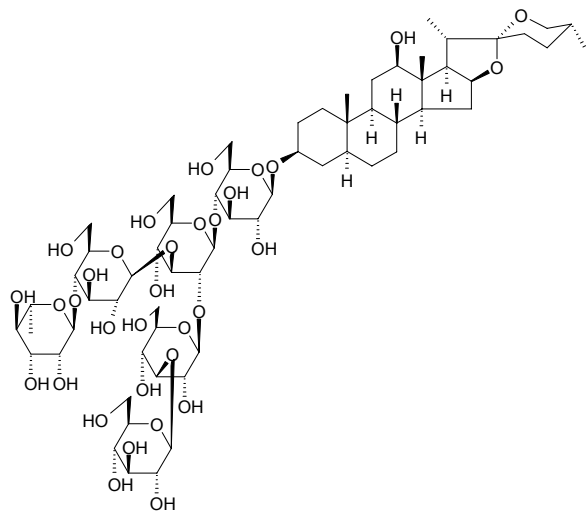
**10718 (25R)-3 β -Hydroxy-5 α -spirostan-6 α -yl O- β -D-glucopyranosyl-(1 \rightarrow 2)- β -D-glucopyranoside**

C₃₉H₆₄O₁₄ (756.94). Pharm: Cytotoxic (hmn oral squamous cell HSC-2, LD₅₀ = 102 μ g/mL; normal hmn gingival fibroblast HGF cell, LD₅₀ = 183 μ g/mL). Source: *Camassia leichtlinii* (bulb). Ref: 3535.



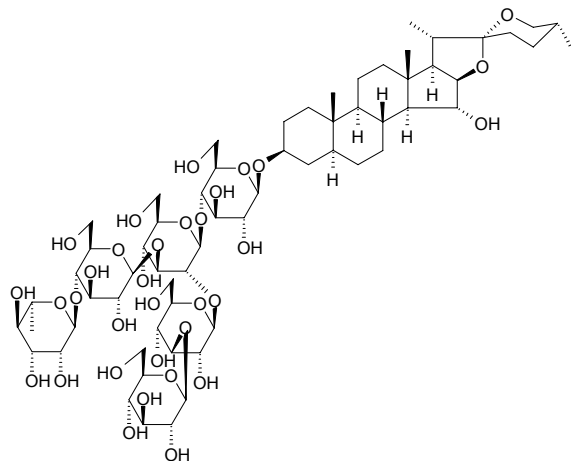
10719 (25R)-12 β -Hydroxy-5 α -spirostan-3 β -yl O- β -D-glucopyranosyl-(1 \rightarrow 3)-O- β -D-glucopyranosyl-(1 \rightarrow 2)-O-[O- α -L-rhamnopyranosyl-(1 \rightarrow 4)- β -D-glucopyranosyl-(1 \rightarrow 3)]-O- β -D-glucopyranosyl-(1 \rightarrow 4)- β -D-galactopyranoside

C₆₃H₁₀₄O₃₃ (1389.51). Amorphous solid, $[\alpha]_D^{25} = -44.0^\circ$ ($c = 0.10$, MeOH). **Pharm:** Cytotoxic (hmn oral squamous cell HSC-2, LD₅₀ = 17 μ g/mL; normal hmn gingival fibroblast HGF cell, LD₅₀ = 19 μ g/mL). **Source:** *Camassia leichtlinii* (bulb). **Ref:** 3535.



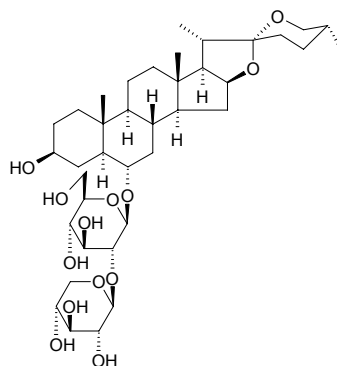
10720 (25R)-15 α -Hydroxy-5 α -spirostan-3 β -yl O- β -D-glucopyranosyl-(1 \rightarrow 3)-O- β -D-glucopyranosyl-(1 \rightarrow 2)-O-[O- α -L-rhamnopyranosyl-(1 \rightarrow 4)- β -D-glucopyranosyl-(1 \rightarrow 3)]-O- β -D-glucopyranosyl-(1 \rightarrow 4)- β -D-galactopyranoside

C₆₃H₁₀₄O₃₃ (1389.51). Amorphous solid, $[\alpha]_D^{25} = -40.0^\circ$ ($c = 0.10$, MeOH). **Pharm:** Cytotoxic (hmn oral squamous cell HSC-2, LD₅₀ = 8.8 μ g/mL; normal hmn gingival fibroblast HGF cell, LD₅₀ = 12 μ g/mL). **Source:** *Camassia leichtlinii* (bulb). **Ref:** 3535.



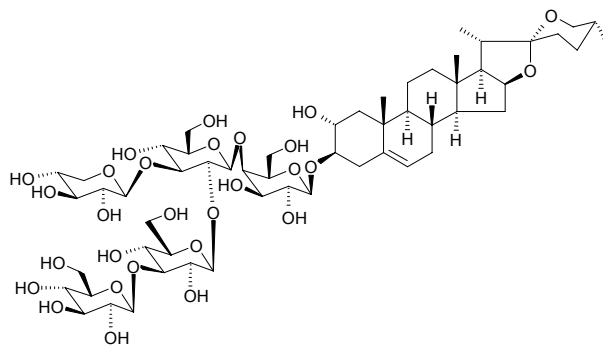
10721 (25R)-3 β -Hydroxy-5 α -spirostan-6 α -yl O- β -D-xylopyranosyl-(1 \rightarrow 2)- β -D-glucopyranoside

C₃₈H₆₂O₁₃ (726.91). Amorphous solid, $[\alpha]_D^{25} = -28.0^\circ$ ($c = 0.10$, MeOH). **Pharm:** Cytotoxic (hmn oral squamous cell HSC-2, LD₅₀ = 120 μ g/mL; normal hmn gingival fibroblast HGF cell, LD₅₀ = 135 μ g/mL). **Source:** *Camassia leichtlinii* (bulb). **Ref:** 3535.



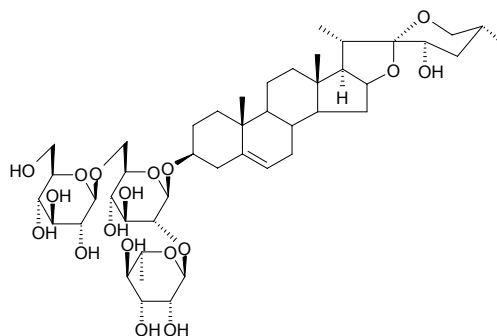
10722 (25R)-2 α -Hydroxyspirost-5-en-3 β -yl O- β -D-glucopyranosyl-(1 \rightarrow 3)-O- β -D-glucopyranosyl-(1 \rightarrow 2)-O-[β -D-xylopyranosyl-(1 \rightarrow 3)]-O- β -D-glucopyranosyl-(1 \rightarrow 4)- β -D-galactopyranoside

C₅₆H₉₀O₂₈ (1211.32). **Pharm:** Cytotoxic (HSC-2 cells, LD₅₀ = 2.7 μ g/mL; HGF, LD₅₀ = 31 μ g/mL). **Source:** YE XIANG SHU *Cestrum nocturnum* (leaf; yield = 0.112%fw). **Ref:** 3023.

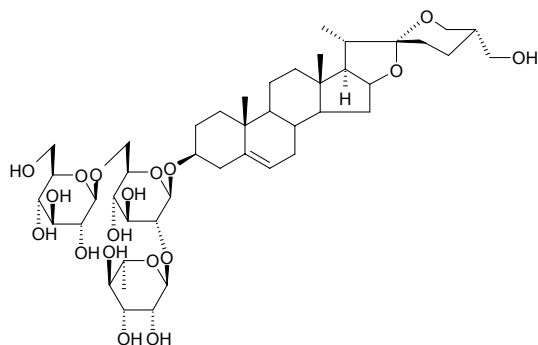


10723 (23S,25R)-23-Hydroxyspirost-5-en-3 β -yl-O- α -L-rhamnopyranosyl-(1 \rightarrow 2)-O-[β -D-glucopyranosyl-(1 \rightarrow 6)]- β -D-glucopyranoside

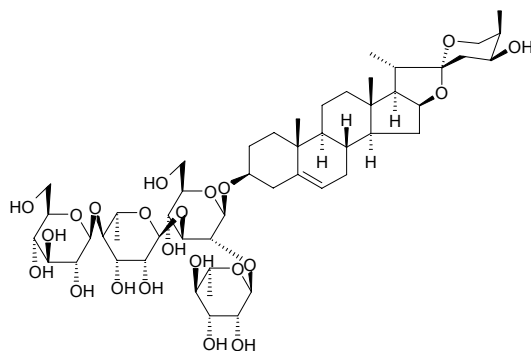
[244160-61-0] C₄₅H₇₂O₁₈ (901.06). Amorphous solid, $[\alpha]_D^{26} = -41.5^\circ$ ($c = 0.23$, pyridine). **Source:** QING LIANG BAI HE *Lilium candidum*. **Ref:** 2303.



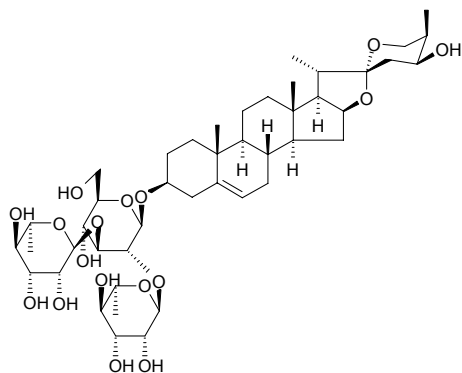
10724 (25S)-27-Hydroxyspirost-5-en-3 β -yl-O- α -L-rhamnopyranosyl-(1 \rightarrow 2)-O- β -D-glucopyranosyl-(1 \rightarrow 6)]- β -D-glucopyranoside
 [244160-60-9] C₄₅H₇₂O₁₈ (901.06). Amorphous solid, $[\alpha]_D^{27} = -44.2^\circ$ ($c = 0.12$, MeOH:H₂O = 1:1) Source: QING LIANG BAI HE *Lilium candidum*. Ref: 2303.



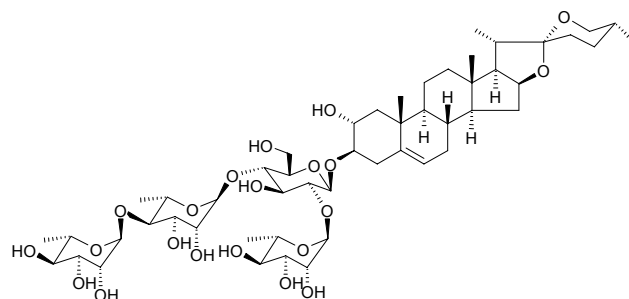
10725 (24S,25R)-24-Hydroxyspirost-5-en-3 β -yl O- α -L-rhamnopyranosyl-(1 \rightarrow 2)-O- β -D-glucopyranosyl-(1 \rightarrow 4)- α -L-rhamnopyranosyl-(1 \rightarrow 3)]- β -D-glucopyranoside
 C₅₁H₈₂O₂₂ (1047.21). Amorphous solid, $[\alpha]_D^{25} = -108.0^\circ$ ($c = 0.10$, CHCl₃:MeOH = 1:1). Pharm: Cytotoxic (hmn, HL-60 promyelocytic leukemia cells, 10 μ g/mL, InRt > 50%). Source: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*]. Ref: 2026.



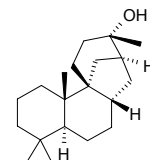
10726 (24S,25R)-24-Hydroxyspirost-5-en-3 β -yl O- α -L-rhamnopyranosyl-(1 \rightarrow 2)-O- α -L-rhamnopyranosyl-(1 \rightarrow 3)]- β -D-glucopyranoside
 C₄₅H₇₂O₁₇ (885.07). Amorphous solid, $[\alpha]_D^{25} = -112.0^\circ$ ($c = 0.10$, CHCl₃:MeOH = 1:1). Pharm: Cytotoxic (hmn, HL-60 promyelocytic leukemia cells, 10 μ g/mL, InRt > 50%). Source: JIAN GEN SHU *Tacca chantrieri* [Syn. *Tacca minor*; *Tacca esquirolii*]. Ref: 2026.



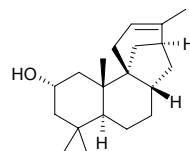
10727 (25R)-2 α -Hydroxyspirost-5-en-3 β -yl O- α -L-rhamnopyranosyl-(1 \rightarrow 2)-O-[O- α -L-rhamnopyranosyl-(1 \rightarrow 4)- α -L-rhamnopyranosyl-(1 \rightarrow 4)]- β -D-glucopyranoside
 C₅₁H₈₂O₂₁ (1031.21). Amorphous powder, $[\alpha]_D^{24} = -93.3^\circ$ ($c = 0.12$, CHCl₃:MeOH = 1:1). Pharm: Cytotoxic (HSC-2 cells, LD₅₀ = 5.5 μ g/mL; HGF, LD₅₀ = 9.1 μ g/mL). Source: YE XIANG SHU *Cestrum nocturnum* (leaf; yield = 0.00073%fw). Ref: 3023.



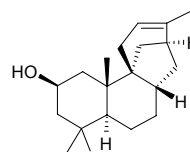
10728 13 β -Hydroxystemodane
 C₂₀H₃₄O (290.49). Amorphous crystals, mp 126~130°C, $[\alpha]_D^{27} = +2.8^\circ$ ($c = 0.56$, MeOH). Source: DAO GEN MEI *Rhizopus oryzae*. Ref: 3781.



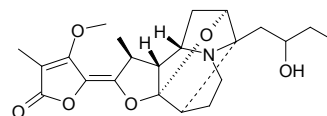
10729 2 α -Hydroxystemod-12-ene
 C₂₀H₃₂O (288.48). Prisms, mp 132~133°C, $[\alpha]_D^{27} = +18.0^\circ$ ($c = 0.75$, MeOH). Source: DAO GEN MEI *Rhizopus oryzae*. Ref: 3781.



10730 2 β -Hydroxystemod-12-ene
 C₂₀H₃₂O (288.48). Amorphous crystals, mp 82~85°C, $[\alpha]_D^{27} = +20.9^\circ$ ($c = 1.63$, MeOH). Source: DAO GEN MEI *Rhizopus oryzae*. Ref: 3781.

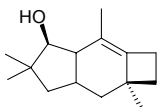


10731 2'-Hydroxystemofoline
 C₂₂H₂₉NO₆ (403.48). Pharm: Insecticidal (neonate larvae of *Spodoptera littoralis*, LC₅₀ = 30mg/L, EC₅₀ = 38mg/L). Source: YIN DU ZHI NA BAI BU *Stemona cochinchinensis*, *Stemona curtisii*. Ref: 3409.

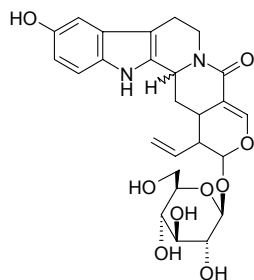


10732 1-Hydroxy-3-sterpuren

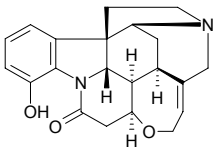
$C_{15}H_{24}O$ (220.36). Colorless oil, $[\alpha]_D = -28^\circ$ ($c = 0.3$, $CHCl_3$). **Pharm:** Antifungal (*Mucor miehei*, *Penicillium notatum*, 50 μ g/filter disc, weak activity); antibacterial (*Bacillus subtilis*, *Bacillus brevis*, 50 μ g/filter disc, weak activity); cytotoxic (HeLa-S3, $IC_{50} = 50\mu$ g/mL, HL-60, $IC_{50} = 50\mu$ g/mL, COS-7, $IC_{50} = 50\sim 100\mu$ g/mL). **Source:** *Gloeophyllum* sp. **Ref:** 3968.

**10733 10-Hydroxystriostosamide**

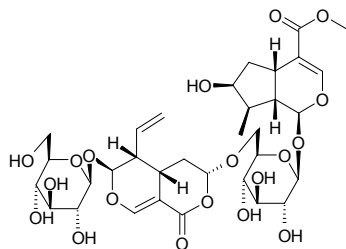
$C_{26}H_{30}N_2O_9$ (514.54). $[\alpha]_D = -24.2^\circ$ ($c = 0.43$, MeOH). **Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial; antifungal (*Aspergillus niger*). **Source:** DONG FANG WU TAN *Nauclea orientalis*, KUAN YE WU TAN *Nauclea latifolia* (bark and wood: yield = 0.008%). **Ref:** 2178, 4303.

**10734 4-Hydroxystrychnine**

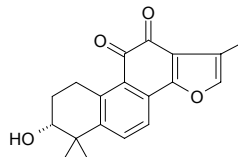
$C_{21}H_{22}N_2O_3$ (350.42). Crystals (EtOH), $[\alpha]_D^{20} = -8^\circ$ ($c = 0.7$, $CHCl_3$). **Pharm:** Eclamptogenic (mus, sc, $CD_{50} = 0.545$ mg/kg); similar action with strychnine; CNS stimulant; $LD_{50} = 0.556$ mg/kg. **Source:** CHANG ZI MA QIAN *Strychnos wallichiana*, MA QIAN ZI *Strychnos nux-vomica*, ZHONG FEI MA QIAN *Strychnos icaja*. **Ref:** 2, 658, 1521.

**10735 6'-O-(7 α -Hydroxyswersoyloxy)loganin**

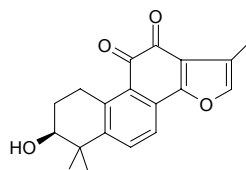
$C_{33}H_{46}O_{19}$ (746.72). Amorphous powder, $[\alpha]_D^{26} = -150.7^\circ$ ($c = 0.146$, MeOH). **Source:** JIN YIN HUA *Lonicera japonica* (stem and leaf). **Ref:** 4220.

**10736 3 α -Hydroxytanshinone IIA**

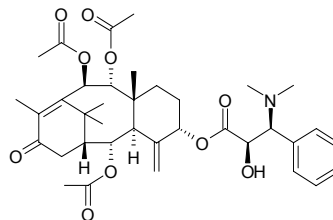
[97399-71-8] $C_{19}H_{18}O_4$ (310.35). mp 187°C, mp 205~206°C. **Pharm:** Antibacterial (*Staphylococcus aureus* and its drug-resistant strain, hmn *Mycobacterium tuberculosis* H37Rv and hemolytic streptococcus); one of effective components in danshen, *Salvia miltiorrhiza* DAN SHEN. **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 2, 6, 658, 1521.

**10737 3 β -Hydroxytanshinone IIA**

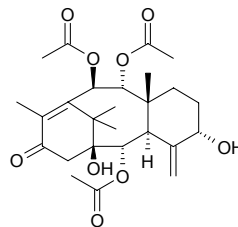
$C_{19}H_{18}O_4$ (310.35). Red acicular crystals (MeOH), mp 202°C. **Source:** DAN SHEN *Salvia miltiorrhiza*. **Ref:** 721.

**10738 2'-Hydroxytaxine II**

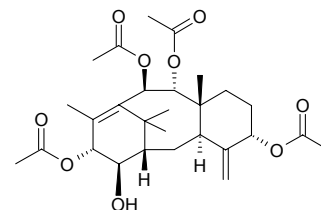
$C_{37}H_{49}NO_{10}$ (667.80). **Source:** ZI SHAN *Taxus cuspidata*. **Ref:** 662.

**10739 1-Hydroxytaxinine A**

Triacetyl-5-decinnamoyltaxicin I $C_{26}H_{36}O_9$ (492.57). mp 206~207°C, $[\alpha]_D = +54^\circ$ (CH_2Cl_2). **Source:** HONG DOU SHAN *Taxus chinensis*, JIANG GUO ZI SHAN *Taxus baccata*. **Ref:** 662.

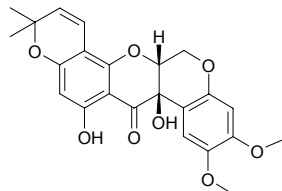
**10740 14 β -Hydroxytaxusin**

5 $\alpha,9\alpha,10\beta,13\alpha$ -Tetraacetoxytaxa-4(20),11-dien-14 β -ol $C_{28}H_{40}O_9$ (520.63). **Source:** MEI LI HONG DOU SHAN *Taxus mairei*. **Ref:** 662.

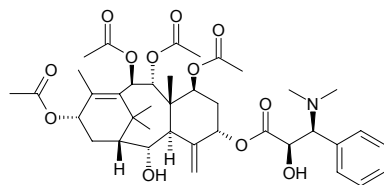


10741 11-Hydroxytephrosin

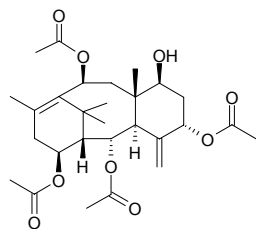
$C_{23}H_{22}O_8$ (426.43). **Pharm:** Antineoplastic (Inhibition of DMBA-induced preneoplastic lesions *in vitro*, MMOC assay, $IC_{50} > 47\mu\text{mol/L}$; control Sulforaphane, $IC_{50} = 11\mu\text{mol/L}$)^[4718]; cytotoxic (mouse mammary organ culture assay, 60% at $10\mu\text{g/mL}$)^[5038]. **Source:** DU HUI MAO DOU *Tephrosia toxicaria*, DU HUI MAO DOU *Tephrosia toxicaria* (stem: yield = 0.0065%dw). **Ref:** 4718, 5038.

**10742 2 α -Hydroxy-7 β ,9 α ,10 β ,13 α -tetraacetoxy-5 α -(2'-hydroxy-3'-N,N-dimethylamino-3'-phenyl)-propionyloxytaxa-4(20),11-diene**

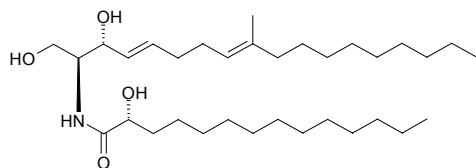
$C_{39}H_{53}NO_{12}$ (727.86). Gum, $[\alpha]_D^{22} = +76^\circ$ ($c = 0.21$, CHCl_3). **Source:** JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle leaf). **Ref:** 3886.

**10743 7 β -Hydroxy-2 α ,5 α ,10 β ,14 β -tetraacetoxytaxa-4(20),11-diene**

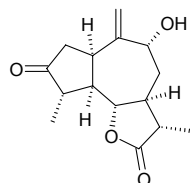
$C_{28}H_{40}O_9$ (520.63). **Source:** ZI SHAN *Taxus cuspidata*. **Ref:** 662.

**10744 (2S,2'R,3R,4E,8E)-N-2'-Hydroxytetradecanoyl-2-amino-9-methyl-4,8-octadecadiene-1,3-diol**

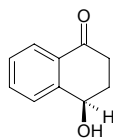
$C_{33}H_{63}NO_4$ (537.87). Amorphous powder, $[\alpha]_D^{20} = +6.3^\circ$ ($c = 0.2$, CHCl_3). **Source:** BAO BAN E GAO *Amanita pantherina*. **Ref:** 4195.

**10745 9 α -Hydroxy-4 β ,15,11 β ,13-tetrahydro-dehydrozalanin C**

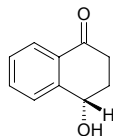
$C_{15}H_{20}O_4$ (264.32). Solid. **Source:** ROU SE HUAN YANG SHEN *Crepis mollis* (root). **Ref:** 3982.

**10746 (4R)-4-Hydroxy- α -tetralone**

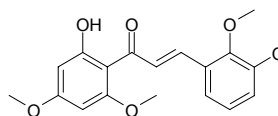
$C_{10}H_{10}O_2$ (162.19). **Source:** DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (fruit). **Ref:** 4492.

**10747 (4S)-4-Hydroxy- α -tetralone**

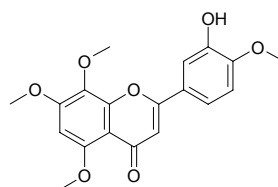
(-)-4-Hydroxy-1-tetralone $C_{10}H_{10}O_2$ (162.19). $[\alpha]_D^{26} = -41.5^\circ$ ($c = 0.17$, CHCl_3). **Pharm:** Antitubercular (*Mycobacterium tuberculosis* 90-221387, MIC = $3.125\mu\text{g/mL}$; *Mycobacterium tuberculosis* H37Rv, MIC = $0.2\mu\text{g/mL}$)^[5059]; cytotoxic inactive (MTT assay, HT29 cell line, MCF7 cell line)^[4321]. **Source:** DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (fruit), HU TAO QIU *Juglans mandshurica* (root), HUANG QI II *Engelhardia roxburghiana* (root). **Ref:** 4321, 4492, 5059.

**10748 2'-Hydroxy-2,3,4,6'-tetramethoxychalcone**

$C_{19}H_{20}O_6$ (344.37). Yellow needles, mp $120\sim 122^\circ\text{C}$. **Pharm:** Antibacterial (gram-positive bacteria: *Staphylococcus aureus*, $30\mu\text{g/mL}$, DIZ = 7mm, *Bacillus subtilis*, $30\mu\text{g/mL}$, DIZ = 6mm, *Bacillus sphaericus*, $30\mu\text{g/mL}$, DIZ = 7mm, control Penicillin G, $30\mu\text{g/mL}$, DIZ = 12, 15, 14mm, respectively; gram-negative bacteria: *Pseudomonas aeruginosa*, $30\mu\text{g/mL}$, DIZ = 7mm, *Klebsiella aerogenes*, $30\mu\text{g/mL}$, DIZ = 6mm, *Chromobacterium violaceum*, $30\mu\text{g/mL}$, DIZ = 7mm, control Penicillin G, $30\mu\text{g/mL}$, DIZ = 24, 23, 24mm, respectively); antifungal (*Aspergillus niger*, $100\mu\text{g/mL}$, DIZ = 7mm, *Candida albicans*, $100\mu\text{g/mL}$, DIZ = 7mm, *Rhizopus oryzae*, $150\mu\text{g/mL}$, inactive, control Clotrimazole, $100\mu\text{g/mL}$, DIZ = 22, 25, 24mm, respectively). **Source:** JI MEI YUN SHI *Caesalpinia pulcherrima*. **Ref:** 3407.

**10749 3'-Hydroxy-5,7,8,4'-tetramethoxyflavone**

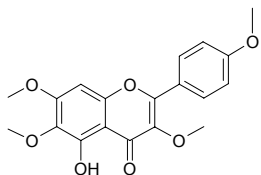
$C_{19}H_{18}O_7$ (358.35). Yellow crystals. **Source:** BAI YE XIANG CHA CAI *Isodon leucophyllus*. **Ref:** 2489.



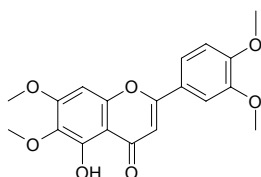
10750 5-Hydroxy-3,6,7,4'-tetramethoxyflavone

[14787-34-9] C₁₉H₁₈O₇ (358.35). **Pharm:** Prolyl endopeptidase inhibitor (flavobacterium origin, IC₅₀ = 860 μmol/L, control Z-pro-prolinal, IC₅₀ = (0.884±0.025) μmol/L)^[4179]; thrombin inhibitor inactive (bovine source, IC₅₀ = 665 μmol/L control Leupeptin, IC₅₀ = 45.4 μmol/L)^[4179].

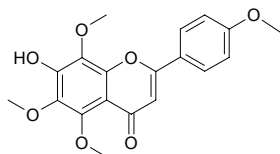
Source: HUANG HUA HAO *Artemisia annua*, JIA LIAN QIAO *Duranta repens* (whole herb). **Ref:** 2, 660, 4179.

**10751 5-Hydroxy-6,7,3',4'-tetramethoxyflavone**

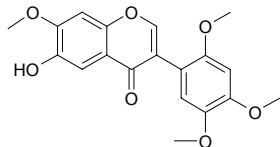
[21763-80-4] C₁₉H₁₈O₇ (358.35). Yellowish slender crystals, mp 188~189°C (95% ethanol); pale yellow powder, mp 242~245°C. **Pharm:** Antibacterial (gram-positive and gram-negative bacteria); cytotoxic (mus myelocytic leukemia cells, strongly induces cell differentiation, 50 μmol/L, growing rate 63%, activity of macrophages > 10%, 5 μmol/L, growing rate 93%); cytotoxic inactive (hmn breast cancer cell lines: MDA-MB-231, MCF7, T47D, 20 μg/mL)^[5378]; angiogenesis inhibitor inactive (chicken embryo chorioallantoic membrane (CAM) assay, 10 μg)^[5378]; antioxidant (ferric thiocyanate method, 0.5 mmol/L, peroxidation value = 77.9%, control BHA, 0.5 mmol/L, peroxidation value = 4.5%, control Vitamin E, 0.5 mmol/L, peroxidation value = 14.7%)^[4508]; PFase inhibitor (100 μg/mL, InRt = 35%)^[5378]. **Source:** AI YE *Artemisia argyi*, BAI YE XIANG CHA CAI *Isodon leucophyllus*, JU PI *Citrus reticulata*, TIAN SHE CAO *Lippia dulcis* (aerial parts). **Ref:** 900, 2489, 4508, 5378.

**10752 7-Hydroxy-5,6,8,4'-tetramethoxyflavone**

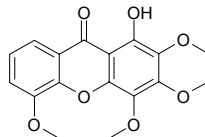
[73213-66-8] C₁₉H₁₈O₇ (358.35). Oil. **Pharm:** Cytotoxic (mus myelocytic leukemia cells, strongly induces cell differentiation, 50 μmol/L, growing rate 22%, activity of macrophages > 50%, 5 μmol/L, growing rate 56%, activity of macrophages > 10%). **Source:** JU PI *Citrus reticulata*. **Ref:** 997, 1091.

**10753 6-Hydroxy-7,2',4',5'-tetramethoxyisoflavone**

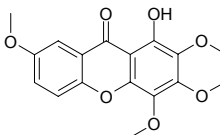
C₁₉H₁₈O₇ (358.35). Colorless amorphous powder (CHCl₃-MeOH), mp 173~175°C. **Source:** SI ZI TAN *Pterocarpus santalinus* (heartwood). **Ref:** 3933.

**10754 1-Hydroxy-2,3,4,5-tetramethoxyxanthone**

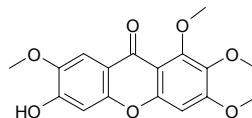
[22961-79-1] C₁₇H₁₆O₇ (332.31). **Source:** HUA MAO *Halenia corniculata*. **Ref:** 6.

**10755 1-Hydroxy-2,3,4,7-tetramethoxyxanthone**

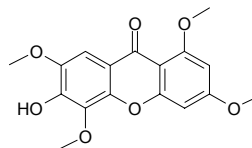
[14103-09-4] C₁₇H₁₆O₇ (332.31). mp 117.8~118.8°C. **Source:** HUA MAO *Halenia corniculata*. **Ref:** 6.

**10756 6-Hydroxy-1,2,3,7-tetramethoxyxanthone**

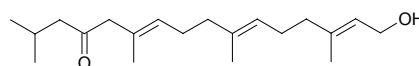
C₁₇H₁₆O₇ (332.31). **Source:** YUAN ZHI *Polygala tenuifolia* (cortex). **Ref:** 4507.

**10757 6-Hydroxy-1,3,5,7-tetramethoxyxanthone**

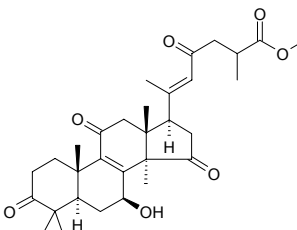
C₁₇H₁₆O₇ (332.31). mp 284~286°C (MeOH). **Source:** TE SI MAN NI HU TONG BIAN ZHONG *Calophyllum teysmannii* var. *inophylloide* (wood). **Ref:** 3937.

**10758 16-Hydroxy-2,6,10,14-tetramethyl-6,10,14-hexadecatrien-4-one**

C₂₀H₃₄O₂ (306.49). Oil. **Source:** SHUANG CHA ZAO *Bifurcaria bifurcata*. **Ref:** 2405.

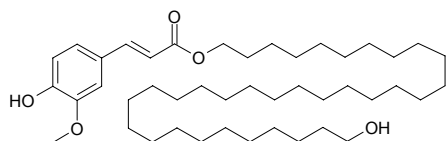
**10759 7β-Hydroxy-3,11,15,23-tetraoxolanosta-8,20E(22)-dien-26-oic acid methyl ester**

C₃₁H₄₂O₇ (526.68). Colorless amorphous solid, [α]_D²⁷ = +106.8° (c = 0.5, MeOH). **Source:** SHU SHE *Ganoderma applanatum* (sporocarp; yield = 0.00048%). **Ref:** 4756.

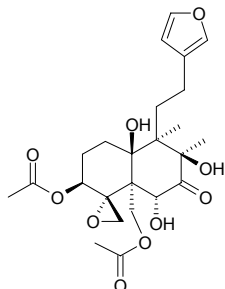


10760 34-Hydroxytetraatriacontanylferulate

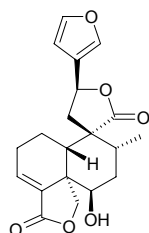
$C_{44}H_{78}O_5$ (687.11). Colorless compound, mp 95–96°C. Source: SHUANG SE JI DAN HUA *Plumeria bicolor*. Ref: 2286.

**10761 8β-Hydroxy-teucrolivin B**

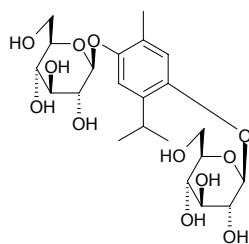
$C_{24}H_{32}O_{10}$ (480.52). Amorphous solid, $[\alpha]_D^{25} = +7.47^\circ$ ($c = 1.52$, $CHCl_3$). Source: DONG FANG XIANG KE KE *Teucrium orientale*. Ref: 2552.

**10762 6β-Hydroxyteuscordin**

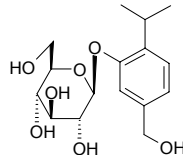
$C_{20}H_{22}O_6$ (358.39). Pharm: Insect antifeedant (*Spodoptera litura*, 10 μg/cm², antifeedant activity = (73.0±3.9%), control Azadirachtin A, 0.5 μg/cm², antifeedant activity = (79±2%); *Plutella xylostella*, 10 μg/cm², antifeedant activity = (80±3%), control Azadirachtin A, 0.5 μg/cm², antifeedant activity = (71±2%). Source: RONG MAO XIANG KE KE *Teucrium tomentosum* (aerial parts), SUAN WEI XIANG KE KE *Teucrium scordium*. Ref: 3478.

**10763 6-Hydroxythymol 3,6-di-O-β-D-glucopyranoside**

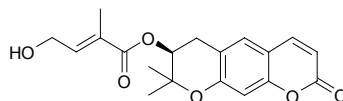
Thymoquinol 2,5-O-β-diglucopyranoside $C_{22}H_{34}O_{12}$ (490.51). Amorphous powder, $[\alpha]_D^{23} = -62^\circ$ ($c = 0.3$, MeOH); $[\alpha]_D^{25} = -12.5^\circ$ ($c = 1.20$, MeOH). Source: XU LI YA NIU ZHI *Origanum syriacum* (aerial parts), YIN DU ZANG HUI XIANG *Carum ajowan* (fruit). Ref: 3547, 5223.

**10764 7-Hydroxythymol 3-O-β-D-glucopyranoside**

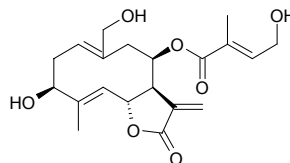
$C_{16}H_{24}O_7$ (328.37). Amorphous powder, $[\alpha]_D^{25} = -60^\circ$ ($c = 1.9$, MeOH). Source: YIN DU ZANG HUI XIANG *Carum ajowan* (fruit). Ref: 3547.

**10765 4'-Hydroxytigloyldecursinol**

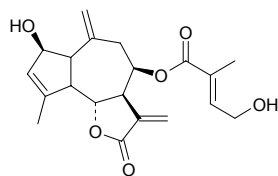
$C_{19}H_{20}O_6$ (344.37). Colorless needles (MeOH), mp 104–106°C, $[\alpha]_D^{20} = +56^\circ$ ($c = 0.5$, $CHCl_3$). Pharm: Neuroprotective (primary cultures of rat cortical cells, control, cell viability = 100%, injured by glutamate, cell viability = 0%, 0.1 μmol/L, cell viability = (33.2±3.5)%, $p < 0.05$, 1 μmol/L, cell viability = (19.9±2.0)%, 10 μmol/L, cell viability = (1.2±4.0)%). Source: CHAO XIAN DANG GUI *Angelica gigas* (root: yield = 0.00075%dw). Ref: 4796.

**10766 8β-(4'-Hydroxytigloyloxy)-3β,14-dihydroxy-6βH,7αH-germacra-1(10)Z,4E,-11(13)-trien-6,12-olide**

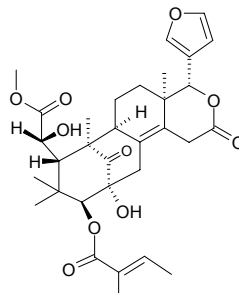
$C_{20}H_{26}O_7$ (378.43). Source: CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole herb: yield = 0.00032%dw). Ref: 4762, 4762b.

**10767 8β-(4'-Hydroxytigloyloxy)-2β-hydroxy-1αH,5αH,6βH,7αH-guai-3,10(14),11(13)-trien-6,12-olide**

$C_{20}H_{24}O_6$ (360.41). Source: HUA ZE LAN *Eupatorium chinense* (whole herb: yield = 0.0014%). Ref: 4739.

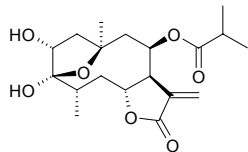
**10768 2-Hydroxy-3-O-tigloylswietenolide**

$C_{32}H_{40}O_{10}$ (584.67). White amorphous powder. Source: TAO HUA XIN MU *Swietenia mahogany* (leaf). Ref: 4420.

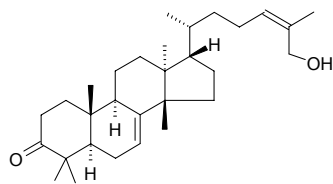


10769 2 α -Hydroxytirotondin

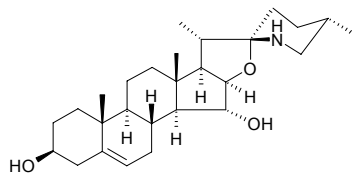
(2R)-Dihydroxy-3,10-epoxy-8-isobutyloxygermacra-11-(13)-en-6,12-olide
 $C_{19}H_{28}O_7$ (368.43). Light yellowish solid, $[\alpha]_D^{25} = -78.0^\circ$ ($c = 0.11$, MeOH).
Pharm: Cytotoxic (antiproliferative, Col2 cells, $IC_{50} > 20\mu\text{g/mL}$); cytotoxic
 (cellular differentiation inducer, hmn promyelocytic leukemia HL-60 cells,
 $4\mu\text{g/mL}$, activity denotes percentage of cells differentiated $< 10\%$); cytotoxic
 (MMOC model, inhibits DMBA-induced preneoplastic lesion formation, not
 tested). **Source:** ZHONG BIN JU *Tithonia diversifolia* (aerial parts: yield =
 0.00078%dw). **Ref:** 4622.

**10770 (24Z)-27-Hydroxy-7,24-tirucalladien-3-one**

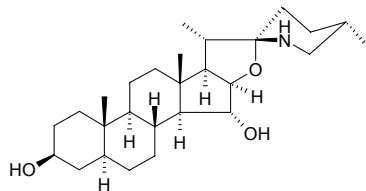
(24Z)-26-Hydroxy-7,24-euphadien-3-one [121063-66-9] $C_{30}H_{48}O_2$ (440.72).
Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. **Ref:** 12.

**10771 15 α -Hydroxytomatidenol**

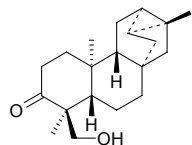
[7755-31-9] $C_{27}H_{43}NO_3$ (429.65). mp 237~240°C. **Source:** QIAN NIAN BU
 LAN XIN *Solanum dulcamara*. **Ref:** 6, 1521.

**10772 15 α -Hydroxytomatidine**

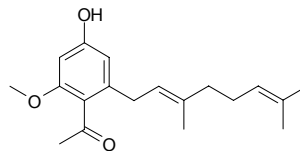
[4828-39-1] $C_{27}H_{43}NO_3$ (431.66). mp 150~155°C, $[\alpha]_D^{18} = +17.8^\circ$ ($c = 0.8$,
 $CHCl_3$). **Source:** QIAN NIAN BU LAN XIN *Solanum dulcamara*. **Ref:** 6, 1521.

**10773 ent-18-Hydroxy-trachyloban-3-one**

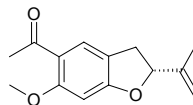
$C_{20}H_{30}O_2$ (302.46). White crystals (CH_2Cl_2), $[\alpha]_D^{22} = -77^\circ$ ($c = 0.1$, CH_2Cl_2). **Pharm:**
 Cytotoxic (HeLa, $IC_{50} = (12.2 \pm 2.1)\mu\text{g/mL}$, control Camptothecin, $IC_{50} =$
 $0.5\mu\text{mol/mL}$; HL-60, $IC_{50} = (12.7 \pm 1.2)\mu\text{g/mL}$, Camptothecin, $IC_{50} = 0.1\mu\text{mol/mL}$;
 WI-38, $IC_{50} = (18.3 \pm 2.7)\mu\text{g/mL}$, Camptothecin, $IC_{50} = 0.6\mu\text{mol/mL}$). **Source:** ZAN
 BI XI BADOU *Croton zambesicus* (leaf). **Ref:** 3807.

**10774 4-Hydroxy-[2-trans-3',7'-dimethyl-octa-2',6'-dienyl]-6-methoxyacetophenone**

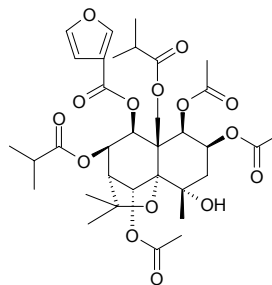
$C_{19}H_{26}O_3$ (302.42). **Source:** HUANG YAO ZI *Dioscorea bulbifera*. **Ref:** 660.

**10775 6-Hydroxytremetone**

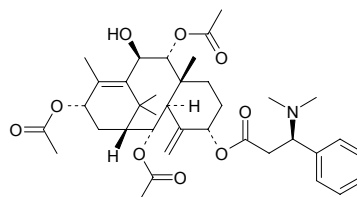
[21491-62-3] $C_{13}H_{14}O_3$ (218.25). mp 70~71°C, $[\alpha]_D^{24} = -50.7^\circ$ (EtOH). **Pharm:**
 Fish toxin (goldfish). **Source:** XIA BAO TUO WU *Ligularia intermedia*,
 ZHAI TOU TUO WU *Ligularia stenocephala* (root), QIAN MA YE ZE LAN
Eupatorium urticaefolium, ZHOU YE ZE LAN *Eupatorium rugosum*, *Senecio*
 sp., *Helichrysum* sp., *Tagetes* sp. **Ref:** 658, 1521, 4536.

**10776 4 α -Hydroxy-1 β ,2 β ,5 α -triacetoxy-7 β ,11-diisobutyryloxy-8 α -furanoyl-dihydroagarofuran**

$C_{34}H_{46}O_{15}$ (694.74). **Pharm:** Immunosuppressant inactive (inhibits lymphocyte
 transformation, $80\mu\text{g/mL}$, InRt = 4%, control Dexamethasone, $50\mu\text{g/mL}$, InRt =
 61%). **Source:** LEI GONG TENG *Tripterygium wilfordii* (xylem). **Ref:** 4466.

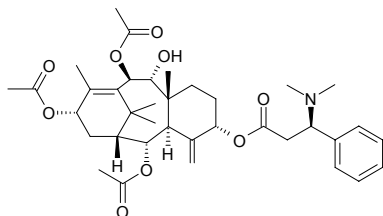
**10777 10 β -Hydroxy-2 α ,9 α ,13 α -triacetoxy-5 α -(3'-(dimethylamino)-3'-phenyl)butanoatetaxa-4(20),11-diene**

$C_{37}H_{51}NO_9$ (653.82). Gum, $[\alpha]_D^{22} = +37^\circ$ ($c = 0.1$, $CHCl_3$). **Source:** JIA NA
 DA HONG DOU SHAN *Taxus canadensis* (needle leaf: yield = 0.00005%dw).
Ref: 4734.



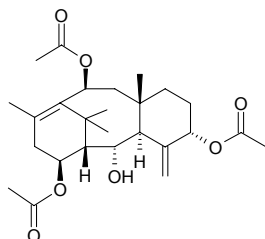
10778 9 α -Hydroxy-2 α ,10 β ,13 α -triacetoxy-5 α -(3'-N,N-dimethylamino-3'-phenyl)-propionyloxytaxa-4(20),11-diene

C₃₇H₅₁NO₉ (653.82). Gum, [α]_D²² = +53° (c = 0.21, CHCl₃); amorphous powder, [α]_D²² = +49° (c = 0.1, CHCl₃). Source: JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle leaf; yield = 0.00015%dw). Ref: 3886, 4734.



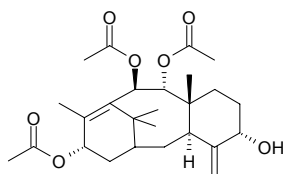
10779 2 α -Hydroxy-5 α ,10 β ,14 β -triacetoxytaxa-4(20),11-diene

C₂₆H₃₈O₇ (462.59). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 662.



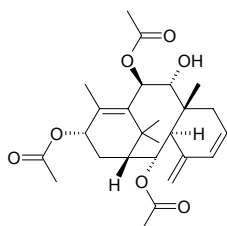
10780 Hydroxytriacetoxytaxadiene

5 α -Hydroxy-9 α ,10 β ,13 α -triacetoxytaxa-4(20),11-diene C₂₆H₃₈O₇ (462.59). mp 204~206°C, [α]_D = +266° (CHCl₃). Source: MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 662.



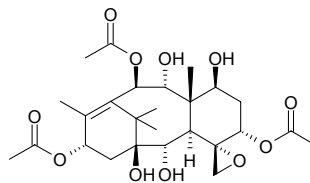
10781 9 α -Hydroxy-2 α ,10 β ,13 α -triacetoxytaxa-4(20),5(6),11(12)-triene

C₂₆H₃₆O₇ (460.57). Gum, [α]_D²² = +47° (c = 0.21, CHCl₃). Source: JIA NA DA HONG DOU SHAN *Taxus canadensis* (needle leaf; yield = 0.000075%dw). Ref: 4734.



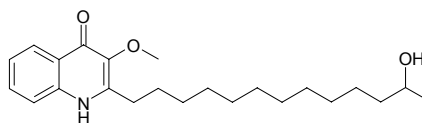
10782 1-Hydroxy-2,7,9-trideacetylaccatin I

C₂₆H₃₈O₁₁ (526.59). White granular crystals, mp 232~235°C (methanol), [α]_D¹² = -52.94° (c = 0.043, methanol). Source: YUN NAN HONG DOU SHAN *Taxus yunnanensis*. Ref: 296, 662.



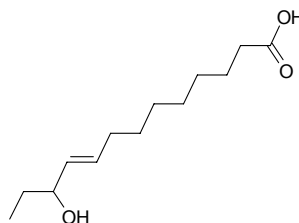
10783 2-(12-Hydroxytridecanyl)-3-methoxy-4-quinolone

C₂₃H₃₅NO₃ (373.54). Colorless oil, [α]_D = +20.7° (c = 0.02, CHCl₃). Source: *Spathelia excelsa* (leaf). Ref: 5297.



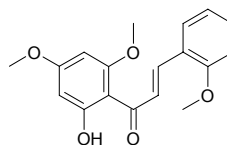
10784 11-Hydroxy-9-tridecenoic acid

C₁₃H₂₄O₃ (228.33). Source: CU LIU GUO *Hippophae rhamnoides*. Ref: 2.



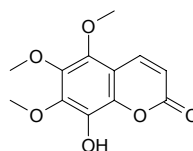
10785 2'-Hydroxy-2,4,6'-trimethoxychalcone

C₁₈H₁₈O₅ (314.34). Yellow needles (CHCl₃), mp 171~173°C. Source: TIAO WEN CHUAN XIN LIAN *Andrographis lineata*. Ref: 3390.



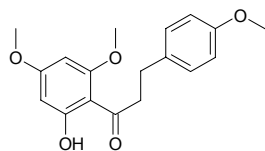
10786 8-Hydroxy-5,6,7-trimethoxycoumarin

C₁₂H₁₂O₆ (252.23). Pale yellow solid, mp 153~156°C. Pharm: Antioxidant inactive (*in vitro*, rat liver microsomes lipid peroxidation); MAO inhibitor (IC₅₀ = 44.5 μ g/mL). Source: MU JIN HUA *Hibiscus syriacus*. Ref: 3088.

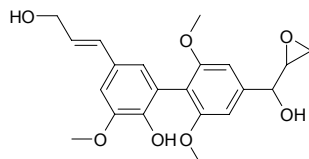


10787 2'-Hydroxy-4,4',6'-trimethoxydihydrochalcone

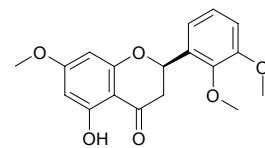
$C_{18}H_{20}O_5$ (316.36). Colorless plates (EtOH), mp 108~110°C, mp 110~112°C. Source: CHANG YE GE NA XIANG *Goniothalamus gardneri* (aerial parts). Ref: 5096.

**10788 2-Hydroxy-3,2',6'-trimethoxy-4'-(2,3-epoxy-1-hydroxypropyl)-5-(3-hydroxy-1-propenyl) biphenyl**

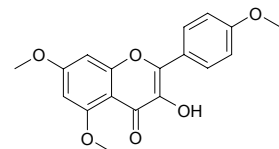
$C_{21}H_{24}O_7$ (388.42). Source: *Eurycoma* sp. Ref: 4556.

**10789 (2R)-5-Hydroxy-7,2',3'-trimethoxyflavanone**

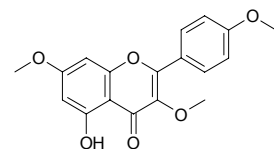
$C_{18}H_{18}O_6$ (330.34). Colorless solid (MeOH), mp 148~150°C, $[\alpha]_D^{25} = -16.6^\circ$ ($c = 0.1$, MeOH). Source: NAN YIN DU CHUAN XIN LIAN *Andrographis viscosula* (whole herb). Ref: 4406.

**10790 3-Hydroxy-5,7,4'-trimethoxyflavone**

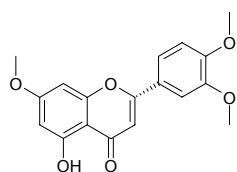
$C_{18}H_{16}O_6$ (328.32). Source: DA YE SHU LAN *Aglaia elliptifolia* (leaf: yield = 0.00025%dw). Ref: 3031.

**10791 5-Hydroxy-3,7,4'-trimethoxyflavone**

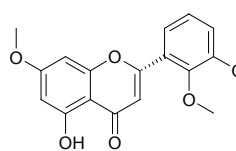
$C_{18}H_{16}O_6$ (328.32). Source: SHAN SHAN JIANG *Alpinia flabellata* (leaf: yield = 0.00069%dw), TU QIANG HUO *Hedychium coronarium* (rhizome). Ref: 4221, 4614.

**10792 5-Hydroxy-7,3',4'-trimethoxyflavone**

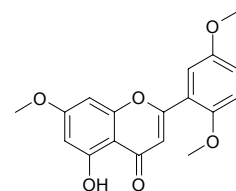
$C_{18}H_{16}O_6$ (328.32). Yellow needles (EtOH), mp 171~192°C, mp 161~163°C. Source: *Arnica* spp., *Piper* spp., *Salvia* spp. Ref: 1521.

**10793 5-Hydroxy-7,2',3'-trimethoxyflavone**

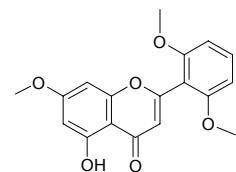
$C_{18}H_{16}O_6$ (328.32). Yellow amorphous solid ($CHCl_3$), mp 191~192°C. Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*] (whole herb). Ref: 3841.

**10794 5-Hydroxy-7,2',5'-trimethoxyflavone**

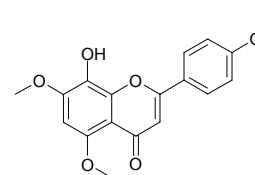
$C_{18}H_{16}O_6$ (328.32). Pale yellow solid (MeOH), mp 196~198°C. Source: *Andrographis neesiana* (whole herb). Ref: 4357.

**10795 5-Hydroxy-7,2',6'-trimethoxyflavone**

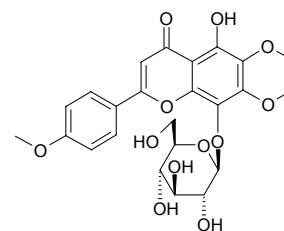
$C_{18}H_{16}O_6$ (328.32). Colorless solid (MeOH), mp 196~198°C. Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*]. Ref: 2036.

**10796 8-Hydroxy-5,7,4'-trimethoxyflavone**

[21919-71-1] $C_{18}H_{16}O_6$ (328.32). Yellowish rhombic crystals, mp 233~234°C (methanol). Pharm: Cytotoxic (mus myelocytic leukemia cells, strongly induces cell differentiation, 50μmol/L, growing rate 42%, activity of macrophages > 25%, 5μmol/L, growing rate 80%). Source: JU PI *Citrus reticulata*. Ref: 936, 997.

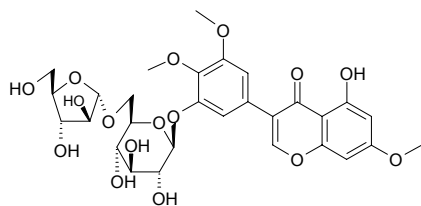
**10797 5-Hydroxy-6,7,3'-trimethoxyflavone-8-O-β-D-glucoside**

$C_{24}H_{26}O_{12}$ (506.47). Pale yellow needles (MeOH), mp 203~205°C, $[\alpha]_D^{25} = -39.0^\circ$ ($c = 0.250$, pyridine). Source: ZI MAO XIANG CHA CAI *Isodon enanderianus*. Ref: 2254.

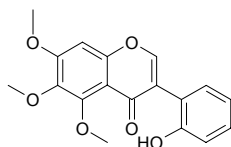


10798 5-Hydroxy-7,4',5'-trimethoxyisoflavone 3'-O- α -L-arabinofuranosyl-(1 \rightarrow 6)- β -D-glucopyranoside

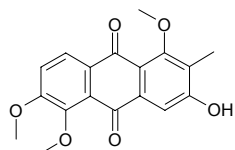
C₂₉H₃₄O₁₆ (638.58). White amorphous powder (MeOH), mp 213~214°C, [α]_D²⁰ = -71.6° (c = 0.1, pyridine). Source: JI BEI *Ceiba pentandra* (bark). Ref: 4171.

**10799 2'-Hydroxy-5,6,7-trimethoxyisoflavonoid**

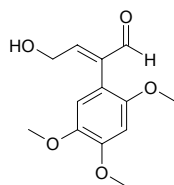
C₁₈H₁₆O₆ (328.32). Oil. Source: YAN SHENG JIA MU ZEI *Anabasis salsa*, DUAN YE JIA MU ZEI *Anabasis brevifolia*. Ref: 4861.

**10800 3-Hydroxy-1,5,6-trimethoxy-2-methyl-9,10-anthraquinone**

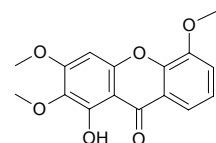
C₁₈H₁₆O₆ (328.32). Yellow needles (acetone), mp 256~258°C. Source: NAN SHAN HUA *Prismatomeris tetrandra* (root). Ref: 4521.

**10801 4-Hydroxy-2-(2,4,5-trimethoxyphenyl)-2E-butenal**

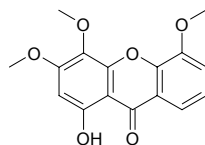
C₁₃H₁₆O₅ (252.27). Yellow oil. Source: SHAN SHAN JIANG *Alpinia flabellata* (leaf; yield = 0.00124%dw). Ref: 3051.

**10802 1-Hydroxy-2,3,5-trimethoxyxanthone**

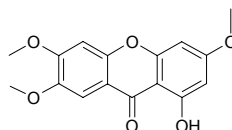
C₁₆H₁₄O₆ (302.29). Yellowish powder, mp 227~228°C, mp 189~190°C. Source: DENG ZHAN XI XIN *Erigeron breviscapus*, HUA MAO *Halenia corniculata*. Ref: 6, 2115.

**10803 1-Hydroxy-3,4,5-trimethoxyxanthone**

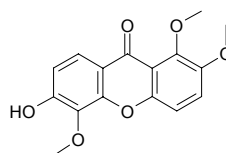
C₁₆H₁₄O₆ (302.29). Pharm: Antioxidant inactive (DPPH scavenger, 10μmol/L, ScRt = 2%; control BHT, 10μmol/L, ScRt = 43%, IC₅₀ = 19.00μmol/L). Source: TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). Ref: 4422.

**10804 1-Hydroxy-3,6,7-trimethoxy xanthone**

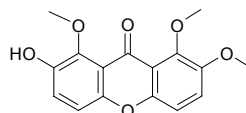
[2054-36-6] C₁₆H₁₄O₆ (302.29). Source: YUAN ZHI *Polygala tenuifolia*. Ref: 2.

**10805 6-Hydroxy-1,2,5-trimethoxyxanthone**

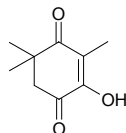
C₁₆H₁₄O₆ (302.29). Brown semisolid. Source: TE SI MAN NI HU TONG BIAN ZHONG *Calophyllum teysmannii* var. *inophylloide* (wood). Ref: 5112.

**10806 7-Hydroxy-1,2,8-trimethoxyxanthone**

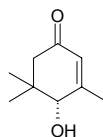
C₁₆H₁₄O₆ (302.29). Brown solid, mp 73~75°C. Source: TE SI MAN NI HU TONG BIAN ZHONG *Calophyllum teysmannii* var. *inophylloide* (wood). Ref: 5112.

**10807 2-Hydroxy-3,5,5-trimethylcyclohex-2-ene-1,4-dione**

3,5,5-Trimethyl-2-hydroxy-1,4-cyclohexadion-2-ene C₉H₁₂O₃ (168.19). Pharm: Tyrosinase inhibitor (333.3μmol/L, InRt = 11.3%; control Kojic acid, 333.3μmol/L, InRt = 59.8%)^[4233]. Source: ZANG HONG HUA *Crocus sativus* (pollen), ZANG HONG HUA *Crocus sativus* (stigma; yield = 0.00039%dw). Ref: 4233, 4653.

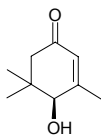
**10808 (4R)-Hydroxy-3,5,5-trimethylcyclohex-2-enone**

C₉H₁₄O₂ (154.21). Source: ZANG HONG HUA *Crocus sativus* (stigma). Ref: 1521, 4653.

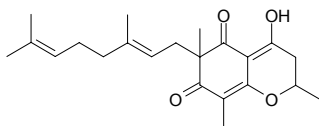


10809 (4S)-Hydroxy-3,5,5-trimethylcyclohex-2-enone

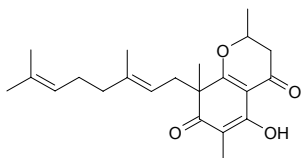
C₉H₁₄O₂ (154.21). Source: ZANG HONG HUA *Crocus sativus* (stigma). Ref: 1521, 4653.

**10810 4-Hydroxy-2,6,8-trimethyl-6-(3,7-dimethyl-2,6-octadienyl)-2H-1-benzopyran-5,7(3H,6H)-dione**

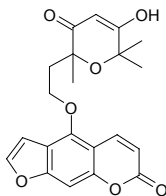
C₂₂H₃₀O₄ (358.48). Yellow oil, $[\alpha]_D^{25} = 0.71^\circ$ ($c = 0.42$, CHCl₃). Source: BAI BEI YE *Mallotus apelta*. Ref: 755.

**10811 5-Hydroxy-2,6,8-trimethyl-8-(3,7-dimethyl-2,6-octadienyl)-2H-1-benzopyran-4,7(3H,8H)-dione**

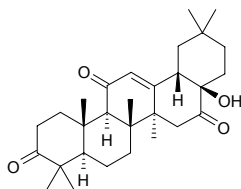
C₂₂H₃₀O₄ (358.48). Yellow oil, $[\alpha]_D^{25} = -152^\circ$ ($c = 0.59$, CHCl₃). Source: BAI BEI YE *Mallotus apelta*. Ref: 755.

**10812 2-O-[2-(5-Hydroxy-2,6,6-trimethyl-3-oxo-2H-pyran-2-yl)ethyl] bergaptol**

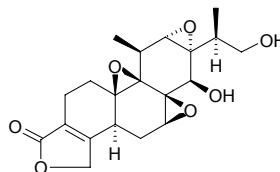
C₂₁H₂₀O₇ (384.39). Colorless plates (hexane-EtOAc), mp 144~145°C, $[\alpha]_D = -4.1^\circ$ ($c = 0.11$, MeOH). Source: TUO YUAN DUO TAN CAO *Dorstenia elliptica* (twig). Ref: 3754.

**10813 17β-Hydroxy-3,11,16-trioxo-28-norolean-12-ene**

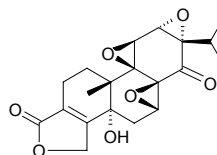
C₂₉H₄₂O₄ (454.66). Glassy amorphous solid, $[\alpha]_D^{20} = +65^\circ$ ($c = 0.04$, CHCl₃). Source: XIAO SHE JU GEN *Microglossa pyrifolia*. Ref: 5374.

**10814 16-Hydroxytriptolide**

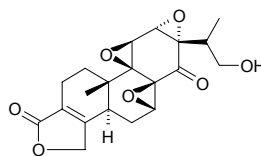
[139713-80-7] C₂₀H₂₄O₇ (376.41). White crystals, mp 232.0~233.5°C. Pharm: Anti-inflammatory (mus, edema on ears caused by oleum crotonis, ED₅₀ = 0.12mg/kg, ED₉₉ = 0.39mg/kg); immunosuppressant (mus, formation test of hemolysin antibody, ED₅₀ = 0.05mg/kg, ED₉₉ = 0.14mg/kg, ConA-induced proliferation of splenic cells, IC₅₀ = 2.4pg/mL, lipopolysaccharide LPS-induced proliferation of splenic cells, IC₅₀ = 3.9pg/mL); anti-fertility agent (male mus, orl, MED = 0.027mg/kg, 33d); LD₅₀ (mus, ip) = (0.79±0.10)mg/kg. Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 204, 1579, 1580.

**10815 5α-Hydroxytriptonide**

C₂₀H₂₂O₇ (374.39). Colorless crystals, mp 269~271°C, $[\alpha]_D^{25} = -157^\circ$ ($c = 0.14$, MeOH). Pharm: Cytotoxic (Bel7402 cell lines, IC₅₀ > 100μmol/L, control Paclitaxel, IC₅₀ = 0.52μmol/L; BGC823, IC₅₀ = 17.50μmol/L, Paclitaxel, IC₅₀ > 500μmol/L; HeLa, IC₅₀ = 3.07μmol/L, Paclitaxel, IC₅₀ = 34.25μmol/L; HL-60, IC₅₀ = 4.82μmol/L, Paclitaxel, IC₅₀ = 3.5E-4μmol/L; KB, IC₅₀ = 4.16μmol/L, Paclitaxel, not tested; MCF7, IC₅₀ = 9.37μmol/L, Paclitaxel, IC₅₀ = 12.64μmol/L). Source: LEI GONG TENG *Tripterygium wilfordii* (structural modification of triptonide by *Aspergillus niger*). Ref: 5454.

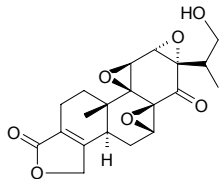
**10816 16-Hydroxytriptonide**

C₂₀H₂₂O₇ (374.39). Colorless crystals, mp 216~218°C, $[\alpha]_D^{25} = -210^\circ$ ($c = 0.1$, MeOH). Pharm: Cytotoxic (Bel7402 cell lines, IC₅₀ > 100μmol/L, control Paclitaxel, IC₅₀ = 0.52μmol/L; BGC823, IC₅₀ = 2.44μmol/L, Paclitaxel, IC₅₀ > 500μmol/L; HeLa, IC₅₀ = 0.33μmol/L, Paclitaxel, IC₅₀ = 34.25μmol/L; HL-60, IC₅₀ = 0.34μmol/L, Paclitaxel, IC₅₀ = 3.5E-4μmol/L; KB, IC₅₀ = 0.32μmol/L, Paclitaxel, not tested; MCF7, IC₅₀ = 0.68μmol/L, Paclitaxel, IC₅₀ = 12.64μmol/L). Source: LEI GONG TENG *Tripterygium wilfordii* (structural modification of triptonide by *Aspergillus niger*). Ref: 5454.

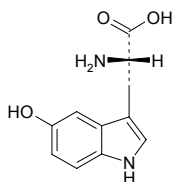


10817 17-Hydroxytriptonide

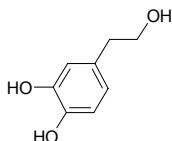
$C_{20}H_{22}O_7$ (374.39). Colorless crystals, mp 219–221°C, $[\alpha]_D^{25} = -180^\circ$ ($c = 0.1$, MeOH). **Pharm:** Cytotoxic (Bel7402 cell lines, $IC_{50} > 100\mu\text{mol/L}$, control Paclitaxel, $IC_{50} = 0.52\mu\text{mol/L}$; BGC823, $IC_{50} = 2.87\mu\text{mol/L}$, Paclitaxel, $IC_{50} > 500\mu\text{mol/L}$; HeLa, $IC_{50} = 0.34\mu\text{mol/L}$, Paclitaxel, $IC_{50} = 34.25\mu\text{mol/L}$; HL-60, $IC_{50} = 0.34\mu\text{mol/L}$, Paclitaxel, $IC_{50} = 3.5E-4\mu\text{mol/L}$; KB, $IC_{50} = 0.37\mu\text{mol/L}$, Paclitaxel, not tested; MCF7, $IC_{50} = 0.85\mu\text{mol/L}$, Paclitaxel, $IC_{50} = 12.64\mu\text{mol/L}$). **Source:** LEI GONG TENG *Tripterygium wilfordii* (structural modification of triptonide by *Aspergillus niger*). **Ref:** 5454.

**10818 5-Hydroxy-L-tryptophan**

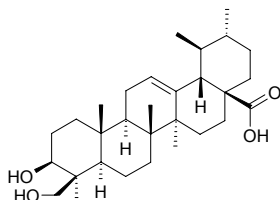
$C_{11}H_{12}N_2O_3$ (220.23). **Pharm:** Precursor to biosynthesis of 5-HT; toxin (insects). **Source:** CI YANG LI DOU *Mucuna pruriens*. **Ref:** 658.

**10819 Hydroxytyrosol**

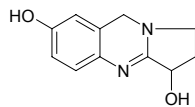
[10597-60-1] $C_8H_{10}O_3$ (154.17). **Pharm:** Antibacterial (*Staphylococcus aureus*, *Bacillus coli* and *Bacillus pyocyaneus*); antitussive (dispels phlegm). **Source:** BAO MA ZI *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*]. **Ref:** 658.

**10820 23-Hydroxyursolic acid**

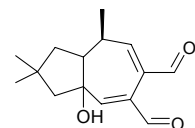
$C_{30}H_{48}O_4$ (472.71). mp 280–281°C $[\alpha]_D^{25} = +64^\circ$ ($c = 0.27$, MeOH). **Pharm:** Antitubercular (*Mycobacterium tuberculosis*, MIC = 15.5 $\mu\text{g/mL}$, cytotoxic, Vero cells, $IC_{50} = 33.7\mu\text{g/mL}$, SI (IC_{50}/MIC) = 2.17, positive control Rifampin, MIC = 0.03 $\mu\text{g/mL}$, $IC_{50} = 98.3\mu\text{g/mL}$, SI = 3300)^[4986]; anti-inflammatory (*in vitro*, murine macrophage RAW264.7 Cells, inhibits LPS-induced NO ($IC_{50} = 2.4\mu\text{mol/L}$) and PGE2 release; inhibits protein and mRNA expression levels of iNOS and COX-2 enzymes; inhibits LPS-induced DNA binding activity of NF- κ B which is associated with a decrease of p65 protein levels in the nucleus)^[5016]. **Source:** SHU HUA JIE CAO *Valeriana laxiflora* (aerial parts and root), *Cussonia bancoensis*. **Ref:** 4986, 5016.

**10821 7-hydroxy vasicine**

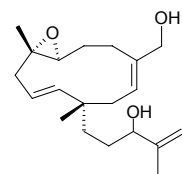
$C_{11}H_{12}N_2O_2$ (204.23). Colorless needles (MeOH), mp 260°C (dec), $[\alpha]_D^{18} = -35.5^\circ$ ($c = 0.013$, MeOH). **Source:** LIU CHUAN YU *Linaria vulgaris*. **Ref:** 4237.

**10822 9-Hydroxyvelleral**

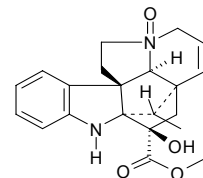
$C_{15}H_{20}O_3$ (248.32). **Source:** RONG BAI RU GU *Lactarius vellereus*. **Ref:** 660.

**10823 14-Hydroxyvibsanin F**

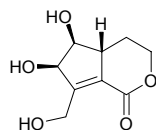
$C_{20}H_{32}O_3$ (320.48). Colorless oil, $[\alpha]_D^{20} = +9.1^\circ$ ($c = 0.18$, CHCl_3). **Source:** XIANG QI JIA MI *Viburnum odoratissimum* (leaf). **Ref:** 3512.

**10824 16β-Hydroxy-19S-vindolinine N-oxide**

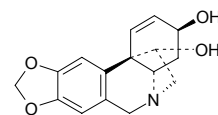
$C_{21}H_{24}N_2O_4$ (368.44). White block crystals, mp 200°C. **Source:** CHUAN SHAN CHENG *Melodinus hemsleyanus*. **Ref:** 819.

**10825 7-Hydroxy viteoid II**

$C_9H_{11}O_5$ (200.19). Yellowish-brown oil, $[\alpha]_D^{17} = -76.14^\circ$ ($c = 0.66$, MeOH). **Source:** DIAO DENG SHU *Kigelia pinnata*. **Ref:** 3418.

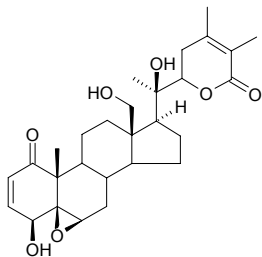
**10826 (+)-11-Hydroxyvittatine**

$C_{16}H_{17}NO_4$ (287.32). **Pharm:** Antibacterial (*Staphylococcus aureus*, IZD = 17mm, MIC = 219 $\mu\text{g/mL}$)^[3829]; antifungal (*Candida albicans*, IZD = 20mm, MIC = 156 $\mu\text{g/mL}$)^[3829]. **Source:** GU TING HUA *Amaryllis belladonna* (bulb). **Ref:** 3829.

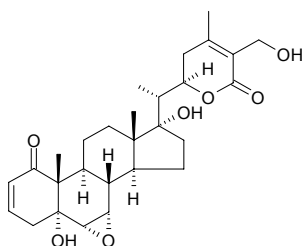


10827 18-Hydroxywithanolide D

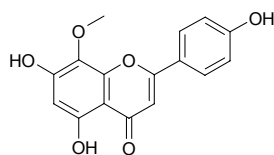
$C_{28}H_{38}O_7$ (486.61). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells, $IC_{50} = 0.029\mu\text{g/mL}$); cytotoxic (soft agar transformation assay with JB6 cells, $IC_{50} = 0.31\mu\text{g/mL}$); cytotoxic (mouse mammary organ culture assay, 63% at $10\mu\text{g/mL}$). **Source:** FEI CHENG SUAN JIANG *Physalis philadelphica*. **Ref:** 5038.

**10828 27-Hydroxy withanone**

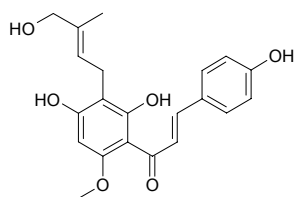
$C_{28}H_{38}O_7$ (486.61). **Source:** CUI MIAN SHUI QIE *Withania somnifera* (leaf). **Ref:** 5329.

**10829 4'-Hydroxywogonin**

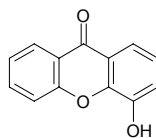
5,7,4'-Trihydroxy-8-methoxyflavone; Isoscutellarein-8-methyl ether $C_{16}H_{12}O_6$ (300.27). **Source:** BAN ZHI LIAN *Scutellaria barbata* [Syn. *Scutellaria rivularis*], HONG CHAI HU *Bupleurum scorzonerifolium* (root), HUANG QIN *Scutellaria baicalensis*. **Ref:** 2, 660, 3498, 5501.

**10830 trans-Hydroxyxanthohumol**

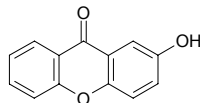
1-[2,4-Dihydroxy-3-(4-hydroxy-3-methyl-2-butenyl)-6-methoxyphenyl]-3-(4-hydroxyphenyl)-2-propen-1-one $C_{21}H_{22}O_6$ (370.41). Yellow-orange solid. **Source:** PI JIU HUA *Humulus lupulus* (strobile). **Ref:** 4789.

**10831 5-Hydroxyxanthone**

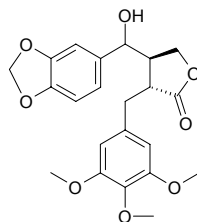
$C_{13}H_8O_3$ (212.21). **Pharm:** Antifungal (*Aspergillus fumigatus* CBS113.26, $MIC_{80} = 31\mu\text{g/mL}$, control Amphotericin B, $MIC_{80} = 8\mu\text{g/mL}$; *Aspergillus flavus* IHEM37.19, $MIC_{80} = 16\mu\text{g/mL}$, Amphotericin B, $MIC_{80} = 8\mu\text{g/mL}$; *Aspergillus niger* IHEM2951, $MIC_{80} = 62\mu\text{g/mL}$, Amphotericin B, $MIC_{80} = 16\mu\text{g/mL}$; *Aspergillus terreus* 5029.2000, $MIC_{80} = 125\mu\text{g/mL}$; Amphotericin B, $MIC_{80} = 16\mu\text{g/mL}$; *Candida albicans* ATCC663.90, $MIC_{80} = 62\mu\text{g/mL}$; Amphotericin B, $MIC_{80} = 1\mu\text{g/mL}$). **Source:** SU GE LAN HU TONG *Calophyllum caledonicum* (stem cortex). **Ref:** 4995.

**10832 7-Hydroxyxanthone**

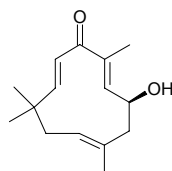
$C_{13}H_8O_3$ (212.21). **Pharm:** Antifungal (*Aspergillus fumigatus* CBS113.26, $MIC_{80} = 31\mu\text{g/mL}$, control Amphotericin B, $MIC_{80} = 8\mu\text{g/mL}$; *Aspergillus flavus* IHEM37.19, $MIC_{80} = 16\mu\text{g/mL}$, Amphotericin B, $MIC_{80} = 8\mu\text{g/mL}$; *Aspergillus niger* IHEM2951, $MIC_{80} = 62\mu\text{g/mL}$, Amphotericin B, $MIC_{80} = 16\mu\text{g/mL}$; *Aspergillus terreus* 5029.2000, $MIC_{80} > 250\mu\text{g/mL}$; Amphotericin B, $MIC_{80} = 16\mu\text{g/mL}$; *Candida albicans* ATCC663.90, $MIC_{80} > 250\mu\text{g/mL}$; Amphotericin B, $MIC_{80} = 1\mu\text{g/mL}$). **Source:** SU GE LAN HU TONG *Calophyllum caledonicum* (stem cortex). **Ref:** 4995.

**10833 7-Hydroxyatein**

$C_{22}H_{24}O_8$ (416.43). **Source:** E SHEN *Anthriscus sylvestris*. **Ref:** 5499.

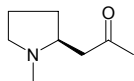
**10834 5-Hydroxyzerumbone**

5-Hydroxy-2E,6E,9E-humulatrien-8-one $C_{15}H_{22}O_2$ (234.34). Colorless oil, $[\alpha]_D^{20} = 0.0^\circ$ ($c = 0.25$, CHCl_3). **Pharm:** NO production inhibitor (cultured RAW264.7 macrophages, induced by LPS, $IC_{50} = 14.1\mu\text{mol/L}$, control L-NMMA, $IC_{50} = 21.3\mu\text{mol/L}$). **Source:** HONG QIU JIANG *Zingiber zerumbet* (rhizome). **Ref:** 4481.

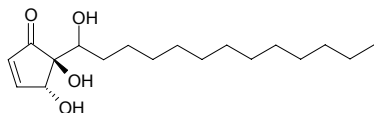


10835 Hygrine

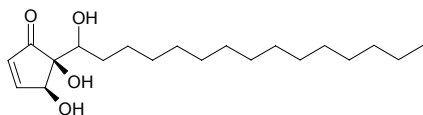
[65941-22-2] C₈H₁₅NO (141.21). bp (-) 193~195°C. Source: JIA SUAN JIANG *Nicandra physaloides*, SHU HUA SHI HU *Dendrobium chrysanthum*. Ref: 6, 660.

**10836 Hygrophorone A¹²**

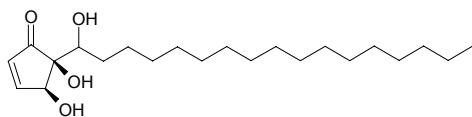
4,5-*trans*-4,5-Dihydroxy-5-(1-hydroxytridecyl)-2-cyclopenten-1-one C₁₈H₃₂O₄ (312.45). Source: *Hygrophorus persoonii*. Ref: 3800.

**10837 Hygrophorone B¹⁴**

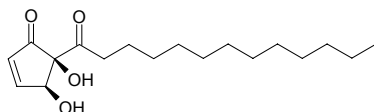
4,5-*cis*-4,5-Dihydroxy-5-(1-hydroxypentadecyl)-2-cyclopenten-1-one C₂₀H₃₆O₄ (340.51). White amorphous solid, [α]_D²³ = +10.5° (c = 0.640, MeOH). Source: *Hygrophorus olivaceoalbus*. Ref: 3800.

**10838 Hygrophorone B¹⁶**

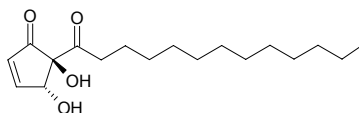
4,5-*cis*-4,5-Dihydroxy-5-(1-hydroxyheptadecyl)-2-cyclopenten-1-one C₂₂H₄₀O₄ (368.56). White amorphous solid. Source: *Hygrophorus olivaceoalbus*. Ref: 3800.

**10839 Hygrophorone C¹²**

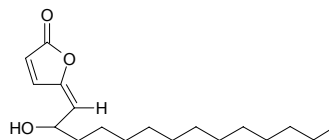
cis-4,5-Dihydroxy-5-tridecanoyl-2-cyclopenten-1-one C₁₈H₃₀O₄ (310.44). White solid. Pharm: Antifungal (*Cladosporium cucumerinum*, 20μg, IZA = 55mm², 40μg, IZA = 90mm²). Source: *Hygrophorus pustulatus*. Ref: 3800.

**10840 Hygrophorone D¹²**

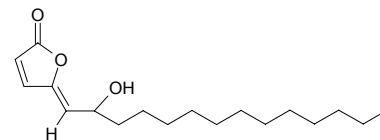
trans-4,5-Dihydroxy-5-tridecanoyl-2-cyclopenten-1-one C₁₈H₃₀O₄ (310.44). Colorless oil. Pharm: Antifungal (*Cladosporium cucumerinum*, 20μg, IZA = 83mm², 40μg, IZA = 170mm²). Source: *Hygrophorus latitabundus*. Ref: 3800.

**10841 Hygrophorone F¹²**

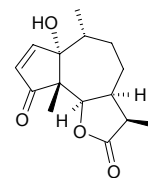
(5*E*)-5-(2-Hydroxytetradexylidene)-furan-2(5*H*)-one C₁₈H₃₀O₃ (294.44). White amorphous solid. Pharm: Antifungal (*Cladosporium cucumerinum*, 20μg, IZA = 43mm², 40μg, IZA = 64mm²). Source: *Hygrophorus persoonii*. Ref: 3800.

**10842 Hygrophorone G¹²**

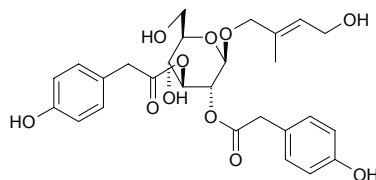
(5*Z*)-5-(2-Hydroxytetradexylidene)-furan-2(5*H*)-one C₁₈H₃₀O₃ (294.44). Colorless oil. Source: *Hygrophorus persoonii*. Ref: 3800.

**10843 Hymenolin**

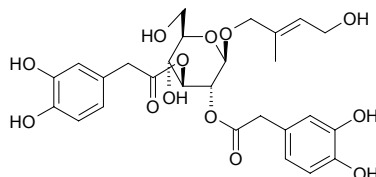
C₁₅H₂₀O₄ (264.32). Pharm: Larvacide (mosquito larva). Source: MEI GUO HAI MO JU *Hymenoclea salsola*. Ref: 658.

**10844 Hymenoside A**

C₂₇H₃₂O₁₁ (532.55). Oil, [α]_D²⁰ = 21.8° (c = 4.8, MeOH). Source: MO JUE *Hymenophyllum barbatum*. Ref: 3506, 4151.

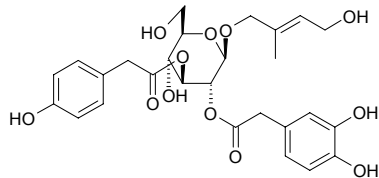
**10845 Hymenoside B**

C₂₇H₃₂O₁₃ (564.55). Oil, [α]_D¹⁷ = -24.0° (c = 2.92, MeOH). Source: MO JUE *Hymenophyllum barbatum*. Ref: 3506.

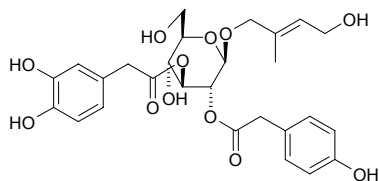


10846 Hymenoside C

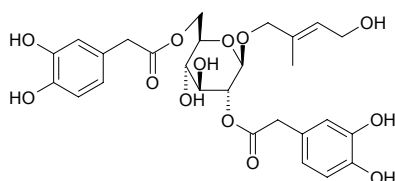
$C_{27}H_{32}O_{12}$ (548.55). Oil, $[\alpha]_D^{21} = -26.1^\circ$ ($c = 2.38$, MeOH). Source: MO JUE
Hymenophyllum barbatum. Ref: 3506.

**10847 Hymenoside D**

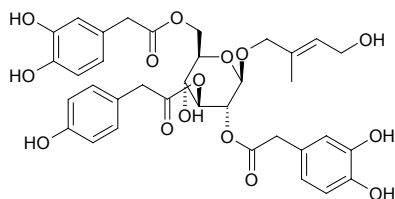
$C_{27}H_{32}O_{12}$ (548.55). Oil, $[\alpha]_D^{21} = -20.0^\circ$ ($c = 1.18$, MeOH). Source: MO JUE
Hymenophyllum barbatum. Ref: 3506.

**10848 Hymenoside E**

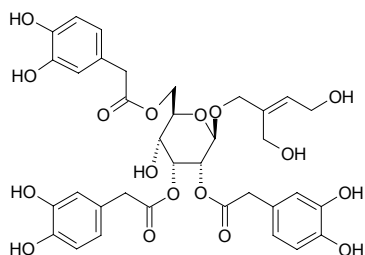
$C_{27}H_{32}O_{13}$ (564.55). Oil, $[\alpha]_D^{22} = -8.2^\circ$ ($c = 0.66$, MeOH). Source: MO JUE
Hymenophyllum barbatum. Ref: 3506.

**10849 Hymenoside F**

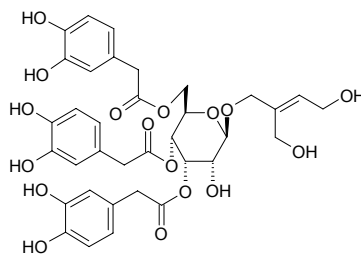
$C_{35}H_{38}O_{15}$ (698.68). Oil, $[\alpha]_D^{20} = -10.2^\circ$ ($c = 2.37$, MeOH). Source: MO JUE
Hymenophyllum barbatum. Ref: 3506.

**10850 Hymenoside G**

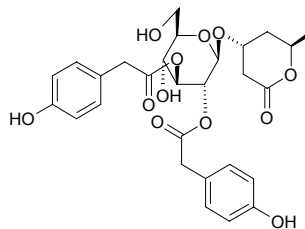
$C_{35}H_{38}O_{17}$ (730.68). Oil, $[\alpha]_D^{22} = -26.3^\circ$ ($c = 1.0$, MeOH). Source: MO JUE
Hymenophyllum barbatum. Ref: 4151.

**10851 Hymenoside H**

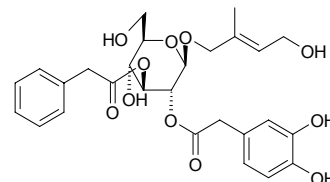
$C_{35}H_{38}O_{17}$ (730.68). Oil, $[\alpha]_D^{22} = +10.9^\circ$ ($c = 1.4$, MeOH). Source: MO JUE
Hymenophyllum barbatum. Ref: 4151.

**10852 Hymenoside I**

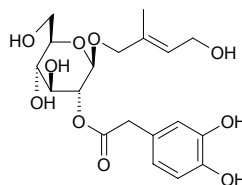
$C_{28}H_{32}O_{12}$ (560.56). Oil, $[\alpha]_D^{22} = -20.9^\circ$ ($c = 0.64$, MeOH). Source: MO JUE
Hymenophyllum barbatum. Ref: 4151.

**10853 Hymenoside J**

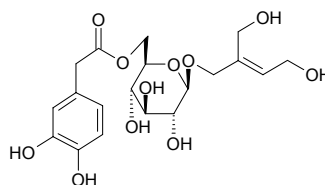
$C_{27}H_{32}O_{11}$ (532.55). Oil, $[\alpha]_D^{22} = -38.7^\circ$ ($c = 2.82$, MeOH). Source: MO JUE
Hymenophyllum barbatum. Ref: 4151.

**10854 Hymenoside K**

2-(3,4-Dihydroxyphenylacetyl)- β -D-glucopyranosyl
(*E*)-2-methyl-but-2-en-4-ol $C_{19}H_{26}O_{10}$ (414.41). Oil, $[\alpha]_D^{22} = -18.5^\circ$ ($c = 3.84$, MeOH). Source: MO JUE *Hymenophyllum barbatum*. Ref: 4178.

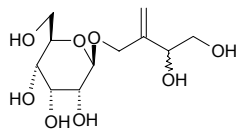
**10855 Hymenoside L**

$C_{19}H_{26}O_{11}$ (430.41). Oil, $[\alpha]_D^{20} = -30.8^\circ$ ($c = 1.40$, MeOH). Source: MO JUE
Hymenophyllum barbatum. Ref: 4178.

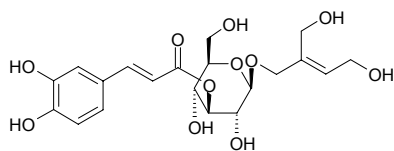


10856 Hymenoside M

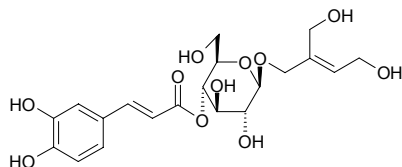
$C_{11}H_{20}O_8$ (280.28). Oil, $[\alpha]_D^{22} = -34.4^\circ$ ($c = 0.98$, MeOH). Source: MO JUE
Hymenophyllum barbatum. Ref: 4178.

**10857 Hymenoside N**

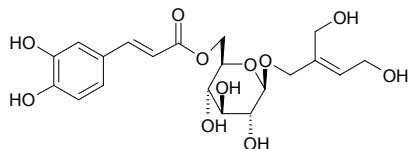
$C_{20}H_{26}O_{11}$ (442.42). Oil, $[\alpha]_D^{22} = -34.0^\circ$ ($c = 4.4$, MeOH). Source: MO JUE
Hymenophyllum barbatum. Ref: 4178.

**10858 Hymenoside O**

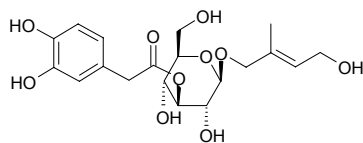
$C_{20}H_{26}O_{11}$ (442.42). Oil, $[\alpha]_D^{22} = -4.7^\circ$ ($c = 2.8$, MeOH). Source: MO JUE
Hymenophyllum barbatum. Ref: 4178.

**10859 Hymenoside P**

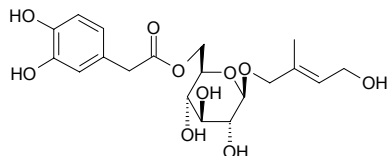
$C_{20}H_{26}O_{11}$ (442.42). Amorphous powder, $[\alpha]_D^{22} = -50.9^\circ$ ($c = 1.5$, MeOH).
Source: MO JUE *Hymenophyllum barbatum*. Ref: 4178.

**10860 Hymenoside Q**

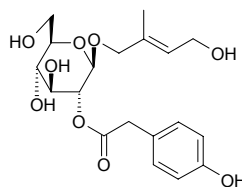
$C_{19}H_{26}O_{10}$ (414.41). Oil, $[\alpha]_D^{20} = -16.7^\circ$ ($c = 1.6$, MeOH). Source: MO JUE
Hymenophyllum barbatum. Ref: 4178.

**10861 Hymenoside R**

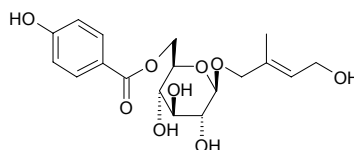
$C_{19}H_{26}O_{10}$ (414.41). Oil, $[\alpha]_D^{20} = -18.3^\circ$ ($c = 1.2$, MeOH). Source: MO JUE
Hymenophyllum barbatum. Ref: 4178.

**10862 Hymenoside S**

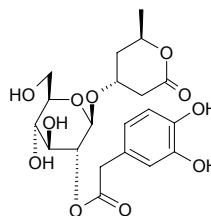
$C_{19}H_{26}O_9$ (398.41). Oil, $[\alpha]_D^{20} = -21.6^\circ$ ($c = 1.1$, MeOH). Source: MO JUE
Hymenophyllum barbatum. Ref: 4178.

**10863 Hymenoside T**

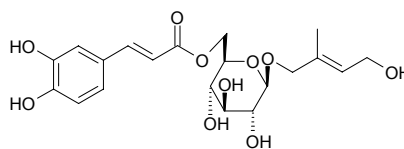
$C_{19}H_{26}O_9$ (384.39). Oil, $[\alpha]_D^{20} = -37.3^\circ$ ($c = 3.1$, MeOH). Source: MO JUE
Hymenophyllum barbatum. Ref: 4178.

**10864 Hymenoside U**

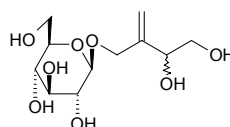
$C_{20}H_{26}O_{11}$ (442.42). Oil, $[\alpha]_D^{20} = -29.0^\circ$ ($c = 2.8$, MeOH). Source: MO JUE
Hymenophyllum barbatum. Ref: 4178.

**10865 Hymenoside V**

$C_{20}H_{26}O_{10}$ (426.42). Oil, $[\alpha]_D^{20} = +20.6^\circ$ ($c = 2.4$, MeOH). Source: MO JUE
Hymenophyllum barbatum. Ref: 4178.

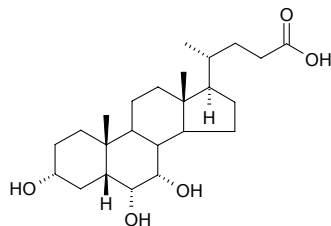
**10866 Hymenoside W**

$C_{11}H_{20}O_8$ (280.28). Oil, $[\alpha]_D^{22} = -37.2^\circ$ ($c = 1.36$, MeOH). Source: MO JUE
Hymenophyllum barbatum. Ref: 4178.

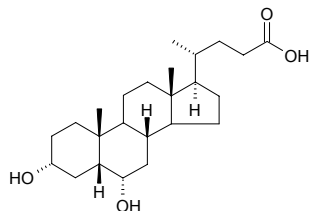


10867 Hyocholic acid

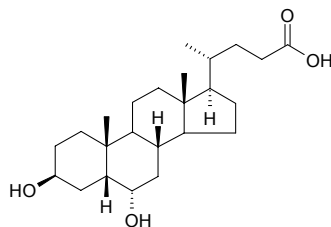
[547-75-1] C₂₄H₄₀O₅ (408.58). mp 188~189°C. Source: ZHU DAN *Sus scrofa domestica*. Ref: 6.

**10868 α-Hyodeoxycholic acid**

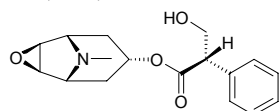
[83-49-8] C₂₄H₄₀O₄ (392.58). mp 196~197°C. Source: ZHU DAN *Sus scrofa domestica*. Ref: 6.

**10869 β-Hyodeoxycholic acid**

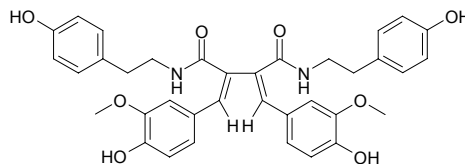
C₂₄H₄₀O₄ (392.58). mp 189~190°C. Source: ZHU DAN *Sus scrofa domestica*. Ref: 6.

**10870 Hyoscine**

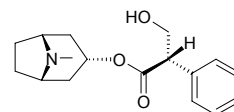
Scopolamine [51-34-3] C₁₇H₂₁NO₄ (303.36). [α]_D²⁰ = -28° (water), easily soluble in hot water, ethanol, ether, chloroform, acetone, insoluble in petroleum spirit.^[5507] Pharm: Vasodilator (dilates blood capillaries to improve microcirculation); inhibits glandular secretion; mydriatic; similar action with atropine; respiratory stimulant (central), but inhibits cerebral cortex; used in treatment of seasickness and carsickness. Source: DIAN QIE *Atropa belladonna* (dried whole herb: content scope = 0.45%~0.85%)^[5501], DONG LANG DANG *Scopolia japonica*, LANG DANG YE *Hyoscyamus niger* (leaf: content = 0.038%^[5508]); LANG DANG ZI *Hyoscyamus niger* (dried ripe seed: mean content of 5 origins = 0.0356%^[5508]); MAN TUO LUO GEN *Datura metel*, MAN TUO LUO YE *Datura metel*, MAO MAN TUO LUO GEN *Datura innoxia*, MAO MAN TUO LUO YE *Datura innoxia*, OU LANG DANG *Scopolia carniolica*, YANG JIN HUA *Datura metel* (flower: content scope of 3 origins = 0.27%~0.56%, mean content = 0.37%^[5508]), ZANG QIE *Anisodus tanguticus* [Syn. *Scopolia tangutica*] (root: content scope of 2 origins = 0.016%~0.023%, mean content = 0.020%^[5508]); *Atropa* spp., *Datura* spp., *Hyoscyamus* spp., *Scopolia* spp., occurs in many plants. Ref: 2, 658, 660, 5501, 5507, 5508.

**10871 Hyoscyamide**

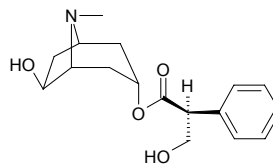
C₃₆H₃₆N₂O₈ (624.70). Pharm: Cytotoxic inactive (*in vitro*, LNCaP, IC₅₀ > 100 μmol/L). Source: LANG DANG ZI *Hyoscyamus niger* (seed: yield = 0.00014%dw). Ref: 4607.

**10872 Hyoscyamine**

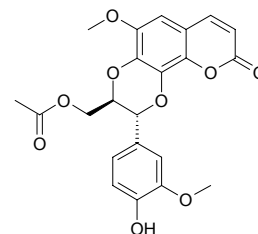
[101-31-5] C₁₇H₂₃NO₃ (289.38). Square tiny acicular crystals (ethanol), mp 108.5°C, [α]_D²⁰ = -21° (ethanol). Pharm: Anticholinergic (blocks M-cholinergic receptor); antispasmodic (smooth muscle, blood vessel); inhibits glandular secretion; mydriatic. Source: DIAN QIE *Atropa belladonna* (leaf: content = 0.07%~1.17%, root: content = 0.35%~0.74%)^[5501], GOU QI ZI *Lycium chinense*, LANG DANG YE *Hyoscyamus niger* (leaf: content = 0.020%^[5508]), LANG DANG ZI *Hyoscyamus niger* (dried ripe seed: content scope = 0.02%~0.17%)^[5508], MA NIAO PAO *Przewalskia tangutica*, MAN TUO LUO GEN *Datura metel*, MAN TUO LUO YE *Datura metel*, MAN TUO LUO ZI *Datura metel*, MAO MAN TUO LUO GEN *Datura innoxia*, MAO MAN TUO LUO HUA *Datura innoxia*, MAO MAN TUO LUO YE *Datura innoxia*, MAO MAN TUO LUO ZI *Datura innoxia*, NING XIA GOU QI ZI *Lycium barbarum*, OU MAN TUO LUO GEN *Datura stramonium*, YANG JIN HUA *Datura metel* (flower: content scope of 3 origins = 0.052%~0.073%, mean content = 0.061%^[5508]), ZANG QIE *Anisodus tanguticus* [Syn. *Scopolia tangutica*] (root: content scope of 3 origins = 0.200%~1.300%, mean content = 0.730%^[5508]). Ref: 658, 5501, 5507, 5508.

**10873 Hyoscyamine 6β-hydroxylase**

C₁₇H₁₃NO₄ (305.38). Source: ZANG QIE *Anisodus tanguticus* [Syn. *Scopolia tangutica*] (Hairy Root). Ref: 5071.

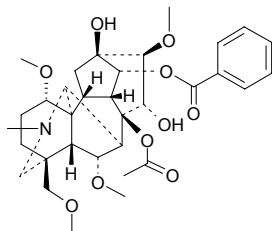
**10874 Hyosgerin**

C₂₂H₂₀O₉ (428.40). Yellow crystals (MeOH), mp 198~199°C, [α]_D²⁵ = -65.4° (c = 0.38, CHCl₃). Source: LANG DANG ZI *Hyoscyamus niger* (seed: yield = 0.00025%dw). Ref: 2096.

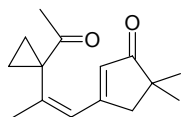


10875 Hypaconitine

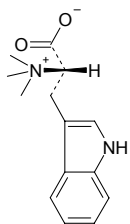
[6900-87-4] $C_{33}H_{45}NO_{10}$ (615.73). White granular crystals, mp 197.5~198.5°C, $[\alpha]_D^{26} = +21.6^\circ$ ($c = 0.607$, $CHCl_3$). **Pharm:** Analgesic; anti-inflammatory; causes arrhythmia (animal model); similar action with aconitine (and mesaconitine); LD_{50} (mus, ip) = 0.50mg/kg. **Source:** BAO SHAN WU TOU *Aconitum bullatifolium* var. *homotrichum* [Syn. *Aconitum nagarum*], BEI WU TOU *Aconitum kusnezoffii* (dried tuberoid: content = 0.067%)^[5508], FU ZI *Aconitum carmichaeli* (daughter root: content = 0.029%)^[5508], HUANG HUA WU TOU *Aconitum coreanum* (tuberoid: content = 0.043%)^[5508], OU WU TOU *Aconitum napellus*, WU TOU *Aconitum carmichaeli* (dried tuberoid: content = 0.030%)^[5508]. **Ref:** 2, 6, 460, 658, 5501, 5508.

**10876 Hypacrone**

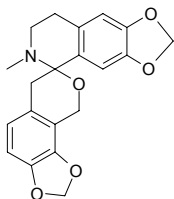
$C_{15}H_{20}O_2$ (232.33). **Source:** JI JUE *Hypolepis punctata* [Syn. *Polypodium punctatum*]. **Ref:** 660.

**10877 Hypaphorine**

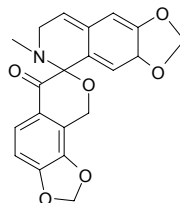
α -Carboxy-*N,N,N*-trimethyl-1H-indole-3-ethanaminium hydroxide inner salt [487-58-1] $C_{14}H_{18}N_2O_2$ (246.31). mp 255°C (dec). **Pharm:** Rodentine antifeedant; eclamptogenic. **Source:** YAO YONG ZI TAN *Pterocarpus officinalis*, HONG MU JI CAO *Desmodium gangeticum*, XIANG SI ZI *Abrus precatorius*. **Ref:** 6, 658.

**10878 Hypecorine**

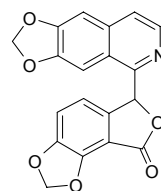
$C_{20}H_{19}NO_5$ (353.38). **Source:** XI GUO JIAO HUI XIANG *Hypecoum leptocarpum*, ZHI LI JIAO HUI XIANG *Hypecoum erectum*. **Ref:** 660.

**10879 Hypecorinine**

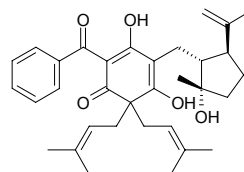
$C_{20}H_{17}NO_6$ (367.36). **Source:** ZHI LI JIAO HUI XIANG *Hypecoum erectum*. **Ref:** 660.

**10880 Hypecoumine**

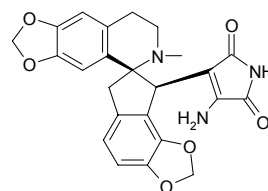
[100163-16-4] $C_{19}H_{11}NO_6$ (349.30). Colorless acicular crystals, mp 202~204°C, $[\alpha]_D^{32} = +45.06^\circ$ ($c = 0.07$, $CHCl_3$). **Source:** XI GUO JIAO HUI XIANG *Hypecoum leptocarpum*. **Ref:** 37, 1521.

**10881 Hypercalin B**

$C_{33}H_{42}O_5$ (518.70). **Pharm:** Antineoplastic (hmn, Co115 cancer cell line); molluscicide (*Oncomelania* infecting schistosomiasis and kills shellfish). **Source:** DA E JIN SI TAO *Hypericum calycinum*. **Ref:** 658.

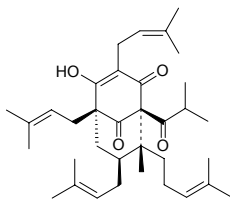
**10882 Hyperectine**

$C_{24}H_{21}N_3O_6$ (447.45). **Source:** ZHI LI JIAO HUI XIANG *Hypecoum erectum*. **Ref:** 660.

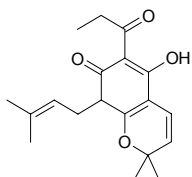


10883 Hyperforin

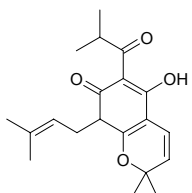
[11079-53-1] C₃₅H₅₂O₄ (536.80). Crystals, mp 79–80°C, [α]_D¹⁸ = +41° (C₂H₅OH). **Pharm:** Inhibits [¹²⁵I]suvagine binding to CRH-1 receptor (IC₅₀ = 10 μmol/L)^[5119]; antioxidant (PMN cellular chemiluminescence assay, reduces oxidative burst FMLP-induced, IC₅₀ = (1.8±0.2) μmol/L, control Quercetin, IC₅₀ = (0.5±0.1) μmol/L; OZ-induced, inactive)^[5371]; DPPH scavenger inactive^[5371]; antidepressant^[1521]; inhibits reuptake of neurotransmitters (synapses)^[1521]; cytochrome P450 (CYP3A4) inducer (hepatocytes)^[1521]; antibacterial (gram-positive and gram-negative bacteria)^[1521]. **Source:** BIAN DI JIN *Hypericum wightianum* (dried whole herb: content = 0.0375%)^[5508], DI ER CAO *Hypericum japonicum* (dried whole herb: content = 0.0897%)^[5508], GUAN YE LIAN QIAO *Hypericum perforatum* (whole herb: mean content of 5 origins = 1.87%)^[5508], HUANG HAI TANG *Hypericum ascyron* (dried whole herb: content = 0.0972%)^[5508], JI WU BING JIN SI TAO *Hypericum subsessile* (dried whole herb: content = 0.1724%)^[5508], JIN SI MEI *Hypericum patulum* (dried whole herb: content = 0.1777%)^[5508], TING JING BIAN DI JIN *Hypericum elodeoides* (dried whole herb: content = 0.0353%)^[5508], WAN E JIN SI TAO *Hypericum curvisepalum* (dried whole herb: content = 0.0309%)^[5508], YANG ZI XIAO LIAN QIAO *Hypericum faberi* (dried whole herb: content = 0.4822%)^[5508], YUAN BAO CAO *Hypericum sampsonii* (dried whole herb: content = 0.1816%)^[5508], ZHAN E JIN SI TAO *Hypericum lancasteri* (dried whole herb: content = 0.7269%)^[5508]. **Ref:** 660, 1521, 3032, 5119, 5371, 5508.

**10884 Hyperguinone A**

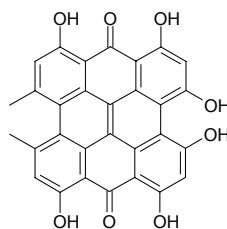
C₁₉H₂₄O₄ (316.40). **Pharm:** Antioxidant (PMN cellular chemiluminescence assay, reduces oxidative burst FMLP-induced, IC₅₀ = (7.0±1.0) μmol/L, control Quercetin, IC₅₀ = (0.5±0.1) μmol/L; OZ-induced, inactive). **Source:** *Hypericum papuanum* **Ref:** 5371.

**10885 Hyperguinone B**

C₂₀H₂₆O₄ (330.43). **Pharm:** Antioxidant (PMN cellular chemiluminescence assay, reduces oxidative burst FMLP-induced, IC₅₀ = (3.3±0.4) μmol/L, control Quercetin, IC₅₀ = (0.5±0.1) μmol/L; OZ-induced, inactive); DPPH scavenger inactive; antioxidant (H₂O₂/horseradish peroxidase assay, inactive); superoxide scavenger inactive (cytochrome C assay). **Source:** *Hypericum papuanum* **Ref:** 5371.

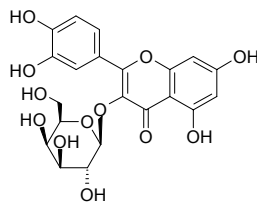
**10886 Hypericin**

Cyclosan; Hypericum red [548-04-9] C₃₀H₁₆O₈ (504.46). mp 320°C (dec), easily soluble in pyridine, almost insoluble in other organic solvent.^[5507] **Pharm:** Antimelancholic; antidepressant; antiviral (reverse transcriptase virus, *in vitro* and *in vivo*); CNS depressant; photosensitizer (mammal); anti-inflammatory (IL-12 production inhibitor, LPS-activated macrophages, IC₅₀ = 1.45 μg/mL; inhibits activation of IL-12 gene promoter; inhibits activation of NF-κB, PMA- and TNF-α-induced, mechanism not involving antioxidant pathways)^[4416]; antirheumatic^[4416]; inhibits [¹²⁵I]suvagine binding to CRH-1 receptor (IC₅₀ = 6 μmol/L)^[5119]. **Source:** BIAN DI JIN *Hypericum wightianum* (dried whole herb: content = 0.0228%)^[5508], GUAN YE LIAN QIAO *Hypericum perforatum* (whole herb: mean content of 7 origins = 0.023%)^[5508]; the compound was isolated from the plant for the first time in 1942^[5507], XIAO LIAN QIAO *Hypericum erectum*, YANG ZI XIAO LIAN QIAO *Hypericum faberi* (dried whole herb: content = 0.0533%)^[5508], YUAN BAO CAO *Hypericum sampsonii* (dried whole herb: content = 0.0396%)^[5508]. **Ref:** 6, 661, 4416, 5119, 5507, 5508.

**10887 Hyperin**

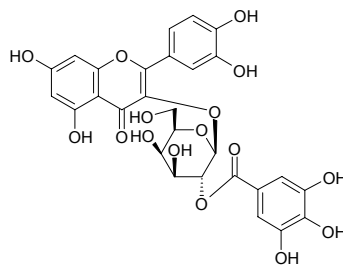
Hyperoside; Quercetin-3-*O*-β-*D*-galactoside; 3',4',5,7-Tetrahydroxyflavonol-3-β-*D*-galactoside [482-36-0] C₂₁H₂₀O₁₂ (464.39). Yellowish acicular crystals (ethanol), mp 227–230°C (dec), [α]_D²⁰ = –83° (*c* = 0.2, pyridine). **Pharm:** Analgesic (peripheral); antibacterial (*Pseudomonas maltophilia*); anti-inflammatory (rat, induced by embedding woolball, 20mg/(kg·d) ip, 7 days); antitussive (cat, ip, model of electrostimulating nervi laryngeus superior; 100mg/kg, mus, ip, ammonia fog method, 100mg/kg, EDT₅₀ prolonged 54% compared with control); aldose reductase inhibitor (eye lens); low toxin (mus, orl, 10g/kg, not death; mus, ip, LD₅₀ = 0.5g/kg); antioxidant (A cDNA microarray study, up-regulates 50 genes and down-regulates many others in SNU-668 hmn gastric cancer cells, many of which are associated with mechanisms of antioxidation)^[5341]; ACE inhibitor (IC₅₀ = 200 μmol/L, control Lisinopril, IC₅₀ = 1 nmol/L); NEP inhibitor (IC₅₀ > 500 μmol/L, control Phosphoramidon, IC₅₀ = 9 nmol/L); APN inhibitor inactive; antioxidant (DPPH scavenger, 10 μmol/L, ScRt = 57%, IC₅₀ = 10.50 μmol/L; control BHT, 10 μmol/L, ScRt = 43%, IC₅₀ = 19.00 μmol/L)^[4422]. **Source:** BIAN DI JIN *Hypericum wightianum* (dried whole herb: mean content = 0.431%)^[5508], CHA YU BIAN DI JIN *Hypericum wightianum* subsp. *axillare* (dried whole herb: mean content = 0.349%)^[5508], CHAO XIAN YIN YANG HUO *Epimedium koreanum* (aerial parts: content = 0.133%)^[5508], CHENG GAN SHENG MA *Eupatorium lindleyanum* (whole herb: content scope = 0.001%–0.012%, mean content = 0.007%)^[5508], CHUAN DIAN JIN SI TAO *Hypericum forrestii* (dried whole herb: mean content = 0.461%)^[5508], DI ER CAO *Hypericum japonicum* (dried whole herb: content = 0.5044%)^[5508], DI YU *Sanguisorba officinalis* (dried root: mean content = 0.13%)^[5508], GAN SU

SHAN ZHA *Crataegus kansuensis* (dried ripe fruit: content = 0.010%)^[5508], GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], GUAN YE LIAN QIAO *Hypericum perforatum*, GUAN YE LIAN QIAO *Hypericum perforatum* (dried whole herb: content = 1.005%)^[5508], HE YE *Nelumbo nucifera* (content scope of 46 origins = 0.35%–1.47%, mean content = 0.72%)^[5515], HEI MU JIN HE HUAN *Acacia melanoxylon*, HONG KUAI ZI *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*], HU BEI SHAN ZHA *Crataegus hupehensis* (dried ripe fruit: mean content of 5 origins = 0.064%)^[5508], HU ZHANG YE *Polygonum cuspidatum*, HUANG HAI TANG *Hypericum ascyron* (dried whole herb: content = 0.1015%)^[5508], HUANG SHU KUI HUA *Abelmoschus manihot* (dried flower: mean content of 4 origins = 1.23%)^[5508], JI WU BING JIN SI TAO *Hypericum subsessile* (dried whole herb: content = 0.7195%)^[5508], JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0093%dw)^[4723], JIN SI MEI *Hypericum patulum* (dried whole herb: content = 0.0980%)^[5508], KUAN DONG HUA *Tussilago farfara* (flower bud: content = 0.28%)^[5501], LAO GUAN CAO *Geranium wilfordii*, LIAO NING SHAN ZHA *Crataegus sanguinea* (dried ripe fruit: content = 0.037%)^[5508], LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*], LIU QIU SHE GEN CAO *Ophiorrhiza liukuiensis* (whole herb), LONG YA CAO *Agrimonia pilosa*, LU XIAN CAO *Pyrola calliantha* [Syn. *Pyrola rotundifolia* ssp. *chinensis*] (whole herb: content = 0.017%)^[5508], LUO BU MA *Apocynum venetum* (leaf: yield = 0.98%)^[5501], MAN SHAN HONG *Rhododendron dauricum* (branchlet-leaf or flower: content = 0.42%)^[5508], MAN SHAN HONG *Rhododendron dauricum* (leaf: mean content of 8 origins = 0.229%)^[5527], MAO GOU TENG *Uncaria hirsuta*, MAO SHAN ZHA *Crataegus maximowiczii* (dried ripe fruit: content = 0.169%)^[5508], MAO YAN CAO *Euphorbia lunulata* (whole herb), MAO YE WEI MAO *Euonymus sacrosancta*, PU TONG LU TI CAO *Pyrola decorata* (whole herb: content = 0.059%)^[5508], SAN BAI CAO *Saururus chinensis* (whole herb: content = 0.35%)^[5501], SHAN LI HONG *Crataegus pinnatifida* var. *major* (dried ripe fruit: mean content of 4 origins = 0.055%)^[5508], SHAN ZHA *Crataegus pinnatifida* (dried ripe fruit: mean content of 3 origins = 0.086%)^[5508], TIAN SHAN ZHU ZI *Garcinia dulcis* (flower), TING JING BIAN DI JIN *Hypericum elodeoides* (dried whole herb: content = 0.8986%)^[5508], TU SI ZI *Cuscuta chinensis*, WAN E JIN SI TAO *Hypericum curvisepalum* (dried whole herb: content = 0.1022%)^[5508], WU MAO SHAN ZHA *Crataegus pinnatifida* var. *psilosa* (dried ripe fruit: content = 0.318%)^[5508], XI SHU *Camptotheca acuminata*, XIA KU CAO *Prunella vulgaris*, XIAN HE CAO *Agrimonia pilosa* var. *japonica*, XIAO YE PI PA *Rhododendron anthopogonoides*, YANG ZI XIAO LIAN QIAO *Hypericum faberi* (dried whole herb: content = 0.4647%)^[5508], YE SHAN ZHA *Crataegus cuneata* (dried ripe fruit: mean content of 2 origins = 0.053%)^[5508], YIN CHEN HAO *Artemisia capillaris*, YIN YANG HUO *Epimedium brevicornum*, YU XING CAO *Houttuynia cordata*, YUAN BAO CAO *Hypericum sampsonii* (dried whole herb: content = 0.2062%)^[5508], YUN NAN SHAN ZHA *Crataegus scabrifolia* (dried ripe fruit: content = 0.069%)^[5508], ZHAN E JIN SI TAO *Hypericum lancasteri* (dried whole herb: content = 0.0396%)^[5508], ZHAO SHAN BAI *Rhododendron micranthum* (leaf: content scope from Feb. to Nov. 0.16%–1.17%, mean content = 0.72%)^[5508], ZI BEI LU TI CAO *Pyrola atropurpurea* (whole herb: content = 0.090%)^[5508], occurs in many plants (family Polygonaceae spp., *Betula* spp., *Juglans* spp.). Ref: 2, 4, 658, 660, 661, 1521, 2508, 4013, 4097, 4422, 4445, 4527, 4723, 5034, 5341, 5501, 5508, 5527.



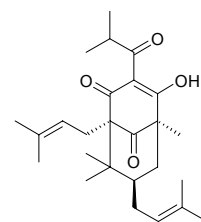
10888 Hyperin-2''-O-gallate

Quercetin-3-*O*-(2''-galloyl)- β -*D*-galactopyranoside C₂₈H₂₄O₁₆ (616.49). Pharm: Insulin-like activity (proliferation assay, dose-dependent, maximal at 30 μ g/mL)^[4445]. Source: HONG HUA LU TI CAO *Pyrola incarnata*, MAO YAN CAO *Euphorbia lunulata* (whole herb). Ref: 660, 4445.



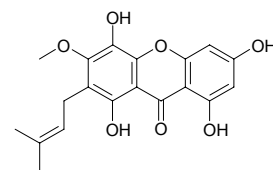
10889 Hyperpapanone

C₂₆H₃₈O₄ (414.59). Pharm: Antioxidant inactive (PMN cellular chemiluminescence assay, FMLP-induced and OZ-induced oxidative burst). Source: *Hypericum papuanum* Ref: 5371.



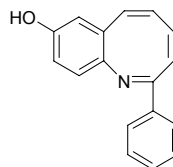
10890 Hyperxanthone

C₁₉H₁₈O₇ (358.39). Yellow amorphous powder. Source: YUAN BAO CAO *Hypericum sampsonii* (whole herb). Ref: 4055.



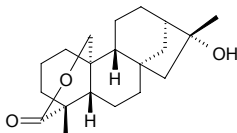
10891 Hypodematine

[134746-11-5] C₁₇H₁₃NO (247.30). Yellowish acicular crystals, mp 156–158°C. Source: SHAN DONG ZHONG ZU JUE *Hypodematium sinense*. Ref: 180.

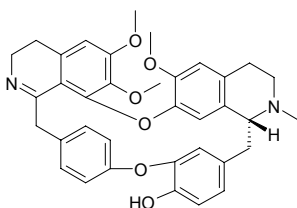


10892 Hypodiolide A

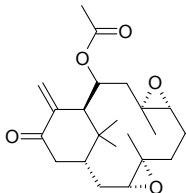
$C_{20}H_{30}O_3$ (318.46). White acicular crystals, mp 205~206°C. Source: KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*. Ref: 252.

**10893 Hypoepistephanine**

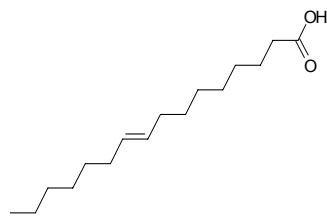
[33116-41-5] $C_{36}H_{36}N_2O_6$ (592.70). mp 257°C. Pharm: Cytotoxic (HeLa, ED_{50} = 12 μ g/mL); antioxidant (peroxide formed from polymorph, InRt = 34.1%). Source: QIAN JIN TENG *Stephania japonica*. Ref: 6, 660, 1791, 1792.

**10894 Hypoestoxide**

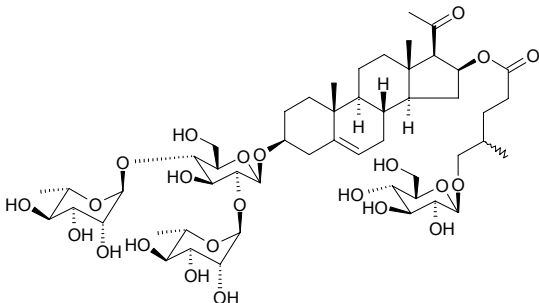
$C_{22}H_{32}O_5$ (376.50). Pharm: Anti-inflammatory (NO production inhibitor)^[4415]. Source: DAN HONG QIANG DAO YAO *Hypoestes rosea*. Ref: 1521,4415.

**10895 Hypogaic acid**

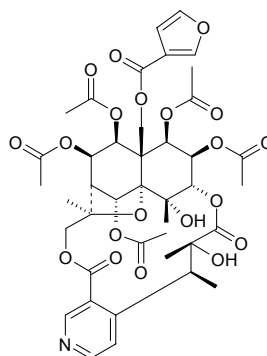
[10030-73-6] $C_{16}H_{30}O_2$ (254.42). mp 33°C. Source: LUO HUA SHENG YOU *Arachis hypogaea*, MI LA *Apis cerana*. Ref: 6, 1521.

**10896 Hypoglaucin G**

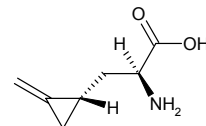
$C_{51}H_{82}O_{23}$ (1063.21). Pharm: Bone resorption inhibitor (PTH-induced in a bone organ culture system). Source: HAI JIN BI XIE *Dioscorea spongiosa* (Rhizome: yield = 0.00024%). Ref: 4692.

**10897 Hypoglaucine**

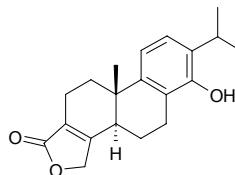
$C_{41}H_{47}NO_{20}$ (873.83). Amorphous powder. Source: KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*. Ref: 1861.

**10898 L-Hypoglycin**

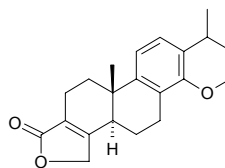
$C_7H_{11}NO_2$ (141.17). Pharm: Toxin (causes glucopenia and "vomiting sickness"). Source: XI FEI LI ZHI GUO *Blighia sapida*. Ref: 658.

**10899 Hypolide**

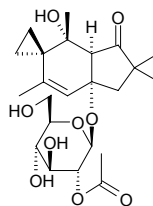
Triptophenolide $C_{20}H_{24}O_3$ (312.41). Source: HEI MAN *Tripterygium regelii*, KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*, LEI GONG TENG *Tripterygium wilfordii*. Ref: 660.

**10900 Hypolide methyl ether**

Triptophenolide methyl ether $C_{21}H_{26}O_3$ (326.44). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2.

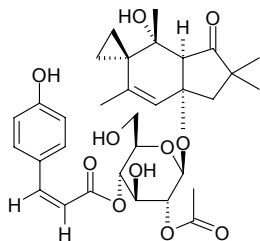
**10901 Hypolide A**

$C_{23}H_{34}O_9$ (454.52). Source: JI JUE *Hypolepis punctata* [Syn. *Polypodium punctatum*]. Ref: 660.

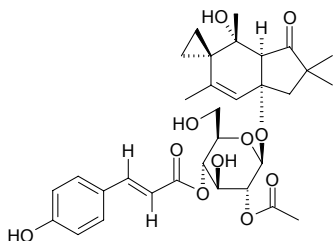


10902 Hypoloside B

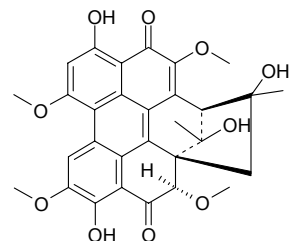
$C_{32}H_{40}O_{11}$ (600.67). Source: JI JUE *Hypolepis punctata* [Syn. *Polypodium punctatum*]. Ref: 660.

**10903 Hypoloside C**

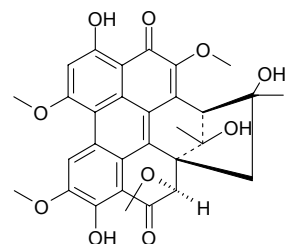
$C_{32}H_{40}O_{11}$ (600.67). Source: JI JUE *Hypolepis punctata* [Syn. *Polypodium punctatum*]. Ref: 660.

**10904 Hypomycin C**

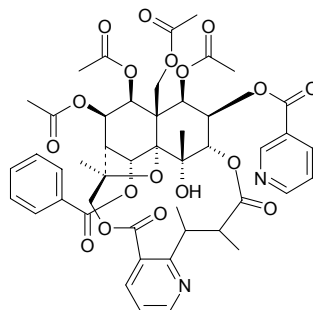
$C_{30}H_{28}O_{10}$ (548.66). Orange fine needles (MeOH), mp 245~248°C. Source: fungus *Hypomyces* sp. Ref: 2477.

**10905 Hypomycin D**

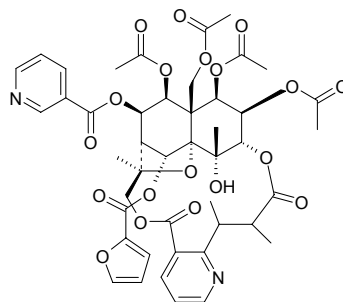
$C_{30}H_{28}O_{10}$ (548.66). Orange-red plate crystals, mp 302~307°C. Source: fungus *Hypomyces* sp. Ref: 2477.

**10906 Hyponine D**

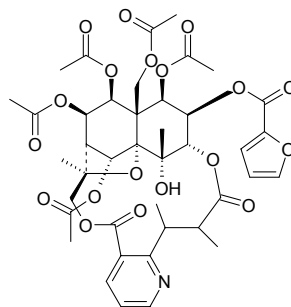
7-(Acetyloxy)-*O*²-nicotinoyl-*O*⁵-deacetyl-*O*⁵-benzoyl-7-deoxo-evonine $C_{47}H_{50}N_2O_{18}$ (930.93). Amorphous powder, $[\alpha]_D^{25} = +5.2^\circ$ ($c = 0.11$, MeOH). Source: KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*. Ref: 2426.

**10907 Hyponine E**

7-(Nicotinoyloxy)-*O*⁵-furanoyl-*O*⁵-deacetyl-7-deoxo-evonine $C_{45}H_{48}N_2O_{19}$ (920.89). Amorphous powder, $[\alpha]_D^{25} = -4.2^\circ$ ($c = 1.0$, MeOH). Source: KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*. Ref: 2426.

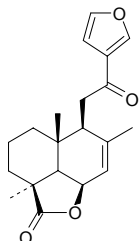
**10908 Hyponine F**

7-(Acetyloxy)-*O*²-furanoyl-*O*²-deacetyl-7-deoxo-evonine $C_{41}H_{47}NO_{19}$ (857.83). Amorphous powder, $[\alpha]_D^{25} = +7.0^\circ$ ($c = 1.0$, MeOH). Source: KUN MING SHAN HAI TANG *Tripterygium hypoglaucum*. Ref: 2426.

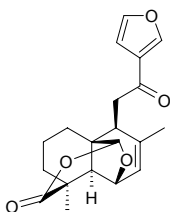


10909 Hypopurin A

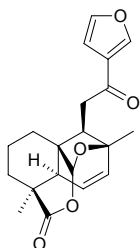
$C_{20}H_{24}O_4$ (328.41). Colorless powder, mp 125~127°C (MeOH), $[\alpha]_D^{25} = +43.3^\circ$ ($c = 0.3$, $CHCl_3$). **Pharm:** Cytotoxic (*in vitro*, KB, $IC_{50} = 9.4\mu\text{mol/L}$, moderate activity). **Source:** QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.00015%dw). **Ref:** 4783.

**10910 Hypopurin B**

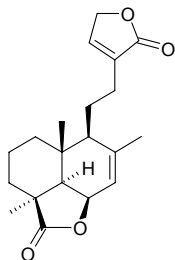
$C_{20}H_{22}O_5$ (342.4). Colorless powder, mp 120~122°C (MeOH), $[\alpha]_D^{25} = +30.3^\circ$ ($c = 0.3$, $CHCl_3$). **Pharm:** Cytotoxic inactive (*in vitro*, KB, $IC_{50} > 100\mu\text{mol/L}$). **Source:** QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.00014%dw). **Ref:** 4783.

**10911 Hypopurin C**

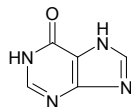
$C_{20}H_{22}O_5$ (342.4). Colorless powder, mp 165~168°C (MeOH), $[\alpha]_D^{25} = +13.3^\circ$ ($c = 0.3$, $CHCl_3$). **Pharm:** Cytotoxic inactive (*in vitro*, KB, $IC_{50} > 100\mu\text{mol/L}$). **Source:** QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.000095%dw). **Ref:** 4783.

**10912 Hypopurin D**

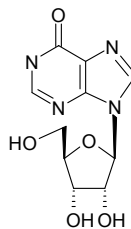
$C_{20}H_{26}O_4$ (330.43). Colorless prisms, mp 173~175°C (MeOH), $[\alpha]_D^{25} = +15^\circ$ ($c = 0.2$, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, KB, $IC_{50} > 100\mu\text{mol/L}$). **Source:** QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.000087%dw). **Ref:** 4783.

**10913 Hypoxanthine**

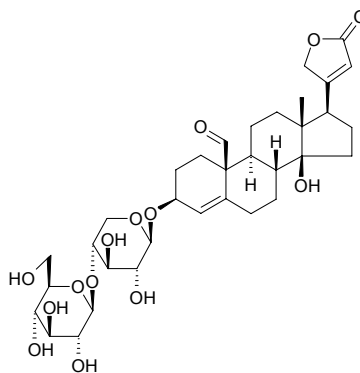
[68-94-0] $C_5H_4N_4O$ (136.11). mp 150°C (dec). **Pharm:** Plays a key role in pathology of gout. (When hypoxanthine decomposes, uric acid is formed. The basic method for treating gout is to inhibit this process.) **Source:** DONG CHONG XIA CAO *Cordyceps sinensis* (dried fungal stroma growing on larva of a caterpillar: content = 0.012%)^[5512], GOU QI YE *Lycium chinense*, GUI GAI *Coprinus atramentarius*, HAI XIA *Penaeus orientalis*, LU RONG *Cervus nippon*; *Cervus elaphus*, QIU YIN *Pheretima aspergillum*; *Allolobophora caliginosa trapezoides*, XIA TIAN GAO *Bos taurus domesticus*, ZHANG YE BAN XIA *Pinellia pedatisecta*. **Ref:** 2, 6, 586, 658, 5501, 5512.

**10914 Hypoxanthine nucleoside**

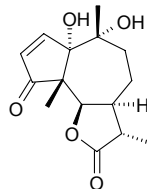
$C_{10}H_{12}N_4O_5$ (268.23). **Source:** DONG CHONG XIA CAO *Cordyceps sinensis*. **Ref:** 660.

**10915 Hyrcanoside**

[15001-93-1] $C_{34}H_{48}O_{14}$ (680.75). Crystals (methanol), mp 205~208°C. **Pharm:** Antineoplastic (mus, P_{388} , 1.25mg/kg, biotic prolonged rate = 33%, mus colon carcinoma, 0.31mg/kg, biotic prolonged rate = 69%, mus colon carcinoma, 2.5mg/kg, biotic prolonged rate = 43%); cardiotoxic; cytotoxic (KB). **Source:** DUO BIAN XIAO GUAN HUA *Coronilla varia*. **Ref:** 661.

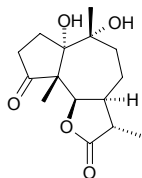
**10916 Hysterone A**

$C_{15}H_{20}O_5$ (280.32). Colorless crystals, mp 198~201°C, $[\alpha]_D^{25} = -14.84^\circ$ ($c = 1.0$, MeOH). **Source:** YIN JIAO JU *Parthenium hysterophorus* (flower). **Ref:** 3462.

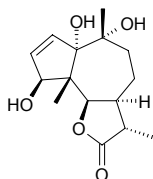


10917 Hysterone B

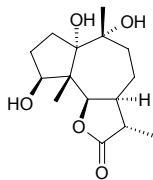
$C_{15}H_{22}O_5$ (282.34). Colorless viscous mass, $[\alpha]_D^{25} = +3.40^\circ$ ($c = 1.25$, MeOH). Source: YIN JIAO JU *Parthenium hysterophorus* (flower). Ref: 3462.

**10918 Hysterone C**

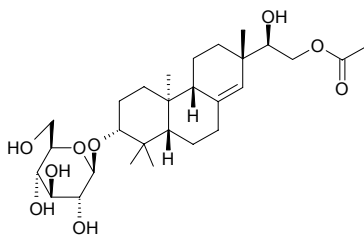
$C_{15}H_{22}O_5$ (282.34). Colorless crystals, mp 186~188°C, $[\alpha]_D^{25} = +30.54^\circ$ ($c = 1.25$, MeOH). Source: YIN JIAO JU *Parthenium hysterophorus* (flower). Ref: 3462, 4489.

**10919 Hysterone D**

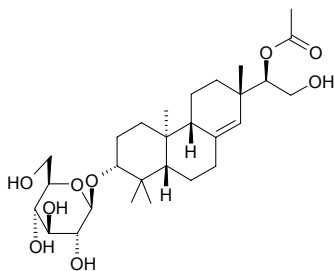
$C_{15}H_{24}O_5$ (284.36). Colorless viscous mass, $[\alpha]_D^{25} = -12.04^\circ$ ($c = 1.25$, MeOH). Source: YIN JIAO JU *Parthenium hysterophorus* (flower). Ref: 3462.

**10920 Hythiemoside A**

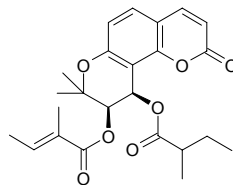
$C_{28}H_{46}O_9$ (526.67). Source: XI XIAN *Siegesbeckia orientalis* (aerial parts). Ref: 4438.

**10921 Hythiemoside B**

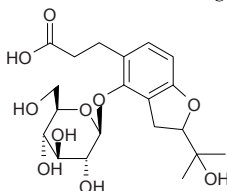
$C_{28}H_{46}O_9$ (526.67). White amorphous powder, $[\alpha]_D^{25} = -110^\circ$ ($c = 0.10$, MeOH). Source: XI XIAN *Siegesbeckia orientalis* (aerial parts). Ref: 4438.

**10922 Hyuganin A**

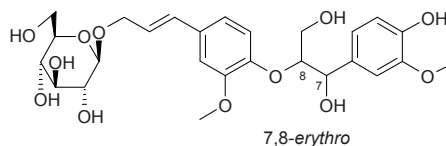
$C_{24}H_{28}O_7$ (428.49). Pharm: NO production inhibitor. Source: FEN CHA DANG GUI *Angelica furcijuga*. Ref: 1521.

**10923 Hyuganoside II**

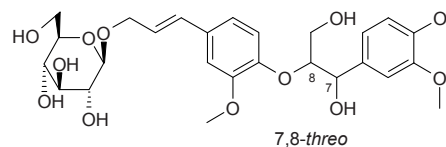
$C_{20}H_{28}O_{10}$ (428.44). White powder, $[\alpha]_D^{25} = +8.7^\circ$ ($c = 1.11$, MeOH). Source: FEN CHA DANG GUI *Angelica furcijuga*. Ref: 2567.

**10924 Hyuganoside IIIa**

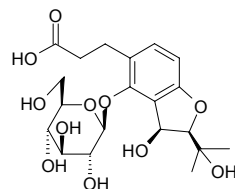
$C_{26}H_{34}O_{12}$ (538.55). White powder, $[\alpha]_D^{25} = -6.1^\circ$ ($c = 0.22$, MeOH). Source: FEN CHA DANG GUI *Angelica furcijuga*. Ref: 2567.

**10925 Hyuganoside IIIb**

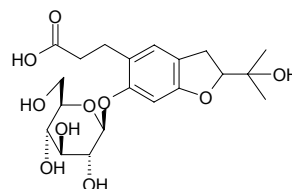
$C_{26}H_{34}O_{12}$ (538.55). White powder, $[\alpha]_D^{23} = -16.9^\circ$ ($c = 0.51$, MeOH). Source: FEN CHA DANG GUI *Angelica furcijuga*. Ref: 2567.

**10926 Hyuganoside IV**

$C_{20}H_{28}O_{11}$ (444.44). White powder, $[\alpha]_D^{27} = -5.5^\circ$ ($c = 1.00$, MeOH). Source: FEN CHA DANG GUI *Angelica furcijuga* (flower). Ref: 4454.

**10927 Hyuganoside V**

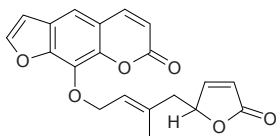
$C_{20}H_{28}O_{10}$ (428.44). White powder, $[\alpha]_D^{27} = -43.1^\circ$ ($c = 1.20$, MeOH). Source: FEN CHA DANG GUI *Angelica furcijuga* (flower). Ref: 4454.



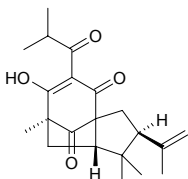
I

10928 I-23

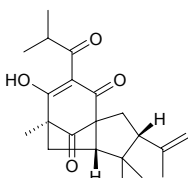
$C_{20}H_{16}O_6$ (352.35). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 11.

**10929 Ialibinone A**

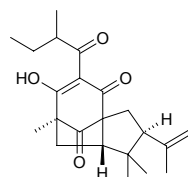
$C_{21}H_{28}O_4$ (344.45). Pharm: Antioxidant (PMN cellular chemiluminescence assay, reduces oxidative burst FMLP-induced, $IC_{50} = (10 \pm 1) \mu\text{mol/L}$, increase of radical production = 100%, control Quercetin, $IC_{50} = (0.5 \pm 0.1) \mu\text{mol/L}$; OZ-induced, inactive). Source: *Hypericum papuanum*. Ref: 5371.

**10930 Ialibinone B**

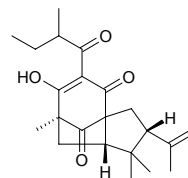
$C_{21}H_{28}O_4$ (344.45). Pharm: Antioxidant (PMN cellular chemiluminescence assay, reduces oxidative burst FMLP-induced, $IC_{50} = (15 \pm 1) \mu\text{mol/L}$, max. effect 60%, control Quercetin, $IC_{50} = (0.5 \pm 0.1) \mu\text{mol/L}$; OZ-induced, inactive). Source: *Hypericum papuanum*. Ref: 5371.

**10931 Ialibinone C**

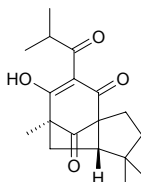
$C_{22}H_{30}O_4$ (358.48). Pharm: Antioxidant inactive (PMN cellular chemiluminescence assay, FMLP-induced and OZ-induced oxidative burst). Source: *Hypericum papuanum*. Ref: 5371.

**10932 Ialibinone D**

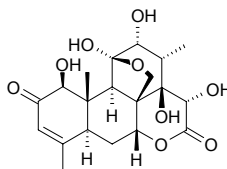
$C_{22}H_{30}O_4$ (358.48). Pharm: Antioxidant (PMN cellular chemiluminescence assay, reduces oxidative burst FMLP-induced, $IC_{50} = (15 \pm 1) \mu\text{mol/L}$, max. effect 60%, control Quercetin, $IC_{50} = (0.5 \pm 0.1) \mu\text{mol/L}$; OZ-induced, inactive). Source: *Hypericum papuanum*. Ref: 5371.

**10933 Ialibinone E**

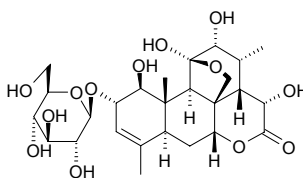
$C_{18}H_{24}O_4$ (304.39). Pharm: Antioxidant (PMN cellular chemiluminescence assay, reduces oxidative burst FMLP-induced, $IC_{50} = (2.5 \pm 0.3) \mu\text{mol/L}$, control Quercetin, $IC_{50} = (0.5 \pm 0.1) \mu\text{mol/L}$; OZ-induced, inactive); DPPH scavenger inactive; antioxidant (H_2O_2 /horseradish peroxidase assay, $IC_{50} = 1.0 \mu\text{mol/L}$); superoxide scavenger (cytochrome C assay)^[5371]. Source: *Hypericum papuanum*. Ref: 5371.

**10934 Iandonone**

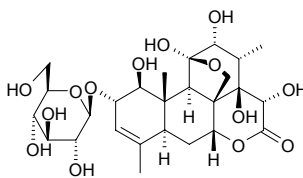
$C_{20}H_{26}O_9$ (410.42). Amorphous powder, $[\alpha]_D^{20} = +4.6^\circ$ ($c = 0.4$, MeOH). Source: *Eurycoma harmandiana* (root). Ref: 5164.

**10935 Iandonoside A**

$C_{26}H_{38}O_{13}$ (558.58). Amorphous powder, $[\alpha]_D^{20} = +19.1^\circ$ ($c = 0.3$, MeOH). Source: *Eurycoma harmandiana* (root). Ref: 5164.

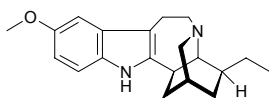
**10936 Iandonoside B**

$C_{26}H_{38}O_{14}$ (574.58). Amorphous powder, $[\alpha]_D^{20} = +4.1^\circ$ ($c = 0.7$, MeOH). Source: *Eurycoma harmandiana* (root). Ref: 5164.

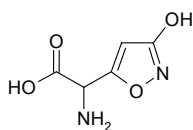


10937 Ibogaine

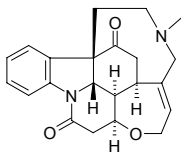
$C_{20}H_{26}N_2O$ (310.44). Source: LUO SHI TENG *Trachelospermum jasminoides*. Ref: 660.

**10938 Ibotenic acid**

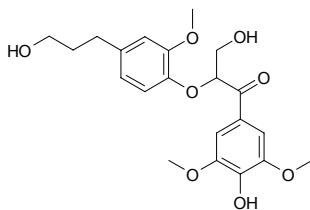
[2552-55-8] $C_5H_6N_2O_4$ (158.11). mp 151~152°C (dec). Pharm: Insecticidal. Source: *Amanita* spp. (the compound was isolated in 1964)^[5505] Ref: 5, 658, 1521, 5505.

**10939 Icajine**

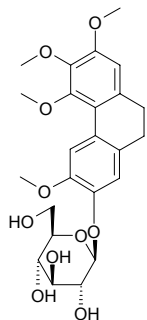
[5525-31-5] $C_{22}H_{24}N_2O_3$ (364.45). mp 271~272°C (dec), $[\alpha]_D = -10^\circ$ ($c = 1$, $CHCl_3$). Source: MA QIAN ZI *Strychnos nux-vomica*, ZHONG FEI MA QIAN *Strychnos icaja*, CHANG ZI MA QIAN *Strychnos wallichiana*. Ref: 2, 542, 1521.

**10940 Icarinol A₁**

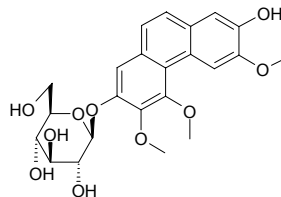
$C_{21}H_{26}O_8$ (406.44). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 660.

**10941 Icariside A₁**

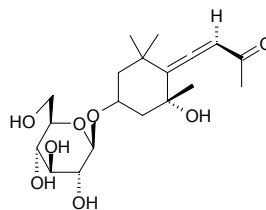
$C_{24}H_{30}O_{10}$ (478.50). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 660.

**10942 Icariside A₇**

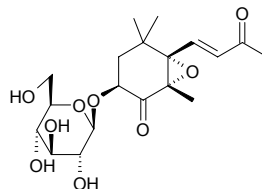
$C_{23}H_{26}O_{10}$ (462.46). White powder. Source: CHAO XIAN YIN YANG HUO *Epimedium koreanum*. Ref: 417.

**10943 Icariside B₁**

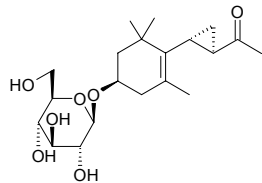
$C_{19}H_{30}O_8$ (386.45). White amorphous powder, $[\alpha]_D = -73.5^\circ$ (MeOH). Source: DUO LIE WEI LING CAI *Potentilla multifida* (whole herb), HUA NAN WU ZHU YU *Evodia austrosinensis*. Ref: 4821, 5052.

**10944 Icariside B₂**

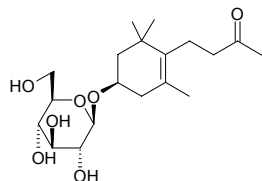
$C_{19}H_{28}O_9$ (400.43). mp 173~174°, $[\alpha]_D^{25} = -51^\circ$. Pharm: Inhibits cancer cell invasion (MM1 cells, *in vitro*, 10µg/mL, InRt = 19.4%)^[4329]. Source: DA HUA YIN YANG HUO *Epimedium grandiflorum*, HEI ZI LI GUO JI SHENG *Scurrura atropurpurea* (yield = 0.0051%), HU SUI ZI *Coriandrum sativum*, SHENG GU YOU *Staphylea bumalda* (leaf). Ref: 4302, 4329, 4478.

**10945 Icariside B₂**

$C_{20}H_{32}O_7$ (384.47). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 660, 1521.

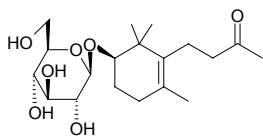
**10946 Icariside B₆**

$C_{19}H_{32}O_7$ (372.46). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 660.

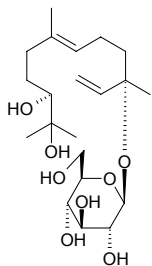


10947 Icariside B₉

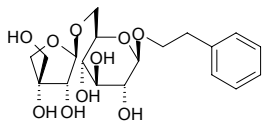
[135743-11-2] C₁₉H₃₂O₇ (372.46). Amorphous powder, $[\alpha]_D^{23} = -42.9^\circ$ ($c = 0.14$, MeOH). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 2, 660, 1521.

**10948 Icariside C₃**

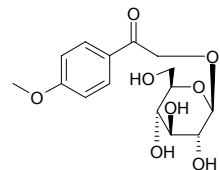
C₂₁H₃₈O₈ (418.53). Source: JIN ZHAN JU *Calendula officinalis* (flower). Ref: 3551.

**10949 Icariside D₁**

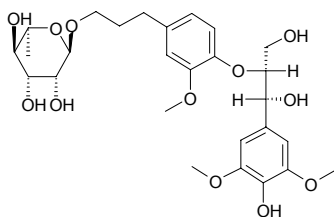
C₁₉H₂₈O₁₀ (416.43). Source: SHI LIU ZHONG ZI *Punica granatum* (seed: yield = 0.0002%), ZHONG HUA QING NIU DAN *Tinospora sinensis* (stem). Ref: 4292, 4792.

**10950 Icariside D₃**

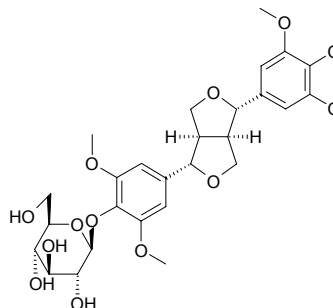
[135743-08-7] C₁₅H₂₀O₈ (328.32). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 1521.

**10951 Icariside E₆**

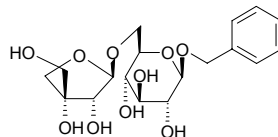
[135774-83-3] C₂₇H₃₈O₁₂ (554.60). Amorphous powder, $[\alpha]_D^{23} = -12.5^\circ$ ($c = 0.3$, MeOH). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 660, 1521.

**10952 Icariside E₇**

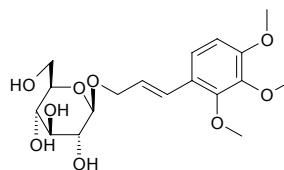
C₂₉H₃₈O₁₃ (594.62). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 2, 660.

**10953 Icariside F₂**

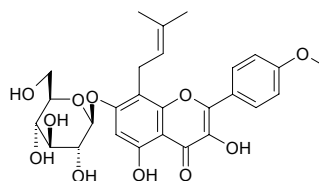
Benzyl β -D-apiofuranosyl-(1 \rightarrow 6)- β -D-glucopyranoside C₁₈H₂₆O₁₀ (402.40). mp 133–135°C, $[\alpha]_D^{22} = -98^\circ$; mp 133–135°C, $[\alpha]_D^{21} = -98^\circ$; $[\alpha]_D^{25} = -84^\circ$, ($c = 0.1$, MeOH). Pharm: Plant growth stimulatory or inhibitory activity (radicle length: *Lactuca sativa*, 1 μ mol/L, StRt or InRt < 10%, 10 μ mol/L, StRt or InRt < 10%, 100 μ mol/L, StRt or InRt < 10%, 1 mmol/L, StRt or InRt < 10%; *Raphanus sativus*, 1 μ mol/L, StRt or InRt < 10%, 10 μ mol/L, StRt or InRt < 10%, 100 μ mol/L, StRt or InRt < 10%, 1 mmol/L, StRt or InRt < 10%; *Allium cepa*, 1 μ mol/L, StRt = (10–30)%, 10 μ mol/L, StRt = (10–30)%, 100 μ mol/L, InRt = (10–30)%, 1 mmol/L, InRt = (10–30)%)^[5217]. Source: BEI SHA SHEN *Glehnia littoralis* (fruit), CANG ZHU *Atractylodes lancea*, HU SUI ZI *Coriandrum sativum*, SHI LUO ZI *Anethum graveolens* (fruit), XI YANG JIE GU MU *Sambucus nigra*, YUAN YE E ZHANG CHAI *Schefflera rotundifolia* (aerial parts). Ref: 3525, 4177, 4302, 4348, 5036, 5217.

**10954 Icariside H₁**

[135743-09-8] C₁₈H₂₆O₉ (386.40). Amorphous powder, $[\alpha]_D^{23} = -47.6^\circ$ ($c = 0.62$, MeOH). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 2, 660, 1521.

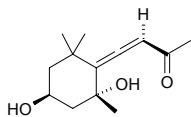
**10955 Icariside I**

[56725-99-6] C₂₇H₃₀O₁₁ (530.53). Yellow needles (MeOH), mp 256°C, mp 248°C (dec), $[\alpha]_D^{15} = -28.4^\circ$ (pyridine). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*, DA HUA YIN YANG HUO *Epimedium grandiflorum*. Ref: 2, 660, 1521.

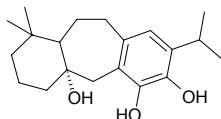


10956 Icarisidin B₁

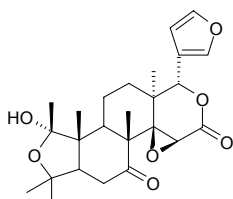
$C_{13}H_{20}O_3$ (224.30). Source: JIAN YE YIN YANG HUO *Epimedium sagittatum*. Ref: 660.

**10957 8,11,13-Icetexantrien-10,11,12-triol**

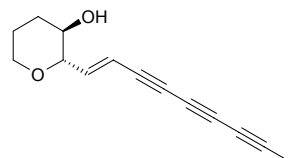
$C_{21}H_{30}O_3$ (318.46). Source: GAN XI SHU WEI CAO *Salvia przewalskii*. Ref: 4538.

**10958 Ichangensin**

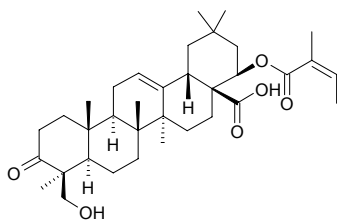
$C_{25}H_{32}O_7$ (444.53). Source: SU DA QI GAN JU *Citrus sudachii* (seed). Ref: 3532.

**10959 Ichthyothereol**

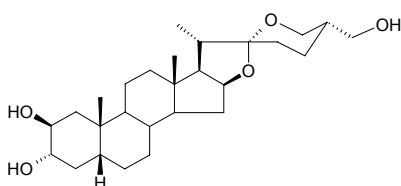
[2294-61-3] $C_{14}H_{14}O_2$ (214.27). Pharm: Supertoxic agent. Source: HONG DA LI HUA *Dahlia coccinea*. Ref: 1521.

**10960 Icterogenin**

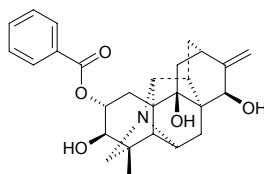
$C_{35}H_{52}O_6$ (568.80). Pharm: Anti-androgenic (testosterone-5 α -reductase inhibitor, 50 μ g/mL, InRt = 78.55%, control Glabridine, 50 μ g/mL, InRt = 48.20%). Source: DUO SUI PO BU MU *Cordia multispicata* (leaf). Ref: 4106.

**10961 Igagenin**

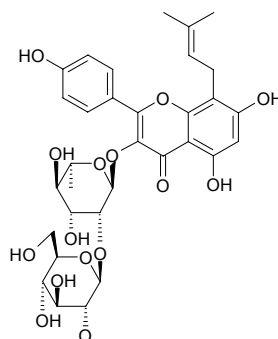
[21152-89-6] $C_{27}H_{44}O_5$ (448.65). mp 248~249°C, $[\alpha]_D = -43.6^\circ$ (CHCl₃). Source: SHAN BI XIE *Dioscorea tokoro*. Ref: 6, 660, 1521.

**10962 Ignavine**

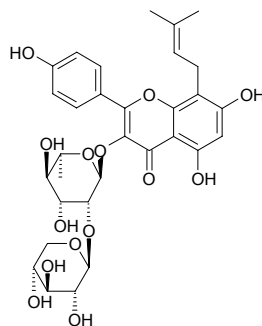
Hetisan-2,3,9,15-tetrol 2-benzoate $C_{27}H_{31}NO_5$ (449.55). Source: WU TOU *Aconitum carmichaeli*. Ref: 660.

**10963 Ikariside B**

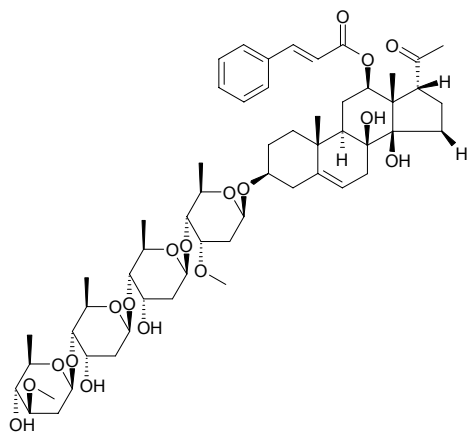
[113558-10-4] $C_{32}H_{38}O_{15}$ (662.65). mp 180~182°C. Source: CU MAO YIN YANG HUO *Epimedium acuminatum*, WAN SHAN YIN YANG HUO *Epimedium wanshanense*. Ref: 574, 599.

**10964 Ikariside F**

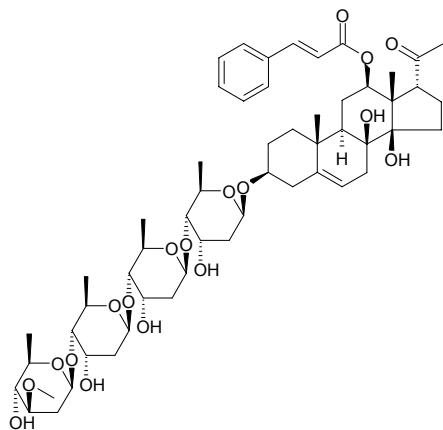
[113558-14-8] $C_{31}H_{36}O_{14}$ (632.62). Source: CHAO XIAN YIN YANG HUO *Epimedium koreanum* (aerial parts: content = 0.072%)^[5508], JIAN YE YIN YANG HUO *Epimedium sagittatum* (aerial parts: content = 0.108%)^[5508], ROU MAO YIN YANG HUO *Epimedium pubescens* (aerial parts: content = 0.068%)^[5508], WU SHAN YIN YANG HUO *Epimedium wushanense* (aerial parts: content = 0.096%)^[5508], YIN YANG HUO *Epimedium brevicornum* (aerial parts: content = 0.065%)^[5508]. Ref: 565, 5508.



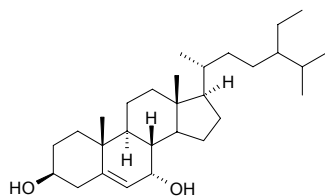
10965 Ikemagenin 3-O- β -D-oleandropyranosyl-(1 \rightarrow 4)- β -D-digitoxopyranosyl-(1 \rightarrow 4)- β -D-cymaropyranoside
 $C_{56}H_{82}O_{18}$ (1043.27). Amorphous powder, $[\alpha]_D^{27} = +14.4^\circ$ ($c = 0.89$, MeOH).
 Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



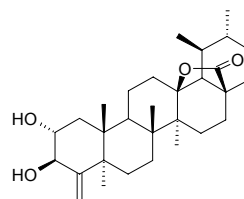
10966 Ikemagenin 3-O- β -D-oleandropyranosyl-(1 \rightarrow 4)- β -D-digitoxopyranosyl-(1 \rightarrow 4)- β -D-digitoxopyranoside
 $C_{55}H_{80}O_{18}$ (1029.24). Amorphous powder, $[\alpha]_D^{27} = +12.1^\circ$ ($c = 0.52$, MeOH).
 Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



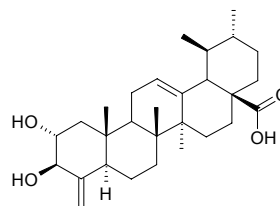
10967 Ikshusterol
 Stigmast-5-ene-3 β ,7 α -diol [34427-61-7] $C_{29}H_{50}O_2$ (430.72). Crystals (MeOH),
 mp 129–133°C, mp 202–204°C, $[\alpha]_D = -27^\circ$ (CHCl₃). Pharm:
 Anti-inflammatory (mus, inflammation caused by TPA, 1.0mg/ear, InRt =
 36%); dissolves fibrin (*in vitro*, fibrin plate test, 1mg/mL, dissolving activity
 = 18.0mm). Source: HONG HUA PI *Betula platyphylla* var. *japonica*, KUAN
 YE XIANG PU *Typha latifolia*, KUN MING JI XUE TENG *Milletia
 dielsiana*, MI HUA DOU *Spatholobus suberectus*, YAO YONG GAN ZHE
Saccharum officinarum, YI ZHU QIAN MA *Urtica dioica*, FENG LI *Ananas
 comosus*. Ref: 900, 1521.



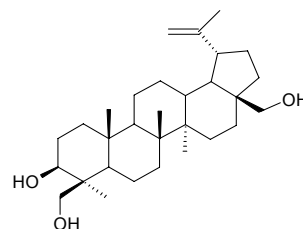
10968 Ilekudinol A
 $C_{30}H_{46}O_4$ (470.70). Source: KU DING CHA DONG QING *Ilex kudingcha*.
 Ref: 2160.



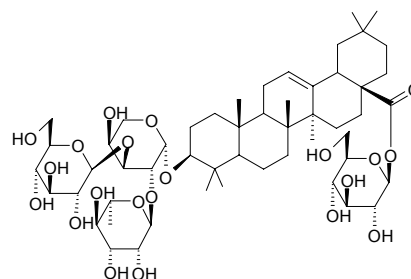
10969 Ilekudinol B
 $C_{29}H_{44}O_4$ (456.67). Source: KU DING CHA DONG QING *Ilex kudingcha*.
 Ref: 2160.

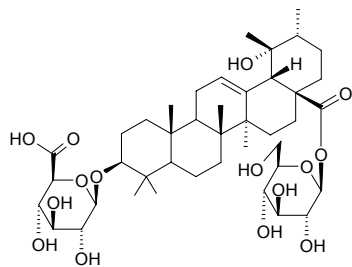
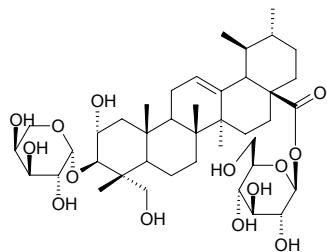
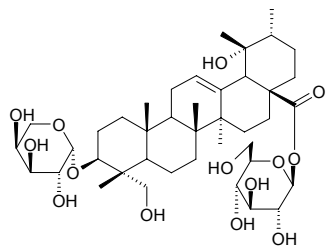
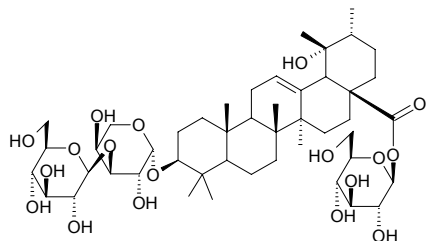
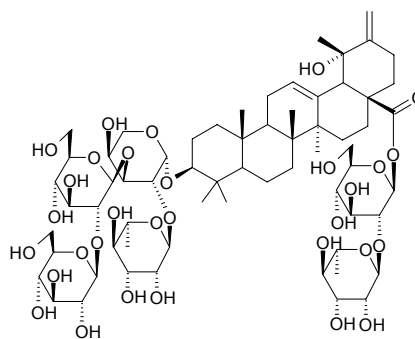
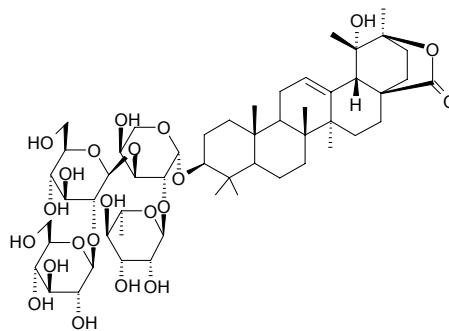
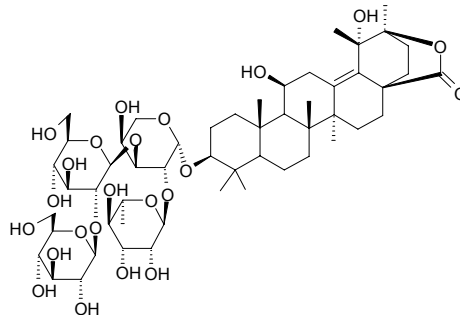


10970 Ilekudinol C
 $C_{30}H_{50}O_3$ (458.73). Source: KU DING CHA DONG QING *Ilex kudingcha*.
 Ref: 2160.



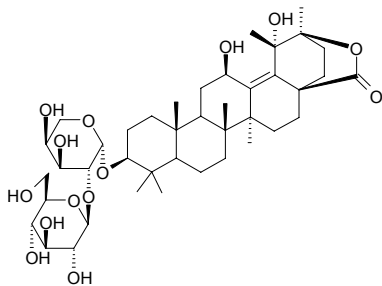
10971 Ilekudinoside A
 $C_{53}H_{86}O_{21}$ (1059.26). Source: KU DING CHA DONG QING *Ilex kudingcha*.
 Ref: 5504.



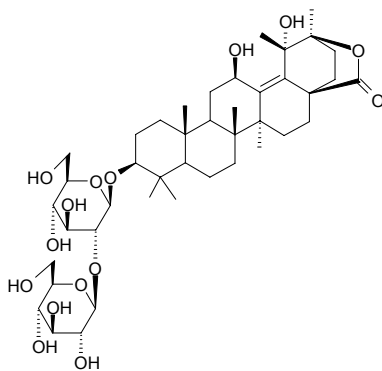
10972 Ilekudinoside BC₄₂H₆₆O₁₅ (810.99). Source: KU DING CHA DONG QING *Ilex kudingcha*.Ref: 5504.**10973 Ilekudinoside C**C₄₁H₆₆O₁₄ (782.97). Source: KU DING CHA DONG QING *Ilex kudingcha*.Ref: 5504.**10974 Ilekudinoside D**C₄₁H₆₆O₁₄ (782.97). Source: KU DING CHA DONG QING *Ilex kudingcha*.Ref: 5504.**10975 Ilekudinoside E**C₄₇H₇₆O₁₈ (929.12). Source: KU DING CHA DONG QING *Ilex kudingcha*.Ref: 5504.**10976 Ilekudinoside F**C₆₅H₁₀₄O₃₁ (1381.54). Source: KU DING CHA DONG QING *Ilex kudingcha*.Ref: 5504.**10977 Ilekudinoside G**3-*O*- β -*D*-Glucopyranosyl(1 \rightarrow 2)- β -*D*-glucopyranosyl-[α -*L*-rhamnopyranosyl(1 \rightarrow 2)]- α -*L*-arabinopyranosyl 3 β ,19 α -dihydroxy-urs-12-en-28,20 β -olideC₅₃H₈₄O₂₂ (1073.25). Source: KU DING CHA DONG QING *Ilex kudingcha*.Ref: 5504.**10978 Ilekudinoside H**3-*O*- β -*D*-Glucopyranosyl(1 \rightarrow 2)- β -*D*-glucopyranosyl-[α -*L*-rhamnopyranosyl(1 \rightarrow 2)]- α -*L*-arabinopyranosyl γ -kudinlactone C₅₃H₈₄O₂₃ (1089.25). Source: KU DING CHA DONG QING *Ilex kudingcha*.Ref: 5504.

10979 Ilexudinoside I

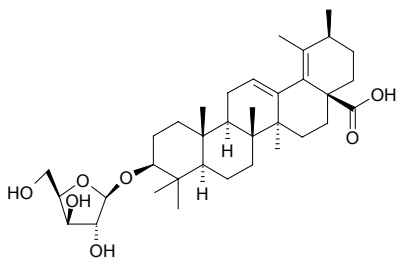
3-*O*- β -*D*-Glucopyranosyl(1 \rightarrow 2)- α -*L*-arabinopyranosyl β -kudinlactone
 $C_{41}H_{64}O_{14}$ (780.96). Source: KU DING CHA DONG QING *Ilex kudingcha*.
Ref: 5504.

**10980 Ilexudinoside J**

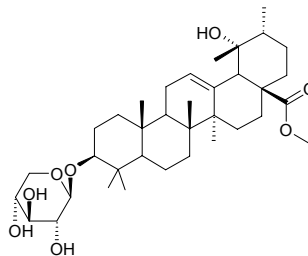
3-*O*- β -*D*-Glucopyranosyl(1 \rightarrow 2)- β -*D*-glucopyranosyl β -kudinlactone
 $C_{42}H_{66}O_{15}$ (810.99). Source: KU DING CHA DONG QING *Ilex kudingcha*.
Ref: 5504.

**10981 Ilexolide A**

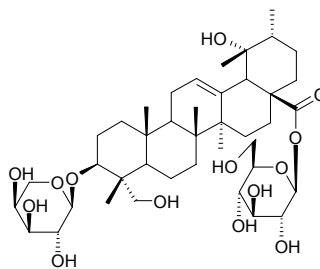
Ilexolide [85344-31-6] $C_{35}H_{54}O_7$ (586.82). Pharm: Cardiotonic. Source: MAO DONG QING *Ilex pubescens*. Ref: 658.

**10982 Ilexoside B methyl ester**

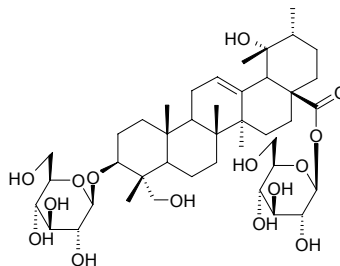
3 β -*O*-(β -*D*-Xylopyranosyl) pomolic acid methyl ester $C_{36}H_{58}O_8$ (618.86).
Source: SI JI QING *Ilex chinensis* [Syn. *Ilex purpurea*]. Ref: 660.

**10983 Ilexoside XXVII**

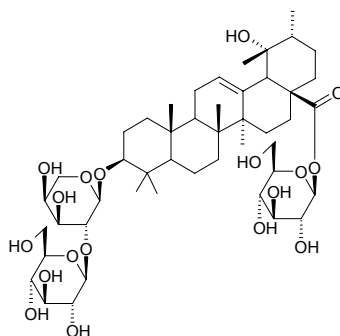
$C_{41}H_{66}O_{14}$ (782.97). Source: BA NA MA SHAN SHI LIU *Randia formosa* (leaf). Ref: 3951.

**10984 Ilexoside XXXVII**

$C_{42}H_{68}O_{15}$ (813.00). Source: BA NA MA SHAN SHI LIU *Randia formosa* (leaf). Ref: 3951.

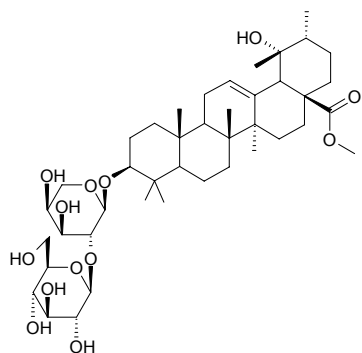
**10985 Ilexside II**

$C_{47}H_{76}O_{18}$ (929.12). Source: GOU GU YE *Ilex cornuta*. Ref: 660.

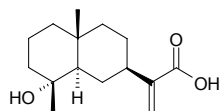


10986 Ilexside I methyl ester

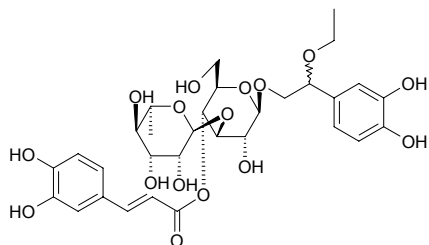
$C_{42}H_{68}O_{13}$ (781.00). Source: GOU GU YE *Ilex cornuta*. Ref: 660.

**10987 Ilicic acid**

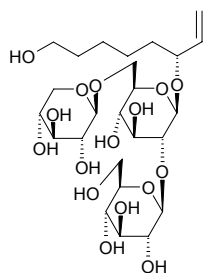
$C_{15}H_{24}O_3$ (252.36). Source: LIU LENG JU *Laggera alata* (aerial parts: yield = 0.09%dw). Ref: 4709.

**10988 Ilicifolioside A**

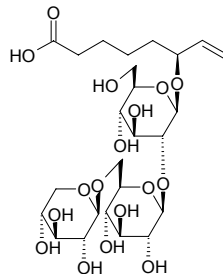
$C_{31}H_{40}O_{16}$ (668.65). Amorphous powder, $[\alpha]_D^{25} = -72^\circ$ ($c = 0.8$, MeOH). Source: LAO SHU LE *Acanthus ilicifolius*. Ref: 3397.

**10989 Ilicifolioside B**

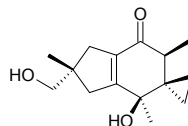
$C_{25}H_{44}O_{16}$ (600.62). Amorphous powder, $[\alpha]_D^{25} = -51^\circ$ ($c = 0.6$, MeOH). Source: LAO SHU LE *Acanthus ilicifolius*. Ref: 3397.

**10990 Ilicifolioside C**

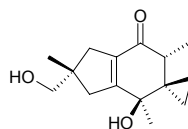
(6*R*)-6-Hydroxyl-7-octenoic acid
6-*O*- β -*D*-xylopyranosyl-(1"^{'''}- \rightarrow 6")-*O*- β -*D*-glucopyranosyl-(1"^{''}- \rightarrow 2')-*O*- β -*D*-glucopyranoside $C_{25}H_{42}O_{17}$ (614.60). Amorphous powder, $[\alpha]_D^{25} = -48^\circ$ ($c = 0.6$, MeOH). Source: LAO SHU LE *Acanthus ilicifolius* (aerial parts). Ref: 4392.

**10991 Illudin I**

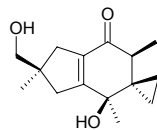
$C_{15}H_{22}O_3$ (250.34). Oil, $[\alpha]_D = -41^\circ$ ($c = 0.09$, MeOH). Source: fungus *Coprinopsis episcopalis*. Ref: 3760.

**10992 Illudin I₂**

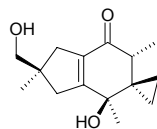
$C_{15}H_{22}O_3$ (250.34). Oil, $[\alpha]_D = +22.5^\circ$ ($c = 0.08$, MeOH). Source: fungus *Coprinopsis episcopalis*. Ref: 3760.

**10993 Illudin J**

$C_{15}H_{22}O_3$ (250.34). Oil. Source: fungus *Coprinopsis episcopalis*. Ref: 3760.

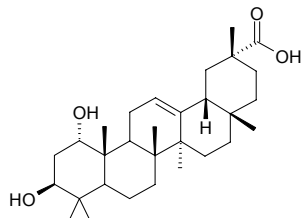
**10994 Illudin J₂**

$C_{15}H_{22}O_3$ (250.34). Oil, $[\alpha]_D = -26^\circ$ ($c = 0.034$, MeOH). Source: fungus *Coprinopsis episcopalis*. Ref: 3760.

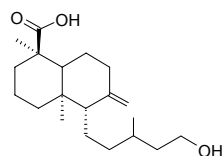


10995 Imberbic acid

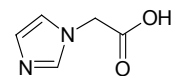
$C_{30}H_{48}O_4$ (472.71). Source: WU MAO FENG CHE ZI *Combretum imberbe*. Ref: 1521.

**10996 Imbricatolic acid**

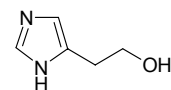
$C_{20}H_{34}O_3$ (322.49). Source: MA WEI SONG YE *Pinus massoniana*, *Araucaria imbricata*. Ref: 660, 1521.

**10997 1-Imidazolylacetic acid**

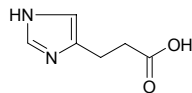
$C_5H_6N_2O_2$ (126.12). mp 268–269°C (dec). Source: GUI GAI *Coprinus atramentarius*. Ref: 6.

**10998 2-(4'-Imidazolylethanol)**

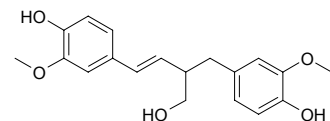
$C_5H_8N_2O$ (112.13). Source: GUI GAI *Coprinus atramentarius*. Ref: 6.

**10999 Imidazolylpropionic acid**

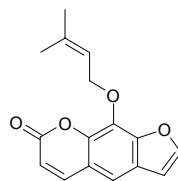
[1074-59-5] $C_6H_8N_2O_2$ (140.14). mp 206–208°C. Source: GUI GAI *Coprinus atramentarius*. Ref: 6, 1521.

**11000 Imperanene**

$C_{19}H_{22}O_5$ (330.38). Pharm: Platelet aggregation inhibitor (rbt, induced by thrombase, 0.3mmol/L, InRt = 100%). Source: BAI MAO GEN⁽¹⁾ *Imperata cylindrica* var. *major*. Ref: 5501.

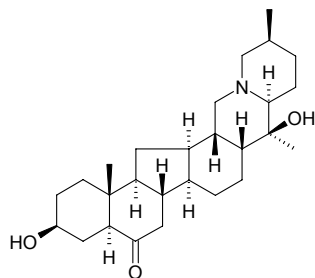
**11001 Imperatorin**

[482-44-0] $C_{16}H_{14}O_4$ (270.29). Yellow amorphous powder, mp 102–104°C. Pharm: NO Production inhibitor (LPS-activated mouse peritoneal macrophages, $IC_{50} = 60\mu\text{mol/L}$, control *L*-NMMA, $IC_{50} = 28\mu\text{mol/L}$)^[4454]; reversing MDR of KBV200 cells (obviously)^[2787]; PGE₂ production inhibitor (rat peritoneal macrophages, LPS-induced, 0.1 $\mu\text{mol/L}$; inhibits LPS-induced expression of COX-2 and mPGES, not directly inhibits COX-1 and COX-2)^[5392]; T-cell Proliferation inhibitor^[4071]; cytotoxic (24h: HL-60, $IC_{50} = 18.8\mu\text{g/mL}$, control Adriamycin $IC_{50} < 0.10\mu\text{g/mL}$; P₃₈₈, $IC_{50} = 20.2\mu\text{g/mL}$, Adriamycin $IC_{50} < 0.10\mu\text{g/mL}$; Colon205, $IC_{50} > 50\mu\text{g/mL}$, Adriamycin $IC_{50} = 0.63\mu\text{g/mL}$; HeLa, $IC_{50} > 50\mu\text{g/mL}$, Adriamycin $IC_{50} = 0.15\mu\text{g/mL}$)^[5486]; cytotoxic (12h: HL-60, $IC_{50} = 26.9\mu\text{g/mL}$, control Adriamycin $IC_{50} = 0.18\mu\text{g/mL}$; primary culture hmn PBMCs, $IC_{50} = 68.1\mu\text{g/mL}$, SI = 2.5, Adriamycin $IC_{50} = 0.54\mu\text{g/mL}$, SI = 3.3)^[5486]; antileishmanial (*Leishmania major* promastigote, 10 $\mu\text{mol/L}$, survival = (70.5±5.0)%, 1 $\mu\text{mol/L}$, survival = (83.0±1.9)%, control Amphotericin B, 10 $\mu\text{mol/L}$, survival = (0.20±0.04)%, 1 $\mu\text{mol/L}$, survival = (71.9±4.4%))^[3797]; antifungal inactive (silica gel TLC, *Cladosporium cucumerinum*, control Nystatin, MIA = 0.2 μg)^[3797]. Source: AO PA CAO *Oppopanax chironium* (root), BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*] (dried root: content scope of 6 origins = 0.065%–0.141%, mean content = 0.104%)^[5508], BEI SHA SHEN *Glehnia littoralis* (root: mean content of 6 origins = 0.00109%)^[5508], CHOU SHAN YANG *Oriza japonica* (stem: yield = 0.001%dw)^[4774], FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], FEN CHA DANG GUI *Angelica furcijuga* (flower), HANG BAI ZHI *Angelica taiwaniana* (dried root: content scope of 19 origins = 0.042%–0.168%, mean content = 0.103%)^[5508], JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], OU QIAN HU *Peucedanum ostruthium* (in 1933 the compound was isolated from the plant by E.Spath)^[5505], QI BAI ZHI *Angelica dahurica* cv. *Qibaizhi* (sundried root: content scope of 10 origins = 0.142%–0.296%, mean content = 0.213%)^[5516], SHE CHUANG ZI *Cnidium monnieri* (ripe seed: content scope = 1.8%–2.2%)^[5501], mean content = 1.30%)^[5508], SONG YE FANG FENG *Seseli yunnanense*, YUN NAN QIANG HUO *Pleurospermum rivulorum*, YUN QIAN HU *Peucedanum rubricaulis*, *Niphogeton ternata*, *Thamnosma rhodesica* (root). Ref: 2, 11, 177, 549, 551, 660, 2787, 3797, 4071, 4156, 4454, 4774, 5392, 5486, 5501, 5505, 5508, 5516.

**11002 Imperialine**

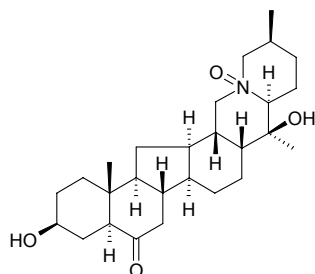
Sipeimine⁺; Kashmirine; Raddeanine [61825-98-7] $C_{27}H_{43}NO_3$ (429.65). Colorless hexagonal–prisms (EtOH), mp 273–275°C (dec), $[\alpha]_D^{23} = -32^\circ$ ($c = 0.5$, $CHCl_3$), mp 267–269°C; Colorless prismatic crystals (ethanol), mp 269°C, $[\alpha]_D^{18} = -33.8^\circ$ ($c = 0.696$, chloroform); $[\alpha]_D^{19} = -39.4^\circ$ ($c = 0.838$, absolute ethanol). Pharm: AChE inhibitor ($IC_{50} > 500\mu\text{mol/L}$, control Eserine, $IC_{50} = (0.41\pm 0.001)\mu\text{mol/L}$)^[4217]; BChE inhibitor ($IC_{50} = (121.5\pm 6.6)\mu\text{mol/L}$, control Eserine, $IC_{50} = (0.857\pm 0.008)\mu\text{mol/L}$)^[4217]; antispasmodic (spasm

caused by acetylcholine chloride, di-*p*-octylphenylphosphoric acid histamine and BaCl₂); smooth muscle relaxant (gpg ileum *in vitro*, rbt duodenum *in vitro*, rat uterus *in vitro*, rat small intestine *in vivo*); vasodilator (peripheral, anesthetic dog, causes low blood pressure); LD₅₀ (rat) = 90mg/kg, (rat, chloride) = 50mg/kg. **Source:** AN ZI BEI MU *Fritillaria unibracteata* (bulb: mean content = 0.00245%)^[5508], CHUAN BEI MU *Fritillaria cirrhosa* (bulb: mean content = 0.056%)^[5508], GAN SU BEI MU *Fritillaria przewalskii*, LENG SHA BEI MU *Fritillaria delavayi*, NING XIA BEI MU *Fritillaria taipaiensis* var. *ningxiaensis*, XI BEI MU *Fritillaria imperialis* (bulb), XIN JIANG BEI MU *Fritillaria walujewii*, YI BEI MU *Fritillaria pallidiflora*. **Ref:** 4, 6, 271, 658, 660, 1521, 4217, 5508.



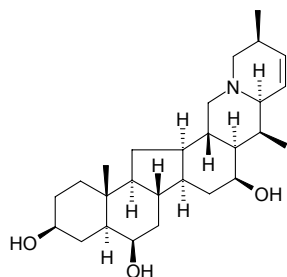
11003 Imperialine N-oxide

C₂₇H₄₃NO₄ (445.65). **Source:** YI BEI MU *Fritillaria pallidiflora*. **Ref:** 660.



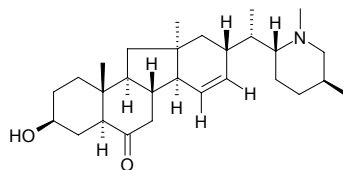
11004 Impericine

(20*R*,22*S*,25*S*)-5α-Cevanin-23-ene-3β,6β,16β-triol C₂₇H₄₃NO₃ (429.65). Needle-like crystals, mp 195~197°C (dec), [α]_D²⁵ = -28° (*c* = 0.5, CHCl₃). **Pharm:** AChE inhibitor (IC₅₀ = (67.97±2.46)μmol/L, control Eserine, IC₅₀ = (0.41±0.001)μmol/L); BChE inhibitor (IC₅₀ = 1.607μmol/L, control Eserine, IC₅₀ = (0.857±0.008)μmol/L). **Source:** XI BEI MU *Fritillaria imperialis* (bulb). **Ref:** 4217.



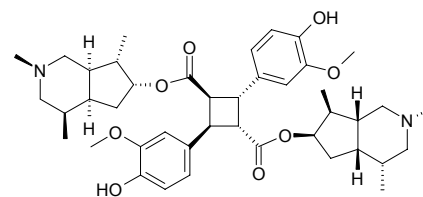
11005 Impranine

3*S*,17*R*,20*S*,22*R*)-5α-Impra-15,16-ene-6-one C₂₈H₄₅NO₂ (427.68). Amorphous powder, [α]_D²⁵ = +28° (*c* = 0.05, MeOH). **Source:** XI BEI MU *Fritillaria imperialis*. **Ref:** 3372.



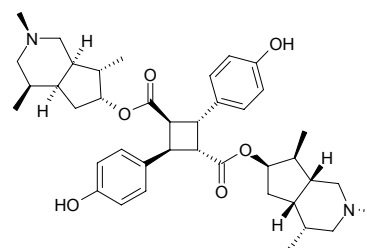
11006 Incarvilleine

C₄₂H₅₈N₂O₈ (718.94). **Source:** JIAO HAO *Incarvillea sinensis* (aerial parts). **Ref:** 4509.



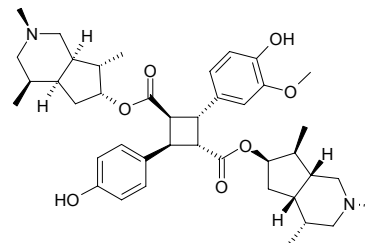
11007 Incarvilleine C

C₄₀H₅₄N₂O₆ (658.89). White powder, [α]_D¹⁷ = -3.2° (*c* = 0.30, CHCl₃). **Source:** JIAO HAO *Incarvillea sinensis*. **Ref:** 2305.



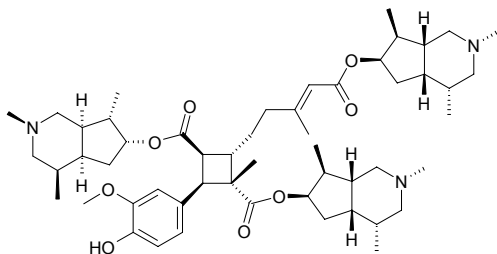
11008 Incarvilleine D

C₄₁H₅₆N₂O₇ (688.91). White powder, [α]_D¹⁶ = -5.1° (*c* = 0.30, CHCl₃). **Source:** JIAO HAO *Incarvillea sinensis*. **Ref:** 2305.

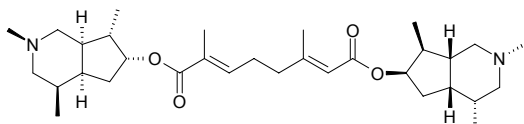


11009 Incarvilleatine E

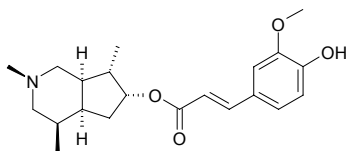
$C_{53}H_{81}N_3O_8$ (888.25). White powder, $[\alpha]_D^{23} = -6.4^\circ$ ($c = 0.32$, $CHCl_3$). Source: JIAO HAO *Incarvillea sinensis* (aerial parts). Ref: 4509.

**11010 Incarvine A**

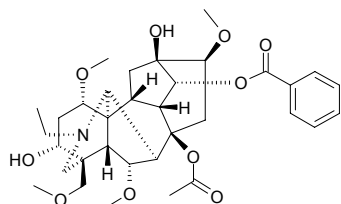
$C_{32}H_{52}N_2O_4$ (528.78). Source: JIAO HAO *Incarvillea sinensis* (aerial parts). Ref: 4509.

**11011 Incarvine C**

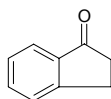
$C_{21}H_{29}NO_4$ (359.47). Source: JIAO HAO *Incarvillea sinensis* (aerial parts). Ref: 4509.

**11012 Indaconitine**

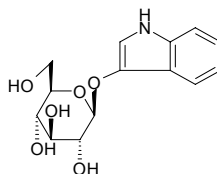
[4491-19-4] $C_{34}H_{47}NO_{10}$ (629.75). Crystals (Et_2O), mp 200–203°C, mp 190–191°C, $[\alpha]_D = +18.3^\circ$ ($c = 2.0$, $EtOH$). Pharm: Toxin. Source: FA KANG WU TOU *Aconitum falconeri*, GUA YE WU TOU *Aconitum hemsleyanum*, NI BO ER WU TOU *Aconitum ferox*, ZHAN HUA WU TOU *Aconitum chasmanthum*, ZI WU TOU *Aconitum violaceum*. Ref: 658, 1521, 3171.

**11013 1-Indanone**

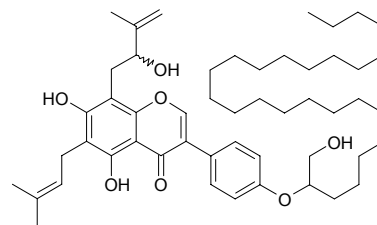
Indan-1-one; α -Indanone [83-33-0] C_9H_8O (132.16). mp 42°C. Source: JUE *Pteridium aquilinum* var. *latiusculum*. Ref: 6.

**11014 Indican glucoside**

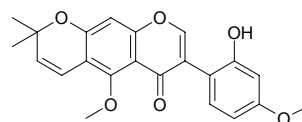
$C_{14}H_{17}NO_6$ (295.29). mp 178–180°C (anhydride). Source: BAN LAN GEN *Isatis indigotica* (dried root: content = 0.0145%)^[5508], DA QING YE *Isatis indigotica* (dried leaf: content = 0.0305%)^[5508], GANG BAN GUI GEN *Polygonum perfoliatum*, LIAO LAN YE *Polygonum tinctorium* (dried leaf: content = 4.069% (period of dense leaves))^[5508], MU LAN⁽²⁾ *Indigofera tinctoria*. Ref: 6, 5508.

**11015 Indicanine D**

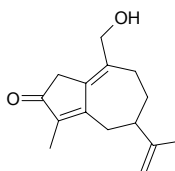
5,7-Dihydroxy-6(γ,γ -dimethylallyl)-8-(2''-hydroxy-3'''-methylbut-3'''-enyl)-4'-(1''-hydroxymethylpenta cosanyl)isoflavone $C_{51}H_{78}O_7$ (803.19). Yellow needles, mp 212–214°C, $[\alpha]_D^{20} = +8.5^\circ$ ($c = 0.045$, $MeOH$). Pharm: Cytotoxic (KB, $EC_{50} = 12.5\mu g/mL$). Source: CI TONG *Erythrina variegata* [Syn. *Erythrina indica*] (stem cortex). Ref: 5220.

**11016 Indicanine E**

2'-Hydroxy-5,4'-dimethoxy-2''-2''-dimethylpyran-[5''-6'':6,7]isoflavone $C_{22}H_{20}O_6$ (380.40). Brown crystals, mp 138–139°C. Source: CI TONG *Erythrina variegata* [Syn. *Erythrina indica*] (stem cortex). Ref: 5220.

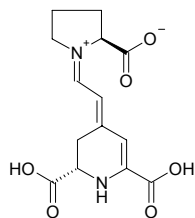
**11017 Indicanone**

$C_{15}H_{20}O_2$ (232.33). Colorless oil, $[\alpha]_D^{25} = +14.3^\circ$, ($c = 0.11$, $MeOH$). Pharm: NO production inhibitor (mus, macrophage-like cell line, RAW264.7, activated by LPS and recombinant mouse IFN- γ , $IC_{50} = 9.3\mu mol/L$, control Quercetin, $IC_{50} = 24.8\mu mol/L$)^[2541]; inhibits the inducible nitric oxide synthase (iNOS) gene expression (LPS/IFN- γ treatment increased the level of iNOS mRNA expression, and indicanone (a sesquiterpene of guanine type) inhibits this increase); cytotoxic inactive (MTT assay, 3–30 $\mu mol/L$ didn't show any cytotoxic effect)^[2541]; anti-inflammatory (may be useful for the treatment of various inflammatory diseases). Source: LIAO GE WANG GEN *Wikstroemia indica*. Ref: 2541.

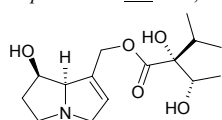


11018 Indicaxanthin

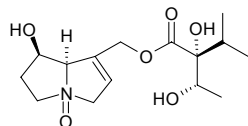
[2181-75-1] $C_{14}H_{16}N_2O_6$ (308.29). Orange crystals (H_2O), mp 160~162°C (dec). **Pharm:** Yellow pigment. **Source:** LI GUO XIAN REN ZHANG *Opuntia ficus-indica*, ZI MO LI GEN *Mirabilis jalapa*, DA HUA MA CHI XIAN *Portulaca grandiflora*. **Ref:** 6, 658, 1521.

**11019 Indicine**

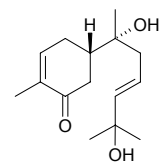
[480-82-0] $C_{15}H_{25}NO_5$ (299.37). **Pharm:** Antineoplastic (mus leukemia, its N-oxide being more effective); hepatotoxin (animal model). **Source:** DA WEI YAO *Heliotropium indicum*, BAO JING TIAN JIE CAI *Heliotropium amplexicaule*. **Ref:** 658, 1521.

**11020 Indicine N-oxide**

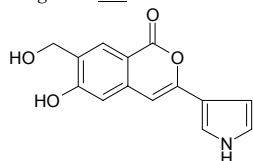
$C_{15}H_{25}NO_6$ (315.37). Combining with one methanol (methanol-acetone), colorless acicular crystals, easy decomposing under moisture, mp 130~131°C (decomposition point 165~166°C). **Pharm:** Antineoplastic (mus, P_{388} , 50~800mg/kg, continuous ip administration produces good treatment results, inefficient by orl or sc); CVS activity (dog, ip, 500mg/kg, electrocardiogram changed); supertoxic agent (ip, 2000~3000mg/kg, supertoxic agent to heart, spleen, kidney and duodenum). **Source:** DA WEI YAO *Heliotropium indicum*. **Ref:** 661.

**11021 Indicumenone**

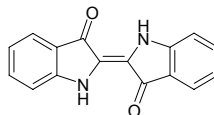
$C_{15}H_{24}O_3$ (252.36). **Source:** YE JU HUA *Chrysanthemum indicum*. **Ref:** 660.

**11022 Indigotiisocoumarin A**

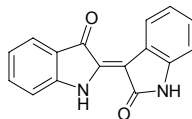
3-(3-Pyrrol)-6-hydroxy-7-hydroxymethyl-isocoumarin $C_{14}H_{11}NO_4$ (257.25). Red crystals (MeOH), mp 130~131°C. **Source:** BAN LAN GEN *Isatis indigotica*. **Ref:** 4905.

**11023 Indigotin**

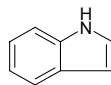
Indigo [482-89-3] $C_{16}H_{10}N_2O_2$ (262.27). Blue powder, mp 390~392°C. **Pharm:** Cytotoxic (mus, Lewis lung carcinoma, W256 sarcoma)^[5369], cyclin-dependent kinase inhibitor^[5369]. **Source:** BAN LAN GEN *Isatis indigotica*, DA QING YE *Isatis indigotica* (leaf: content scope = 2.21%~8.00%^[5501]), LIAO LAN YE *Polygonum tinctorium*, MU LAN⁽²⁾ *Indigofera tinctoria*. **Ref:** 2, 660, 1521, 5369, 5501.

**11024 Indirubin**

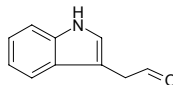
Courouptine B [479-41-4] $C_{16}H_{10}N_2O_2$ (262.27). mp 356~358°C. **Pharm:** Antineoplastic (mus leukemia L₁₇₁₂, rat W₂₅₆); digestive tract irritant; treatment of chronic granulocytic leukemia (total effective rate > 90%); LD₅₀ (mus, iv) = 1.1~2.0g/kg. **Source:** BAN LAN GEN *Isatis indigotica* (root: content = 0.0058%^[5501]), DA QING YE *Isatis indigotica* (dried leaf: mean content = 0.14%^[5508]), LIAO LAN YE *Polygonum tinctorium* (dried leaf: content = 0.0063%), MA LAN GEN *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*] (root: content = 0.0036%^[5501]), MU LAN⁽²⁾ *Indigofera tinctoria*. **Ref:** 4, 658, 660, 5501, 5508.

**11025 Indole**

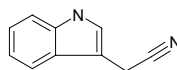
2,3-Benzopyrrole [120-72-9] C_8H_7N (117.15). mp 52°C, bp 253~254°C. **Pharm:** Insect attractant. **Source:** KU BAO *Sauromatum guttatum*, CHA YE *Camellia sinensis* [Syn. *Thea sinensis*], LA MEI HUA *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*], LING MAO XIANG *Viverra zibetha*, SHUI XIAN HUA *Narcissus tazetta* var. *chinensis*, *Amorphophallus* sp., *Jasminum* sp., *Citrus* sp. **Ref:** 6, 658.

**11026 Indole-3-acetaldehyde**

[2591-98-2] $C_{10}H_9NO$ (159.19). **Source:** GAN LAN *Brassica oleracea* var. *capitata*. **Ref:** 6.

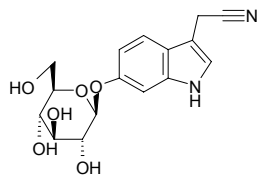
**11027 Indole-3-acetonitrile**

[771-51-7] $C_{10}H_8N_2$ (156.19). mp 36.0~36.5°C. **Source:** FENG XIAN *Impatiens balsamina*. **Ref:** 6, 660.

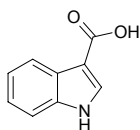


11028 Indole-3-acetonitrile-6-O-β-D-glucopyranoside

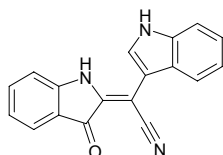
$C_{16}H_{18}N_2O_6$ (334.33). Brown yellow powder, mp 240–242°C. Source: BAN LAN GEN *Isatis indigotica*. Ref: 855.

**11029 Indole-3-carboxylic acid**

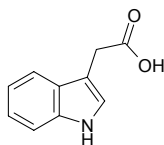
$C_9H_7NO_2$ (161.16). Pharm: Anti-HIV (inhibits HIV replication, H9 Lymphocytic Cells, IC_{50} (concentration that inhibits uninfected H9 cell growth by 50%) = 14.40 μg/mL, EC_{50} = 2.41 μg/mL, TI = 6.79 μg/mL, control AZT, IC_{50} = 500 μg/mL, EC_{50} = 0.0007 μg/mL, TI = 710000); cytotoxic (hmn cancer lines A549, EC_{50} = 4.6 μg/mL, hmn cancer lines MCF7, EC_{50} = 12.9 μg/mL). Source: NAN TOU QIU HAI TANG *Begonia nantoensis* (rhizome). Ref: 4267.

**11030 (E)-2-[(3'-Indole)cyanomethylene]-3-indolinone**

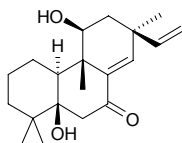
$C_{18}H_{11}N_3O$ (285.31). Purple powder, mp 213–215°C. Source: BAN LAN GEN *Isatis indigotica*. Ref: 2465.

**11031 3-Indolylacetic acid**

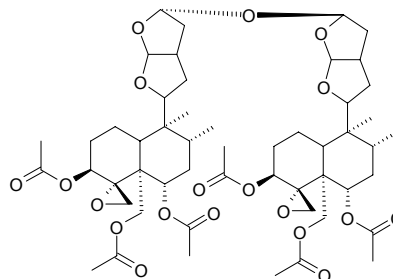
Heteroauxin; Rhizopin [87-51-4] $C_{10}H_9NO_2$ (175.19). Crystals ($CHCl_3$), mp 164–165°C. Pharm: Plant growth hormone. Source: LV SUN PIAN *Sinocalamus oldhami*, PING GUO *Malus pumila*, WU HUA GUO *Ficus carica*, YUAN CAN SHA *Bombyx mori*, occurs in many plants. Ref: 6, 660, 1521.

**11032 Ineketone**

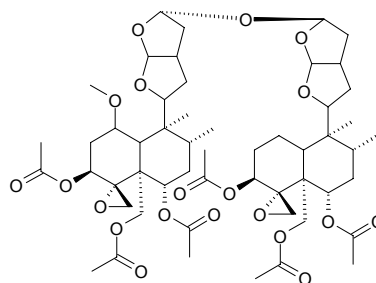
[62574-18-9] $C_{20}H_{30}O_3$ (318.46). Crystals (EtOH–hexane), mp 206–209°C. Pharm: Germination inhibitor. Source: NUO DAO *Oryza sativa* var. *glutinosa*. Ref: 658.

**11033 Inerme A**

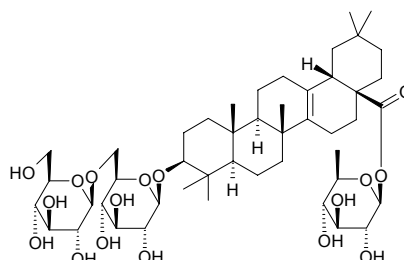
$C_{52}H_{74}O_{19}$ (1003.16). Viscous mass, $[\alpha]_D = -18.6^\circ$ ($CHCl_3$). Source: KU LANG SHU *Clerodendrum inerme* (leaf). Ref: 5261.

**11034 Inerme B**

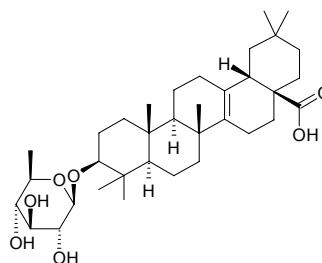
$C_{53}H_{76}O_{20}$ (1033.18). Viscous mass, $[\alpha]_D = -12.6^\circ$ ($CHCl_3$). Source: KU LANG SHU *Clerodendrum inerme* (leaf). Ref: 5261.

**11035 Inermiside I**

6-Deoxy-β-D-glucopyranosyl-[3-O-β-D-glucopyranosyl-(1→6)-β-D-glucopyranosyl]-pyrocincholate $C_{47}H_{76}O_{17}$ (913.12). Needles (MeOH:H₂O = 3:2), mp 226–228°C, $[\alpha]_D^{25} = -32.52^\circ$ ($c = 1$, MeOH). Source: WU CI MAO ZHU MU *Mitragyna inermis*. Ref: 2154.

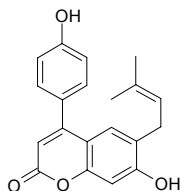
**11036 Inermiside II**

6-Deoxy-β-D-glucopyranosyl-pyrocincholate $C_{35}H_{56}O_7$ (588.83). Needles (MeOH), mp 211–213°C, $[\alpha]_D^{25} = -0.125^\circ$ ($c = 0.001$, MeOH). Source: WU CI MAO ZHU MU *Mitragyna inermis*. Ref: 2154.

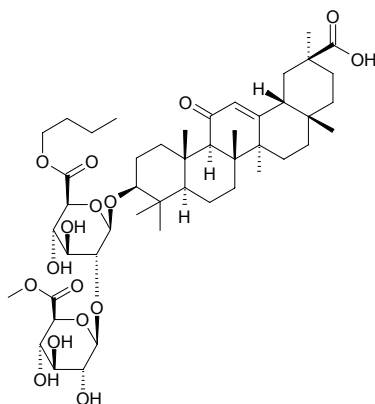


11037 Inflacoumarin A

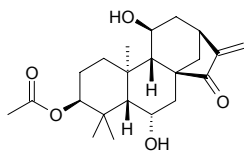
4-(4'-Hydroxy-phenyl)-6-prenyl-7-hydroxy-coumarin [158446-33-4]
 $C_{20}H_{18}O_4$ (322.36). Colorless acicular crystals, mp 232~233°C. Source:
 ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 302.

**11038 Inflasaponin I**

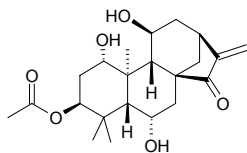
Glycyrrhetic acid-3-O- β -D-6"-n-methyl-glucuronopyranosyl-(1 \rightarrow 2)- β -D-6'-
 n-butyl-glucuronopyranoside $C_{47}H_{72}O_{16}$ (893.09). Colorless amorphous
 powder, mp 256~258°C. Source: ZHANG GUO GAN CAO *Glycyrrhiza*
inflata. Ref: 301.

**11039 Inflexanin A**

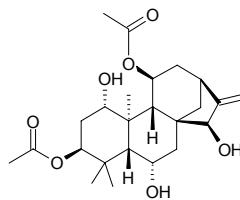
$C_{22}H_{32}O_5$ (376.50). Amorphous powder, $[\alpha]_D^{22} = -108.3^\circ$ ($c = 0.12$, MeOH).
Source: NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*].
Ref: 4067.

**11040 Inflexanin B**

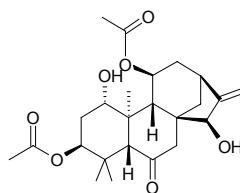
$C_{22}H_{32}O_6$ (392.50). Amorphous powder, $[\alpha]_D^{26} = -46.2^\circ$ ($c = 1.04$, MeOH).
Source: NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*].
Ref: 4067.

**11041 Inflexarabdonin A**

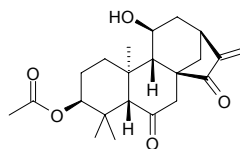
$C_{24}H_{36}O_7$ (436.55). mp 118~120°C, $[\alpha]_D^{27.5} = -5.5^\circ$ ($c = 1.95$, MeOH). Source:
 NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. Ref: 4067.

**11042 Inflexarabdonin B**

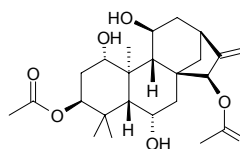
$C_{24}H_{36}O_7$ (434.53). Amorphous powder, $[\alpha]_D^{24} = -16.9^\circ$ ($c = 0.83$, MeOH).
Source: NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*].
Ref: 4067.

**11043 Inflexarabdonin C**

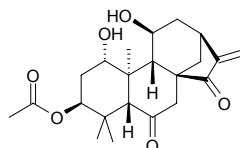
$C_{22}H_{30}O_5$ (374.48). mp 179~181°C, $[\alpha]_D^{24} = -55.2^\circ$ ($c = 0.87$, MeOH). Source:
 NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. Ref: 4067.

**11044 Inflexarabdonin D**

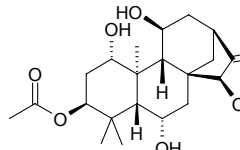
$C_{24}H_{36}O_7$ (436.55). mp 210~212°C, $[\alpha]_D^{24} = -17.1^\circ$ ($c = 0.82$, MeOH). Source:
 NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. Ref: 4067.

**11045 Inflexarabdonin E**

$C_{22}H_{30}O_6$ (390.48). mp 234~237°C, $[\alpha]_D^{25.5} = -42.8^\circ$ ($c = 0.80$, MeOH).
Source: NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*].
Ref: 4067.

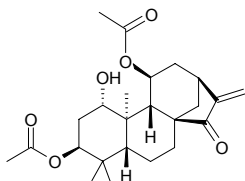
**11046 Inflexarabdonin F**

$C_{22}H_{34}O_6$ (394.51). mp 263~266°C, $[\alpha]_D^{27} = +13.4^\circ$ ($c = 1.10$, MeOH). Source:
 NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. Ref: 4067.

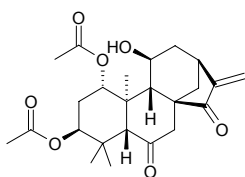


11047 Inflexarabdonin G

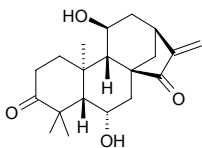
$C_{24}H_{34}O_6$ (418.53). Amorphous powder, $[\alpha]_D^{25.5} = -54.9^\circ$ ($c = 0.97$, MeOH).
 Source: NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*].
 Ref: 4067.

**11048 Inflexarabdonin B**

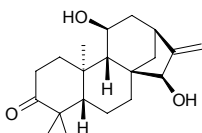
$C_{24}H_{32}O_7$ (432.52). mp 125–128°C, $[\alpha]_D^{24} = -64.2^\circ$ ($c = 0.30$, MeOH). Source:
 NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. Ref: 4067.

**11049 Inflexarabdonin I**

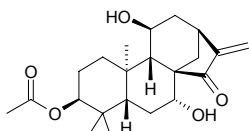
$C_{20}H_{28}O_4$ (332.44). mp 232–234°C, $[\alpha]_D^{23.5} = -106.4^\circ$ ($c = 0.87$, MeOH).
 Source: NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*].
 Ref: 4067.

**11050 Inflexarabdonin J**

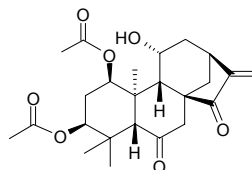
$C_{20}H_{30}O_3$ (318.46). Amorphous powder, $[\alpha]_D^{27} = -63.4^\circ$ ($c = 0.56$, MeOH).
 Source: NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*].
 Ref: 4067.

**11051 Inflexarabdonin K**

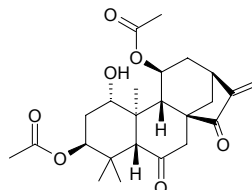
$C_{22}H_{32}O_5$ (376.50). mp 208–210°C, $[\alpha]_D^{26} = -73.7^\circ$ ($c = 0.57$, MeOH). Source:
 NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. Ref: 4067.

**11052 Inflexin**

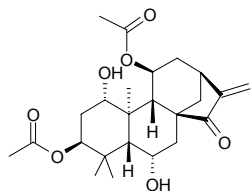
[39388-66-4] $C_{24}H_{32}O_7$ (432.52). Crystals, mp 203–205°C, $[\alpha]_D^{19} = -47^\circ$ ($c = 1$, EtOH). Pharm: Cytotoxic; insect antifeedant. Source: NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. Ref: 658, 1521.

**11053 Inflexin II**

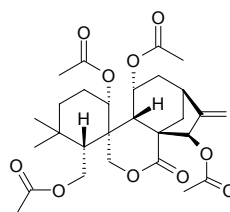
$C_{24}H_{32}O_7$ (432.52). mp 202–204°C, $[\alpha]_D^{29} = -57.1^\circ$ ($c = 1.0$, MeOH). Source:
 LONG SHENG XIANG CHA CAI *Isodon lungshengensis*, NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. Ref: 690, 4067.

**11054 Inflexinol**

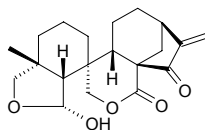
$C_{24}H_{34}O_7$ (434.53). mp 202–204°C, $[\alpha]_D^{29} = -57.1^\circ$ ($c = 1.0$, MeOH). Source:
 NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. Ref: 4067.

**11055 Inflexusin**

$C_{28}H_{38}O_{10}$ (534.61). mp 217–219°C, $[\alpha]_D^{25} = -100^\circ$ ($c = 0.08$, MeOH). Source: LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis* (leaf), NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. Ref: 4067, 4353.

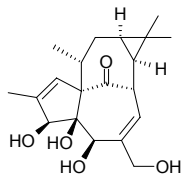
**11056 Inflexusin B**

Macrocalyxoformin C [182266-57-5] $C_{20}H_{26}O_5$ (346.43). Colorless rhomboid crystals (acetone), mp 221–223°C, $[\alpha]_D^{18} = -187.6^\circ$ ($c = 0.5$, MeOH); mp 220–222°C, $[\alpha]_D^6 = -186.7^\circ$ ($c = 0.5$, MeOH). Pharm: Cytotoxic (EAC, *in vitro*); antibacterial (*Staphylococcus aureus*, *Bacillus subtilis*); antifungal (*Candida albicans*). Source: DA E BIAN XING XIANG CHA CAI *Isodon macrocalyx*, NEI ZHE XIANG CHA CAI *Isodon inflexa* [Syn. *Rabdosia inflexa*]. Ref: 491, 4067.

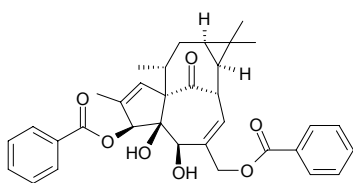


11057 Ingenol

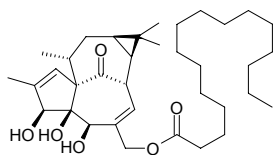
[30220-46-3] C₂₀H₂₈O₅ (348.44). Source: JI CHANG LANG DU *Euphorbia esula*. Ref: 658.

**11058 Ingenol-3,20-dibenzoate**

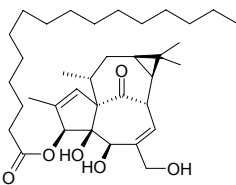
C₃₄H₃₆O₇ (556.66). [α]_D²⁸ = +268° (*c* = 0.0026, ethanol). Pharm: Antineoplastic (mus P₃₈₈, 130–360 μg/kg). Source: JI CHANG LANG DU *Euphorbia esula*. Ref: 661.

**11059 Ingenol-20-hexadecanoate**

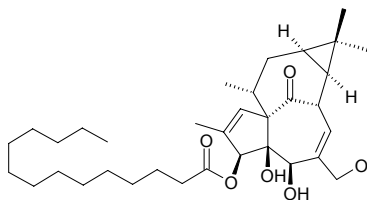
C₃₆H₅₈O₆ (586.86). Source: QIAN JIN ZI *Euphorbia lathyris*. Ref: 660.

**11060 Ingenol-3-hexadecanoate**

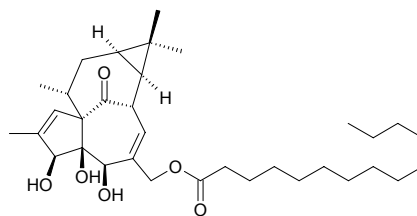
C₃₆H₅₈O₆ (586.86). Source: QIAN JIN ZI *Euphorbia lathyris*. Ref: 660.

**11061 Ingenol-3-myristinate**

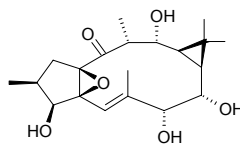
C₃₄H₅₄O₆ (558.81). Yellowish colloid, [α]_D²⁰ = +22° (*c* = 0.2, MeOH). Source: DA GUO DA JI *Euphorbia wallichii* (root). Ref: 4811.

**11062 Ingenol-20-myristinate**

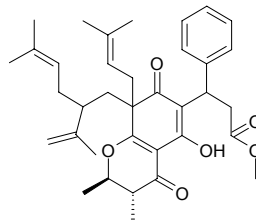
C₃₄H₅₄O₆ (558.81). Yellowish colloid, [α]_D²⁰ = -14° (*c* = 0.1, MeOH). Source: DA GUO DA JI *Euphorbia wallichii* (root). Ref: 4811.

**11063 Ingol**

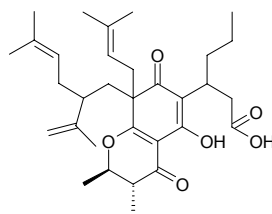
C₂₀H₃₀O₆ (366.46). Source: JU DA JI *Euphorbia ingens*, *Euphorbia kamerunica* Ref: 1521.

**11064 Inocalophyllin A methyl ester**

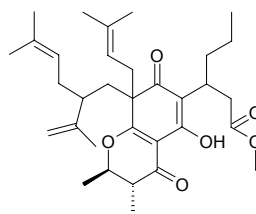
C₃₆H₄₆O₆ (574.76). Amorphous solid, [α]_D²⁵ = -122° (*c* = 0.05, CH₂Cl₂). Source: HAI TANG GUO *Calophyllum inophyllum*. Ref: 4354.

**11065 Inocalophyllin B**

C₃₂H₄₆O₆ (526.72). Amorphous solid, [α]_D²⁵ = -95° (*c* = 0.05, CH₂Cl₂). Source: HAI TANG GUO *Calophyllum inophyllum*. Ref: 4354.

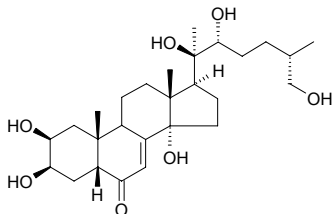
**11066 Inocalophyllin B methyl ester**

C₃₃H₄₈O₆ (540.75). Amorphous solid, [α]_D²⁵ = -138° (*c* = 0.05, CH₂Cl₂). Source: HAI TANG GUO *Calophyllum inophyllum*. Ref: 4354.

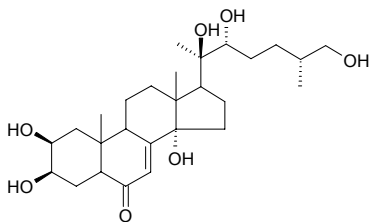


11067 Inokosterone

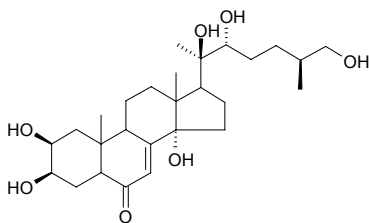
[15130-85-5] $C_{27}H_{44}O_7$ (480.65). Crystals (MeOH–EtOAc), mp 255°C (dec). **Pharm:** Hypoglycemic (rat, hyperglycemia due to glucagon, 0.1–10mg/kg iv or 1–100mg/kg orl); insect ecdysone (molting hormone); low toxin. **Source:** NIU XI *Achyranthes bidentata*, RI BEN NIU XI *Achyranthes fauriei* (the compound was isolated from the plant by Tsunematsu Takemoto et al. in 1967)^[5505], SANG YE *Morus alba*, DONG FANG GOU JI *Woodwardia orientalis*. **Ref:** 2, 658, 5501, 5505.

**11068 (25R)-Inokosterone**

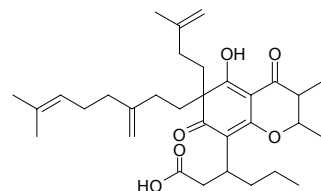
$C_{27}H_{44}O_7$ (480.65). White needles, mp 242–244°C, $[\alpha]_D^{20} = +78.3^\circ$ ($c = 0.007$, MeOH). **Source:** NIU XI *Achyranthes bidentata*. **Ref:** 4854.

**11069 (25S)-Inokosterone**

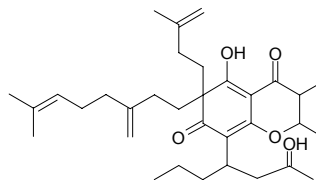
$C_{27}H_{44}O_7$ (480.65). White needles, mp 242–244°C, $[\alpha]_D^{20} = +90.0^\circ$ ($c = 0.006$, MeOH). **Source:** NIU XI *Achyranthes bidentata*. **Ref:** 4854.

**11070 Inophylloic acid**

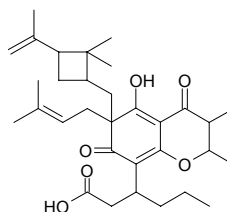
$C_{32}H_{46}O_6$ (526.72). **Source:** HAI TANG GUO *Calophyllum inophyllum*. **Ref:** 1521.

**11071 Inophylloic acid**

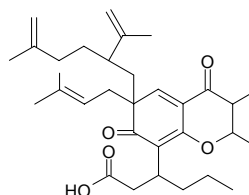
$C_{34}H_{50}O_4$ (522.78). **Pharm:** Cytotoxic (KB, $IC_{50} = 9.7\mu\text{g/mL}$); antibacterial (*Staphylococcus aureus*, 20 $\mu\text{g/disk}$, DIZ = 9.0mm; *Escherichia coli*, 20 $\mu\text{g/disk}$, inactive; *Vibrio anguillarum*, 20 $\mu\text{g/disk}$, inactive); antifungal inactive (*Candida tropicalis*, 20 $\mu\text{g/disk}$). **Source:** HAI TANG GUO *Calophyllum inophyllum* (root cortex and nut). **Ref:** 3866.

**11072 Inophylloic acid A₁**

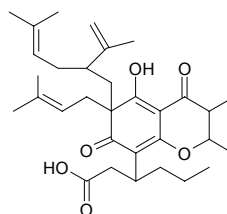
$C_{32}H_{46}O_6$ (526.72). **Source:** HAI TANG GUO *Calophyllum inophyllum*. **Ref:** 660.

**11073 Inophylloic acid A₂**

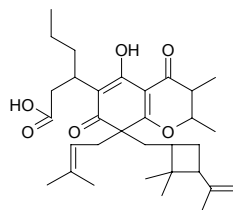
$C_{32}H_{46}O_5$ (510.72). **Source:** HAI TANG GUO *Calophyllum inophyllum*. **Ref:** 660.

**11074 Inophylloic acid A₃**

$C_{32}H_{46}O_6$ (526.72). **Source:** HAI TANG GUO *Calophyllum inophyllum*. **Ref:** 660.

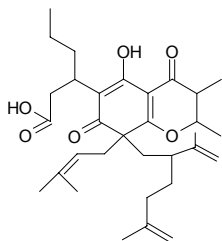
**11075 Inophylloic acid B₁**

$C_{32}H_{46}O_6$ (526.72). **Source:** HAI TANG GUO *Calophyllum inophyllum*. **Ref:** 660.

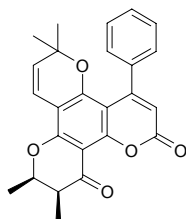


11076 Inophylloic acid B₂

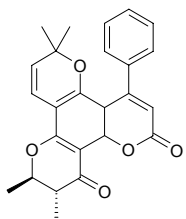
C₃₂H₄₆O₆ (526.72). Source: HAI TANG GUO *Calophyllum inophyllum*.
Ref: 660.

**11077 Inophyllolide**

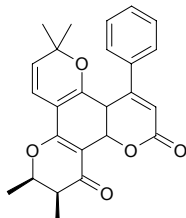
C₂₅H₂₂O₅ (402.45). mp (±) 186~188°C, (+)10, 11-*trans*-: crystals (benzene-hexane or ethyl acetate), mp 188~191°C, [α]_D²⁰ = +13° (c = 1.1, chloroform); (+)10, 11-*cis*: crystals (benzene-hexane), mp 149~151°C, [α]_D²⁰ = +70° (c = 1.2, chloroform). Pharm: Anticonvulsant; anti-inflammatory; fish toxin. Source: HAI TANG GUO *Calophyllum inophyllum*. Ref: 661.

**11078 Inophyllum C**

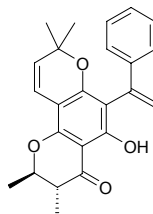
C₂₅H₂₄O₅ (404.47). Pharm: Antibacterial (*Staphylococcus aureus*, 20μg/disk, DIZ = 10.0mm; *Escherichia coli*, 20μg/disk, inactive; *Vibrio anguillarum*, 20μg/disk, inactive); antifungal inactive (*Candida tropicalis*, 20μg/disk). Source: HAI TANG GUO *Calophyllum inophyllum* (root cortex and nut). Ref: 3866.

**11079 Inophyllum E**

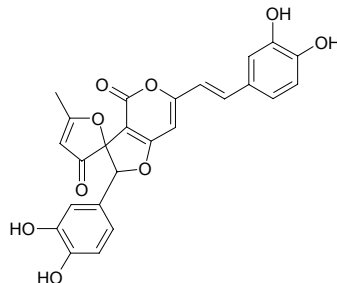
C₂₅H₂₄O₅ (404.47). Pharm: Cytotoxic inactive (KB, IC₅₀ = 36.1μg/mL); antibacterial (*Staphylococcus aureus*, 20μg/disk, DIZ = 13.0mm; *Escherichia coli*, 20μg/disk, inactive; *Vibrio anguillarum*, 20μg/disk, inactive); antifungal inactive (*Candida tropicalis*, 20μg/disk). Source: HAI TANG GUO *Calophyllum inophyllum* (root cortex and nut). Ref: 3866.

**11080 Inophynone**

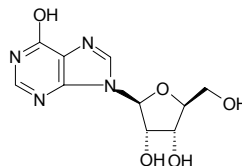
C₂₄H₂₄O₄ (376.46). Fine crystals, mp 115°C. Source: HAI TANG GUO *Calophyllum inophyllum*. Ref: 1878.

**11081 Inoscavin A**

C₂₅H₁₈O₉ (462.42). Pharm: Cytotoxic (*in vitro*, A549, IC₅₀ > 0.108μmol/L; BGC823, IC₅₀ > 0.108μmol/L; MCF7, IC₅₀ > 0.108μmol/L; Bel7402, IC₅₀ = 0.088μmol/L; Ketr3, IC₅₀ > 0.108μmol/L; HCT8, IC₅₀ > 0.108μmol/L; control Topotecan, A549, IC₅₀ = 0.0032μmol/L; BGC823, IC₅₀ = 0.0043μmol/L; MCF7, IC₅₀ = 0.0018μmol/L; Bel7402, IC₅₀ = 0.0012μmol/L; Ketr3, IC₅₀ = 0.0049μmol/L; HCT8, IC₅₀ = 0.0015μmol/L). Source: SANG HUANG *Phellinus igniarius* (sporocarp: yield = 0.0017%dw). Ref: 4747.

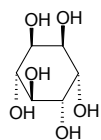
**11082 Inosine**

Aminosin; Inosine; Ribosine [58-63-9] C₁₀H₁₂N₄O₅ (268.23). mp 215°C^[6], [α]_D¹⁸ = -49.2° (c = 0.9, H₂O)^[5507]. Pharm: Normal component in human body (participator of metabolism of nucleic acid, energy metabolism and protein synthesis)^[5507]. Source: DONG CHONG XIA CAO *Cordyceps sinensis* (dried fungal stroma growing on larva of a caterpillar: content = 0.067%)^[5512], GOU QI YE *Lycium chinense*^[6], REN GONG YONG CHONG CAO *Cordyceps militaris* cv. (sclerotium and stroma: content = 0.010%)^[5512], TIAN CAI *Beta vulgaris*^[5507]. Ref: 6, 5507, 5512.

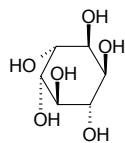


11083 Inositol

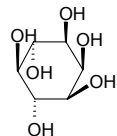
Chiro-Inositol $C_6H_{12}O_6$ (180.16). mp 247°C. **Pharm:** Growth factor for animals and microorganisms; antihypercholesterolemic, used in treatment of arteriosclerosis and hyperlipidemia; promotes lipometabolism (treatment of hepatic adipose infiltration). **Source:** AI YE *Artemisia argyi*, BAI JIANG *Patrinia villosa*, BEI MEI E ZHANG QIU *Liriodendron tulipifera*, CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], CHANG CHUN TENG *Hedera nepalensis* var. *sinensis*, DI JIN CAO *Euphorbia humifusa*, FENG RU *Apis cerana*, FENG XIANG JI SHENG *Viscum articulatum*, JIN YIN HUA *Lonicera japonica*, MU TONG *Akebia quinata*, NIU RU *Bos taurus domesticus*; *Bubalus bubalis*, NIU SHE TOU *Sonchus arvensis*, SHAN FAN GEN *Symplocos caudata*, WU TOU *Aconitum carmichaeli*, YANG YI *Capra hircus*; *Ovis aries*, YU BAI FU *Typhonium giganteum*, YU MI XU *Zea mays*. **Ref:** 2, 6, 658, 660, 2535.

**11084 Inositol b**

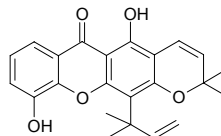
$C_6H_{12}O_6$ (180.16). mp 238°C. **Source:** AI YE *Artemisia argyi*, WU TOU *Aconitum carmichaeli*, CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], CHANG CHUN TENG *Hedera nepalensis* var. *sinensis*, DI JIN CAO *Euphorbia humifusa*, FENG RU *Apis cerana*, FENG XIANG JI SHENG *Viscum articulatum*, JIN YIN HUA *Lonicera japonica*, NIU RU *Bos taurus domesticus*; *Bubalus bubalis*, NIU SHE TOU *Sonchus arvensis*, YANG YI *Capra hircus*; *Ovis aries*, YU BAI FU *Typhonium giganteum*, YU MI XU *Zea mays*. **Ref:** 2, 6, 660.

**11085 Inositol c**

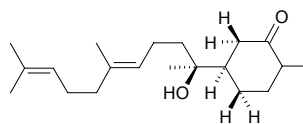
Myoinositol [87-89-8] $C_6H_{12}O_6$ (180.16). mp 218–219°C. **Source:** AI YE *Artemisia argyi*, CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], CHANG CHUN TENG *Hedera nepalensis* var. *sinensis*, DI JIN HETEROPOGON *contortus*, DI JIN CAO *Euphorbia humifusa*, FENG RU *Apis cerana*, FENG XIANG JI SHENG *Viscum articulatum*, JIN YIN HUA *Lonicera japonica*, LI MU *Lyonia ovalifolia*, MAO XU CAO *Clerodendranthus spicatus*, NAN ZHU ZI *Vaccinium bracteatum*, NIU RU *Bos taurus domesticus*; *Bubalus bubalis*, NIU SHE TOU *Sonchus arvensis*, SANG YE *Morus alba*, WU TOU *Aconitum carmichaeli*, YANG MEI *Myrica rubra*, YANG YI *Capra hircus*; *Ovis aries*, YING SU KE *Papaver somniferum*, YU BAI FU *Typhonium giganteum*, YU MI XU *Zea mays*, occurs in many plants. **Ref:** 2, 6, 660.

**11086 Inoxanthone**

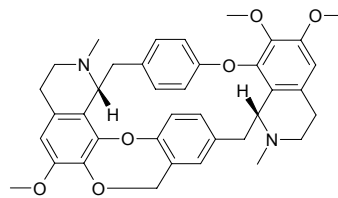
Blancoxanthone $C_{23}H_{22}O_5$ (378.43). Yellow needles (cyclohexane–EtOAc), mp 217°C; yellowish powder. **Pharm:** Antibacterial inactive (*Staphylococcus aureus*, 20µg/disk; *Escherichia coli*, 20µg/disk; *Vibrio anguillarum*, 20µg/disk)^[3866]; antifungal inactive (*Candida tropicalis*, 20µg/disk)^[3866]; Antivirus (hmn coronavirus strain 229E (HCoV-229E), 3µg/mL)^[4441]. **Source:** HAI TANG GUO *Calophyllum inophyllum* (root cortex and nut), *Calophyllum blancoi* (root). **Ref:** 3866, 4441.

**11087 Insecticidea diterpene**

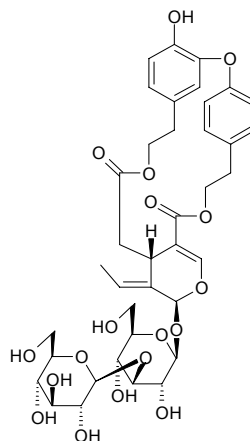
$C_{20}H_{34}O_2$ (306.49). **Source:** XIAN YE BA DOU *Croton linearis*. **Ref:** 4552.

**11088 Insularine**

[549-07-5] $C_{38}H_{40}N_2O_6$ (620.75). mp 160°C. **Source:** QIAN JIN TENG *Stephania japonica*. **Ref:** 6.

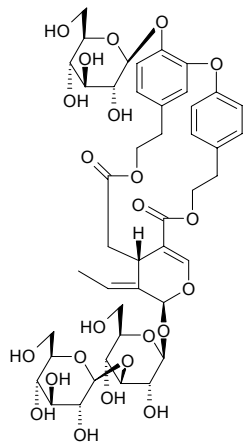
**11089 Insularoside-3'-O-β-D-glucoside**

Insularoside-3'-O-β-D-glucoside $C_{38}H_{46}O_{18}$ (790.78). Amorphous powder (CH₃OH). **Source:** KU LI MU YE *Fraxinus insularis*. **Ref:** 804.

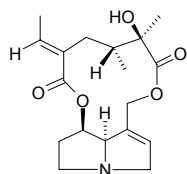


11090 Insularoside-6'''-O-β-glucosi-(3'→1)-β-D-glucoside

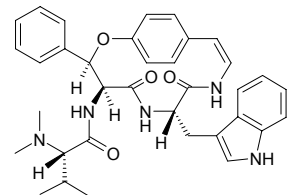
$C_{44}H_{56}O_{23}$ (952.92). Amorphous powder (CH₃OH). Source: KU LI MU YE *Fraxinus insularis*. Ref: 804.

**11091 Integerrimine**

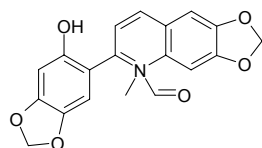
Squalidine [480-79-5] $C_{18}H_{25}NO_5$ (335.40). mp 168~170°C, 172.5°C. Pharm: Antineoplastic (transplant tumor of 6 animals); antihypertensive (dog, iv, 1~3mg/kg, anesthetic cat); antispasmodic (caused by histamine, acetylcholine and BaCl₂); hepatotoxic; inhibits intestinal movement (rbt, *in vitro*); muscle relaxant; mutagen (drosophila experiments); promotes uterine contraction (gpg); LD₅₀ (mus, iv) = 75mg/kg. Source: BA XI QIAN LI GUANG *Senecio brasiliensis*, DUAN HUA ZHU SHI DOU *Crotalaria breviflora*, GUANG YE ZHU SHI DOU *Crotalaria incana*, MI SAN QIAN LI GUANG *Senecio faberi* (whole herb: mean content = 10.2%)^[5508], NIU JIN QIAN LI GUANG *Senecio squalidus*, QUAN YUAN QIAN LI GUANG *Senecio integerrimus*, YA KE BEI QIAN LI GUANG *Senecio alpinus*. Ref: 4, 658, 5508.

**11092 Integerrine**

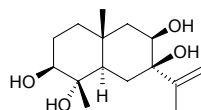
[18397-13-2] $C_{35}H_{39}N_5O_4$ (593.73). Needles (CHCl₃-petroleum ether), mp 258°C. Pharm: Antibacterial (gram-positive bacteria and lower fungi). Source: QUAN YUAN YE MEI ZHOU CHA *Ceanothus integerrimus*. Ref: 658.

**11093 Integriamide**

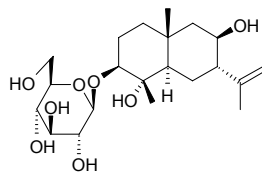
$C_{19}H_{15}NO_6$ (353.33). Source: RU DI JIN NIU *Zanthoxylum nitidum*. Ref: 660.

**11094 Integrifonol A**

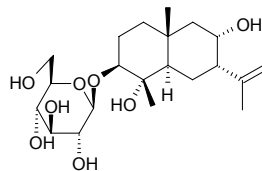
$C_{15}H_{26}O_4$ (270.37). Powder, $[\alpha]_D^{19} = +43.0^\circ$ ($c = 0.5$, MeOH). Source: QUAN YUAN YE TE SA JU *Tessaria integrifolia* (aerial parts). Ref: 3924.

**11095 Integrifoside A**

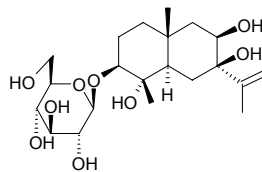
$C_{21}H_{36}O_8$ (416.52). Powder, $[\alpha]_D^{19} = -12.7^\circ$ ($c = 5.9$, MeOH). Pharm: Antiallergic (hyaluronidase inhibitor (activated hyaluronidase by compound 48/80 (Kakegawa et al., 1985), 0.2mmol/L, InRt = 3%, control DSCG). Source: QUAN YUAN YE TE SA JU *Tessaria integrifolia* (aerial parts). Ref: 3924.

**11096 Integrifoside B**

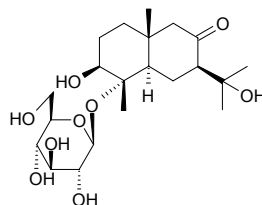
$C_{21}H_{36}O_8$ (416.52). Powder, $[\alpha]_D^{19} = -16.0^\circ$ ($c = 1.9$, MeOH). Source: QUAN YUAN YE TE SA JU *Tessaria integrifolia* (aerial parts). Ref: 3924.

**11097 Integrifoside C**

$C_{21}H_{36}O_9$ (432.52). Powder, $[\alpha]_D^{19} = 0^\circ$ ($c = 1.0$, MeOH). Source: QUAN YUAN YE TE SA JU *Tessaria integrifolia* (aerial parts). Ref: 3924.

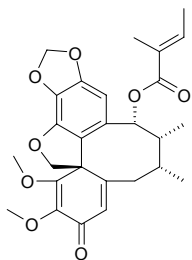
**11098 Integrifoside D**

$C_{21}H_{36}O_9$ (432.52). Powder, $[\alpha]_D^{19} = +39.4^\circ$ ($c = 0.8$, MeOH). Source: QUAN YUAN YE TE SA JU *Tessaria integrifolia* (aerial parts). Ref: 3924.

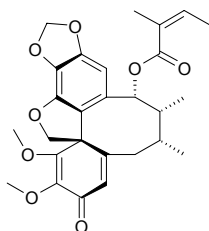


11099 Interiorin A

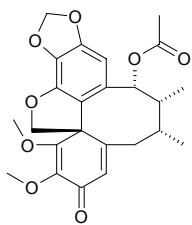
$C_{27}H_{30}O_8$ (482.54). Source: NEI NAN WU WEI ZI *Kadsura interior*. Ref: 2436.

**11100 Interiorin B**

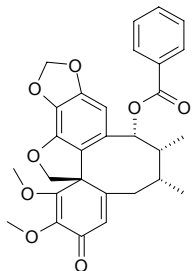
[133442-66-7] $C_{27}H_{30}O_8$ (482.54). Pharm: Antineoplastic (screened as potential antitumor promoters, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = $(13.5 \pm 0.6)\%$ (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 60%)^[4644]. Source: NEI NAN WU WEI ZI *Kadsura interior* (stem: yield = 0.0155%dw). Ref: 2436, 4644.

**11101 Interiorin C**

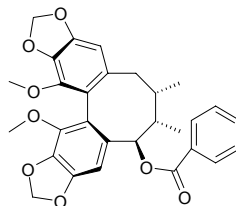
[133360-39-1] $C_{24}H_{26}O_8$ (442.47). Source: NEI NAN WU WEI ZI *Kadsura interior*. Ref: 2436.

**11102 Interiorin D**

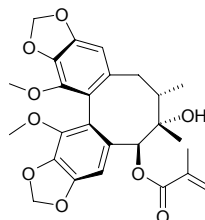
[133360-40-4] $C_{29}H_{28}O_8$ (504.54). Source: NEI NAN WU WEI ZI *Kadsura interior*. Ref: 2436.

**11103 Interiotherin A**

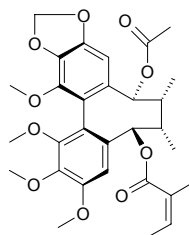
[181701-06-4] $C_{29}H_{28}O_8$ (504.54). Pharm: Antineoplastic (screened as potential antitumor promoters, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = $(18.3 \pm 1.0)\%$ (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 60%)^[4644]. Source: NEI NAN WU WEI ZI *Kadsura interior* (stem), NEI NAN WU WEI ZI *Kadsura interior*. Ref: 2436, 4644.

**11104 Interiotherin B**

[181701-07-5] $C_{27}H_{30}O_9$ (498.53). Pharm: Antineoplastic (screened as potential antitumor promoters, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = $(11.6 \pm 0.4)\%$ (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 60%)^[4644]. Source: NEI NAN WU WEI ZI *Kadsura interior* (stem), NEI NAN WU WEI ZI *Kadsura interior*. Ref: 2436, 4644.

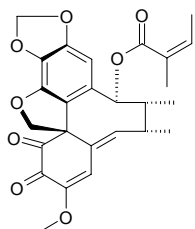
**11105 Interiotherin C**

$C_{30}H_{36}O_{10}$ (556.62). Colorless needles (MeOH), mp 179~181°C, $[\alpha]_D = +127.66^\circ$ ($c = 1.175$, $CHCl_3$). Pharm: Antineoplastic (screened as potential antitumor promoters, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = $(16.0 \pm 0.6)\%$ (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 60%). Source: NEI NAN WU WEI ZI *Kadsura interior* (stem: yield = 0.0062%dw). Ref: 4644.

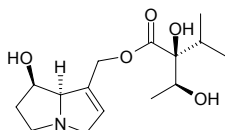


11106 Interiotherin D

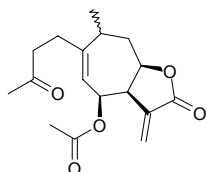
$C_{26}H_{26}O_8$ (466.49). Yellow prisms (MeOH), mp 148–151°C, $[\alpha]_D^{20} = -271.19^\circ$ ($c = 1.180$, $CHCl_3$). **Pharm:** Antineoplastic (screened as potential antitumor promoters, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = $(11.5 \pm 0.5)\%$ (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 60%). **Source:** NEI NAN WU WEI ZI *Kadsura interior* (stem: yield = 0.00083%dw). **Ref:** 4644.

**11107 Intermedine**

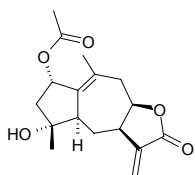
$C_{15}H_{25}NO_5$ (299.37). **Source:** ZI CAO *Lithospermum erythrorhizon*. **Ref:** 2193.

**11108 Inuchinenolide A**

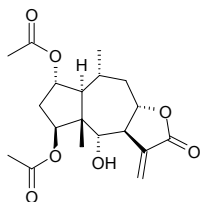
$C_{17}H_{22}O_5$ (306.36). **Source:** JIN FEI CAO *Inula japonica*. **Ref:** 660.

**11109 Inuchinenolide B**

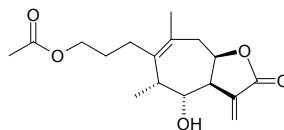
$C_{17}H_{22}O_5$ (306.36). **Source:** JIN FEI CAO *Inula japonica*. **Ref:** 660.

**11110 Inuchinenolide C**

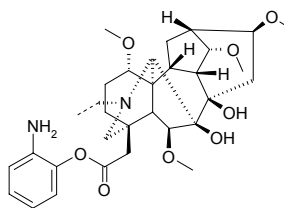
$C_{19}H_{26}O_7$ (366.41). **Source:** JIN FEI CAO *Inula japonica*. **Ref:** 660.

**11111 Inulicin**

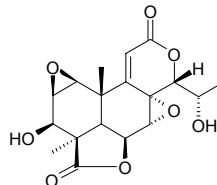
[33627-41-7] $C_{17}H_{24}O_5$ (308.38). mp 125.5–126.5°C, $[\alpha]_D = +90^\circ$. **Pharm:** CNS stimulant; intestinal smooth muscle stimulant. **Source:** XUAN FU HUA *Inula britannica*, XIAN YE XUAN FU HUA *Inula linariaefolia*, JIN FEI CAO *Inula japonica*, ZHONG GUO XUAN FU HUA *Inula britannica* var. *chinensis*. **Ref:** 6, 658, 660, 1521.

**11112 Inuline**

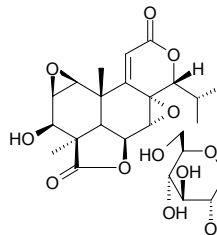
$C_{32}H_{46}N_2O_8$ (586.73). **Source:** GAN WAN WU TOU *Aconitum finetianum*. **Ref:** 660.

**11113 Inumakilactone A**

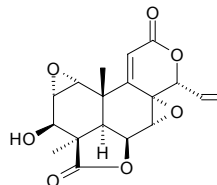
[19885-83-7] $C_{18}H_{20}O_8$ (364.36). mp 251–253°C (dec), $[\alpha]_D = 0^\circ$. **Pharm:** Plant growth inhibitor. **Source:** LUO HAN SONG SHI *Podocarpus macrophyllus*. **Ref:** 6, 1521.

**11114 Inumakilactone A glucoside**

$C_{24}H_{30}O_{13}$ (526.50). **Pharm:** Plant growth inhibitor. **Source:** LUO HAN SONG SHI *Podocarpus macrophyllus*. **Ref:** 6, 658.

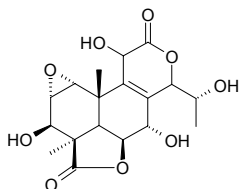
**11115 Inumakilactone B**

[31323-76-9] $C_{18}H_{18}O_7$ (346.34). mp 295°C (dec). **Pharm:** Plant growth inhibitor. **Source:** LUO HAN SONG SHI *Podocarpus macrophyllus*. **Ref:** 6.

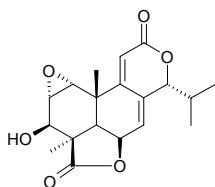


11116 Inumakilactone C

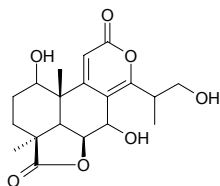
$C_{18}H_{22}O_9$ (382.37). mp 263~265°C (dec). Source: LUO HAN SONG SHI *Podocarpus macrophyllus*. Ref: 6.

**11117 Inumakilactone D**

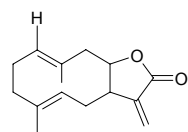
$C_{19}H_{22}O_6$ (346.38). Source: LUO HAN SONG SHI *Podocarpus macrophyllus*. Ref: 660.

**11118 Inumakilactone E**

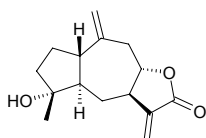
[37886-71-8] $C_{19}H_{24}O_7$ (364.40). mp 220~225°C. Source: LUO HAN SONG SHI *Podocarpus macrophyllus*. Ref: 6, 660, 1521.

**11119 Inunolide**

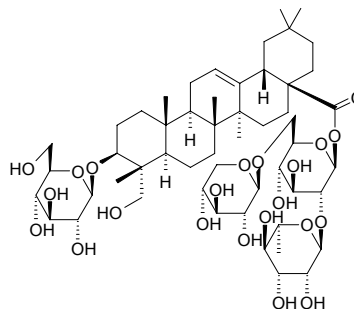
$C_{15}H_{20}O_2$ (232.31). Source: LUO HAN SONG SHI *Podocarpus macrophyllus*. Ref: 6.

**11120 Inuviscolide**

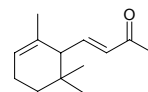
$C_{15}H_{20}O_3$ (248.32). Source: JIN FEI CAO *Inula japonica*. Ref: 1521, 5422.

**11121 Ioniceroside C**

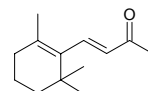
3-*O*- β -*D*-Glucopyranosyl hederagenin 28-*O*- α -*L*-rhamnopyranosyl (1 \rightarrow 2)-[β -*D*-xylopyranosyl(1 \rightarrow 6)]- β -*D*-glucopyranosyl ester $C_{53}H_{86}O_{22}$ (1075.26). Pharm: Anti-inflammatory (*in vivo*, mouse ear edema induced by croton oil, 100mg/kg, orl, InRt = 31%). Source: JIN YIN HUA *Lonicera japonica* (aerial parts). Ref: 4327.

**11122 α -Ionone**

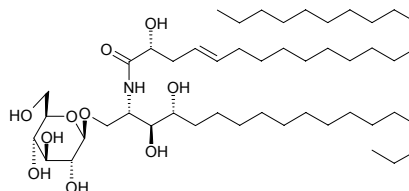
[24190-29-2] $C_{13}H_{20}O$ (192.30). bp (\pm) 146.5~147.5°C/28mmHg. Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. Ref: 2.

**11123 β -Ionone**

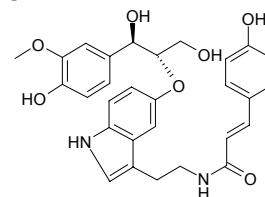
[14901-07-6] $C_{13}H_{20}O$ (192.30). bp 150~151°C/24mmHg. Source: GOU QI ZI *Lycium chinense*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], QUN DAI CAI *Undaria pinnatifida* (dried thallus: yield = 0.00012%)^[4602], XING REN *Prunus armeniaca*. Ref: 2, 660, 4602.

**11124 Iotrroidoside B**

$C_{48}H_{93}NO_{10}$ (844.28). $[\alpha]_D^{28} = +12.0^\circ$ ($c = 0.15$, pyridine). Source: XIAO BANG XIYOU QIOU HAI MIAN *Istrochota baculifera*. Ref: 4391.

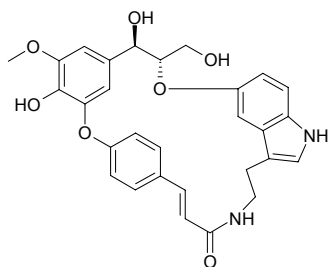
**11125 Ipobscurine B**

N-[2-[5-[2-[(4-Hydroxy-3-methoxyphenyl)-2-hydroxy-1-hydroxymethyl]ethoxy]indol-3-yl]ethyl]-4-hydroxycinnamoyl amide $C_{29}H_{30}N_2O_7$ (518.57). Yellow solid, $[\alpha]_D^{20} = -35^\circ$ ($c = 0.28$, MeOH). Source: XIAO XIN YE SHU *Ipomoea obscura*. Ref: 2039.

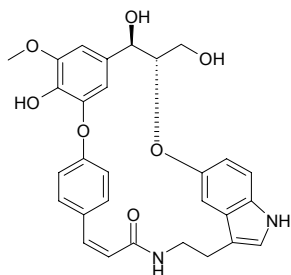


11126 Ipobscurine C

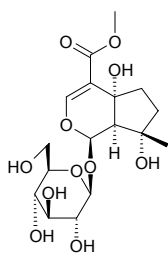
$C_{29}H_{28}N_2O_7$ (516.56). White crystals, mp 193–195°C, $[\alpha]_D^{20} = -44^\circ$ ($c = 0.16$, $CHCl_3$). Source: XIAO XIN YE SHU *Ipomoea obscura*. Ref: 2039.

**11127 Ipobscurine D**

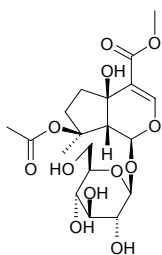
$C_{29}H_{28}N_2O_7$ (516.56). Yellow solid, mp 245–247°C. Source: XIAO XIN YE SHU *Ipomoea obscura*. Ref: 2039.

**11128 Ipolamiide**

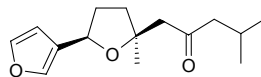
[27934-98-1] $C_{17}H_{26}O_{11}$ (406.39). Crystals (Me_2CO aq.), mp 144–145°C, $[\alpha]_D^{13} = -136^\circ$ ($c = 0.5$, dioxan). Source: LUO HAN SONG SHI *Podocarpus macrophyllus*, BAO GAI CAO *Lamium amplexicaule*, ZONG KUI CAO SU *Phlomis brunneogaleata*. Ref: 6, 1521, 5009.

**11129 Ipolamiidoside**

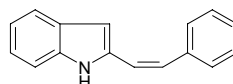
$C_{19}H_{28}O_{12}$ (448.23). $[\alpha]_D^{28} = -70.6^\circ$ ($c = 0.15$, MeOH). Pharm: Antiviral (anti-HSV-1); cytotoxic inactive (vero cells); COX-2 inhibitor inactive. Source: HUA YE JIA DU JUAN *Barleria lupulina* (flower). Ref: 5456.

**11130 Ipomeamarone**

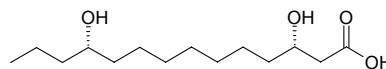
[494-23-5] $C_{15}H_{22}O_3$ (250.34). Pharm: Antifungal; inhibits cytochrome b5 reductase (rat, *in vitro*, inhibits electron-transfer and oxidative phosphorylation); toxin. Source: GAN SHU *Ipomoea batatas* [Syn. *Convolvulus batatas*]. Ref: 658.

**11131 Ipolamine A**

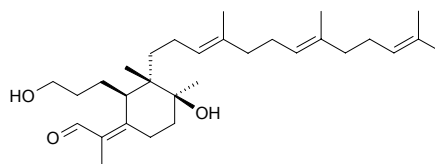
$C_{16}H_{13}N$ (219.29). White needles (cyclohexane–acetone), mp 110°C. Source: GAN SHU *Ipomoea batatas* [Syn. *Convolvulus batatas*] (root). Ref: 4852.

**11132 Ipurolic acid**

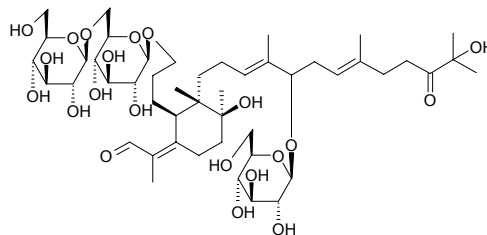
$C_{14}H_{28}O_4$ (260.38). Source: FEI E TENG *Porana racemosa*. Ref: 660.

**11133 Iridal**

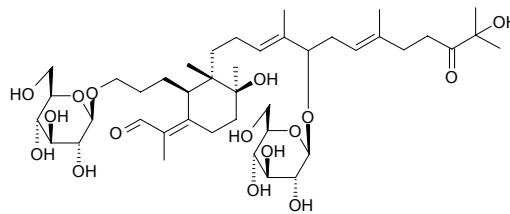
21-Desoxy-iridogermainal $C_{30}H_{50}O_3$ (458.73). Glassy solid, $[\alpha]_D^{20} = +34.4^\circ$ ($c = 0.9$, CH_2Cl_2). Pharm: Antimalarial (hmn malaria strain, *in vitro* $IC_{50} = 1.8$ – 26.0 mg/mL, *in vivo* $ED_{50} = 85$ mg/(kg·d) ip; MIC > 50 μg/mL). Source: DE GUO YUAN WEI *Iris germanica*. Ref: 2033.

**11134 Iridalglycoside 5a**

22-Oxo-23-hydroxyiridal-3- β -D-glucopyranosyl-(1→6)- β -D-glucopyranoside]-16- β -D-glucopyranoside $C_{48}H_{80}O_{21}$ (993.16). Source: JIA YUAN WEI *Iris spuria*. Ref: 1951.

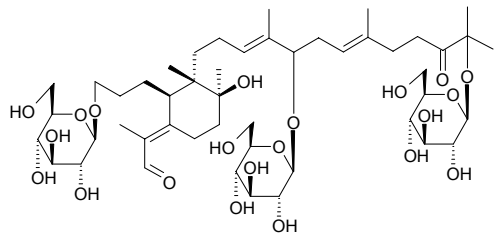
**11135 Iridalglycoside 5b**

22-Oxo-23-hydroxy-iridal-3,16-di- β -D-glucopyranoside $C_{42}H_{70}O_{16}$ (831.02). Source: JIA YUAN WEI *Iris spuria*. Ref: 1951.

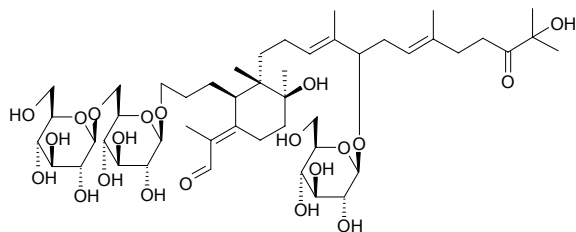


11136 Iridalglycoside 6a

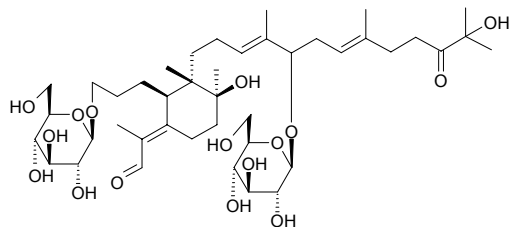
22-Oxo-isoiridal-3,16,23-tri- β -D-glucopyranoside C₄₈H₈₀O₂₁ (993.16). Source: JIA YUAN WEI *Iris spuria*. Ref: 1951.

**11137 Iridalglycoside 6b**

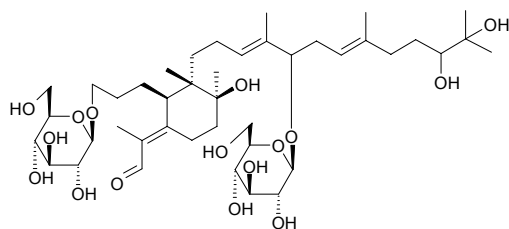
C₄₈H₈₀O₂₁ (993.16). Source: JIA YUAN WEI *Iris spuria*. Ref: 1951.

**11138 Iridalglycoside 6c**

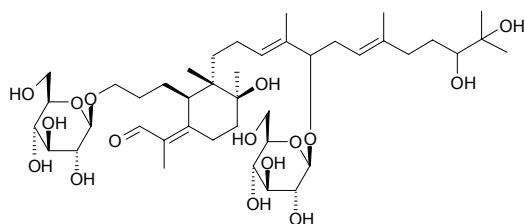
22-Oxo-23-hydroxy-isoiridal-3,16-di- β -D-glucopyranoside C₄₂H₇₀O₁₆ (831.03). Source: JIA YUAN WEI *Iris spuria*. Ref: 1951.

**11139 Iridalglycoside 7**

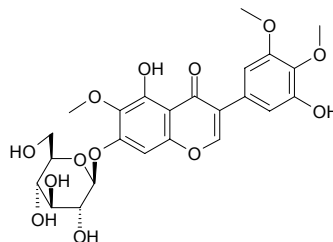
22,23-Dihydroxy-isoiridal-3,16-di- β -D-glucopyranoside C₄₂H₇₂O₁₆ (833.03). Source: JIA YUAN WEI *Iris spuria*. Ref: 1951.

**11140 Iridalglycoside 8**

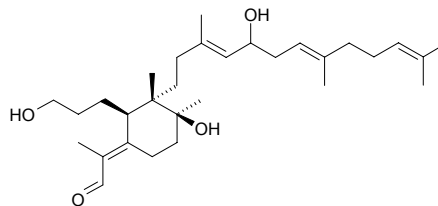
22,23-Dihydroxy-iridal-3,16-di- β -D-glucopyranoside C₄₂H₇₂O₁₆ (833.03). Source: JIA YUAN WEI *Iris spuria*. Ref: 1951.

**11141 Iridin**

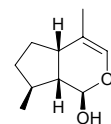
[491-74-7] C₂₄H₂₆O₁₃ (522.47). mp 208°C. Pharm: Diuretic (rbt, sc, 25mg/kg); improves osmosis of capillary blood vessels (inhibits adenosine diphosphate transfer to adenosine triphosphate); LD (rbt, sc) = 8~10g/kg. Source: A ER JI LI YA YUAN WEI *Iris unguicularis*, BAI HUA SHE GAN *Iris dichotoma*, CHANG BING YUAN BAI *Juniperus macropoda*, DE GUO YUAN WEI *Iris germanica* (rhizome), RI BEN YUAN WEI *Iris komonoensis*, SHE GAN *Belamcanda chinensis* (dried rhizome: content scope of 6 origins = 0.36%~1.31%, mean content = 0.83%^[5508]), XI OU YUAN WEI *Iris florentina*, XI OU YUAN WEI *Iris florentina*. Ref: 6, 658, 4128, 4223, 5501, 5508.

**11142 Iridobelamal A**

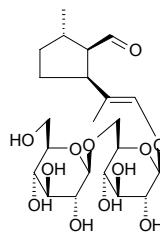
C₃₀H₅₀O₄ (474.73). Colorless viscous oil, [α]_D = 51° (c = 0.08, EtOH). Source: SHE GAN *Belamcanda chinensis*. Ref: 767.

**11143 (+)-Iridodial**

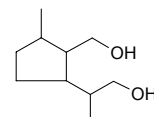
[550-45-8] C₁₀H₁₆O₂ (168.24). Pharm: Insect repellent. Source: *Myoporium* sp. Ref: 658.

**11144 Iridodial- β -D-gentiobioside**

C₂₂H₃₆O₁₂ (492.53). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 660.

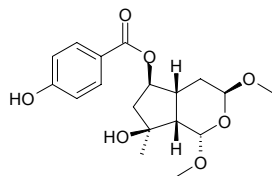
**11145 Iridodiol**

C₁₀H₂₀O₂ (172.27). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 6.

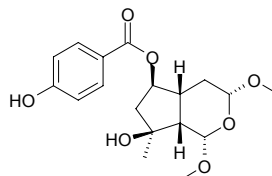


11146 Iridoid CPB-53-710-1

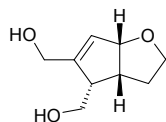
$C_{18}H_{24}O_7$ (352.39). Colorless amorphous solid, $[\alpha]_D^{25} = -110.2^\circ$ ($c = 0.033$, MeOH). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells, $IC_{50} = 17.4\mu g/mL$, control *L*-NMMA, $IC_{50} = 27.4\mu g/mL$). **Source:** HE SE ZHONG HUA SHU *Tabebuia avellanadae* (inner bark). **Ref:** 4473.

**11147 Iridoid CPB-53-710-2**

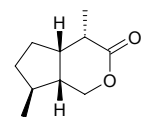
$C_{18}H_{24}O_7$ (352.39). Colorless amorphous solid, $[\alpha]_D^{25} = -56.4^\circ$ ($c = 0.035$, MeOH). **Pharm:** NO production inhibitor (LPS-activated macrophage-like J774.1 cells, $IC_{50} = 34.6\mu g/mL$, control *L*-NMMA, $IC_{50} = 27.4\mu g/mL$). **Source:** HE SE ZHONG HUA SHU *Tabebuia avellanadae* (inner bark). **Ref:** 4473.

**11148 Iridoid-related aglycone**

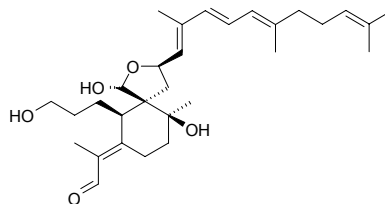
$C_9H_{14}O_3$ (170.21). Colorless oil, $[\alpha]_D^{22} = -6^\circ$ ($c = 0.1$, MeOH). **Pharm:** Antitrypanosomal (*Trypanosoma brucei rhodesiense*, $IC_{50} = 58.5\mu g/mL$, control Melarsoprol, $IC_{50} = 0.0033\mu g/mL$; *Trypanosoma cruzi*, $IC_{50} > 90\mu g/mL$, control Benznidazole, $IC_{50} = 0.70\mu g/mL$); antileishmanial (*Leishmania donovani*, $IC_{50} > 100\mu g/mL$, control Miltefosine, $IC_{50} = 0.32\mu g/mL$); antimalarial (*Plasmodium falciparum*, $IC_{50} = 40.6\mu g/mL$, control Artemisinin, $IC_{50} = 0.002\mu g/mL$); cytotoxic (L6 cells, $IC_{50} > 90\mu g/mL$, control Podophyllotoxin, $IC_{50} = 0.0075\mu g/mL$). **Source:** LIN PIAN XUAN SHEN *Scrophularia lepidota* (root). **Ref:** 5251.

**11149 Iridomyrmecin**

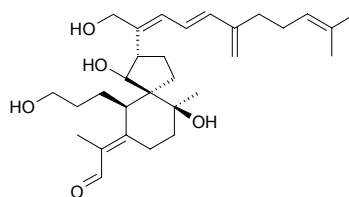
[485-43-8] $C_{10}H_{16}O_2$ (168.24). mp 60–61°C. **Pharm:** Antibacterial; insecticidal. **Source:** MU TIAN LIAO *Actinidia polygama*. **Ref:** 6, 658, 1521.

**11150 Iridotectoral A**

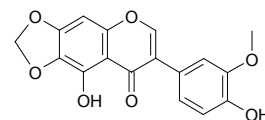
$C_{30}H_{46}O_5$ (486.70). White glassy substance. **Source:** YUAN WEI *Iris tectorum*. **Ref:** 767.

**11151 Iridotectoral B**

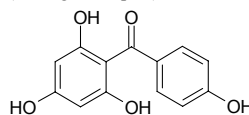
$C_{30}H_{46}O_5$ (486.70). White glassy substance, $[\alpha]_D = 67^\circ$ ($c = 0.12$, EtOH). **Source:** YUAN WEI *Iris tectorum*. **Ref:** 767.

**11152 Iriflogenin**

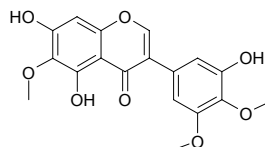
5,4'-Dihydroxy-3'-methoxy-6,7-methylenedioxyisoflavone; 3'-Methoxy-4',5'-dihydroxy-6,7-methylenedioxyisoflavone $C_{17}H_{12}O_7$ (328.28). **Pharm:** CyP1A inhibitor ($IC_{50} = (1.4 \pm 0.6)\mu mol/L$)^[5347]; QR inhibitor (cultured mouse Hepa1c1c7 cells, $CD > 50\mu mol/L$, $50\mu mol/L$ InRt = 1.9%, $IC_{50} > 50\mu mol/L$)^[5347]; DPPH scavenger ($SC_{50} = (89.6 \pm 4.4)\mu mol/L$)^[5347]. **Source:** DE GUO YUAN WEI *Iris germanica* (rhizome), JUAN QIAO YUAN WEI *Iris potaninii* (underground part). **Ref:** 4235, 5347.

**11153 Iriflophenone**

$C_{13}H_{10}O_5$ (246.22). **Source:** JUAN QIAO YUAN WEI *Iris potaninii* (underground part), XI OU YUAN WEI *Iris florentina*. **Ref:** 1521, 4235.

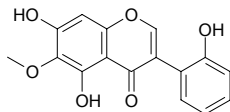
**11154 Irigenin**

5,7,3'-Trihydroxy-6,4',5'-trimethoxyisoflavone $C_{18}H_{16}O_8$ (360.32). **Pharm:** CyP1A inhibitor ($IC_{50} = (1.2 \pm 0.3)\mu mol/L$)^[5347]; QR inhibitor (cultured mouse Hepa1c1c7 cells, $CD = (7.8 \pm 0.1)\mu mol/L$, $IC_{50} > 50\mu mol/L$)^[5347]; DPPH scavenger ($SC_{50} > 250\mu mol/L$, $250\mu mol/L$ scavenging rate = 15%)^[5347]. **Source:** BAI HUA SHE GAN *Iris dichotoma* (dried rhizome: content = 1.21%)^[5508], DE GUO YUAN WEI *Iris germanica* (rhizome), SHE GAN *Belamcanda chinensis* (dried rhizome: content = 1.45%)^[5508], YUAN WEI *Iris tectorum* (dried rhizome: content = 0.68%)^[5508]. **Ref:** 4128, 5347, 5508.

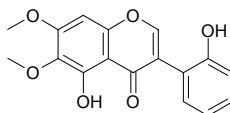


11155 Irilin A

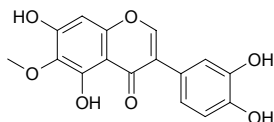
$C_{16}H_{12}O_6$ (300.27). Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 3063.

**11156 Irilin B**

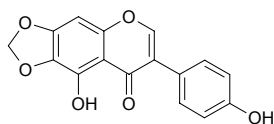
$C_{17}H_{14}O_6$ (314.3). Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 3063.

**11157 Irilin D**

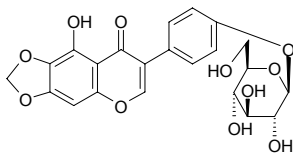
3',4',5',7-Tetrahydroxy-6-methoxyisoflavone $C_{16}H_{12}O_7$ (316.27). Amorphous powder. Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 3063.

**11158 Irlone**

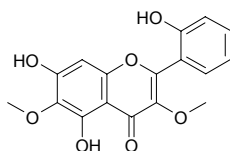
5,4'-Dihydroxy-6,7-methylenedioxyisoflavone $C_{16}H_{10}O_6$ (298.25). Pharm: CyP1A inhibitor ($IC_{50} = (0.3 \pm 0.1) \mu\text{mol/L}$); QR inhibitor (cultured mouse Hepa1c1c7 cells, $CD = (16.7 \pm 2.3) \mu\text{mol/L}$, $IC_{50} = (17.6 \pm 1.6) \mu\text{mol/L}$); DPPH radical scavenger ($SC_{50} > 250 \mu\text{mol/L}$, 250 $\mu\text{mol/L}$ scavenging rate = 2%)^[5347]; germination inhibitor (embryo sheath of wheat, *in vitro*). Source: DE GUO YUAN WEI *Iris germanica* (rhizome), HONG CHE ZHOU CAO *Trifolium pratense*. Ref: 658, 5347.

**11159 Irlone 4'-O-β-D-glucoside**

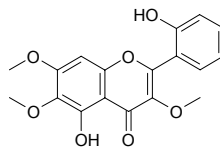
$C_{22}H_{20}O_{11}$ (460.40). Amorphous solid, mp 157°C, $[\alpha]_D^{24} = +47.6^\circ$ ($c = 0.63$, MeOH). Source: DE GUO YUAN WEI *Iris germanica* (rhizome). Ref: 4223.

**11160 Irisflavone A**

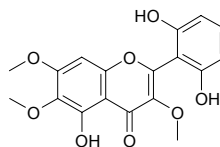
5,7,2'-Trihydroxy-3,6-dimethoxyflavone $C_{17}H_{14}O_7$ (330.3). Yellow needles. Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 3063.

**11161 Irisflavone B**

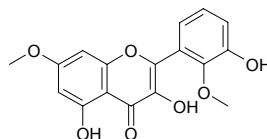
2',5-Dihydroxy-3,6,7-trimethoxyflavone $C_{18}H_{16}O_7$ (344.32). Yellow needles, mp 205–206°C. Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 3063.

**11162 Irisflavone C**

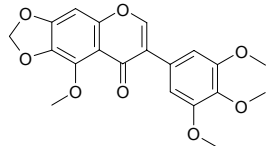
5,2',6'-Trihydroxy-3,6,7-trimethoxyflavone $C_{18}H_{16}O_8$ (360.32). Yellow needles. Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 3063.

**11163 Irisflavone D**

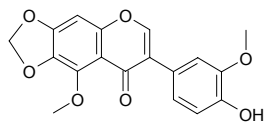
3,5,3'-Trihydroxy-7,2'-dimethoxyflavone $C_{17}H_{14}O_7$ (330.3). Amorphous powder. Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 3063.

**11164 Irisfloreutin**

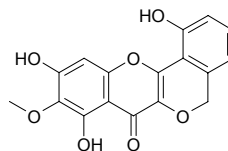
$C_{20}H_{18}O_8$ (386.36). Source: BAI HUA SHE GAN *Iris dichotoma*, SHE GAN *Belamcanda chinensis*, SHE GAN *Belamcanda chinensis* (rhizome). Ref: 660, 4128.

**11165 Iriskashmirianin**

4'-Hydroxy-5,3'-dimethoxy-6,7-methylenedioxyisoflavone $C_{18}H_{14}O_7$ (342.31). Pharm: CyP1A inhibitor ($IC_{50} > 5 \mu\text{mol/L}$, 5 $\mu\text{mol/L}$ InRt = 0%); QR inhibitor (cultured mouse Hepa1c1c7 cells, $CD (+3.5 \pm 1.5) \mu\text{mol/L}$, $IC_{50} > 50 \mu\text{mol/L}$); DPPH scavenger ($SC_{50} = (120.3 \pm 7.4) \mu\text{mol/L}$). Source: DE GUO YUAN WEI *Iris germanica* (rhizome). Ref: 5347.

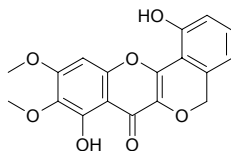
**11166 Irisoid A**

1,8,10-Trihydroxy-9-methoxy-[1]benzopyrano-[3,2-c][2]benzopyran-7(5H)-one $C_{17}H_{12}O_7$ (328.28). Amorphous powder. Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 4130.

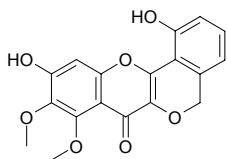


11167 Irisoid B

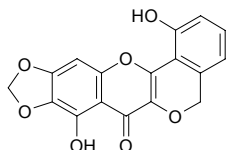
1,8-Dihydroxy-9,10-dimethoxy-[1]benzopyrano-[3,2-c][2]-benzopyran-7(5H)-one C₁₈H₁₄O₇ (342.31). Yellow needles, mp 329~330°C. Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 4130.

**11168 Irisoid C**

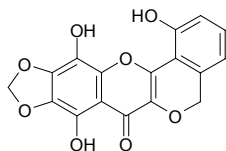
1,10-Dihydroxy-8,9-dimethoxy-[1]benzopyrano-[3,2-c][2]-benzopyran-7(5H)-one C₁₈H₁₄O₇ (342.31). Amorphous powder. Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 4130.

**11169 Irisoid D**

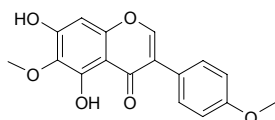
1,8-Dihydroxy-9,10-methylenedioxy-[1]benzopyrano-[3,2-c][2]-benzopyran-7(5H)-one C₁₇H₁₀O₇ (326.27). Amorphous powder. Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 4130.

**11170 Irisoid E**

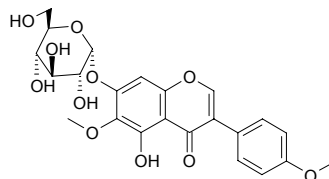
1,8,11-Trihydroxy-9,10-methylenedioxy-[1]benzopyrano-[3,2-c][2]-benzopyran-7(5H)-one C₁₇H₁₀O₈ (342.26). Amorphous powder. Source: BENG GE YUAN WEI *Iris bungei* (underground part). Ref: 4130.

**11171 Irisolidone**

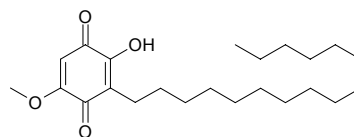
5,7-Dihydroxy-6,4'-dimethoxyisoflavone C₁₇H₁₄O₆ (314.30). Pharm: CyP1A inhibitor (IC₅₀ = (4.9±0.5)μmol/L); QR inhibitor (cultured mouse Hepa1c1c7 cells, CD > 50μmol/L, 50μmol/L InRt = 1.4%, IC₅₀ > 50μmol/L); DPPH scavenger (SC₅₀ > 250μmol/L, 250μmol/L scavenging rate = 8%). Source: DE GUO YUAN WEI *Iris germanica* (rhizome). Ref: 5347.

**11172 Irisolidone-7-O-α-D-glucoside**

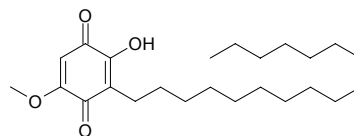
5,7-Dihydroxy-6,4'-dimethoxyisoflavone-7-O-α-D-glucopyranoside C₂₃H₂₄O₁₁ (476.44). Pharm: CyP1A inhibitor (IC₅₀ > 5μmol/L, 5μmol/L InRt = 38%); QR inhibitor (cultured mouse Hepa1c1c7 cells, CD > 50μmol/L, 50μmol/L InRt = 1.2, IC₅₀ > 50μmol/L); DPPH scavenger (SC₅₀ > 250μmol/L, 250μmol/L scavenging rate = 1%). Source: DE GUO YUAN WEI *Iris germanica* (rhizome). Ref: 5347.

**11173 Irisoquin A**

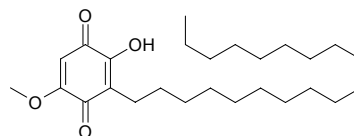
2-Hydroxy-3-hexadecyl-5-methoxy-1,4-benzoquinone C₂₃H₃₈O₄ (378.56). Orange coloured powder, mp 81.5°C. Source: XI MA LA YA YUAN WEI *Iris kumaonensis*. Ref: 1935.

**11174 Irisoquin B**

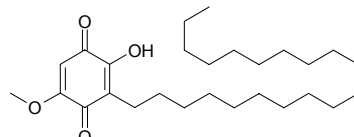
2-Hydroxy-3-heptadecyl-5-methoxy-1,4-benzoquinone C₂₄H₄₀O₄ (392.58). Source: XI MA LA YA YUAN WEI *Iris kumaonensis*. Ref: 1935.

**11175 Irisoquin C**

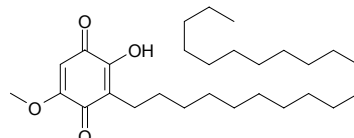
2-Hydroxy-3-nonadecyl-5-methoxy-1,4-benzoquinone C₂₆H₄₄O₄ (420.64). Source: XI MA LA YA YUAN WEI *Iris kumaonensis*. Ref: 1935.

**11176 Irisoquin D**

2-Hydroxy-3-eicosanyl-5-methoxy-1,4-benzoquinone C₂₇H₄₆O₄ (434.67). Source: XI MA LA YA YUAN WEI *Iris kumaonensis*. Ref: 1935.

**11177 Irisoquin E**

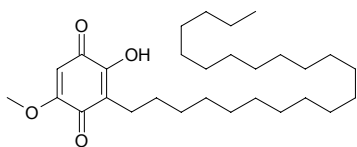
C₂₈H₄₈O₄ (448.69). Source: XI MA LA YA YUAN WEI *Iris kumaonensis*. Ref: 1935.



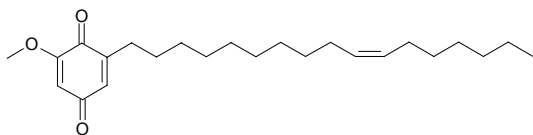
11178 Irisoquin F

2-Hydroxy-3-docosanyl-5-methoxy-1,4-benzoquinone C₂₉H₅₀O₄ (462.72).

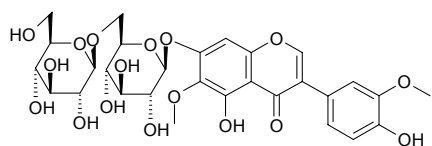
Source: XI MA LA YA YUAN WEI *Iris kumaonensis*. Ref: 1935.

**11179 Irisquinone A**

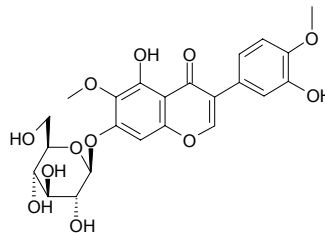
Pallasone A; Irisquinone [56495-82-0] C₂₄H₃₈O₃ (374.57). Yellow needles (MeOH), mp 42.5–43.5°C. Pharm: Antineoplastic (acute leukemia and solid tumor, mus tumor U14, 3~7mg/kg ip, InRt = (44.0~55.5)%, mus lymphatic sarcoma, 3mg/kg, InRt = 33.3%, liver cancer in solid tumor, 7mg/kg, InRt = 38%, liver cancer with ascites, 5mg/kg, biotic prolonged rate = 150%, EAC, 5mg/kg, biotic prolonged rate = 38%); immunoenhancer; cytotoxic (radiosensitizing agent, *in vitro*, U₁₄, S-180V, HeLa, mus Ma7373 breast cancer cell, hmn intestinal mucoadenocarcinoma in nude mouse, mechanism was considered to be an inhibition of oxygen consumption and depletion of glutathione in tumor cells)^[5369]; antineoplastic (mus tumor xenografts, U₁₄ cervical cancer and Ehrlich carcinoma, ip, lymphosarcoma, ip and oral administration, inhibits cancer growth)^[5369]; antineoplastic (mus bearing U₁₄ tumor, orl 100mg/kg or iv 5mg/kg, once every other day for 5 cycles, starting 24h after implantation of the tumor, tumor inhibition rate = (35~55)%^[5369]; antineoplastic (clinical trial, given orl to 558 patients with cancer of lung and esophagus, or with superficial metastatic cancer during radiotherapy, significantly reduction of tumor size and prolongation of survival time of the patients)^[5369]; LD₅₀ (mus, ip) = 28mg/kg (25.4mg/kg), LD₅₀ (mus, orl) = 2.8g/kg. Source: HUANG CHANG PU *Iris pseudacorus*, MA LIN *Iris pallasii* var. *chinensis*, MA LIN ZI *Iris lactea* var. *chinensis* [Syn. *Iris pallasii* var. *chinensis*] (spermoderm: mean content = 0.81%^[5508]). Ref: 658, 3124, 3125, 3126, 5369, 5508.

**11180 Iristectorigenin B 7-glucosyl(1→6)glucoside**

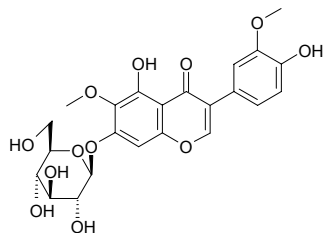
C₂₉H₃₄O₁₇ (654.58). Yellow amorphous powder. Source: AI JI ZHONG ZHI YUAN WEI *Iris carthaliniae*. Ref: 1880.

**11181 Iristectorin A**

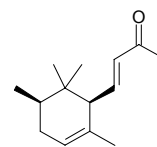
[37744-61-9] C₂₃H₂₄O₁₂ (492.44). mp 212~214°C. Source: MU TIAN LIAO *Actinidia polygama*, YUAN WEI *Iris tectorum*. Ref: 6, 660.

**11182 Iristectorin B**

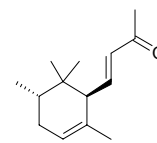
C₂₃H₂₄O₁₂ (492.44). mp 153~155°C. Source: YUAN WEI *Iris tectorum*. Ref: 6.

**11183 cis-α-Irone**

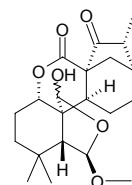
C₁₄H₂₂O (206.33). Pharm: Flavorant. Source: XI OU YUAN WEI *Iris florentina*, *Viola* sp. Ref: 658.

**11184 trans-α-Irone**

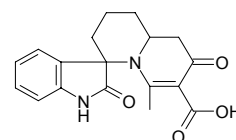
C₁₄H₂₂O (206.33). Source: XI OU YUAN WEI *Iris florentina*, *Viola* sp. Ref: 658.

**11185 Irroratin A**

C₂₁H₃₀O₆ (378.47). mp 185~187°C, [α]_D = -194.8° (c = 0.40, MeOH). Source: LU ZHU XIANG CHA CAI *Isodon irrorata*. Ref: 4067.

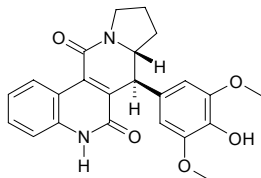
**11186 Isaindigodione**

C₁₈H₁₈N₂O₄ (326.36). White powdery solid. Source: BAN LAN GEN *Isatis indigotica*. Ref: 2161.

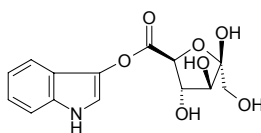


11187 Isaindigotidione

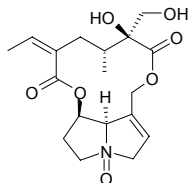
$C_{23}H_{22}N_2O_5$ (406.44). White powder mp 242°C. Source: BAN LAN GEN *Isatis indigotica*. Ref: 2119.

**11188 Isatan B**

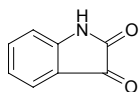
$C_{14}H_{15}NO_7$ (309.28). Source: DA QING YE *Isatis indigotica*. Ref: 2.

**11189 Isatidine**

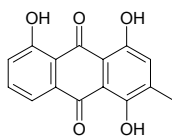
[15503-86-3] $C_{18}H_{25}NO_7$ (367.40). mp 145°C, $[\alpha]_D = -8.2^\circ$ (water). Pharm: Carcinogen (animal model); toxin (horse orl, 14~15g, feeding 2 or 3 times to death); LD₅₀ (rat, orl) = 48mg/kg, (rat, ip) = 250mg/kg. Source: CHAI HU ZHUANG QIAN LI GUANG *Senecio bupleuroides*, SHAO FU E QIAN LI GUANG *Senecio paucicazyculatus*, CHANG YE QIAN LI GUANG *Senecio longifolius*. Ref: 658.

**11190 Isatin**

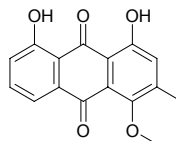
2,3-Indolinedione [91-56-5] $C_8H_5NO_2$ (147.13). mp 203.5°C. Source: BAN LAN GEN *Isatis indigotica*. Ref: 6.

**11191 Islandicin**

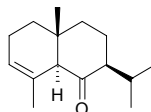
$C_{15}H_{10}O_5$ (270.24). Pharm: Cytotoxic inactive (*in vitro*, HeLa, Vero, K562, Raji, Wish, and Calu1 tumor cell lines, IC₅₀ > 100μmol/L). Source: YI HE GUO *Ventilago leiocarpa* (stem). Ref: 3057.

**11192 Islandicin 4-methyl ether**

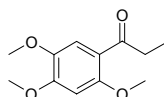
$C_{16}H_{12}O_5$ (284.27). Red needles (EtOAc-*n*-hexane), mp 184~186°C. Pharm: Cytotoxic inactive (*in vitro*, HeLa, Vero, K562, Raji, Wish, and Calu1 tumor cell lines, IC₅₀ > 100μmol/L). Source: YI HE GUO *Ventilago leiocarpa* (stem). Ref: 3057.

**11193 Isoacolumone**

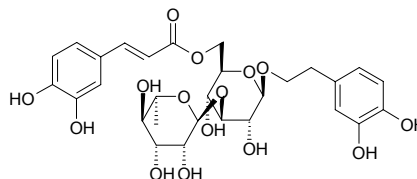
$C_{15}H_{24}O$ (220.36). Oil. Source: BAI CHANG *Acorus calamus*. Ref: 6.

**11194 Isoacoramone**

$C_{12}H_{16}O_4$ (224.26). Yellowish ropy liquid. Source: SHI CHANG PU *Acorus tatarinowii*. Ref: 8.

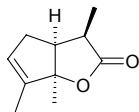
**11195 Isoacteoside**

Isoverbascoside $C_{29}H_{36}O_{15}$ (624.60). Pharm: Antioxidant (ferric thiocyanate method, 0.5mmol/L, peroxidation value = 7.2%, control BHA, 0.5mmol/L, peroxidation value = 4.5%, control Vitamin E, 0.5mmol/L, peroxidation value = 14.7%)^[4508]; antioxidant (relative potency = 5.8, compared with resveratrol, relative potency = 1)^[4920]; elastase inhibitor (hmn leukocyte *in vitro*, IC₅₀ = 179μg/mL = 286μmol/L; control Caffeic acid, IC₅₀ = 86μg/mL = 475μmol/L)^[5458]; antitrypanosomal (*Trypanosoma b. rhodesiense*, IC₅₀ = 6.2μg/mL, control Melarsoprol, IC₅₀ = 0.00098μg/mL; *Trypanosoma cruzi*, IC₅₀ > 90μg/mL, control Benzimidazole, IC₅₀ = 1.06μg/mL)^[5009]; antileishmanial (*Leishmania donovani*, IC₅₀ = 9.2μg/mL, control Miltefosine, IC₅₀ = 0.102μg/mL)^[5009]; antimalarial (*Plasmodium falciparum*, IC₅₀ = 37.5μg/mL, control Artemisinin, IC₅₀ = 0.0022μg/mL)^[5009]; cytotoxic (L6, IC₅₀ = 55.4μg/mL, control Podophyllotoxin, IC₅₀ = 0.008μg/mL)^[5009]. Source: A LA BO PO PO NA *Veronica persica* (aerial parts), CHE QIAN *Plantago asiatica*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], LIE DANG *Orobanchae coerulea* (whole herb), NAN FEI GOU MA *Harpagophytum procumbens*, TIAN SHE CAO *Lippia dulcis* (aerial parts), ZONG KUI CAO SU *Phlomis brunneogaleata*. Ref: 2, 660, 4211, 4508, 4920, 5009, 5458.

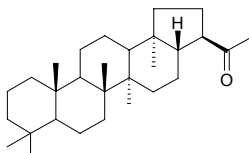


11196 Isoactinidialactone

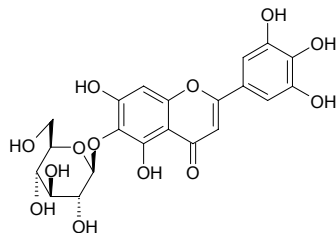
C₁₀H₁₄O₂ (166.22). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 660.

**11197 Isoadiantone**

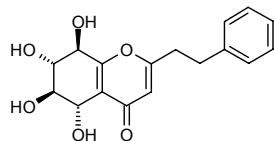
[58260-74-5] C₂₉H₄₈O (412.71). mp 232~233°C. Source: BIAN YE TIE XIAN JUE *Adiantum caudatum*, TIE SI QI *Adiantum pedatum*. Ref: 6.

**11198 Isoaffinetin**

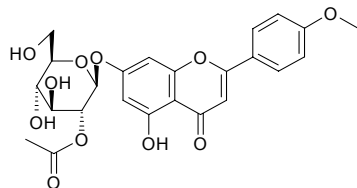
5,7,3',4',5'-Pentahydroxyflavone-6-C-glucoside [60476-24-6] C₂₁H₂₀NO₁₃ (480.39). Pharm: Aldose reductase inhibitor (porcine lens, IC₅₀ = (4.6±0.4)μmol/L; rat lens, IC₅₀ = (1.2±0.2)μmol/L; recombinant hmn, IC₅₀ = (1.0±0.1)μmol/L). Source: IN DU TIE XIAN ZI *Manilkara indica*. Ref: 5452.

**11199 Isoagarotretrol**

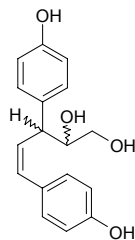
AH2 [104060-61-9] C₁₇H₁₈O₆ (318.33). Colorless lamellar crystals, mp 174~175°C (dec), [α]_D = -58.6° (c = 1.19, MeOH). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13, 1521.

**11200 Isoagastachoside**

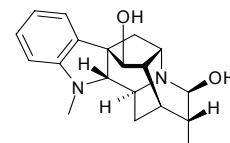
[78886-64-3] C₂₄H₂₄O₁₁ (488.45). Source: HUO XIANG *Agastache rugosus*. Ref: 2.

**11201 Isoagatharesinol**

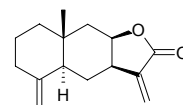
C₁₇H₁₈O₄ (286.33). Colorless gum, [α]_D²¹ = +49.7° (c = 5.40, Me₂CO). Pharm: Cytotoxic (*in vitro*, HO-8910, IC₅₀ > 658μmol/L, Vincristine, IC₅₀ = (25.1±1.9)μmol/L; Bel7405, IC₅₀ > 658μmol/L, Vincristine, IC₅₀ = (31.4±3.4)μmol/L). Source: GE BI TIAN MEN *Asparagus gobicus* (root). Ref: 4975.

**11202 Isoajmaline**

[6989-79-3] C₂₀H₂₆N₂O₂ (326.44). Prisms (MeOH aq.), plates (Et₂O), mp 265 (dec), [α]_D¹⁸ = +72° (c = 0.7, CHCl₃). Pharm: Bidirectional action to CNS (first stimulates, then inhibits); uterine stimulant; antihypertensive. Source: YIN DU LUO FU MU *Rauwolfia serpentina*. Ref: 658.

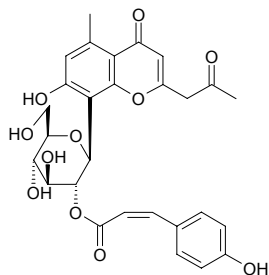
**11203 Isoalantolactone**

Isohenin; 5αH-Eudesma-4(15),11(13)-dien-12,8β-olide [470-17-7] C₁₅H₂₀O₂ (232.33). Crystals (EtOH aq.), mp 115°C, mp 109~110°C, [α]_D = +172° (CHCl₃). Pharm: Antifungal (*Epidermophyton*, MIC = 35μg/mL, *Trichophyton mentagrophytes*, MIC = 25μg/mL); anthelmintic (ascarid, protozoan, *Australorbis glabratus*); antiprotozoal (*Amoeba dysenteriae*, and *Trichomonas vaginalis*); insect antifeedant; anti-inflammatory (NO production inhibitor, cultured rat aortic smooth muscle cells treated with LPS and interferon-γ)^[4415]; cytotoxic (SMMC-7721 IC₅₀ = (6.21±1.63)μg/mL, Vincristine IC₅₀ = (30.35±2.23)μg/mL; HO-8910 IC₅₀ = (5.28±0.78)μg/mL, Vincristine IC₅₀ = (20.74±1.91)μg/mL; LO2 hmn hepatocytes cell IC₅₀ = (9.77±1.91)μg/mL, Vincristine IC₅₀ = (17.25±0.91)μg/mL)^[5422]; MLD (mus, sc) = 2000mg/kg. Source: CHANG YE TIAN MING JING *Carpesium longifolium* (aerial parts: yield = 0.0015%^[4736]), DA YE TU MU XIANG *Inula grandis*, JIA NA DA CANG ER *Xanthium canadense*, JIN FEI CAO *Inula japonica*, MEI LI TE LE JU *Telekia speciosa*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], TU MU XIANG *Inula helenium* (root: mean content of 2 batch samples = 1.00%^[5508]), XI MA XUAN FU HUA *Inula royleana*, ZONG ZHUANG TU MU XIANG *Inula racemosa*, ZONG ZHUANG TU MU XIANG *Inula racemosa* (root: mean content of 4 batch samples = 1.90%^[5508]). Ref: 4, 658, 1521, 4415, 4736, 5422, 5508.

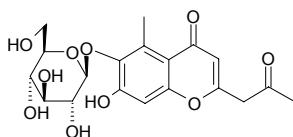


11204 Isoaloeresin A

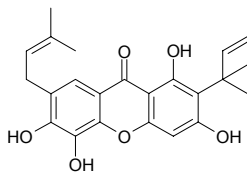
$C_{28}H_{28}O_{11}$ (540.53). Source: HAO WANG JIAO LU HUI *Aloe ferox*. Ref: 660.

**11205 Isoaloecin**

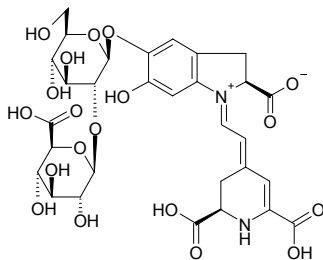
2-Acetyl-6-C- β -D-glucopyranosyl-7-hydroxy-5-methyl-chromone $C_{19}H_{22}O_{10}$ (410.38). Source: LU HUI *Aloe vera* [Syn. *Aloe barbadensis*]. Ref: 534.

**11206 Isoalvaxanthone**

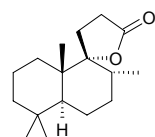
$C_{23}H_{24}O_6$ (396.44). Pharm: Cytotoxic (HSC-2 cells, $CC_{50} = 0.035$ mmol/L; HGF, $CC_{50} = 0.058$ mmol/L). Source: GOU JI *Cudrania cochinchinensis* (root; yield = 0.00164%dw). Ref: 3025.

**11207 Isoamaranthin**

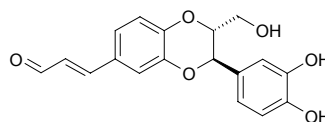
[15229-42-2] $C_{30}H_{34}N_2O_{19}$ (726.61). Source: QIAN RI HONG *Gomphrena globosa*. Ref: 15.

**11208 Isoambreninoid**

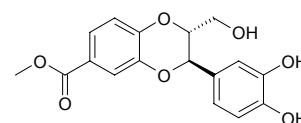
$C_{17}H_{28}O_2$ (264.41). Source: DAN YE MAN JING ZI *Vitex rotundifolia* [Syn. *Vitex trifolia* var. *simplicifolia*] (seed; yield = 0.0018%dw). Ref: 4623.

**11209 Isoamericanin A**

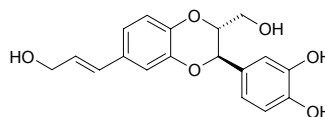
[109063-85-6] $C_{18}H_{16}O_6$ (328.32). mp 177~178°C, $[\alpha]_D = \pm 0^\circ$ ($c = 1.01$). Pharm: Stimulates release of PGI₂ (10μmol/L, makes PGI₂ releasing 149.8%); nourishes nerve (10μmol/L, increases activity of choline acetyltransferase in rat cerebrum). Source: MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*]. Ref: 954, 1022.

**11210 Isoamericanoic acid A methyl ester**

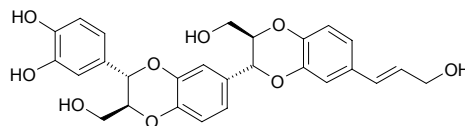
$C_{17}H_{16}O_7$ (332.31). $[\alpha]_D^{20} = 0^\circ$ ($c = 0.71$, MeOH). Source: MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*] (seed). Ref: 4407.

**11211 Isoamericanol A**

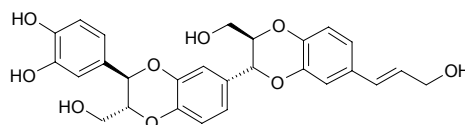
[121620-06-2] $C_{18}H_{18}O_6$ (330.34). Colorless rhombic crystals, mp 157~159°C (ethyl acetate-acetone), $[\alpha]_D^{27} = \pm 0^\circ$ ($c = 1.05$, ethanol). Pharm: Nourishes nerve (10μmol/L, increases activity of choline acetyltransferase in rat cerebrum). Source: MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*]. Ref: 1022, 1521.

**11212 Isoamericanol B₁**

rel-(7ⁿE)-(7 α ,8 β ,7 α ,8 β)-3,4,9,9',9''-Pentahydroxy-3',7:3'',7'-diepoxy-8,4':8',4''-bisoxysesquieolign-7ⁿ-ene $C_{27}H_{26}O_9$ (494.50). Colorless amorphous solid. Source: BA XI QIAO AN MU *Joannesia princeps* (seed). Ref: 3369.

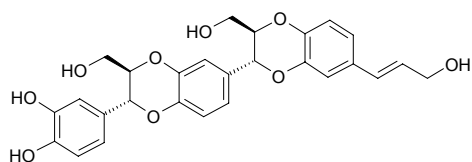
**11213 Isoamericanol B₂**

rel-(7ⁿE)-(7 α ,8 β ,7 β ,8 α)-3,4,9,9',9''-Pentahydroxy-3',7:3'',7'-diepoxy-8,4':8',4''-bisoxysesquieolign-7ⁿ-ene $C_{27}H_{26}O_9$ (494.50). Colorless amorphous solid. Source: BA XI QIAO AN MU *Joannesia princeps* (seed). Ref: 3369.

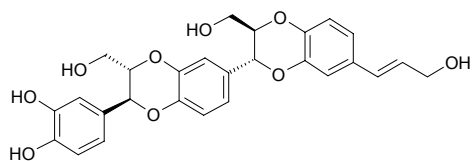


11214 Isoamericanol C₁

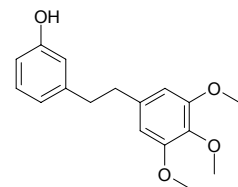
rel-(7''*E*)-(7 α ,8 β ,7' α ,8' β)-3,4,9,9',9''-Pentahydroxy-4',7:3'',7'-diepoxy-8,3':8',4''-bisoxysesquieolign-7''-ene C₂₇H₂₆O₉ (494.50). Colorless amorphous solid. Source: BA XI QIAO AN MU *Joannesia princeps* (seed). Ref: 3369.

**11215 Isoamericanol C₂**

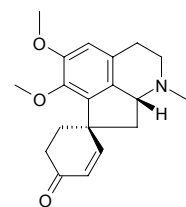
rel-(7''*E*)-(7 α ,8 β ,7' β ,8' α)-3,4,9,9',9''-Pentahydroxy-4',7:3'',7'-diepoxy-8,3':8',4''-bisoxysesquieolign-7''-ene C₂₇H₂₆O₉ (494.50). Colorless amorphous solid. Source: BA XI QIAO AN MU *Joannesia princeps* (seed). Ref: 3369.

**11216 Isoamoeylin**

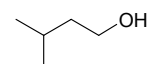
C₁₇H₂₀O₄ (288.35). Source: KE AI SHI HU *Dendrobium amoenum*. Ref: 2397.

**11217 Isoamuronine**

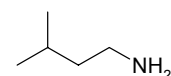
C₁₉H₂₃NO₃ (313.4). Yellow powder. Source: HOU KE GUI *Cryptocarya chinensis* (wood). Ref: 3092.

**11218 Isoamyl alcohol**

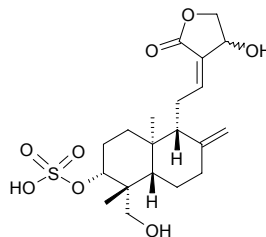
Isopentanol [123-51-3] C₅H₁₂O (88.15). bp 132°C. Source: SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*], MEI GUI HUA *Rosa rugosa*. Ref: 2, 1445.

**11219 Isoamylamine**

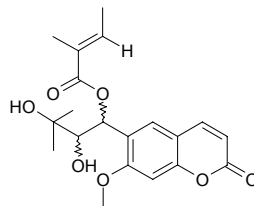
[107-85-7] C₅H₁₃N (87.17). bp 95°C. Source: GUI GAI *Coprinus atramentarius*. Ref: 6.

**11220 Isoandrographolide-3-O-sulfate**

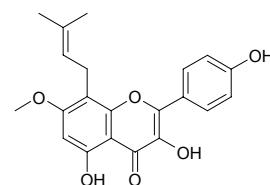
C₂₀H₃₀O₈S (430.52). White amorphous powder. Source: REN NIAO *Homo sapiens*. Ref: 4300.

**11221 Isoangelol**

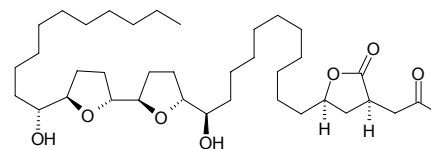
[110115-58-7] C₂₀H₂₄O₇ (376.41). Colorless transparent substance, [α]_D²⁰ = -138.5° (c = 0.33, chloroform). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 8, 79.

**11222 Isoanhydrocaritin**

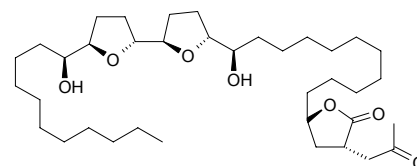
3,4',5-Trihydroxy-7-methoxy-8-isopentenylflavone C₂₁H₂₀O₆ (368.39). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 6, 660, 4430.

**11223 Isoannonarectin**

C₃₇H₆₆O₇ (622.93). Source: NIU XIN FAN LI ZHI *Annona reticulata*. Ref: 401.

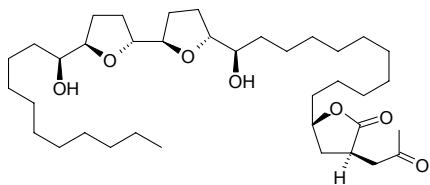
**11224 2,4-cis-Isoannonarectin**

C₃₇H₆₆O₇ (622.93). Source: NIU XIN FAN LI ZHI *Annona reticulata*. Ref: 432.

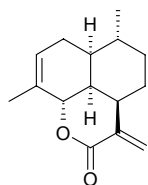


11225 2,4-trans-Isoannonarecticin

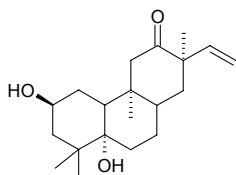
$C_{37}H_{66}O_7$ (622.93). Source: NIU XIN FAN LI ZHI *Annona reticulata*. Ref: 432.

**11226 Isoannulide**

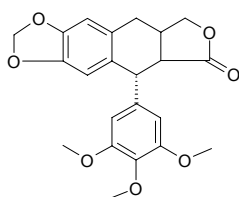
$C_{15}H_{20}O_2$ (232.33). Source: HUANG HUA HAO *Artemisia annua* (aerial parts). Ref: 5224.

**11227 Isoanomallotusin**

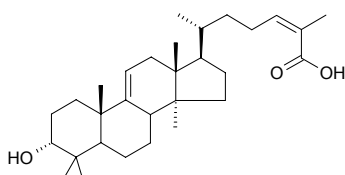
[141374-89-2] $C_{20}H_{32}O_3$ (320.47). White acicular crystals, mp 213~215°C (acetone–diethyl ether), $[\alpha]_D^{25} = +101.20^\circ$ ($c = 0.045$, methanol). Pharm: Inhibits leukemia cells *in vitro* (1 $\mu\text{g}/\text{mL}$, InRt = 98%, *in vivo* no effect). Source: XIU MAO YE TONG *Mallotus anomalus*. Ref: 1184.

**11228 Isoanthricin**

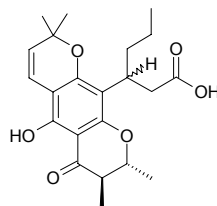
$C_{22}H_{22}O_7$ (398.24). mp 170°C. Source: E SHEN *Anthriscus sylvestris*. Ref: 6.

**11229 Isoanwuweizic acid**

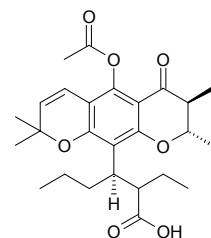
$C_{30}H_{48}O_3$ (456.72). Source: LENG FAN TUAN *Kadsura coccinea* [syn. *Kadsura chenensis*; *Kadsura hainanensis*]. Ref: 2436.

**11230 Isoapetalic acid**

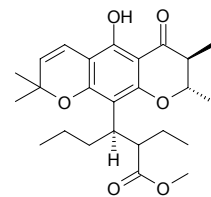
$C_{22}H_{28}O_6$ (388.46). Yellow oil, $[\alpha]_D^{25} = -23.0^\circ$ ($c = 1.0$, CH_2Cl_2). Pharm: Cytotoxic (KB, $\text{ED}_{50} = 11.29 \mu\text{g}/\text{mL}$, HeLa, $\text{ED}_{50} = 12.77 \mu\text{g}/\text{mL}$, hmn medulloblastoma, $\text{ED}_{50} > 20 \mu\text{g}/\text{mL}$, control Doxorubicin, $\text{ED}_{50} = 0.15 \mu\text{g}/\text{mL}$, 0.14 $\mu\text{g}/\text{mL}$, 0.19 $\mu\text{g}/\text{mL}$ respectively)^[4274]; antifungal inactive (*Aspergillus fumigatus*, $\text{MIC}_{80} > 250 \mu\text{g}/\text{mL}$, Amphotericin B, $\text{MIC}_{80} = 8 \mu\text{g}/\text{mL}$)^[5489]. Source: SU GE LAN HU TONG *Calophyllum caledonicum* (seed), *Calophyllum blancoi* (seed). Ref: 4274, 5489.

**11231 Isoapetalic acid 5-O-acetate**

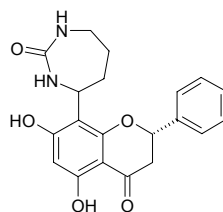
$C_{24}H_{30}O_7$ (430.50). Yellow oil, $[\alpha]_D^{25} = -37.6^\circ$ ($c = 1.0$, CH_2Cl_2). Pharm: Cytotoxic (KB, $\text{ED}_{50} = 13.15 \mu\text{g}/\text{mL}$, HeLa, $\text{ED}_{50} = 16.79 \mu\text{g}/\text{mL}$, hmn medulloblastoma, $\text{ED}_{50} = 13.37 \mu\text{g}/\text{mL}$, control Doxorubicin, $\text{ED}_{50} = 0.15 \mu\text{g}/\text{mL}$, 0.14 $\mu\text{g}/\text{mL}$, 0.19 $\mu\text{g}/\text{mL}$ respectively). Source: *Calophyllum blancoi* (seed). Ref: 4274.

**11232 Isoapetalic methyl ester**

$C_{23}H_{30}O_6$ (402.49). Yellow oil, $[\alpha]_D^{25} = -83.7^\circ$ ($c = 1.0$, CH_2Cl_2). Pharm: Cytotoxic (KB, $\text{ED}_{50} = 6.37 \mu\text{g}/\text{mL}$, HeLa, $\text{ED}_{50} = 7.79 \mu\text{g}/\text{mL}$, hmn medulloblastoma, $\text{ED}_{50} = 8.69 \mu\text{g}/\text{mL}$, control Doxorubicin, $\text{ED}_{50} = 0.15 \mu\text{g}/\text{mL}$, 0.14 $\mu\text{g}/\text{mL}$, 0.19 $\mu\text{g}/\text{mL}$ respectively). Source: *Calophyllum blancoi* (seed). Ref: 4274.

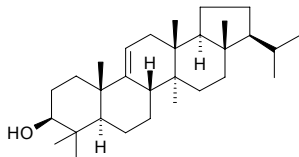
**11233 Isoaquiledine**

(2*S*)-8-(1,4-Ureylenebutyl)-5,7-dihydroxyflavanone $C_{20}H_{20}N_2O_5$ (368.39). White amorphous powder (CH_3OH), mp 232~233°C, $[\alpha]_D^{25} = +19^\circ$ ($c = 0.43$, CH_3OH). Source: WU JU LOU DOU CAI *Aquilegia ecalcarata* (whole herb: yield = 0.000078%dw). Ref: 3029.

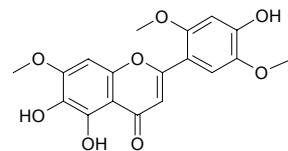


11234 Isoarborinol

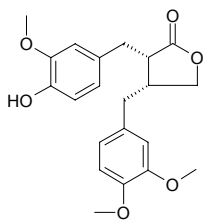
[5532-41-2] $C_{30}H_{50}O$ (426.73). Crystals ($CHCl_3$ -MeOH), mp 294.0~294.5°C, $[\alpha]_D = +47^\circ$ ($c = 0.53$, $CHCl_3$). **Pharm:** Cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity)^[3069]. **Source:** CHOU SHAN YANG *Orixa japonica*, GOU MAO QIAN CAO *Rubia oncotricha*, JIN CAO *Hedyotis acutangula*, YIN DU BAI MAO *Imperata cylindrica*, ZHONG GUO XIU QIU *Hydrangea chinensis* (root)^[3069]. **Ref:** 6, 1521, 3069.

**11235 Isoarcapillin**

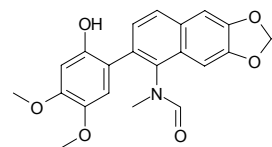
$C_{18}H_{16}O_8$ (360.32). **Source:** YIN CHEN HAO *Artemisia capillaris*. **Ref:** 2.

**11236 Isoartigenin**

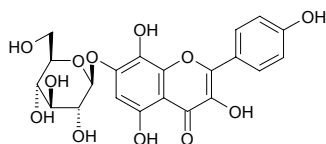
$C_{21}H_{24}O_6$ (372.42). mp *cis*- (+) 92~93°C. **Source:** NIU BANG ZI *Arctium lappa*. **Ref:** 6.

**11237 Isoarnottianamide**

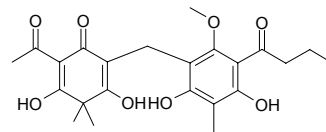
$C_{21}H_{19}NO_6$ (381.39). **Source:** HUA JIAO LE *Zanthoxylum cuspidatum*, RU DI JIN NIU *Zanthoxylum nitidum*. **Ref:** 660.

**11238 Isoarticulatin**

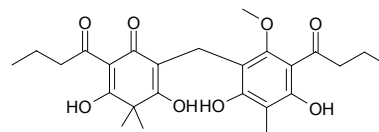
Herbacitrin [35815-07-7] $C_{21}H_{20}O_{12}$ (464.39). Yellow needles (pyridine aq.), mp 247~249°C. **Source:** MU ZEI *Equisetum hiemale*, WEN JING *Equisetum arvense*, MIAN HUA *Gossypium herbaceum*, YIN DU MIAN *Gossypium indicum*. **Ref:** 2, 660, 1521.

**11239 Isoaspidin AB**

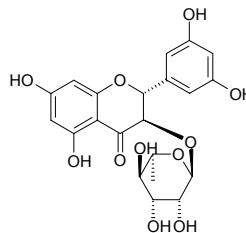
$C_{23}H_{28}O_8$ (432.47). **Source:** CHANG WEI FU YE ER JUE *Arachniodes simplicior*, CI TOU FU YE ER JUE *Arachniodes exilis*, *Arachniodes dimorphophylla*, *Arachniodes nipponica*. **Ref:** 660, 1521.

**11240 Isoaspidin BB**

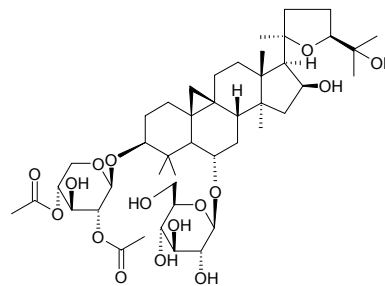
$C_{23}H_{32}O_8$ (460.53). **Source:** CHANG WEI FU YE ER JUE *Arachniodes simplicior*, CI TOU FU YE ER JUE *Arachniodes exilis*, *Arachniodes dimorphophylla*, *Arachniodes nipponica*. **Ref:** 660, 1521.

**11241 Isoastilbin B**

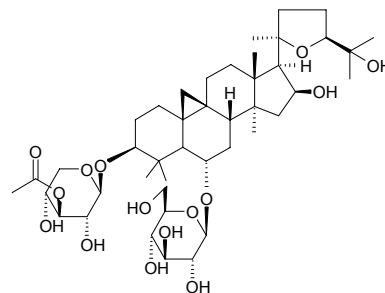
$C_{21}H_{22}O_{11}$ (450.40). Yellowish acicular crystals (methanol), mp 186~187°C; pale yellow needles (MeOH), mp 191~193°C, $[\alpha]_D^{34} = -3.0^\circ$ ($c = 1.06$, MeOH). **Source:** HAI QI *Excoecaria agallocha* (fresh stem), TU FU LING *Smilax glabra*. **Ref:** 366, 568, 4386.

**11242 Isoastragaloside I**

$C_{45}H_{72}O_{16}$ (869.07). **Source:** HUANG QI *Astragalus membranaceus*. **Ref:** 660.

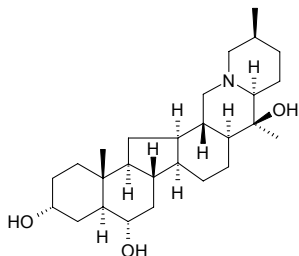
**11243 Isoastragaloside II**

$C_{43}H_{70}O_{15}$ (827.03). **Source:** HUANG QI *Astragalus membranaceus*. **Ref:** 660.

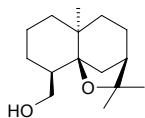


11244 Isobaimonidine

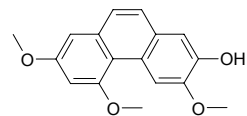
[74184-79-5] $C_{27}H_{45}NO_3$ (431.66). Crystals ($Me_2CO-CHCl_3$), mp 238~239°C, $[\alpha]_D^{22} = -12^\circ$ ($c = 0.5$, $CHCl_3$), $[\alpha]_D = -59.2^\circ$ ($c = 0.25$, $CHCl_3$). **Source:** ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*], XI BEI MU *Fritillaria imperialis*. **Ref:** 660, 2201.

**11245 Isobaimuxinol**

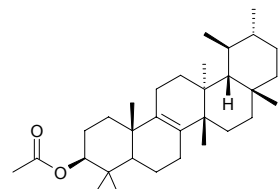
[122798-42-9] $C_{15}H_{26}O_2$ (238.37). Crystals, mp 73~75°C, $[\alpha]_D^{12} = -68^\circ$ ($c = 0.1$, $CHCl_3$). **Source:** BAI MU XIANG *Aquilaria sinensis*. **Ref:** 13, 1521.

**11246 Isobatatin I**

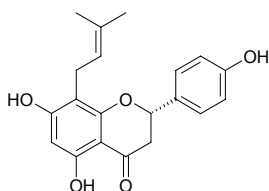
$C_{17}H_{16}O_4$ (284.31). **Pharm:** Antifungal (*Aspergillus niger* and *Botrytis cinerea*). **Source:** YUAN SHU YU *Dioscorea rotundata* [Syn. *Dioscorea cayenensis*], JIANG GUO SHU YU *Tamus communis*. **Ref:** 658.

**11247 Isobauerenyl acetate**

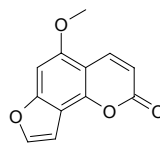
$C_{32}H_{52}O_2$ (468.77). **Source:** LIAN QIAO *Forsythia suspensa*. **Ref:** 660.

**11248 Isobavachin**

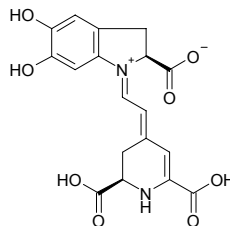
8-Prenylnaringenin; Sophoraflavanone B [31524-62-6] $C_{20}H_{20}O_5$ (340.38). Crystals (MeOH), mp 187~188°C, mp 200~202°C, $[\alpha]_D^{22} = -46^\circ$ ($c = 0.13$, EtOH). **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor)^[5038], cytotoxic (HSC-2 cells, $CC_{50} = 0.13$ mmol/L; HGF, $CC_{50} = 0.19$ mmol/L)^[3025]. **Source:** BU GU ZHI *Psoralea corylifolia*, GOU JI *Cudrania cochinchinensis* (root: yield = 0.00143%dw), LING NAN HUAI SHU *Sophora tomentosa*, PI JIU HUA *Humulus lupulus* (strobile), SHA SHENG HUAI *Sophora moorcroftiana*, ZHEN YE XUE TONG *Macaranga confera*. **Ref:** 2, 545, 1521, 3025, 4789, 5038.

**11249 Isobergapten**

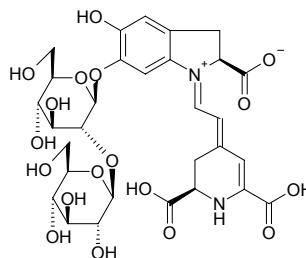
[482-48-4] $C_{12}H_8O_4$ (216.20). mp 222~224°C. **Source:** DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], LANG DU *Stellera chamaejasme*, DA HUI QIN *Pimpinella magna*, HU ER CAO YE HUI QIN *Pimpinella saxifraga*, YONG NING DU HUO *Heracleum yungningense*, YU ZHUANG YUN XIANG *Ruta pinnata*. **Ref:** 6, 541, 1521.

**11250 Isobetandin**

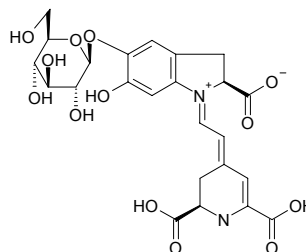
$C_{18}H_{16}N_2O_8$ (388.34). **Source:** DA HUA MA CHI XIAN *Portulaca grandiflora*, MA CHI XIAN *Portulaca oleracea*, MAO MA CHI XIAN *Portulaca pilosa*. **Ref:** 660.

**11251 Isobetandin-6-O-β-sophoroside**

$C_{30}H_{36}N_2O_{18}$ (712.62). **Source:** GUANG YE ZI HUA *Bougainvillea glabra*. **Ref:** 6.

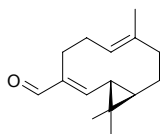
**11252 Isobetandin**

[15121-53-6] $C_{24}H_{26}N_2O_{13}$ (550.48). **Source:** LV XIAN REN ZHANG *Opuntia vulgaris*, SHI YONG RI ZHONG HUA *Mesembryanthemum edule*, DA HUA MA CHI XIAN *Portulaca grandiflora*, MA CHI XIAN *Portulaca oleracea*, MAO MA CHI XIAN *Portulaca pilosa*. **Ref:** 660, 658.

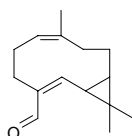


11253 (+)-Isobicyclogermacrenal

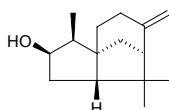
[110268-36-5] C₁₅H₂₂O (218.34). Source: GUAN MU TONG *Aristolochia manshuriensis*, MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.0074%dw). Ref: 660, 3026.

**11254 (-)-Isobicyclogermacrenal**

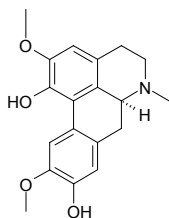
[73256-82-3] C₁₅H₂₂O (218.34). Source: YING ZHI YE TAI *Lepidozia vitrea*. Ref: 1521.

**11255 β-Isobiotol**

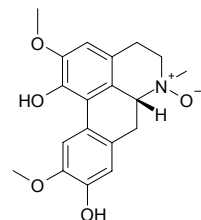
[24048-41-7] C₁₅H₂₄O (220.36). Crystals, mp 76.5°C, [α]_D²⁰ = -7.8°. Source: CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*]. Ref: 6, 1521.

**11256 Isoboldine**

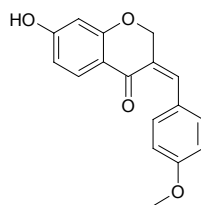
C₁₉H₂₁NO₄ (327.38). mp 178~180°C (dec), [α]_D¹³ = +54° (c = 0.20, EtOH). Pharm: Insect antifeedant. Source: AO XIAN ZI JIN *Corydalis cava*, BO LU DU SHU *Peumus boldus*, CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*], HOU KE GUI *Cryptocarya chinensis* (leaf), WU MAO CHAN GAO SHU *Litsea glutinosa* var. *glabrara*, XIANG TANG SONG CAO *Thalictrum foetidum*. Ref: 6, 658, 660, 4129.

**11257 Isoboldine-β-N-oxide**

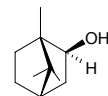
C₁₉H₂₁NO₅ (343.38). Brown powder, mp 177~179°C, [α]_D = -90.32° (c = 0.1395, MeOH). Source: HOU KE GUI *Cryptocarya chinensis* (leaf). Ref: 4129.

**11258 Isobonducellin**

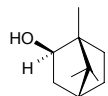
C₁₇H₁₄O₄ (282.30). Yellow needles, mp 156~158°C. Pharm: Antibacterial (gram-positive bacteria: *Staphylococcus aureus*, 30μg/mL, DIZ = 8mm; *Bacillus subtilis*, 30μg/mL, DIZ = 9mm; *Bacillus sphaericus*, 30μg/mL, DIZ = 8mm; control Penicillin G, 30μg/mL, DIZ = 12, 15, 14mm, respectively; gram-negative bacteria: *Pseudomonas aeruginosa*, 30μg/mL, DIZ = 9mm; *Klebsiella aerogenes*, 100μg/mL, inactive, *Chromobacterium violaceum*, 100μg/mL, inactive, control Penicillin G, 30μg/mL, DIZ = 24, 23, 24mm, respectively); antifungal (*Aspergillus niger*, 100μg/mL DIZ = 7mm; *Candida albicans*, 100μg/mL DIZ = 8mm; *Rhizopus oryzae*, 150μg/mL inactive; control Clotrimazole, 100μg/mL DIZ = 22, 25, 24mm, respectively). Source: JI MEI YUN SHI *Caesalpinia pulcherrima*. Ref: 3407.

**11259 D-Isoborneol**

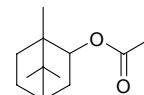
C₁₀H₁₈O (154.25). Pharm: Analgesic (mouse, hot plate)^[5501]; increases tolerance to anoxia (mouse)^[5501]; hypnotic (mouse, extends sleeping time due to pentobarbital)^[5501]; antibacterial (*Staphylococcus aureus*, β-hemolytic streptococcus, *Streptococcus pneumoniae*, *Streptococcus viridans*, *Escherichia coli*)^[5501]; anti-Inflammatory (mouse ear edema induced by croton oil)^[5501]; LD₅₀ = 2269mg/kg^[5501]. Source: BING PIAN *Dryobalanops aromatica* (37.52%~38.98%), SHENG JIANG *Zingiber officinale*, HUANG HUA HAO *Artemisia annua*. Ref: 2, 660, 5501.

**11260 L-Isoborneol**

C₁₀H₁₈O (154.25). Pharm: Analgesic (mouse, hot plate)^[5501]; increases tolerance to anoxia (mouse)^[5501]; hypnotic (mouse, extends sleeping time due to pentobarbital)^[5501]; antibacterial (*Staphylococcus aureus*, β-hemolytic streptococcus, *Streptococcus pneumoniae*, *Streptococcus viridans*, *Escherichia coli*)^[5501]; anti-Inflammatory (mouse ear edema induced by croton oil)^[5501]; LD₅₀ = 2269mg/kg^[5501]. Source: BING PIAN *Dryobalanops aromatica* (37.52%~38.98%), SHENG JIANG *Zingiber officinale*, HUANG HUA HAO *Artemisia annua*. Ref: 2, 660, 5501.

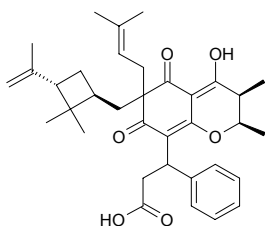
**11261 Isobornyl acetate**

C₁₂H₂₀O₂ (196.29). Source: BEI AI *Artemisia vulgaris*, HUANG HUA HAO *Artemisia annua*. Ref: 660.

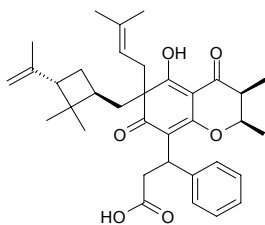


11262 Isobrasiliensophyllic acid A

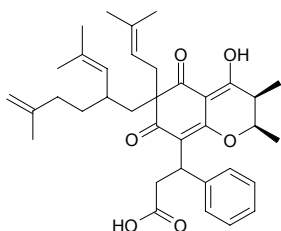
3-[*rel*-(2*S*,3*R*)-4-Hydroxy-6-(3-*isopropenyl*-2,2-dimethylcyclobutyl- β -methyl)-2,3-dimethyl-6-(3-methylbut-2-enyl)-5,7-dioxo-3,5,6,7-tetrahydro-2*H*-chromen-8-yl]-3-phenylpropionic acid C₃₅H₄₄O₆ (560.74). Green gum, $[\alpha]_D^{20} = -12^\circ$ ($c = 0.1$, MeOH). **Pharm:** Antibacterial (*Bacillus cereus*, MIC = 1 μ g/mL, control Chloramphenicol, MIC = 4 μ g/mL; *Staphylococcus epidermidis*, MIC = 16 μ g/mL, Chloramphenicol, MIC = 4 μ g/mL); cytotoxic inactive (KB, Jurkat-T, and myosarcoma, 20 μ g/mL). **Source:** BA XI HU TONG *Calophyllum brasiliense* (Bark: yield = 0.0018%dw). **Ref:** 3019.

**11263 Isobrasiliensophyllic acid B**

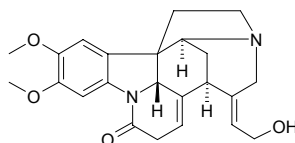
3-[*rel*-(2*S*,3*R*)-5-Hydroxy-6-(3-*isopropenyl*-2,2-dimethylcyclobutyl- β -methyl)-2,3-dimethyl-6-(3-methylbut-2-enyl)-4,7-dioxo-3,4,6,7-tetrahydro-2*H*-chromen-8-yl]-3-phenylpropionic acid C₃₅H₄₄O₆ (560.74). Yellow gum, $[\alpha]_D^{20} = -49^\circ$ ($c = 0.1$, MeOH). **Pharm:** Antibacterial (*Bacillus cereus*, MIC = 4 μ g/mL, control Chloramphenicol, MIC = 4 μ g/mL; *Staphylococcus epidermidis*, MIC = 16 μ g/mL, Chloramphenicol, MIC = 4 μ g/mL); cytotoxic inactive (KB, Jurkat-T, and myosarcoma, 20 μ g/mL). **Source:** BA XI HU TONG *Calophyllum brasiliense* (Bark: yield = 0.0005%dw). **Ref:** 3019.

**11264 Isobrasiliensophyllic acid C**

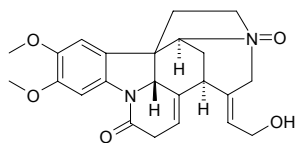
3-[*rel*-(2*S*,3*R*)-4-Hydroxy-2,3-dimethyl-6-(3-methylbut-2-enyl)-6-[5-methyl-2-(2-methylpropenyl)hex-5-enyl]-5,7-dioxo-3,5,6,7-tetrahydro-2*H*-chromen-8-yl]-3-phenylpropionic acid C₃₆H₄₆O₆ (574.76). Green gum, $[\alpha]_D^{20} = -56^\circ$ ($c = 0.1$, MeOH). **Pharm:** Antibacterial (*Bacillus cereus*, MIC = 16 μ g/mL, control Chloramphenicol, MIC = 4 μ g/mL; *Staphylococcus epidermidis*, MIC = 16 μ g/mL, Chloramphenicol, MIC = 4 μ g/mL); cytotoxic inactive (KB, Jurkat-T, and myosarcoma, 20 μ g/mL). **Source:** BA XI HU TONG *Calophyllum brasiliense* (Bark: yield = 0.0005%dw). **Ref:** 3019.

**11265 Isobrucine**

[129724-78-3] C₂₃H₂₆N₂O₄ (394.47). Colorless rhombic crystals, mp 197–199°C (acetone), $[\alpha]_D = -31.1^\circ$ ($c = 0.3$, chloroform). **Pharm:** Cytotoxic (*in vitro*, HeLa, IC₅₀ = 23 μ mol/L; K562, IC₅₀ = 23 μ mol/L; Hep2, IC₅₀ = 34 μ mol/L). **Source:** MA QIAN ZI *Strychnos nux-vomica*. **Ref:** 2, 542, 1186, 1187.

**11266 Isobrucine N-oxide**

[130641-43-9] C₂₃H₂₆N₂O₅ (410.47). White powder, $[\alpha]_D = +34.2^\circ$ ($c = 0.0017$, methanol). **Pharm:** Cytotoxic (*in vitro*, HeLa, IC₅₀ = 26 μ mol/L; K562, IC₅₀ = 15 μ mol/L; Hep2, IC₅₀ = 4.3 μ mol/L); antioxidant; inhibits damage of myocardial cells caused by free radicals; free radical scavenger (inhibits formation of superoxide anion, X-XOD, IC₅₀ = 86.5 μ mol/L, NADH, IC₅₀ = 8.9 μ mol/L); xanthinoxidase inhibitor (IC₅₀ = (13.3 \pm 6.0) μ mol/L). **Source:** MA QIAN ZI *Strychnos nux-vomica*. **Ref:** 2, 542, 1180, 1186, 1187.

**11267 Isobutanol**

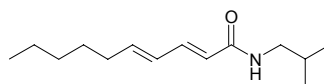
[78-84-2] C₄H₈O (72.11). bp 63–64°C/757mmHg. **Source:** NIU BANG GEN *Arctium lappa*. **Ref:** 6.

**11268 Isobutyl alcohol**

2-Methyl-1-propanol; Isobutanol [78-83-1] C₄H₁₀O (74.12). **Source:** SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*]. **Ref:** 2.

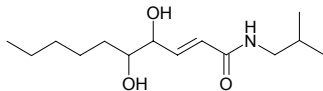
**11269 N-Isobutyldeca-trans-2-trans-4-dienamide**

Pellitorine; Pyretrin [18836-52-7] C₁₄H₂₅NO (223.36). Needles (pet. ether), mp 69°C, mp 75°C, mp 90–90.5°C. **Pharm:** Antifungal (TLC-based assay, *Cladosporium cucumerinum*, MIQ = 0.1 μ g, control Moiconazole, MIQ = 1 μ g; *Candida albicans*, MIQ = 10 μ g, Moiconazole, MIQ = 0.1 μ g)^[5385]; antibacterial (TLC-based assay, *Bacillus subtilis*, MIQ = 10 μ g; control Chloramphenicol, MIQ = 1 μ g)^[5385]; insecticide; phyto-growth inhibitor (100 μ g/mL, *Amaranthus hypochondriacus*, InRt = (20.3 \pm 0.7)% $_{P < 0.05}$; *E. crusgalli*, InRt = (55.6 \pm 2.2)% $_{P < 0.05}$)^[5253]; cytotoxic (*in vitro*, A549, ED₅₀ = 16.3 μ g/mL, control Adriamycin, ED₅₀ = 0.0322 μ g/mL; MCF7, ED₅₀ = 9.3 μ g/mL, Adriamycin, ED₅₀ = 0.0204 μ g/mL; HT29, ED₅₀ = 3.5 μ g/mL, Adriamycin, ED₅₀ = 0.0421 μ g/mL; A498, ED₅₀ = 3.9 μ g/mL, Adriamycin, ED₅₀ = 0.00348 μ g/mL; PC3, ED₅₀ = 4.8 μ g/mL, Adriamycin, ED₅₀ = 0.241 μ g/mL; PACA-2, ED₅₀ = 2.2 μ g/mL, Adriamycin, ED₅₀ = 0.0120 μ g/mL)^[5253]. **Source:** BI BA *Piper longum*, HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*], HU JIAO *Piper nigrum* (root: yield = 0.00014%dw)^[4753], *Fagara xanthoxyloides*, *Stauranthus perforatus* (root). **Ref:** 6, 1521, 2537, 4753, 5253, 5385.

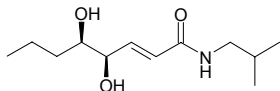


11270 N-Isobutyl-4,5-dihydroxy-2E-decaenamide

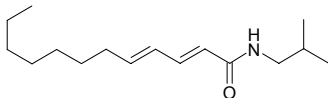
C₁₄H₂₇NO₃ (257.38). Source: HU JIAO *Piper nigrum* (root: yield = 0.0008%dw). Ref: 4753.

**11271 (±)-threo-N-Isobutyl-4,5-dihydroxy-2E-octaenamide**

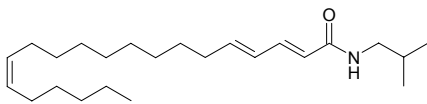
C₁₂H₂₃NO₃ (229.32). Colorless oil, [α]_D²⁵ = 0° (c = 0.3, CHCl₃). Source: HU JIAO *Piper nigrum* (root: yield = 0.000043%dw). Ref: 4753.

**11272 N-Isobutyl-2E,4E-dodecadienamide**

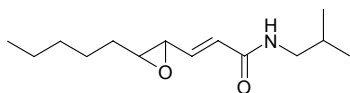
C₁₆H₂₉NO (251.42). Source: HU JIAO *Piper nigrum* (root: yield = 0.00031%dw). Ref: 4753.

**11273 N-Isobutyl-(2E,4E,14Z)-eicosatrienamide**

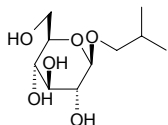
C₂₄H₄₃NO (361.62). Colorless oil. Pharm: Protective gastric lesions (rat, ethanol-induced, 25mg/kg orl, length = (31.9±9.6)mm, control, length = (118.6±16.2)mm, InRt = 73.1%; indomethacin-induced in rats, dose, 25mg/kg orl, length = (29.0±12.0)mm, control, length = (89.5±9.8)mm, InRt = 67.6%). Source: *Piper chaba* (fruit). Ref: 4935.

**11274 N-Isobutyl-4,5-epoxy-2E-decaenamide**

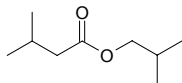
C₁₄H₂₅NO₂ (239.36). Source: HU JIAO *Piper nigrum* (root: yield = 0.00031%dw). Ref: 4753.

**11275 Isobutyl β-D-glucopyranoside**

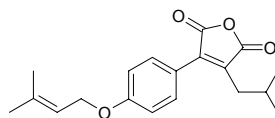
C₁₀H₂₀O₆ (236.27). Amorphous powder, [α]_D²⁴ = -19° (c = 0.1, MeOH). Source: BEI SHA SHEN *Glehnia littoralis* (fruit). Ref: 3525.

**11276 Isobutylisovalerate**

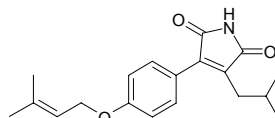
[589-59-3] C₉H₁₈O₂ (158.24). bp 170–172°C/757.5mmHg. Source: BAN BIAN SU *Elsholtzia ciliata*. Ref: 6.

**11277 3-Isobutyl-4-[4-(3-methyl-2-butenyloxy)phenyl]furan-2,5-dione**

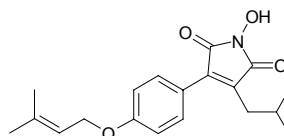
C₁₉H₂₂O₄ (314.38). Yellow oil. Pharm: Cytotoxic (*in vitro*, LLC cell line, ED₅₀ > 20μg/mL; control Adriamycin, ED = 0.14μg/mL). Source: *Antrodia camphorata* (fruit: yield = 0.0145%dw). Ref: 3003.

**11278 3-Isobutyl-4-[4-(3-methyl-2-butenyloxy)phenyl]-1H-pyrrole-2,5-dione**

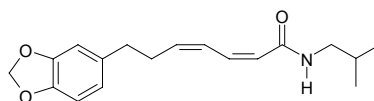
C₁₉H₂₃NO₃ (313.40). Yellow needles (*n*-hexane–EtOAc), mp 110–111°C. Pharm: Cytotoxic (*in vitro*, LLC cell line, ED₅₀ = 3.6μg/mL; control Adriamycin, ED = 0.14μg/mL). Source: *Antrodia camphorata* (fruit: yield = 0.0227%dw). Ref: 3003.

**11279 3-Isobutyl-4-[4-(3-methyl-2-butenyloxy)phenyl]-1H-pyrrol-1-ol-2,5-dione**

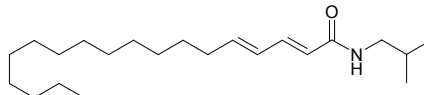
C₁₉H₂₃NO₄ (329.40). Yellow oil. Pharm: Cytotoxic (*in vitro*, LLC cell line, ED₅₀ = 7.6μg/mL; control Adriamycin, ED = 0.14μg/mL). Source: *Antrodia camphorata* (fruit: yield = 0.0243%dw). Ref: 3003.

**11280 (3Z,5Z)-N-Isobutyl-8-(3',4'-methylenedioxy-phenyl)-heptadienamide**

C₁₈H₂₃NO₃ (301.39). Amorphous solid. Pharm: Antifungal (*Cladosporium sphaerospermum*, MIA = 5.0μg, control Nystatin, MIA = 0.5μg). Source: YING MAO HU JIAO *Piper hispidum* (stem). Ref: 5102.

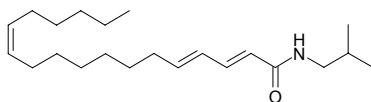
**11281 N-Isobutyl-(2E,4E)-octadecadienamide**

C₂₂H₄₁NO (335.58). Colorless oil. Pharm: Protective gastric lesions (rat, ethanol-induced, 25mg/kg orl, length = (44.8±13.5)mm, control, length = (118.6±16.2)mm, InRt = 33.2%; indomethacin-induced in rats, dose, 25mg/kg orl, length = (41.1±7.4)mm, control, length = (89.5±9.8)mm, InRt = 54.1%). Source: *Piper chaba* (fruit). Ref: 4935.

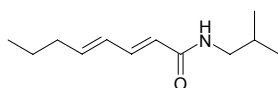


11282 N-Isobutyl-2E,4E,12Z-octadecatrienamide

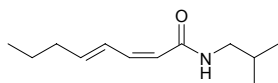
C₂₂H₃₉NO (333.56). Source: HU JIAO *Piper nigrum* (root: yield = 0.00011%dw). Ref: 4753.

**11283 N-Isobutyl-(2E,4E)-octadienamide**

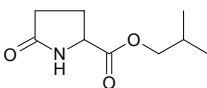
C₁₂H₂₁NO (195.31). Source: HU JIAO *Piper nigrum* (root: yield = 0.00029%dw). Ref: 4753.

**11284 N-Isobutyl-(2Z,4E)-octa-2,4-dienamide**

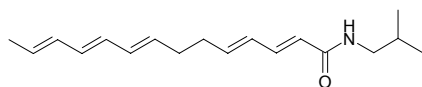
C₁₂H₂₁NO (195.31). Source: *Fagara xanthoxyloides*. Ref: 5385.

**11285 Isobutyl pyroglutamate**

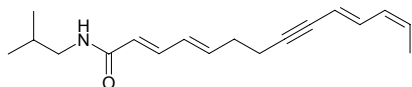
C₉H₁₅NO₃ (185.22). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2487.

**11286 (2E,4E,8E,10E,12E)-N-Isobutyl-2,4,8,10,12-tetradecapentaenamide**

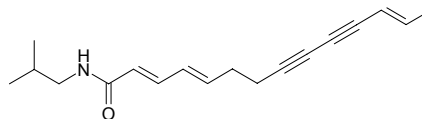
C₁₈H₂₇NO (273.42). Pharm: Anti-PAF. Source: *Zanthoxylum* sp. Ref: 2176.

**11287 N-Isobutyl-2E,4E,10E,12Z-tetradecatetraen-8-ynamide**

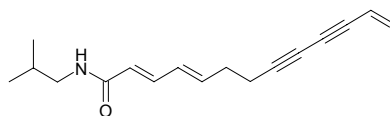
C₁₈H₂₅NO (271.41). Colorless oil. Source: JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*] (leaf and flower). Ref: 4725.

**11288 N-Isobutyl-2E,4E,12E-tetradecatrien-8,10-diynamide**

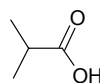
C₁₈H₂₃NO (269.39). Source: JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*] (leaf and flower). Ref: 4725.

**11289 N-Isobutyl-2E,4E,12Z-tetradecatrien-8,10-diynamide**

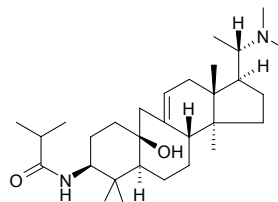
C₁₈H₂₃NO (269.39). Colorless oil. Source: JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*] (leaf and flower). Ref: 4725.

**11290 Isobutyric acid**

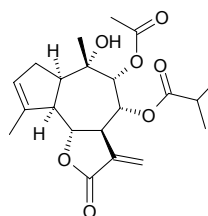
2-Methylpropanoic acid [79-31-2] C₄H₈O₂ (88.11). mp -47°C, bp 154.3°C. Source: SANG YE *Morus alba*. Ref: 6.

**11291 N-Isobutyrylbuxahyrcanine**

C₃₀H₅₂N₂O₂ (472.76). Colorless amorphous powder, mp 234-235°C, [α]_D²⁹ = +14° (c = 0.124, CHCl₃). Pharm: AChE inhibitor (*in vitro*, IC₅₀ > 1000 μmol/L; control Eserine, IC₅₀ = 0.041 μmol/L); BChE inhibitor (*in vitro*, IC₅₀ = 53.7 μmol/L; control Eserine, IC₅₀ = 0.0857 μmol/L). Source: HE KA NI YA HUANG YANG *Buxus hyrcana* (leaf). Ref: 4694.

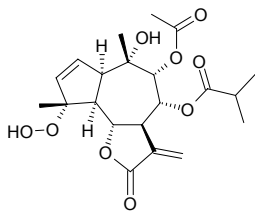
**11292 8-O-Isobutyryl-9a-acetoxycumambrin B**

C₂₁H₂₈O₇ (392.45). Amorphous solid, [α]_D²⁵ = +21° (c = 0.16, CHCl₃). Source: *Anthemis carpatica* (aerial parts). Ref: 3974.

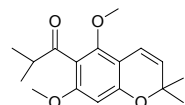


11293 8-O-Isobutyryl-9-O-acetylanthemolide B

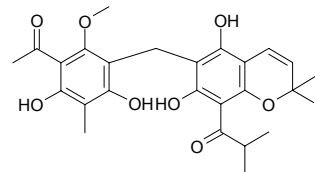
$C_{21}H_{28}O_9$ (424.45). Source: *Anthemis carpatica* (aerial parts). Ref: 3974.

**11294 6-Isobutyryl-5,7-dimethoxy-2,2-dimethylbenzopyran**

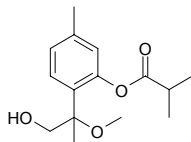
$C_{17}H_{22}O_4$ (290.36). Viscous oil. Source: *Hypericum polyanthemum* (aerial parts). Ref: 5168.

**11295 Isobutyrylmallotochromene**

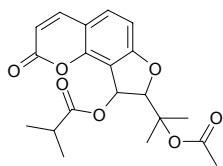
$C_{26}H_{30}O_8$ (470.52). Pharm: Antineoplastic; cytotoxic (KB); treatment of ulcer. Source: YE WU TONG *Mallotus japonicus*. Ref: 658.

**11296 3-O-Isobutyryl-8-methoxy-9-hydroxythymol**

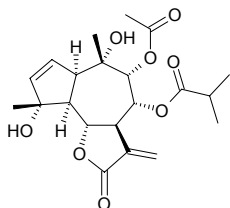
$C_{15}H_{22}O_4$ (266.34). $[\alpha]_D^{24} = 0^\circ$ ($c = 1.9$, $CHCl_3$). Source: PEI LAN *Eupatorium fortunei* (aerial parts). Ref: 3077.

**11297 3'-Isobutyryloxy-O-acetyl-2',3'-dihydro-oroselol**

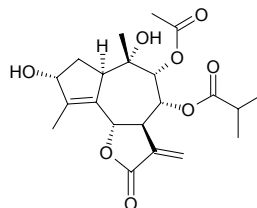
$C_{20}H_{22}O_7$ (374.39). mp 153~154°C. Source: SHE CHUANG ZI *Cnidium monnieri*. Ref: 6.

**11298 8α-Isobutyryloxyanthemolide A**

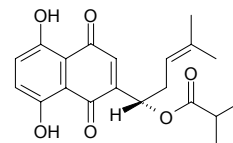
$C_{21}H_{28}O_8$ (408.45). Colorless gum, $[\alpha]_D^{25} = -13.6^\circ$ ($c = 0.11$, CH_2Cl_2). Source: *Anthemis carpatica* (aerial parts). Ref: 3974.

**11299 8α-Isobutyryloxyanthemolide C**

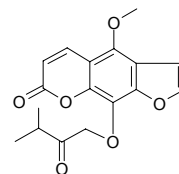
$C_{21}H_{28}O_8$ (408.45). Colorless gum, $[\alpha]_D^{25} = +51^\circ$ ($c = 0.14$, MeOH). Source: *Anthemis carpatica* (aerial parts). Ref: 3974.

**11300 Isobutyryl shikonin**

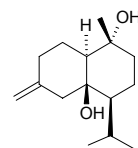
$C_{20}H_{22}O_6$ (358.39). mp 89~90°C. Source: ZI CAO *Lithospermum erythrorhizon*, XIN ZANG JIA ZI CAO *Arnebia euchroma*. Ref: 2, 6, 2193.

**11301 Isobyakangelicol**

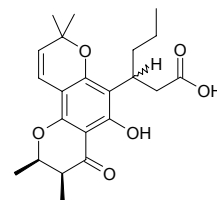
Anhydrobyakangelicin [35214-81-4] $C_{17}H_{16}O_6$ (316.31). mp 108~109°C. Source: HANG BAI ZHI *Angelica taiwaniana*. Ref: 2, 660.

**11302 Isocalamendiol**

[25330-21-6] $C_{15}H_{26}O_2$ (238.37). mp 72.5~73.5°C. Source: BAI CHANG *Acorus calamus*. Ref: 6.

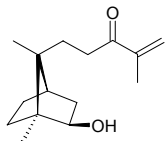
**11303 Isocalolongic acid**

$C_{22}H_{28}O_6$ (388.46). $[\alpha]_D^{25} = -13.9^\circ$. Pharm: Antifungal (*Aspergillus fumigatus*, $MIC_{80} = 2\mu g/mL$, control Amphotericin B, $MIC_{80} = 8\mu g/mL$). Source: SU GE LAN HU TONG *Calophyllum caledonicum* (seed). Ref: 5489.

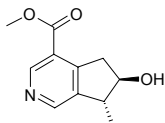


11304 Isocampheren-11-ene-10-one

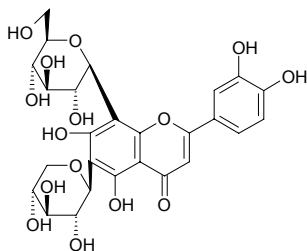
$C_{15}H_{24}O_2$ (236.36). Oil, $[\alpha]_D = -4.4^\circ$ ($c = 0.37$, $CHCl_3$). Source: DU AI BA JIAO *Illicium tsangii*. Ref: 1866.

**11305 Isocantleyine**

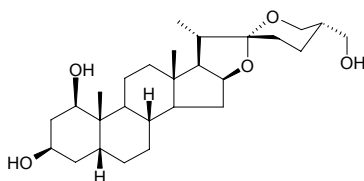
$C_{11}H_{13}NO_3$ (207.23). White feathery crystals, mp 124–125°C. Source: YIN XING CAO *Siphonostegia chinensis*. Ref: 217.

**11306 Isocarlinoside**

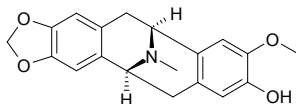
Luteolin 6-*C*- α -*L*-arabinopyranosyl-8-*C*- β -*D*-glucopyranoside $C_{26}H_{28}O_{15}$ (580.50). Source: ZI HUA DI DING *Viola yedoensis* (whole herb). Ref: 4393.

**11307 Isocarneagenin**

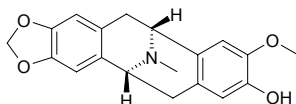
[17634-26-3] $C_{27}H_{44}O_5$ (448.65). Crystals, mp 242–244°C, $[\alpha]_D = -63.4^\circ$ ($c = 1.1$, MeOH/ $CHCl_3$). Source: JI XIANG CAO *Reineckea carnea*. Ref: 6.

**11308 (+)-Isocaryachine**

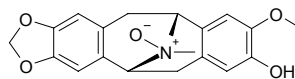
$C_{19}H_{19}NO_4$ (325.37). Source: HOU KE GUI *Cryptocarya chinensis* (leaf). Ref: 4129.

**11309 (-)-Isocaryachine**

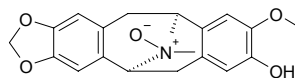
$C_{19}H_{19}NO_4$ (325.37). Source: HOU KE GUI *Cryptocarya chinensis* (leaf). Ref: 4129.

**11310 (+)-Isocaryachine-N-oxide**

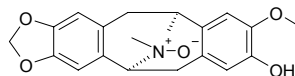
$C_{19}H_{19}NO_5$ (341.37). Colorless needles (acetone), mp >280°C, $[\alpha]_D = +72.60^\circ$ ($c = 0.073$, MeOH). Source: HOU KE GUI *Cryptocarya chinensis* (stem cortex). Ref: 4160.

**11311 (-)-Isocaryachine-N-oxide**

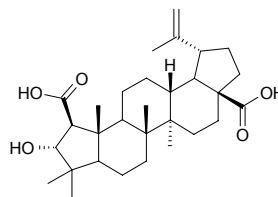
$C_{19}H_{19}NO_5$ (341.37). Colorless needles (acetone), mp >280°C, $[\alpha]_D = -245.08^\circ$ ($c = 0.1076$, MeOH). Source: HOU KE GUI *Cryptocarya chinensis* (leaf). Ref: 4129.

**11312 (-)-Isocaryachine-N-oxide B**

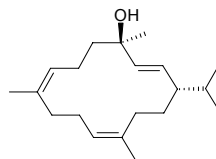
$C_{19}H_{19}NO_5$ (341.37). Colorless needles (acetone), mp >280°C, $[\alpha]_D = -26.2^\circ$ ($c = 0.2175$, MeOH). Source: HOU KE GUI *Cryptocarya chinensis* (stem cortex). Ref: 4160.

**11313 Isoceanothic acid**

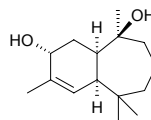
$C_{30}H_{46}O_5$ (486.70). Source: *Zizyphus xylopyrus*. Ref: 660.

**11314 Isocembrol**

[25269-17-4] $C_{20}H_{34}O$ (290.49). Oil, $[\alpha]_D = +74.4^\circ$ ($c = 0.3$, $CHCl_3$). Source: HAI SONG ZI *Pinus koraiensis*, XI BO LI YA HONG SONG *Pinus sibirica*, XI BO LI YA YUN SHAN *Picea obovata*. Ref: 6, 1521.

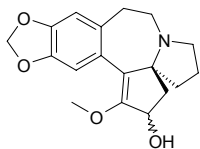
**11315 Isocentdarol**

$C_{15}H_{26}O_2$ (238.37). Source: XUE SONG *Cedrus deodara*. Ref: 660.

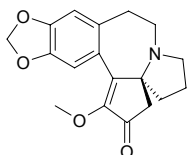


11316 Isocephalotaxine

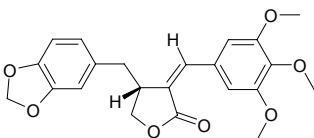
$C_{18}H_{21}NO_4$ (315.37). Amorphous solid, $[\alpha]_D^{21} = -47^\circ$ ($c = 0.5$, $CHCl_3$). **Pharm:** Cytotoxic (*in vitro*, nasopharynx KB cells, $IC_{50} = 15\mu g/mL$, weak activity). **Source:** SAN JIAN SHAN *Cephalotaxus fortunei* (drupe: yield = 0.00010%). **Ref:** 4675.

**11317 Isocephalotaxinone**

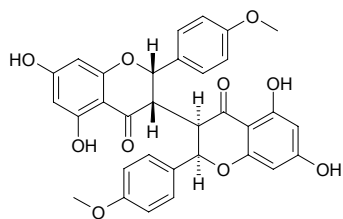
[50908-91-3] $C_{18}H_{19}NO_4$ (313.35). **Source:** SAN JIAN SHAN *Cephalotaxus fortunei*. **Ref:** 2, 1521.

**11318 Isochaihulactone**

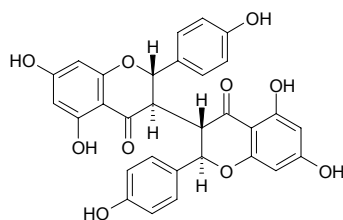
$C_{22}H_{22}O_7$ (398.42). White needle crystals, mp 137~138°C, $[\alpha]_D^{25} = -29.0^\circ$ ($c = 0.5$, $CHCl_3$). **Pharm:** Cytotoxic (hmn peripheral blood T cells, dose = 2.0 $\mu g/mL$, T cell survival rate = 73%); immunosuppressant (inhibits IL-2 secretion costimulated by CD28, dose = 2.0 $\mu g/mL$, InRt = 54%). **Source:** HONG CHAI HU *Bupleurum scorzonrifolium* (root). **Ref:** 3498.

**11319 Isochamaejasmenin B**

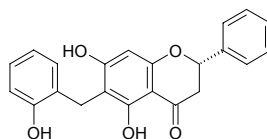
$C_{32}H_{26}O_{10}$ (570.56). Brown amorphous powder, $[\alpha]_D^{20} = +307^\circ$ ($c = 0.01$, MeOH). **Pharm:** Antimitotic and antifungal (*Pyricularia oryzae*, 50 $\mu g/mL$, middle inhibition, 100 $\mu g/mL$, complete inhibition). **Source:** LANG DU *Stellera chamaejasme*. **Ref:** 4476.

**11320 Isochamaejasmin**

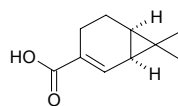
[93859-63-3] $C_{30}H_{22}O_{10}$ (542.50). Amorphous powder, $[\alpha]_D = 0^\circ$ ($c = 0.4$, methanol). **Pharm:** Inhibits promotor of cancer; prevents action of chemical carcinogens. **Source:** LANG DU *Stellera chamaejasme*. **Ref:** 658, 953, 980, 1103.

**11321 Isochamanetin**

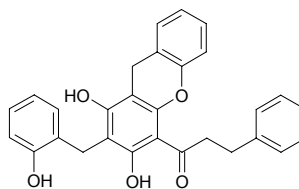
[58777-17-6] $C_{22}H_{18}O_5$ (362.39). mp 215~217°C. **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 1.6 $\mu g/mL$; *Mycobacterium smegmatis*, MIC = 3.1 $\mu g/mL$; *Bacillus subtilis*, MIC = 6.3 $\mu g/mL$). **Source:** AN ZI YU PAN *Uvaria chamae*. **Ref:** 5, 658.

**11322 (-)-Isochaminic acid**

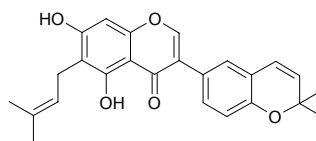
Isochamic acid $C_{10}H_{14}O_2$ (166.22). mp 60°C $[\alpha]_D^{25} = -10.2^\circ$ ($c = 1.3$, ether). **Pharm:** Antifungal (TLC bioautography method at very low concentration). **Source:** SI LI LAN KA TU MI SHU *Bridelia retusa*. **Ref:** 2021.

**11323 Isochamuvaritin**

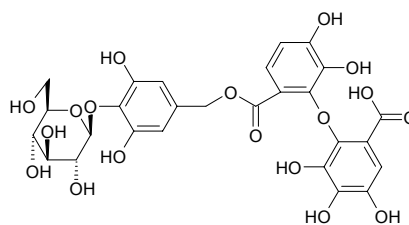
$C_{29}H_{24}O_5$ (452.51). White crystals, mp 157~159°C ($CHCl_3/Me_2CO$). **Pharm:** Cytotoxic (hmn promyelocytic leukemia HL-60 cells, $IC_{50} = 8.2\mu mol/L$). **Source:** JIAN ZI YU PAN *Uvaria acuminata* (root). **Ref:** 4261.

**11324 Isochandalone**

$C_{25}H_{24}O_5$ (404.47). **Pharm:** Antioxidant (DPPH scavenger, ScRt = 10.53%, control BHT, ScRt = 71.5%); antibacterial (*Staphylococcus aureus* ATCC 25923, MIC > 256 $\mu g/mL$, Vancomycin, MIC = 0.5 $\mu g/mL$; MRSA SK1, MIC > 256 $\mu g/mL$, Vancomycin, MIC = 1.0 $\mu g/mL$). **Source:** PAN YUAN YU TENG *Derris scandens* (stem). **Ref:** 3810.

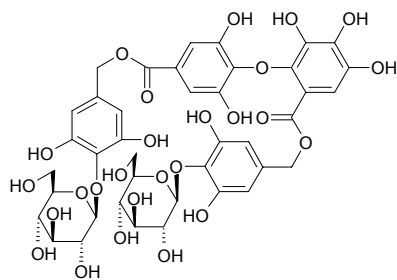
**11325 Isochesnatin**

$C_{27}H_{26}O_{18}$ (638.50). **Source:** LI YE *Pyrus bretschneideri*. **Ref:** 660.



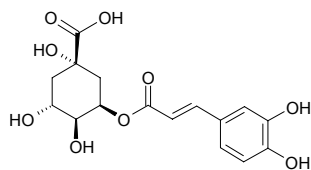
11326 Isochestanin

$C_{40}H_{42}O_{26}$ (938.77). Source: LI YE *Pyrus bretschneideri*. Ref: 660.

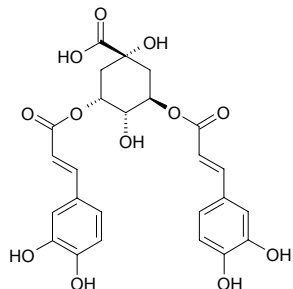
**11327 Isochlorogenic acid**

[534-61-2] $C_{16}H_{18}O_9$ (354.31). Pharm: Antibacterial; antioxidant (mus hepatic homogenate, inhibits *t*-BuOOH induced luminescence $IC_{50} = 30\mu\text{mol/L}$).

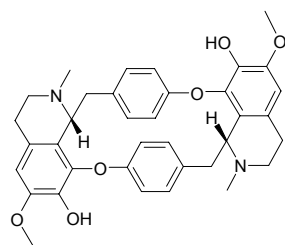
Source: JIN YIN HUA *Lonicera japonica*, SHI CHE JU *Centaurea cyanus*, CAI JI *Cynara scolymus*, YAO SHUI SU *Betonica officinalis*. Ref: 900.

**11328 Isochlorogenic acid A**

3,5-Di-*O*-caffeoylquinic acid $C_{25}H_{24}O_{12}$ (516.46). Source: JIN YIN HUA *Lonicera japonica* (flower bud: mean content = 2.50%)^[5508], XI ZHAN MAO REN DONG *Lonicera similis* (flower bud: mean content = 4.50%)^[5508], *Coffea* sp. Ref: 660, 5508.

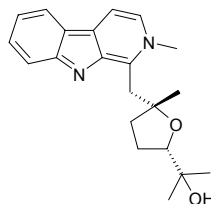
**11329 Isochondrodendrin**

$C_{36}H_{38}N_2O_6$ (594.71). mp 316°C (dec). Pharm: Muscle relaxant. Source: WA SHI DU HUO *Heracleum wallichii*, RU LAN *Stephania hernandifolia*, XI SHENG TENG *Cissampelos pareira*, YIN BU HUAN *Cyclea barbata*. Ref: 6, 658.

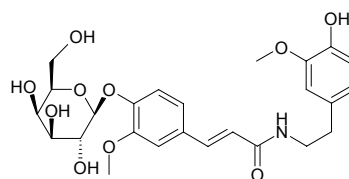
**11330 Isochrysotricine**

$C_{21}H_{26}N_2O_2$ (338.45). Yellow amorphous solids, $[\alpha]_D = -110^\circ$ ($c = 0.50$, MeOH).

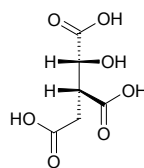
Source: XIAO TOU LIANG HOU CHA *Hedyotis capitellata*. Ref: 2424.

**11331 Isocimicifugamide**

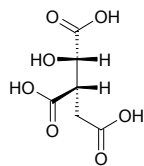
N-(3'-Methoxy-4'-hydroxyphenethyl)-4-*O*-β-*D*-galactopyranosyl-isoferulamid e $C_{25}H_{31}NO_{10}$ (505.53). White amorphous powder, mp 97~100°C, $[\alpha]_D^{20} = -46.2^\circ$ ($c = 0.13$, methanol). Source: XING AN SHENG MA *Cimicifuga dahurica*. Ref: 294.

**11332 Isocitric acid**

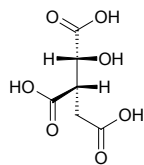
$C_6H_8O_7$ (192.13). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2.

**11333 Isocitric acid b**

$C_6H_8O_7$ (192.13). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2.

**11334 Isocitric acid c**

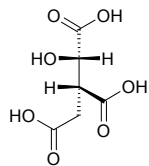
$C_6H_8O_7$ (192.13). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2.



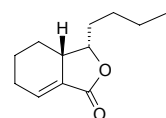
11335 Isocitric acid d

$C_6H_8O_7$ (192.13). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*].

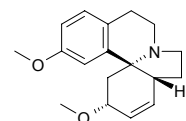
Ref: 2.

**11336 Isocnidilide**

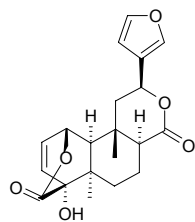
$C_{12}H_{18}O_2$ (194.28). Source: DANG GUI *Angelica sinensis*. Ref: 6.

**11337 Isococculidine**

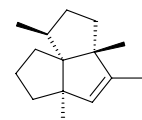
[60229-91-6] $C_{18}H_{23}NO_2$ (285.39). mp 95–96°C (benzene–hexane), $[\alpha]_D = +124^\circ$ ($c = 1.2$, methanol). Pharm: Neuromuscular blocker (rat, ia, 250 μ g); LD₅₀ (mus, ip) = 50mg/kg. Source: HENG ZHOU WU YAO *Cocculus laurifolius*. Ref: 661.

**11338 Isocolumbin**

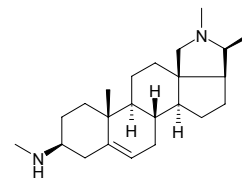
$C_{20}H_{22}O_6$ (358.39). Source: QING NIU DAN *Tinospora sagittata*. Ref: 660.

**11339 Isocomene**

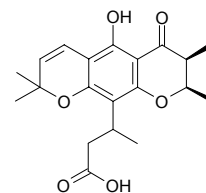
$C_{15}H_{24}$ (204.36). Pharm: Anti-Inflammatory (anti-oedema, control oedema = (7.8 \pm 0.3)mg, 100 μ g/cm² mixture with silphinene and modhephene, oedema = (4.9 \pm 0.4)mg, $p < 0.05$, reduction = 37%, Indomethacin oedema = (3.4 \pm 0.3)mg, $p < 0.05$, reduction = 56%). Source: GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root). Ref: 4985.

**11340 Isoconessimine**

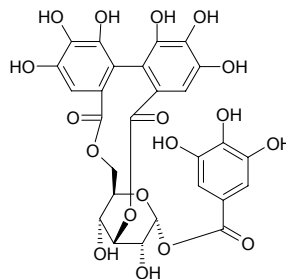
[468-36-0] $C_{23}H_{38}N_2$ (342.57). mp 92°C. Source: ZHI XIE MU PI *Holarhena antidysenterica*, TUI RE ZHI XIE MU *Holarhena febrifuga*, YAN MU *Wrightia tomentosa*. Ref: 6, 1521.

**11341 Isocardatooblongic acid**

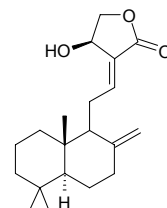
$C_{20}H_{24}O_6$ (360.41). Source: CHANG YUAN XIN XING HU TONG *Calophyllum cordato-oblongum*. Ref: 2280.

**11342 Isocorilagin**

$C_{27}H_{12}O_{18}$ (634.47). $[\alpha]_D^{20} = -53.6^\circ$ ($c = 0.11$, MeOH). Source: SHEN YE TIAN ZHU KUI *Pelargonium reniforme* (aerial parts). Ref: 3975.

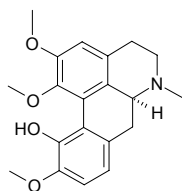
**11343 Isocoronarin D**

$C_{20}H_{30}O_3$ (318.46). Colorless lamellar crystals, mp 187–188°C. Source: YUAN BAN JIANG HUA *Hedychium forrestii* (root). Ref: 4886.

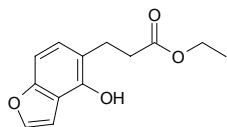


11344 Isocorydine

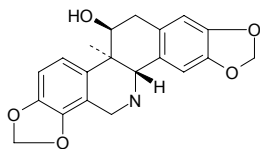
(+)-Isocorydine [475-67-2] $C_{20}H_{23}NO_4$ (341.41). mp 185~186°C. **Pharm:** Adrenergic antagonist; antiarrhythmic (animal model); increases coronary flow and cerebral blood flow; cytotoxic inactive (yeast assay: RS321NYCp50(gal), RS321NpRAD52(gal), RS321NpRAD52(glu))^[5457]; LD₅₀ (rat, ip) = 10.9mg/kg. **Source:** AO XIAN ZI JIN *Corydalis cava*, BAI XIAN SHU *Stephania brachyandra*, CHENG QIE ZI *Litsea cubeba*, DING KE LA QIAN JIN TENG *Stephania dinklagei* (stem), JIAN YE SHI DA GONG LAO *Mahonia aquifolium*, KUAI JING ZI JIN *Corydalis tuberosa*, LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*], NAN TIAN ZHU ZI *Nandina domestica*, SHEN HUANG ZI JIN *Corydalis lutea*, TAI WAN TANG SONG CAO *Thalictrum urbainii*, XIANG YING ZHAO *Artabotrys suaveolens*, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*], YOU GOU YING ZHAO *Artabotrys uncinatus* (root)^[3083]. **Ref:** 6, 658, 1521, 3083, 5457.

**11345 Isocorylifonol**

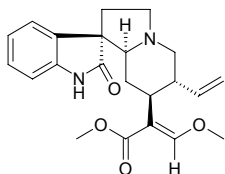
$C_{13}H_{14}O_4$ (234.25). **Source:** BU GU ZHI *Psoralea corylifolia*. **Ref:** 660.

**11346 Isocorynoline**

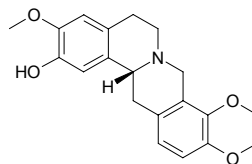
[51151-82-7] $C_{20}H_{19}NO_5$ (353.38). mp 234~235°C. **Source:** YUN QIAN HU *Peucedanum rubricaulae*, ZI HUA YU DENG CAO *Corydalis incisa*. **Ref:** 6, 436, 1521.

**11347 Isocorynoxine**

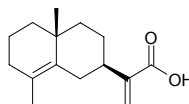
[51014-29-0] $C_{22}H_{26}N_2O_4$ (382.46). **Source:** CHANG HUA GOU TENG *Uncaria longiflora*, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], HUA GOU TENG *Uncaria sinensis*, MIAN MAO GOU TENG *Uncaria lanosa*, PO LUO ZHOU GOU TENG *Uncaria borneensis*, XIA GOU TENG *Uncaria attenuata*. **Ref:** 2, 1521, 5341.

**11348 Isocorypalmine**

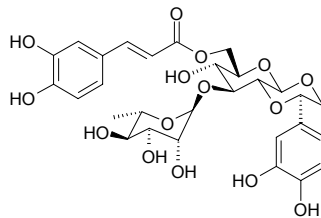
(-)-Tetrahydrocolumbamine; Casealutine [53447-14-6] $C_{20}H_{23}NO_4$ (341.41). mp (+) 239~241°C, (-) 241~242°C, (±) 221~222°C; mp 241~242°C, $[\alpha]_D^{20} = -302.0$ ($c = 0.1$, $CHCl_3$). **Pharm:** Antibacterial (oral pathogens: *Streptococcus mutans*, MIC > 125µg/mL, control Chlorhexidine gluconate, MIC = 1.25µg/mL; *Fusobacterium nucleatum*, MIC > 125µg/mL, Chlorhexidine gluconate, MIC = 2.5µg/mL)^[5418]. **Source:** AO XIAN ZI JIN *Corydalis cava*, BAI MAO GEN⁽⁴⁾ *Hydrastis canadensis* (root), YA PIAN *Papaver somniferum*, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*] (rhizome: mean content of 7 origins = 0.067%^[5508]). **Ref:** 2, 6, 660, 1521, 5418, 5508.

**11349 Isocostic acid**

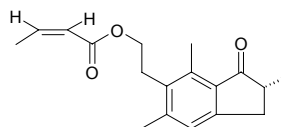
$C_{15}H_{22}O_2$ (234.34). **Source:** LIU LENG JU *Laggera alata* (aerial parts: yield = 0.0026%dw). **Ref:** 4709.

**11350 Isocrenatoside**

$C_{29}H_{34}O_{15}$ (622.59). **Pharm:** Antiviral inactive (Vero cell lines infected with HSV-2 strain 333, 250µg/mL); ACE inhibitor (1.0mg/mL, InRt = 99.3%; 0.1mg/mL, InRt = 71.4%; 0.01mg/mL, InRt = 35.2%; control Captopril, 0.01mg/mL, InRt = 97.7%). **Source:** NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.00014%dw). **Ref:** 4752.

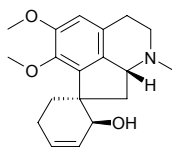
**11351 Isocrotonoylpterosin B**

$C_{18}H_{22}O_3$ (286.37). Oil, $[\alpha]_D = -3.5^\circ$ ($CHCl_3$). **Source:** JUE *Pteridium aquilinum* var. *latiusculum*. **Ref:** 6, 1521.

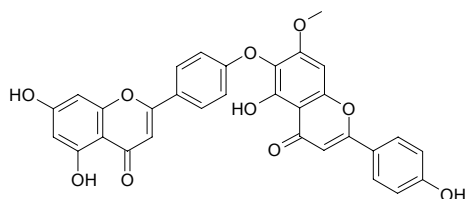


11352 Isocryprochine

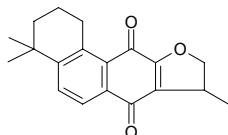
$C_{19}H_{25}NO_3$ (315.42). Colorless needles (acetone), mp 186–187°C, $[\alpha]_D = -22.2^\circ$ ($c = 0.0336$, MeOH). Source: HOU KE GUI *Cryptocarya chinensis* (wood). Ref: 3092.

**11353 Isocryptomerin**

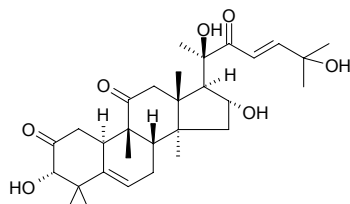
7"-Monomethylhinoliflavone [20931-58-2] $C_{31}H_{20}O_{10}$ (552.50). Yellowish rhombic crystals (methanol–pyridine), mp 308–310°C (dec). Pharm: Cytotoxic (*in vitro*, BC1 ED₅₀ = 1.5 μg/mL, HT1080 ED₅₀ = 0.6 μg/mL, Lu1 ED₅₀ = 0.9 μg/mL, Col2 ED₅₀ = 1.8 μg/mL, KB ED₅₀ = 1.6 μg/mL, KB-V+ ED₅₀ = 1.5 μg/mL, KB-V- ED₅₀ = 2.1 μg/mL, LNCaP ED₅₀ = 2.1 μg/mL, U373 ED₅₀ = 3.5 μg/mL, and ZR-75-1 ED₅₀ = 0.58 μg/mL). Source: JUAN BAI *Selaginella tamariscina*, RI BEN BIAN BAI *Chamaecyparis obtusa*, RI BEN HUA BAI *Chamaecyparis pisifera*. Ref: 6, 900, 1521.

**11354 Isocryptotanshinone**

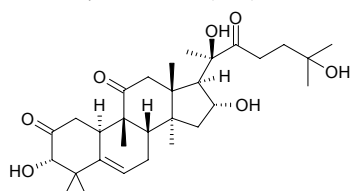
[22550-15-8] $C_{19}H_{20}O_3$ (296.37). mp 121°C. Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 2, 6.

**11355 Isocurbitacin D**

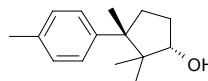
[68422-20-8] $C_{30}H_{44}O_7$ (516.68). mp 188–191 (ether), $[\alpha]_D = +37^\circ$ ($c = 0.8$, chloroform). Pharm: Cytotoxic (KB, ED₅₀ = 0.024 μg/mL). Source: XIN XI LAN MA *Phormium tenax*. Ref: 661.

**11356 Isocurbitacin R**

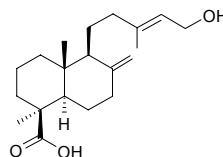
$C_{30}H_{48}O_7$ (518.70). White prisms (methanol), mp 187–190°C. Source: *Dendrosicyos socotrana* (stem). Ref: 3855.

**11357 α-Isocuparenenol**

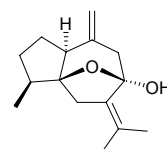
[21730-87-0] $C_{15}H_{22}O$ (218.34). mp 78.5°C. Source: CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*]. Ref: 6.

**11358 Isocupressic acid**

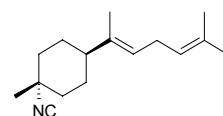
$C_{20}H_{32}O_3$ (320.48). Colorless oil, $[\alpha]_D^{25} = +43^\circ$ ($c = 0.27$, $CHCl_3$), $[\alpha]_D^{25} = +42^\circ$ ($c = 2.5$, $CHCl_3$); $[\alpha]_D^{25} = +51.0^\circ$ ($c = 0.90$, $CHCl_3$); $[\alpha]_D^{25} = +52.9^\circ$. Pharm: Antimalarial (*in vitro*, *Plasmodium falciparum* strain 3D7, IC₅₀ = (33.5±1.7) μg/mL = (104.5±5.3) μmol/L)^[3022]; cytotoxic (EBV-EA inhibitor TPA-induced, mol ratio/TPA = 1000, InRt = 96.8%)^[5352]. Source: CE BAI YE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*], RI BEN XIANG BAI JING PI *Thuja standishii*. Ref: 3022, 5352.

**11359 Isocurcumenol**

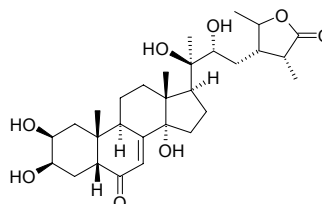
[24063-71-6] $C_{15}H_{22}O_2$ (234.34). mp 139–141°C. Pharm: NO production inhibitor (mus peritoneal macrophages, induced by LPS, 100 μmol/L, InRt = (65.8±2.8)%, control *L*-NMMA, 100 μmol/L, InRt = (79.2±0.9)%, $p < 0.01$)^[4150]. Source: PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. Ref: 6, 4150.

**11360 (E)-3-Isocyanobisabolane-7,10-diene**

$C_{16}H_{25}N$ (231.38). Colorless oil, $[\alpha]_D^{25} = 0.0^\circ$ ($c = 0.75$, $CHCl_3$). Source: Sponge *Axinyssa* sp. Ref: 4231.

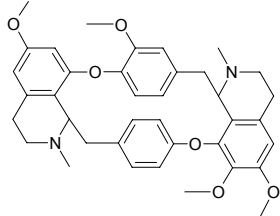
**11361 Isocyasterone**

[54082-42-7] $C_{29}H_{44}O_8$ (520.67). Source: MA NIU XI *Cyathula capitata*, TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole herb). Ref: 6, 660, 4483.

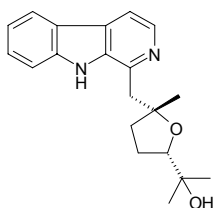


11362 Isocycleanine

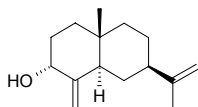
$C_{38}H_{42}N_2O_6$ (622.77). Colorless powder, $[\alpha]_D^{25} = 0^\circ$ ($c = 0.10$, $CHCl_3$). Source: SI CHUAN LUN HUAN TENG *Cyclea sutchuenensis*. Ref: 274.

**11363 Isocyclocapitelline**

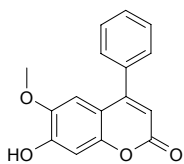
$C_{20}H_{24}N_2O_2$ (324.43). Yellow prisms, mp 199–200°C (acetone), $[\alpha]_D = -75^\circ$ ($c = 0.50$, $CHCl_3$). Source: XIAO TOU LIANG HOU CHA *Hedyotis capitellata*. Ref: 2424.

**11364 Isocyperol**

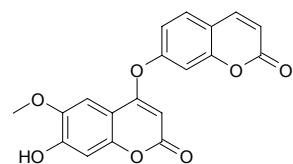
[20085-00-1] $C_{15}H_{24}O$ (220.36). Pharm: NO production Inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages, $IC_{50} = 21 \mu\text{mol/L}$; control *L*-NMMA, $IC_{50} = 28 \mu\text{mol/L}$)^[4655]; β -hexosaminidase release inhibitor (RBL-2H3 Cells, $100 \mu\text{mol/L}$, InRt = -28.9%; control Curcumin, InRt = 62.6%)^[4655]. Source: XIANG FU *Cyperus rotundus*, YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.0020%dw)^[4655]. Ref: 6, 1521, 4655.

**11365 Isodalbergin**

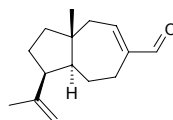
[605-09-4] $C_{16}H_{12}O_4$ (268.27). Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 6.

**11366 Isodaphnoretin**

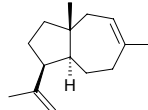
$C_{19}H_{12}O_7$ (352.30). Yellowish crystals, mp 246–248°C. Source: YUAN HUA GEN *Daphne genkwa*. Ref: 4855.

**11367 Isodaucenal**

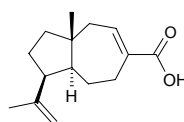
$C_{15}H_{22}O$ (218.34). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**11368 Isodaucene**

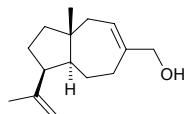
$C_{15}H_{24}$ (204.36). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**11369 Isodaucenoic acid**

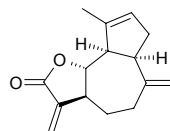
$C_{15}H_{22}O_2$ (234.34). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**11370 Isodaucenol**

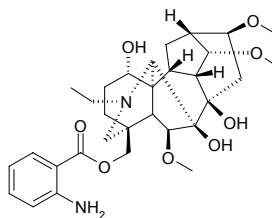
$C_{15}H_{24}O$ (220.36). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**11371 Isodehydrocostus lactone**

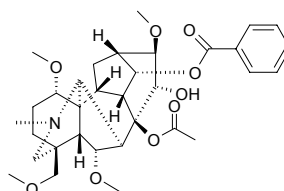
[68151-26-8] $C_{15}H_{18}O_2$ (230.31). Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. Ref: 2.

**11372 Isodelectine**

[133034-09-0] $C_{31}H_{44}N_2O_8$ (572.70). White amorphous powder. Source: E MEI CUI QUE HUA *Delphinium omeiense*. Ref: 2190, 1521.

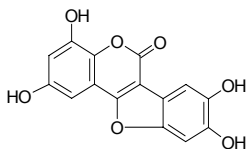
**11373 Isodelphinine**

$C_{33}H_{45}NO_9$ (599.73). Source: FU ZI *Aconitum carmichaeli*, WU TOU *Aconitum carmichaeli*. Ref: 660.

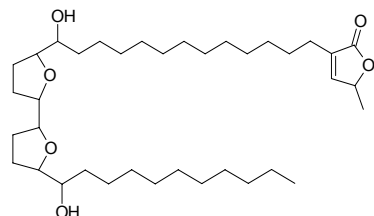


11374 Isodemethylwedelolactone

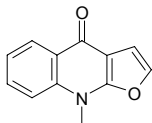
$C_{15}H_8O_7$ (300.23). Light gray amorphous powder, mp > 360°C (dec). Source: MO HAN LIAN *Eclipta prostrata* [Syn. *Eclipta alba*]. Ref: 865.

**11375 Isodesacetylvaricin**

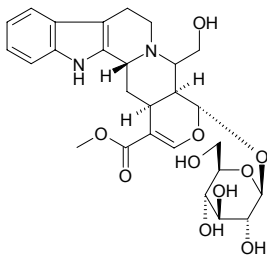
4-Deoxyasimicin [136033-39-1] $C_{37}H_{66}O_6$ (606.93). Lardaceous solid, mp > 30°C. Pharm: Cytotoxic (BST LD₅₀ = 0.201 μg/mL, A549 ED₅₀ = 0.000183 μg/mL, HT29 ED₅₀ < 0.0001 μg/mL). Source: DA HUA ZI YU PAN *Uvaria grandiflora*, NA ER ZI YU PAN *Uvaria narum*. Ref: 1027, 1082, 1171, 1202, 1521.

**11376 Isodictamine**

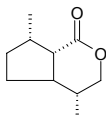
[484-74-2] $C_{12}H_9NO_2$ (199.21). Pharm: Phototoxic (yeast and bacteria). Source: BAI SE BAI XIAN *Dictamnus albus*. Ref: 658, 1521.

**11377 3β-Isodihydrocadambine**

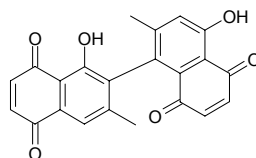
[62014-69-1] $C_{27}H_{34}N_2O_{10}$ (546.58). Pharm: Antihypertensive^[5341]. Source: GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], HUA GOU TENG *Uncaria sinensis*. Ref: 2, 5341.

**11378 Isodihydroepinetalactone**

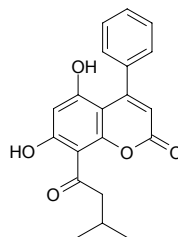
[17672-96-7] $C_{10}H_{16}O_2$ (168.24). Source: JIA JING JIE *Nepeta cataria*, MU TIAN LIAO *Actinidia polygama*. Ref: 6, 660, 1521.

**11379 Isodiospyrin**

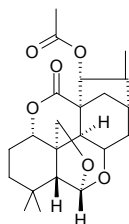
[20175-84-2] $C_{22}H_{14}O_6$ (374.35). mp 226–228°C. Pharm: Antifungal; cytotoxic; molluscicide (kills shellfish). Source: JUN QIAN ZI *Diospyros lotus*. Ref: 6, 658.

**11380 Isodispar B**

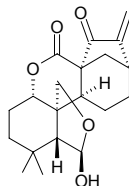
5,7-Dihydroxy-8-(2-methyl-1-oxobutyl)-4-phenyl-2H-[1]benzopyran-2-one $C_{20}H_{18}O_5$ (338.36). Pharm: Cytotoxic (KB, EC₅₀ = 8 μg/mL). Source: BU DENG HONG HOU KE *Calophyllum dispar* (fruit and stem cortex). Ref: 5196.

**11381 Isodoacetal**

$C_{22}H_{28}O_6$ (388.46). mp > 300°C, $[\alpha]_D^{17} = -134^\circ$ ($c = 1.0$, $CHCl_3$). Source: MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. Ref: 4067.

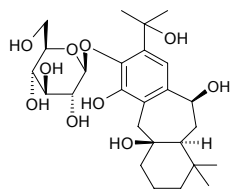
**11382 Isodocarpin**

[10391-08-9] $C_{20}H_{26}O_5$ (346.43). mp 270–273°C, $[\alpha]_D^{17} = -172^\circ$ ($c = 1.0$, $CHCl_3$). Source: HEI HUA YAN MING CAO *Isodon trichocarpus*, MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. Ref: 1521, 4067.

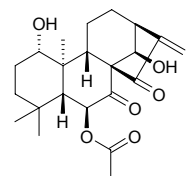


11383 Isodoforrestin

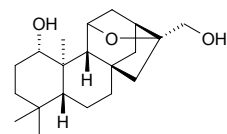
Abieferrestin C₂₆H₄₀O₁₀ (512.60). Amorphous substance, $[\alpha]_D^{24.7} = -25.05^\circ$ ($c = 0.29$, C₅H₅N). Source: ZI E XIANG CHA CAI *Isodon forrestii*. Ref: 2139, 4067.

**11384 Isodoglutinosin A**

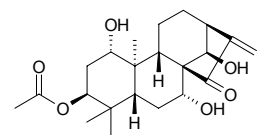
C₂₂H₃₀O₆ (390.48). mp 144~146°C. Source: JIAO NIAN XIANG CHA CAI *Isodon glutinosa*. Ref: 4067.

**11385 Isodoglutinosin B**

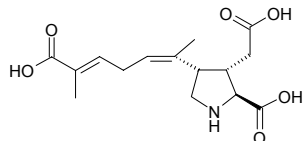
C₂₀H₃₂O₃ (320.48). mp 144~146°C. Source: JIAO NIAN XIANG CHA CAI *Isodon glutinosa*. Ref: 4067.

**11386 Isodomedin**

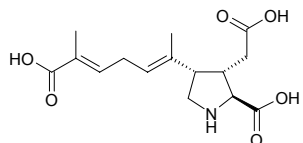
[39388-61-9] C₂₂H₃₂O₆ (392.50). mp 217~218°C, $[\alpha]_D = -59^\circ$ ($c = 1.0$, EtOH). Pharm: Antibacterial; cytotoxic; larvacide, insect antifeedant (larva of *Spodoptera exempta*). Source: JIAN XING SI GUO XIANG CHA CAI *Isodon shikokiana* var. *intermedius*. Ref: 658, 4067.

**11387 Isodomoic acid A**

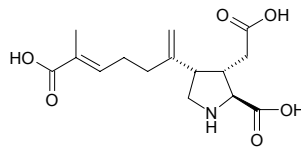
C₁₅H₂₁NO₆ (311.34). Source: RUAN GU ZAO *Chondria armata* [Syn. *Lophura armata*]. Ref: 660.

**11388 Isodomoic acid B**

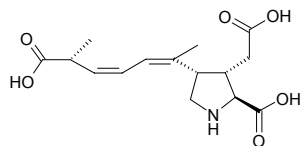
C₁₅H₂₁NO₆ (311.34). Source: RUAN GU ZAO *Chondria armata* [Syn. *Lophura armata*]. Ref: 660.

**11389 Isodomoic acid C**

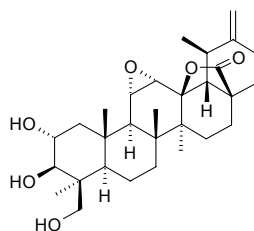
C₁₅H₂₁NO₆ (311.34). Source: RUAN GU ZAO *Chondria armata* [Syn. *Lophura armata*]. Ref: 660.

**11390 Isodomoic acid D**

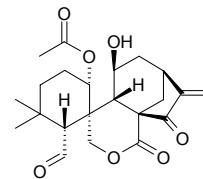
C₁₅H₂₁NO₆ (311.34). Source: RUAN GU ZAO *Chondria armata* [Syn. *Lophura armata*]. Ref: 660.

**11391 Isodonadenanthin**

C₃₀H₄₄O₆ (500.68). White amorphous powder. Source: XIAN HUA XIANG CHA CAI *Rabdosia adenantha*. Ref: 2260.

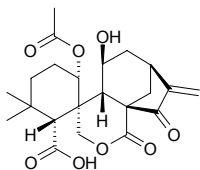
**11392 Isodonal**

[16964-56-0] C₂₂H₂₈O₇ (404.46). mp 245~247°C (dec); mp 219~221°C, $[\alpha]_D^{25} = +102.7^\circ$ ($c = 0.3$, C₅H₅N). Pharm: Cytotoxic (K562, IC₅₀ = 2.29 μmol/L, control Cisplatin IC₅₀ = 3.84 μmol/L; Bcap37, IC₅₀ = 28.64 μmol/L, control Cisplatin IC₅₀ = 1.54 μmol/L; BGC823, IC₅₀ = 79.87 μmol/L, control Cisplatin IC₅₀ = 2.54 μmol/L; CA, IC₅₀ = 9.04 μmol/L, control Cisplatin IC₅₀ = 0.88 μmol/L; HeLa, IC₅₀ > 100 μmol/L, control Cisplatin IC₅₀ = 3.60 μmol/L)^[4353]; cytotoxic (liver cancer cells, *in vitro*); antibacterial (*Bacillus subtilis*, *Bacillus coli* and *Staphylococcus aureus*, EC = 1 : 10000). Source: DA YE XIANG CHA CAI *Rabdosia macrophylla*, LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis* (leaf), MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. Ref: 5, 658, 4067, 4353.

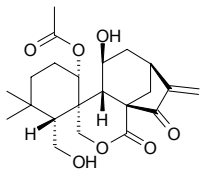


11393 Isodonoic acid

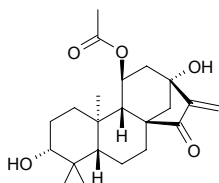
$C_{22}H_{28}O_8$ (420.46). mp 291~294°C, $[\alpha]_D^{25} = +42.6^\circ$ ($c = 0.09$, MeOH). Source: NIU WEI CAO *Isodon ternifolia*. Ref: 4067.

**11394 Isodonoiol**

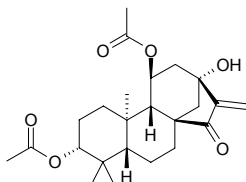
Rabdosin C; Rabdophyllin G $C_{22}H_{30}O_7$ (406.48). mp 271.8~272.3°C, $[\alpha]_D^{25} = +98.6^\circ$ ($c = 0.57$, C_5H_5N). Pharm: Cytotoxic (K562, $IC_{50} = 10.15 \mu\text{mol/L}$, control Cisplatin $IC_{50} = 3.84 \mu\text{mol/L}$; Bcap37, $IC_{50} = 101.32 \mu\text{mol/L}$, control Cisplatin $IC_{50} = 1.54 \mu\text{mol/L}$)^[4353]. Source: LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis*, MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. Ref: 4067, 4353.

**11395 Isodopharicin A**

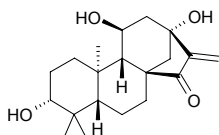
$C_{22}H_{32}O_5$ (376.50). mp 213~215°C, $[\alpha]_D^{28} = -154^\circ$ ($c = 0.5$, EtOH). Source: CHUAN ZANG XIANG CHA CAI *Isodon pharicus*. Ref: 4067.

**11396 Isodopharicin B**

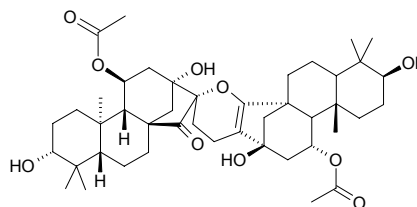
$C_{24}H_{34}O_6$ (418.53). mp 266~268°C, $[\alpha]_D^{16} = -190^\circ$ ($c = 0.5$, EtOH). Source: CHUAN ZANG XIANG CHA CAI *Isodon pharicus*. Ref: 4067.

**11397 Isodopharicin D**

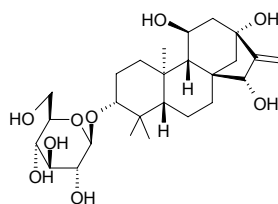
3 α ,11 β ,13 α -Trihydroxy-entkaur-16-en-15-one $C_{20}H_{30}O_4$ (334.46). White crystals, mp 245~247°C. Source: CHUAN ZANG XIANG CHA CAI *Isodon pharicus*. Ref: 405, 4067.

**11398 Isodopharicin E**

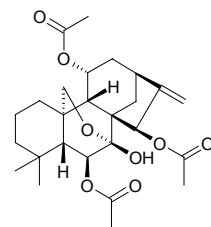
$C_{44}H_{64}O_{10}$ (752.99). mp 240~241°C, $[\alpha]_D = -144^\circ$ ($c = 0.25$, EtOH). Source: CHUAN ZANG XIANG CHA CAI *Isodon pharicus*. Ref: 4067.

**11399 Isodopharicin F**

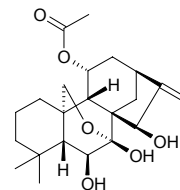
11 β ,13 α ,15 α -Trihydroxy-entkaur-16-en-3 α - β -D-glucoside $C_{26}H_{42}O_9$ (498.62). White crystals, mp 252~254°C, mp 254~256°C. Source: CHUAN ZANG XIANG CHA CAI *Isodon pharicus*. Ref: 405, 4067.

**11400 Isodoternifolin A**

β ,11 α ,15 β -Triacetoxo-7 β -hydroxy-7 α ,20-epoxy-entkaur-16-ene $C_{26}H_{36}O_8$ (476.57). Colorless acicular crystals, mp 249~251°C, $[\alpha]_D^{20} = -122.9^\circ$ (chloroform). Source: CHONG YA YAO *Isodon ternifolius*, NIU WEI CAO *Isodon ternifolia*. Ref: 367, 4067.

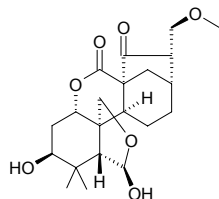
**11401 Isodoternifolin B**

11 α -Acetoxo-6 β ,7 β ,15 β -trihydroxy-7 α ,20-epoxy-entkaur-16-ene $C_{22}H_{32}O_6$ (392.50). Colorless prismatic crystals, mp 236~238°C (chloroform). Source: CHONG YA YAO *Isodon ternifolius*, NIU WEI CAO *Isodon ternifolia*. Ref: 367, 4067.

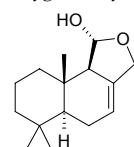


11402 Isodotricin

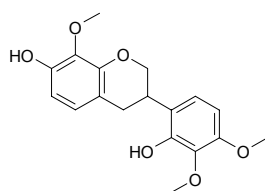
$C_{21}H_{30}O_7$ (394.47). mp 240~245°C, $[\alpha]_D^{17} = -114^\circ$ ($c = 1.0$, C_5H_5N). Source: MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. Ref: 4067.

**11403 Isodrimeninol**

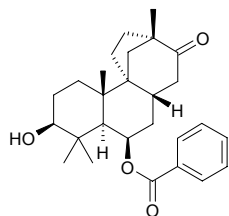
$C_{15}H_{24}O_2$ (236.36). Source: LIAO SHI *Polygonum hydropiper*, SHUI LIAO *Polygonum hydropiper*. Ref: 660.

**11404 Isoduartin**

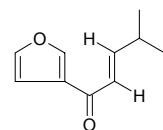
$C_{18}H_{20}O_6$ (332.36). Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 660.

**11405 Isodulcinol**

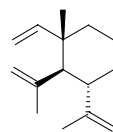
$C_{27}H_{36}O_4$ (424.59). Gum, $[\alpha]_D^{25} = -21.4^\circ$ ($c = 0.45$, $CHCl_3$). Pharm: Cytotoxic (*in vitro*, SCL, $ED_{50} = 19.5\mu\text{mol/L}$; SCL-6, $ED_{50} = 62.9\mu\text{mol/L}$; SCL-37'6, $ED_{50} = 45.8\mu\text{mol/L}$; SCL-9, $ED_{50} = 58.9\mu\text{mol/L}$; Kato3, $ED_{50} = 71.7\mu\text{mol/L}$; NUGC-4, $ED_{50} = 122.9\mu\text{mol/L}$; control Vinblastine Sulfate: SCL, $ED_{50} = 5.9\mu\text{mol/L}$; SCL-6, $ED_{50} = 6.1\mu\text{mol/L}$; SCL-37'6, $ED_{50} = 5.3\mu\text{mol/L}$; SCL-9, $ED_{50} = 5.3\mu\text{mol/L}$; Kato3, $ED_{50} = 6.1\mu\text{mol/L}$; NUGC-4, $ED_{50} = 5.3\mu\text{mol/L}$). Source: YE GAN CAO *Scoparia dulcis* (aerial parts: yield = 0.00138%dw). Ref: 4703.

**11406 Isoegomaketone**

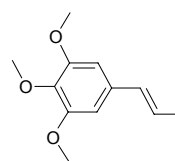
[34348-59-9] $C_{10}H_{12}O_2$ (164.21). mp 179~180°C. Source: JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], ZI SU YE *Perilla frutescens* var. *arguta*. Ref: 2, 660.

**11407 (-)-(5S,6S,10S)-Iso-β-elemene**

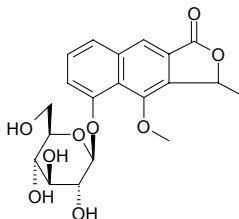
(-)-(1S,2S,3S)-1-Ethenyl-1-methyl-2,3-di(1-methylethenyl)-cyclohexane $C_{15}H_{24}$ (204.36). Colorless oil. Source: *Saccogyna viticulosa* (essential oil). Ref: 3839.

**11408 trans-Isoelemicin**

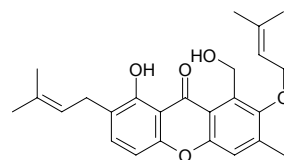
trans-Isoelemicine [5273-85-8] $C_{12}H_{16}O_3$ (208.26). bp 153~156°C/10mmHg. Pharm: Antifungal (*Cladosporium cucumerinum*); hypnotic (strong action); larvacide (*Stegomyia calopus*). Source: BAI CHANG *Acorus calamus*, YE XIANG MAO *Cymbopogon goeringii*, ROU DOU KOU *Myristica fragrans*. Ref: 6, 900, 1521.

**11409 Isoeuletherol glucoside**

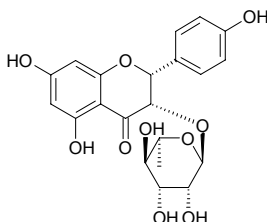
$C_{20}H_{22}O_9$ (406.39). Source: LU HUI *Aloe vera* [Syn. *Aloe barbadensis*]. Ref: 2.

**11410 Isoemicellin**

$C_{25}H_{28}O_5$ (408.50). Source: BIAN SE HE KE BAO *Emericella varicolor*. Ref: 3386.

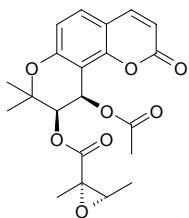
**11411 Isoengelitin**

[30987-58-7] $C_{21}H_{22}O_{10}$ (434.40). mp 295~296°C. Source: DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*], TU FU LING *Smilax glabra*. Ref: 6, 568, 1521.

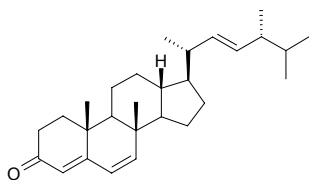


11412 Isoepoxypteryxin

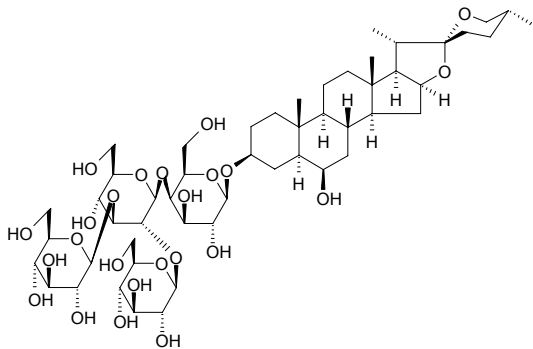
$C_{21}H_{22}O_8$ (402.40). **Pharm:** NO Production inhibitor (LPS-activated mouse peritoneal macrophages, $IC_{50} = 53\mu\text{mol/L}$, control *L*-NMMA, $IC_{50} = 28\mu\text{mol/L}$). **Source:** FEN CHA DANG GUI *Angelica furcijuga* (flower). **Ref:** 4454.

**11413 Isoergosterone**

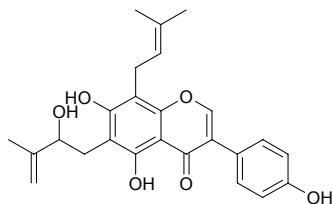
$C_{28}H_{42}O$ (394.65). **Source:** SANG HUANG *Phellinus igniarius* (sporocarp; yield = 0.00046%dw). **Ref:** 4747.

**11414 Isoerubioside B**

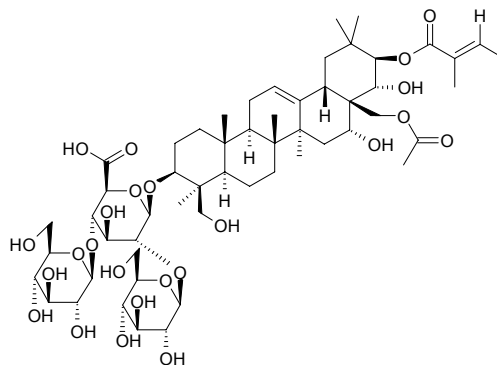
[186545-52-8] $C_{51}H_{84}O_{24}$ (1081.22). White acicular crystals, mp 310~312°C, $[\alpha]_D^{20} = -32.8^\circ$ ($c = 1.0$, C_3H_5N). **Pharm:** Enhances fibrinolytic activity; platelet aggregation inhibitor; anticoagulant (extends time of coagulation). **Source:** DA SUAN *Allium sativum*. **Ref:** 362, 658.

**11415 Isoerysenegalensein E**

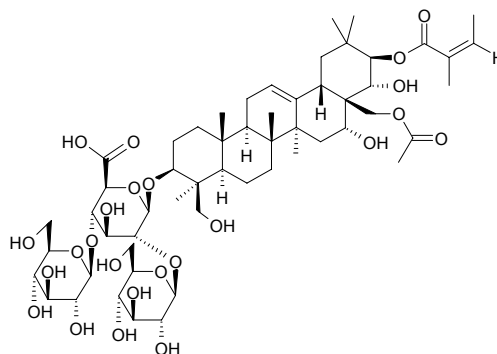
5,7,4'-Trihydroxy-8-(3''-methylbut-2''-enyl)-6-(2''-hydroxy-3''-methylbut-3''-enyl) isoflavone $C_{25}H_{26}O_6$ (422.48). Yellow crystals ($CHCl_3$), mp 155~156°C. **Source:** AI JI ZAI PEI CI TONG *Erythrina lysistemon*. **Ref:** 1971.

**11416 Isoescsin Ia**

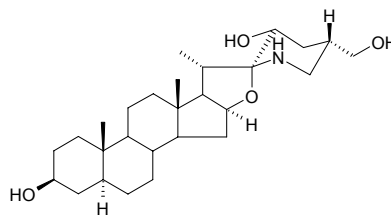
21-*O*-Tigloyl-28-*O*-acetylprotoaescigenin-3-*O*-[β -*D*-glucopyranosyl(1→2)]-[β -*D*-glucopyranosyl(1→4)]- β -*D*-glucopyranosiduronic acid $C_{55}H_{86}O_{24}$ (1131.28). **Pharm:** Anti-inflammatory (mus, assay of Dimethyl benzene-induced inflammation, dose 30mg/kg, InRt = 78.8%, control Dexamethasone, dose 1mg/kg, InRt = 55.6%). **Source:** QI YE SHU *Aesculus chinensis* (seeds). **Ref:** 2578.

**11417 Isoescsin Ib**

21-*O*-Angeloyl-28-*O*-acetylprotoaescigenin-3-*O*-[β -*D*-glucopyranosyl(1→2)]-[β -*D*-glucopyranosyl(1→4)]- β -*D*-glucopyranosiduronic acid $C_{55}H_{86}O_{24}$ (1131.28). **Pharm:** Anti-inflammatory (mus, assay of Dimethyl benzene-induced inflammation, dose 30mg/kg, InRt = 67.3%, control Dexamethasone, dose 1mg/kg, InRt = 55.6%). **Source:** QI YE SHU *Aesculus chinensis* (seeds). **Ref:** 2578.

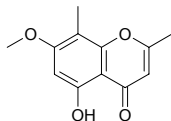
**11418 Isoesculeogenin A**

(5 α ,22*R*,23*R*,25*S*)-3 β ,23,27-Trihydroxyspirosolane $C_{27}H_{45}NO_4$ (447.66). Colorless needles, mp 206~213°C, $[\alpha]_D = -87.2^\circ$ ($c = 0.64$, pyridine). **Source:** FAN QIE *Lycopersicon esculentum*. **Ref:** 4484.

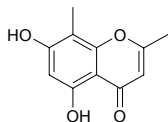


11419 Isoeugenitin

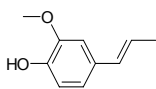
$C_{12}H_{12}O_4$ (220.23). Source: DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*]. Ref: 660.

**11420 Isoeugenitol**

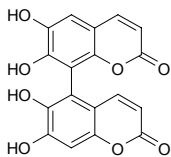
[479-06-1] $C_{11}H_{10}O_4$ (206.20). mp 229~230°C. Source: DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*]. Ref: 6.

**11421 Isoeugenol**

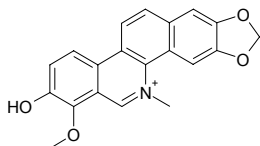
2-Methoxy-4-propenyl phenol [97-54-1] $C_{10}H_{12}O_2$ (164.21). bp (*cis*-) 134~135°C/13mmHg, mp (*trans*-) 33~34°C, bp (*trans*-) 141~142°C/13mmHg. Pharm: Platelet aggregation inhibitor (rbt). Source: DANG GUI *Angelica sinensis*, HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], LUO JI SHAN YUAN BAI *Juniperus scopulorum*, ROU DOU KOU *Myristica fragrans*, SHANG LU *Phytolacca esculenta* [Syn. *Phytolacca acinosa*], XI YANG SHEN *Panax quinquefolium*, YI LAN *Cananga odorata*. Ref: 2, 6, 658, 660, 1439.

**11422 Isoeuphorbetin**

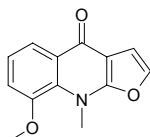
$C_{18}H_{10}O_8$ (354.28). Source: QIAN JIN ZI *Euphorbia lathyris*. Ref: 660.

**11423 Isofagaridine**

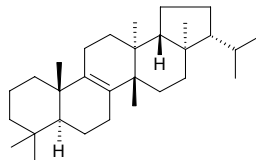
$C_{20}H_{16}NO_4^+$ (334.35). Pharm: Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. Source: RU DI JIN NIU *Zanthoxylum nitidum*, *Zanthoxylum* sp. Ref: 660, 2176.

**11424 Iso-γ-fagarine**

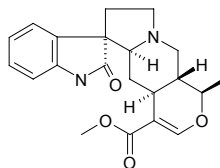
$C_{13}H_{11}NO_3$ (229.24). Colorless needles (Me₂CO), mp 160~161°C. Source: XIA YE BAI XIAN *Dictamnus angustifolius*. Ref: 1912.

**11425 Isofernene**

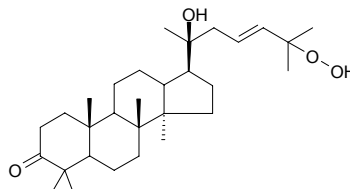
[1750-35-2] $C_{30}H_{50}$ (410.73). mp 189~190°C. Source: TIE SI QI *Adiantum pedatum*. Ref: 6.

**11426 Isoformosanine**

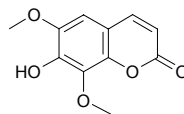
Uncarine A $C_{21}H_{24}N_2O_4$ (368.44). Source: HUA GOU TENG *Uncaria sinensis*. Ref: 660.

**11427 Isofouquierone peroxide**

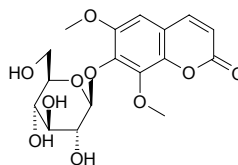
$C_{30}H_{50}O_4$ (474.73). White powder, $[\alpha]_D^{25} = +35^\circ$ ($c = 0.29$, CHCl₃). Source: YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (stem cortex). Ref: 4111.

**11428 Isofraxidin**

6,8-Dimethoxy-7-hydroxycoumarin [486-21-5] $C_{11}H_{10}O_5$ (222.20). mp 148~149°C. Pharm: Antineoplastic (mus vaccinal S₁₈₀, *in vivo*); choleric (rat); cytotoxic (P₃₈₈ *in vitro*, ED₅₀ = 1.7 μg/mL). Source: CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*] (root and rhizome: content = 0.011%^[5508]), DA JI⁽³⁾ *Euphorbia pekinensis*, HUANG HUA HAO *Artemisia annua*, HUI SE OU SHI NAN *Erica cinerea*, JIU JIE CHA *Sarcandra glabra* [Syn. *Chloranthus glaber*] (dried whole herb: content scope of 8 origins = 0.022%~0.088%, mean content = 0.056%^[5508]), *Fraxinus* sp. Ref: 2, 5, 658, 660, 5508.

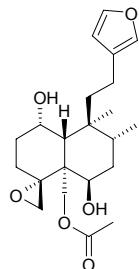
**11429 Isofraxidin glucoside**

$C_{17}H_{20}O_{10}$ (384.34). Source: CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*]. Ref: 2.

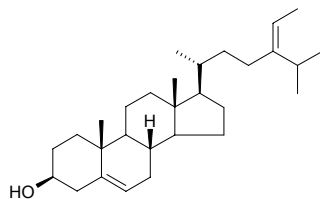


11430 Isofruticolone

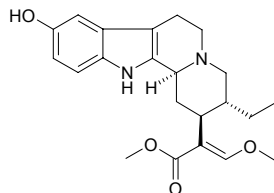
$C_{22}H_{32}O_6$ (392.50). **Pharm:** Insect antifeedant (fifth instar larvae of *Spodoptera littoralis*, dual-choice feeding assays, dose = $10\mu\text{g}/\text{cm}^2$, $\text{FR}_{50} = 0.78 \pm 0.11$). **Source:** GUAN CONG XIANG KE KE *Teucrium fruticans*. **Ref:** 3761.

**11431 Isofucosterol**

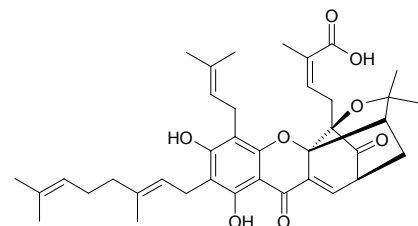
28-Isofucosterol $C_{29}H_{48}O$ (412.71). mp $133\sim 135^\circ\text{C}$. **Source:** SHI CHUN *Ulva lactuca*, KONG SHI CHUN *Ulva pertusa*. **Ref:** 6, 660.

**11432 Isogambirine**

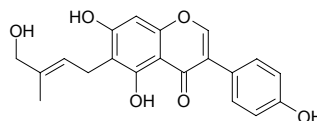
$C_{22}H_{28}N_2O_4$ (384.48). **Source:** HOU YE GOU TENG *Uncaria callophylla*. **Ref:** 5341.

**11433 Isogambogenic acid**

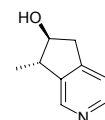
$C_{38}H_{46}O_8$ (630.79). Bright yellow amorphous powder, $[\alpha]_D^{20} = -488^\circ$, ($c = 0.290$, CHCl_3). **Pharm:** Cytotoxic (hmn leukemia: doxorubicin-resistant K562, $\text{IC}_{50} = (2.86 \pm 0.16)\mu\text{g}/\text{mL}$, control Adriamycin, $\text{IC}_{50} = (1.79 \pm 0.17)\mu\text{g}/\text{mL}$; drug-sensitive K562, $\text{IC}_{50} = (2.10 \pm 0.14)\mu\text{g}/\text{mL}$, Adriamycin, $\text{IC}_{50} = (0.11 \pm 0.01)\mu\text{g}/\text{mL}$). **Source:** TENG HUANG SHU *Garcinia hanburyi* (resin). **Ref:** 1583.

**11434 Isogancaonin C**

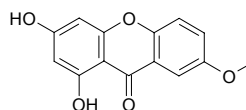
5,7,4'-Trihydroxy-6-[1-hydroxy-2-methylbuten-2-yl]isoflavone $C_{20}H_{18}O_6$ (354.36). Creamy solid, mp $259\sim 260^\circ\text{C}$. **Pharm:** Antibacterial (*Escherichia coli*, MIA = $0.10\mu\text{g}$, control Chloramphenicol, MIA = $0.001\mu\text{g}$; *Bacillus subtilis*, MIA = $0.05\mu\text{g}$, Chloramphenicol, MIA = $0.001\mu\text{g}$; *Staphylococcus aureus*, MIA = $0.05\mu\text{g}$, Chloramphenicol, MIA = $0.001\mu\text{g}$); antifungal (*Candida mycoderma*, MIA = $0.05\mu\text{g}$, Miconazole, MIA = $0.0001\mu\text{g}$); antioxidant (DPPH scavenger, TLC detection limit = $0.5\mu\text{g}$, $\text{IC}_{50} = 650\mu\text{g}/\text{mL}$; control Quercetin, TLC detection limit $< 0.05\mu\text{g}$, $\text{IC}_{50} = 7\mu\text{g}/\text{mL}$; Gallic acid, TLC detection limit $< 0.05\mu\text{g}$, $\text{IC}_{50} = 4\mu\text{g}/\text{mL}$; Ascorbic acid, TLC detection limit $< 0.10\mu\text{g}$, $\text{IC}_{50} = 18\mu\text{g}/\text{mL}$). **Source:** *Bolusanthus speciosus* (root wood). **Ref:** 3785.

**11435 Isogentialutine**

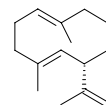
$C_9H_{11}NO$ (149.19). **Source:** XI ZANG QIN JIAO *Gentiana tibetica*. **Ref:** 660.

**11436 Isogentisin**

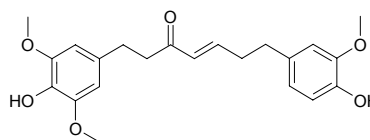
[491-64-5] $C_{14}H_{10}O_5$ (258.23). **Pharm:** Monoamine oxidase inhibitor; mutagen (*Salmonella typhimurium*). **Source:** HUANG LONG DAN *Gentiana lutea*, QI RUI TA ZHANG YA CAI *Swertia chirata*. **Ref:** 658.

**11437 (+)-(S)-Isogermaacrene A**

(+)-(S)-1,5-Dimethyl-7-(1-methylethenyl)-cyclodeca-1E,5E-diene $C_{15}H_{24}$ (204.36). Colorless oil. **Source:** *Saccogyne viticulosa* (essential oil). **Ref:** 3839.

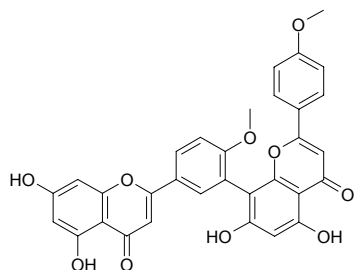
**11438 Isogingerenone B**

[128700-99-2] $C_{22}H_{26}O_6$ (386.45). **Source:** GAN JIANG *Zingiber officinale*, SHENG JIANG *Zingiber officinale*. **Ref:** 2.

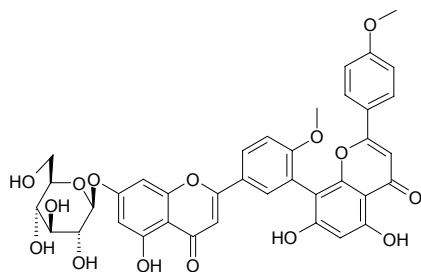


11439 Isoginkgetin

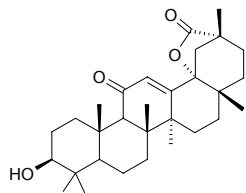
[548-19-6] C₃₂H₂₂O₁₀ (566.53). Yellow powder, mp 210°C. Source: BAI GUO YE *Ginkgo biloba* (leaf: mean content = 2.29%^[5508]); the compound was isolated from the plant by Kôichi Nakazawa in 1959)^[5505], CHAO XIAN YIN YANG HUO *Epimedium koreanum*. Ref: 6, 442, 5505, 5508.

**11440 Isoginkgetin-7-O-β-D-glucopyranoside**

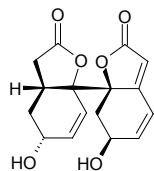
C₃₈H₃₂O₁₅ (728.67). Yellow amorphous powder, [α]_D²⁰ = +0.77° (c = 0.003, MeOH). Source: BAI GUO YE *Ginkgo biloba*. Ref: 4512.

**11441 Isoglabrolide**

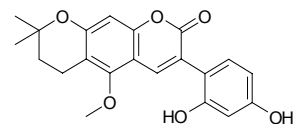
C₃₀H₄₄O₄ (468.68). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 660.

**11442 Isoglochidiolide**

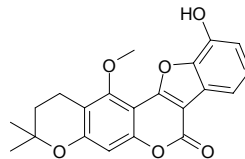
C₁₆H₁₆O₆ (304.30). Off-white syrup, [α]_D²³ = +26.6° (c = 2.33, MeOH). Source: JIAN JIAN SUAN PAN ZI *Glochidion acuminatum* (leaf). Ref: 4286.

**11443 Isoglycycoumarin**

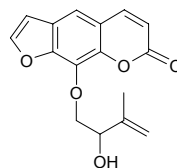
C₂₁H₂₀O₆ (368.39). Source: CU MAO GAN CAO *Glycyrrhiza aspera*. Ref: 660.

**11444 Isoglycyrol**

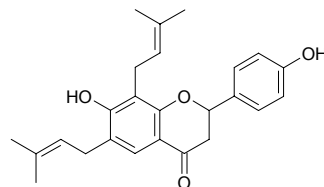
[23013-86-7] C₂₁H₁₈O₆ (366.37). mp 298~300°C (dec). Source: CU MAO GAN CAO *Glycyrrhiza aspera*, GAN CAO *Glycyrrhiza uralensis*. Ref: 660, 1521.

**11445 Isogosferol**

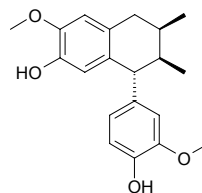
[53319-52-1] C₁₆H₁₄O₅ (286.29). mp 76~78°C. Source: YUN NAN QIANG HUO *Pleurospermum rivulorum*. Ref: 551.

**11446 Isograbrol**

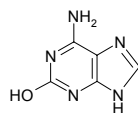
C₂₅H₂₈O₄ (392.50). Source: *Glycyrrhiza* sp. Ref: 2431.

**11447 (-)-Isoguaiacin**

C₂₀H₂₄O₄ (328.41). Pharm: Neuroprotective (glutamate-induced neurotoxicity in primary cultures of cortical cells, 0.1 μmol/L, protection rate = (33.6±2.7)%, p<0.05, MK-801: 1.0 μmol/L, protection rate = (83.6±2.0)%, p<0.001, CNQX: 1.0 μmol/L, protection rate = (70.5±1.5)%, p<0.001). Source: HONG NAN PI *Machilus thunbergii*. Ref: 4927.

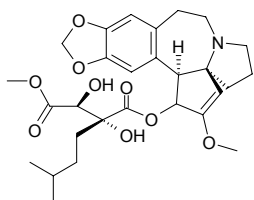
**11448 Isoguanine**

C₅H₅N₅O (151.13). Source: BA DOU *Croton tiglium*. Ref: 660.

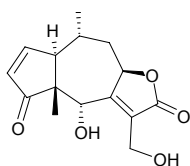


11449 Isoharringtonine

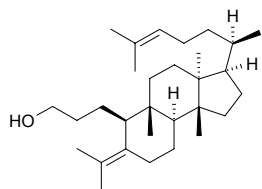
[26833-86-3] $C_{28}H_{37}NO_9$ (531.61). **Pharm:** Antineoplastic (mus L_{1210} , 7.5mg/kg ip, biotic prolonged rate = 26%, P_{388} , biotic prolonged rate = 172%). **Source:** HAI NAN CU FEI *Cephalotaxus hainanensis* [Syn. *Cephalotaxus manii*] (branchlet and bark: mean content of 2 samples = 0.14%^[5508]), RI BEN CU FEI *Cephalotaxus harringtonia*, SAN JIAN SHAN *Cephalotaxus fortunei* (branchlet and bark: mean content of 2 origins = 0.0027%^[5508]), SAN JIAN SHAN *Cephalotaxus fortunei* (drupe: yield = 0.00018%^[4675]), TAI WAN CU FEI *Cephalotaxus wilsoniana*, ZHONG GUO CU FEI ZHI YE *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*], ZHONG GUO CU FEI ZI *Cephalotaxus sinensis* [Syn. *Cephalotaxus harringtonia* var. *sinensis*]. **Ref:** 5, 658, 660, 1521, 4675, 5508.

**11450 Isohelenol**

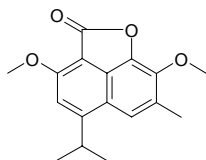
$C_{15}H_{18}O_5$ (278.31). Crystals (chloroform-methanol), mp 190~192°C. **Pharm:** Antineoplastic (mus P_{388} *in vivo*, biotic prolonged rate = 33%). **Source:** XIAO TOU DUI XIN JU *Helenium microcephalum*. **Ref:** 661.

**11451 Isohelianol**

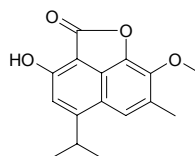
$C_{30}H_{52}O$ (428.75). **Pharm:** Antineoplastic (EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = 0% (positive control value 32pmol, 20ng TPA=100%), viability of Raji cells = 70%; reference compound β -Carotene, relative percentage = 8.6%). **Source:** HUO YANG LE *Euphorbia antiquorum* (latex). **Ref:** 4606.

**11452 Isohemigossylic acid lactone-2, 7-dimethyl ether**

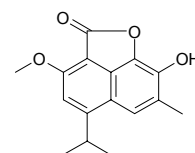
$C_{17}H_{18}O_4$ (286.33). **Source:** JI BEI *Ceiba pentandra*. **Ref:** 3040.

**11453 Isohemigossylic acid lactone-2-methyl ether**

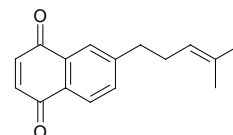
$C_{16}H_{16}O_4$ (272.3). mp 209~210°C, with a phase change from cubes to needles at 153~155°C (ether/cyclohexane). **Source:** MU MIAN HUA *Bombax malabaricum* [Syn. *Gossampinus malabarica*] (root: yield = 0.0042%_{dw}). **Ref:** 3040.

**11454 Isohemigossylic acid lactone- 7-methyl ether**

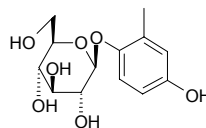
$C_{16}H_{16}O_4$ (272.3). **Source:** JI BEI *Ceiba pentandra*. **Ref:** 3040.

**11455 6-Isohexenyl- α -naphthoquinone**

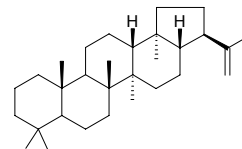
$C_{16}H_{16}O_2$ (240.36). **Pharm:** Antibacterial (gram-positive bacteria). **Source:** CAI DOU SHU *Radermachera sinica*. **Ref:** 658.

**11456 Isohomoarbutin**

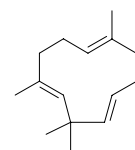
[25162-30-5] $C_{13}H_{18}O_7$ (286.28). mp 175~176°C. **Source:** HONG HUA LU TI CAO *Pyrola incarnata*, YUAN YE LU TI CAO *Pyrola rotundifolia*. **Ref:** 6, 660.

**11457 Isohop-22-(29)-ene**

$C_{30}H_{50}$ (410.73). **Source:** HAI ZHOU GU SUI BU *Davallia mariesii*. **Ref:** 660.

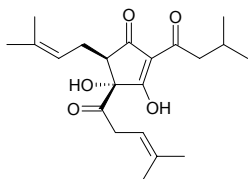
**11458 Iso- α -humulene**

1,3,3,8-Tetramethylcycloundeca-1,4,8-triene $C_{15}H_{24}$ (204.36). Colorless oil. **Source:** *Saccogyna viticulosa* (essential oil). **Ref:** 3839.

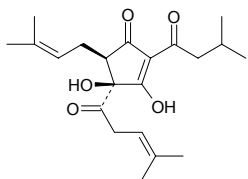


11459 Isohumulone A

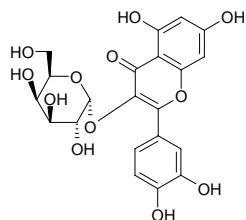
$C_{21}H_{30}O_5$ (362.47). Source: PI JIU HUA *Humulus lupulus*. Ref: 660.

**11460 Isohumulone B**

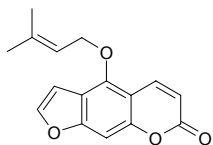
$C_{21}H_{30}O_5$ (362.47). Source: PI JIU HUA *Humulus lupulus*. Ref: 660.

**11461 Isohyperoside**

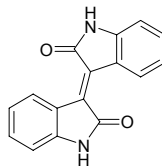
[65549-68-0] $C_{21}H_{20}O_{12}$ (464.39). mp 242–245°C. Source: MAN SHAN HONG *Rhododendron dauricum*. Ref: 6, 1521.

**11462 Isoimperatorin**

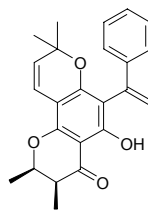
Ausraptin [482-45-1] $C_{16}H_{14}O_4$ (270.29). mp 109–101°C. Pharm: Antioxidant (DPPH free radical scavenger, $EC_{50} = 34.6 \mu\text{g/mL} = 171 \mu\text{mol/L}$, control Ascorbic acid, $EC_{50} = 1.6 \mu\text{g/mL} = 9.1 \mu\text{mol/L}$)^[4154]; NO Production inhibitor (LPS-activated mouse peritoneal macrophages, 100 $\mu\text{mol/L}$, InRt = (82.5±4.5)%, control *L*-NMMA, 100 $\mu\text{mol/L}$, InRt = (79.2±0.9)%)^[4454]; PGE₂ production inhibitor (rat peritoneal macrophages, LPS-induced, 30 $\mu\text{mol/L}$; inhibits LPS-induced expression of COX-2 and mPGES, not directly inhibits COX-1 and COX-2)^[5392]; AChE inhibitor (*in vitro*, $IC_{50} = 69 \mu\text{mol/L}$)^[3058]. Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*] (dried root: content scope of 6 origins = 0.042%–0.069%, mean content = 0.052%)^[5508], BEI SHA SHEN *Glehnia littoralis* (root: mean content of 6 origins = 0.00798%)^[5508], CHAO XIAN DANG GUI *Angelica gigas* (underground part)^[3058], DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], FEN CHA DANG GUI *Angelica furcijuga* (flower), HANG BAI ZHI *Angelica taiwaniana* (dried root: content scope of 19 origins = 0.032%–0.070%, mean content = 0.053%)^[5508], KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], QI BAI ZHI *Angelica dahurica* cv. *Qibaizhi* (sundried root: content scope of 10 origins = 0.060%–0.216%, mean content = 0.110%)^[5516], QIANG HUO *Notopterygium incisum*, *Niphogeton ternata*. Ref: 4, 325, 344, 507, 566, 660, 3058, 4154, 4156, 4454, 5392, 5501, 5508, 5516.

**11463 Isoindigo**

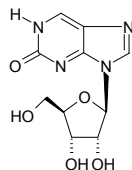
[476-34-6] $C_{16}H_{10}N_2O_2$ (262.27). Source: MA LAN GEN *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*]. Ref: 7, 701.

**11464 Isoinophynone**

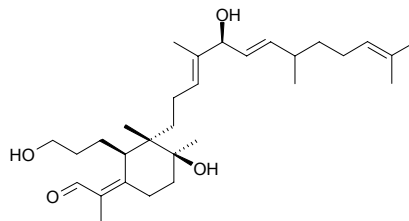
$C_{24}H_{24}O_4$ (376.46). Crystals, mp 185°C. Source: HAI TANG GUO *Calophyllum inophyllum*. Ref: 1878.

**11465 6-Isoinosine**

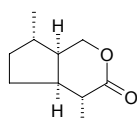
[72346-26-0] $C_{10}H_{12}N_4O_5$ (268.23). Source: MAO GENG HONG MAO WU JIA *Acanthopanax giraldii* var. *hispidus*. Ref: 525.

**11466 Isoiridogermanal**

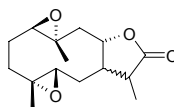
$C_{30}H_{50}O_4$ (474.73). Source: HU DIE HUA *Iris japonica* (root), SHE GAN *Belamcanda chinensis*. Ref: 660.

**11467 Isoiridomyrmecin**

[573-94-4] $C_{10}H_{16}O_2$ (168.24). mp 58–59°C. Source: MU TIAN LIAO *Actinidia polygama*. Ref: 6.

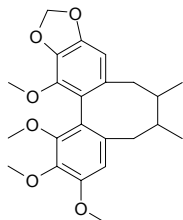
**11468 Isoivaxillin**

$C_{15}H_{22}O_4$ (266.34). Source: TIAN MING JING *Carpesium abrotanoides*. Ref: 660.

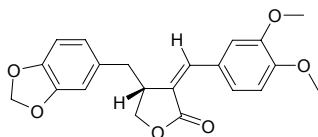


11469 Isokadsuranin

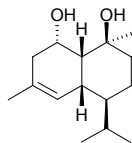
$C_{23}H_{28}O_6$ (400.48). Source: LENG FAN TUAN *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*]. Ref: 660.

**11470 Isokaerophyllin**

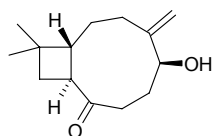
$C_{21}H_{20}O_6$ (368.39). Source: HONG CHAI HU *Bupleurum scorzonerifolium* (root). Ref: 3498.

**11471 Isokhusinodiol**

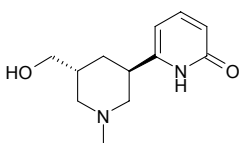
Iso-4-cadinene-2 α ,10 β -diol $C_{15}H_{26}O_2$ (238.37). mp 105~107°C, $[\alpha]_D^{27} = -5.9^\circ$ ($c = 0.26$, $CHCl_3$). Source: TAI WAN SHAN *Taiwania cryptomerioides* (root). Ref: 4371.

**11472 Isokobusone**

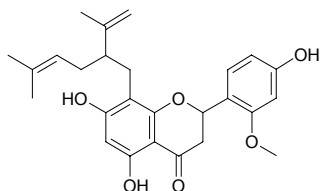
[24173-72-6] $C_{14}H_{22}O_2$ (222.33). Crystals (Et_2O), mp 108~109°C, $[\alpha]_D = -40.1^\circ$ ($c = 3.1$, $CHCl_3$). Source: XIANG FU *Cyperus rotundus*. Ref: 6.

**11473 Isokuraramine**

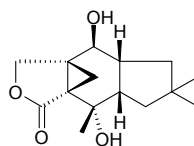
[85799-36-6] $C_{12}H_{18}N_2O_2$ (222.29). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 2.

**11474 Isokurarinone**

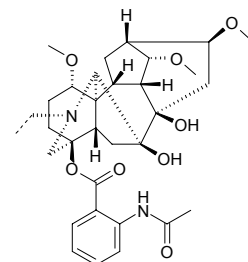
[52483-02-0] $C_{26}H_{30}O_6$ (438.53). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 2.

**11475 Isolactarorufin**

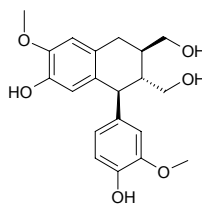
$C_{15}H_{22}O_4$ (266.34). Source: RONG BAI RU GU *Lactarius vellereus*. Ref: 660.

**11476 Isolappaconitine**

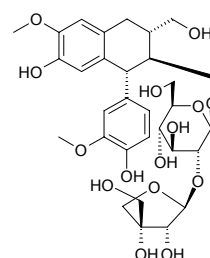
9-Deoxysanaconitine $C_{32}H_{44}N_2O_8$ (584.72). Source: GAN WAN WU TOU *Aconitum finetianum*. Ref: 660.

**11477 Isolariciresinol**

(+)-Isolariciresinol [548-29-8] $C_{20}H_{24}O_6$ (360.41). Colorless acicular crystals (methanol-chloroform), mp 158~160°C; 114~115°C (water-methanol), $[\alpha]_D^{20} = +64.6^\circ$ ($c = 1.5$, acetone), $[\alpha]_D^{20} = +34.0^\circ$ ($c = 0.10$, MeOH). Pharm: CNS depressant (mus); β -Hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of β -hexosaminidase, 100 μ mol/L, InRt = (6.0 \pm 8.5)%)^[4347]; antioxidant (DPPH free radical scavenger, for 40 μ mol/L DPPH radical, $SC_{50} = 12\mu$ mol/L)^[4378]; cytotoxic inactive (100 μ g/mL: KB, LNCaP, and Col2 cells)^[5336]; NO production inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages, 3 μ mol/L, 10 μ mol/L, 30 μ mol/L, 100 μ mol/L, InRt = -0.6%, 0.6%, 5.1%, 7.5%, respectively; control *L*-NMMA, 3 μ mol/L, 10 μ mol/L, 30 μ mol/L, 100 μ mol/L, InRt = 10.3%, 15%, 34.1%, 63.1%, respectively)^[4691]. Source: SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem), XIAO HONG SHEN *Rubia yunnanensis* (root: yield = 0.0050%dw)^[4691], ZI SHAN *Taxus cuspidata*, YI ZHU QIAN MA *Urtica dioica*, YUE NAN LIE LAN *Bursera tonkinensis* (root). Ref: 900, 1521, 4347, 4378, 4691, 5336.

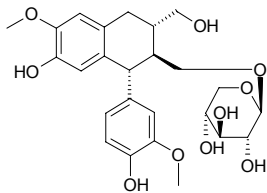
**11478 (-)-Isolariciresinol-3 α -O- β -apiofuranosyl-(1 \rightarrow 2)-O- β -glucopyranoside**

$C_{31}H_{42}O_{15}$ (654.67). Amorphous powder, $[\alpha]_D^{28} = -48.0^\circ$ ($c = 1.71$, MeOH). Source: TONG XU SHOU GONG MU *Sauropus androgynus*. Ref: 3432.

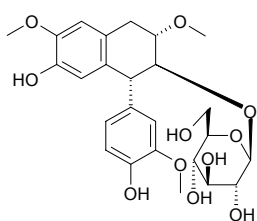


11479 (-)-Isolariciresinol-2 α -O- β -D-xylopyranoside

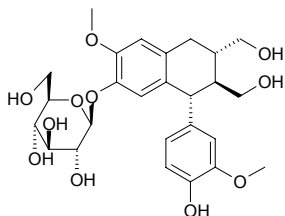
C₂₅H₃₂O₁₀ (492.53). White powder, mp 209–210°C. Source: DIAN BAI ZHU SHU *Gaultheria yunnanensis*. Ref: 666.

**11480 (-)-Isolariciresinol-3 α -O- β -D-glucopyranoside**

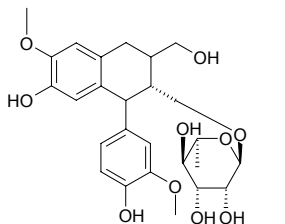
C₂₅H₃₂O₁₁ (508.53). Source: ZHONG HUA QING NIU DAN *Tinospora sinensis* (stem). Ref: 4292.

**11481 (-)-Isolariciresinol-4-O- β -D-glucopyranoside**

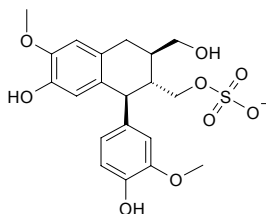
C₂₆H₃₄O₁₁ (522.55). Pale yellow amorphous powder, $[\alpha]_D^{15} = -33.0^\circ$ ($c = 0.2$, CHCl₃). Source: GE XUN *Balanophora japonica* (fresh aboveground part), SUO YANG *Cynomorium songaricum* (stem). Ref: 4114, 4451.

**11482 (+)-Isolariciresinol-9'-O- α -L-rhamnoside**

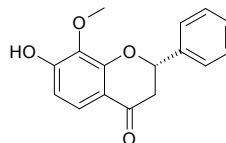
C₂₆H₃₄O₁₀ (506.55). White granular crystals (CHCl₃-MeOH), mp 211–214°C, $[\alpha]_D^{25} = +38.6^\circ$ ($c = 0.32$, MeOH). Source: BAN LI *Castanea mollissima* (flower). Ref: 4844.

**11483 (+)-Isolariciresinol-2 α -sulfate**

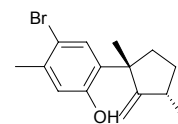
C₂₀H₂₃O₉S (439.46). Amorphous powder, $[\alpha]_D^{25} = +34.0^\circ$ ($c = 0.11$, MeOH). Source: HU ZHANG *Polygonum cuspidatum*. Ref: 4186.

**11484 Isolarrien**

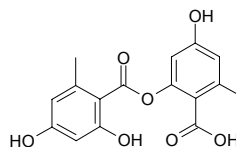
7-Hydroxy-8-methoxyflavanone C₁₆H₁₄O₄ (270.29). Amorphous powder. Source: LIN JING ZHONG ZI WEN SHU LAN *Crinum bulbispermum* (bulb). Ref: 3997.

**11485 Isolaurinterol**

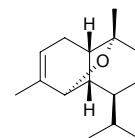
C₁₅H₁₉BrO (295.22). Pharm: Antibacterial (marine bacteria: *Alteromonas* sp., MIC = 10 μg/disc; *Azomonas agilis*, MIC = 5 μg/disc; *Erwinia amylovora*, MIC = 5 μg/disc; *Escherichia coli*, MIC = 10 μg/disc; *Alcaligenes aquamarinus*, *Azobacter beijerinckii*, *Halobacterium* sp., *Halococcus* sp., no inhibition). Source: CHAO AO DING CAO *Laurencia nidifica*. Ref: 5191.

**11486 Isolecanoric acid**

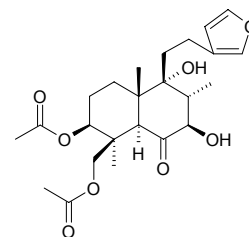
C₁₆H₁₄O₇ (318.29). Source: MEI YI *Parmelia tinctorum*. Ref: 660.

**11487 Isolentideusether**

C₁₅H₂₄O (220.36). Source: BAO PI GU *Lentinus lepideus*. Ref: 660.

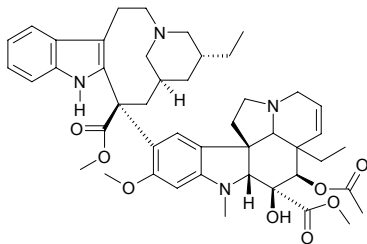
**11488 Isoleoisibirin**

[86575-86-2] C₂₄H₃₄O₈ (450.53). Oil liquid, $[\alpha]_D^{28} = +7.1^\circ$ ($c = 0.63$, CHCl₃). Source: XI YE YI MU CAO *Leonurus sibiricus*. Ref: 660, 2499.

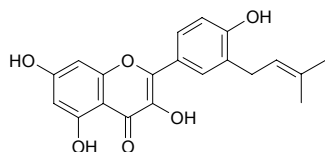


11489 Isoleurosine

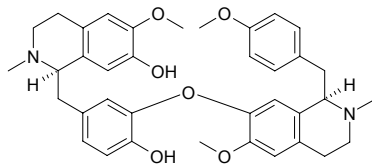
[20072-25-7] C₄₆H₅₈N₄O₈ (795.00). mp 202–206°C. Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochnera rosea*]. Ref: 2, 1521.

**11490 Isolicoflavanol**

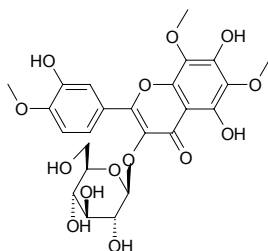
[94805-83-1] C₂₀H₁₈O₆ (354.36). Pharm: Inhibits onset of senility (free radical scavenger, EC₅₀ = 40μmol/L); anti-HIV; cytotoxic (cyclooxygenase-2 inhibitor, a promising lead as potential cancer chemopreventive agents)^[5038]; cytotoxic (aromatase inhibitor)^[5038]; aromatase inhibitor (*in vitro*, IC₅₀ = 0.1μmol/L; control Aminoglutethimide, IC₅₀ = 6.4μmol/L)^[3090]. Source: GAN CAO *Glycyrrhiza uralensis*, GOU SHU *Broussonetia papyrifera*^[3090], ZHEN YE XUE TONG *Macaranga confiera*. Ref: 2, 1001, 1678, 3090, 5038.

**11491 Isoliensinine**

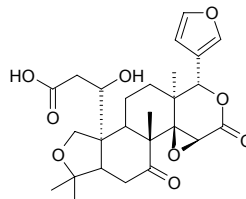
[6817-41-0] C₃₇H₄₂N₂O₆ (610.76). Oil, [α]_D²² = +49.3° (Me₂CO), [α]_D²⁹ = -43.3° (CHCl₃). Pharm: Pulmonary fibrosis inhibitor (BLM-induced, significant inhibitory effect, probably due to its antioxidant and/or anti-inflammatory activities and inhibitory overexpressing TNF-α and TGF-β₁ induced by BLM)^[5068]. Source: LIAN ZI XIN *Nelumbo nucifera* (dried plumule and radicle in seed: mean content of 7 origins = 0.125%^[5508]). Ref: 6, 1521, 5068, 5508.

**11492 Isolimocitrol-3-β-D-glucoside**

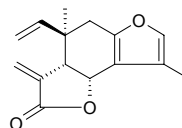
C₂₄H₂₆O₁₄ (538.47). mp 220–225°C. Source: NING MENG *Citrus limon*. Ref: 6.

**11493 Isolimononic acid (16→17)lactone**

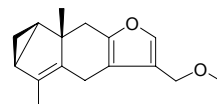
C₂₆H₃₂O₉ (488.54). Source: CHENG ZI *Citrus junos*, ZHI SHI *Citrus aurantium*. Ref: 660.

**11494 Isolinderalactone**

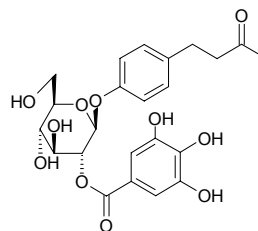
[957-66-4] C₁₅H₁₆O₃ (244.29). mp 118–121°C. Pharm: Cytotoxic (*in vitro*: KB ED₅₀ = 2.990mg/L, P₃₈₈ ED₅₀ = 0.816mg/L, A549 ED₅₀ = 1.420mg/L, HT29 ED₅₀ = 1.528mg/L). Source: WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*]. Ref: 6, 1647.

**11495 Isolinderoxide**

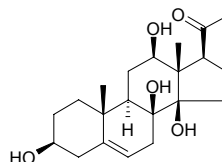
[15004-40-7] C₁₆H₂₀O₂ (244.34). bp 97–100°C/0.3mmHg. Source: WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*]. Ref: 6, 1521.

**11496 Isolindleyin**

[87075-18-1] C₂₃H₂₆O₁₁ (478.46). Source: TANG GU TE DA HUANG *Rheum tanguticum*. Ref: 2, 660, 1521.

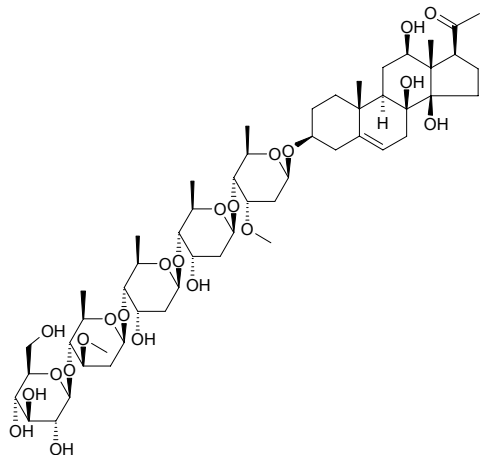
**11497 Isolineolone**

C₂₁H₃₂O₅ (364.49). Source: FU SHOU CAO *Adonis amurensis*, ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 6, 1521, 3925.



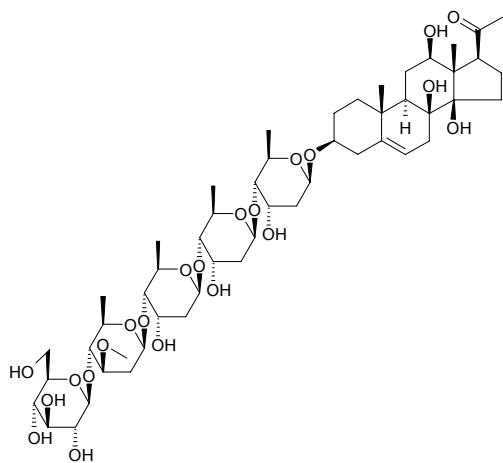
11498 Isolineolon 3-*O*- β -*D*-glucopyranosyl-(1 \rightarrow 4)- β -*D*-oleandropyranosyl-(1 \rightarrow 4)- β -*D*-digitoxopyranosyl-(1 \rightarrow 4)- β -*D*-digitoxopyranosyl-(1 \rightarrow 4)- β -*D*-cymaropyranoside

C₅₃H₈₆O₂₂ (1075.26). Amorphous powder, $[\alpha]_D^{21} = +32.1^\circ$ ($c = 0.90$, MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



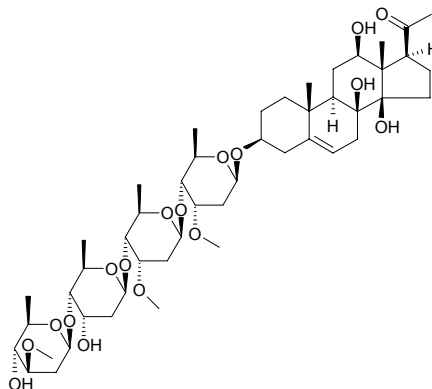
11499 Isolineolon 3-*O*- β -*D*-glucopyranosyl-(1 \rightarrow 4)- β -*D*-oleandropyranosyl-(1 \rightarrow 4)- β -*D*-digitoxopyranosyl-(1 \rightarrow 4)- β -*D*-digitoxopyranosyl-(1 \rightarrow 4)- β -*D*-digitoxopyranoside

C₅₂H₈₄O₂₂ (1061.24). Amorphous powder, $[\alpha]_D^{27} = +28.3^\circ$ ($c = 1.12$, MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



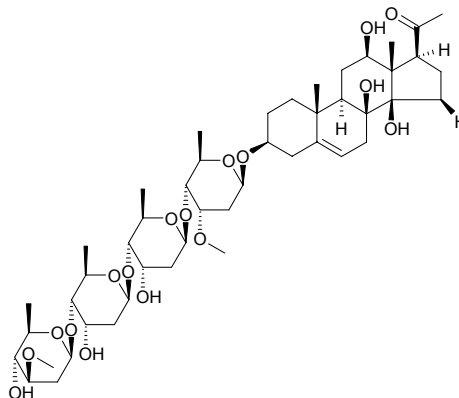
11500 Isolineolon 3-*O*- β -*D*-oleandropyranosyl-(1 \rightarrow 4)- β -*D*-digitoxopyranosyl-(1 \rightarrow 4)- β -*D*-cymaropyranosyl-(1 \rightarrow 4)- β -*D*-cymaropyranoside

C₄₈H₇₈O₁₇ (927.15). Amorphous powder, $[\alpha]_D^{27} = +46.2^\circ$ ($c = 0.50$, MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



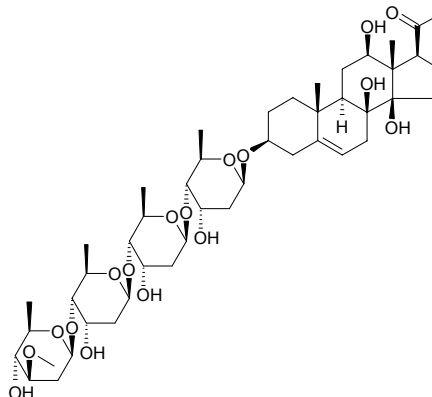
11501 Isolineolon 3-*O*- β -*D*-oleandropyranosyl-(1 \rightarrow 4)- β -*D*-digitoxopyranosyl-(1 \rightarrow 4)- β -*D*-digitoxopyranosyl-(1 \rightarrow 4)- β -*D*-cymaropyranoside

C₄₇H₇₆O₁₇ (913.12). Amorphous powder, $[\alpha]_D^{20} = +35.5^\circ$ ($c = 0.78$, MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



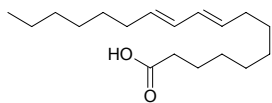
11502 Isolineolon 3-*O*- β -*D*-oleandropyranosyl-(1 \rightarrow 4)- β -*D*-digitoxopyranosyl-(1 \rightarrow 4)- β -*D*-digitoxopyranosyl-(1 \rightarrow 4)- β -*D*-digitoxopyranoside

C₄₆H₇₄O₁₇ (899.09). Amorphous powder, $[\alpha]_D^{24} = +30.9^\circ$ ($c = 1.14$, MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.

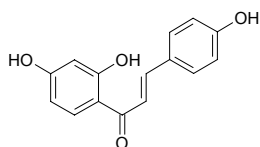


11503 Isololinic acid

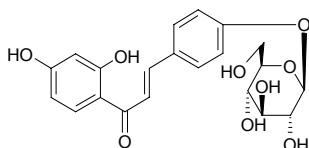
9,11-Octadecadienoic acid C₁₈H₃₂O₂ (280.45). mp 54°C. Source: BIAN JING HUANG QI *Astragalus complanatus*, CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], MING DANG SHEN *Changium smyrnioides*, SAN LENG *Sparganium stoloniferum*, SHU MI *Panicum miliaceum*. Ref: 6, 2655, 2882, 2883, 2885.

**11504 Isoliquiritigenin**

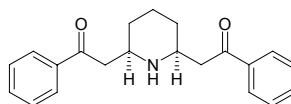
4,2',4'-Trihydroxychalcone [961-29-5] C₁₅H₁₂O₄ (256.26). mp 185~186°C (dec), 199.5~200.5°C. Pharm: Cytotoxic (quinone reductase induction assay in cultured Hepa1c7 mouse hepatoma cells, CD = 1.4µg/mL)^[5038]; cytotoxic (mouse mammary organ culture assay, 76% at 10µg/mL, a promising lead as potential cancer chemopreventive agents)^[5038]; cytotoxic (HT1080 cell line, IC₅₀ = 96.8µmol/L)^[4470]; antineoplastic (Inhibition of DMBA-induced preneoplastic lesions *in vitro*, MMOC assay, IC₅₀ = 36.3µmol/L; control Sulforaphane, IC₅₀ = 11µmol/L)^[4718]; inhibits cell proliferation (HepG2, IC₅₀ = 10.51µg/mL, induces apoptosis)^[5055]; monoamine oxidase inhibitor (mitochondrion in mus liver cells); antispasmodic (zoic intestinal canal *in vitro*, inhibits intestinal spasm caused by acetylcholine, histamine or BaCl₂); antiulcerative (pylorus-ligated rat). Source: CI HUAI HUA *Robinia pseudoacacia*, DU HUI MAO DOU *Tephrosia toxicaria* (stem: yield = 0.00015%dw)^[4718], GAN CAO *Glycyrrhiza uralensis*, GUANG GUO GAN CAO *Glycyrrhiza glabra*, HU CONG *Allium ascalonicum*, HUI HUI DOU *Cicer arietinum*, JUAN MAO HUANG TAN *Dalbergia sericea*, LING NAN HUAI SHU *Sophora tomentosa*, LONG XUE SHU *Dracaena draco* (stem cortex)^[4696], LV DOU *Onobrychis vicifolia*, SI TE WEN HUANG TAN *Dalbergia stevensonii*, YA MAI JIA YING TAO *Muntingia calabura*, YUN NAN GAN CAO *Glycyrrhiza yunnanensis*, ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 2, 6, 658, 660, 4470, 4696, 4718, 5038, 5055.

**11505 Isoliquiritin**

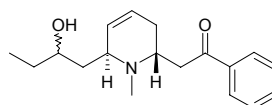
[5401-81-6] C₂₁H₂₂O₉ (418.40). mp 185~186°C. Pharm: Anti-angiogenic (*in vitro*, 1~100µmol/L, IC₅₀ = 28.3 mol/L); anti-inflammatory (mus, 0.31~1.3mg/kg, inhibits content of carmine in granulation tissue, IC₅₀ = 1.46mg/kg, inhibits weight of diffulate in granulation gasbag, IC₅₀ = 771mg/kg); anti-complication of diabetes (hmn red cell, inhibits aggregation of sorbol, IC₅₀ = 29µmol/L); aldose reductase inhibitor (rat eye lens, 1.0µg/mL, InRt = 75.4%, IC₅₀ = 0.72µmol/L). Source: CU MAO GAN CAO *Glycyrrhiza aspera*, GAN CAO *Glycyrrhiza uralensis* (root and rhizome: content = 0.289%^[5508]), GUANG GUO GAN CAO *Glycyrrhiza glabra* (root and rhizome: content = 0.723%^[5508]), HUANG GAN CAO *Glycyrrhiza kansuensis*, ZHANG GUO GAN CAO *Glycyrrhiza inflata* (root and rhizome: content = 0.849%^[5508]). Ref: 2, 660, 1765, 1766, 5508.

**11506 Isolobelanine**

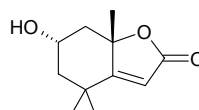
Norlobelanine C₂₁H₂₃NO₂ (321.42). mp 120~121°C. Source: BAN BIAN LIAN *Lobelia chinensis* [Syn. *Lobelia radicans*]. Ref: 2, 1521.

**11507 Isolobinine**

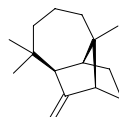
C₁₈H₂₅NO₂ (287.41). Pharm: Antitussive; antiasthmatic; increases blood pressure. Source: BEI MEI ZHOU SHAN GENG CAI *Lobelia inflata*. Ref: 658, 1521.

**11508 Isololiolide**

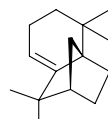
C₁₁H₁₆O₃ (196.25). Source: QUN DAI CAI *Undaria pinnatifida* (dried thallus: yield = 0.00052%). Ref: 4602.

**11509 (+)-β-Isolongibornene**

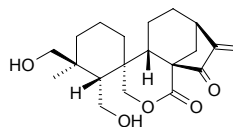
C₁₅H₂₄ (204.36). Colorless oil. Source: BO BAN HE YE TAI *Scapania undulata* (essential oil). Ref: 3752.

**11510 Isolongifolene**

(-)-Isolongifolene; (2*S*,4*R*)-(-)-1,3,4,5,6,7-Hexahydro-1,1,5,5-tetramethyl-2*H*-2,4a-methanonaphthalene [1135-66-6] C₁₅H₂₄ (204.36). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2, 1521.

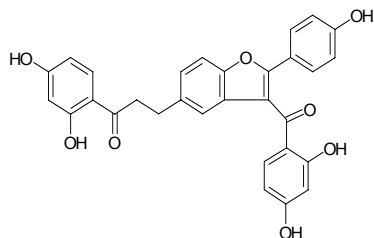
**11511 Isolongirabdiol**

C₂₀H₂₈O₅ (348.44). Amorphous powder, [α]_D²⁶ = +37.7° (c = 0.69, MeOH). Source: CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. Ref: 4067.

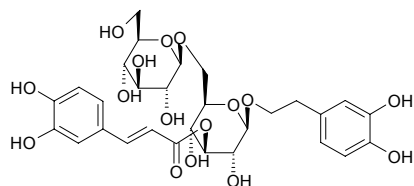


11512 Isolophirone C

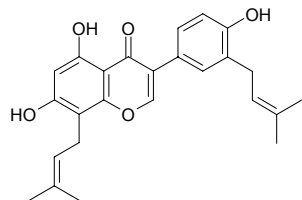
$C_{30}H_{22}O_8$ (510.51). Yellow crystals, mp 194–195°C (Me₂CO). Source: *Ochna afzelii* (stem cortex). Ref: 5153.

**11513 Isolugrandoside**

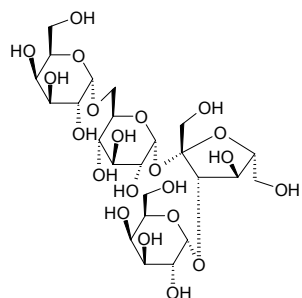
2-(3,4-dihydroxyphenyl)-ethyl-*O*-β-*D*-glucopyranosyl-(1→6)-3-*O*-*trans*-caffeoyl-1-β-*D*-glucopyranoside $C_{29}H_{35}O_{16}$ (640.60). Amorphous powder, $[\alpha]_D^{25} = 16.6^\circ$ ($c = 0.06$, MeOH). Source: HUA BAI LA SHU *Fraxinus ornus*. Ref: 1894.

**11514 Isolupalbigenin**

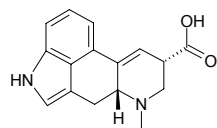
$C_{25}H_{26}O_5$ (406.48). Pharm: Antioxidant (DPPH scavenger, 10 μmol/L, ScRt = 16%, control BHT, 10 μmol/L, ScRt = 43%)^[5319]. Source: HUANG YU SHAN *Lupinus luteus*, TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit), XIAO JING DOU *Ulex minor*. Ref: 1521, 5319.

**11515 Isolychnose**

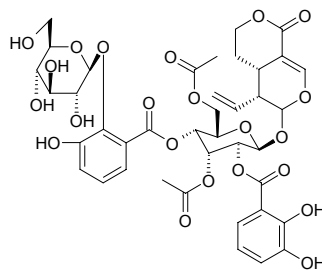
$C_{24}H_{42}O_{21}$ (666.59). Source: BAI NIU XI *Cucubalus baccifer*. Ref: 6.

**11516 Isolysergic acid**

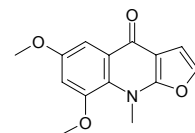
$C_{16}H_{16}N_2O_2$ (268.32). Source: MAI JIAO *Claviceps purpurea*, QUE BAI MAI JIAO *Claviceps paspali*. Ref: 660.

**11517 Isomacrophyllside**

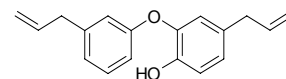
$C_{40}H_{44}O_{22}$ (876.78). Source: XI ZANG QIN JIAO *Gentiana tibetica*. Ref: 702.

**11518 Isomaculosidine**

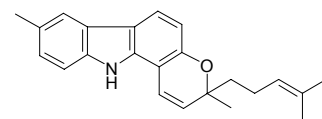
$C_{14}H_{13}NO_4$ (259.26). Source: BAI XIAN PI *Dictamnus dasycarpus*. Ref: 660.

**11519 Isomagnolol**

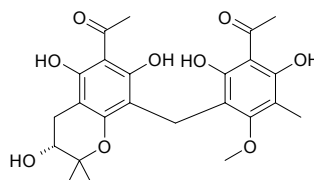
Hydromagnolol [87688-90-2] $C_{18}H_{18}O_2$ (366.34). mp 143.5°C. Source: HOU PO *Magnolia officinalis*, AO YE HOU PO *Magnolia biloba*. Ref: 2, 660.

**11520 Isomahanimbine**

Mahanimbicine [28305-77-3] $C_{23}H_{25}NO$ (331.46). Source: XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*, YIN DU JIU LI XIANG *Murraya koenigii*. Ref: 11.

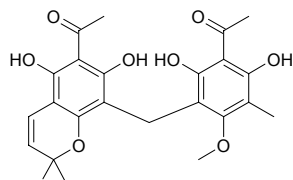
**11521 Isomallotochromanol**

$C_{24}H_{28}O_9$ (460.49). Pharm: Anti-inflammatory (modulator of cytokine network: inhibits mRNA expression and production of TNF-α or IL-6 in RAW264.7 cells (IC₅₀ = 0.7–30 μmol/L)). Source: YE WU TONG *Mallotus japonicus*. Ref: 4416.

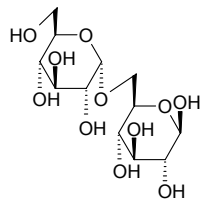


11522 Isomallotochromene

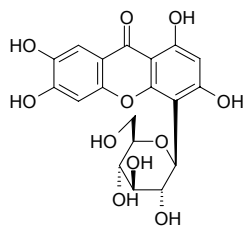
$C_{24}H_{26}O_8$ (442.47). **Pharm:** Anti-inflammatory (modulator of cytokine network; inhibits mRNA expression and production of TNF- α or IL-6 in RAW264.7 cells, $IC_{50} = 0.7\sim 30\mu\text{mol/L}$). **Source:** YE WU TONG *Mallotus japonicus*. **Ref:** 4416.

**11523 Isomaltose**

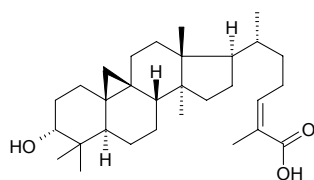
[499-40-1] $C_{12}H_{22}O_{11}$ (342.30). **Source:** DU ZHONG *Eucommia ulmoides*. **Ref:** 2, 1521.

**11524 Isomangiferin**

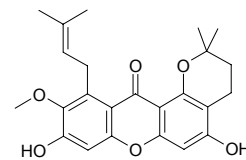
[24699-16-9] $C_{19}H_{18}O_{11}$ (422.35). mp > 260°C (dec). **Pharm:** Antitussive (dispels phlegm); antiviral (HSV); cardiotoxic; diuretic; antidepressant. **Source:** GUANG SHI WEI *Pyrrhosia calvata* (dried leaf: content = 7.84%^[5508]), LU SHAN SHI WEI *Pyrrhosia sheareri* (dried leaf: mean content = 0.16%^[5508]), NI GUANG SHI WEI *Pyrrhosia pseudocalvata* (dried leaf: content = 0.17%^[5508]), SHI WEI *Pyrrhosia lingua* (dried leaf: content scope = 0.01%~0.24%^[5501], mean content = 0.014%^[5508]), YOU BING SHI WEI *Pyrrhosia petiolosa* (dried leaf: mean content = 0.011%^[5508]), ZHI MU *Anemarrhena asphodeloides* (dried rhizome: content scope of 8 origins = 0.35%~2.80%, mean content = 1.17%^[5508]). **Ref:** 2, 660, 5501, 5508.

**11525 Isomangiferolic acid**

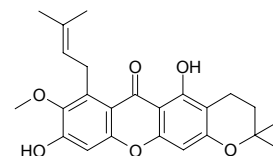
Isoschizandrolic acid [13878-92-7] $C_{30}H_{48}O_3$ (456.72). mp 168~170°C. **Pharm:** Antineoplastic^[2523]; anti-HIV^[2523]. **Source:** MANG GUO *Mangifera indica*, MANG GUO SHU PI *Mangifera indica*, LIU LI CAO *Cynoglossum zeylanicum* [Syn. *Anchusa zeylanica*; *Cynoglossum furcatum*; *Cynoglossum formosanum*]. **Ref:** 6, 1521, 2523.

**11526 1-Isomangostin**

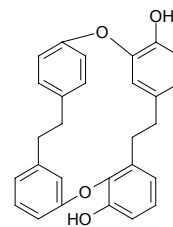
[19275-44-6] $C_{24}H_{26}O_6$ (410.47). **Pharm:** Antibacterial; antifungal. **Source:** DAO NIAN ZI *Garcinia mangostana*, DAO NIAN ZI *Garcinia mangostana* (fruit hull)^[3066]. **Ref:** 658, 3066.

**11527 3-Isomangostin**

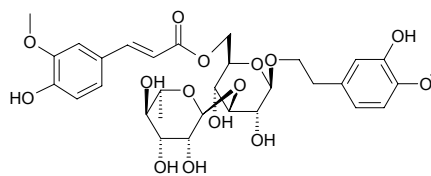
$C_{24}H_{26}O_6$ (410.47). **Pharm:** Antioxidant inactive (DPPH scavenger, 10 $\mu\text{mol/L}$, ScRt = 3%; control BHT, 10 $\mu\text{mol/L}$, ScRt = 43%, $IC_{50} = 19.00\mu\text{mol/L}$)^[4422]. **Source:** DAO NIAN ZI *Garcinia mangostana* (fruit hull), TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). **Ref:** 3066, 4422.

**11528 Isomarchantin C**

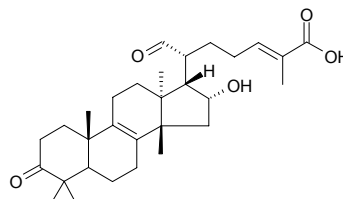
$C_{28}H_{24}O_4$ (424.50). **Source:** DI SUO LUO *Marchantia polymorpha*. **Ref:** 660.

**11529 Isomartynoside**

$C_{31}H_{40}O_{15}$ (652.66). **Source:** DA YE ZUI YU CAO *Buddleja davidii*, CHE QIAN *Plantago asiatica*. **Ref:** 660.

**11530 Isomasticadienonic acid**

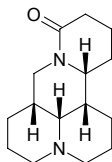
$C_{30}H_{44}O_5$ (484.68). $[\alpha]_D^{25} = +29.9^\circ$ ($c = 0.5$, CHCl_3). **Pharm:** Anti-inflammatory (acute inflammation model, PLA₂-induced mouse paw oedema, 30mg/kg, InRt = 66% at 60min); anti-inflammatory (chronic inflammation model, in the form of eczema, provoked by repeated administration of TPA to the ears of mouse, swelling reduction = 48%, control Dexamethasone, swelling reduction = 85%; reduces leukocyte infiltration, measured as tissue peroxidase activity, InRt = 50%, Dexamethasone, InRt = 55%); toxic (rat peritoneal polymorphonuclear leukocytes, 100 $\mu\text{mol/L}$). **Source:** ROU MAO XIAO RU XIANG *Schinus molle* (fruit). **Ref:** 5459.



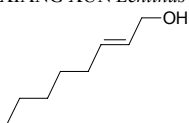
11531 Isomatrine

[17801-36-4] C₁₅H₂₄N₂O (248.37). mp 132~134°C, [α]_D²⁵ = +44° (CHCl₃).

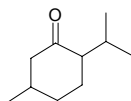
Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*] (dried root: content scope of 5 origins = 0%~0.022%, mean content = 0.004%^[5508]). **Ref:** 2, 1521, 5508.

**11532 Isomatsutakeol**

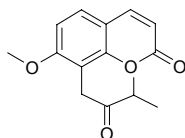
(E)-2-Octen-1-ol C₈H₁₆O (128.22). bp 87~89°C/11mmHg. **Source:** BING CHI XIAN *Tetraplodon mnioides* [Syn. *Tetraplodon bryoides*; *Splachnum mnioides*], SONG XUN *Tricholoma matsutake* [Syn. *Armillaria matsutake*], XIANG XUN *Lentinus edodes*. **Ref:** 6, 660.

**11533 Isomenthone**

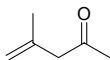
C₁₀H₁₈O (154.25). mp (+) -35°C, bp (+) 212°C, (±) 210°C. **Source:** BO HE *Mentha haplocalyx* [Syn. *Mentha canadensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], HUA DONG LAN CI TOU *Echinops grijsii*. **Ref:** 2, 660.

**11534 Isomeramazin**

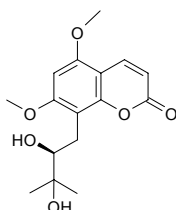
C₁₅H₁₆O₄ (260.29). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 11.

**11535 Isomesityl oxide**

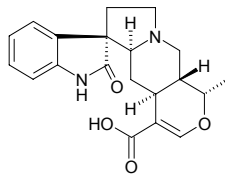
4-Methyl-4-penten-2-one [3744-02-3] C₆H₁₀O (98.15). mp 135~145°C (dec). **Source:** YA ER QIN *Cryptotaenia japonica*. **Ref:** 6.

**11536 Isomexoticin**

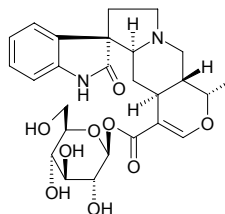
C₁₆H₂₀O₆ (308.33). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 660.

**11537 Isomitraphyllic acid**

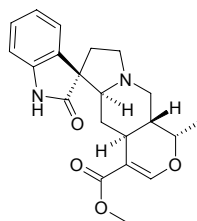
C₂₀H₂₂N₂O₄ (354.41). White thin acicular crystals, mp 184~186°C. **Source:** HUA GOU TENG *Uncaria sinensis*. **Ref:** 287.

**11538 Isomitraphyllic acid (16→1)-β-D-glucopyranosyl ester**

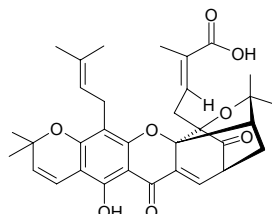
C₂₆H₃₂N₂O₉ (516.55). White powder crystals, mp 206~209°C, [α]_D = 0° (MeOH). **Source:** HUA GOU TENG *Uncaria sinensis*. **Ref:** 287.

**11539 Isomitraphylline**

C₂₁H₂₄N₂O₄ (368.44). **Pharm:** Immunostimulant (maybe by increasing phagocytosis of hmn granulocytes and macrophages and blocking proliferation of myeloid cell lines). **Source:** BAI GOU TENG *Uncaria sessilifrutus* [Syn. *Nauclea sessilifrutus*], BEI YUE GOU TENG *Uncaria homomalla* [Syn. *Uruparia homomalla*; *Uruparia tonkinensis*; *Uruparia lanosa* var. *parviflora*], BI LU GOU TENG *Uncaria tomentosa*, CHANG HUA GOU TENG *Uncaria longiflora*, DONG FANG GOU TENG *Uncaria orientalis*, DUAN RONG MAO GOU TENG *Uncaria veluntina*, FEI ZHOU GOU TENG *Uncaria africana*, GUI YA NA GOU TENG *Uncaria guianensis*, HOU YE GOU TENG *Uncaria callophylla*, MAO GOU TENG *Uncaria hirsuta*, MIAN MAO GOU TENG *Uncaria lanosa*, PAN ZHI GOU TENG *Uncaria scandens* [Syn. *Nauclea pilosa*; *Uruparia pilosa*; *Uncaria pilosa*], PI ZHEN YE GOU TENG *Uncaria lancifolia*, PING HUA FA LIANG GOU TENG *Uncaria laevigata*, TUO YUAN GOU TENG *Uncaria elliptica*, *Uncaria bernaysii*, *Uncaria perrottetii*, *Uncaria sterrophylla*. **Ref:** 5341.

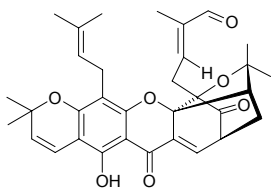
**11540 Isomorellic acid**

C₃₃H₃₆O₈ (560.65). **Source:** TENG HUANG *Garcinia morella*. **Ref:** 6.

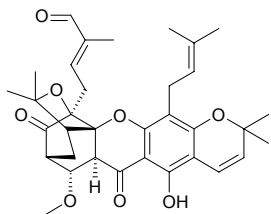


11541 Isomorellin

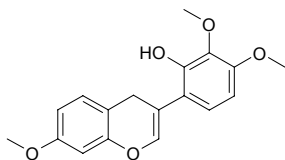
[1064-71-7] $C_{33}H_{36}O_7$ (544.65). Acicular crystals (methanol), mp 120~121°C, $[\alpha]_D = -623^\circ$ (chloroform). **Pharm:** Cytotoxic (*in vitro*, hm cervical carcinoma cells, MIC = 25.0 μ g/mL, hm embryo lung cells, MIC = 25.0 μ g/mL); antiprotozoal. **Source:** TENG HUANG *Garcinia morella*. **Ref:** 6, 900.

**11542 Isomorellin B**

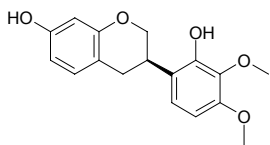
$C_{34}H_{40}O_8$ (576.69). **Source:** TENG HUANG SHU *Garcinia hanburyi* (fresh fruit). **Ref:** 4487.

**11543 Iso-mucromatol**

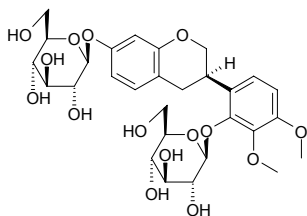
$C_{18}H_{18}O_5$ (314.34). **Source:** KUN MING JI XUE TENG *Milletia dielsiana*. **Ref:** 2205.

**11544 Isomucronulatol**

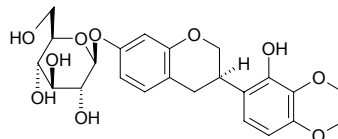
$C_{17}H_{18}O_5$ (302.33). $[\alpha]_D^{20.6} = -13.0^\circ$ ($c = 0.3$, $CHCl_3$). **Source:** DIAN HUANG JING *Polygonatum kingianum* (dried rhizome), MENG GU HUANG QI *Astragalus mongholicus*. **Ref:** 660, 5484.

**11545 Isomucronulatol-7,2'-di-O-glucoside**

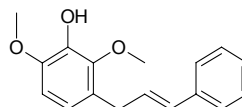
$C_{29}H_{38}O_{15}$ (626.62). **Source:** MENG GU HUANG QI *Astragalus mongholicus*. **Ref:** 660.

**11546 Isomucronulatol-7-O-glucoside**

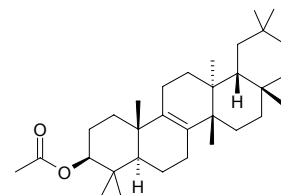
$C_{23}H_{28}O_{10}$ (464.47). **Source:** MENG GU HUANG QI *Astragalus mongholicus*. **Ref:** 660.

**11547 Isomucronustyrene**

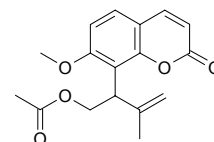
$C_{17}H_{18}O_3$ (270.33). **Pharm:** Platelet aggregation inhibitor (induced by arachidonic acid); prostaglandin biosynthesis inhibitor. **Source:** JIANG ZHEN XIANG *Dalbergia odorifera*. **Ref:** 660, 5501.

**11548 Isomultiflorenyl acetate**

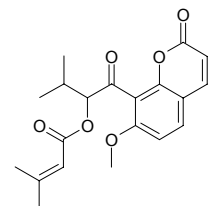
$C_{32}H_{52}O_2$ (468.77). **Source:** DONG GUA PI *Benincasa hispida*. **Ref:** 660.

**11549 Isomurralonginol acetate**

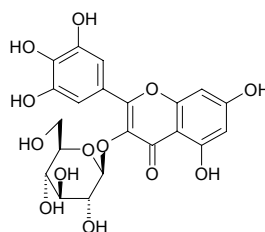
$C_{17}H_{18}O_5$ (302.33). **Source:** XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. **Ref:** 660.

**11550 Isomurranganone seneciolate**

$C_{20}H_{22}O_6$ (358.39). **Source:** XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. **Ref:** 660.

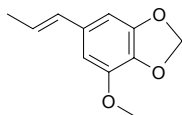
**11551 Isomyricitrin**

Myricetin-3-glucoside [19833-12-6] $C_{21}H_{20}O_{13}$ (480.39). **Source:** BAI FAN DOU *Phaseolus vulgaris*, HENG GEN FEI CAI *Sedum kamschaticum*. **Ref:** 6.

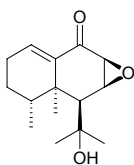


11552 Isomyristicin

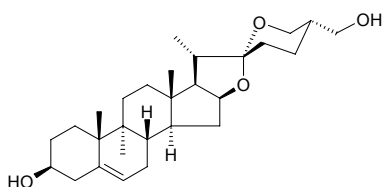
$C_{11}H_{12}O_3$ (192.22). Source: GAO BEN *Ligusticum sinense*, SHI JI NING *Mosla scabra* [Syn. *Mosla punctata*], XIN JIANG GAO BEN *Conioselinum vaginatum*. Ref: 660.

**11553 Isonardosinone**

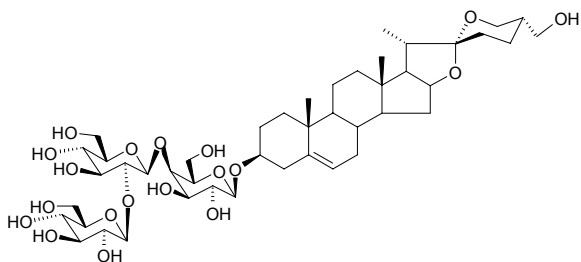
$C_{15}H_{22}O_3$ (250.34). Source: GAN SONG *Nardostachys chinensis*. Ref: 660.

**11554 Isonarthogenin**

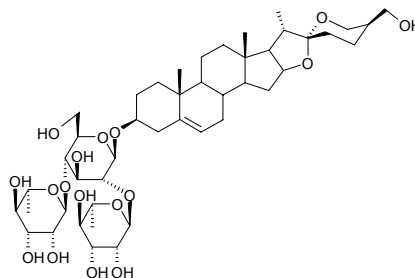
[7050-40-0] $C_{27}H_{42}O_4$ (430.63). Source: CHA RUI SHU YU *Dioscorea collettii*. Ref: 10.

**11555 Isonarthogenin 3-O-β-D-glucopyranosyl-(1→2)-β-D-glucopyranosyl-(1→4)-β-D-galactopyranoside**

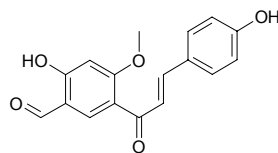
$C_{45}H_{72}O_{19}$ (917.06). Pharm: Cytotoxic (*in vitro*, HeLa, IC_{50} = 5.24 μg/mL; control Cisplatin, HeLa, IC_{50} = 0.75 μg/mL). Source: HU BEI HUANG JING *Polygonatum zanlanscianense* (rhizome: yield = 0.00006% dw). Ref: 4788.

**11556 Isonarthogenin-3-O-α-L-rhamnopyranosyl-(1→2)-O-[α-L-rhamnopyranosyl-(1→4)]-β-D-glucopyranoside**

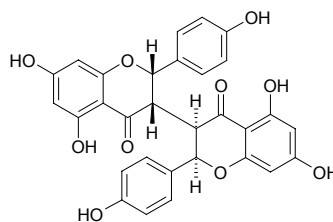
$C_{45}H_{72}O_{17}$ (885.07). Pharm: Cytotoxic (*in vitro*, HeLa, IC_{50} = 3.62 μg/mL; control Cisplatin, HeLa, IC_{50} = 0.75 μg/mL)^[4788]. Source: HAI JIN BI XIE *Dioscorea spongiosa* (Rhizome: yield = 0.00016%), HU BEI HUANG JING *Polygonatum zanlanscianense* (rhizome: yield = 0.00014% dw). Ref: 4692, 4788.

**11557 Isonobavachalcone**

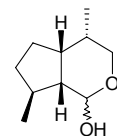
[76444-57-0] $C_{17}H_{14}O_5$ (298.30). Source: BU GU ZHI *Psoralea corylifolia*. Ref: 2.

**11558 Isonochamaejasmin A**

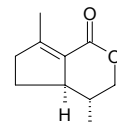
$C_{30}H_{22}O_{10}$ (542.50). Yellowish powder, mp 233–235°C (MeOH). Source: LANG DU *Stellera chamaejasme*. Ref: 4577.

**11559 Isoncomatatabiol**

Isodihydronepetalactol [34258-02-1] $C_{10}H_{18}O_2$ (170.25). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 6, 1521.

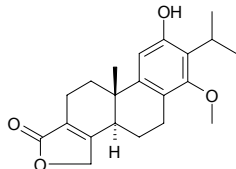
**11560 Isononepetalactone**

$C_{10}H_{14}O_2$ (166.22). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 660.



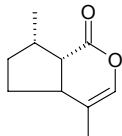
11561 Isonetriptophenolide

$C_{21}H_{26}O_4$ (342.44). Source: LEI GONG TENG *Tripterygium wilfordii*. Ref: 2.

**11562 Isonepetalactone**

$C_{10}H_{14}O_2$ (166.22). mp 27.5–29.0°C. Source: JIA JING JIE *Nepeta cataria*.

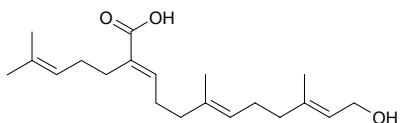
Ref: 6.

**11563 Isonerylgeraniol-18-oic acid**

(2*E*,6*E*,10*Z*)-1-Hydroxy-2,6,10,14-phytatetraen-18-oic Acid $C_{20}H_{32}O_3$

(320.48). Amorphous solid. Source: TAI WAN CUI BAI *Calocedrus*

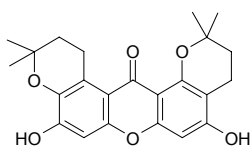
macrolepis var. *formosana* (leaf). Ref: 4297.

**11564 Isonormangostin**

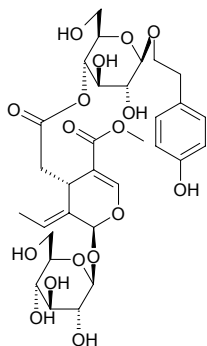
$C_{23}H_{24}O_6$ (396.44). Pharm: Antioxidant (DPPH scavenger, 10μmol/L, ScRt =

10%, control BHT, 10μmol/L, ScRt = 43%). Source: TIAN SHAN ZHU

ZI Garcinia dulcis (fruit). Ref: 5319.

**11565 Isonuezhenide**

$C_{31}H_{42}O_{17}$ (686.67). Source: NV ZHEN ZI *Ligustrum lucidum*. Ref: 3545.

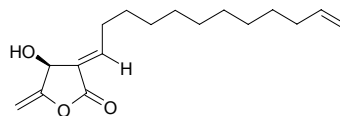
**11566 Isoobtusilactone**

[56522-14-6] $C_{17}H_{26}O_3$ (278.39). Oil, $[\alpha]_D^{20} = -43^\circ$ ($c = 0.003$, chloroform).

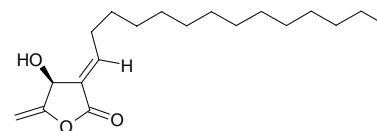
Pharm: Cytotoxic (cultured hmn MCF7, $ED_{50} = 4.60\mu\text{g/mL}$, HT29, $ED_{50} =$

$2.92\mu\text{g/mL}$, BST, $LC_{50} = 0.065\text{mg/L}$). Source: ZHANG MU *Cinnamomum*

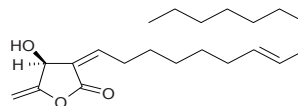
camphora, SAN ZUAN FENG *Lindera obtusiloba*. Ref: 938, 1053, 1119.

**11567 Isoobtusilactone A**

$C_{19}H_{32}O_3$ (308.47). Source: SAN ZUAN FENG *Lindera obtusiloba*. Ref: 660.

**11568 Isoobtusilactone B**

$C_{21}H_{34}O_3$ (334.50). Source: SAN ZUAN FENG *Lindera obtusiloba*. Ref: 660.

**11569 Isoobtusitin**

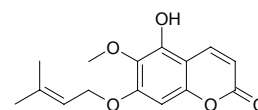
5-Hydroxy-6-methoxy-7-(3-methyl-but-2-enyloxy)-2*H*-1-benzopyran-2-one

$C_{15}H_{16}O_5$ (276.29). Pale yellow needles (MeOH), mp 127–130°C. Pharm:

Antiviral (*in vitro*, poliovirus, moderate activity; HIV, very weak activity;

HSV1, VSV, and murine tumoral cell lines 3LL, L1210, inactive). Source:

Psiadia dentata (aerial parts). Ref: 3527.

**11570 Isoobtusol**

$C_{15}H_{23}Br_2ClO$ (414.61). mp 109–113°C, $[\alpha]_D^{26} = +24.8^\circ$ ($c = 0.48$, $CHCl_3$).

Pharm: Antibacterial (*Clostridium cellobioparum*, MIC = 10μg/disc; *Proteus*

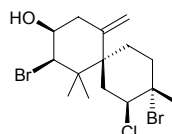
mirabilis, MIC = 15μg/disc; *Chromobacterium violaceum*, *Escherichia coli*,

Flavobacterium helmiphilum, *Vibrio parahaemolyticus*, MIC = 40–60μg/disc;

Clostridium fallax, *Clostridium novyi*, *Clostridium sordellii*, *Enterobacter*

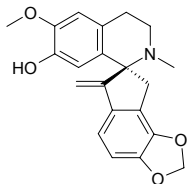
aerogenes, *Shigella flexneri*, *Vibrio cholerae*, *Vibrio vulnificus*, no inhibition).

Source: LUE DAO DING ZAO *Laurencia majuscula*. Ref: 5183.

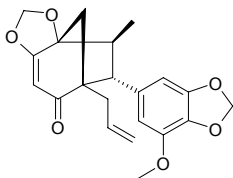


11571 Isoochotensine

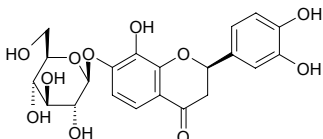
$C_{21}H_{21}NO_4$ (351.41). Source: HUANG ZI JIN *Corydalis ochotensis*. Ref: 660.

**11572 Isoocobullenone**

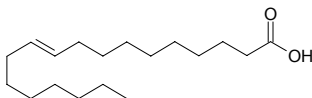
$C_{21}H_{22}O_6$ (370.41). Pharm: Anti-inflammatory (5-LOX inhibitor, $IC_{50} > 100 \mu\text{mol/L}$; COX-1 inhibitor, $> 500 \mu\text{mol/L}$, inactive, control Indomethacin, $IC_{50} = 3.1 \mu\text{mol/L}$, COX-2 inhibitor, $> 500 \mu\text{mol/L}$, inactive, Indomethacin, $IC_{50} = 188 \mu\text{mol/L}$). Source: NAN FEI ZHANG GUI *Ocotea bullata* (stem cortex). Ref: 3971.

**11573 Isookanin-7-O-β-D-glucoside**

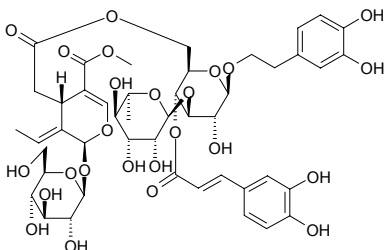
$C_{21}H_{22}O_{11}$ (450.40). Source: GUI ZHEN CAO *Bidens bipinnata*, LANG PA CAO *Bidens tripartita*. Ref: 660.

**11574 Isooleic acid**

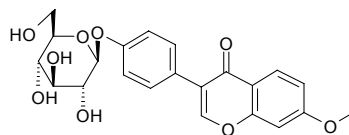
10-Octadecenoic acid [5684-82-2] $C_{18}H_{34}O_2$ (282.47). mp 52.5°C. Source: HUI XIANG *Foeniculum vulgare*, HUI XIANG JING YE *Foeniculum vulgare*, MING DANG SHEN *Changium smyrnioides*, WEN PO *Cydonia oblonga*. Ref: 6, 1521, 2940, 2941.

**11575 Isooleoacteoside**

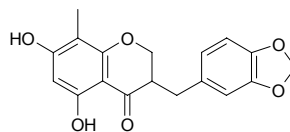
$C_{46}H_{58}O_{25}$ (1010.96). Colorless amorphous powder, $[\alpha]_D^{23} = -124^\circ$ ($c = 0.28$, MeOH). Source: YING CHUN HUA *Jasminum nudiflorum* (leaf). Ref: 4169.

**11576 Isoononin**

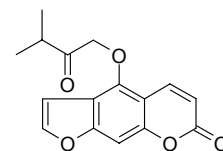
Isoformononetin-4'-glucoside $C_{22}H_{22}O_9$ (430.42). White acicular crystals, mp 216–218°C. Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 305, 660.

**11577 Isoophiopogonone A**

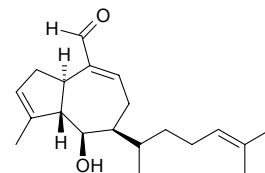
$C_{18}H_{16}O_6$ (328.32). Source: MAI DONG *Ophiopogon japonicus*. Ref: 660.

**11578 Isooxypeucedanin**

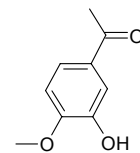
[5058-15-1] $C_{16}H_{14}O_5$ (286.29). Crystals (Et₂O), mp 146–148°C, mp 131–132°C. Source: HANG BAI ZHI *Angelica taiwaniana*, LIN BAI ZHI *Angelica sylvestris*, *Niphogeton ternata*. Ref: 2, 660, 4156.

**11579 Isopachydictyolal**

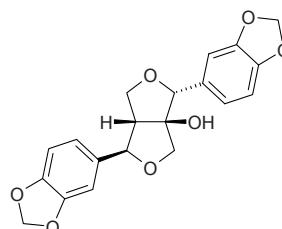
$C_{20}H_{30}O_2$ (302.46). Colorless oil, $[\alpha]_D^{20} = -85.8^\circ$ ($c = 0.30$, CH₂Cl₂). Source: WANG DI ZAO *Dictyota dichotoma*. Ref: 3818.

**11580 Isopaconol**

$C_9H_{10}O_3$ (166.18). Pharm: Analgesic (mus); intestinal smooth muscle relaxant. Source: XU CHANG QING *Cynanchum paniculatum*. Ref: 660, 5501.

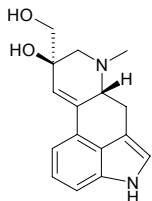
**11581 Isopaulownin**

[10590-41-7] $C_{20}H_{18}O_7$ (370.36). mp 132°C, $[\alpha]_D = +127^\circ$ ($c = 0.80$, CHCl₃). Source: MAO PAO TONG *Paulownia tomentosa*. Ref: 6, 660.

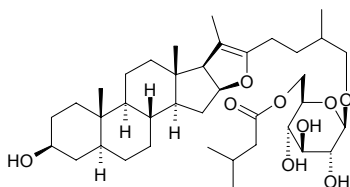


11582 Isopenniclavine

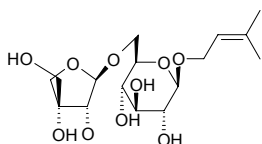
[478-92-2] $C_{16}H_{18}N_2O_2$ (270.33). mp 163~165°C (dec). Source: QIAN NIU ZI *Pharbitis nil*. Ref: 6.

**11583 26-O-(3'-Isopentanoyl)-β-D-glucopyranosyl-5α-furost-20(22)-ene-3β,26-diol**

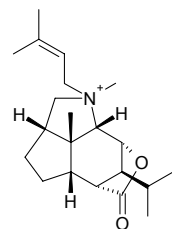
$C_{38}H_{62}O_9$ (662.91). White powder. Source: PA KE YE XIANG SHU *Cestrum parqui* (fresh leaf). Ref: 5327.

**11584 Isopentenol-1-O-β-D-apiofuranosyl-(1→6)-β-D-glucopyranoside**

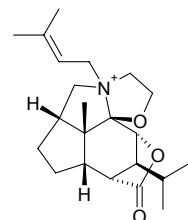
[198832-70-1] $C_{16}H_{28}O_{10}$ (380.40). Powder, $[\alpha]_D^{26} = -66.2^\circ$ ($c = 2.0$, MeOH). Source: ZI HU *Bupleurum falcatum*. Ref: 2317.

**11585 N-Isopentenyl dendrobine**

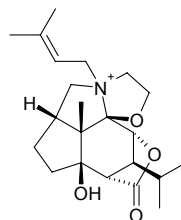
$C_{22}H_{34}NO_2^+$ (332.51). Source: SHI HU⁽⁴⁾ *Dendrobium nobile*. Ref: 660.

**11586 N-Isopentenyl dendroxine**

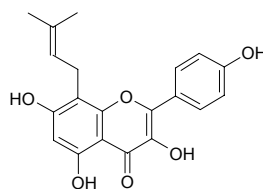
$C_{22}H_{34}NO_3$ (360.52). Source: SHI HU⁽⁴⁾ *Dendrobium nobile*. Ref: 660.

**11587 N-Isopentenyl-6-hydroxydendroxine**

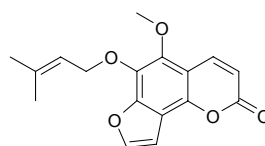
$C_{22}H_{34}NO_4^+$ (376.52). Source: SHI HU⁽⁴⁾ *Dendrobium nobile*. Ref: 660.

**11588 8-Isopentenyl-kaempferol**

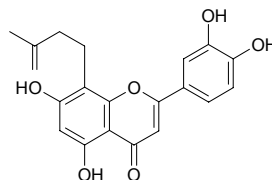
Noranhydrocaritin [28610-31-3] $C_{20}H_{18}O_6$ (354.36). Yellow crystals (EtOAc-pet. ether), mp 226°C. Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 6, 1521, 2703, 4430.

**11589 6-Isopentenylxyloisobergaptin**

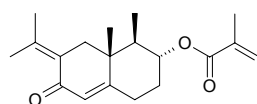
[24099-29-4] $C_{17}H_{16}O_5$ (300.31). mp 96~97°C. Source: YONG NING DU HUO *Heracleum yungningense*. Ref: 541.

**11590 8-(4'-Isopentenyl)-5,7,3',4'-tetrahydroxyflavone**

$C_{20}H_{18}O_6$ (354.36). mp 100°C. Source: CANG ER *Xanthium sibiricum* [Syn. *Xanthium strumarium*]. Ref: 6.

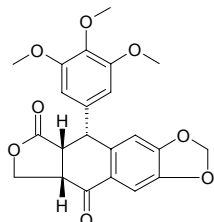
**11591 Isopetasin**

$C_{20}H_{28}O_3$ (316.44). mp 95~96°C. Pharm: Antispasmodic. Source: ZI FENG DOU CAI *Petasites officinalis* [Syn. *Petasites hybridu*], FENG DOU CAI *Petasites japonicus*, KA BU LI FENG DOU *Petasites kablikianus*, DUO CHI QIAN LI GUANG *Senecio polyodon*. Ref: 6, 658.

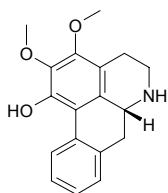


11592 Isopropodophyllone

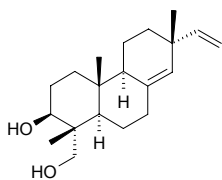
[55515-07-6] C₂₂H₂₀O₈ (412.40). Needles (MeOH), mp 170~172°C, [α]_D = -273° (CHCl₃). Source: LIU JIAO LIAN *Dysosma pleiantha* [Syn. *Podophyllum pleianthum*], WO ER QI *Diphylleia sinensis* (rhizome: content scope of 4 origins = 0.015%~0.109%, mean content = 0.063%). Ref: 5, 5508.

**11593 (-)-Isopiline**

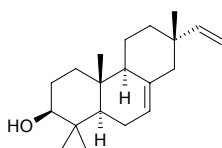
C₁₈H₁₉NO₃ (297.36). Source: YOU GOU YING ZHAO *Artabotrys uncinatus* (root, stem). Ref: 3083.

**11594 8(14),15-Isopimaradien-3β,19-diol**

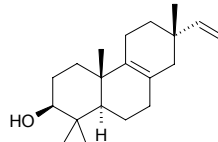
C₂₀H₃₂O₂ (304.48). Colorless oil, [α]_D²⁵ = -23° (c = 1.18, CHCl₃), [α]_D²³ = -17 (CHCl₃). Pharm: Antimalarial (*in vitro*, *Plasmodium falciparum* strain 3D7, IC₅₀ = (28.4±1.4)μg/mL = (93.3±4.6)μmol/L). Source: CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*]. Ref: 3022.

**11595 Isopimara-7,15-dien-3β-ol**

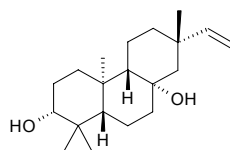
C₂₀H₃₂O (288.48). Amorphous powder, [α]_D²² = +15° (c = 0.1, CH₂Cl₂). Pharm: Cytotoxic (HeLa, IC₅₀ = (25.3±3.3)μg/mL, control Camptothecin, IC₅₀ = 0.5μmol/mL; HL-60, IC₅₀ = (28.9±4.0)μg/mL, Camptothecin, IC₅₀ = 0.1μmol/mL; WI-38, IC₅₀ = (32.6±3.6)μg/mL, Camptothecin, IC₅₀ = 0.6μmol/mL). Source: ZAN BI XI BADOU *Croton zambesicus* (leaf). Ref: 3807.

**11596 8(9),15-Isopimaradien-3β-ol**

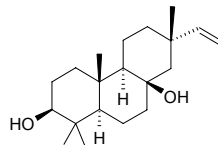
C₂₀H₃₂O (288.48). Colorless oil, [α]_D²⁵ = +105° (c = 0.36, CHCl₃), [α]_D²⁵ = +92° (c = 0.82, CHCl₃). Pharm: Antimalarial (*in vitro*, *Plasmodium falciparum* strain 3D7, IC₅₀ = (7.1±0.6)μg/mL = (24.6±2.1)μmol/L). Source: CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*]. Ref: 3022.

**11597 ent-Isopimara-15-en-α,α-diol**

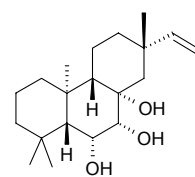
C₂₀H₃₄O₂ (306.49). White amorphous powder, [α]_D²⁵ = +3° (c = 1.0, CHCl₃). Source: BAI ZI REN *Biota orientalis* [Syn. *Thuja orientalis*; *Platyclusus orientalis*] (leaf). Ref: 4203.

**11598 15-Isopimaren-3β,8β-diol**

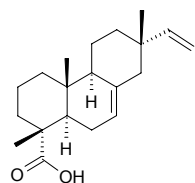
C₂₀H₃₄O₂ (306.49). Colorless oil, [α]_D²⁵ = -9° (c = 0.36, CHCl₃), [α]_D²⁵ = +3° (c = 1.0, CHCl₃). Pharm: Antimalarial (*in vitro*, *Plasmodium falciparum* strain 3D7, IC₅₀ = (24.8±2.1)μg/mL = (80.9±6.9)μmol/L). Source: CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*]. Ref: 3022.

**11599 ent-Isopimar-15-en-6α,7α,8α-triol**

C₂₀H₃₄O₃ (322.49). mp 169.5~170°C, [α]_D²⁰ = +7.7° (c = 0.40, MeOH). Source: XIAO YE XIANG CHA CAI *Isodon parvifolia*. Ref: 4067.

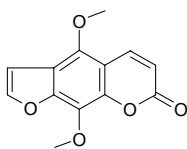
**11600 Isopimaric acid**

Isodextropimaric acid; Micropinic acid [5835-26-7] C₂₀H₃₀O₂ (302.46). Pharm: Cytotoxic inactive (KB oral epidermoid carcinoma, ED₅₀ > 10μg/mL, Hep3B hepatoma cells, ED₅₀ > 10μg/mL, HeLa, ED₅₀ > 10μg/mL, Colon205, ED₅₀ > 10μg/mL)^[4253]. Source: CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], TAI WAN CU FEI *Cephalotaxus wilsoniana* (twig), CHANG YE SONG *Pinus palustris*, JIAN YE LONG XUE SHU *Dracaena cochinchinensis*. Ref: 660, 1521, 4253.

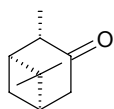


11601 Isopimpinellin

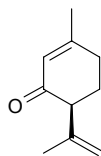
5,8-Dimethoxy-6,7-furanocoumarin [482-27-9] C₁₃H₁₀O₅ (246.22). Golden~yellow needles (MeOH), mp 151°C, mp 147~148°C; yellow amorphous powder. **Pharm:** Antineoplastic (inhibits proliferation of HeLa cell); cytotoxic (24h: HL-60, IC₅₀ > 50µg/mL, control Adriamycin IC₅₀ < 0.10µg/mL; P₃₈₈, IC₅₀ > 50µg/mL, Adriamycin IC₅₀ < 0.10µg/mL; Colon205, IC₅₀ = 39.2µg/mL, Adriamycin IC₅₀ = 0.63µg/mL; HeLa, IC₅₀ > 50µg/mL, Adriamycin IC₅₀ = 0.15µg/mL)^[5486]; antileishmanial (*Leishmania major* promastigote, 10µmol/L, survival = (99.1±1.8)%, 1µmol/L, survival = (97.6±3.2)%, control Amphotericin B, 10µmol/L, survival = (0.2±0.04)%, 1µmol/L, survival = (71.9±4.4)%; *Leishmania major* amastigote, 10µmol/L, survival = (79.0±4.2)%, 1µmol/L, survival = (91.7±4.5)%, control Amphotericin B, 10µmol/L, survival = (0.4±0.02)%, 1µmol/L, survival = (0.5±0.03)%)^[3797]; antifungal inactive (silica gel TLC, *Cladosporium cucumerinum*, control Nystatin, MIA = 0.2µg)^[3797]. **Source:** CHOU CAO *Ruta graveolens*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], FEI LONG ZHANG XUE *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*], JU YUAN YE *Citrus medica*, LANG DU *Stellera chamaejasme*, SHE CHUANG ZI *Cnidium monnieri* (ripe seed: mean content of 14 origins = 0.121%^[5508]), YONG NING DU HUO *Heracleum yungningense*, *Niphogeton ternata*, *Thamnosma rhodesica* (root). **Ref:** 6, 541, 1521, 1851, 3797, 4156, 5486, 5508.

**11602 Isopinocampnone**

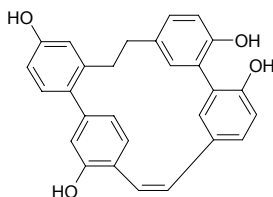
[14575-93-0] C₁₀H₁₆O (152.24). bp (+) 213.4~215.0°C, (-) 81°C/5mmHg. **Source:** JIN XIAN CAO *Glechoma longituba*. **Ref:** 6, 1521.

**11603 Isopiperitenone**

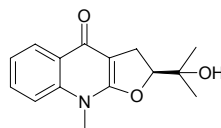
C₁₀H₁₄O (150.22). **Source:** AI YE *Artemisia argyi*. **Ref:** 660.

**11604 Isoplagiochin C**

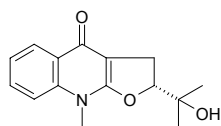
C₂₈H₂₂O₄ (422.49). [α]_D²⁰ = +42.5° (c = 0.2, MeOH). **Source:** WAN QU ZHI YE TAI *Lepidozia incurvata*. **Ref:** 3456.

**11605 (S)-(+)-Isoplatydesmine**

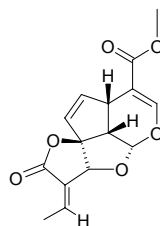
C₁₅H₁₇NO₃ (259.31). **Pharm:** Cytotoxic (P₃₈₈ cell line, ED₅₀ = 4.1µg/mL, control Mithramycin, ED₅₀ = 0.06µg/mL; HT29, ED₅₀ = 9.8µg/mL, Mithramycin, ED₅₀ = 0.07µg/mL; A549, ED₅₀ = 1.5µg/mL, Mithramycin, ED₅₀ = 0.08µg/mL). **Source:** SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*. **Ref:** 5405.

**11606 Isoplatydesmine**

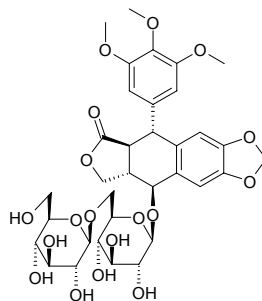
C₁₅H₁₇NO₃ (259.31). **Source:** CHOU SHAN YANG *Orixa japonica*, SAN CHA KU *Evodia lepta* [Syn. *Ilex lepta*]. **Ref:** 660.

**11607 Isoplumericin**

[31298-76-7] C₁₅H₁₄O₆ (290.28). mp 200.5~201.5°C (dec), [α]_D = +216.4°±2° (c = 1.01, chloroform). **Pharm:** Antibacterial (*Mycobacterium tuberculosis*); antifungal. **Source:** RUAN ZHI HUANG CHAN *Allenmenda cathartica*. **Ref:** 658.

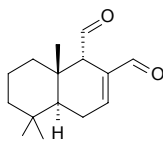
**11608 Isopodophyllotoxin 7'-O-β-D-glucopyranosyl-(1→6)-β-D-glucopyranoside**

C₃₄H₄₂O₁₈ (738.70). Colorless needles, [α]_D²⁹ = -45.67° (c = 0.6, MeOH). **Source:** TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimensis*; *Sinopodophyllum emodii*] (root and rhizome). **Ref:** 3543.

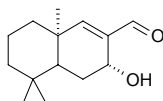


11609 Isopolygodial

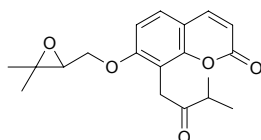
Isotadeonal C₁₅H₂₂O₂ (234.34). Source: SHUI LIAO *Polygonum hydropiper*. Ref: 6, 660.

**11610 Isopolygonal**

C₁₄H₂₂O₂ (222.33). Source: SHUI LIAO *Polygonum hydropiper*. Ref: 660.

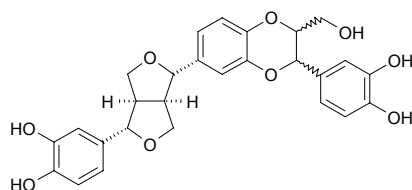
**11611 Isoponceimarín**

C₁₉H₂₂O₅ (330.38). Source: GOU JU *Poncirus trifoliata* (unripe fruit). Ref: 660.

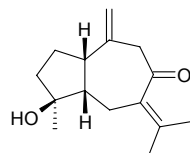
**11612 Isoprincepin**

rel-(7 α ,7 α ,8 α ,8 α ,7 α ,8 β)-3',7':7,9':7,9-triepoxo-4'8"-oxy-8,8'-sesquieolignan-3,3',4,4',9"-pentaol and *rel*-(7 α ,7 α ,8 α ,8 α ,7 β ,8 α)-3',7':7,9':7,9-Triepoxo-4'8"-oxy-8,8'-sesquieolignan-3,3',4,4',9"-pentaol) C₂₇H₂₆O₉ (494.50). Colorless amorphous solid.

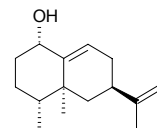
Source: BA XI QIAO AN MU *Joannesia princeps* (seed). Ref: 3369.

**11613 Isoprocurcumenol**

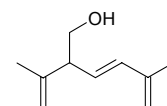
C₁₅H₂₂O₂ (234.34). Pharm: NO production inhibitor inactive (mus peritoneal macrophages, induced by LPS, 100 μ mol/L, InRt = (20.6 \pm 2.9)%), control *L*-NMMA, 100 μ mol/L, InRt = (79.2 \pm 0.9)%, $p < 0.05$)^[4150]. Source: JIANG HUANG *Curcuma longa*, PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. Ref: 660, 4150.

**11614 6-Isopropenyl-4,4a-dimethyl-1,2,3,4,4a,5,6,7-octahydro-naphthalen-1-ol**

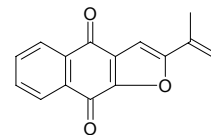
C₁₅H₂₄O (220.36). Pharm: NO production Inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages, IC₅₀ = 48 μ mol/L; control *L*-NMMA, IC₅₀ = 28 μ mol/L); β -hexosaminidase release inhibitor (RBL-2H3 Cells, 100 μ mol/L, InRt = -8.0%; control Curcumin, InRt = 62.6%). Source: YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.0020%dw). Ref: 4655.

**11615 2-Isopropenyl-5-methylhexa-trans-3,5-dien-1-ol**

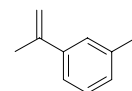
C₁₀H₁₆O (152.24). Colorless oil. Source: WA SI YA NA SAN CHI HAO *Artemisia tridentata* ssp. *vaseyana*, NIAN HAO *Artemisia cana* ssp. *viscidula*. Ref: 1980.

**11616 2-Isopropenyl naphtho[2,3-b]furan-4,9-quinone**

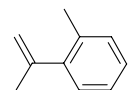
C₁₅H₁₀O₃ (238.25). Source: CAI DOU SHU *Radermachera sinica*. Ref: 660.

**11617 m-Isopropenyl toluene**

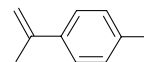
C₁₀H₁₂ (132.21), bp 185~186°C. Source: JU PI *Citrus reticulata*. Ref: 6.

**11618 o-Isopropenyl toluene**

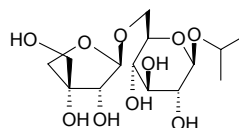
[7399-49-7] C₁₀H₁₂ (132.21), bp 172~173°C. Source: JU PI *Citrus reticulata*. Ref: 6.

**11619 p-Isopropenyl toluene**

[1195-32-0] C₁₀H₁₂ (132.21), mp -20°C, bp 184~185°C. Source: JU PI *Citrus reticulata*. Ref: 6.

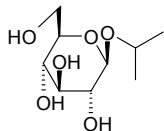
**11620 Isopropyl β -D-apiofuranosyl-(1 \rightarrow 6)- β -D-glucopyranoside**

C₁₄H₂₆O₁₀ (354.36). Amorphous powder, $[\alpha]_D^{24} = -66^\circ$. Source: BEI SHA SHEN *Glehnia littoralis* (fruit). Ref: 3525.

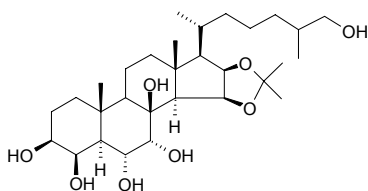


11621 Isopropyl β -D-glucopyranoside

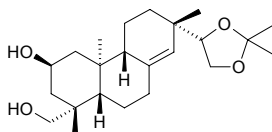
$C_9H_{18}O_6$ (222.24). mp 129~131°C, $[\alpha]_D^{21} = -36^\circ$. Source: BEI SHA SHEN *Glehnia littoralis* (fruit). Ref: 3525.

**11622 15 β ,16 β -Isopropylidenedioxy-5 α -cholest-3 β ,4 β ,6 α ,7 α ,8 β ,26-hexaol**

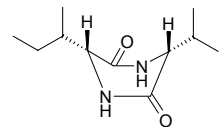
$C_{30}H_{52}O_8$ (540.74). Yellowish amorphous powder, mp 140~145°C, $[\alpha]_D^{18} = +8.5^\circ$ ($c = 1.06$, MeOH). Source: HAI YAN *Asterina pectinifera*. Ref: 4887.

**11623 Isopropyl idenekirenol**

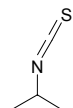
$C_{23}H_{38}O_4$ (378.56). Source: XI XIAN *Siegesbeckia orientalis* (aerial parts: yield = 0.0008%). Ref: 4764.

**11624 3-Isopropyl-6-isobutyl-2,5-dioxopiperazine**

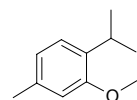
$C_{11}H_{20}N_2O_2$ (212.29). White amorphous powder (MeOH). Source: DONG CHONG XIA CAO *Cordyceps sinensis* (whole herb). Ref: 4462.

**11625 Isopropyl isothiocyanate**

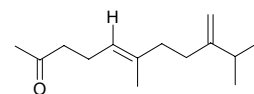
[2253-73-8] C_4H_7NS (101.17). bp 137.0~137.5°C. Source: JIE ZI *Brassica juncea*. Ref: 6.

**11626 2-Isopropyl-5-methylanisole**

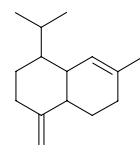
5-Methyl thymol ether [1076-56-8] $C_{11}H_{16}O$ (164.25). bp 216°C. Source: FENG DOU CAI *Petasites japonicus*, PEI LAN *Eupatorium fortunei*, XI XIN *Asarum sieboldii*, WU WEI ZI *Schisandra chinensis*. Ref: 2, 6, 1466, 1467, 1468.

**11627 (E)-9-Isopropyl-6-methyl-5,9-decadiene-2-one**

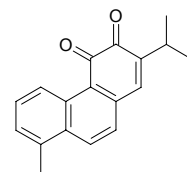
[64854-44-0] $C_{14}H_{24}O$ (208.35). Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. Ref: 2.

**11628 1-Isopropyl-4-methylene-7-methyl-1,2,3,4,4a,5,6,8a-octahydronaphthalene**

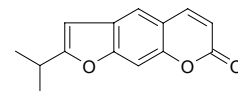
$C_{15}H_{24}$ (204.36). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 2.

**11629 2-Isopropyl-8-methylphenanthrene-3,4-dione (R₀-090680)**

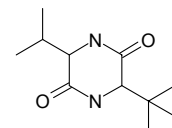
$C_{18}H_{16}O_2$ (264.33). Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 660.

**11630 2'-Isopropyl-psoralen**

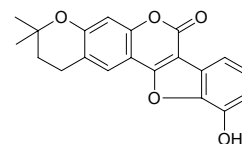
Anhydromarmesin $C_{14}H_{12}O_3$ (228.25). Source: *Stauranthus perforatus* (root). Ref: 5253.

**11631 3-Isopropyl-6-tert-butyl-2,5-piperazinedione**

$C_{11}H_{20}N_2O_2$ (212.29). Source: ZHANG YE BAN XIA *Pinellia pedatisecta*. Ref: 660.

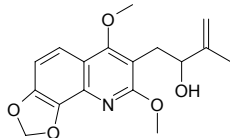
**11632 Isopsoralidin**

[3564-61-21] $C_{20}H_{16}O_5$ (336.35). Source: BU GU ZHI *Psoralea corylifolia*. Ref: 2, 545.

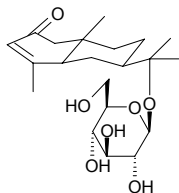


11633 Isoptelefolidine

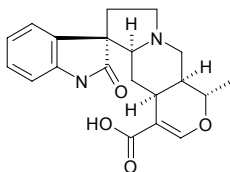
$C_{17}H_{19}NO_5$ (317.34). Source: CHOU SHAN YANG *Orixa japonica* (stem: yield = 0.0004%dw). Ref: 4774.

**11634 (5R,7R,10S)-Isoptercarpolon β -D-glucopyranoside**

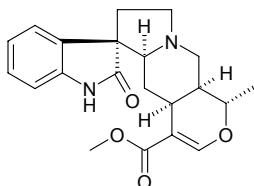
$C_{21}H_{35}O_7$ (398.50). Amorphous powder, $[\alpha]_D^{24} = +43^\circ$ ($c = 1.6$, MeOH). Source: CANG ZHU *Atractylodes lancea*. Ref: 4348.

**11635 Isopteropodic acid**

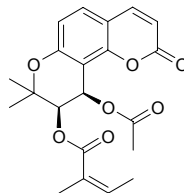
$C_{20}H_{22}N_2O_4$ (354.41). Source: HUA GOU TENG *Uncaria sinensis*. Ref: 660, 5341.

**11636 Isopteropodine**

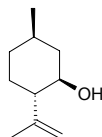
Uncarine E [5171-37-9] $C_{21}H_{24}N_2O_4$ (368.43). mp 204–209°C, $[\alpha]_D^{24} = -85.1^\circ$ ($c = 0.554$, chloroform). Pharm: Cytotoxic (SK-MEL, $IC_{50} > 50\mu\text{g/mL}$, control doxorubicin, $IC_{50} < 1.1\mu\text{g/mL}$; SK-OV-3, $IC_{50} > 50\mu\text{g/mL}$, doxorubicin, $IC_{50} = 1.9\mu\text{g/mL}$; KB, BT549, Vero, inactive)^[5161], cytotoxic (SK-MEL, KB, BT549, SK-OV-3 and Vero cell lines)^[5341]; cytotoxic (mammalian cell lines, $IC_{50} = 17\text{--}51\mu\text{g/mL}$)^[5341]; cytotoxic and DNA damaging activity (RS321 yeast assay, $IC_{12} = 140\mu\text{g/mL}$; RS322 yeast assay, $IC_{12} = 120\mu\text{g/mL}$)^[5341]; immunostimulant (maybe by increasing phagocytosis of hmn granulocytes and macrophages and blocking proliferation of myeloid cell lines)^[5341]; CNS activity (positively modulates both 5-HT2 receptor and muscarinic M1 receptor)^[5341]. Source: BEI YUE GOU TENG *Uncaria homomalla* [Syn. *Uruparia homomalla*; *Uruparia tonkinensis*; *Uruparia lanosa* var. *parviflora*], BI LU GOU TENG *Uncaria tomentosa*, CHANG HUA GOU TENG *Uncaria longiflora*, DONG FANG GOU TENG *Uncaria orientalis*, DUAN RONG MAO GOU TENG *Uncaria velutina*, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], GUI YA NA GOU TENG *Uncaria guianensis*, HUA GOU TENG *Uncaria sinensis*, MIAN MAO GOU TENG *Uncaria lanosa*, PAN ZHI GOU TENG *Uncaria scandens* [Syn. *Nauclea pilosa*; *Uruparia pilosa*; *Uncaria pilosa*], PING HUA FA LIANG GOU TENG *Uncaria laevigata*, *Uncaria bernaysii*, *Uncaria donisii*, *Uncaria roxburghiana*, *Uncaria sterrophylla*. Ref: 660, 900, 5161, 5341.

**11637 Isopteryxin**

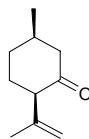
$C_{21}H_{22}O_7$ (386.41). Pharm: NO Production inhibitor (LPS-activated mouse peritoneal macrophages, $IC_{50} = 8.8\mu\text{mol/L}$, control *L*-NMMA, $IC_{50} = 28\mu\text{mol/L}$). Source: FEN CHA DANG GUI *Angelica furcujuga* (flower). Ref: 4454.

**11638 Isopulegol**

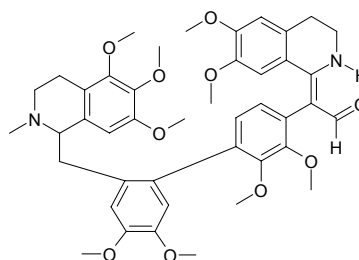
[7786-67-6] $C_{10}H_{18}O$ (154.25). bp (-) 94°C/14mmHg. Source: NING MENG AN YE *Eucalyptus citriodora*. Ref: 6.

**11639 Isopulegone**

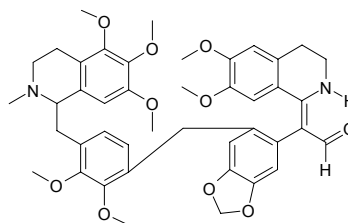
[529-00-0] $C_{10}H_{16}O$ (152.24). Source: JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*]. Ref: 2.

**11640 Isopyruthaldine**

$C_{44}H_{52}N_2O_{10}$ (768.91). Yellow amorphous solid, $[\alpha]_D = 0^\circ$ ($c = 0.16$, CHCl_3). Source: TANG SONG CAO ZHUANG BIAN GUO CAO *Isopyrum thalictroides* (root and rhizome). Ref: 5078.

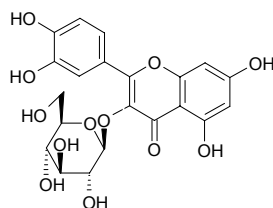
**11641 Isopythaldine**

$C_{43}H_{48}N_2O_{10}$ (752.87). Yellow amorphous solid, $[\alpha]_D = 0^\circ$ ($c = 0.21$, CHCl_3). Source: TANG SONG CAO ZHUANG BIAN GUO CAO *Isopyrum thalictroides* (root and rhizome). Ref: 5078.

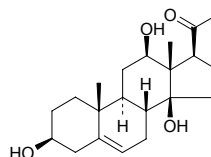


11642 Isoquercitrin

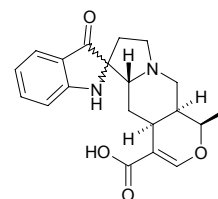
Isoquercitrin; Isoquercetin; Hirsutrin; Quercetin-3-*O*- β -D-glucopyranoside C₂₁H₂₀O₁₂ (464.39). Yellow crystals, mp 234–236°C. **Pharm:** Antibacterial (*Pseudomonas maltophilia*); diuretic; antihypertensive (rat); anti-inflammatory; phagostimulant (silkworm); antihepatotoxin (one of effective components in *Hypericum japonicum* DI ER CAO for curing hepatitis); antioxidant (DPPH free radical scavenger, EC₅₀ = 3.1 μ g/mL = 6.7 μ mol/L, control Ascorbic acid, EC₅₀ = 1.6 μ g/mL = 9.1 μ mol/L)^[4154]; antioxidant (DPPH scavenger, IC₅₀ = (17.3 \pm 0.6) μ mol/L, control Trolox, IC₅₀ = (25.4 \pm 0.8) μ mol/L)^[4244]; antioxidant (DPPH scavenger, IC₅₀ = 33.2 μ mol/L; control Vitamin E, IC₅₀ = 8.3 μ mol/L)^[4722]; ACE inhibitor (IC₅₀ = 300 μ mol/L, control Lisinopril, IC₅₀ = 1 nmol/L); NEP inhibitor (IC₅₀ = 480 μ mol/L, control Phosphoramidon, IC₅₀ = 9 nmol/L); APN inhibitor inactive; aldose reductase inhibitor (IC₅₀ = 4.5 μ mol/L, control Epalrestat, IC₅₀ = 0.072 μ mol/L)^[4530]; antioxidant (DPPH scavenger, IC₅₀ = 12.1 μ g/mL, control Gallic acid, IC₅₀ = 3.6 μ g/mL; Cytochrome-C reduction, IC₅₀ = 11.1 μ g/mL, control Gallic acid, IC₅₀ = 3.0 μ g/mL)^[5239]. **Source:** BAI GUO YE *Ginkgo biloba*, BAI YE XIANG CHA CAI *Isodon leucophyllus*, BEI SHA SHEN *Glehnia littoralis* (underground part), BO NIANG HAO *Descurainia Sophia* (seeds), CHA YE *Camellia sinensis* [Syn. *Thea sinensis*], CHAI HU *Bupleurum chinense*, DA CHAO CAI *Vicia sativa*, DA JIN QIAN CAO *Lysimachia christinae*, DI ER CAO *Hypericum japonicum*, DUO SUI LIAO *Polygonum polystachyum*, GAN CAO *Glycyrrhiza uralensis*, GUANG GUO GAN CAO *Glycyrrhiza glabra*, HE YE *Nelumbo nucifera* (content scope of 46 origins = 0.10%–0.69%, mean content = 0.35%)^[5515], HONG KUAI ZI *Chamaenerion angustifolium* [Syn. *Epilobium angustifolium*], HONG MA *Apocynum lancifolium*, HU ZHANG YE *Polygonum cuspidatum*, HU ZHI ZI *Lespedeza bicolor*, HUAI *Sophora japonica* (pericarp)^[3080], HUANG GUA *Cucumis sativus*, HUANG HAI TANG *Hypericum ascyron*, HUANG HUA HAO *Artemisia annua*, HUANG SHU KUI HUA *Abelmoschus manihot*, JIN QUE ER *Cytisus scoparius* [Syn. *Spartium scoparium*], JIN ZHONG HUA *Forsythia viridissima*, LAN YU LUO YE RONG *Ficus ruficalulis* var. *antaensis* (leaf: yield = 0.00025%fw)^[4794], LAO SHU LE *Acanthus ilicifolius*, LAO YA SHI *Diospyros rhombifolia* (leaf), LIN WEN JING *Equisetum sylvaticum*, LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*], LUO BU MA *Apocynum venetum* (dried leaf: content scope of 6 origins = 0.082%–0.299%, mean content = 0.177%)^[5529], LUO LE *Ocimum basilicum*, MEI GUI HUA *Rosa rugosa*, MIAN HUA *Gossypium herbaceum*, MU MA HUANG *Casuarina equisetifolia*, MU ZEI *Equisetum hiemale* (aerial parts: mean content of 3 origins = 0.051%)^[5508], OU DANG GUI *Levisticum officinale*, PU TONG LU TI CAO *Pyrola decorata*, SAN BAI CAO *Saururus chinensis*, SANG YE *Morus alba* (leaf: content = 0.018%)^[5501], SHAN WO JU *Lactuca indica* (Fresh whole herb: yield = 0.0018%fw)^[4689], SHI DI *Diospyros kaki*, SHI WEI *Pyrrosia lingua*, SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb), TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.06%dw)^[4722], TAO YE LIAO *Polygonum persicaria*, WEN JING *Equisetum arvense*, XI SHU *Camptotheca acuminata*, XIA YE BAI XIAN *Dictamnus angustifolius*, XIU MAO JI SHENG *Taxillus levinei*, XUAN FU HUA *Inula britannica*, YOU GAN YE *Phyllanthus emblica* (leaf and branch), YOU SE ZI JIN NIU *Ardisia colorata* (fruit), YU XING CAO *Houttuynia cordata*, YUAN YE CHAI HU *Bupleurum rotundifolium*, occurs in many plants. **Ref:** 2, 658, 660, 1521, 2080, 2489, 2548, 3080, 3507, 4013, 4097, 4154, 4205, 4244, 4464, 4530, 4689, 4722, 4794, 5034, 5239, 5501, 5508, 5515, 5529.

**11643 Isoramanone**

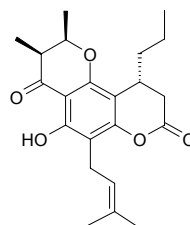
[4644-99-9] C₂₁H₃₂O₄ (348.49). mp 220.0–223.4°C. **Source:** FU SHOU CAO *Adonis amurensis*, LUO MO *Metaplexis japonica*. **Ref:** 6.

**11644 3-Isorauniticine pseudoindoxyl**

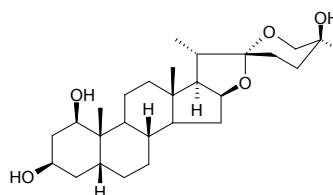
C₂₀H₂₂N₂O₄ (354.41). **Source:** TUO YUAN GOU TENG *Uncaria elliptica*. **Ref:** 5341.

**11645 Isoecedensolid**

C₂₂H₂₈O₅ (372.47). Yellow oil, [α]_D²⁵ = +47.0° (c = 1.0, CH₂Cl₂). **Pharm:** Cytotoxic (KB, ED₅₀ = 9.37 μ g/mL, HeLa, ED₅₀ = 9.89 μ g/mL, hmn medulloblastoma, ED₅₀ = 11.79 μ g/mL, control Doxorubicin, ED₅₀ = 0.15 μ g/mL, 0.14 μ g/mL, 0.19 μ g/mL respectively)^[4274]. **Source:** *Calophyllum blancoi* (seed). **Ref:** 4274.

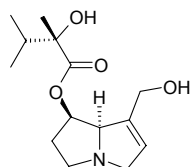
**11646 Isoleineckiagenin**

C₂₇H₄₄O₅ (448.65). mp 240–242°C. **Source:** JI XIANG CAO *Reineckea carnea*. **Ref:** 6.

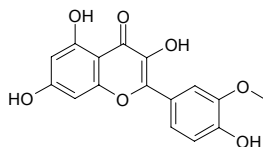


11647 Isoretrohoustine

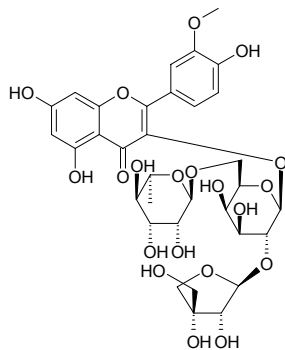
*O*⁷-(2*S*-2-Hydroxy-2,3-dimethyl-butanoyl) C₁₄H₂₃NO₄ (269.34). Source: XIONG ER CAO *Ageratum houstonianum* (aerial parts). Ref: 5173.

**11648 Isorhamnetin**

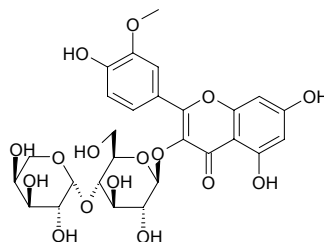
Quercetin 3'-methyl ether [480-19-3] C₁₆H₁₂O₇ (316.27). Yellowish rhombic crystals (dilute methanol), mp 305°C (dec), 312°C. Pharm: Antihepatotoxin (rat liver damage caused by CCl₄); coronary vasodilator; antihypercholesterolemic (rat serum and liver, reduces the level of cholesterol in serum); antioxidant (lipid peroxidation inhibitor); antioxidant (*in vitro*, PEP inhibitor, IC₅₀ = (18.94±0.25)μmol/L, control Bacitracin, IC₅₀ = (129.26±3.28)μmol/L)^[4923]; platelet aggregation inhibitor (*in vitro*). Source: BAI GUO *Ginkgo biloba*, BAI GUO YE *Ginkgo biloba* (leaf: mean content collected in Apr., May and Sep. = 0.055%)^[5508], BO NIANG HAO *Descurainia Sophia* (seeds), CHE SANG ZI YE *Dodonaea viscosa*, CHENG LIU *Tamarix chinensis*, CU LIU GUO *Hippophae rhamnoides* (leaf: content = 0.005%)^[5508], GANG MAO CHENG LIU *Tamarix hispida* (aerial parts), HONG CHE ZHOU CAO *Trifolium pratense*, HUAI JIAO *Sophora japonica*, HUANG HUA HAO *Artemisia annua*, HUI GUO JIAO GU LAN *Gynostemma yixingense*, KUAN YE XIANG PU *Typha latifolia*, LAN YU BAI JI *Bletilla formosana* (whole herb), PU HUANG *Typha angustata*, SHI ZHI JIA *Sedum sarmentosum* (whole herb: mean content of 10 origins = 0.028%)^[5532], SHUI QIN *Oenante javanica*, XIA YE XIANG PU *Typha angustifolia*, YIN CHEN HAO *Artemisia capillaris*, ZHONG GUO SHA JI *Hippophae rhamnoides* subsp. *sinensis* (leaf: content = 0.002%)^[5508]. Ref: 2, 660, 900, 2548, 4500, 4923, 5508, 5532.

**11649 Isorhamnetin 3-O-β-D-apiofuranosyl-(1'''→2'')[α-L-rhamnopyranosyl-(1''''→6'')]-β-D-galactopyranoside**

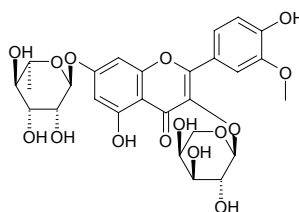
C₃₃H₄₀O₂₀ (756.67). Source: *Hammada scoparia* [syn. *Arthrophytum scoparium*; *Haloxylon articulatum* ssp. *scoparium*; *Haloxylon scoparium*] (leaf). Ref: 4228.

**11650 Isorhamnetin-3-arabinoglucoside**

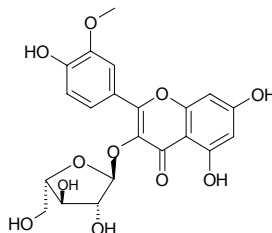
C₂₇H₃₀O₁₆ (610.53). Source: NING MENG PI *Citrus limon*. Ref: 6, 660.

**11651 Isorhamnetin-3-arabino-7-rhamnoside**

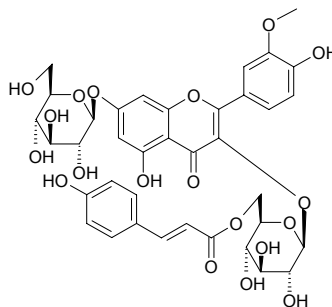
C₂₇H₃₀O₁₅ (594.53). Source: GUI ZHU XIANG *Cheiranthus cheiri*. Ref: 660.

**11652 Isorhamnetin-3-α-L-arabofuranoside**

C₂₁H₂₀O₁₁ (448.39). Source: GUI JIAN JIN JI ER *Caragana jubata*. Ref: 6.

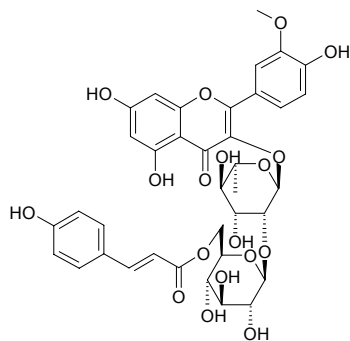
**11653 Isorhamnetin 3-O-β-(6''-E-p-coumaroylglucopyranoside)-7-O-β-glucopyranoside**

C₃₇H₃₈O₁₉ (786.70). Dull yellow amorphous powder. Source: DUO YE BAI MAI GEN *Lotus polyphyllus*. Ref: 1973.



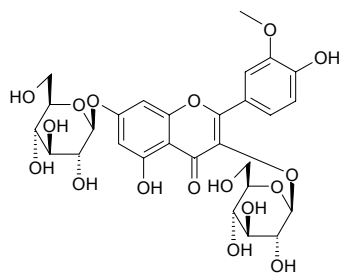
11654 Isorhamnetin 3-O- α -L-[6'''-p-coumaroyl- β -D-glucopyranosyl-(1,2)-rhamnopyranoside]

$C_{37}H_{38}O_{18}$ (770.70). Pale yellow amorphous powder. **Pharm:** Antioxidant (DPPH scavenger, $IC_{50} = 17.9\mu\text{g/mL}$, control Gallic acid, $IC_{50} = 3.6\mu\text{g/mL}$; Cytochrome-C reduction, $IC_{50} = 17.5\mu\text{g/mL}$, control Gallic acid, $IC_{50} = 3.0\mu\text{g/mL}$). **Source:** BAI GUO YE *Ginkgo biloba*. **Ref:** 5239.



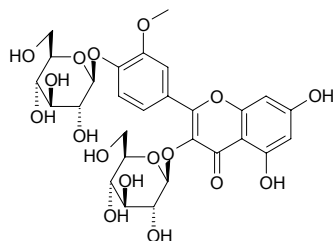
11655 Isorhamnetin 3,7-O-di- β -D-glucopyranoside

$C_{28}H_{32}O_{17}$ (640.56). **Source:** SHI ZHI JIA *Sedum sarmentosum* (whole herb: mean content of 2 origins = 0.031%)^[5508], WU QING *Brassica rapa*^[191]. **Ref:** 191, 5508.



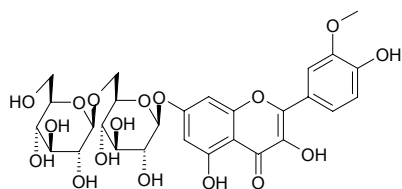
11656 Isorhamnetin-3,4'-diglucoside

$C_{28}H_{32}O_{17}$ (640.56). **Pharm:** Tyrosinase inhibitor ($IC_{50} = 1.84\text{mmol/L}$; control Kojic acid, $IC_{50} = 235.2\mu\text{mol/L}$). **Source:** ZANG HONG HUA *Crocus sativus* (pollen). **Ref:** 4233.



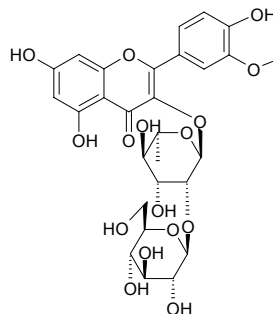
11657 Isorhamnetin-7- β -D-gentiobioside

$C_{28}H_{32}O_{17}$ (640.56). Yellowish grained powder (MeOH), mp 216~218°C. **Source:** BO NIANG HAO *Descurainia Sophia* (seed). **Ref:** 4829.



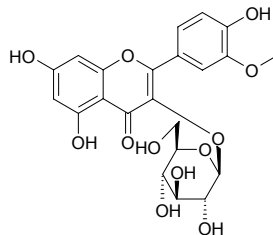
11658 Isorhamnetin 3-O- β -D-glucopyranosyl-(1-2)- α -L-rhamnopyranoside

$C_{28}H_{32}O_{16}$ (624.56). Yellow powder, mp 170~172°C. **Pharm:** Antioxidant (DPPH scavenger, $IC_{50} > 100\mu\text{g/mL}$, control Gallic acid, $IC_{50} = 3.6\mu\text{g/mL}$; Cytochrome-C reduction, $IC_{50} > 50\mu\text{g/mL}$, control Gallic acid, $IC_{50} = 3.0\mu\text{g/mL}$)^[5239]. **Source:** BAI GUO YE *Ginkgo biloba*. **Ref:** 850, 5239.



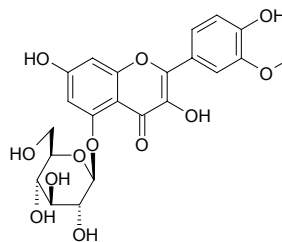
11659 Isorhamnetin-3-O-glucoside

[5041-82-7] $C_{22}H_{22}O_{12}$ (478.41). mp 177~179°C. **Pharm:** Cytotoxic (*in vitro*, HL-60 $IC_{50} = 2.24\mu\text{g/mL}$, PC-3M-1E8 $IC_{50} > 10\mu\text{g/mL}$, BGC823 $IC_{50} > 10\mu\text{g/mL}$, MDA-MB-435 $IC_{50} > 10\mu\text{g/mL}$, Bel7402 $IC_{50} > 10\mu\text{g/mL}$, HeLa $IC_{50} > 10\mu\text{g/mL}$). **Source:** BO NIANG HAO *Descurainia Sophia* (seeds), JIN ZHAN JU *Calendula officinalis* (flower), TIAN CONG *Philydrum lanuginosum*, YIN CHEN HAO *Artemisia capillaris*, ZHEN ZHU MEI *Sorbaria sorbifolia*, TENG HUANG *Garcinia morella*, ZANG HONG HUA *Crocus sativus* (pollen). **Ref:** 2, 6, 2548, 3551, 4233.



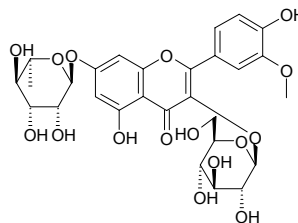
11660 Isorhamnetin-5-O-glucoside

[34199-20-7] $C_{22}H_{22}O_{12}$ (478.41). **Source:** LU CAO *Rhaponticum carthamoides*. **Ref:** 1521.



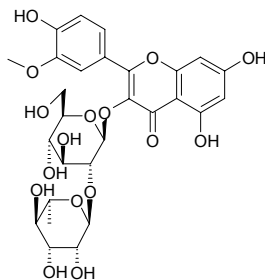
11661 Isorhamnetin-3-O-glucosyl-7-O-rhamnoside

$C_{28}H_{32}O_{16}$ (624.56). **Source:** GUI ZHU XIANG *Cheiranthus cheiri*. **Ref:** 660.

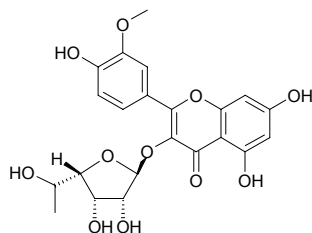


11662 Isorhamnetin-3-O-neohesperidoside

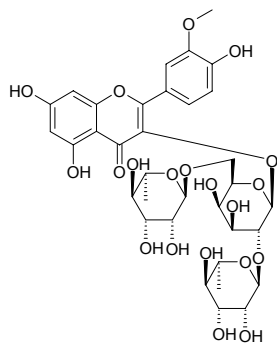
$C_{28}H_{32}O_{16}$ (624.56). Source: JIN ZHAN JU *Calendula officinalis* (flower), KUAN YE XIANG PU *Typha latifolia* (dried pollen: content = 0.331%^[5508]), PU HUANG *Typha angustata* (dried pollen: content = 0.426%^[5508]). Ref: 2, 660, 3551, 5508.

**11663 Isorhamnetin-3- α -L-rhamnofuranoside**

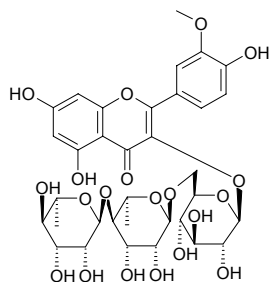
$C_{22}H_{22}O_{11}$ (462.41). Source: GUI JIAN JIN JI ER *Caragana jubata*. Ref: 6.

**11664 Isorhamnetin 3-O- α -L-rhamnopyranosyl-(1''' \rightarrow 2'')- α -L-rhamnopyranosyl-(1'''' \rightarrow 6'')- β -D-galactopyranoside**

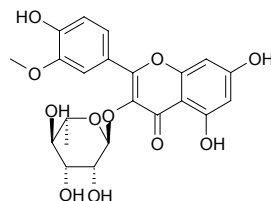
$C_{34}H_{42}O_{20}$ (770.70). Source: *Hammada scoparia* [syn. *Arthrophytum scoparium*; *Haloxylon articulatum* ssp. *scoparium*; *Haloxylon scoparium*] (leaf). Ref: 4228.

**11665 Isorhamnetin 3-O-[α -rhamnopyranosyl-(1 \rightarrow 4)- α -rhamnopyranosyl-(1 \rightarrow 6)- β -glucopyranoside]**

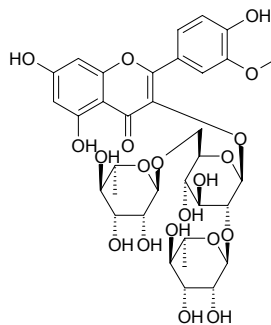
$C_{34}H_{42}O_{20}$ (770.70). Source: HUA LING CAO *Eschscholzia californica*. Ref: 1898.

**11666 Isorhamnetin 3-O-rhamnoside**

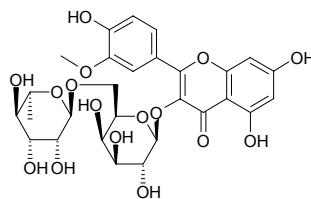
$C_{22}H_{22}O_{11}$ (462.41). Pharm: Aldose reductase inhibitor (*in vitro*, rat lens aldose reductase, IC_{50} = 19 μ mol/L; control Epalrestat, IC_{50} = 0.072 μ mol/L). Source: BAI MEI HUA *Prunus mume* (flower: yield = 0.0013%fw). Ref: 4641.

**11667 Isorhamnetin 3-O-2^G-rhamnosylrutinoside**

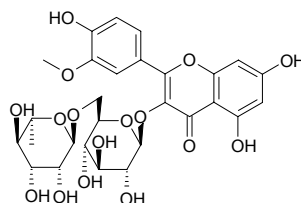
$C_{34}H_{42}O_{20}$ (770.70). Source: JIN ZHAN JU *Calendula officinalis* (flower). Ref: 3551.

**11668 Isorhamnetin-3-O-robinobioside**

[107740-46-5] $C_{28}H_{32}O_{16}$ (624.56). Source: ZANG HONG HUA *Crocus sativus* (pollen). Ref: 4233.

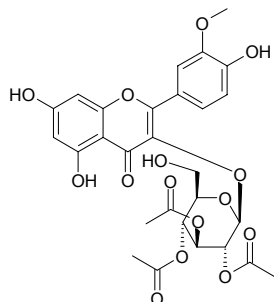
**11669 Isorhamnetin-3-O-rutinoside**

Isorhamnetin 3-O-(6''- α -L-rhamnopyranosyl)- β -D-glucopyranoside $C_{28}H_{32}O_{16}$ (624.56). Pharm: Antioxidant (DPPH scavenger, IC_{50} > 100 μ g/mL, control Gallic acid, IC_{50} = 3.6 μ g/mL; Cytochrome-C reduction, IC_{50} > 50 μ g/mL, control Gallic acid, IC_{50} = 3.0 μ g/mL)^[5239]. Source: BAI GUO YE *Ginkgo biloba*, JIN ZHAN JU *Calendula officinalis* (flower), LV DOU *Onobrychis viciifolia* (leaf), KUAN YE XIANG PU *Typha latifolia*, MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.0012%dw)^[3026]. Ref: 2, 3026, 3551, 5084, 5239.

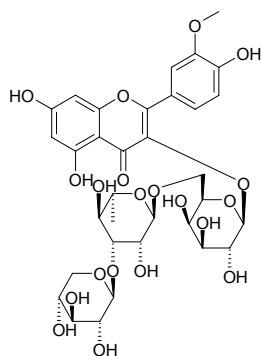


11670 Isorhamnetin 3-O-β-D-2'',3'',4''-triacetylglucopyranoside

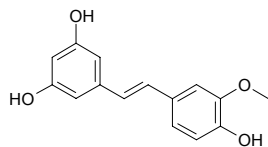
$C_{28}H_{28}O_{15}$ (604.53). Yellow amorphous powder. Source: *Warburgia stuhlmannii* (leaf). Ref: 3398.

**11671 Isorhamnetin 3-O-β-D-xylopyranosyl-(1''''→3''')-α-L-rhamnopyranosyl-(1''''→6''')-β-D-galactopyranoside**

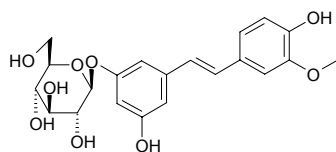
$C_{33}H_{40}O_{20}$ (756.67). Source: *Hammada scoparia* [syn. *Arthrophyllum scoparium*; *Haloxylon articulatum* ssp. *scoparium*; *Haloxylon scoparium*] (leaf). Ref: 4228.

**11672 Isorhapontigenin**

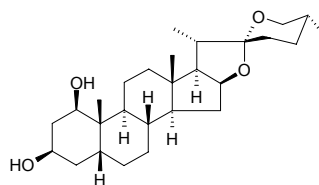
Anticancer Stilbenoid PMV70P691-140 [32507-66-7] $C_{15}H_{14}O_4$ (258.28). mp 182~183°C. Pharm: Antioxidant (superoxide anion scavenger (100 μmol/L, InRt = (45.7±0.7)%, positive control (+)-Catechin, IC₅₀ = (3.67±0.14) μmol/L)^[4514]; cytotoxic (cyclooxygenase-1 inhibitor)^[5038]. Source: MAO CI JIN JI ER *Caragana tibetica* (stem), XIAO YE MAI MA TENG *Gnetum parvifolium* [Syn. *Gnetum indicum*], CI JI NU ZONG LV *Aiphanes aculeata*. Ref: 660, 2233, 2234, 4514, 5038.

**11673 Isorhapontin**

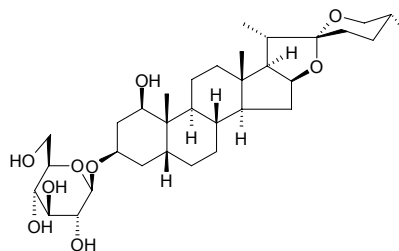
[32727-29-0] $C_{21}H_{24}O_9$ (420.42). Pharm: Antifungal (for protecting heartwood and bark). Source: OU ZHOU YUN SHAN *Picea abies*. Ref: 658.

**11674 Isorhodeasapogenin**

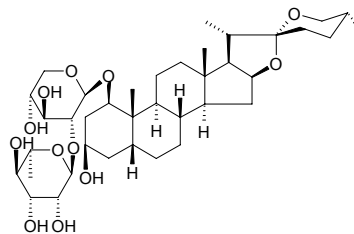
[472-10-6] $C_{27}H_{44}O_4$ (432.65). mp 239~240°C. Source: JI XIANG CAO *Reineckea carnea*, LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*]. Ref: 6.

**11675 Isorhodeasapogenin-3-O-β-D-glucopyranoside**

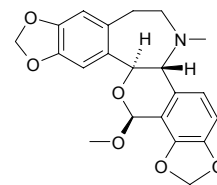
$C_{33}H_{54}O_9$ (594.79). Source: WAN NIAN QING GEN *Rohdea japonica* [Syn. *Orontium japonicum*]. Ref: 660.

**11676 Isorhodeasapogenin-1-O-α-L-rhamnopyranosyl(1→2)-β-D-xylopyranoside**

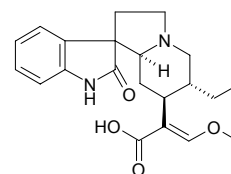
$C_{38}H_{62}O_{12}$ (710.91). Source: WAN NIAN QING GEN *Rohdea japonica* [Syn. *Orontium japonicum*]. Ref: 660.

**11677 Isorhoeadine**

[4046-21-3] $C_{21}H_{21}NO_6$ (383.40). mp 165~167°C. Source: LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*]. Ref: 6.

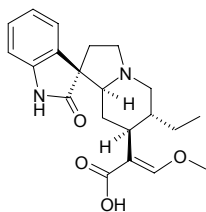
**11678 Isorhynchophyllic acid**

$C_{21}H_{26}N_2O_4$ (370.45). Source: HUA GOU TENG *Uncaria sinensis* Ref: 660, 5341.

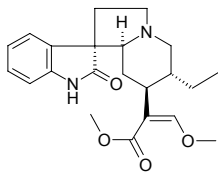


11679 Isorhynchophylline

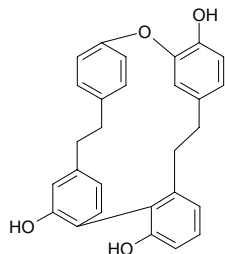
$C_{21}H_{26}N_2O_4$ (370.45). **Pharm:** Hypnosis (100mg/kg, prolongation of thiopental-induced hypnosis); CNS activity (significantly depresses locomotion response, may be central dopaminergic receptor antagonist); immunostimulant inactive. **Source:** BAI GOU TENG *Uncaria sessilifructus* [Syn. *Nauclea sessilifructus*], BI LU GOU TENG *Uncaria tomentosa*, CHANG HUA GOU TENG *Uncaria longiflora*, DA YE GOU TENG *Uncaria macrophylla*, FEI ZHOU GOU TENG *Uncaria africana*, GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*], GUI YA NA GOU TENG *Uncaria guianensis*, HOU YE GOU TENG *Uncaria callophylla*, HUA GOU TENG *Uncaria sinensis*, PO LUO ZHOU GOU TENG *Uncaria borneensis*, SUAN GOU TENG *Uncaria acida*, TUO YUAN GOU TENG *Uncaria elliptica*, XIA GOU TENG *Uncaria attenuata*, XIN XING GOU TENG *Uncaria cordata*, *Uncaria bernaysii*, *Uncaria kunstleri*, *Uncaria sterrophylla*, *Uncaria talbotii*. **Ref:** 5341.

**11680 Isorhynchophylline**

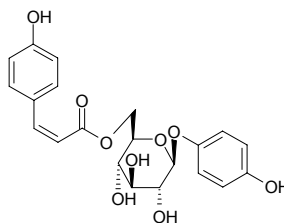
7-Isorhynchophylline [6859-01-4] $C_{22}H_{28}N_2O_4$ (384.48). mp 138–141°C, $[\alpha]_D^{24} = +7.8^\circ$ ($c = 0.42$, chloroform). **Pharm:** Calcium antagonist (potential dependent); immunoenhancer (promotes phagocytic function); antihypertensive (long acting); vasodilator (relaxes blood vessels and reduces consumption of oxygen in myocardium); slows heart rate (anesthetic rbt, inhibits heart conduction). **Source:** GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*] (hooked stem-branch: content = 0.049%), DA YE GOU TENG *Uncaria macrophylla*, HUA GOU TENG *Uncaria sinensis*. **Ref:** 2, 6, 660, 900, 1521, 5501.

**11681 Isoriccardin C**

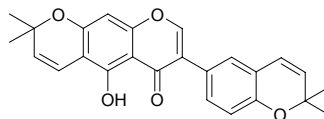
$C_{28}H_{24}O_4$ (424.50). **Source:** DI SUO LUO *Marchantia polymorpha*. **Ref:** 660.

**11682 Isorobustaside A**

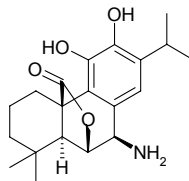
$C_{21}H_{22}O_9$ (418.40). Amorphous powder, $[\alpha]_D = -51.4^\circ$. **Source:** YAO YONG HEI MIAN SHEN YE *Breynia officinalis* (leaf). **Ref:** 2583.

**11683 Isorobustone**

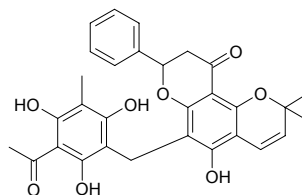
$C_{25}H_{22}O_5$ (402.45). **Pharm:** Antioxidant (DPPH scavenger, ScRt = 13.16%, control BHT, ScRt = 71.5%); antibacterial (*Staphylococcus aureus* ATCC 25923, MIC > 128µg/mL, control Vancomycin, MIC = 0.5µg/mL; MRSA SK1, MIC > 128µg/mL, Vancomycin, MIC = 1.0µg/mL). **Source:** PAN YUAN YU TENG *Derris scandens* (stem). **Ref:** 3810.

**11684 Isorosmaricine**

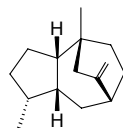
[33947-58-9] $C_{20}H_{27}NO_4$ (345.44). **Source:** MI DIE XIANG *Rosmarinus officinalis*. **Ref:** 6.

**11685 Isorottlerin**

$C_{30}H_{28}O_8$ (516.55). mp 180°C. **Source:** LV SONG QIU MAO *Mallotus philippinensis*. **Ref:** 6.

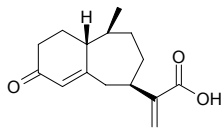
**11686 (-)-Isorotundene**

$C_{15}H_{24}$ (204.36). **Source:** XIANG FU *Cyperus rotundus* (essential oil). **Ref:** 5210.

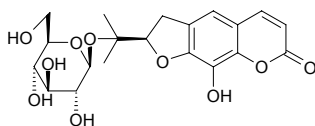


11687 Isorupestonic acid

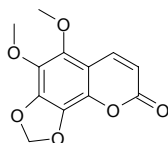
$C_{15}H_{20}O_3$ (248.32). Colorless bar crystals, mp 192~193°C, $[\alpha]_D^{14} = 11^\circ$ ($c = 0.62$, methanol). Source: XIN JIANG YI ZHI HAO *Artemisia rupestris* [Syn. *Artemisia dentata*; *Artemisia viridis*; *Artemisia viridifolia*]. Ref: 196.

**11688 Isorutarin**

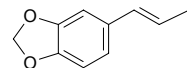
$C_{20}H_{24}O_{10}$ (424.41). Source: BAI HUA QIAN HU *Peucedanum praeruptorum*. Ref: 660.

**11689 Isosabandin**

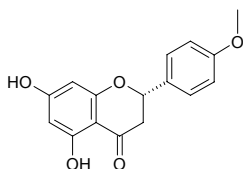
$C_{15}H_{10}O_6$ (250.21). Yellow fine needles (petroleum ether–EtOAc), mp 126~128°C. Source: BIN HAO *Artemisia maritima* (aerial parts). Ref: 4910.

**11690 Isosafrole**

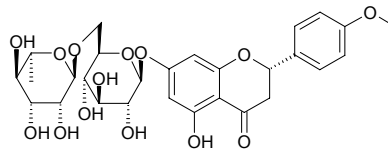
$C_{10}H_{10}O_2$ (161.19). Pharm: antihepatotoxin (promotes regeneration of liver tissue); toxin (hmn). Source: DONG DANG GUI *Angelica acutiloba* [Syn. *Ligusticum acutilobum*], YIN DU JIU LI XIANG *Murraya koenigii*, YI LAN *Cananga odorata*. Ref: 658.

**11691 Isosakuranetin**

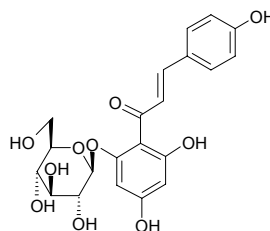
Ponciretin $C_{16}H_{14}O_5$ (286.29). Pharm: Passive cutaneous anaphylaxis inhibitor (inhibits IgE-induced β -hexosaminidase release from RBL-2H3 cells, $IC_{50} = (105 \pm 6.6) \mu\text{mol/L}$, control Azelastine, $IC_{50} = (35 \pm 2) \mu\text{mol/L}$; PCA reaction inhibitor, 5mg/kg orl, $\text{InRt} = (62 \pm 2\%)^{[5041]}$). Source: FEI JI CAO *Eupatorium odoratum*, FENG LUN CAI *Clinopodium chinense*, WU HE MI JU *Citrus unshiu* (pericarp). Ref: 660, 5041.

**11692 Isosakuranetin-7-rutinoside**

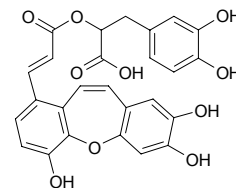
$C_{28}H_{34}O_{14}$ (594.57). mp 211~213°C. Source: TIAN CHENG *Citrus sinensis*. Ref: 6.

**11693 Isosalipurposide**

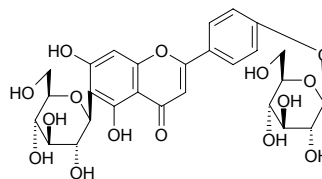
[4547-85-7] $C_{21}H_{22}O_{10}$ (434.40). mp 172~173°C. Source: SHUI YANG MU BAI PI *Salix purpurea*. Ref: 6.

**11694 Isosalvianolic acid C**

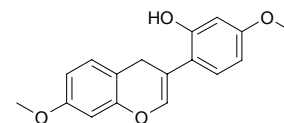
$C_{26}H_{20}O_{10}$ (492.44). Pharm: Antioxidant (*in vitro*, Cu^{2+} induced LDL peroxidation assay, $IC_{50} = 2.72 \mu\text{mol/L}$; control Probuocol, $IC_{50} = 4.7 \mu\text{mol/L}$). Source: ZI DAN TENG *Tournefortia sarmentosa* (stem: yield = 0.0026%). Ref: 4628.

**11695 Isosaponarin**

[19416-87-6] $C_{27}H_{30}O_{15}$ (594.53). mp 236~237°C. Source: WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*]. Ref: 6.

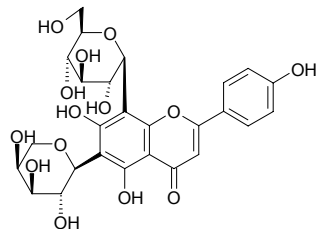
**11696 Isosativan**

[60102-29-6] $C_{17}H_{16}O_4$ (284.31). Source: KUN MING JI XUE TENG *Millettia dielsiana*. Ref: 2205.

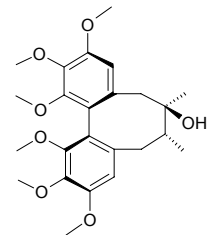


11697 Isoschaftoside5,7,4'-Trihydroxy-6-C-arabinoside-8-C-glucoside flavone C₂₆H₂₈O₁₄ (564.50).

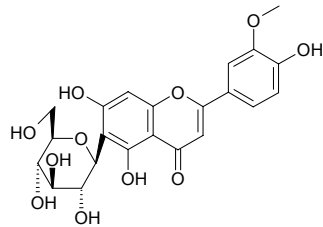
Source: GAN CAO *Glycyrrhiza uralensis* (root and rhizome: mean content of 4 origins = 0.061%)^[5508], GUANG GUO GAN CAO *Glycyrrhiza glabra* (root and rhizome: content = 0.12%)^[5508], HUANG QIN *Scutellaria baicalensis*, TIAN NAN XING *Arisaema consanguineum* (dried tuber: content scope of 3 origins = 0.0069%–0.0177%, mean content = 0.0105%)^[5508], YI YE TIAN NAN XING *Arisaema heterophyllum* (dried tuber: content scope of 7 origins = 0.0081%–0.0263%, mean content = 0.0193%)^[5508], ZHANG GUO GAN CAO *Glycyrrhiza inflata* (root and rhizome: content = 0.085%)^[5508], *Glycyrrhiza* sp. **Ref:** 1557, 2431, 5508.

**11698 Isoschizandrin**

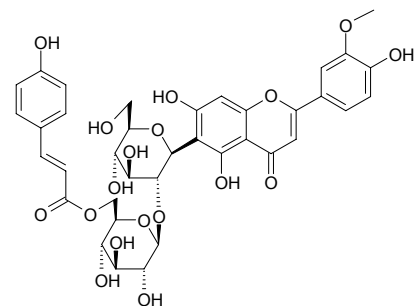
[114422-18-3] C₂₄H₃₂O₇ (432.52). Amorphous powder, [α]_D²⁵ = +92° (c = 1.22, CHCl₃). **Pharm:** Antiulcer agent. **Source:** WU WEI ZI *Schisandra chinensis*. **Ref:** 2, 1521.

**11699 Isoscoparin**

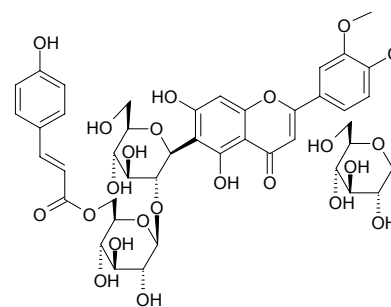
[20013-23-4] C₂₂H₂₂O₁₁ (462.41). **Pharm:** Phagostimulant (insect). **Source:** FU PING *Lemna minor*, FU YE YAN ZI CAI *Potamogeton natans*. **Ref:** 658.

**11700 Isoscoparin 2''-O-(6'''-(E)-p-coumaroyl)glucoside**

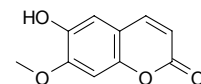
3'-Methoxyisovitexin 2''-O-(6'''-(E)-p-coumaroyl)-β-glucopyranoside C₃₇H₃₈O₁₈ (770.70). **Source:** HUANG GUA *Cucumis sativus* (leaf). **Ref:** 5181.

**11701 Isoscoparin 2''-O-(6'''-(E)-coumaroyl)glucoside-4'-O-glucoside**

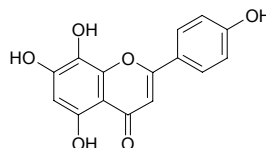
3'-Methoxyisovitexin 2''-O-(6'''-(E)-p-coumaroyl)-β-glucopyranoside-4'-O-β-glucopyranoside C₄₃H₄₈O₂₃ (932.85). **Source:** HUANG GUA *Cucumis sativus* (leaf). **Ref:** 5181.

**11702 Isoscooletin**

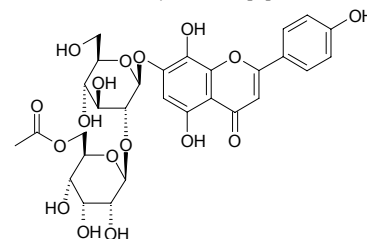
7-O-Methylesculetin C₁₀H₈O₄ (192.17). **Source:** HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], HUANG YANG MU YE *Buxus microphylla* var. *sinica*, YIN XIAN CAO *Chloranthus japonicus*. **Ref:** 660, 1385.

**11703 Isoscutellarein**

8-Hydroxyapigenin; 5,7,8,4'-Tetrahydroxyflavone [41440-05-5] C₁₅H₁₀O₆ (286.24). Yellow acicular crystals (ethanol), mp 300–301°C. **Pharm:** Inhibits influenza virus (inhibits replication of influenza virus A/WSN/33, IC₅₀ = 16nmol/L well); antioxidant (inhibits lipid peroxidation strongly, induced by Fe in mitochondria of rat hepatic cells, 0.5nmol/mg prot, MDA yielding rate = 43.5%, 5.0nmol/mg prot, MDA yielding rate = 0%, ED₅₀ < 0.5nmol/mg prot); aldose reductase inhibitor (IC₅₀ = 3.2μmol/L); α-glucosidase inhibitor (small intestine, 50μmol/L, InRt = 14%); AMV-reverse transcriptase inhibitor (0.1mmol/L, InRt = 22%); influenza virus sialoma inhibitor (91μg/mL, InRt = 91%). **Source:** HUANG QIN *Scutellaria baicalensis*, HAN XIN CAO *Scutellaria indica*. **Ref:** 900.

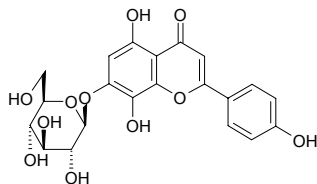
**11704 Isoscutellarein 7-O-(6'''-O-acetyl)-β-allopyranosyl(1'''→2'')-β-glucopyranoside**

C₂₉H₃₂O₁₇ (652.57). **Pharm:** Antioxidant (DPPH scavenger, DPPH radical 15μmol/L: 10μmol/L, ScRt = 40.5%; control BHA, 10μmol/L, ScRt = 23.0%; Vitamin E, 10μmol/L, ScRt = 41.1%). **Source:** JIA HUI SE JIU LI XIANG PO PO NA *Veronica thymoides* ssp. *pseudocinerea*. **Ref:** 3846.

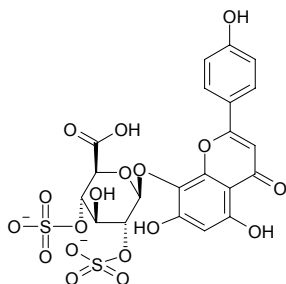


11705 Isoscutellarein 7-O-β-D-glucopyranoside

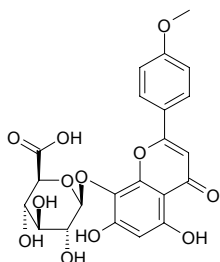
$C_{21}H_{20}O_{11}$ (448.39). Source: ZHEN XIAN *Bryum argenteum*. Ref: 660.

**11706 Isoscutellarein 8-O-β-D-glucuronide 2'',4''-disulfate**

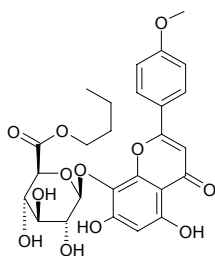
$C_{21}H_{16}O_{18}S_2^{2-}$ (620.48). Yellow amorphous powder, $[\alpha]_D^{21} = -82.4^\circ$ ($c = 0.43$, H_2O). Source: HUO SUO MA *Helicteres isora*. Ref: 756.

**11707 Isoscutellarein 4'-methyl ether 8-O-β-D-glucuronide**

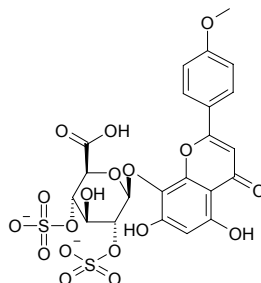
$C_{22}H_{20}O_{12}$ (476.40). Yellow amorphous powder, $[\alpha]_D^{21} = 10.5^\circ$ ($c = 0.4$, H_2O). Source: HUO SUO MA *Helicteres isora*. Ref: 756.

**11708 Isoscutellarein 4'-methyl ether 8-O-β-D-glucuronide 6''-n-butyl ester**

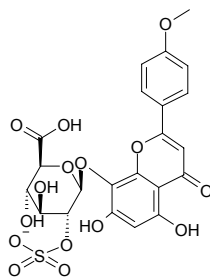
$C_{26}H_{28}O_{12}$ (532.51). Yellow amorphous powder, $[\alpha]_D^{21} = 73.2^\circ$ ($c = 0.13$, $MeOH$). Source: HUO SUO MA *Helicteres isora*. Ref: 756.

**11709 Isoscutellarein 4'-methyl ether 8-O-β-D-glucuronide 2'',4''-disulfate**

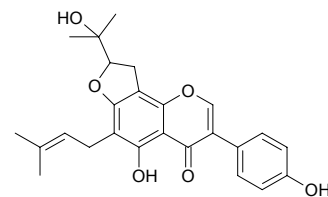
$C_{22}H_{18}O_{18}S_2^{2-}$ (634.51). Yellow amorphous powder, $[\alpha]_D^{21} = -98.4^\circ$ ($c = 1.22$, H_2O). Source: HUO SUO MA *Helicteres isora*. Ref: 756.

**11710 Isoscutellarein 4'-methyl ether 8-O-β-D-glucuronide 2''-sulfate**

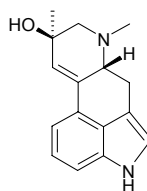
$C_{22}H_{19}O_{15}S^-$ (555.45). Yellow amorphous powder, $[\alpha]_D^{21} = -38.4^\circ$ ($c = 1.09$, H_2O). Source: HUO SUO MA *Helicteres isora*. Ref: 756.

**11711 Isosenegalensin**

5,4'-Dihydroxy-6-(3'''-methylbut-2'''-enyl)-2''-hydroxyisopropyl dihydrofuran[4'',5'':8,7]isoflavone $C_{25}H_{26}O_6$ (422.48). Yellow crystals ($CHCl_3$), mp $158^\circ C$. Source: AI JI ZAI PEI CI TONG *Erythrina lysistemon*. Ref: 1971.

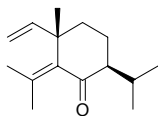
**11712 Isoetoclavine**

$C_{16}H_{18}N_2O$ (254.33). Source: MAI JIAO *Claviceps purpurea*. Ref: 660.

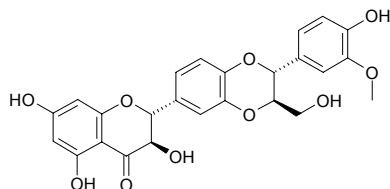


11713 Isoshyobunone

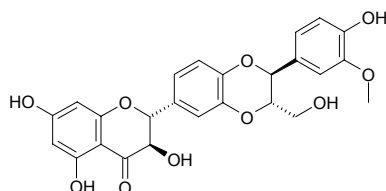
$C_{15}H_{24}O$ (220.36). Source: BAI CHANG *Acorus calamus*. Ref: 6.

**11714 Isosilybin A**

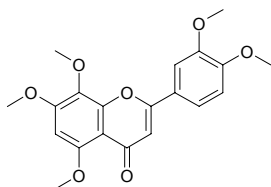
$C_{25}H_{22}O_{10}$ (482.45). Colorless needle crystals (MeOH-H₂O), mp 201~203°C, $[\alpha]_D = +48.15^\circ$ ($c = 0.27$, acetone). Source: SHUI FEI JI *Silybum marianum* (seed). Ref: 4719.

**11715 Isosilybin B**

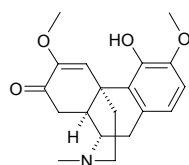
$C_{25}H_{22}O_{10}$ (482.45). Colorless needle crystals (MeOH-H₂O), mp 236~238°C, $[\alpha]_D = -23.55^\circ$ ($c = 0.31$, acetone). Source: SHUI FEI JI *Silybum marianum* (seed). Ref: 4719.

**11716 Isosinensetin**

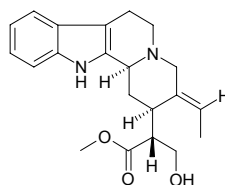
5,7,8,3',4'-Pentamethoxyflavone [17290-70-9] $C_{20}H_{20}O_7$ (372.37). Colorless rhombic crystals (methanol), mp 197.5~198.5°C; crystals (EtOH), mp 206~207°C. Pharm: Induces cell differentiation (mus myelocytic leukemia cells, 50μmol/L, growing rate = 78%, 5μmol/L, =89%, activity of macrophage of the former > 25%, HL-60 cells, 100μmol/L, growing rate = 42%, 50μmol/L, =62%, activity of macrophage of both > 10%). Source: HUA ZHOU YOU *Citrus grandis* var. *tomentosa*, JIAO GAN *Citrus tankan*, JIN GAN *Fortunella japonica*, JIN JU *Fortunella margarita*, JU PI *Citrus reticulata*, LAI MENG *Citrus aurantifolia*, OU *Nelumbo nucifera*, ZHI SHI *Citrus aurantium*. Ref: 6, 969, 979, 997, 2867, 2992.

**11717 Isosinomenine**

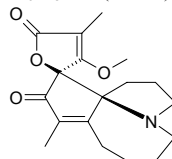
[510-42-9] $C_{19}H_{23}NO_4$ (329.40). mp (+) 198~202°C. Source: BAI CHANG *Acorus calamus*, QING FENG TENG *Sinomenium acutum*. Ref: 6, 660.

**11718 Isositsirikine**

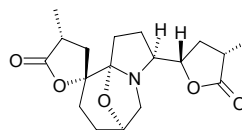
[6519-27-3] $C_{21}H_{26}N_2O_3$ (354.45). $[\alpha]_D^{25} = -20^\circ$ (CHCl₃). Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], *Aspidosperma marcgravianum*. Ref: 6, 1521.

**11719 Isostemonamine**

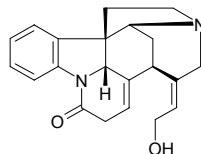
$C_{18}H_{23}NO_4$ (317.39). Source: ZHI LI BAI BU *Stemona sessilifolia*. Ref: 660.

**11720 Isostemetinine**

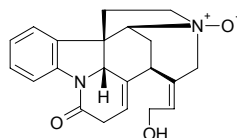
$C_{18}H_{23}NO_5$ (335.40). Source: BAI BU *Stemona tuberosa*. Ref: 660.

**11721 Isostrychnine**

[467-16-3] $C_{21}H_{22}N_2O_2$ (334.42). Source: MA QIAN ZI *Strychnos nux-vomica*. Ref: 2, 542.

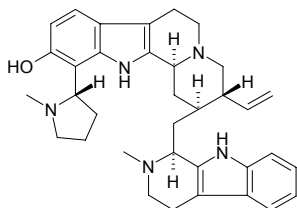
**11722 Isostrychnine N-oxide**

[130641-44-0] $C_{21}H_{22}N_2O_3$ (350.42). White powder, $[\alpha]_D = +15.1^\circ$ ($c = 0.002$, methanol). Pharm: Cytotoxic (*in vitro*, HeLa, IC₅₀ = 9.0μmol/L, hmn K562, IC₅₀ = 9.7μmol/L, hmn Hep2, IC₅₀ = 49μmol/L). Source: MA QIAN ZI *Strychnos nux-vomica*. Ref: 2, 1186, 1187.

**11723 Isostrychnopentamine**

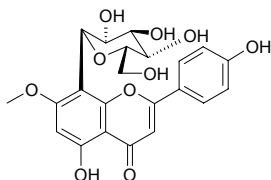
$C_{33}H_{43}N_5O$ (549.77). Pharm: Antiplasmodial (chloroquine-sensitive line: IC₅₀ = (120±42)nmol/L, IC₉₀ = 450nmol/L, Quinine: IC₅₀ = (269±6)nmol/L, IC₉₀ = 1910nmol/L; chloroquine-resistant line: IC₅₀ = (104±36)nmol/L, IC₉₀ = 386nmol/L, Quinine: IC₅₀ = (200±33)nmol/L, IC₉₀ = 2740nmol/L; moderately chloroquine-resistant line: IC₅₀ = (152±9)nmol/L, IC₉₀ = 628nmol/L, Quinine: IC₅₀ = (413±11)nmol/L, IC₉₀ = 1720nmol/L)^[4925]; antimalarial and cytotoxic (antiplasmodial, 5 kinds of *Plasmodium falciparum*: FCA 20 GHANA (CQS), IC₅₀ = (0.120±0.042)μmol/L, control Chloroquine IC₅₀ = (0.020±0.002)μmol/L; W2INDOCHINA (CQR), IC₅₀ = (0.152±0.009)μmol/L; FCB1 COLOMBIA (CQR-), IC₅₀ = (0.104±0.036)μmol/L, Chloroquine IC₅₀ =

(0.032±0.019)μmol/L; PFB(CQR+), IC₅₀ = (0.163±0.056)μmol/L, Chloroquine IC₅₀ = (0.540±0.330)μmol/L; F32(CQS), IC₅₀ = (0.046±0.005)μmol/L, Chloroquine IC₅₀ = (0.014±0.004)μmol/L; 4 kinds of hmn cell line: HCT116, IC₅₀ = (6.68±2.1)μmol/L, SI = 41~145; HCT15, IC₅₀ = (13.57±3.1)μmol/L, SI = 83~295; WI-38, IC₅₀ = 2.31μmol/L, SI = 15~50; KB, IC₅₀ = (19.4±3.5)μmol/L, SI = 119~421^[4987]. Source: DONG FEI MA QIAN *Strychnos usambarensis* (leaf). Ref: 4925, 4987.



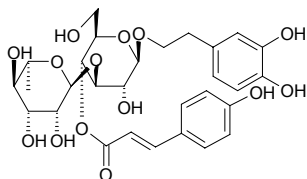
11724 Isoswertisin

5,4'-Dihydroxy-7-methoxyflavone 8-C-glucopyranoside; Vitexin 7-methyl ether; 8-C-Glucosylgenkwanin; Genkwanin 8-C-glucoside C₂₂H₂₂O₁₀ (446.41). Source: DUAN BAN JIN LIAN HUA *Trollius ledebourii* (flower: yield = 0.00039%dw). Ref: 4743.



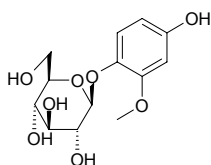
11725 Isosyringalide 3'-α-L-rhamnopyranoside

C₂₉H₃₆O₁₄ (608.60). Source: GUAN HUA ROU CONG RONG *Cistanche tubulosa*. Ref: 2448.



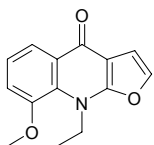
11726 Isotachioside

C₁₃H₁₈O₈ (302.28). White powder. Source: XIAO YE SHI NAN *Photinia parvifolia* (stem). Ref: 4553.



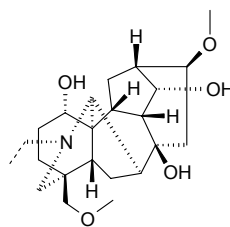
11727 Isotaifine

[84323-09-1] C₁₄H₁₃NO₃ (243.26). Needles (pet. ether), mp 123-125°C. Source: SUI ZHUANG YUN XIANG *Ruta chalepensis*. Ref: 1521.



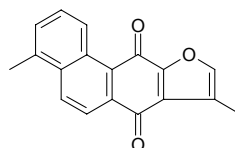
11728 Isotalatizidine

C₂₃H₃₇NO₅ (407.56). Source: LU CUI QUE *Delphinium denudatum*, FU ZI *Aconitum carmichaeli*, RI BEN WU TOU *Aconitum japonicum*, TA LA WU TOU *Aconitum talassicum*, WU TOU *Aconitum carmichaeli*, ZI SHAN *Taxus cuspidata*. Ref: 660, 1521.



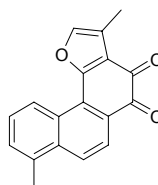
11729 Isotanshinone I

[20958-17-2] C₁₈H₁₂O₃ (276.29). mp 219°C. Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 2.



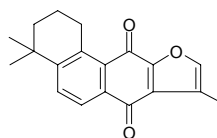
11730 Isotanshinone II

11,16-Oxy-18,20-dinor-1,3,5(10),6,8,11,15-abietaheptaene-13,14-dione [98249-39-9] C₁₈H₁₂O₃ (276.29). Orange crystals (CHCl₃), mp 291~293°C. Source: JIAO ZHI SHU WEI CAO *Salvia glutinosa* (dried root). Ref: 2384.



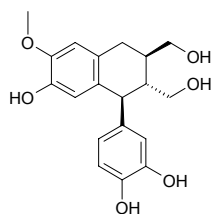
11731 Isotanshinone IIA

[20958-15-0] C₁₉H₁₈O₃ (294.35). mp 208°C. Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 2.



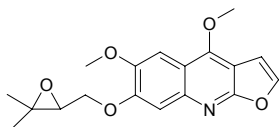
11732 Isotaxiresinol

C₁₉H₂₂O₆ (346.38). Pharm: Antioxidant (DPPH scavenger, IC₅₀ = 21.7μmol/L, control Caffeic acid, IC₅₀ = 25.5μmol/L)^[5407]; NO production inhibitor (IC₅₀ = 148μmol/L, control L-NMMA, IC₅₀ = 28.5μmol/L)^[5407]. Source: ZI SHAN *Taxus cuspidata*, YUN NAN HONG DOU SHAN *Taxus yunnanensis* (wood: yield = 0.918%dw). Ref: 660, 4661, 5407.

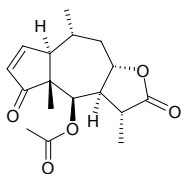


11733 Isotecleoxine

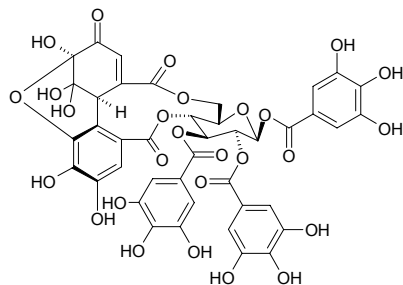
$C_{18}H_{19}NO_5$ (329.36). Solid, $[\alpha]_D = -13.3^\circ$ ($c = 0.06$, MeOH). **Source:** GAO GUI YOU MU YUN XIANG *Teclia nobilis* (aerial parts). **Ref:** 3503.

**11734 Isotenulin**

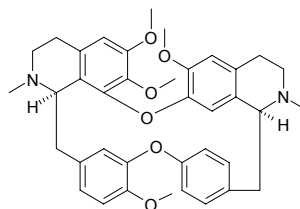
[10092-04-3] $C_{17}H_{22}O_5$ (306.36). **Pharm:** Analgesic (ip, weak). **Source:** YA LI SANG NA DUI XIN JU *Helenium arizonicum*, BI SHI DUI XIN JU *Helenium bigelovii*. **Ref:** 658.

**11735 Isoterchebin**

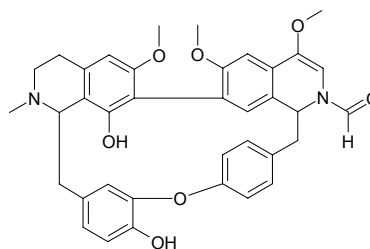
[58690-20-3] $C_{41}H_{30}O_{27}$ (954.68). **Pharm:** Antioxidant (rat cytoblast in liver cells, inhibits lipid peroxidation). **Source:** SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*]. **Ref:** 658.

**11736 Isotetrandrine**

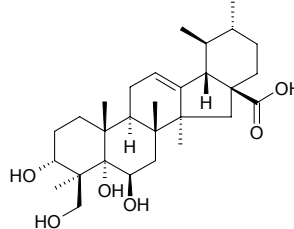
[477-57-6] $C_{38}H_{42}N_2O_6$ (622.77). mp $182^\circ C$. **Pharm:** Antibacterial (*Staphylococcus aureus* and *Bacillus pyocyaneus*, MIC = $100\mu g/mL$); anti-inflammatory; tuberculostatic (*Mycobacterium tuberculosis*, animal model); cytotoxic (KB); LD₅₀ (mus, ip) = $160mg/kg$, (rat, ip) = $2700mg/kg$, (rat, orl) = $6400mg/kg$. **Source:** BAI YAO ZI *Stephania cepharantha*, BAN RUI TANG SONG CAO *Thalictrum petaloideum* (root: content < 0.001%)^[5508], DA YE TANG SONG CAO *Thalictrum faberi* (root: content < 0.001%)^[5508], HUA NAN GONG LAO MU *Mahonia japonica*, HUA NAN GONG LAO YE *Mahonia japonica*, HUA NAN GONG LAO ZI *Mahonia japonica*, JIN SI MA WEI LIAN *Thalictrum glandulosissimum* (root: content < 0.001%)^[5508], MA WEI LIAN *Thalictrum foliolosum* (root: content < 0.001%)^[5508], RI BEN XIAO BO *Berberis thunbergii*, XIA XU TANG SONG CAO *Thalictrum atriplex* (root: content < 0.001%)^[5508], XIANG TANG SONG CAO *Thalictrum foetidum*, XIAO GUO TANG SONG CAO *Thalictrum microgynum* (root: content < 0.001%)^[5508], YAN GUO CAO *Thalictrum thunbergii* (root: content < 0.001%)^[5508], YIN BU HUAN *Cyclea barbata*, YING SHUI HUANG LIAN *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*] (root: content = 0.35%)^[5508]. **Ref:** 6, 658, 5508.

**11737 Isothalamidine**

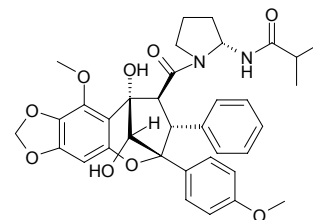
$C_{37}H_{36}N_2O_7$ (620.71). Pale yellow solid, $[\alpha]_D = 14^\circ$ ($c = 0.46$, $CHCl_3$). **Source:** TANG SONG CAO ZHUANG BIAN GUO CAO *Isopyrum thalictroides* (root and rhizome). **Ref:** 5078.

**11738 Isothankunic acid**

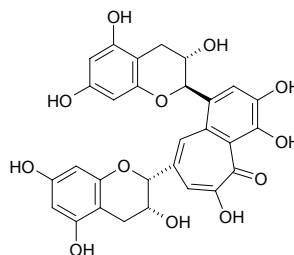
$C_{29}H_{46}O_6$ (490.69). **Source:** JI XUE CAO *Centella asiatica*. **Ref:** 660.

**11739 Isothapsakin B**

(-)-(2*R*,3*R*,4*S*,5*R*,10*R*,2*S*)-1-[2,3,4,5-Tetrahydro-5,10-dihydroxy-2-(4-methoxyphenyl)-6-methoxy-7,8-methylenedioxy-3-phenyl-2,5-methano-1-benzoxepin-4-carbonyl]-2-(2-methylpropanoylamino)-pyrrolidine $C_{35}H_{38}N_2O_9$ (630.70). $[\alpha]_D^{20} = -54^\circ$ ($c = 0.2$, $CHCl_3$). **Source:** KE SHI MI ZI LAN *Aglaia edulis*. **Ref:** 2355.

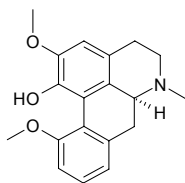
**11740 Isotheaflavin**

$C_{29}H_{24}O_{12}$ (564.51). **Source:** CHAYE *Camellia sinensis* [Syn. *Thea sinensis*]. **Ref:** 660.

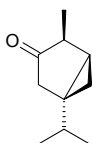


11741 Isothebaine

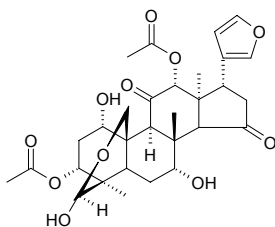
[568-21-8] $C_{19}H_{21}NO_3$ (311.38). **Pharm:** Analgesic; anti-inflammatory; respiratory depressant; sedative; inhibits autonomic movement. **Source:** JIN DONG YING SU *Papaver orientale*, JIA JIN DONG YING SU *Papaver pseudorientale*. **Ref:** 658.

**11742 Isothujone**

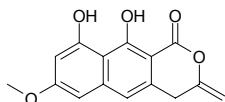
$C_{10}H_{16}O$ (152.24). **Source:** BEI AI *Artemisia vulgaris*. **Ref:** 660.

**11743 Isootoosendanin**

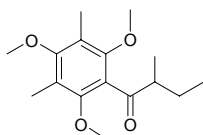
$C_{30}H_{38}O_{11}$ (574.63). **Source:** CHUAN LIAN PI *Melia toosendan*. **Ref:** 660.

**11744 Isotoralactone**

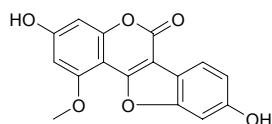
$C_{15}H_{12}O_5$ (272.26). **Source:** DUN YE JUE MING *Cassia obtusifolia*. **Ref:** 660.

**11745 Isotorquatone**

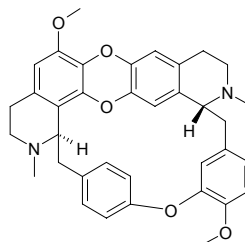
Torquatone in *Eucalyptus torquata* var. *grandiflora* $C_{16}H_{24}O_4$ (280.37). **Source:** WU BING YE AN *Eucalyptus apodophylla*. **Ref:** 2331.

**11746 Isotrifoliol**

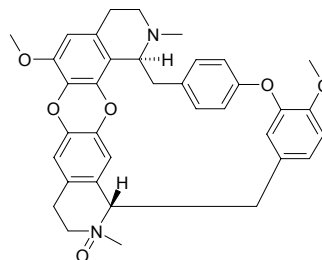
$C_{16}H_{10}O_6$ (298.25). Pale-yellow acicular crystals, mp > 300°C. **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 748.

**11747 Isotrilobine**

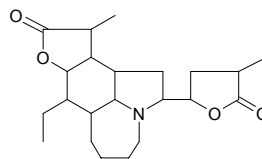
Homotrilobine [26195-62-0] $C_{36}H_{36}N_2O_5$ (576.70). mp 213–215°C. **Pharm:** Antibacterial (six *Bacillus* and *Coccus* spp., MIC = 7.8–500 µg/mL); antineoplastic (HeLa, mus EAC, S₁₈₀); anti-inflammatory (rat, tampon granuloma model and swollen foot model caused by carrageenan); platelet aggregation inhibitor. **Source:** MU FANG JI *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], RU LAN *Stephania hernandifolia*. **Ref:** 6, 658.

**11748 Isotrilobine-2-N-oxide**

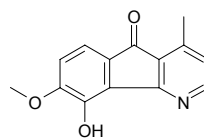
[139953-39-2] $C_{36}H_{36}N_2O_6$ (592.70). Yellowish crystalline powder, mp 178–179°C (methanol), $[\alpha]_D^{20.5} = +150.9^\circ$ ($c = 0.91$, chloroform). **Pharm:** Antineoplastic (P₃₈₈). **Source:** MU FANG JI *Cocculus trilobus* [Syn. *Cocculus sarmentosus*]. **Ref:** 203, 658.

**11749 Isotuberostemonine**

$C_{22}H_{33}NO_4$ (375.51). mp 123–125°C. **Source:** BAI BU *Stemona tuberosa*. **Ref:** 6.

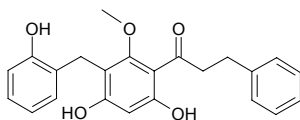
**11750 Isoursuline**

$C_{14}H_{11}NO_3$ (241.25). **Source:** BIAN ZHONG CHANG YE AN LUO *Polyalthia longifolia* var. *pendula*. **Ref:** 5386.

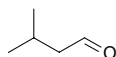


11751 Isoouvaretin

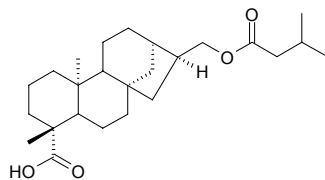
[61463-03-4] C₂₃H₂₂O₅ (378.43). Resin. **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 3.1 μg/mL; *Bacillus subtilis*, MIC = 0.8 μg/mL; *Mycobacterium smegmatis*, MIC = 12.5 μg/mL); cytotoxic (hmn promyelocytic leukemia HL-60 cells, IC₅₀ = 24.7 μmol/L). **Source:** AN ZI YU PAN *Uvaria chamae*, GUAN ZI YU PAN *Uvaria angolensis*, JIAN ZI YU PAN *Uvaria acuminata* (root). **Ref:** 661, 4261.

**11752 Isovaleraldehyde**

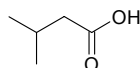
Isopentanal; Isovaleral [590-86-3] C₅H₁₀O (86.13). mp 92.5°C. **Source:** SHENG JIANG *Zingiber officinale*, XI GUA *Citrullus vulgaris* [Syn. *Citrullus lanatus*]. **Ref:** 2.

**11753 16αH,17-Isovalerate-ent-kauran-19-oic acid**

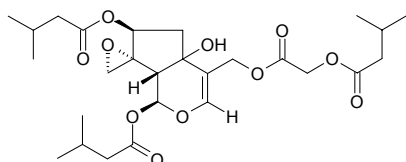
C₂₅H₄₀O₄ (404.60). White crystals, mp 168–171°C, [α]_D²⁰ = –32° (c = 0.50, CHCl₃). **Pharm:** COX-1 inhibitor (*in vitro*, IC₅₀ = 0.21 mmol/L). **Source:** CI SAN JIA *Acanthopanax trifoliatum* (stem cortex). **Ref:** 4957.

**11754 Isovaleric acid**

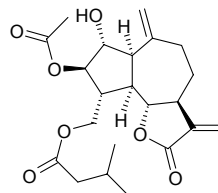
3-Methylbutanoic acid [503-74-2] C₅H₁₀O₂ (102.13). mp –37.6°C, bp 176.7°C. **Pharm:** Raw material for synthesis. **Source:** BAN BIAN SU *Elsholtzia ciliata*, FAN QIE *Lycopersicon esculentum*, HONG HUA *Carthamus tinctorius*, GAN SONG *Nardostachys chinensis*, HAI TUN YU *Delphinus delphis*, NIU BANG GEN *Arctium lappa*, PI JIU HUA *Humulus lupulus*, SANG YE *Morus alba*, TIAO JING CAO *Euonymus japonicus*, XIE CAO *Valeriana officinalis*, YAN CAO *Nicotiana tabacum*, YANG SHI CAO *Achillea millefolium*, *Valeriana* sp. **Ref:** 1460, 1461.

**11755 Isovaleroxy-hydroxy dihydrovaltrate**

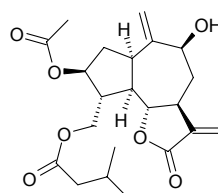
C₂₇H₄₀O₁₁ (540.61). **Source:** XIE CAO *Valeriana officinalis*, SHE CHUANG ZI *Cnidium monnieri*. **Ref:** 6.

**11756 15-O-Isovaleroyl-3β-O-acetyl-2α-hydroxyamphoricarpolide**

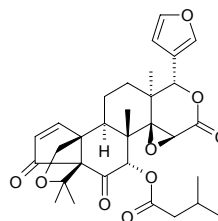
C₂₀H₃₀O₇ (406.48). Colorless gum, [α]_D²⁵ = +14° (c = 0.25, CHCl₃). **Source:** *Amphoricarpus neumayeri* ssp. *neumayeri* (aerial parts), *Amphoricarpus neumayeri* ssp. *murbeckii* (aerial parts). **Ref:** 3842.

**11757 15-O-Isovaleroyl-3β-O-acetyl-9β-hydroxyamphoricarpolide**

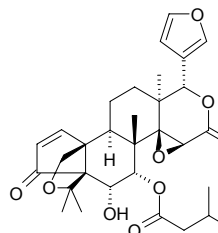
C₂₂H₃₀O₇ (406.48). Viscous oil, [α]_D²⁵ = +7.9° (c = 0.9, CHCl₃). **Source:** *Amphoricarpus neumayeri* ssp. *neumayeri* (aerial parts), *Amphoricarpus neumayeri* ssp. *murbeckii* (aerial parts). **Ref:** 3842.

**11758 7-Isovaleroyleyclopiatalantin**

C₃₁H₃₆O₉ (552.63). Colorless plates, mp 208–210°C, [α]_D = +22.3° (c = 0.85, CHCl₃). **Source:** DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). **Ref:** 3075.

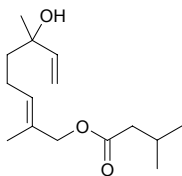
**11759 7-Isovaleroyleycloeverinolide**

C₃₁H₃₈O₉ (554.64). Colorless plates, mp 242–244°C, [α]_D = +73° (c = 0.63, CHCl₃). **Source:** DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). **Ref:** 3075.

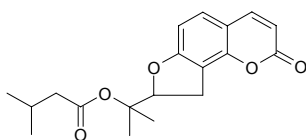


11760 Isovaleroyloxylinalool

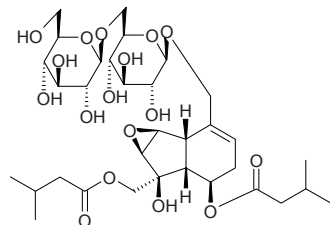
$C_{15}H_{26}O_3$ (254.37). Colorless oil, $[\alpha]_D = -1.4^\circ$ ($c = 0.3$, CH_2Cl_2). Source: FEI NI JI CI BAI *Juniperus phoenicea* (leaf), XIANG CI BAI FEI ZHOU BIAN ZHONG *Juniperus thurifera* var. *africana* (leaf). Ref: 3851.

**11761 O-Isovalerylcolum bianetin**

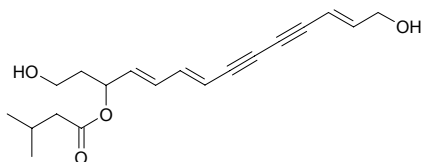
$C_{19}H_{22}O_5$ (330.38). Source: SHE CHUANG ZI *Cnidium monnieri*. Ref: 6.

**11762 10-Isovaleryl kanokoside C**

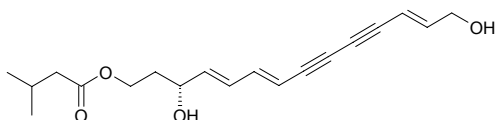
$C_{33}H_{52}O_{17}$ (720.77). Amorphous colorless solid. Source: XIE CAO *Valeriana officinalis* (rhizome and root: yield = 0.0002%). Ref: 915.

**11763 (4E,6E,12E)-3-Isovaleryloxy-tetradeca-4,6,12-triene-8,10-diyne-1,14-diol**

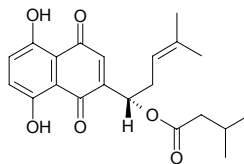
$C_{19}H_{24}O_4$ (316.40). Source: BEI CANG ZHU *Atractylodes chinensis* (rhizome). Ref: 4540.

**11764 (3S,4E,6E,12E)-1-Isovaleryloxy-tetradeca-4,6,12-triene-8,10-diyne-3,14-diol**

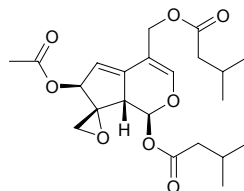
$C_{19}H_{24}O_4$ (316.40). Pale yellow oil, $[\alpha]_D^{22} = +45^\circ$ ($c = 0.139$, MeOH). Source: BEI CANG ZHU *Atractylodes chinensis* (rhizome). Ref: 4540.

**11765 Isovalerylshikonin**

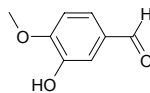
$C_{21}H_{24}O_6$ (372.42). Source: ZI CAO *Lithospermum erythrorhizon*. Ref: 2.

**11766 Isovaltrate**

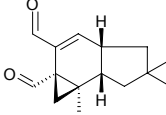
$C_{22}H_{30}O_8$ (422.48). Source: ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*]. (rhizome and root: yield = 0.000019%dw). Ref: 4672.

**11767 Isovanillin**

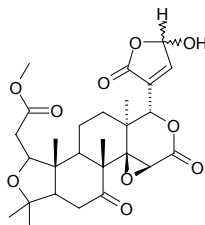
3-Hydroxy-*p*-anisaldehyde [621-59-0] $C_8H_8O_3$ (152.15). mp 116–117°C, bp 179°C/15mmHg. Source: KONG SHI CHUN *Ulva pertusa*. Ref: 6, 660.

**11768 Isovelleral**

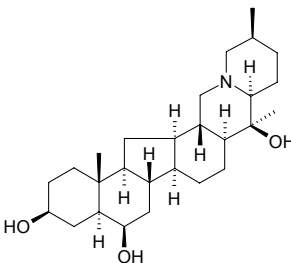
$C_{15}H_{20}O_2$ (232.33). Source: RONG BAI RU GU *Lactarius vellereus*. Ref: 660.

**11769 Isoveprisonic acid**

21-Oxo-23 ξ -hydroxy-21,23-dihydroveprisonone $C_{27}H_{34}O_{10}$ (518.57). White amorphous solid. Source: *Bouchardatia neurococca*. Ref: 3445.

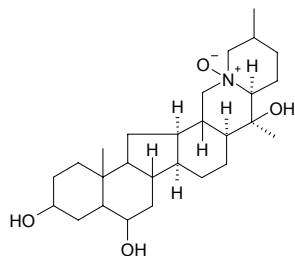
**11770 Isoverticine**

$C_{27}H_{45}NO_3$ (431.66). Source: ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 660.

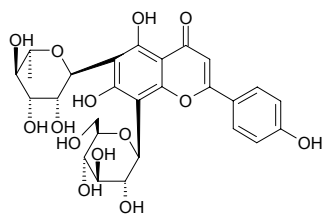


11771 Isoverticine- β -N-oxide

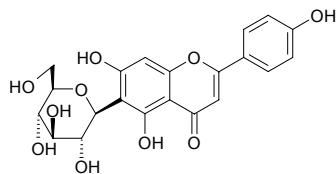
$C_{27}H_{45}NO_4$ (447.66). White crystals, mp 207~210°C. Source: WA BU BEI MU *Fritillaria wabuensis* (bulb). Ref: 4838.

**11772 Isoviolanthin**

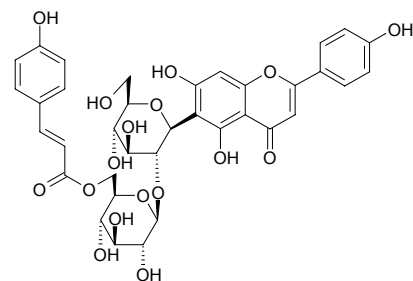
$C_{27}H_{30}O_{14}$ (578.53). Source: HUANG GAN CAO *Glycyrrhiza kansuensis*, *Glycyrrhiza* spp. Ref: 660, 2431.

**11773 Isovitexin**

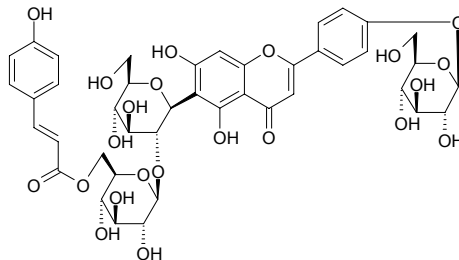
Homovitexin; Saponaretin; Apigenin-6-*C*- β -D-glucopyranoside [38953-85-4] $C_{21}H_{20}O_{10}$ (432.39). mp 265°C, mp 239°C, $[\alpha]_D^{22} = -9.2^\circ$ ($c = 0.72$, pyridine). Pharm: Antineoplastic (of 60 tested flavones, 10 showed antineoplastic activity, and isovitexin was one of the strongest three compounds); pytoalexin^[4727]. Source: BIN MU JING *Vitex littoralis*, HUANG GUA *Cucumis sativus* (leaf)^[4727], ER RUI HE LIAN DOU *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*] (whole herb: yield = 0.00018%dw)^[4758], RI BEN SHUANG HU DIE *Tripterospermum japonicum*, SUAN JIAO *Tamarindus indica*, XIN XI LAN MU JING *Vitex lucens*, YA MA *Linum usitatissimum*, ZAO JIA *Gleditsia sinensis* [Syn. *Gleditsia horrida*], ZHANG YA CAI *Swertia pseudochinensis*. Ref: 658, 3533, 4758.

**11774 Isovitexin 2''-O-(6'''-(E)-p-coumaroyl)glucoside**

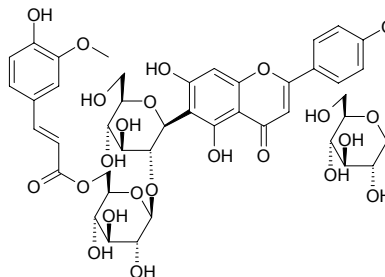
$C_{36}H_{36}O_{17}$ (740.68). Yellow solid. Source: HUANG GUA *Cucumis sativus* (leaf). Ref: 5181.

**11775 Isovitexin 2''-O-(6'''-(E)-p-coumaroyl)glucoside-4'-O-glucoside**

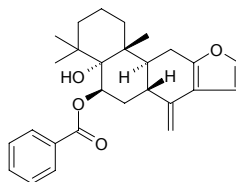
$C_{42}H_{46}O_{22}$ (902.82). Yellow solid. Source: HUANG GUA *Cucumis sativus* (leaf). Ref: 5181.

**11776 Isovitexin 2''-O-(6'''-(E)-feruloyl)glucoside-4'-O-glucoside**

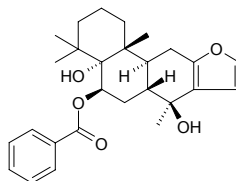
Isovitexin 2''-O-(6'''-(E)-feruloyl)- β -glucopyranoside-4'-O- β -glucopyranoside $C_{43}H_{48}O_{23}$ (932.85). Source: HUANG GUA *Cucumis sativus* (leaf). Ref: 5181.

**11777 Isovouacapenol A**

(4 α ,5 β ,6 $\alpha\beta$,11 α ,11 β)-1,2,3,4,4a,5,6,6a,7,11,11a,11b-Dodecahydro-4,4,11b-trimethyl-7-methylenephenanthro[3,2-*b*]furan-4a,5-diol-5-benzoate $C_{27}H_{32}O_4$ (420.55). Colorless crystals, mp 163~165°C (petroleum ether), $[\alpha]_D^{20} = -25.5^\circ$ ($c = 0.0092$, $CDCl_3$). Pharm: Antibacterial (*Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas aeruginosa*, and *Bacillus subtilis*); antifungal (*Candida albicans* and *Trichophyton mentagrophytes*). Source: JI MEI YUN SHI *Caesalpinia pulcherrima* (leaf: yield = 0.00087%dw). Ref: 4639.

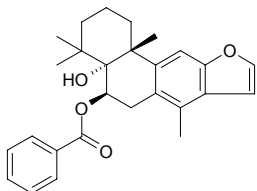
**11778 Isovouacapenol B**

(4 α ,5 β ,6 $\alpha\beta$,7 β ,11 α ,11 β)-1,2,3,4,4a,5,6,6a,7,11,11a,11b-Dodecahydro-4,4,7,11b-tetramethylphenanthro[3,2-*b*]furan-4a,5,7-triol-5-benzoate $C_{27}H_{34}O_5$ (438.57). Colorless crystals, mp 108~110°C (petroleum ether), $[\alpha]_D^{20} = +12.6^\circ$ ($c = 0.0082$, $CDCl_3$). Pharm: Antibacterial (*Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas aeruginosa*, and *Bacillus subtilis*); antifungal (*Candida albicans*, *Aspergillus niger* and *Trichophyton mentagrophytes*). Source: JI MEI YUN SHI *Caesalpinia pulcherrima* (leaf: yield = 0.00044%dw). Ref: 4639.

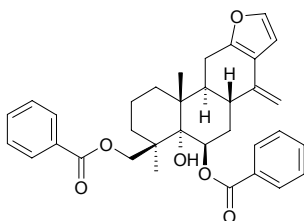


11779 Isovouacapenol D

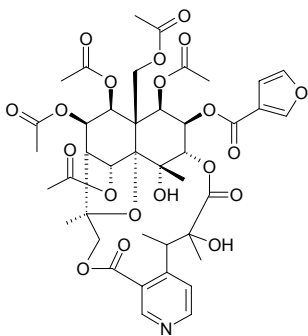
(4 α ,5 β ,11 β)-1,2,3,4,4a,5,6,11b-Octahydro-4,4,7,11b-tetramethyl-phenanthro [3,2-*b*]furan-4a,5-diol-5-benzoate C₂₇H₃₀O₄ (418.54). Colorless crystals, mp 211~213°C (petroleum ether), [α]_D²⁰ = -71.6° (*c* = 0.0031, CDCl₃). **Pharm:** Antibacterial (*Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas aeruginosa*, and *Bacillus subtilis*); antifungal (*Candida albicans* and *Trichophyton mentagrophytes*). **Source:** JI MEI YUN SHI *Caesalpinia pulcherrima* (leaf: yield = 0.00009%dw). **Ref:** 4639.

**11780 Isovouacapenol E**

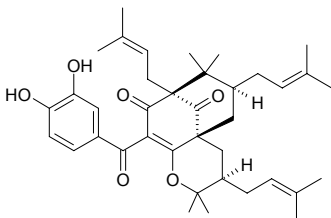
C₃₄H₃₆O₆ (540.66). Colorless gum, [α]_D²⁰ = -7° (*c* = 0.001, CHCl₃). **Source:** JI MEI YUN SHI *Caesalpinia pulcherrima* (leaf). **Ref:** 4394.

**11781 Isowilfortrine**

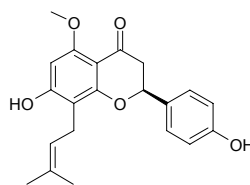
C₄₁H₄₇NO₂₀ (873.83). Colorless lamellar crystals, mp 329~331°C. **Source:** LEI GONG TENG *Tripterygium wilfordii*. **Ref:** 310.

**11782 Isoxanthochymol**

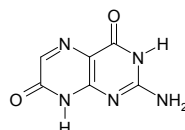
C₃₈H₅₀O₆ (602.82). **Source:** DA YE TENG HUANG *Garcinia xanthochymus*. **Ref:** 660.

**11783 Isoxanthohumol**

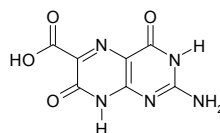
[70872-29-6] C₂₁H₂₂O₅ (354.41). mp 198°C. **Pharm:** Cytotoxic (inhibits cellular hyperplasia of mammary cancer, colon cancer and ovary cancer A2780). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*], PI JIU HUA *Humulus lupulus* (strobile)^[4789]. **Ref:** 6, 1582, 4789.

**11784 Isoxanthopterin**

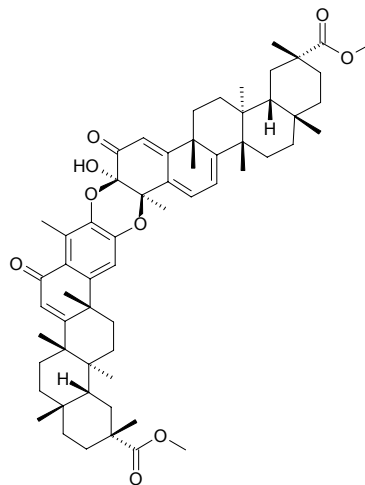
2-Amino-4,7-pteridinediol; Ranachrome 4 [529-69-1] C₆H₅N₅O₂ (179.14). mp > 300°C (dec). **Source:** DIE DA LAO *Litsea verticillata*, JIN YU *Carassius auratus*, QING WA *Rana nigromaculata*; *Rana plancyi*. **Ref:** 6.

**11785 Isoxanthopterin-6-carboxylic acid**

C₇H₅N₅O₄ (223.15). **Source:** JIN YU *Carassius auratus*. **Ref:** 6.

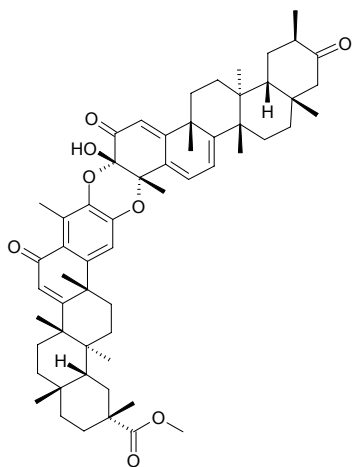
**11786 Isoxuxuarine E β**

C₆₀H₇₈O₉ (943.29). Yellow amorphous solid. **Source:** QIU SHI MEI DENG MU *Maytenus chuchuhuasca*(bark). **Ref:** 4295.

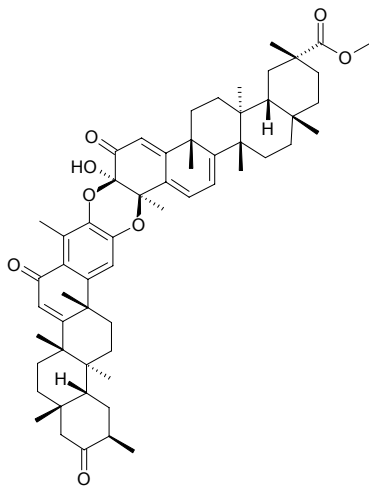


11787 Isoxuxuarine Fa

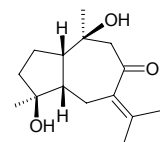
$C_{58}H_{74}O_8$ (899.23). Yellow amorphous solid. Source: QIU SHI MEI DENG MU *Maytenus chuchuhuasca* (bark). Ref: 4295.

**11788 Isoxuxuarine Gβ**

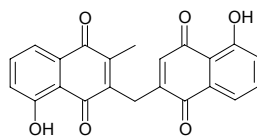
$C_{58}H_{74}O_8$ (899.23). Yellow amorphous solid. Source: QIU SHI MEI DENG MU *Maytenus chuchuhuasca* (bark). Ref: 4295.

**11789 Isozedoarondiol**

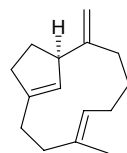
$C_{15}H_{24}O_3$ (252.36). Pharm: NO production inhibitor inactive (mus peritoneal macrophages, induced by LPS, 100 μmol/L, InRt = (11.4±2.5)%, control L-NMMA, 100 μmol/L, InRt = (79.2±0.9)%, $p < 0.05$). Source: PING E SHU *Curcuma zedoaria* [Syn. *Curcuma aeruginosa*]. Ref: 4150.

**11790 Isozeylanone**

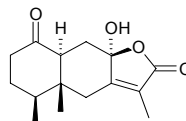
$C_{22}H_{14}O_6$ (374.35). Red powder. Source: BAI HUA DAN *Plumbago zeylanica*, HAI SHI *Diospyros maritima* (fruit). Ref: 1521, 4185.

**11791 (+)-Isozierene**

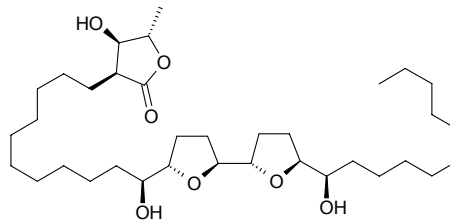
(+)-4-Methyl-9-methylene-bicyclo[8.2.1]trideca-1(13),4-diene $C_{15}H_{22}$ (202.34). Colorless oil. Source: *Saccogyna viticulosa* (essential oil). Ref: 3839.

**11792 (-)-Istanbulin A**

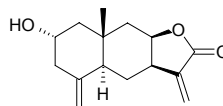
$C_{15}H_{20}O_4$ (264.32). Colorless granular crystals, mp 245°C, $[\alpha]_D^{17.5} = -110^\circ$ ($c = 0.6035$, methanol). Source: JIU JIE CHA *Sarcandra glabra* [Syn. *Chloranthus glaber*]. Ref: 94.

**11793 Itrabin**

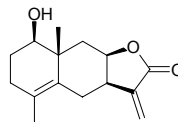
$C_{35}H_{64}O_7$ (596.90). Pharm: Mitochondrial complex I selective inhibitor (NADH oxidase $IC_{50} = (0.21 \pm 0.03)$ nmol/L, $p < 0.001$, control Rotenone, $IC_{50} = (5.10 \pm 0.09)$ nmol/L). Source: MAO YE FAN LI ZHI *Annona cherimolia* (seed). Ref: 5024.

**11794 Ivalin**

$C_{15}H_{20}O_3$ (248.32). Pharm: Toxin (mammal). Source: *Inula* sp., *Wedelia* sp. Ref: 658.

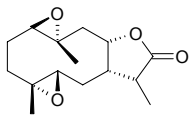
**11795 Ivangustin**

$C_{15}H_{20}O_3$ (248.32). Source: JIN FEI CAO *Inula japonica*. Ref: 5422.

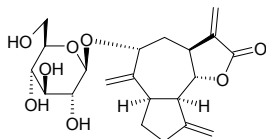


11796 Ivaxillin

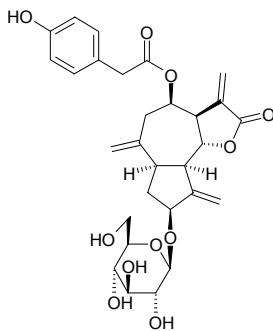
$C_{15}H_{22}O_4$ (266.34). Source: TIAN MING JING *Carpesium abrotanoides*. Ref: 660.

**11797 Ixeriside**

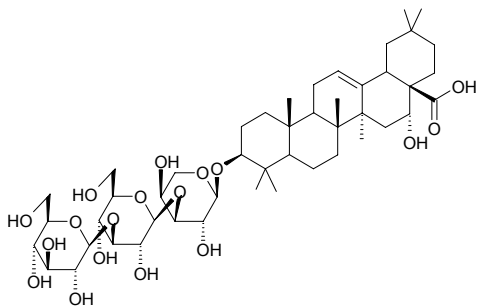
$C_{21}H_{28}O_8$ (408.45). Source: JU QU *Cichorium intybus*. Ref: 736.

**11798 Ixeriside A**

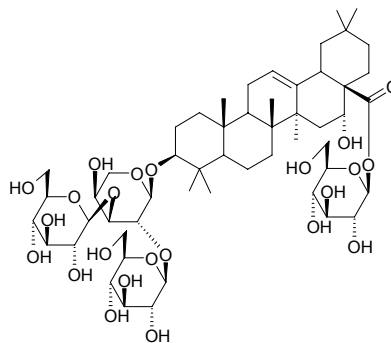
$C_{29}H_{34}O_{11}$ (558.59). Source: SHAN KU MAI *Ixeris chinensis*. Ref: 1521.

**11799 Ixerissaponin A**

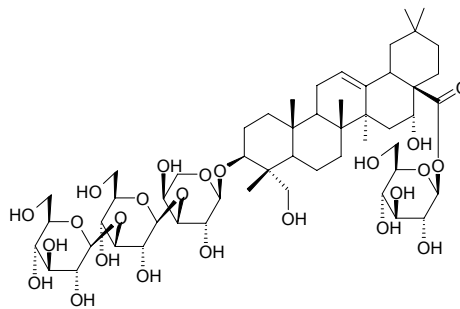
Echinocystic acid 3-*O*- β -*D*-glucopyranosyl(1 \rightarrow 3)- β -*D*-glucopyranosyl(1 \rightarrow 3)- α -*L*-arabinopyranoside $C_{47}H_{76}O_{18}$ (929.12). White amorphous powder, $[\alpha]_D^{25} = +16.0^\circ$ ($c = 0.23$, pyridine). Pharm: Cytotoxic inactive (*in vitro*, cultured A375, $IC_{50} > 50\mu\text{mol/L}$, control Mithramycin, $IC_{50} = (0.35\pm 0.03)\mu\text{mol/L}$; L-929, $IC_{50} > 50\mu\text{mol/L}$, Mithramycin, $IC_{50} = (0.32\pm 0.02)\mu\text{mol/L}$; HeLa, $IC_{50} > 50\mu\text{mol/L}$, Mithramycin, $IC_{50} = (0.23\pm 0.02)\mu\text{mol/L}$). Source: BAO JING KU MAI CAI *Ixeris sonchifolia* (whole herb). Ref: 5476.

**11800 Ixerissaponin B**

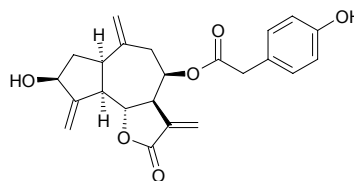
3-*O*-{Bis[β -*D*-glucopyranosyl(1 \rightarrow 2 and 1 \rightarrow 3)- α -*L*-arabinopyranosyl]} echinocystic acid 28-*O*- β -*D*-glucopyranosyl ester $C_{53}H_{86}O_{23}$ (1093.26). White amorphous powder, $[\alpha]_D^{25} = +22.4^\circ$ ($c = 0.21$, pyridine). Pharm: Cytotoxic (*in vitro*, cultured A375, $IC_{50} = (8.83\pm 2.78)\mu\text{mol/L}$, control Mithramycin, $IC_{50} = (0.35\pm 0.03)\mu\text{mol/L}$; L-929, $IC_{50} = (12.10\pm 4.69)\mu\text{mol/L}$, Mithramycin, $IC_{50} = (0.32\pm 0.02)\mu\text{mol/L}$; HeLa, $IC_{50} = (15.83\pm 3.65)\mu\text{mol/L}$, Mithramycin, $IC_{50} = (0.23\pm 0.02)\mu\text{mol/L}$). Source: BAO JING KU MAI CAI *Ixeris sonchifolia* (whole herb). Ref: 5476.

**11801 Ixerissaponin C**

3-*O*-[β -*D*-Glucopyranosyl(1 \rightarrow 3)- β -*D*-glucopyranosyl(1 \rightarrow 3)- α -*L*-arabinopyranosyl]-16 α ,23-dihydroxyolean-12-ene 28-*O*- β -*D*-glucopyranosyl ester $C_{53}H_{86}O_{24}$ (1107.26). White amorphous powder, $[\alpha]_D^{25} = +28.6^\circ$ ($c = 0.25$, pyridine). Pharm: Cytotoxic (*in vitro*, cultured A375, $IC_{50} = (10.32\pm 3.12)\mu\text{mol/L}$, control Mithramycin, $IC_{50} = (0.35\pm 0.03)\mu\text{mol/L}$; L-929, $IC_{50} = (13.2\pm 5.02)\mu\text{mol/L}$, Mithramycin, $IC_{50} = (0.32\pm 0.02)\mu\text{mol/L}$; HeLa, $IC_{50} = (9.49\pm 2.36)\mu\text{mol/L}$, Mithramycin, $IC_{50} = (0.23\pm 0.02)\mu\text{mol/L}$). Source: BAO JING KU MAI CAI *Ixeris sonchifolia* (whole herb). Ref: 5476.

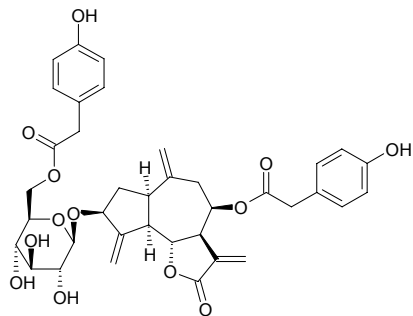
**11802 Ixerochinolide**

$C_{23}H_{24}O_6$ (396.44). Pharm: Cytotoxic (hmn, *in vitro*, PC3 prostate cancer cells, $IC_{50} = 1.6\mu\text{g/mL}$). Source: SHAN KU MAI CAI *Ixeris chinensis*. Ref: 2527.

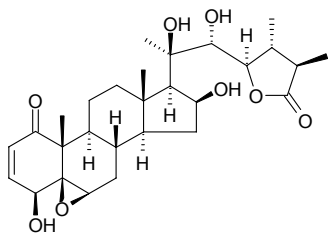


11803 Ixerochinoside

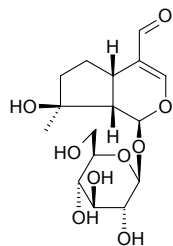
3 β -(6"-Phenylacetyloxyb-D-glucopyranosyloxy)-8 β -(p-hydroxyphenylacetyloxy)-guaia-4(15),10(14),11(13)-trien-1 α ,5 α ,6 β ,7 α H-12,6-olide C₃₇H₄₀O₁₃ (692.72). Source: SHAN KU MAI *Ixeris chinensis*. Ref: 2527.

**11804 Ixocarpalactone A**

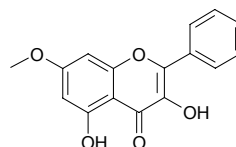
5,6-Epoxy-4,16,20,22-tetrahydroxy-1-oxoergost-2-eno-26,23-lactone [71801-45-1] C₂₈H₄₀O₈ (504.63). Crystals, mp 294~295°C, [α]_D = +84°. Pharm: Quinone reductase inducer (mus Hepa1c1c7 cells, CD = (0.22±0.08) μ mol/L, IC₅₀ = (4.1±2.9) μ mol/L, CI = 19, positive control Sulforaphane, CD = (0.36±0.17) μ mol/L, IC₅₀ = (9.9±2.1) μ mol/L, CI = 28)^[4337]; cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells, IC₅₀ = 0.16 μ g/mL)^[5038]; cytotoxic (soft agar transformation assay with JB6 cells, IC₅₀ = 0.13 μ g/mL)^[5038]; cytotoxic (mouse mammary organ culture assay, ca. 60% at 10 μ g/mL, a promising lead as potential cancer chemopreventive agents)^[5038]. Source: FEI CHENG SUAN JIANG *Physalis philadelphica* (stem and leaf), NIAN XING GUO SHI SUAN JIANG *Physalis ixocarpa*. Ref: 1521, 4337, 5038.

**11805 Ixoroside**

C₁₆H₂₄O₉ (360.36). Source: DA CHE QIAN *Plantago major*. Ref: 660.

**11806 Izalpinin**

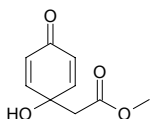
3,5-Dihydroxy-7-methoxy-2-phenyl-4H-1-benzopyran-4-one [480-14-8] C₁₆H₁₂O₅ (284.27). Yellow acicular crystals (CH₂Cl₂), mp 192~195°C. Pharm: NO production Inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages, IC₅₀ > 30 μ mol/L; control L-NMMA, IC₅₀ = 28 μ mol/L)^[4655]; β -hexosaminidase release inhibitor (RBL-2H3 Cells, 100 μ mol/L, InRt = 27.5%; control Curcumin, InRt = 62.6%)^[4655]. Source: FENG JIAO *Apis mellifera ligustica*, JIN YU *Carassius auratus*, LIAN JIANG *Alpinia chinensis*, YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.0006%dw)^[4655]. Ref: 6, 463, 4655.



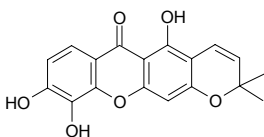
J

11807 Jacaranone

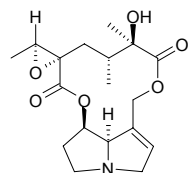
[60263-07-2] C₉H₁₀O₄ (182.18). mp 76~77°C, 80~81°C. **Pharm:** Antineoplastic (mus P₃₈₈ *in vivo*, 2mg/kg, biotic prolonged rate = 65%); cytotoxic (KB *in vitro*, ED₅₀ = 2.1µg/mL). **Source:** SONG YE QIAN LI GUANG *Senecio abrotanifolius*, FEI YI DIAN HONG *Emilia coccinea*, YI DIAN HONG *Emilia sonchifolia*. **Ref:** 5, 658, 1521.

**11808 Jacareubin**

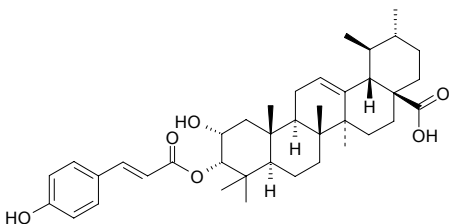
[3811-29-8] C₁₈H₁₄O₆ (326.31). **Pharm:** Anti-inflammatory; antimicrobial; antiulcerative. **Source:** BA XI HU TONG *Calophyllum brasiliense*, HAI TANG GUO *Calophyllum inophyllum* (in 1971, the compound was isolated from the plant by F.S.AL-Jeboury, et al.)^[5505], *Calophyllum* sp. **Ref:** 658, 5505.

**11809 Jacobine**

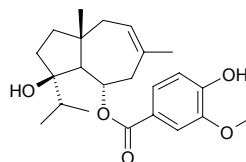
[6870-67-3] C₁₈H₂₅NO₆ (351.40). **Pharm:** Anticholinergic; mutagen (chromosome in plant cells). **Source:** CAO DIAN QIAN LI GUANG *Senecio jacobaea*, YA KE BEI QIAN LI GUANG *Senecio alpinus*, YIN BAI QIAN LI GUANG *Senecio cineraria*. **Ref:** 658.

**11810 Jacoumaric acid**

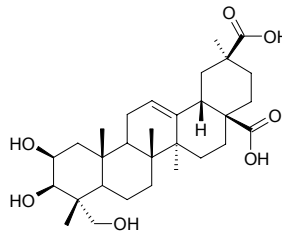
[63303-42-4] C₃₉H₅₄O₆ (618.86). **Source:** WU LING ZHI *Trogopterus xanthipes*; *Pteromys volans*. **Ref:** 637.

**11811 Jaeschkeanadiol vanillate**

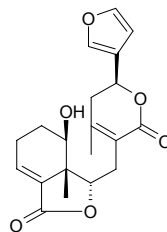
C₂₃H₃₂O₅ (388.51). **Pharm:** Antibacterial (MSSA, MIC = 16µg/mL, control Ampicillin, MIC = 1µg/mL; MRSA, MIC = 16µg/mL, Ampicillin, MIC = 2µg/mL; *Staphylococcus epidermidis* IFO 3762, MIC = 31µg/mL, Ampicillin, MIC < 0.125µg/mL; *Enterococcus faecalis* ATCC 21212, MIC = 31µg/mL, Ampicillin, MIC = 1µg/mL; *Bacillus subtilis* IFO 3134, MIC = 31µg/mL, Ampicillin, MIC < 0.125µg/mL; *Salmonella typhimurium* IFO 13245, MIC > 250µg/mL, Ampicillin, MIC = 1µg/mL; *Proteus mirabilis* IFO 3849, MIC > 250µg/mL, Ampicillin, MIC = 2µg/mL; *Escherichia coli* NIHJ JC-2, MIC > 250µg/mL, Ampicillin, MIC = 4µg/mL)^[5207]. **Source:** YI LANG A WEI *Ferula kuhistanica* (root), YI LANG A WEI *Ferula kuhistanica* (fruit). **Ref:** 3977, 5207.

**11812 Jaligonic acid**

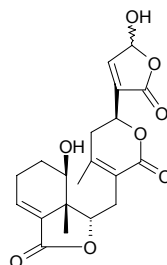
2-Hydroxyesculentic acid C₃₀H₄₆O₇ (518.70). **Source:** BA XIAN CAO *Galium aparine*, SHANG LU *Phytolacca esculenta* [Syn. *Phytolacca acinosa*]. **Ref:** 660.

**11813 Jamesoniellide I**

C₂₀H₂₂O₆ (358.39). **Source:** YUAN YE TAI *Jamesoniella colorata*. **Ref:** 3375.

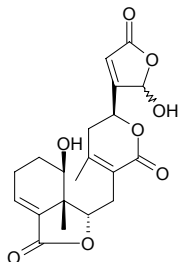
**11814 Jamesoniellide K**

C₂₀H₂₂O₈ (390.39). [α]_D²⁰ = -15.4° (c = 0.9, CHCl₃). **Source:** YUAN YE TAI *Jamesoniella colorata*. **Ref:** 3375.

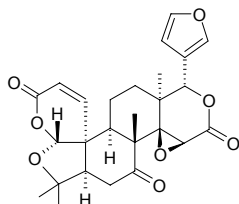


11815 Jamesoniellide L

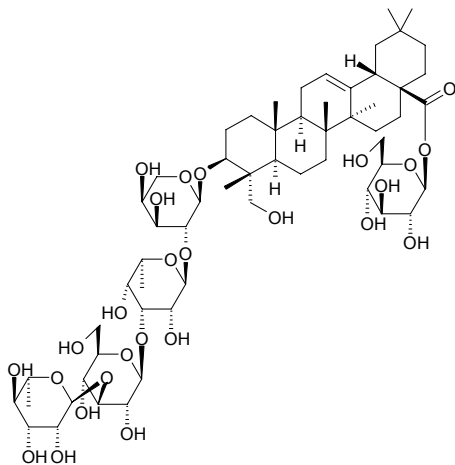
$C_{20}H_{22}O_8$ (390.39). $[\alpha]_D^{20} = -11.8^\circ$ ($c = 0.25$, $CHCl_3$). Source: YUAN YE TAI *Jamesoniella colorata*. Ref: 3375.

**11816 Jangomolide**

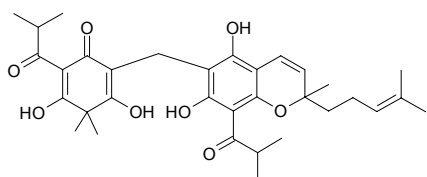
$C_{26}H_{28}O_8$ (468.51). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 660.

**11817 Japondipsaponin E₁**

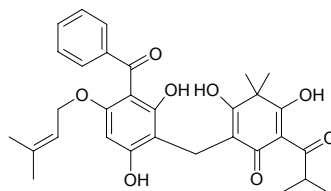
3-*O*- α -L-Rhamnopyranosyl-(1 \rightarrow 3)- β -D-glucopyranosyl-(1 \rightarrow 3)- α -L-rhamnopyranosyl-(1 \rightarrow 2)- α -L-arabinopyranosyl-hederagenin 28-*O*- β -D-glucopyranoside $C_{59}H_{96}O_{26}$ (1221.41). White powder, mp 223–226°C, soluble in methanol, pyridine and water. Source: XU DUAN *Dipsacus japonicus*. Ref: 339.

**11818 Japonicin B**

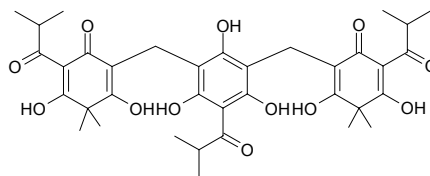
Sarothralen B $C_{33}H_{42}O_8$ (566.70). Source: DI ER CAO *Hypericum japonicum*. Ref: 660.

**11819 Japonicin C**

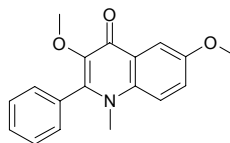
Sarothralin [96624-40-7] $C_{31}H_{34}O_8$ (534.61). Pharm: Antimicrobial. Source: DI ER CAO *Hypericum japonicum*. Ref: 658, 660.

**11820 Japonicin D**

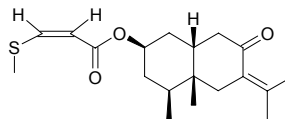
$C_{36}H_{44}O_{12}$ (668.74). Source: DI ER CAO *Hypericum japonicum*. Ref: 660.

**11821 Japonine**

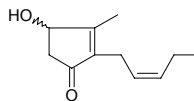
[30426-61-0] $C_{18}H_{17}NO_3$ (295.34). mp 143°C. Source: CHOU SHAN YANG *Orixa japonica*. Ref: 6.

**11822 S-Japonine**

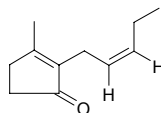
[36031-35-3] $C_{19}H_{28}O_3S$ (336.50). mp 116.5–117.0°C. Source: FENG DOU CAI *Petasites japonicus*. Ref: 6.

**11823 Jasmololone**

$C_{11}H_{16}O_2$ (180.25). Source: MAI DONG *Ophiopogon japonicus*. Ref: 660.

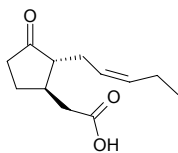
**11824 Jasmone**

[488-10-8] $C_{11}H_{16}O$ (164.25). bp 134–135°C/12mmHg. Source: SU FANG HUA *Jasminum officinale*, CHA YE *Camellia sinensis* [Syn. *Thea sinensis*], DAI DAI HUA *Citrus aurantium* var. *amara*, MO LI HUA *Jasminum sambac*, SU XIN HUA *Jasminum grandiflorum*. Ref: 6, 658, 1521.

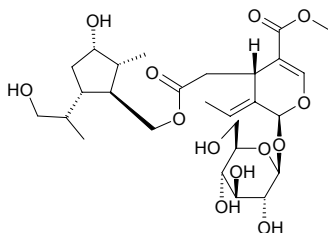


11825 (-)-Jasmonic acid

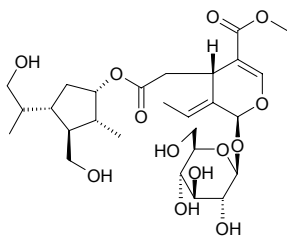
[6894-38-8] C₁₂H₁₈O₃ (210.28). Viscous oil, bp 125°C/0.001mmHg, [α]_D = -83.5° (*c* = 0.97, CHCl₃). **Pharm:** Inhibits biosynthesis of chlorophyll; promotes aging of leaves; potato micro-tuber inducer (1 μmol/L)^[3966]. **Source:** CAN DOU *Vicia faba*, SU XIN HUA *Jasminum grandiflorum*, *Lasiodiplodia theobromae*. **Ref:** 658, 1521, 3966.

**11826 Jasnudifloside F**

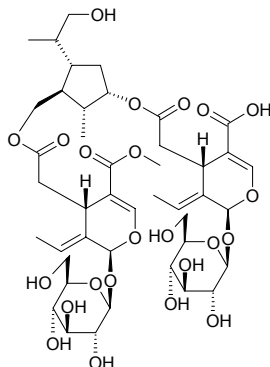
C₂₇H₄₂O₁₃ (574.63). Colorless amorphous powder, [α]_D²⁸ = -145° (*c* = 0.52, MeOH). **Source:** YING CHUN HUA *Jasminum nudiflorum* (leaf). **Ref:** 4169.

**11827 Jasnudifloside G**

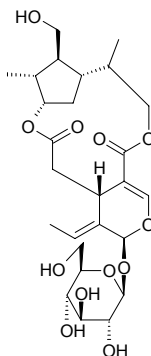
C₂₇H₄₂O₁₃ (574.63). Colorless amorphous powder, [α]_D²³ = -161° (*c* = 0.89, MeOH). **Source:** YING CHUN HUA *Jasminum nudiflorum* (leaf). **Ref:** 4169.

**11828 Jasnudifloside H**

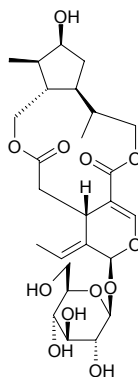
C₄₃H₆₂O₂₃ (946.96). Colorless amorphous powder, [α]_D²⁴ = -183° (*c* = 1.02, MeOH). **Source:** YING CHUN HUA *Jasminum nudiflorum* (leaf). **Ref:** 4169.

**11829 Jasnudifloside I**

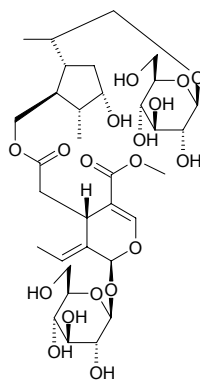
C₂₆H₃₈O₁₂ (542.59). Colorless amorphous powder, [α]_D²⁶ = -186° (*c* = 0.39, MeOH). **Source:** YING CHUN HUA *Jasminum nudiflorum* (leaf). **Ref:** 4169.

**11830 Jasnudifloside J**

C₂₆H₃₈O₁₂ (542.59). Colorless amorphous powder, [α]_D²³ = -189° (*c* = 0.17, MeOH). **Source:** YING CHUN HUA *Jasminum nudiflorum* (leaf). **Ref:** 4169.

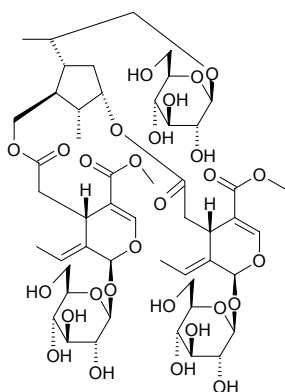
**11831 Jasnudifloside K**

C₃₃H₅₂O₁₈ (736.77). Colorless amorphous powder, [α]_D²⁴ = -135° (*c* = 0.55, MeOH). **Source:** YING CHUN HUA *Jasminum nudiflorum* (leaf). **Ref:** 4169.

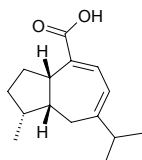


11832 Jasnudifloside L

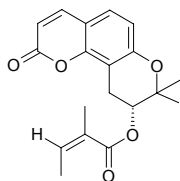
$C_{50}H_{74}O_{28}$ (1123.13). Colorless amorphous powder, $[\alpha]_D^{24} = -173^\circ$ ($c = 0.73$, MeOH). Source: YING CHUN HUA *Jasminum nudiflorum* (leaf). Ref: 4169.

**11833 Jatamansic acid**

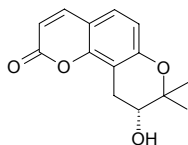
$C_{15}H_{22}O_2$ (234.34). Source: SHI YE GAN SONG *Nardostachys jatamansi*. Ref: 660.

**11834 Jatamansin**

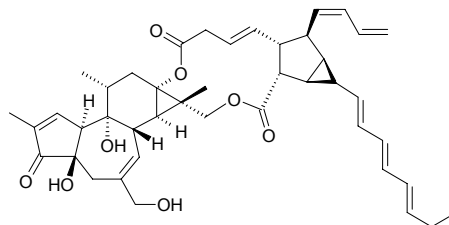
Selinidin [19427-82-8] $C_{19}H_{20}O_5$ (328.37). Crystals (Et₂O–petroleum ether), mp 100–102.5°C, mp 97–98°C, $[\alpha]_D^{29} = +20.3^\circ$ ($c = 1.474$, dioxin), $[\alpha]_D = -24^\circ$ (CHCl₃), $[\alpha]_D^{16} = -41.4^\circ$ ($c = 1.6$, CHCl₃). Pharm: Anti-atherosclerotic; antispasmodic (peripheral blood vessel and small intestine); vasodilator. Source: GAN SONG *Nardostachys chinensis*, SHI YE GAN SONG *Nardostachys jatamansi*, GAO DANG GUI *Ligusticum elatum*, YAN FENG *Libanotis buchtormensis*, *Niphogeton ternata*. Ref: 6, 661, 1521, 4156.

**11835 Jatamansinol**

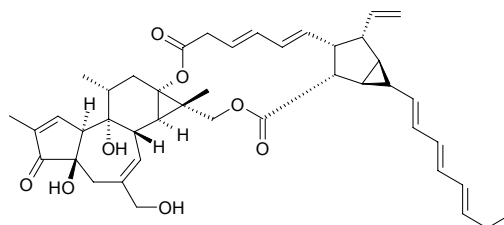
Lomatin [19380-05-3] $C_{14}H_{14}O_4$ (246.27). mp 182–183°C, $[\alpha]_D^{23} = +74.8^\circ$ (EtOH). Source: GAN SONG *Nardostachys chinensis*, SHI YE GAN SONG *Nardostachys jatamansi*, YAN FENG *Libanotis buchtormensis*. Ref: 6, 1521.

**11836 Jatropa factor C₁**

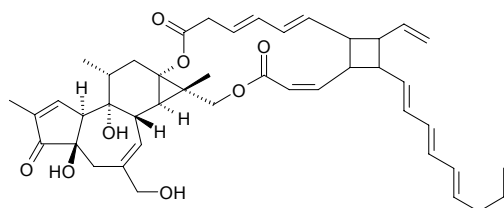
$C_{44}H_{54}O_8$ (710.92). Amorphous white powder, $[\alpha]_D^{20} = +20.9^\circ$ ($c = 0.35$, MeOH). Source: MA FENG SHU *Jatropha curcas* (seed). Ref: 4652.

**11837 Jatropa factor C₂**

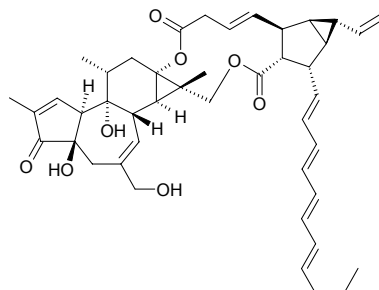
$C_{44}H_{54}O_8$ (710.92). Amorphous white powder, $[\alpha]_D^{20} = +0.6^\circ$ ($c = 0.17$, MeOH), unstable. Source: MA FENG SHU *Jatropha curcas* (seed). Ref: 4652.

**11838 Jatropa factor C₃**

$C_{44}H_{54}O_8$ (710.92). Amorphous white powder, $[\alpha]_D^{20} = +130.0^\circ$ ($c = 0.07$, MeOH), unstable. Source: MA FENG SHU *Jatropha curcas* (seed). Ref: 4652.

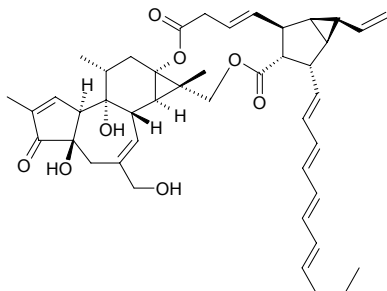
**11839 Jatropa factor C₄**

$C_{44}H_{54}O_8$ (710.92). Amorphous white powder, $[\alpha]_D^{20} = +113.0^\circ$ ($c = 0.23$, MeOH). Source: MA FENG SHU *Jatropha curcas* (seed). Ref: 4652.

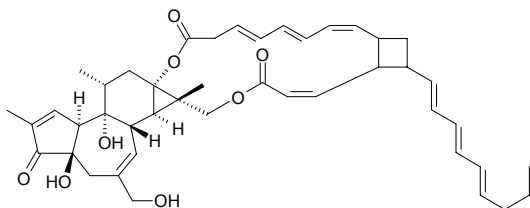


11840 Jatropa factor C₅

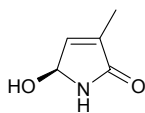
C₄₄H₅₄O₈ (710.92). Amorphous white powder, $[\alpha]_D^{20} = +113.0^\circ$ ($c = 0.23$, MeOH). **Source:** MA FENG SHU *Jatropha curcas* (seed). **Ref:** 4652.

**11841 Jatropa factor C₆**

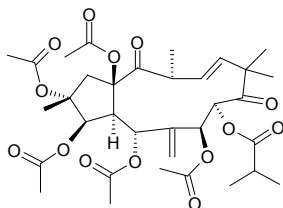
C₄₄H₅₄O₈ (710.92). Amorphous white powder, $[\alpha]_D^{20} = +69.3^\circ$ ($c = 0.14$, MeOH), unstable. **Source:** MA FENG SHU *Jatropha curcas* (seed). **Ref:** 4652.

**11842 Jatropham**

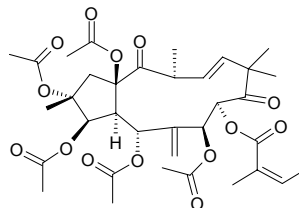
Jatrophalactam [50656-76-3] C₅H₇NO₂ (113.12). mp 131~132°C, mp 119~123°C. **Pharm:** Cytotoxic (P₃₃₈, marginally active). **Source:** MA FENG SHU *Jatropha curcas*, HUANG BAI HE *Litium hansonii*. **Ref:** 5, 1521.

**11843 Jatrophane 7**

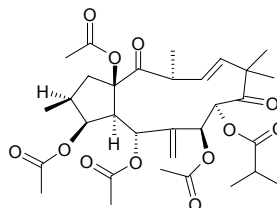
C₃₄H₄₆O₁₄ (678.74). **Pharm:** Antifeedant (*Spodopetra littoralis*, 500~1000mg/L); anti-HIV-1 (inhibition of virus-induced cytopathicity in MT-4 cells, EC₅₀ = 69µg/mL); cytotoxic (MT-4, CC₅₀ = 69µg/mL). **Source:** HAI YANG DA JI *Euphorbia paralias* (aerial parts). **Ref:** 5221.

**11844 Jatrophane 8**

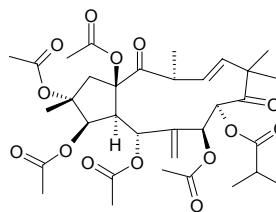
C₃₅H₄₆O₁₄ (690.75). **Pharm:** Antifeedant (*Spodopetra littoralis*, 500mg/L); anti-HIV-1 (inhibition of virus-induced cytopathicity in MT-4 cells, EC₅₀ > 100µg/mL); cytotoxic (MT-4, CC₅₀ > 100µg/mL). **Source:** HAI YANG DA JI *Euphorbia paralias* (aerial parts). **Ref:** 5221.

**11845 Jatrophane 9**

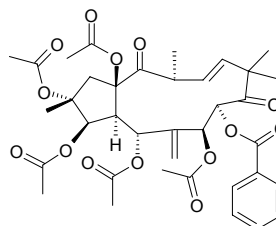
C₃₂H₄₄O₁₂ (620.70). **Pharm:** Antifeedant (*Spodopetra littoralis*, 500~1000mg/L); anti-HIV-1 (inhibition of virus-induced cytopathicity in MT-4 cells, EC₅₀ = 45µg/mL); cytotoxic (MT-4, CC₅₀ = 45µg/mL). **Source:** HAI YANG DA JI *Euphorbia paralias* (aerial parts). **Ref:** 5221.

**11846 Jatrophane 10**

C₃₅H₄₈O₁₄ (692.76). **Pharm:** Anti-HIV-1 (inhibition of virus-induced cytopathicity in MT-4 cells, EC₅₀ = 40µg/mL); cytotoxic (MT-4, CC₅₀ = 40µg/mL). **Source:** HAI YANG DA JI *Euphorbia paralias* (aerial parts). **Ref:** 5221.

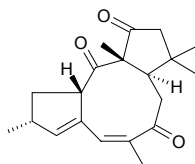
**11847 Jatrophane 11**

C₃₇H₄₄O₁₄ (712.75). **Pharm:** Anti-HIV-1 (inhibition of virus-induced cytopathicity in MT-4 cells, EC₅₀ = 79µg/mL); cytotoxic (MT-4, CC₅₀ = 79µg/mL). **Source:** HAI YANG DA JI *Euphorbia paralias* (aerial parts). **Ref:** 5221.

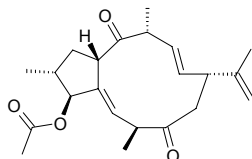


11848 Jatrophatrione

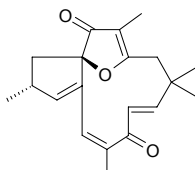
[58298-76-3] C₂₀H₂₆O₃ (314.43). mp 148–150°C. **Pharm:** Antineoplastic (mus, P₃₈₈, 3PS, 1.0–0.5mg/kg, biotic prolonged rate = 41%). **Source:** MA FENG SHU *Jatropha curcas*. **Ref:** 5, 658, 1521.

**11849 Jatropheneone**

C₂₂H₃₀O₄ (358.48). mp, 204–205°C, [α]_D²⁵ = –4.5° (c = 0.5, MeOH). **Pharm:** Antibacterial (*Staphylococcus aureus*, comparable activity with Penicillin G). **Source:** MIAN YE MA FENG SHU *Jatropha gossypifolia* (whole herb). **Ref:** 4360.

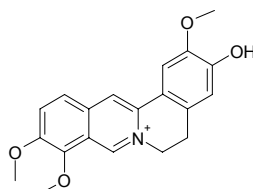
**11850 Jatrophone**

[29444-03-9] C₂₀H₂₄O₃ (312.41). mp 152–153°C. **Pharm:** Antineoplastic (mus, P₃₈₈, ED = 27mg/kg and 12mg/kg); cytotoxic (KB, *in vitro*, ED₅₀ = 0.17 μg/mL). **Source:** MA FENG SHU *Jatropha curcas*. **Ref:** 5, 658.

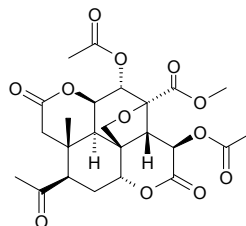
**11851 Jatrorrhizine**

Yatrorrhizine [3621-38-3] C₂₀H₂₀NO₄⁺ (338.39). Iodine: yellow lamellar crystals, mp 208–210°C. **Pharm:** Antiarrhythmic (caused by myocardial ischemia and reperfusion); antibacterial (broad spectrum); antifungal (broad spectrum); antiprotozoal; bidirectional action to heart (frog heart *in vitro*, inhibits first and then stimulates); antihypertensive (anesthetic rbt, iv); inhibits adrenaline (anesthetic rbt, iv); sedative (animal model); treatment of myocardial infarction (in coronary artery-ligated rbt). **Source:** BAN RUI TANG SONG CAO *Thalictrum petaloideum* (root: content = 0.33%)^[5508], CHENG KOU SHI DA GONG LAO *Mahonia shenii* (stem: content = 0.09%)^[5510], CHUAN DIAN SHI DA GONG LAO *Mahonia veitchiorum* (stem: content = 0.45%)^[5510], DA YE TANG SONG CAO *Thalictrum faberi* (root: content = 0.23%)^[5508], DUAN E HUANG LIAN *Coptis chinensis* var. *brevisepala* (rhizome: content = %) ^[5508], E MEI YE HUANG LIAN *Coptis*

omeiensis (rhizome: content = 1.09%)^[5508], FANG JI *Stephania tetrandra*, GU LIN YE LIAN *Coptis gulinensis* (rhizome: content = 0.92%)^[5508], HAI NAN QING NIU DAN *Tinospora hainanensis*, HE NAN TANG SONG CAO *Thalictrum honanense*, HU BEI SHI DA GONG LAO *Mahonia confusa* (stem: content = 0.17%)^[5510], HUA NAN GONG LAO MU *Mahonia japonica* (stem: content = 0.10%)^[5510], HUANG BAI *Phellodendron amurense*, HUANG LIAN *Coptis chinensis* (rhizome: mean content = 0.94%)^[5508], HUANG YE DI BU RONG *Stephania viridiflavens*, JIN SI MA WEI LIAN *Thalictrum glandulosissimum* (root: content < 0.001%)^[5508], KUAN BAO SHI DA GONG LAO *Mahonia eurybracteata* (stem: mean content of 3 origins = 0.29%)^[5510], MA WEI LIAN *Thalictrum foliolosum* (root: content = 0.09%)^[5508], RI BEN XIAO BO *Berberis thunbergii*, SAN JIAO YE HUANG LIAN *Coptis deltoidea* (rhizome: mean content = 1.32%)^[5508], SHAO CHI XIAO BO *Berberis potaninii* (root, stem: mean content = 0.930%)^[5508], SHEN HUANG ZI JIN *Corydalis lutea*, SHI DA GONG LAO MU *Mahonia bealei* (stem: mean content of 4 origins 0.26%)^[5510], TIAN XIAN TENG *Fibraurea recisa* (dried lianoid stem: content = 0.76%), TOU MING TANG SONG CAO *Thalictrum lucidum*, TU HUANG LIAN *Berberis julianae*, WANG CHUN YU LAN *Magnolia biondii* [Syn. *Magnolia fargesii*] (stem: mean content of 2 origins = 0.18%)^[5510], XI BING SHI DA GONG LAO *Mahonia gracilipes* (stem: mean content of 4 origins = 0.38%)^[5510], XI YE GONG LAO MU *Mahonia fortunei* (stem: mean content of 4 origins = 0.52%)^[5510], XI YE XIAO BO *Berberis poiretii*, XIA XU TANG SONG CAO *Thalictrum atriplex* (root: content < 0.001%)^[5508], XIAN E HUANG LIAN *Coptis linearisepala* (rhizome: content = 0.79%)^[5508], XIAN HUANG XIAO BO *Berberis diaphana* (root, stem: mean content = 0.200%)^[5508], XIAO BO *Berberis amurensis*, XIAO GUO SHI DA GONG LAO *Mahonia bodinieri* (stem: content = 0.26%)^[5510], XIAO GUO TANG SONG CAO *Thalictrum microgynum* (root: content = 0.13%)^[5508], YAN GUO CAO *Thalictrum thunbergii* (root: content < 0.001%)^[5508], YING SHUI HUANG LIAN *Thalictrum simplex* [Syn. *Thalictrum simplex* var. *brevipes*] (root: content = 0.18%)^[5508], YUN NAN HUANG LIAN *Coptis teetoides* [Syn. *Coptis teeta*] (rhizome: mean content = 1.10%)^[5508], ZHI YI XIAO BO *Berberis dubia* (root, stem: mean content = 0.249%)^[5508]. **Ref:** 2, 4, 537, 658, 687, 5501, 5508, 5510.

**11852 Javanicin**

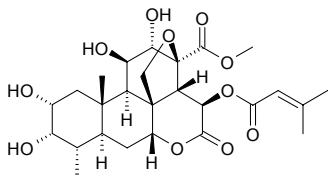
C₂₄H₂₈O₁₂ (508.48). Crystals, mp 167–168°C, [α]_D = –30° (c = 0.02, MeOH). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. **Ref:** 2.



11853 Javanicolide C

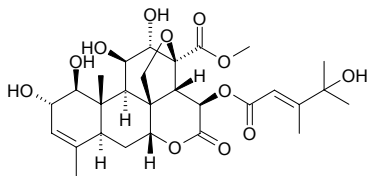
$C_{26}H_{36}O_{11}$ (524.57). Amorphous powder, $[\alpha]_D^{26} = +60.0^\circ$ ($c = 0.07$, MeOH).

Pharm: Cytotoxic inactive (*in vitro*, P_{388} , $IC_{50} > 100\mu\text{g/mL}$). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.000019%dw). **Ref:** 4748.

**11854 Javanicolide D**

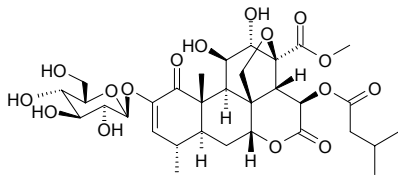
$C_{28}H_{38}O_{12}$ (566.61). Amorphous powder, $[\alpha]_D^{26} = +60.0^\circ$ ($c = 0.06$, MeOH).

Pharm: Cytotoxic (*in vitro*, P_{388} , $IC_{50} = 18\mu\text{g/mL}$, weak activity). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.00005%dw). **Ref:** 4748.

**11855 Javanicoside B**

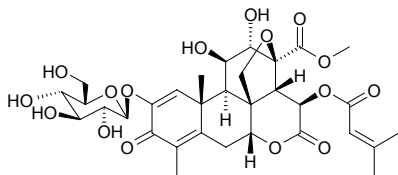
$C_{32}H_{44}O_{16}$ (684.7). Amorphous powder, $[\alpha]_D^{26} = -20.0^\circ$ ($c = 0.10$, MeOH).

Pharm: Cytotoxic (*in vitro*, P_{388} , $IC_{50} = 5.6\mu\text{g/mL}$). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.00012%dw). **Ref:** 4748.

**11856 Javanicoside C**

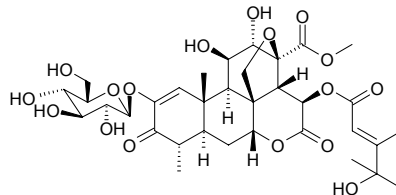
$C_{32}H_{40}O_{16}$ (680.67). Amorphous powder, $[\alpha]_D^{26} = -34.0^\circ$ ($c = 0.10$, MeOH).

Pharm: Cytotoxic (*in vitro*, P_{388} , $IC_{50} = 18\mu\text{g/mL}$, weak activity). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.000026%dw). **Ref:** 4748.

**11857 Javanicoside D**

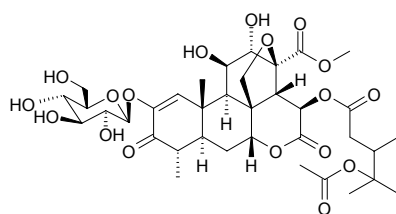
$C_{35}H_{48}O_{17}$ (740.76). Amorphous powder, $[\alpha]_D^{24} = +4.2^\circ$ ($c = 0.24$, MeOH).

Pharm: Cytotoxic (*in vitro*, P_{388} , $IC_{50} = 89\mu\text{g/mL}$, weak activity). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.000059%dw). **Ref:** 4748.

**11858 Javanicoside E**

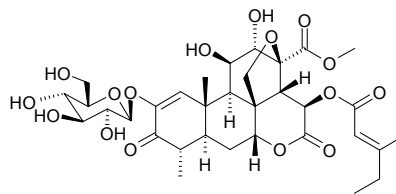
$C_{36}H_{50}O_{18}$ (770.79). Amorphous powder, $[\alpha]_D^{24} = -2.3^\circ$ ($c = 0.44$, MeOH).

Pharm: Cytotoxic (*in vitro*, P_{388} , $IC_{50} = 16\mu\text{g/mL}$, weak activity). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.00011%dw). **Ref:** 4748.

**11859 Javanicoside F**

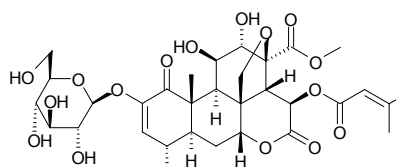
$C_{33}H_{44}O_{16}$ (696.71). Amorphous powder, $[\alpha]_D^{24} = +10.4^\circ$ ($c = 0.24$, MeOH).

Pharm: Cytotoxic (*in vitro*, P_{388} , $IC_{50} = 50\mu\text{g/mL}$, weak activity). **Source:** YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*] (seed: yield = 0.00006%dw). **Ref:** 4748.

**11860 Javanicoside I**

$C_{32}H_{42}O_{16}$ (682.68). Amorphous powder, $[\alpha]_D^{26} = -2.0^\circ$ ($c = 0.65$, MeOH).

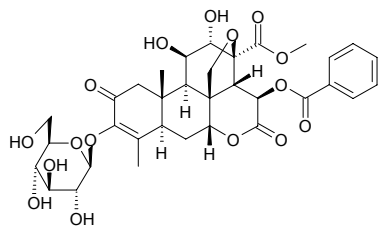
Pharm: Cytotoxic (P_{388} , $IC_{50} = 7.5\mu\text{g/mL}$). **Source:** KU YA DAN ZI *Brucea amarissima* (seed). **Ref:** 3893.



11861 Javanicoside J

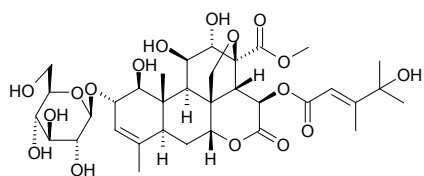
$C_{34}H_{40}O_{16}$ (704.69). Amorphous powder, $[\alpha]_D^{26} = +1.3^\circ$ ($c = 0.24$, MeOH).

Pharm: Cytotoxic (P_{388} , $IC_{50} = 2.3\mu\text{g/mL}$). **Source:** KU YA DAN ZI *Brucea amarissima* (seed). **Ref:** 3893.

**11862 Javanicoside K**

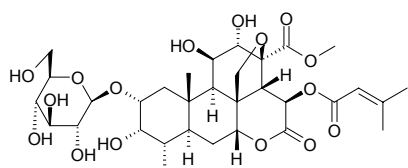
$C_{34}H_{48}O_{17}$ (728.75). Amorphous powder, $[\alpha]_D^{26} = +31^\circ$ ($c = 0.12$, MeOH).

Pharm: Cytotoxic (P_{388} , $IC_{50} = 1.6\mu\text{g/mL}$). **Source:** KU YA DAN ZI *Brucea amarissima* (seed). **Ref:** 3893.

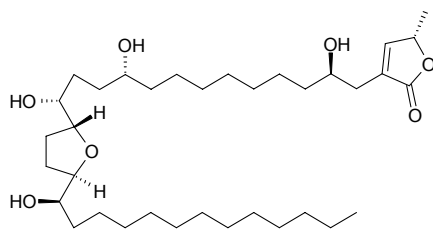
**11863 Javanicoside L**

$C_{32}H_{46}O_{16}$ (686.71). Amorphous powder, $[\alpha]_D^{26} = -5.8^\circ$ ($c = 0.31$, MeOH).

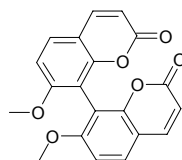
Pharm: Cytotoxic (P_{388} , $IC_{50} = 2.9\mu\text{g/mL}$). **Source:** KU YA DAN ZI *Brucea amarissima* (seed). **Ref:** 3893.

**11864 Javoricin**

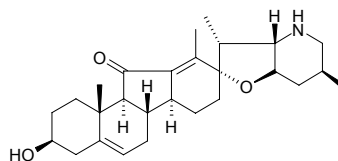
[172588-18-0] $C_{35}H_{64}O_7$ (596.90). White amorphous powder (hexane), mp 70°C , $[\alpha]_D^{25} = +13.6^\circ$ ($c = 0.1$, chloroform). **Pharm:** Antineoplastic (A549, $IC_{50} = 0.017\mu\text{g/mL}$, MCF7, $IC_{50} = 0.23\mu\text{g/mL}$, HT29, $IC_{50} = 1.8\mu\text{g/mL}$); cytotoxic (BST, $IC_{50} = 4.9\mu\text{g/mL}$, PD, InRt = 47%). **Source:** CI GUO FAN LI ZHI *Annona muricata*. **Ref:** 1062.

**11865 Jayantinin**

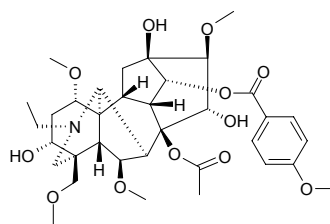
7,7'-Dimethoxy-8,8'-bicooumarin $C_{20}H_{14}O_6$ (350.33). mp $255\sim 256^\circ\text{C}$. **Source:** SHI JIAO CAO *Boenninghausenia sessilicarpa*, YAN JIAO CAO *Boenninghausenia albiflora*. **Ref:** 2495.

**11866 Jervine**

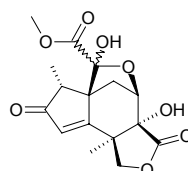
[469-59-0] $C_{27}H_{39}NO_3$ (425.62). mp $237\sim 238^\circ\text{C}$. **Pharm:** Antibacterial; teratogen (sheep). **Source:** BAI LI LU *Veratrum album*, LV LI LU *Veratrum viride*, MAO YE LI LU *Veratrum grandiflorum*, LI LU *Veratrum nigrum*. **Ref:** 658.

**11867 Jesaconitine**

[16298-90-1] $C_{35}H_{49}NO_{12}$ (675.78). Amorphous, mp $128\sim 131^\circ\text{C}$. **Pharm:** Intestinal smooth muscle stimulant (mammal, in low dose); similar action with aconitine; toxin (mammal). **Source:** BO YE WU TOU *Aconitum fischeri*, XIE XING WU TOU *Aconitum subcuneatum*, KU YE WU TOU *Aconitum sachalinense*. **Ref:** 658.

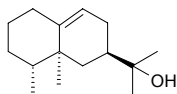
**11868 Jiadifenin**

$C_{16}H_{18}O_8$ (338.32). Colorless amorphous, $[\alpha]_D^{22} = -152.9^\circ$ ($c = 0.24$, EtOH). **Pharm:** Neurotropic (primary cultures of fetal rat cortical neuron, $0.1\sim 10\mu\text{mol/L}$, significantly promotes neurite outgrowth). **Source:** JIA DI FENG PI *Illicium jiadifengpi* (pericarp; yield = 0.00014%dw). **Ref:** 4621.

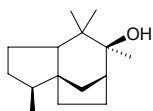


11869 Jinkoheremol

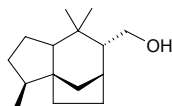
[86747-08-2] C₁₅H₂₆O (222.37). Pharm: CNS depressant (mus, inhibits spontaneous motion induced by pervitine and apomorphine, increases content of homovanillic acid in cerebrum). Source: BAI MU XIANG *Aquilaria sinensis*, CHEN XIANG *Aquilaria agallocha*. Ref: 13, 1789.

**11870 Jinkohol I**

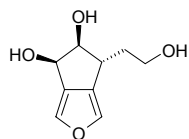
C₁₅H₂₆O (222.37). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

**11871 Jinkohol II**

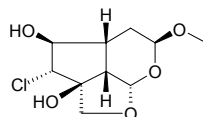
[86703-03-9] C₁₅H₂₆O (222.37). Crystals (CHCl₃), mp 79–81°C, [α]_D²⁰ = +32.4° (c = 0.26, CHCl₃). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13, 1521.

**11872 Jiofuran**

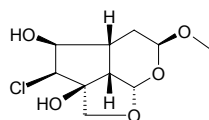
[124902-19-8] C₉H₁₂O₄ (184.19). Amorphous powder, [α]_D²⁴ = –30.4° (c = 0.19, MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 1521.

**11873 Jioglutin A**

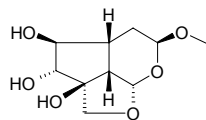
[124902-16-5] C₁₀H₁₅ClO₅ (250.68). Amorphous powder, [α]_D²⁰ = +63.3° (c = 1, MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 1521.

**11874 Jioglutin B**

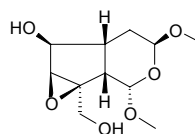
[124989-76-0] C₁₀H₁₅ClO₅ (250.68). Amorphous powder, [α]_D²⁰ = –63.2° (c = 0.94, MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 1521.

**11875 Jioglutin C**

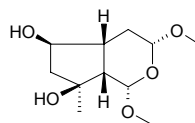
[124902-17-6] C₁₀H₁₆O₆ (232.24). Amorphous powder, [α]_D²⁰ = +58.1° (c = 0.89, MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 1521.

**11876 Jioglutin D**

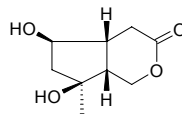
[128443-55-0] C₁₁H₁₈O₆ (246.26). Amorphous powder, [α]_D²⁰ = +54.9° (c = 1.23, MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 1521.

**11877 Jioglutin E**

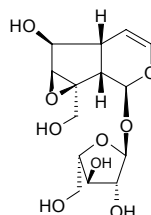
[128397-37-5] C₁₁H₂₀O₅ (232.28). Amorphous powder, [α]_D²⁰ = –118.2° (c = 0.95, MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 1521.

**11878 Jioglutolide**

C₉H₁₄O₄ (186.21). Needles (Me₂CO), mp 141–142°C, [α]_D²⁰ = –8.4° (c = 1.19, MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 1521.

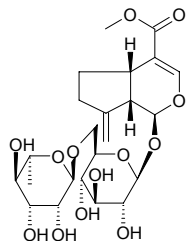
**11879 Jioglutoside A**

[124167-99-3] C₁₄H₂₀O₉ (332.31). Amorphous powder, [α]_D²⁰ = –158.8° (c = 1.65, MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 1521.

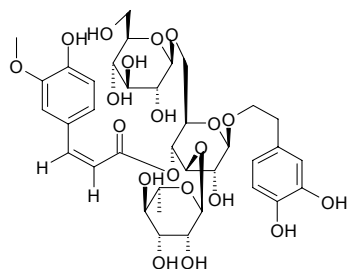


11880 Jioglutoside B

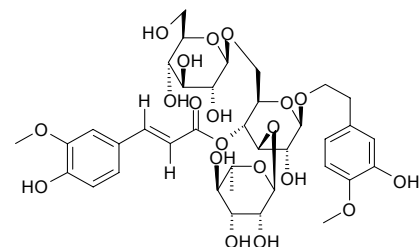
$C_{23}H_{34}O_{13}$ (518.52). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2.

**11881 Jionoside A₂**

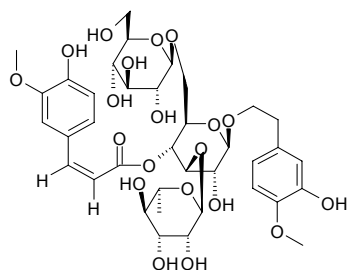
[120406-36-2] $C_{36}H_{48}O_{20}$ (800.77). Amorphous powder, $[\alpha]_D^{24} = -40.3^\circ$ ($c = 0.36$, MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 1521.

**11882 Jionoside B₁**

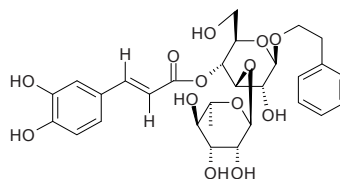
[120406-37-3] $C_{37}H_{50}O_{20}$ (814.80). Amorphous powder, $[\alpha]_D^{24} = -62.8^\circ$ ($c = 0.31$, MeOH). Pharm: Immunosuppressant (mus, 100mg/kg, orl, inhibits formation of the lemlytic spots formation cells, HPFC ,cells in spleen, InRt = 36.1%); tonic, antianemic and antipyretic (in Adhesive Rehmannia Dried Root, GAN DI HUANG, *Rehmannia glutinosa*). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 658, 660, 1521, 1785.

**11883 Jionoside B₂**

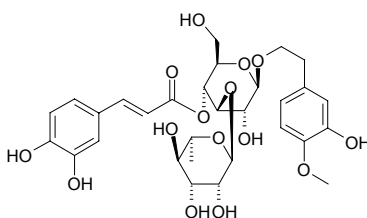
[120445-12-7] $C_{37}H_{50}O_{20}$ (814.80). Amorphous powder, $[\alpha]_D^{24} = -42.5^\circ$ ($c = 0.34$, MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 1521.

**11884 Jionoside C**

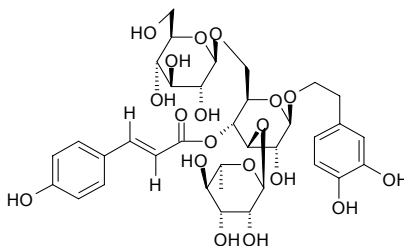
[120406-33-9] $C_{29}H_{36}O_{13}$ (592.60). Amorphous powder, $+2H_2O$, $[\alpha]_D^{25} = -86.9^\circ$ ($c = 0.72$, MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 1521.

**11885 Jionoside D**

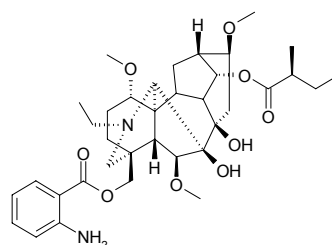
[120406-34-0] $C_{30}H_{38}O_{15}$ (638.63). Off-white powder, $+1H_2O$, $[\alpha]_D^{28} = -95.7^\circ$ ($c = 0.22$, MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*], DA YE ZUI YU CAO *Buddleja davidii*. Ref: 2, 1521.

**11886 Jionoside E**

[120406-35-1] $C_{35}H_{46}O_{19}$ (770.75). Amorphous powder, $+2.5H_2O$, $[\alpha]_D^{28} = -64.6^\circ$ ($c = 0.11$, MeOH). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *huechingensis*]. Ref: 2, 1521.

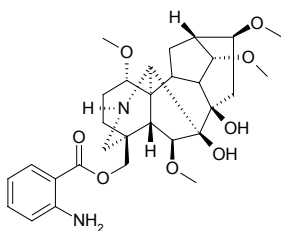
**11887 Jiufengdine**

$C_{36}H_{52}N_2O_9$ (656.82). White amorphous powder, $[\alpha]_D = +63.8^\circ$ ($c = 0.5$, $CHCl_3$). Source: HEI SHUI CUI QUE HUA BIAN ZHONG *Delphinium potaninii* var. *jiufengshanense* (root). Ref: 4227.

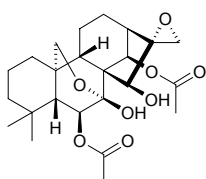


11888 Jiufengtine

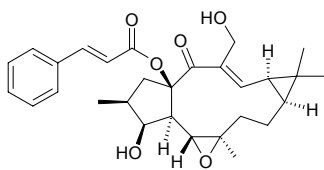
$C_{30}H_{42}N_2O_8$ (558.68). White amorphous powder, $[\alpha]_D^{25} = +46.0^\circ$ ($c = 0.5$, $CHCl_3$). **Source:** HEI SHUI CUI QUE HUA BIAN ZHONG *Delphinium potaninii* var. *jiufengshanense* (root). **Ref:** 4227.

**11889 Jiuhuanin A**

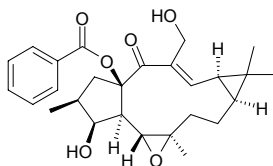
$C_{24}H_{34}O_8$ (450.53). mp 203~205°C, $[\alpha]_D^{25} = -98.6^\circ$ ($c = 0.2$, MeOH). **Source:** JIU HUA DA E XIANG CHA CAI *Isodon macrocalyx* var. *jiuhua*. **Ref:** 4067.

**11890 Jolkinol A**

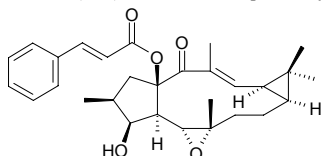
$C_{29}H_{36}O_6$ (480.61). White amorphous powder, $[\alpha]_D^{25} = -120^\circ$ ($c = 0.18$, $CHCl_3$). **Pharm:** Cytotoxic (*in vitro* MCF7 cell lines, $GI_{50} = (95.3 \pm 2.7) \mu\text{mol/L}$, Doxorubicin, $GI_{50} = (42.8 \pm 8.2) \mu\text{mol/L}$; NCI-H460 cell lines, $GI_{50} = (57.3 \pm 7.6) \mu\text{mol/L}$, Doxorubicin, $GI_{50} = (94.0 \pm 8.7) \mu\text{mol/L}$; SF268 cell lines, $GI_{50} > 100 \mu\text{mol/L}$, Doxorubicin, $GI_{50} = (93.0 \pm 7.0) \mu\text{mol/L}$). **Source:** DUAN ROU MAO DA JI *Euphorbia pubescens* (whole herb). **Ref:** 4949.

**11891 Jolkinol A'**

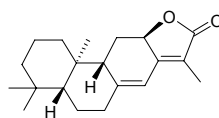
$C_{27}H_{34}O_6$ (454.57). White amorphous powder, $[\alpha]_D^{25} = -78^\circ$ ($c = 0.10$, $CHCl_3$). **Source:** DUAN ROU MAO DA JI *Euphorbia pubescens* (whole herb). **Ref:** 4949.

**11892 Jolkinol B**

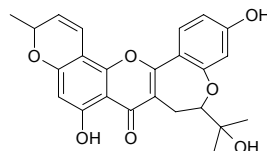
$C_{29}H_{36}O_5$ (464.61). Colorless oil. **Source:** DA GUO DA JI *Euphorbia wallichii* (root), NAN DA JI *Euphorbia jolkini*. **Ref:** 1521, 4585.

**11893 Jolkinolide E**

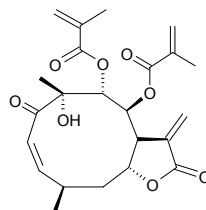
[54494-34-7] $C_{20}H_{28}O_2$ (300.44). Crystals, mp 181~182°C, mp 182~183°C, $[\alpha]_D^{20} = +340^\circ$ ($c = 0.45$, chloroform). **Source:** DA LANG DU *Euphorbia nematocypa*, NAN DA JI *Euphorbia jolkini*. **Ref:** 547, 1521.

**11894 JSPC0305368-18**

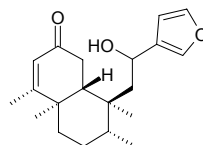
$C_{24}H_{22}O_7$ (422.44). **Source:** *Morus* sp. **Ref:** 2513.

**11895 Juanislamin**

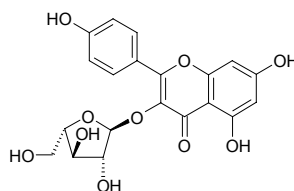
$C_{23}H_{28}O_8$ (432.47). White powder. **Pharm:** Cytotoxic (U937, $IC_{50} = 3.0 \mu\text{mol/L}$; control Parthenolide, $IC_{50} = 1.9 \mu\text{mol/L}$). **Source:** YOU KA MEI JU *Calea urticifolia* (leaf). **Ref:** 3887.

**11896 (12R)-Judrpxucascainone**

$C_{20}H_{28}O_3$ (316.44). **Source:** GE LUN BI YA BA DOU *Croton schiedeanus*. **Ref:** 4552.

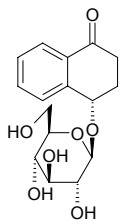
**11897 Juglanin**

Kaempferol 3-*O*- α -L-arabinofuranoside [5041-67-8] $C_{20}H_{18}O_{10}$ (418.36) mp 224~225°C (containing 1.5H₂O). **Pharm:** Aldose reductase inhibitor (rat, eye lens, 10 $\mu\text{mol/L}$ InRt = 64.8%, 1 $\mu\text{mol/L}$ InRt = 6.3%); hepatoprotective (primary cultures of rat hepatocytes, H₂O₂-induced toxicity, 50 $\mu\text{mol/L}$, relative protection = 39.7% (H₂O₂-treated, relative protection = 0.0%, control, relative protection = 100%), positive control Silibinin, Relative protection = 74.9%)^[4996]. **Source:** HU TAO YE *Juglans regia*, HUI XIANG JING YE *Foeniculum vulgare*, TOU GU CAO *Speranskia tuberculata*, RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts), ZHEN ZHU MEI *Sorbaria sorbifolia*. **Ref:** 6, 1631, 4996.

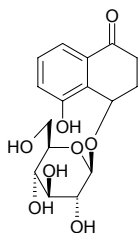


11898 Juglanoside A

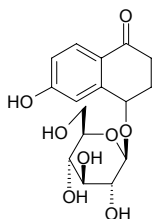
(4S)-4-Hydroxy- α -tetralone 4-*O*- β -D-glucopyranoside C₁₆H₂₀O₇ (324.33). Amorphous powder, $[\alpha]_D^{25} = -77^\circ$ ($c = 0.9$, MeOH). Source: DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (Fruit). Ref: 4285.

**11899 Juglanoside B**

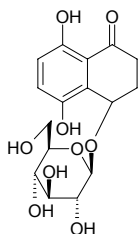
(4S)-4,5-Dihydroxy- α -tetralone 4-*O*- β -D-glucopyranoside C₁₆H₂₀O₈ (340.33). Amorphous powder, $[\alpha]_D^{25} = -13^\circ$ ($c = 0.5$, MeOH). Source: DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (Fruit). Ref: 4285.

**11900 Juglanoside C**

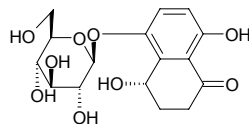
(4S)-4,6-Dihydroxy- α -tetralone 4-*O*- β -D-glucopyranoside C₁₆H₂₀O₈ (340.33). Amorphous powder, $[\alpha]_D^{25} = -36^\circ$ ($c = 0.4$, MeOH). Source: DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (Fruit). Ref: 4285.

**11901 Juglanoside D**

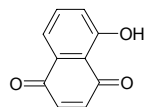
(4S)-4,5,8-Trihydroxy- α -tetralone 4-*O*- β -D-glucopyranoside C₁₆H₂₀O₉ (356.33). Amorphous powder, $[\alpha]_D^{25} = -45^\circ$ ($c = 0.2$, MeOH). Source: DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (Fruit). Ref: 4285.

**11902 Juglanoside E**

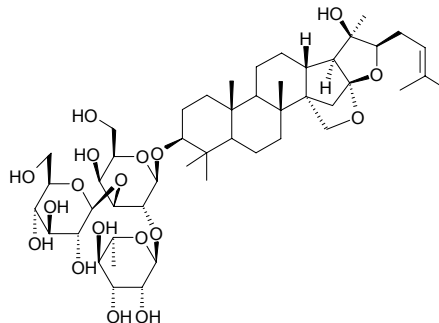
(4S)-4,5,8-Trihydroxy- α -tetralone 5-*O*- β -D-glucopyranoside C₁₆H₂₀O₉ (356.33). Amorphous powder, $[\alpha]_D^{25} = -65^\circ$ ($c = 1.1$, MeOH). Source: DONG BEI HU TAO *Juglans mandshurica* var. *sieboldiana* (Fruit). Ref: 4285.

**11903 Juglone**

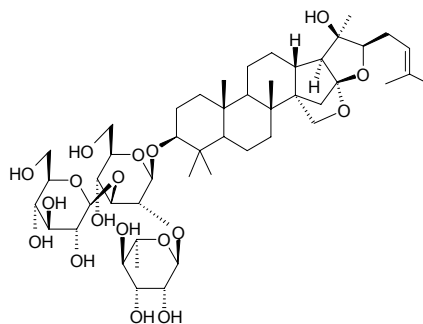
5-Hydroxy-1,4-naphthoquinone; Yuglon [481-39-0] C₁₀H₆O₃ (174.16). mp 153~155°C. Pharm: Allelopathic agent (produced from walnut tree *Juglans regia*); antibacterial (broad spectrum); antineoplastic (animal model); antifungal (*Aspergillus flavus*); antiviral (influenza virus A and B); insect antifeedant (*Scolytus multistriatus*); sedative (mammal and fish); molluscicide; ichthyotoxin (MLC = 0.2×10^{-6})^[4185]. Source: HEI HU TAO *Juglans nigra*, HU TAO REN *Juglans regia*, CU PI SHAN HE TAO *Carya ovata*, MEI GUO SHAN HE TAO *Carya illinoensis*, HUA XIANG SHU YE *Platycarya strobilacea*. Ref: 658, 4185.

**11904 Jujubasaponin IV**

[146445-93-4] C₄₈H₇₈O₁₈ (943.15). Amorphous powder, mp 185~187°C, $[\alpha]_D = -3.64^\circ$ ($c = 5.0$, methanol). Pharm: Anti-sweetener (1mmol/L, inhibits sweet taste of 0.2mol/L sugar). Source: DA ZAO *Ziziphus jujuba*. Ref: 970.

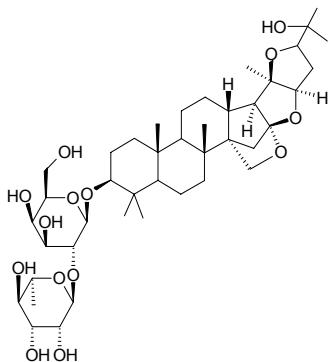
**11905 Jujubasaponin V**

[146503-31-3] C₄₈H₇₈O₁₈ (943.15). Amorphous powder, mp 210~212°C, $[\alpha]_D = -14.2^\circ$ ($c = 4.3$, methanol). Pharm: Anti-sweetener (1mmol/L, inhibits sweet taste of 0.2mol/L sugar). Source: DA ZAO *Ziziphus jujuba*. Ref: 970.

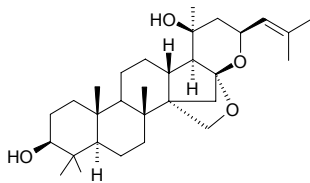


11906 Jujubasaponin VI

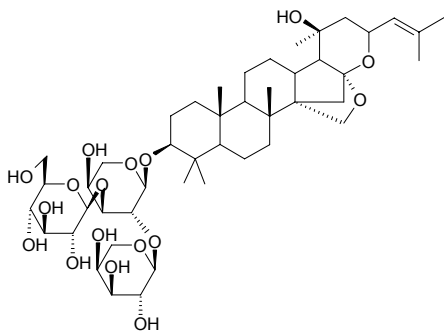
[146445-94-5] C₄₂H₆₈O₁₄ (797.00). Amorphous powder, mp 199~201°C, [α]_D = 28.1° (c = 4.5, methanol). **Pharm:** Anti-sweetener (1mmol/L, inhibits sweet taste of 0.2mol/L sugar). **Source:** DA ZAO *Ziziphus jujuba*. **Ref:** 970.

**11907 Jujubogenin**

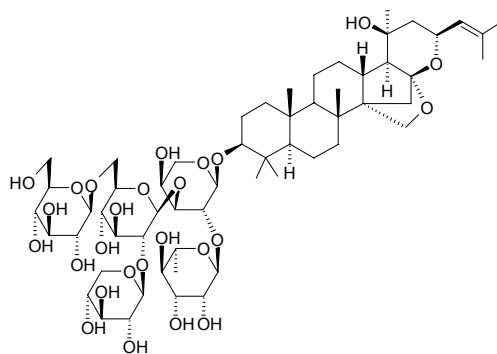
[54815-36-0] C₃₀H₄₈O₄ (472.71). **Source:** SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. **Ref:** 2.

**11908 Jujubogenin 3-O- α -L-arabinofuranosyl-(1→2)-[β -D-glucopyranosyl-(1→3)]- α -L-arabinopyranoside**

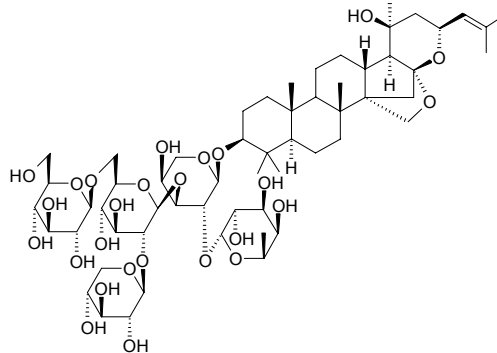
C₄₆H₇₄O₁₇ (899.09). **Source:** JIA MA CHI XIAN *Bacopa monniera* (aerial parts). **Ref:** 4316.

**11909 Jujuboside A**

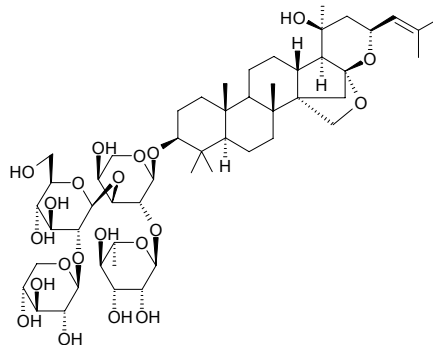
3-O-[α -L-Rhamnopyranosyl-(1→2)-[β -D-glucopyranosyl-(1→6)-[β -D-xylopyranosyl-(1→2)]- β -D-glucopyranosyl-(1→3)]- α -L-arabinopyranoside] [55466-04-1] C₅₈H₉₄O₂₆ (1207.38). **Pharm:** Inhibits hippocampal formation (*in vitro* and *in vivo*); inhibits Glu-mediated excitatory signal pathway (in hippocampus and probably acts through its anti-calmodulin action, similar effect with TFP)^[5433]. **Source:** DA ZAO *Ziziphus jujuba*, SUAN ZAO REN *Ziziphus jujuba* var. *spinosa* (seed: mean content of 4 origins = 0.062%^[5508]). **Ref:** 2, 5433, 5508.

**11910 Jujuboside A₁**

3-O-[β -D-Glucopyranosyl-(1→6)-[β -D-xylopyranosyl-(1→2)]- β -D-glucopyranosyl-(1→3)-[α -D-fucopyranosyl-(1→2)]- α -L-arabinopyranoside] [194851-84-8] C₅₈H₉₄O₂₆ (1207.38). Amorphous powder (water-methanol), mp 223~225°C, [α]_D²⁹ = -47.6° (c = 0.3, methanol). **Pharm:** Antihistamine (inhibits histamine release, rat peritoneum oozing cells, caused by antigen-antibody reaction, 100 μ mol/L, InRt = 30.3%). **Source:** SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. **Ref:** 971.

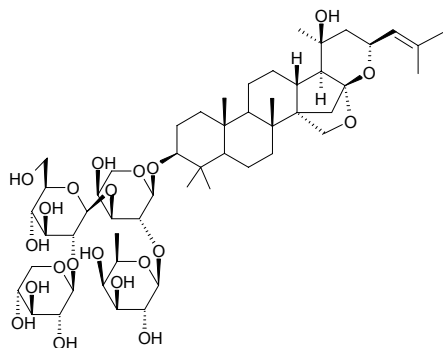
**11911 Jujuboside B**

[55466-05-2] C₅₂H₈₄O₂₁ (1045.24). **Pharm:** Anti-sweetener (1mmol/L, inhibits sweet taste of 0.2mol/L sugar). **Source:** DA ZAO *Ziziphus jujuba*, SUAN ZAO REN *Ziziphus jujuba* var. *spinosa* (seed: mean content of 4 origins = 0.037%^[5508]). **Ref:** 2, 1754, 5508.

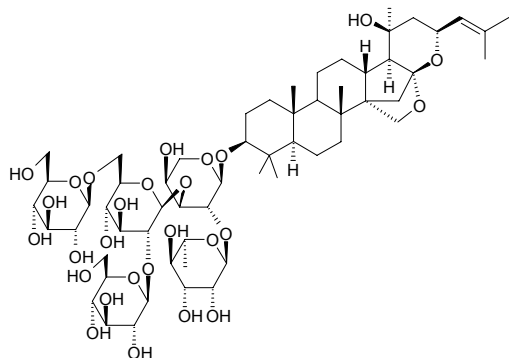


11912 Jujuboside B₁

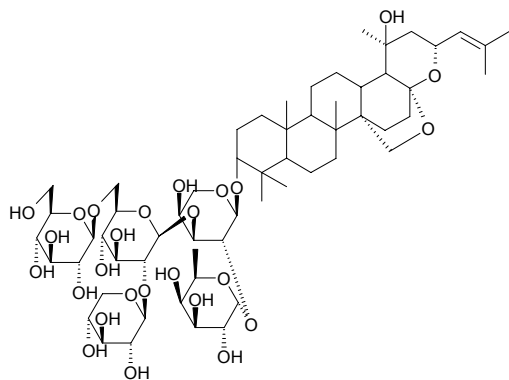
C₅₂H₈₄O₂₁ (1045.24). Source: DA ZAO *Ziziphus jujuba*. Ref: 660.

**11913 Jujuboside C**

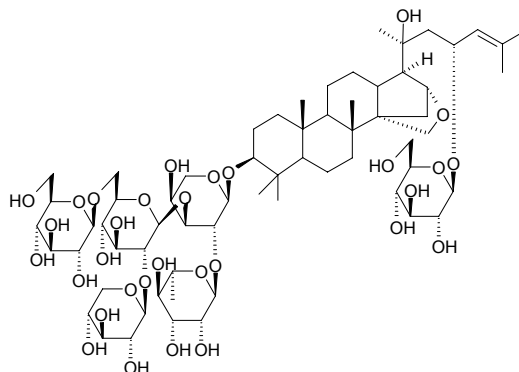
[194852-14-7] C₅₉H₉₆O₂₇ (1237.41). Colorless thin crystals (water-methanol), mp 229–231°C, [α]_D²⁹ = –32.8° (c = 0.3, methanol). Pharm: Antihistamine (inhibits histamine release, rat peritoneum oozing cells, caused by antigen-antibody reaction, 100 μmol/L, InRt = 71.4%). Source: SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. Ref: 971.

**11914 Jujuboside D**

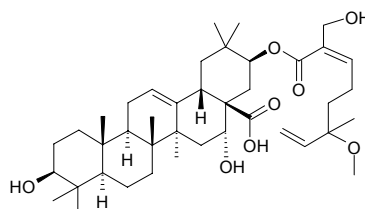
C₅₉H₉₆O₂₆ (1221.41). White powder, mp 171–174°C. Source: SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. Ref: 4847.

**11915 Jujuboside E**

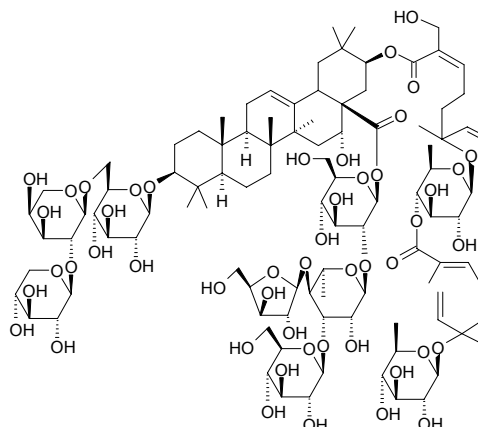
3β,20,23-Trihydroxy-16,30-epoxy-dammar-24-ene-23-O-β-D-glucopyranosyl-3-O-β-D-xylopyranosyl(1→2)-[β-D-glucopyranosyl(1→6)]-β-D-glucopyranosyl(1→3)-[α-L-rhamnopyranosyl(1→2)]-α-L-arabinopyranoside C₆₄H₁₀₆O₃₁ (1371.54). White powder, mp 171–174°C. Source: SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. Ref: 2481.

**11916 Julibrogenin A**

21-O-(2-Hydroxymethyl-6-methyl-6-methoxy-2,7-octadienyl)acacic acid C₄₁H₆₄O₈ (684.96). White powder, mp 244–246°C. Source: HE HUAN PI *Albizia julibrissin*. Ref: 375.

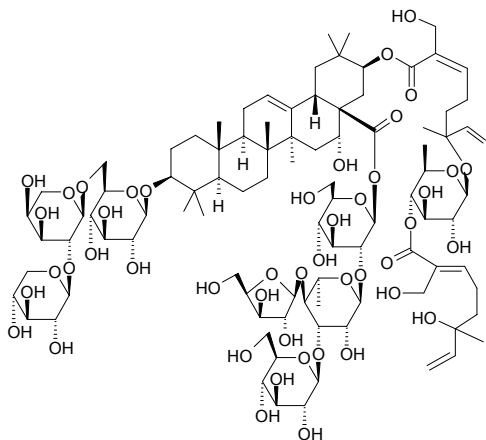
**11917 Julibroside**

3-O-[β-D-Xylopyranosyl-(1→2)-α-L-arabinopyranosyl-(1→6)]-β-D-glucopyranosyl]-21-O-[(6S)-2-trans-2-hydroxymethyl-6-methyl-6-O-[4-O-((6S)-2-trans-2,6-dimethyl-6-O-(6-deoxy-β-D-glucopyranosyl)-2,7-octadienyl)-6-deoxy-β-D-glucopyranosyl]-2,7-octadienyl]-28-O-β-glucopyranosyl-(1→3)-α-L-arabinofuranosyl-(1→4)]-α-L-rhamnopyranosyl-(1→2)-β-D-glucopyranosyl ester C₁₀₁H₁₆₀O₄₉ (2158.37). White powder, mp 170–172°C. Source: HE HUAN PI *Albizia julibrissin*. Ref: 374.

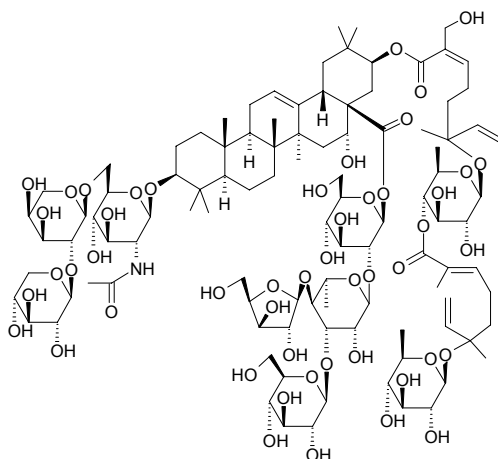


11918 Julibroside J₂

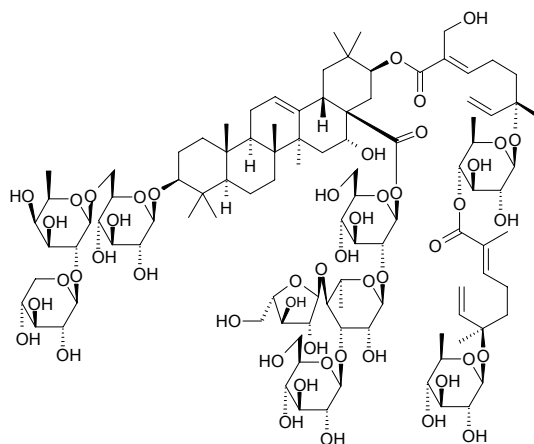
3-*O*-[β -*D*-Xylopyranosyl-(1 \rightarrow 2)- α -*L*-arabinopyranosyl-(1 \rightarrow 6)- β -*D*-glucopyranosyl]-21-*O*-{(6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-*O*-[4-*O*-{(6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-hydroxy-2,7-octadienyl]-6-deoxy- β -*D*-glucopyranosyl]-2,-7-octadienyl}-acacic acid 28-*O*- β -*D*-glucopyranosyl-(1 \rightarrow 3)- α -*L*-arabinofuranosyl-(1 \rightarrow 4)]- α -*L*-rhamnopyranosyl-(1 \rightarrow 2)- β -*D*-glucopyranosyl ester C₉₅H₁₅₀O₄₆ (2028.23). White powder, mp 202–204°C. Source: HE HUAN PI *Albizzia julibrissin*. Ref: 374.

**11919 Julibroside J₃**

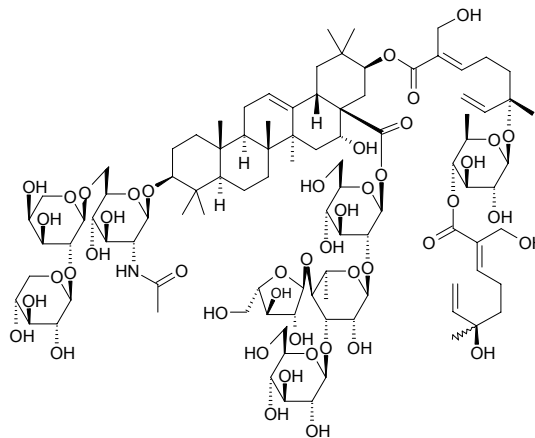
3-*O*-[β -*D*-Xylopyranosyl-(1 \rightarrow 2)- α -*L*-arabinopyranosyl-(1 \rightarrow 6)-2-acetamido-2-deoxy- β -*D*-glucopyranosyl]-21-*O*-{(6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-*O*-[4-*O*-{(6*S*)-2-*trans*-2,6-dimethyl-6-*O*-(6-deoxy- β -*D*-glucopyranosyl)-2,7-octadienyl]-6-deoxy- β -*D*-glucopyranosyl]-2,-7-octadienyl}-acacic acid 28-*O*- β -*D*-glucopyranosyl-(1 \rightarrow 3)- α -*L*-arabinofuranosyl-(1 \rightarrow 4)]- α -*L*-rhamnopyranosyl-(1 \rightarrow 2)- β -*D*-glucopyranosyl ester C₁₀₃H₁₆₃NO₄₉ (2199.42). White powder, mp 204–206°C. Source: HE HUAN PI *Albizzia julibrissin*. Ref: 374.

**11920 Julibroside J₅**

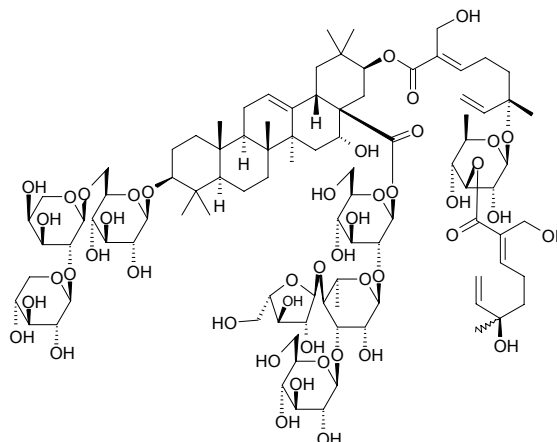
3-*O*-[β -*D*-Xylopyranosyl(1 \rightarrow 2)- α -*L*-fucopyranosyl(1 \rightarrow 6)- β -*D*-glucopyranosyl]-21-*O*-{(6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-*O*-[4-*O*-{(6*R*)-2-*trans*-2,6-dimethyl-6-*O*-(β -*D*-quinovopyranosyl)-2,7-octadienyl]- β -*D*-quinovopyranosyl-2,7-octadienyl}-acacic acid 28-*O*- β -*D*-glucopyranosyl-(1 \rightarrow 3)-[α -*L*-arabinofuranosyl(1 \rightarrow 4)]- α -*L*-rhamnopyranosyl(1 \rightarrow 2)- β -*D*-glucopyranosyl ester C₁₀₁H₁₆₀O₄₉ (2172.40). White powder, $[\alpha]_D^{14} = -35.0^\circ$ ($c = 0.050$, 70% MeOH). Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

**11921 Julibroside J₆**

3-*O*-[β -*D*-Xylopyranosyl(1 \rightarrow 2)- α -*L*-arabinopyranosyl(1 \rightarrow 6)- β -*D*-2-deoxy-2-acetamido-glucopyranosyl]-21-*O*-{(6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-*O*-[4-*O*-{(6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-hydroxy-2,7-octadienyl]- β -*D*-quinovopyranosyl-2,7-octadienyl}-acacic acid 28-*O*- β -*D*-glucopyranosyl-(1 \rightarrow 3)-[α -*L*-arabinofuranosyl(1 \rightarrow 4)]- α -*L*-rhamnopyranosyl(1 \rightarrow 2)- β -*D*-glucopyranosyl ester C₉₇H₁₅₃NO₄₆ (2069.28). White powder, $[\alpha]_D^{17} = -34.9^\circ$ ($c = 0.042$, 70% MeOH). Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

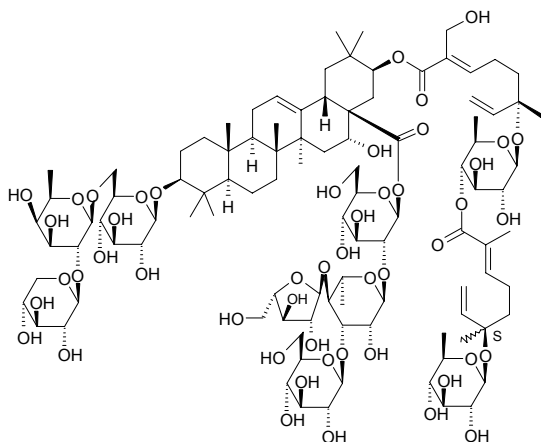
**11922 Julibroside J₇**

C₉₅H₁₅₀O₄₆ (2028.23). White powder. Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

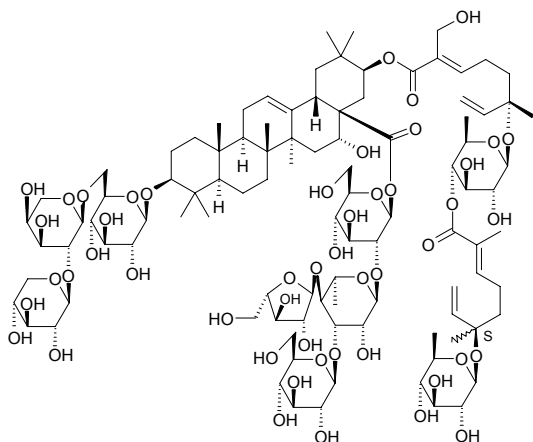


11923 Julibroside J₈

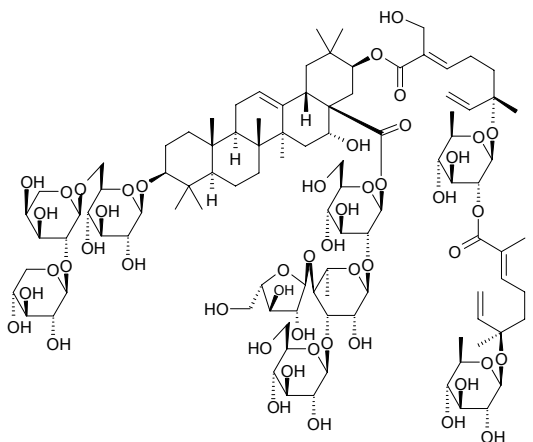
C₁₀₂H₁₆₂O₄₉ (2172.40). White powder, $[\alpha]_D^{14} = -28.6^\circ$ ($c = 0.035$, 70% MeOH). Source: HE HUAN PI *Albizia julibrissin*. Ref: 8.

**11924 Julibroside J₉**

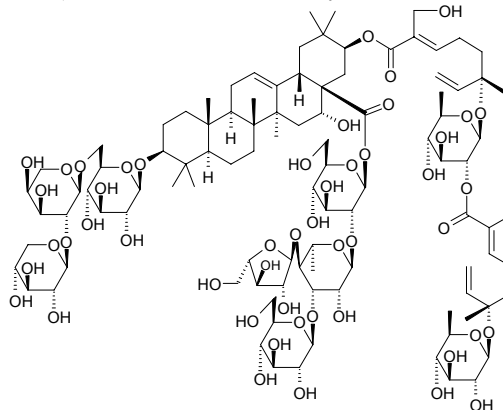
C₁₀₁H₁₆₀O₄₉ (2158.37). White powder, $[\alpha]_D^{14} = -32.5^\circ$ ($c = 0.11$, 70% MeOH). Source: HE HUAN PI *Albizia julibrissin*. Ref: 8.

**11925 Julibroside J₁₀**

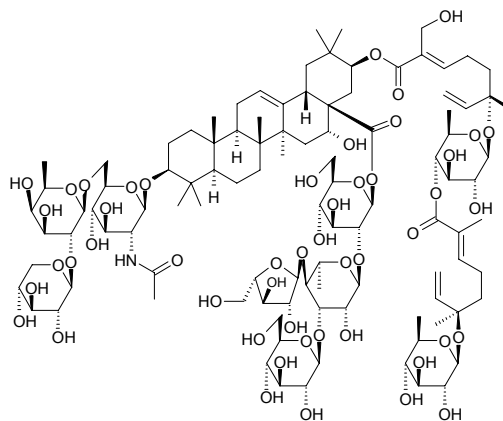
C₁₀₁H₁₆₀O₄₉ (2158.37). White powder, $[\alpha]_D^{17} = -57.1^\circ$ ($c = 0.018$, 70% MeOH). Source: HE HUAN PI *Albizia julibrissin*. Ref: 8.

**11926 Julibroside J₁₁**

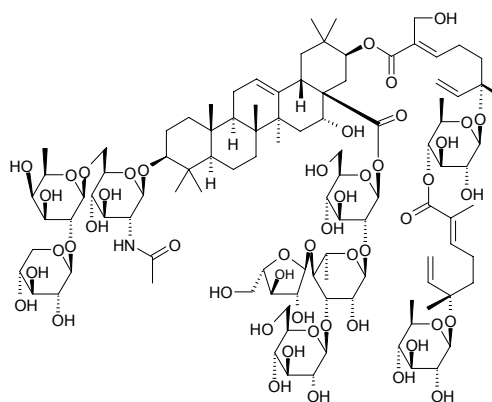
3-*O*-[β -*D*-Xylopyranosyl(1 \rightarrow 2)- α -*L*-arabinopyranosyl(1 \rightarrow 6)- β -*D*-glucopyranosyl]-21-*O*-[(6*S*)-2-*trans*-2-hydroxymethyl-6-methyl-6-*O*-(2-*O*-[(6*S*)-2-*trans*-2,6-dimethyl-6-*O*- β -*D*-quinovopyranosyl-2,7-octadienyl]- β -*D*-quinovopyranosyl-2,7-octadienyl)-acacic acid 28-*O*- β -*D*-glucopyranosyl(1 \rightarrow 3)-[α -*L*-arabinofuranosyl(1 \rightarrow 4)]- α -*L*-rhamnopyranosyl(1 \rightarrow 2)- β -*D*-glucopyranosyl ester C₁₀₁H₁₆₀O₄₉ (2158.37). White powder, $[\alpha]_D^{17} = -78.6^\circ$ ($c = 0.014$, 70% MeOH). Source: HE HUAN PI *Albizia julibrissin*. Ref: 8.

**11927 Julibroside J₁₂**

C₁₀₄H₁₆₅NO₄₉ (2213.45). White powder, $[\alpha]_D^{17} = +7.7^\circ$ ($c = 0.078$, 70% MeOH). Source: HE HUAN PI *Albizia julibrissin*. Ref: 8.

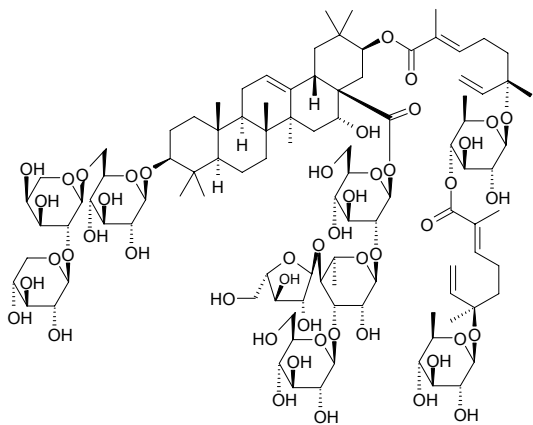
**11928 Julibroside J₁₃**

C₁₀₄H₁₆₅NO₄₉ (2213.45). White powder, $[\alpha]_D^{17} = +23.8^\circ$ ($c = 0.11$, 70% MeOH). Source: HE HUAN PI *Albizia julibrissin*. Ref: 8.

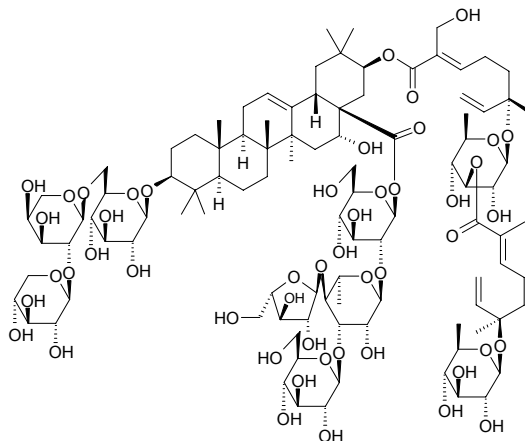


11929 Julibroside J₁₄

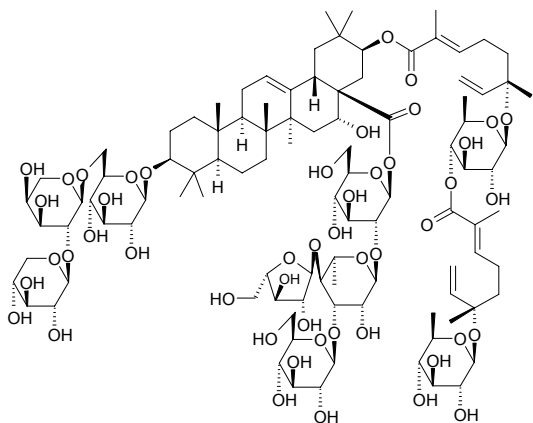
C₁₀₁H₁₆₀O₄₈ (2142.37). White powder, $[\alpha]_D^{17} = -35.7^\circ$ ($c = 0.070$, 70% MeOH). Source: HE HUAN PI *Albizia julibrissin*. Ref: 8.

**11932 Julibroside J₁₇**

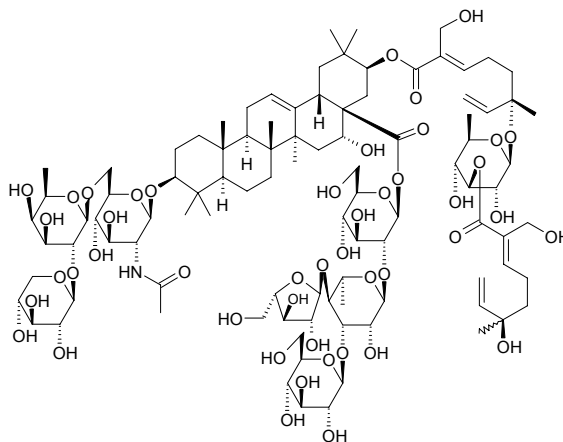
C₁₀₁H₁₆₀O₄₉ (2158.37). White powder. Source: HE HUAN PI *Albizia julibrissin*. Ref: 8.

**11930 Julibroside J₁₅**

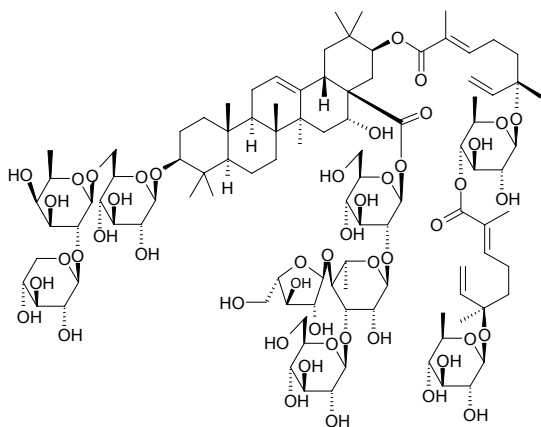
C₁₀₁H₁₆₀O₄₈ (2142.37). White powder, $[\alpha]_D^{17} = -28.0^\circ$ ($c = 0.070$, 70% MeOH). Source: HE HUAN PI *Albizia julibrissin*. Ref: 8.

**11933 Julibroside J₁₈**

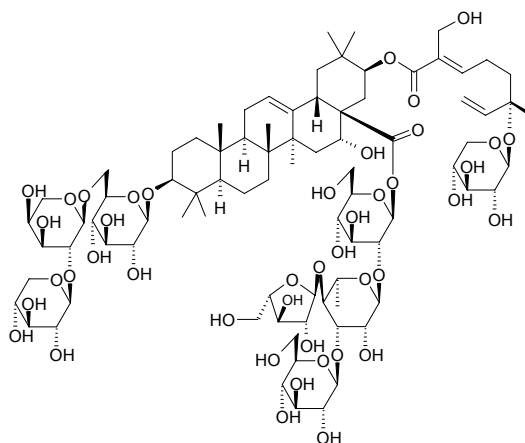
C₉₈H₁₅₅NO₄₆ (2083.31). White powder. Source: HE HUAN PI *Albizia julibrissin*. Ref: 8.

**11931 Julibroside J₁₆**

C₁₀₂H₁₆₂O₄₈ (2156.40). White powder, $[\alpha]_D^{17} = 0.0^\circ$ ($c = 0.081$, 70% MeOH). Source: HE HUAN PI *Albizia julibrissin*. Ref: 8.

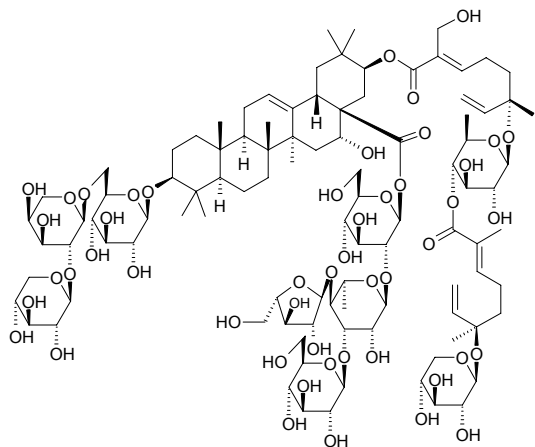
**11934 Julibroside J₂₀**

C₈₄H₁₃₄O₄₃ (1831.98). White powder. Source: HE HUAN PI *Albizia julibrissin*. Ref: 8.

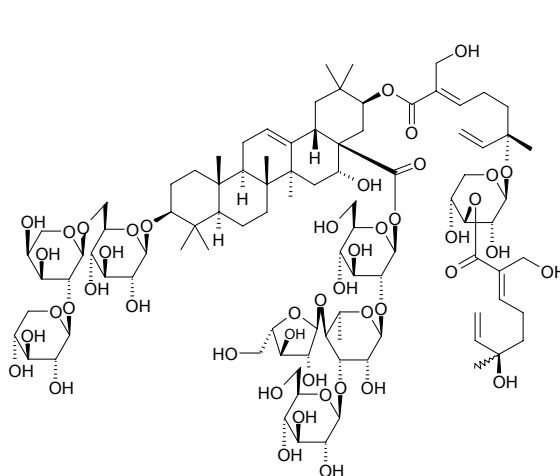


11935 Julibroside J₂₁

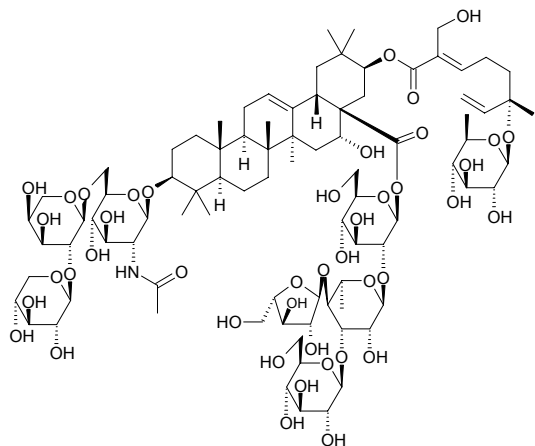
$C_{100}H_{158}O_{49}$ (2144.34). White powder. Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

**11938 Julibroside J₂₄**

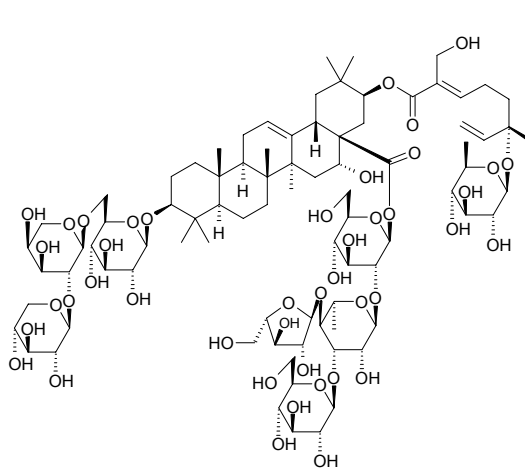
$C_{94}H_{148}O_{46}$ (2014.20). White powder. Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

**11936 Julibroside J₂₂**

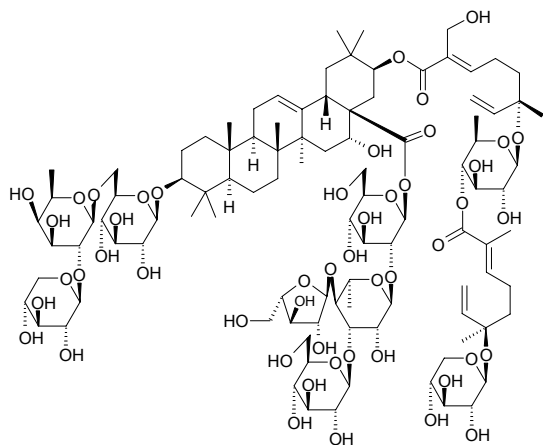
$C_{87}H_{139}NO_{43}$ (1887.06). White powder. Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

**11939 Julibroside J₂₅**

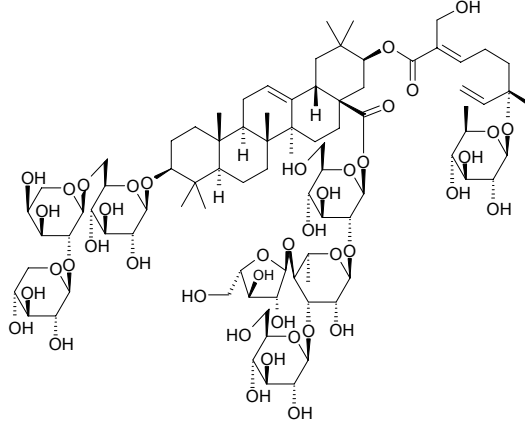
$C_{85}H_{136}O_{43}$ (1846.01). White powder. Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

**11937 Julibroside J₂₃**

$C_{101}H_{160}O_{49}$ (2158.37). White powder. Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

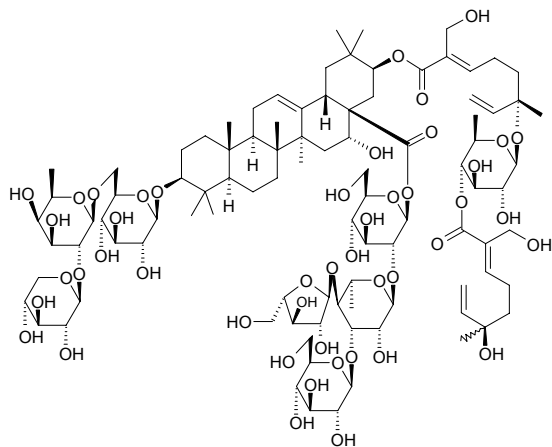
**11940 Julibroside J₂₆**

$C_{85}H_{136}O_{42}$ (1830.01). White powder. Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

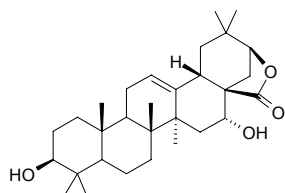


11941 Julibroside J₂₇

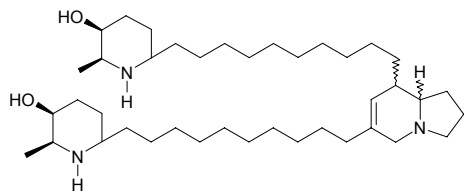
C₉₆H₁₅₂O₄₆ (2042.25). White powder. Source: HE HUAN PI *Albizzia julibrissin*. Ref: 8.

**11942 Julibrotriterpenoidal lactone A**

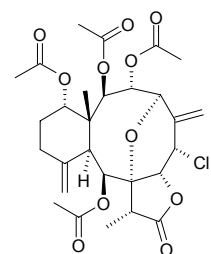
C₃₀H₄₆O₄ (470.70). Source: HE HUAN PI *Albizzia julibrissin*. Ref: 660.

**11943 Juliflorine**

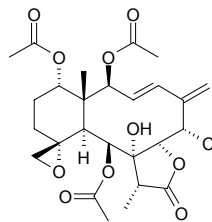
C₄₀H₇₅N₃O₂ (630.06). Pharm: Antibacterial; antifungal. Source: MU DOU SHU *Prosopis juliflora*. Ref: 658.

**11944 Junceellin**

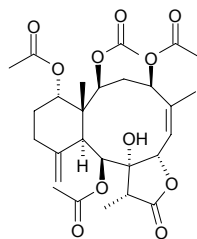
C₂₈H₃₅ClO₁₁ (583.04). White powder, mp 271~272°C, [α]_D²⁵ = -10° (c = 1.8, CHCl₃). Source: CUI DENG XIN LIU SHAN HU *Junceella fragilis*. Ref: 4411.

**11945 Junceollolide C**

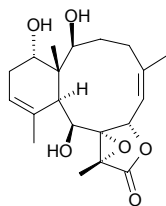
C₂₆H₃₃ClO₁₀ (541.00). Pharm: Cytotoxic inactive (*in vitro*, Hepa59T/VGH, KB16). Source: DENG XIN LIU SHAN HU *Junceella juncea* (outer red layer: yield = 0.0012%ww). Ref: 4680.

**11946 Junceollolide D**

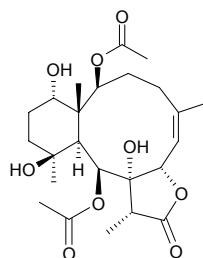
C₂₈H₃₈O₁₁ (550.61). Source: DENG XIN LIU SHAN HU *Junceella juncea* (yield = 0.00021%). Ref: 4781.

**11947 Junceollolide H**

C₂₀H₂₈O₆ (364.44). White powder, mp 207~209°C, [α]_D²⁵ = -22° (c = 0.8, CHCl₃). Source: CUI DENG XIN LIU SHAN HU *Junceella fragilis*. Ref: 4411.

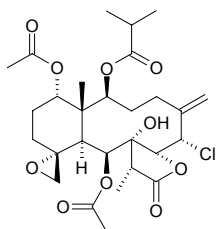
**11948 Junceollolide I**

C₂₄H₃₆O₉ (468.55). White powder, mp 210~212°C, [α]_D²⁵ = -77° (c = 0.7, CHCl₃). Source: CUI DENG XIN LIU SHAN HU *Junceella fragilis*. Ref: 2554.

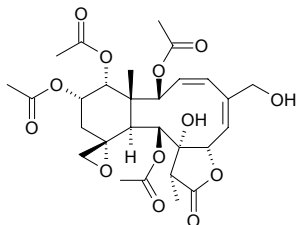


11949 Juncenolide A

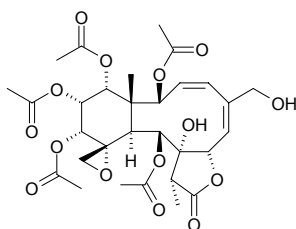
$C_{28}H_{39}ClO_{10}$ (571.07). Colorless prisms, mp 203~205°C, $[\alpha]_D^{25} = -25.5^\circ$ ($c = 0.05$, CH_2Cl_2). **Pharm:** Cytotoxic (*in vitro*, hm colon adenocarcinoma DLD, 3.4 μ g/mL; KB16, 5.9 μ g/mL). **Source:** DENG XIN LIU SHAN HU *Junceella juncea* (outer red layer: yield = 0.012%ww). **Ref:** 4601.

**11950 Juncenolide B**

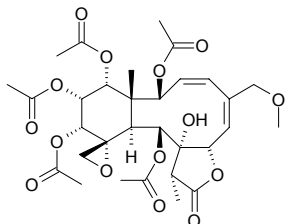
$C_{28}H_{36}O_{13}$ (580.59). Amorphous solid, $[\alpha]_D^{25} = -12.4^\circ$ ($c = 0.4$, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, Hepa59T/VGH, KB16). **Source:** DENG XIN LIU SHAN HU *Junceella juncea* (outer red layer: yield = 0.0005%ww). **Ref:** 4680.

**11951 Juncenolide C**

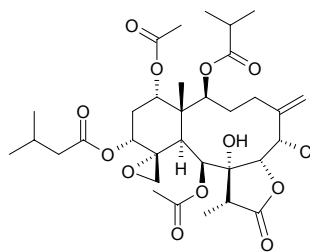
$C_{30}H_{38}O_{15}$ (638.63). Amorphous solid, $[\alpha]_D^{25} = -24.4^\circ$ ($c = 0.05$, CH_2Cl_2). **Pharm:** Cytotoxic (*in vitro*, Hepa59T/VGH, 6.6 μ g/mL, mild activity; KB16, 7.8 μ g/mL, mild activity). **Source:** DENG XIN LIU SHAN HU *Junceella juncea* (outer red layer: yield = 0.00013%ww). **Ref:** 4680.

**11952 Juncenolide D**

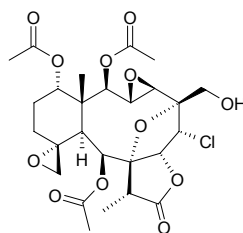
$C_{31}H_{40}O_{15}$ (652.66). Amorphous solid, $[\alpha]_D^{25} = -10.3^\circ$ ($c = 0.2$, CH_2Cl_2). **Pharm:** Cytotoxic inactive (*in vitro*, Hepa59T/VGH, KB16). **Source:** DENG XIN LIU SHAN HU *Junceella juncea* (outer red layer: yield = 0.0007%ww). **Ref:** 4680.

**11953 Juncenolide F**

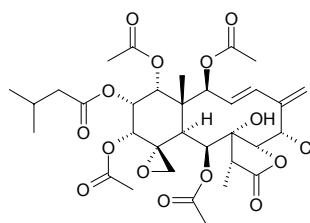
$C_{33}H_{47}ClO_{12}$ (671.19). Colorless crystals, $[\alpha]_D = +9.7^\circ$ ($c = 0.2$, CH_2Cl_2). **Source:** DENG XIN LIU SHAN HU *Junceella juncea*. **Ref:** 2539.

**11954 Juncenolide G**

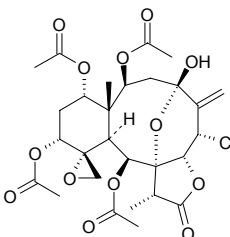
$C_{26}H_{33}ClO_{12}$ (573.00). Colorless crystals, $[\alpha]_D = +6.5^\circ$ ($c = 0.2$, CH_2Cl_2). **Source:** DENG XIN LIU SHAN HU *Junceella juncea*. **Ref:** 2539.

**11955 Juncin O**

$C_{33}H_{43}ClO_{14}$ (699.19). White powder, $[\alpha]_D = +36^\circ$ ($c = 1.0$, $CHCl_3$). **Source:** DENG XIN LIU SHAN HU *Junceella juncea* (yield = 0.00015%). **Ref:** 4781.

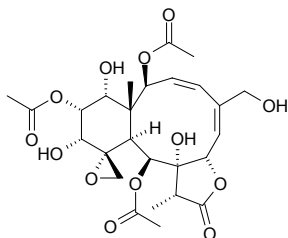
**11956 Juncin P**

$C_{28}H_{35}ClO_{13}$ (615.04). White powder, $[\alpha]_D = -6.8^\circ$ ($c = 0.24$, $CHCl_3$). **Source:** DENG XIN LIU SHAN HU *Junceella juncea* (yield = 0.00013%). **Ref:** 4781.

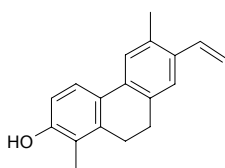


11957 Juncin Q

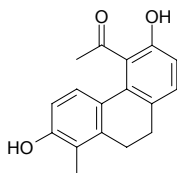
$C_{26}H_{34}O_{13}$ (554.55). White powder, $[\alpha]_D = -14^\circ$ ($c = 0.4$, pyridine). Source: DENG XIN LIU SHAN HU *Junceella juncea* (yield = 0.00022%). Ref: 4781.

**11958 Juncunol**

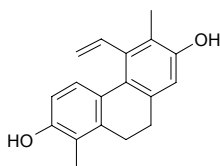
$C_{18}H_{18}O$ (250.34). Source: DENG XIN CAO *Juncus effusus*. Ref: 660.

**11959 Juncunone**

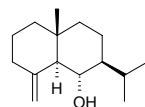
$C_{17}H_{16}O_3$ (268.32). Source: DENG XIN CAO *Juncus effusus*. Ref: 660.

**11960 Juncusol**

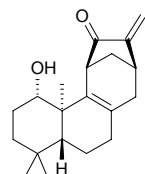
$C_{18}H_{18}O_2$ (266.34). Source: DENG XIN CAO *Juncus effusus*. Ref: 660.

**11961 Junenol**

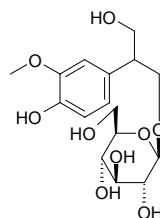
$C_{15}H_{26}O$ (222.37). Crystals, mp 62.5~63.0°C, $[\alpha]_D = +52^\circ$ ($c = 3.35^\circ$, $CHCl_3$) Source: OU ZHOU CI BAI *Juniperus communis*. Ref: 1521.

**11962 Jungermannone A**

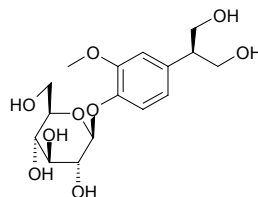
$C_{20}H_{28}O_2$ (300.44). mp 105~106°C, $[\alpha]_D^{20} = -265.5^\circ$ ($c = 1.97$, $CHCl_3$). Pharm: Cytotoxic (hmn leukemia cell line HL-60, $IC_{50} = 0.28 \mu\text{mol/L}$)^[4390]. Source: XIN XI LAN YE TAI *Jungermannia* sp. Ref: 4390.

**11963 Junipediol A 29-O-β-D-glucopyranoside**

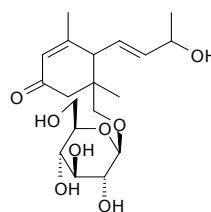
$C_{16}H_{24}O_9$ (360.36). Amorphous powder, $[\alpha]_D^{22} = -18^\circ$. Source: BEI SHA SHEN *Glehnia littoralis* (fruit). Ref: 3525.

**11964 Junipediol A 4-O-β-D-glucopyranoside**

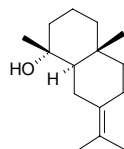
$C_{16}H_{24}O_9$ (360.36). Amorphous powder, $[\alpha]_D^{25} = -34^\circ$ ($c = 0.8$, MeOH). Source: GE LU ZI *Carum carvi*. Ref: 1926.

**11965 Junipeionoside**

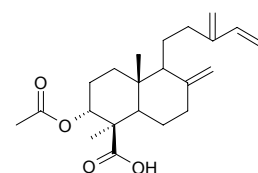
$C_{19}H_{30}O_8$ (386.45). Source: SHAN YANG DOU *Galega officinalis*, FEI NI JI CI BAI *Juniperus phoenicea*. Ref: 1867.

**11966 Juniper camphor**

$C_{15}H_{26}O$ (222.37). White acicular crystals (petroleum ether–ethyl acetate), mp 164~166°C; crystals (methanol), mp 155~156°C. Pharm: Antitussive (dispels phlegm). Source: BAI ZHU *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*], MI ZI LAN *Aglaia odorata*, OU ZHOU CI BAI *Juniperus communis*, TOU HUA DU JUAN *Rhododendron capitatum*, WAN YAN XIANG MAO *Cymbopogon flexuosus*, XIANG YANG MEI *Myrica gale*, XIAO YE PI PA *Rhododendron anthopogonoides*. Ref: 661.

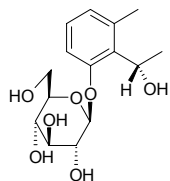
**11967 Juniperexcelsic acid**

3α-Acetoxyabda-8(17),13(16),14-trien-19-oic acid $C_{22}H_{32}O_4$ (360.50). Source: GAO DA CI BAI *Juniperus excelsa*. Ref: 1864.

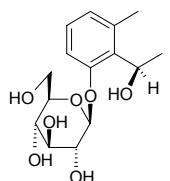


11968 Juniperoside I

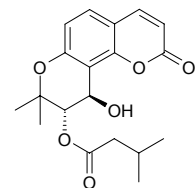
$C_{15}H_{22}O_7$ (314.34). Colorless needles (MeOH), mp 89–91°C, $[\alpha]_D = -26.3^\circ$ ($c = 1.0$, pyridine). **Pharm:** Anti-HIV-1 inactive (*in vitro*). **Source:** XI FANG CI BAI *Juniperus occidentalis* (leaf). **Ref:** 4234.

**11969 Juniperoside II**

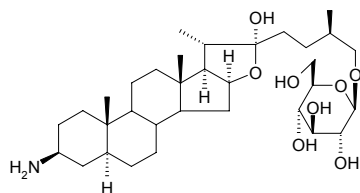
$C_{15}H_{22}O_7$ (314.34). Colorless needles (MeOH), mp 97–99°C, $[\alpha]_D = -8.4^\circ$ ($c = 1.0$, pyridine). **Pharm:** Anti-HIV-1 inactive (*in vitro*). **Source:** XI FANG CI BAI *Juniperus occidentalis* (leaf). **Ref:** 4234.

**11970 Junosmarin**

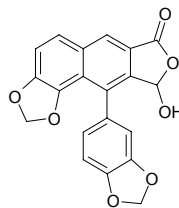
$C_{19}H_{22}O_6$ (346.38). **Pharm:** Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA: EBV-EA-positive cells = (42.2±1.4)% (viability > 80%), β -Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability > 80%), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability > 80%), compound $IC_{50} = 351$ mol ratio/32 pmol TPA, β -Carotene, $IC_{50} = 400$ mol ratio/32 pmol TPA, Curcumin, $IC_{50} = 341$ mol ratio/32 pmol TPA). **Source:** *Citrus medica* var. *etrog*, LI HUA JU *Citrus tachibana*, *Citrus rugulosa*, *Citrus hassaku*. **Ref:** 5048.

**11971 Jurubine**

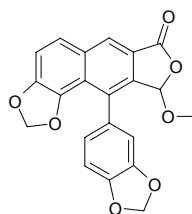
[14256-61-2] $C_{33}H_{57}NO_8$ (595.82). **Source:** SHUI QIE *Solanum torvum*. **Ref:** 6.

**11972 Jsmicranthin**

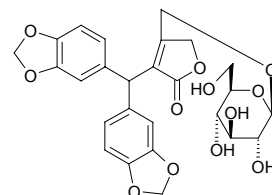
$C_{20}H_{14}O_7$ (364.31). **Source:** QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (whole herb: yield = 0.00073%dw). **Ref:** 4712.

**11973 Jsmicranthin methyl ether**

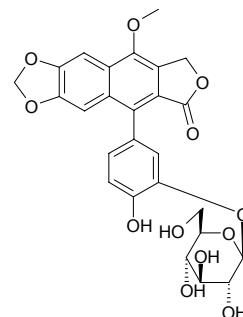
$C_{21}H_{14}O_7$ (378.34). **Source:** QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (whole herb: yield = 0.017%dw). **Ref:** 4712.

**11974 Juspurpurin**

3-[Bis(3,4-methylenedioxyphenyl)methyl]-4-(β -D-glucopyranosyloxy-methyl)-2(5H)-furanone $C_{26}H_{26}O_{12}$ (530.49). Colorless oil, $[\alpha]_D^{25} = -17.5^\circ$ ($c = 0.75$, acetone). **Source:** QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (whole herb: yield = 0.00091%dw). **Ref:** 4712.

**11975 Justalakonin**

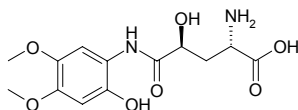
1-(3'- β -D-Glucosyloxy-4'-hydroxyphenyl)-3-hydroxymethyl-4-methoxy-6,7-methylenedioxy-2-naphthoic acid lactone $C_{26}H_{24}O_{12}$ (528.47). Amorphous solid; mp 205–207°C, $[\alpha]_D^{25} = -31.0^\circ$ ($c = 0.25$, MeOH). **Source:** QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (whole herb: yield = 0.0065%dw). **Ref:** 4712.



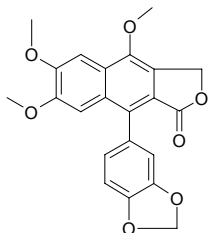
11976 Justiciamide

$C_{13}H_{18}N_2O_7$ (314.30). Non-crystalline solid, $[\alpha]_D = 2.7^\circ$ ($c = 0.07$, H_2O).

Source: *Justicia ghiesbreghtiana*. Ref: 2346.

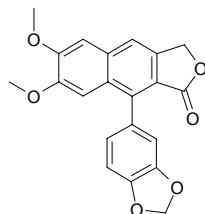
**11977 Justicidin A**

[25001-57-4] $C_{22}H_{18}O_7$ (394.38). mp 263°C. Pharm: Cytotoxic (KB ED₅₀ < 1.0 μg/mL, HeLa ED₅₀ = 10 μg/mL); cytotoxic (*in vitro*, 212, ED₅₀ = 0.0227 μg/mL, control Cisplatin, ED₅₀ = 1.3 μg/mL; CaSKi, ED₅₀ = 0.0030 μg/mL, control Actinomycin D, ED₅₀ = 0.0019 μg/mL; Hep3B, ED₅₀ = 0.029 μg/mL, control 5-Fluorouracil, ED₅₀ = 0.0715 μg/mL; SiHa, ED₅₀ = 0.0074 μg/mL, control Actinomycin D, ED₅₀ = 0.00081 μg/mL; HepG2, ED₅₀ = 0.020 μg/mL, control 5-Fluorouracil, ED₅₀ = 0.033 μg/mL; HT29, not determined, control 5-Fluorouracil, ED₅₀ = 0.074 μg/mL; HCT116, not determined, control 5-Fluorouracil, ED₅₀ = 0.48 μg/mL; MCF7, ED₅₀ = 0.39 μg/mL; MCF7-ras, ED₅₀ = 0.074 μg/mL)^[4612]; TNF- α formation enhancer (mouse macrophage-like RAW264.7, stimulated by LPS, strong activity)^[4612]; antimalarial (*Plasmodium falciparum*, IC₅₀ = 1.9 μg/mL, IC₉₀ = 4.5 μg/mL); fish toxin (action matches rotenone). Source: JUE CHUANG *Rostellularia procumbens* [Syn. *Justicia procumbens*] (whole herb: yield = 0.004% dw)^[4612]; the compound was isolated from the plant by M.Okigawa, et al. in 1972^[5505]. Ref: 6, 1848, 1849, 1850, 4612, 5505.

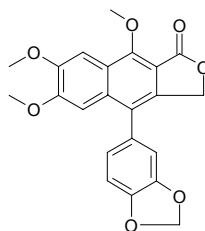
**11978 Justicidin B**

[17951-19-8] $C_{21}H_{16}O_6$ (364.36). mp 240°C. Pharm: Antiviral (vesicular stomatitis virus VSV, MIC \geq 0.06 μg/mL, mus cytomegalovirus, Sindbis virus); cytotoxic (P₃₈₈ ED₅₀ = 3.3 μg/mL, 9KB ED₅₀ = 0.073 μg/mL, NSCLC-N6 IC₅₀ = 28 μg/mL, RL33 MTC = 31.0 μg/mL, BST LC₅₀ = 1.1 μg/mL); antifungal (*Aspergillus fumigatus*, MIC \geq 1 μg/mL, Miconazole nitrate, MIC \geq 0.5 μg/mL; *Candida albicans*, MIC \geq 4 μg/mL, Miconazole nitrate, MIC \geq 0.2 μg/mL; *Aspergillus flavus*, MIC \geq 16 μg/mL, Miconazole nitrate, MIC \geq 0.2 μg/mL; *Blastoschizomyces capitatus*, MIC \geq 128 μg/mL, Miconazole nitrate, MIC \geq 1 μg/mL; *Cryptococcus neoformans*, MIC \geq 128 μg/mL)^[5393]; antiprotozoal (*Trypanosoma brucei rhodesiense*, IC₅₀ = 0.2 μg/mL, control Melarsoprol, IC₅₀ = 0.003 μg/mL; *Trypanosoma cruzi*, IC₅₀ = 2.6 μg/mL, control Benznidazol, IC₅₀ = 0.27 μg/mL; *Plasmodium falciparum* (strain K1), IC₅₀ \geq 5 μg/mL, control Chloroquine, IC₅₀ = 0.12 μg/mL); cytotoxic (Jurkat-T, IC₅₀ = 3.2 μg/mL, control Helenalin, IC₅₀ = 0.03 μg/mL; KB, IC₅₀ = 0.2 μg/mL, control Helenalin, IC₅₀ = 0.2 μg/mL; L-6, IC₅₀ = 3.3 μg/mL; PBMC, IC₅₀ = 4.7 μg/mL, control Helenalin, IC₅₀ = 0.03 μg/mL)^[5393]; piscicide (adult zebra fishes *Brachydanio rerio*, LC₁₀₀ = 1.5 μg/mL, time = 25–40 min; positive control Rotenone, LC₁₀₀ = 1.0 μg/mL, time = 20–30 min; negative control Catechin, LC₁₀₀ > 200 μg/mL, time > 120 min)^[5393]; fish toxin

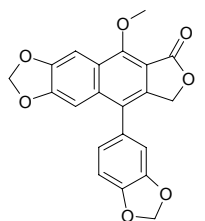
(action matches rotenone). Source: JIAN YE YE XIA ZHU *Phyllanthus acuminatus*, YAN JIAO CAO *Boenninghausenia albiflora*, JUE CHUANG *Rostellularia procumbens* [Syn. *Justicia procumbens*] (in 1972, the compound was isolated from the plant by M.Okigawa, et al.)^[5505], QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (whole herb: yield = 0.0036% dw)^[4712], YU FU YE XIA ZHU *Phyllanthus piscatorum*, *Haplophyllum patavinum* (shoot). Ref: 658, 1778, 1793, 1794, 1795, 4206, 4712, 5393, 5505.

**11979 Justicidin C**

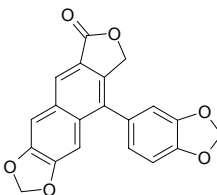
Neojusticin B [17803-12-2] $C_{22}H_{18}O_7$ (394.38). mp 266°C, 262–265°C. Source: JUE CHUANG *Rostellularia procumbens* [Syn. *Justicia procumbens*], BAI HUA JUE CHUANG *Justicia procumbens* var. *leucantha*, DAN JUE CHUANG *Justicia simplex*. Ref: 6, 658.

**11980 Justicidin D**

Neojusticin A [27041-98-1] $C_{21}H_{14}O_7$ (378.34). mp 272°C, 273–275°C. Pharm: Antiviral (vesicular stomatitis virus VSV, MIC = 16.0 μg/mL); cytotoxic (rbt, lung cancer cell RL33, MTC = 63.0 μg/mL, KB, ED₅₀ = 9.0 μg/mL). Source: JUE CHUANG *Rostellularia procumbens* [Syn. *Justicia procumbens*]. Ref: 6, 1521, 1778, 1779.

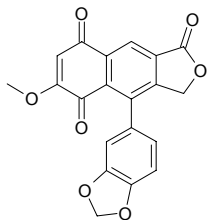
**11981 Justicine E**

Justicidin E $C_{20}H_{12}O_6$ (348.32). Source: QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.000025% dw). Ref: 4783.

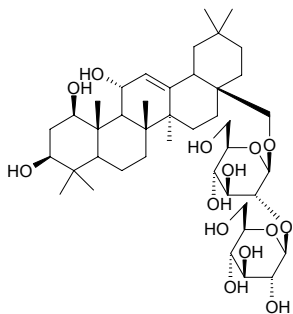


11982 Justicidone

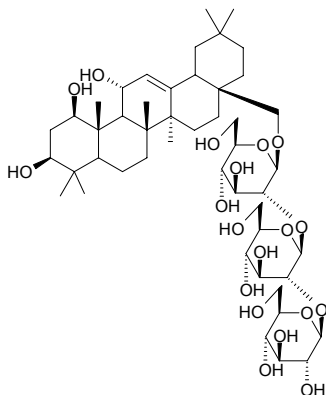
4-(1,3-Benzodioxol-5-yl)-6-methoxynaphtho[2,3-*c*]furan-1,5,8(3*H*)-trione
 $C_{20}H_{12}O_7$ (364.31). Red crystals (EtOAc-*n*-hexane), mp 114~115°C. Source:
Justicia hyssopifolia (aerial parts). Ref: 4259.

**11983 Justicoside A**

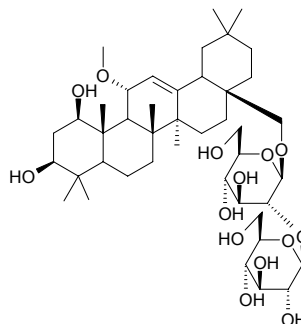
Olean-12-ene-1 β ,3 β ,11 α ,28-tetraol
 28-*O*- β -D-glucopyranosyl-(1 \rightarrow 2)- β -D-glucopyranoside $C_{42}H_{70}O_{14}$ (799.02).
 Amorphous powder, $[\alpha]_D^{27} = -1.9^\circ$ ($c = 2.65$, MeOH). Source: YAO SHUI SU
 JUE CHUANG *Justicia betonica* (aerial parts). Ref: 3863.

**11984 Justicoside B**

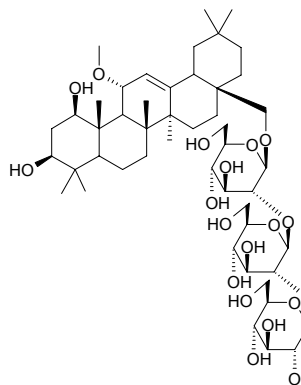
Olean-12-ene-1 β ,3 β ,11 α ,28-tetraol 28-*O*- β -D-glucopyranosyl-(1 \rightarrow 2)- β -D-
 glucopyranosyl-(1 \rightarrow 2)- β -D-glucopyranoside $C_{48}H_{80}O_{19}$ (961.16). Amorphous
 powder, $[\alpha]_D^{27} = -4.2^\circ$ ($c = 2.61$, MeOH). Source: YAO SHUI SU JUE
 CHUANG *Justicia betonica* (aerial parts). Ref: 3863.

**11985 Justicoside C**

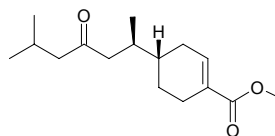
11 α -Methoxy-olean-12-ene-1 β ,3 β ,28-triol 28-*O*- β -D-glucopyranosyl-(1 \rightarrow 2)-
 β -D-glucopyranoside $C_{43}H_{72}O_{14}$ (813.04). Amorphous powder, $[\alpha]_D^{27} = +10.1^\circ$
 ($c = 3.57$, MeOH). Source: YAO SHUI SU JUE CHUANG *Justicia betonica*
 (aerial parts). Ref: 3863.

**11986 Justicoside D**

11 α -Methoxy-olean-12-ene-1 β ,3 β ,28-triol 28-*O*- β -D-glucopyranosyl-(1 \rightarrow 2)-
 β -D-glucopyranosyl-(1 \rightarrow 2)- β -D-glucopyranoside $C_{49}H_{82}O_{19}$ (975.19).
 Amorphous powder, $[\alpha]_D^{27} = +46.7^\circ$ ($c = 0.71$, MeOH). Source: YAO SHUI
 SU JUE CHUANG *Justicia betonica* (aerial parts). Ref: 3863.

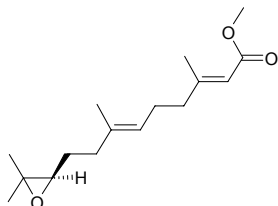
**11987 Juvabione**

[17904-27-7] $C_{16}H_{26}O_3$ (266.38). Crystals (EtOAc), mp 273~275°C, 272°C.
Pharm: Insect juvenile hormone. Source: XIANG ZHI LENG SHAN *Abies*
balsamea. Ref: 658.

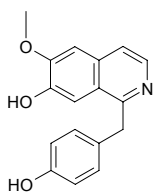


11988 Juvenile hormone III

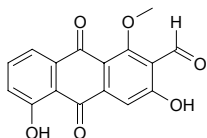
Methyl (2*E*,6*E*,10*R*)-10,11-epoxy-3,7,11-trimethyl-2,6-dodecadien-oate
 [22963-93-5] C₁₆H₂₆O₃ (266.38). Colorless oil, [α]_D = +4.5° (c = 0.7), [α]_D = +6.7° (c = 0.6, MeOH). **Pharm:** Insect juvenile hormone^[658]; antimalarial (*in vitro*, *Plasmodium falciparum* K1 multidrug-resistant strain and chloroquine sensitive NF54 strain, weak activity)^[3944]. **Source:** SUI MI SHA CAO *Cyperus iria*, *Lettowianthus stellatus* (root cortex). **Ref:** 658, 3944.

**11989 Juzirine**

[64069-53-0] C₁₇H₁₅NO₃ (281.31). Crystals (Me₂CO), mp 203–205°C. **Source:** SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. **Ref:** 583.

**11990 Juzunal**

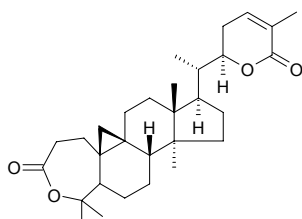
[4430-68-6] C₁₆H₁₀O₆ (298.25). mp 248°C. **Source:** HU CI *Damnacanthus indicus*, *Damnacanthus major*. **Ref:** 6, 1521.



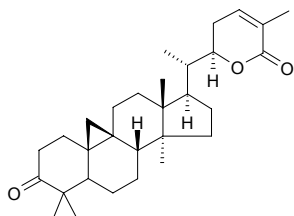
K

11991 Kadsulactone

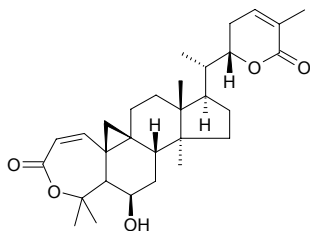
[137348-14-2] C₃₀H₄₄O₄ (468.68). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 1539, 2523.

**11992 Kadsulactone**

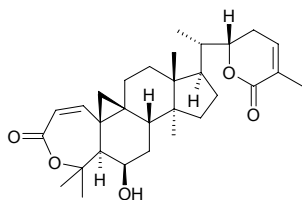
[137348-13-1] C₃₀H₄₄O₃ (452.68). Crystals (EtOAc), mp 230~232°C, [α]_D¹⁸ = +57.7° (c = 0.09, CHCl₃). Pharm: Antineoplastic^[2523]; anti-HIV^[2523]. Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], LENG FAN TUAN *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*]. Ref: 1521, 2436, 2523.

**11993 Kadsulactone A**

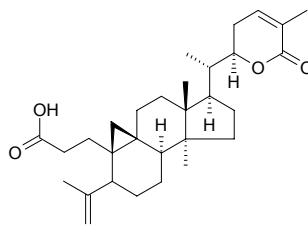
C₃₀H₄₂O₅ (482.67). Crystals (MeOH), mp 195~197°C, [α]_D²³ = +70.65° (c = 0.552, MeOH). Pharm: Antineoplastic^[2523]; anti-HIV^[2523]. Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*]. Ref: 1521, 2436, 2523.

**11994 Kadsulactone A'**

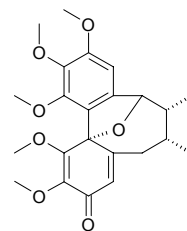
C₃₀H₄₂O₅ (482.67). Source: YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*]. Ref: 660.

**11995 Kadsulactone acid**

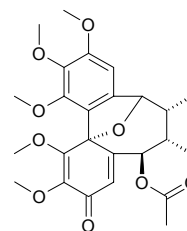
C₃₀H₄₄O₄ (468.68). Colorless massive crystals, mp 180~182°C. Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 389.

**11996 Kadsulignan A**

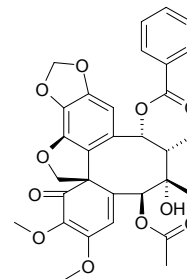
[122350-74-7] C₂₃H₂₈O₇ (416.48). Source: LENG FAN TUAN *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*]. Ref: 660, 2436.

**11997 Kadsulignan B**

[122350-75-8] C₂₅H₃₀O₉ (474.51). Source: LENG FAN TUAN *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*]. Ref: 660, 2436.

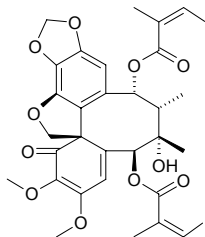
**11998 Kadsulignan C**

[137637-49-1] C₃₁H₃₀O₁₁ (578.58). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 2436.

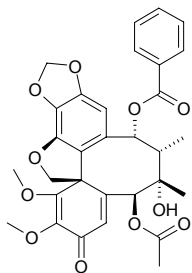


11999 Kadsulignan D

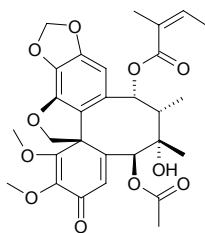
[137637-50-4] $C_{32}H_{36}O_{11}$ (596.64). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 2436.

**12000 Kadsulignan E**

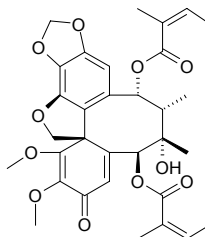
$C_{31}H_{30}O_{11}$ (578.58). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 2436.

**12001 Kadsulignan F**

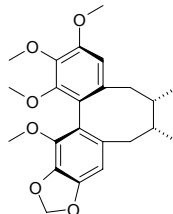
$C_{29}H_{32}O_{11}$ (556.57). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 2436.

**12002 Kadsulignan G**

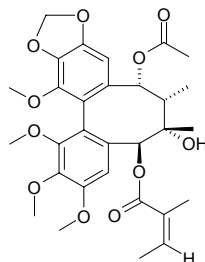
$C_{32}H_{36}O_{11}$ (596.64). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*]. Ref: 2436.

**12003 Kadsuranin**

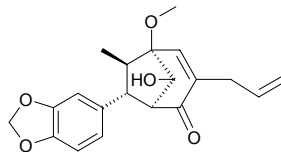
Rubschisandrin $C_{23}H_{28}O_6$ (400.48). Source: CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], HONG HUA WU WEI ZI *Schisandra rubriflora* (fruit), LENG FAN TUAN *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*], RI BEN NAN WU WEI ZI *Kadsura japonica*. Ref: 660, 2436.

**12004 Kadsurarin**

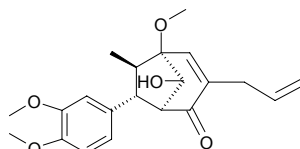
$C_{30}H_{36}O_{11}$ (572.61). Pharm: Antihepatitis inactive (anti-HBsAg, 100µg/mL, InRt < 25%, inactive; anti-HBeAg, 100µg/mL, InRt < 25%, inactive). Source: *Kadsura matsudai* (stem). Ref: 4397.

**12005 Kadsurenin B**

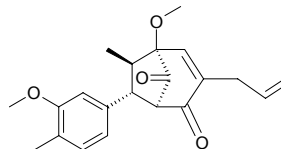
[145701-13-9] $C_{20}H_{22}O_5$ (342.39). Colorless oil, $[\alpha]_D^{18} = -29.5^\circ$ ($c = 0.112$, chloroform). Pharm: PAF receptor antagonist ($IC_{50} = 4.4\mu\text{mol/L}$). Source: HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. Ref: 930.

**12006 Kadsurenin C**

[145722-88-9] $C_{21}H_{26}O_5$ (358.43). Colorless oil, $[\alpha]_D^{18} = -24.0^\circ$ ($c = 0.067$, chloroform). Pharm: PAF receptor antagonist. Source: HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. Ref: 930.

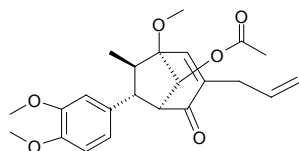
**12007 Kadsurenin K**

[149560-83-8] $C_{20}H_{22}O_5$ (342.39). Colorless oil, $[\alpha]_D^{18} = -54.6^\circ$ ($c = 0.048$, chloroform). Pharm: PAF receptor antagonist. Source: HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. Ref: 930.

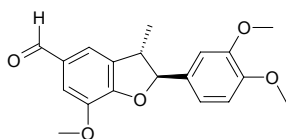


12008 Kadsurenin L

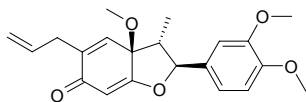
[149438-61-9] C₂₃H₂₈O₆ (400.47). Colorless rhombic crystals (acetone), [α]_D¹⁸ = -36.9° (*c* = 0.086, chloroform). **Pharm:** PAF receptor antagonist. **Source:** HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. **Ref:** 930.

**12009 Kadsurenin M**

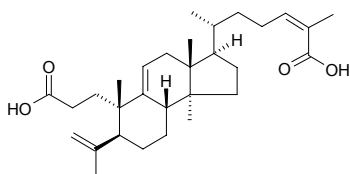
[150133-00-9] C₁₉H₂₀O₅ (328.37). Colorless oleaginous substance, [α]_D¹⁵ = -24.6° (CHCl₃). **Source:** HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. **Ref:** 267.

**12010 Kadsurenone**

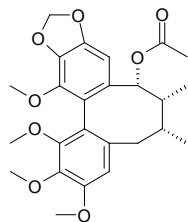
[95851-37-9] C₂₁H₂₄O₅ (356.42). **Pharm:** Inhibits PAF. **Source:** HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. **Ref:** 658.

**12011 Kadsuric acid**

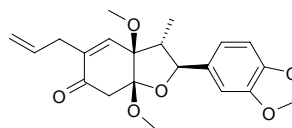
C₃₀H₄₆O₄ (470.70). **Pharm:** Antineoplastic^[2523]; anti-HIV^[2523]. **Source:** LENG FAN TUAN *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*], XIAO HUA WU WEI ZI *Schisandra micrantha* (leaf and stem), YI GENG WU WEI ZI *Schisandra henryi*. **Ref:** 660, 2523, 4389.

**12012 Kadsurin**

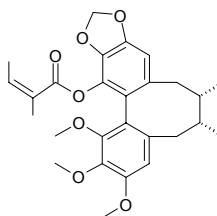
[51670-40-7] C₂₅H₃₀O₈ (458.51). White acicular crystals (ethanol), mp 157-158°C, [α]_D²⁵ = -39° (*c* = 0.13, chloroform). **Pharm:** Antineoplastic (potential antitumor promoter, EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = (15.0±0.7)% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 60%)^[4644]; synergist of pesticides. **Source:** NEI NAN WU WEI ZI *Kadsura interior* (stem)^[4644], RI BEN NAN WU WEI ZI *Kadsura japonica* (in 1973, the compound was isolated from the plant by Y.P.Chen et al.)^[5505]. **Ref:** 658, 2436, 4644, 5055.

**12013 Kadsurin A**

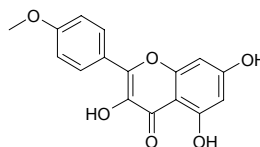
C₂₁H₂₄O₆ (372.42). **Pharm:** Inhibits PAF. **Source:** CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*], HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*]. **Ref:** 658.

**12014 Kadsutherin**

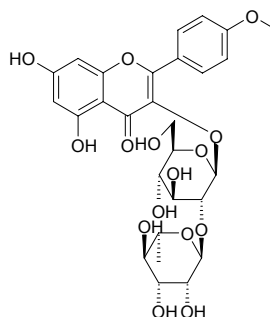
[99481-39-7] C₂₇H₃₂O₇ (468.55). **Source:** LENG FAN TUAN *Kadsura coccinea* [Syn. *Kadsura chenensis*; *Kadsura hainanensis*]. **Ref:** 660, 2436.

**12015 Kaempferide**

Kaempferol-4'-methylether [491-54-3] C₁₆H₁₂O₆ (300.27). mp 227-229°C. **Pharm:** Anti-inflammatory (induced by 12-O-tetradecanoyl phorbol-13-acetate); antiemetic (young male chicks, copper sulfate induced emesis assay, 20mg/kg, InRt = 63.3%, *p* < 0.001)^[4649]. **Source:** CHENG LIU *Tamarix chinensis*, DA ER MA WEI YA LIU CHUAN YU *Linaria dalmatica*, GAO LIANG JIANG *Alpinia officinarum* (rhizome: yield = 0.076%dw)^[4649], JI CAI *Capsella bursa-pastoris*, SHAN NAI *Kaempferia galanga*, SHI ZHI JIA *Sedum sarmentosum* (whole herb: mean content of 10 origins = 0.026%)^[5532], ZANG HONG HUA *Crocus sativus* (pollen). **Ref:** 6, 660, 658, 4233, 4649, 5532.

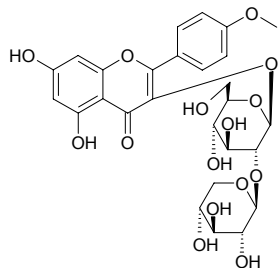
**12016 Kaempferide-3-O-neohesperidoside**

3-[[2-O-(6-Deoxy- α -L-man-nopyranosyl)- β -D-glucopyranosyl]oxy]-5,7-dihydroxy-2-(4-methoxyphenyl)-4H-1-benzopyran-4-one C₂₈H₃₂O₁₅ (608.56). Yellow amorphous powder (MeOH), mp 170-180°C (dec), [α]_D²⁰ = -85° (*c* = 0.001, DMSO). **Pharm:** Nitric oxide production inhibitor inactive (IC₅₀ > 100 μ g/mL). **Source:** SUI ZHUANG BI QIAO JIANG *Costus spicatus* (leaf) **Ref:** 3898.

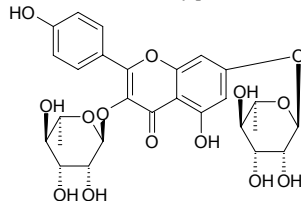


12017 Kaempferide-3-O- β -xylosyl (1 \rightarrow 2)- β -glucoside

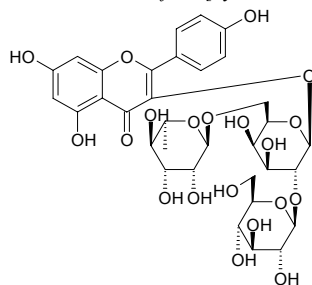
C₂₇H₃₀O₁₅ (594.53). Amorphous yellow powder. Source: *Warburgia ugandensis* (leaf). Ref: 3470.

**12018 Kaempferitrin**

Kaempferol 3,7-di-O- α -rhamnopyranoside [482-38-2] C₂₇H₃₀O₁₄ (578.53). mp 201~203°C. Pharm: Anti-inflammatory (induced by woolball-embedding, reduces blood capillary permeability); similar action with vitamin P; treatment of renal insufficiency; antioxidant (DPPH scavenger, IC₅₀ = (35.7 \pm 0.3) μ mol/L, control Trolox, IC₅₀ = (25.4 \pm 0.8) μ mol/L)^[4244]; antioxidant (DPPH free radical scavenger, 10 μ mol/L, ScRt = 11%, control BHT, 10 μ mol/L, ScRt = 43%)^[5319]; antibacterial (*Staphylococcus aureus* ATCC 25923, MIC > 128 μ g/mL, control Vancomycin, MIC = 2 μ g/mL; *Staphylococcus aureus* MRSA SK1, MIC > 128 μ g/mL, Vancomycin, MIC = 2 μ g/mL)^[5319]. Source: BAI DUAN *Tilia alburnum*, CHAI HU *Bupleurum chinense*, DA JIN QIAN CAO *Lysimachia christinae*, DUAN GENG HU ZHI ZI *Lespedeza cyrtobotrya*, MIAN TENG *Celastrus hypoleucus*, NI BO ER LAO GUAN CAO *Geranium nepalense*, SHAN MA HUANG *Desmodium racemosum* [Syn. *Podocarpium podocarpum* var. *oxyphyllum*], TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit), WAN SHOU JU 叶 *Tagetes erecta*, WANG GUA *Trichosanthes cucumeroides*, YIN YANG HUO *Epimedium brevicornum*, YOU SE ZI JIN NIU *Ardisia colorata* (fruit), YU LI REN *Prunus japonica* [Syn. *Cerasus japonica*], ZHI LI DIAN LAN *Indigofera arrecta*, occurs in many plants. Ref: 4, 6, 623, 658, 660, 1521, 4244, 5319, 5501.

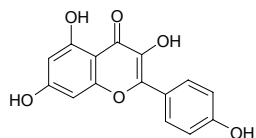
**12019 Kaempferol 3-O- β -D-glucopyranosyl-(1 \rightarrow 2)- α -L-rhamnonopyranosyl-(1 \rightarrow 6)]- β -D-galactopyranoside**

C₃₃H₄₀O₂₀ (756.67). Pharm: Anti-HIV-1 (RT (RDDP) inhibitor, IC₅₀ = 38 μ mol/L, positive control Adriamycin, IC₅₀ = 27 μ mol/L; DDDP inhibitor, IC₅₀ > 100 μ mol/L, Adriamycin, IC₅₀ = 6 μ mol/L; HIV-1 IN inhibitor, IC₅₀ = 43 μ mol/L, Suramin, IC₅₀ = 2.4 μ mol/L). Source: HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*] (leaf). Ref: 4187.

**12020 Kaempferol**

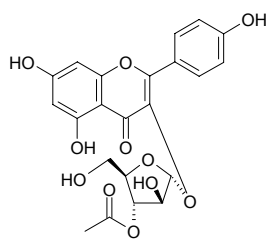
3,5,7,4'-Tetrahydroxyflavone [520-18-3] C₁₅H₁₀O₆ (286.24). Yellow acicular crystals (methanol), mp 274~278°C. Pharm: Anti-HIV-1 (RT (RDDP) inhibitor, IC₅₀ = 110 μ mol/L, positive control Adriamycin, IC₅₀ = 46 μ mol/L; DDDP inhibitor, IC₅₀ = 75 μ mol/L, Adriamycin, IC₅₀ = 6 μ mol/L; RnaseH inhibitor, IC₅₀ > 500 μ mol/L, Illimaquinone, IC₅₀ = 50 μ mol/L; HIV-1 IN inhibitor, IC₅₀ = 40 μ mol/L, Suramin, IC₅₀ = 2.4 μ mol/L)^[3522, 4187]; antibacterial; anti-inflammatory (rat, woolball-embedded model); antitussive to cure trachitis; Δ^5 -lipoxygenase inhibitor; iodinate thyronine deiodinase inhibitor; aldose reductase inhibitor (eye lens, may cure cataract due to diabetes mellitus); antioxidant (*in vitro*, DPPH scavenger, 0.1mg/mL, ScRt = 89.9%)^[3015]; anti-inflammatory (IL-5 inhibitor, concentration-dependent manner, mean IC₅₀ = 30.0 μ mol/L)^[4416]; DPPH scavenger (SC₅₀ = 10 μ mol/L)^[4247]; antioxidant (superoxide anion radical scavenger, superoxide dismutase method, IC₅₀ for Formazan formation activity = 11 μ mol/L)^[4247]. Source: BAI GUO *Ginkgo biloba*, BAI GUO YE *Ginkgo biloba* (leaf: mean content collected in Apr., May and Sep. = 0.179%)^[5508], BAI RUI CAO *Thesium chinense*, CU LIU GUO *Hippophae rhamnoides*, DA JIN QIAN CAO *Lysimachia christinae*, DA TU SI ZI *Cuscuta japonica* (ripe fruit: mean content = 0.0015%)^[5508], DU ZHONG *Eucommia ulmoides*, FAN XIE YE *Cassia angustifolia*, FEN CHA DANG GUI *Angelica furcijuga* (flower), FENG JIAO *Apis mellifera ligustica* (bee glue: mean content of 5 beach samples = 0.67%)^[5508], HONG HUA *Carthamus tinctorius* (flower: mean content of 4 origins = 0.35%)^[5508], HUANG HAI TANG *Hypericum ascyron*, HUANG HUA HAO *Artemisia annua*, HUANG QI *Astragalus membranaceus* (dried root: content scope of 5 origins = 0.0008%~0.0034%, mean content = 0.0018%)^[5519], JI YAN CAO *Kummerowia striata*, JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0064%dw^[3014]; yield = 0.0017%dw)^[4723], JIAN YE FAN XIE YE *Cassia acutifolia*, LAN YU BAI JI *Bletilla formosana* (whole herb), LIANG SHAN DU JUAN *Rhododendron huianum* (leaf: content = 0.006%)^[5508], LUO BU MA *Apocynum venetum* (dried leaf: content scope of 6 origins = 0.0%~0.0098%, mean content = 0.0033%)^[5529], MA HUANG *Ephedra sinica*, MAN SHAN HONG *Rhododendron dauricum* (leaf: mean content of 8 origins = 0.030%)^[5527], MAO YAN CAO *Euphorbia lunulata*, MENG GU HUANG QI *Astragalus mongholicus* (dried root: mean content of 3 origins = 0.44%)^[5508], MU ZEI *Equisetum hiemale* (aerial parts: mean content of 5 origins = 0.69%)^[5508], NAN FANG TU SI ZI *Cuscuta australis* (ripe fruit: mean content = 0.0148%)^[5508], PI JIU HUA TU SI ZI *Cuscuta lupuliformis* (ripe fruit: mean content = 0.0005%)^[5508], REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN LENG *Sparganium stoloniferum*, SHAN HE YE *Diphylleia grayi*, SHAN NAI *Kaempferia galanga*, SHAN YE WAN DOU *Vicia amoena*, SHE PU TAO *Ampelopsis brevipedunculata*, SHENG DI HONG JING TIAN *Rhodiola sacra*, SHI WEI *Pyrosia lingua*, SHU LI *Rhamnus davurica*, TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00014%dw)^[4722], TAI WAN JIN GU CAO *Ajuga taiwanensis* (whole herb), TU SI ZI *Cuscuta chinensis* (ripe seed: content = 0.198%)^[5501], WEI LING CAI *Potentilla chinensis*, WO ER QI *Diphylleia sinensis*, XI GENG XIANG CAO *Lysimachia capillipes* (dried whole herb: mean content of 3 origins = 0.054%)^[5508], XIA YE XIANG PU *Typha angustifolia*, XUAN FU HUA *Inula britannica*, YE XIA ZHU *Phyllanthus urinaria*, YI ZHU QIAN MA *Urtica dioica*, YOU GAN YE *Phyllanthus emblica* (leaf and branch), ZANG HONG HUA *Crocus sativus* (petal: yield =

0.00036%), ZHAI YE BAN FENG HE *Pterospermum lanceaefolium*, ZHAO SHAN BAI *Rhododendron micranthum* (leaf: content scope from Feb. to Nov. 0.01%–0.12%, mean content = 0.05%)^[5508], ZHONG GUO XUAN FU HUA *Inula britannica* var. *chinensis*, occurs in many plants (family Brassicaceae spp., family Apocynaceae spp., family Dilleniaceae spp., family Ranunculaceae spp., family Fabaceae spp.). Ref: 2, 4, 279, 283, 397, 463, 468, 552, 573, 658, 660, 1521, 3014, 3015, 3522, 4187, 4205, 4247, 4416, 4454, 4483, 4500, 4722, 4723, 5501, 5508, 5519, 5527, 5529.



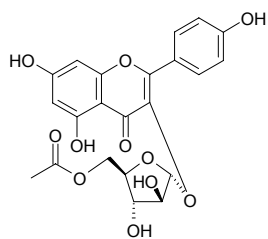
12021 Kaempferol-3-O- α -L-3''-acetyl-arabinofuranoside

$C_{22}H_{20}O_{11}$ (460.40). Dark yellow powder, $[\alpha]_D^{20} = -231.6^\circ$ ($c = 0.01$, MeOH). Source: RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts: yield = 0.00017%dw). Ref: 1179.



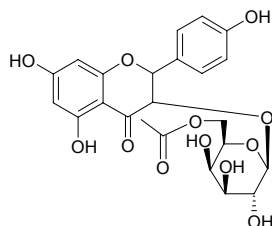
12022 Kaempferol-3-O- α -L-5''-acetyl-arabinofuranoside

$C_{22}H_{20}O_{11}$ (460.40). Dark yellow powder, $[\alpha]_D^{20} = -91.3^\circ$ ($c = 0.03$, MeOH). Source: RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts: yield = 0.0002%dw). Ref: 1179.



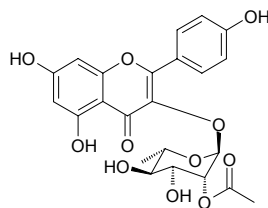
12023 Kaempferol 3-O-(6''-acetyl)- β -D-galactopyranoside

$C_{23}H_{24}O_{12}$ (492.44). Source: SAN XIAO CAO *Trifolium repens* (flower). Ref: 3970.



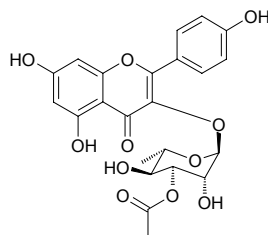
12024 Kaempferol-3-O-(2-O-acetyl- α -L-rhamnopyranoside)

$C_{23}H_{22}O_{11}$ (474.43). Pharm: CYP3A4 inhibitor ($IC_{50} = 59.0\mu\text{mol/L}$, control Ketoconazole, $IC_{50} = 0.245\mu\text{mol/L}$); CYP2D6 inhibitor inactive ($IC_{50} > 100\mu\text{mol/L}$, control Quinidine, $IC_{50} = 0.078\mu\text{mol/L}$). Source: FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00044%dw). Ref: 4669.



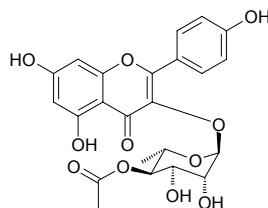
12025 Kaempferol-3-O-(3-O-acetyl- α -L-rhamnopyranoside)

$C_{23}H_{22}O_{11}$ (474.43). Pharm: CYP3A4 inhibitor ($IC_{50} = 98.3\mu\text{mol/L}$, control Ketoconazole, $IC_{50} = 0.245\mu\text{mol/L}$); CYP2D6 inhibitor inactive ($IC_{50} > 100\mu\text{mol/L}$, control Quinidine, $IC_{50} = 0.078\mu\text{mol/L}$). Source: FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00044%dw). Ref: 4669.



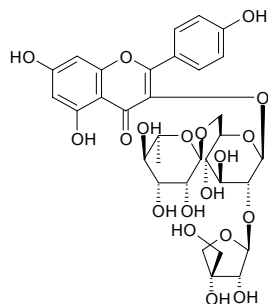
12026 Kaempferol-3-O-(4-O-acetyl- α -L-rhamnopyranoside)

$C_{23}H_{22}O_{11}$ (474.43). Pharm: CYP3A4 inhibitor ($IC_{50} = 90.0\mu\text{mol/L}$, control Ketoconazole, $IC_{50} = 0.245\mu\text{mol/L}$); CYP2D6 inhibitor inactive ($IC_{50} > 100\mu\text{mol/L}$, control Quinidine, $IC_{50} = 0.078\mu\text{mol/L}$). Source: FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00036%dw). Ref: 4669.

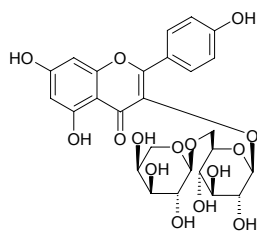


12027 Kaempferol 3-O- β -D-apiosyl-(1→2)-[α -L-rhamnosyl(1→6)]- β -D-glucoside

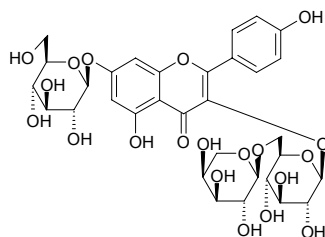
$C_{32}H_{38}O_{19}$ (726.65). Yellowish powder mp 174–175°C, $[\alpha]_D^{25} = -37^\circ$ ($c = 0.0015$, H₂O). Source: MIAN HUA *Gossypium herbaceum*. Ref: 2130.



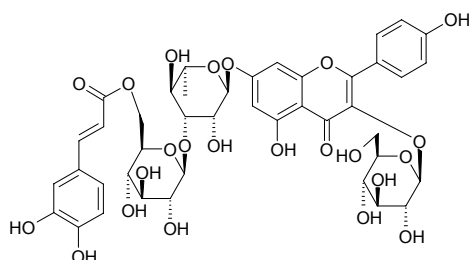
12028 Kaempferol 3-*O*- α -arabinopyranosyl(1'''' \rightarrow 6'')- β -glucopyranoside
 $C_{26}H_{28}O_{15}$ (580.50). Yellow solid (MeOH). Source: KU DI DING *Corydalis bungeana* (whole herb). Ref: 3880.



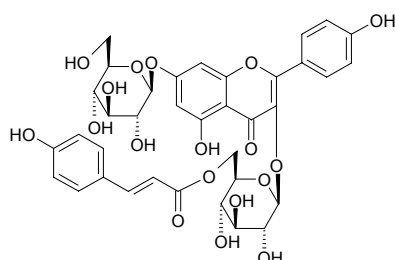
12029 Kaempferol 3-*O*- α -arabinopyranosyl(1'''' \rightarrow 6'')- β -glucopyranoside 7-*O*- β -glucopyranoside
 $C_{32}H_{38}O_{20}$ (742.65). Yellow solid (MeOH). Source: KU DI DING *Corydalis bungeana* (whole herb). Ref: 3880.



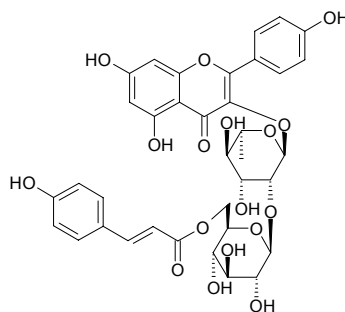
12030 Kaempferol 7-*O*-(6-*trans*-caffeoyl)- β -glucopyranosyl-(1 \rightarrow 3)- α -rhamnopyranoside-3-*O*- β -glucopyranoside
 $C_{42}H_{46}O_{23}$ (918.82). Amorphous yellow powder, mp 180~182°C, $[\alpha]_D^{25} = -84.7^\circ$ ($c = 0.1$, MeOH). Source: *Aconitum napellus* ssp. *neomontanum* (flower). Ref: 5148.



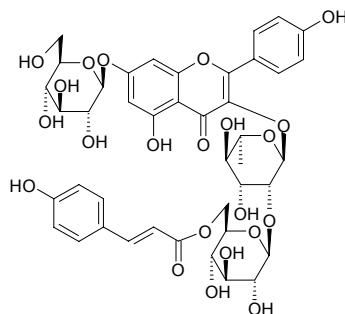
12031 Kaempferol 3-*O*- β -(6''-*E*-*p*-coumaroylglucopyranoside)-7-*O*- β -glucopyranoside
 $C_{36}H_{36}O_{18}$ (756.68). Yellow amorphous powder. Source: DUO YE BAI MAI GEN *Lotus polyphyllus*. Ref: 1973.



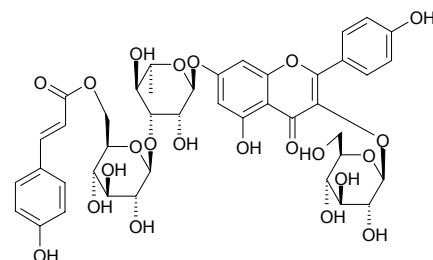
12032 Kaempferol 3-*O*- α -L-[6''''-*p*-coumaroyl-(β -D)-glucopyranosyl-(1,2)-rhamnopyranoside]
 $C_{36}H_{36}O_{17}$ (740.68). Pharm: Antioxidant (DPPH scavenger, $IC_{50} = 18.1\mu\text{g/mL}$, control Gallic acid, $IC_{50} = 3.6\mu\text{g/mL}$; Cytochrome-C reduction, $IC_{50} = 17.7\mu\text{g/mL}$, control Gallic acid, $IC_{50} = 3.0\mu\text{g/mL}$). Source: BAI GUO YE *Ginkgo biloba*. Ref: 5239.



12033 Kaempferol 3-*O*- α -L-[6''''-*p*-coumaroyl-(β -D)-glucopyranosyl-(1,2)-rhamnopyranoside]-7-*O*- β -D-glucopyranoside
 $C_{42}H_{46}O_{22}$ (902.82). Yellow amorphous powder. Pharm: Antioxidant (DPPH scavenger, $IC_{50} = 18.4\mu\text{g/mL}$, control Gallic acid, $IC_{50} = 3.6\mu\text{g/mL}$; Cytochrome-C reduction, $IC_{50} = 17.9\mu\text{g/mL}$, control Gallic acid, $IC_{50} = 3.0\mu\text{g/mL}$). Source: BAI GUO YE *Ginkgo biloba*. Ref: 5239.

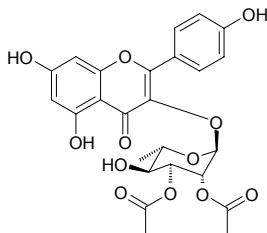


12034 Kaempferol 7-*O*-(6-*trans*-*p*-coumaroyl)- β -glucopyranosyl-(1 \rightarrow 3)- α -rhamnopyranoside-3-*O*- β -glucopyranoside
 $C_{42}H_{46}O_{22}$ (902.82). Amorphous yellow powder, mp 175~177°C, $[\alpha]_D^{25} = -52.0^\circ$ ($c = 0.1$, MeOH). Source: *Aconitum napellus* ssp. *neomontanum* (flower). Ref: 5148.

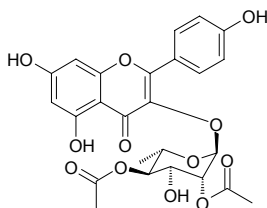


12035 Kaempferol-3-O-(2,3-di-O-acetyl- α -L-rhamnopyranoside)

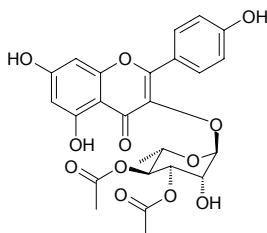
$C_{25}H_{24}O_{12}$ (516.46). **Pharm:** CYP3A4 inhibitor (IC_{50} = 55.8 μ mol/L, control Ketoconazole, IC_{50} = 0.245 μ mol/L); CYP2D6 inhibitor inactive (IC_{50} > 100 μ mol/L, control Quinidine, IC_{50} = 0.078 μ mol/L). **Source:** FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00059%dw). **Ref:** 4669.

**12036 Kaempferol-3-O-(2,4-di-O-acetyl- α -L-rhamnopyranoside)**

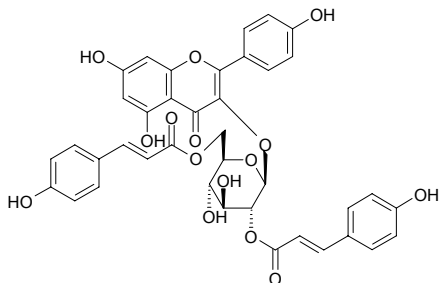
$C_{25}H_{24}O_{12}$ (516.46). **Pharm:** CYP3A4 inhibitor (IC_{50} = 31.6 μ mol/L, control Ketoconazole, IC_{50} = 0.245 μ mol/L); CYP2D6 inhibitor inactive (IC_{50} > 100 μ mol/L, control Quinidine, IC_{50} = 0.078 μ mol/L). **Source:** FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00031%dw). **Ref:** 4669.

**12037 Kaempferol-3-O-(3,4-di-O-acetyl- α -L-rhamnopyranoside)**

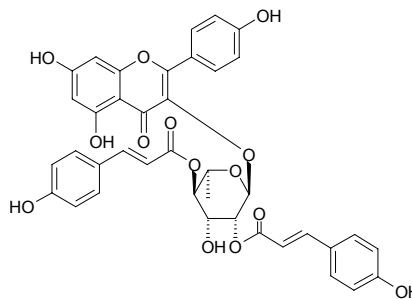
$C_{25}H_{24}O_{12}$ (516.46). **Pharm:** CYP3A4 inhibitor (IC_{50} = 20.6 μ mol/L, control Ketoconazole, IC_{50} = 0.245 μ mol/L); CYP2D6 inhibitor (IC_{50} = 50.5 μ mol/L, control Quinidine, IC_{50} = 0.078 μ mol/L). **Source:** FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00029%dw). **Ref:** 4669.

**12038 Kaempferol-3-O-(2'',6''-di-O-(E)-p-coumaroyl- β -D-glucopyranoside)**

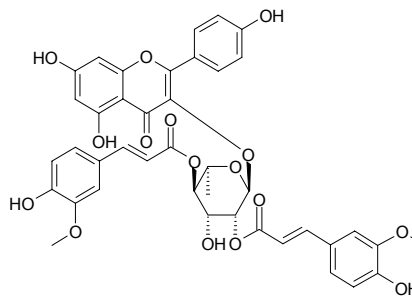
$C_{39}H_{32}O_{15}$ (740.68). **Source:** HU YE *Quercus dentata* **Ref:** 660.

**12039 Kaempferol 3-O- α -L-(2',4'-di-Z-p-coumaroyl)-rhamnoside**

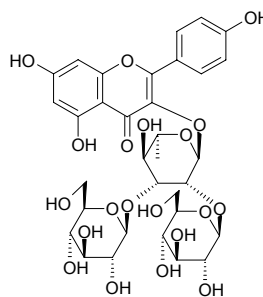
$C_{39}H_{32}O_{14}$ (724.68). **Source:** PI PA YE *Eriobotrya japonica*. **Ref:** 4255.

**12040 Kaempferol 3-O- α -L-(2'',4''-di-E-feruloyl)-rhamnoside**

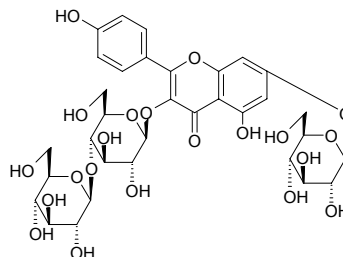
$C_{41}H_{37}O_{16}$ (784.73). Pale yellow amorphous powder, $[\alpha]_D^{23}$ = -19.4° (c = 0.16, MeOH). **Source:** PI PA YE *Eriobotrya japonica*. **Ref:** 4255.

**12041 Kaempferol 3-O- α -(2,3-di-O- β -D-glucopyranosyl)rhamnopyranoside**

$C_{33}H_{40}O_{20}$ (756.67). **Source:** MEI LI FAN HONG HUA *Crocus speciosus*, *Crocus antalyensis*. **Ref:** 2341.

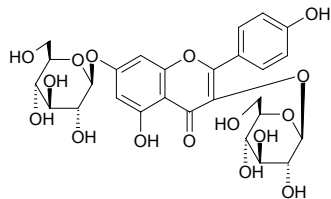
**12042 Kaempferol-3-diglucose-7-glucoside**

Kaempferol-3-glucose-7-diglucoside $C_{33}H_{40}O_{21}$ (772.67). **Source:** MU ZEI *Equisetum hiemale*. **Ref:** 2.

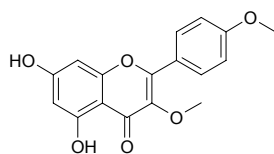


12043 Kaempferol-3,7-diglucoside

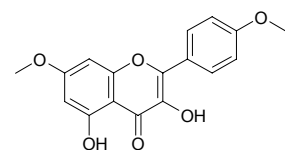
$C_{27}H_{30}O_{16}$ (610.53). mp 233°C. Source: CAO WEN JING *Equisetum pratense*, GU JIE CAO *Equisetum palustre*, LIN WEN JING *Equisetum sylvaticum*, MU ZEI *Equisetum hiemale* (aerial parts: mean content of 3 origins = 0.016%^[5508]), WEN JING *Equisetum arvense*. Ref: 2, 660, 5508.

**12044 Kaempferol-3,4-di-O-methyl ether**

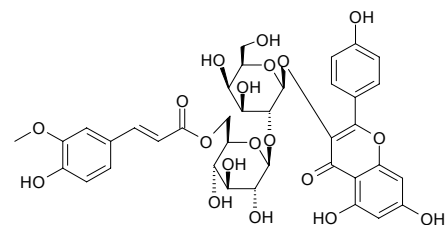
Eemanin $C_{17}H_{14}O_6$ (314.30). Pharm: CYP3A4 inhibitor (IC_{50} = 21.8 μ mol/L, control Ketoconazole, IC_{50} = 0.245 μ mol/L)^[4669]; CYP2D6 inhibitor (IC_{50} = 45.5 μ mol/L, control Quinidine, IC_{50} = 0.078 μ mol/L)^[4669]; NO production inhibitor (LPS-induced, concentration-dependent manner, IC_{50} = 8.9 μ mol/L or 6.6 μ mol/L)^[4918]; PGE₂ production inhibitor (LPS-induced, concentration-dependent manner, IC_{50} = 9.6 μ mol/L or 5.1 μ mol/L)^[4918]. Source: FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00012%dw), XIAO YE JU HAO *Tanacetum microphyllum* (aerial parts). Ref: 4669, 4918.

**12045 Kaempferol-7,4'-dimethyl ether**

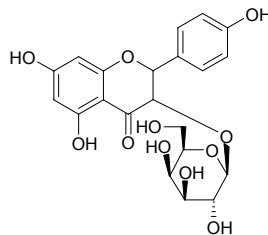
$C_{17}H_{14}O_6$ (314.30). Source: CHENG LIU *Tamarix chinensis*, YUE HUA *Betula ermanii*. Ref: 660.

**12046 Kaempferol 3-O-[(6-O-feruloyl)-β-D-glucopyranosyl-(1→2)-β-D-galactopyranoside]**

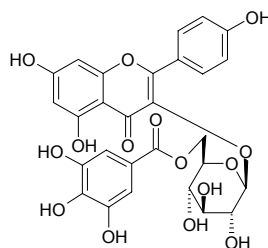
$C_{37}H_{38}O_{19}$ (786.70). Dark yellow amorphous powder, mp 210–212°C, $[\alpha]_D^{25}$ = -0.026° (c = 0.1, MeOH). Pharm: Anti-HIV-1 (RT (RDDP) inhibitor, IC_{50} = 52 μ mol/L, positive control Adriamycin, IC_{50} = 27 μ mol/L; DDDP inhibitor, IC_{50} > 100 μ mol/L, positive control Adriamycin, IC_{50} = 6 μ mol/L; HIV-1 IN inhibitor, IC_{50} = 31 μ mol/L, positive control Suramin, IC_{50} = 2.4 μ mol/L)^[4187]; Neuroprotective (primary cultures of rat cortical cells, induced by *L*-glutamate, 0.1 μ mol/L, cell viability = (25.2±3.2)%, p < 0.05, 1.0 μ mol/L, cell viability = (66.9±5.8)%, p < 0.001, 10 μ mol/L, cell viability = (25.2±3.6)%, p < 0.05)^[3027]. Source: HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*] (leaf), BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] (whole herb: yield = 0.00076%). Ref: 3027, 4187.

**12047 Kaempferol 3-O-β-D-galactopyranoside**

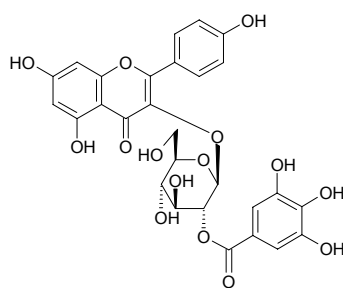
$C_{21}H_{22}O_{11}$ (450.40). Source: SAN XIAO CAO *Trifolium repens* (flower). Ref: 3970.

**12048 Kaempferol 3-O-(6''-galloyl)-β-D-glucopyranoside**

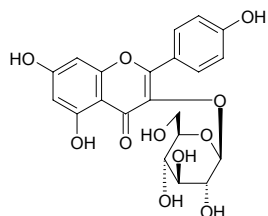
$C_{28}H_{24}O_{15}$ (600.49). $[\alpha]_D^{25}$ = -36.3° (c = 0.1, MeOH). Pharm: Antifungal (*Candida albicans* ATCC2091, MIC > 200 μ g/mL, control Amphotericin B, MIC = 1 μ g/mL; *Candida albicans* 32, MIC > 200 μ g/mL, Amphotericin B, MIC = 4 μ g/mL; *Candida albicans* 19, MIC = 200 μ g/mL, Amphotericin B, MIC = 2 μ g/mL); cytotoxic inactive (MIC > 200 μ g/mL); antibacterial inactive. Source: *Baseonema acuminatum* (leaf). Ref: 5021.

**12049 Kaempferol-3-O-(2''-O-galloyl)-β-D-glucoside**

$C_{28}H_{24}O_{15}$ (600.49). Source: DI JIN CAO *Euphorbia humifusa*, JIE LIAO *Polygonum nodosum*, YU LIAO *Polygonum lapathifolium*. Ref: 660.

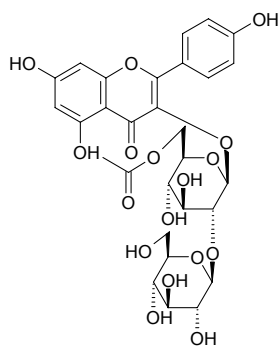
**12050 Kaempferol 3-O-β-D-glucopyranoside**

Astragalol [480-10-4] $C_{21}H_{20}O_{11}$ (448.39). Yellow needles, mp 178, $[\alpha]_D^{18}$ = +16.9° (c = 0.62, MeOH). Source: Astragalus sp. Ref: 1521.



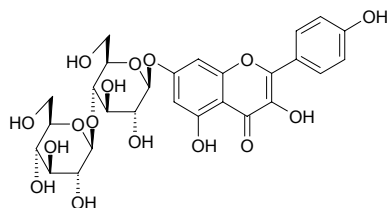
12051 Kaempferol-3-O- β -D-glucopyranosyl(1 \rightarrow 2)- β -D-6-acetylglucopyranoside

C₂₉H₃₂O₁₇ (652.57). Source: ZANG HONG HUA *Crocus sativus*. Ref: 660.



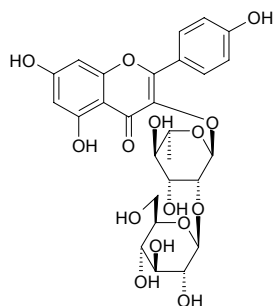
12052 Kaempferol 7-O- β -D-glucopyranosyl-(1 \rightarrow 4)- β -D-glucopyranoside

C₂₇H₃₀O₁₆ (610.53). Yellow powder, $[\alpha]_D^{28} = -49.0^\circ$ ($c = 0.5$, MeOH). Pharm: DPPH scavenger (SC₅₀ = 13 μ mol/L)^[4247], antioxidant (superoxide anion radical scavenger, superoxide dismutase method, IC₅₀ for Formazan formation activity = 24 μ mol/L)^[4247]. Source: XIAN REN ZHANG *Opuntia dillenii* (fresh stem: yield = 0.0001%). Ref: 4247, 4912.



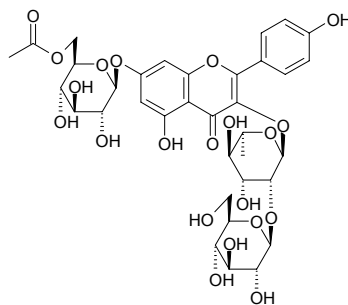
12053 Kaempferol 3-O- β -D-glucopyranosyl-(1-2)- α -L-rhamnopyranoside

C₂₇H₃₀O₁₅ (594.53). Pharm: Antioxidant (DPPH scavenger, IC₅₀ > 100 μ g/mL, control Gallic acid, IC₅₀ = 3.6 μ g/mL; Cytochrome-C reduction, IC₅₀ > 50 μ g/mL, control Gallic acid, IC₅₀ = 3.0 μ g/mL). Source: BAI GUO YE *Ginkgo biloba*. Ref: 5239.



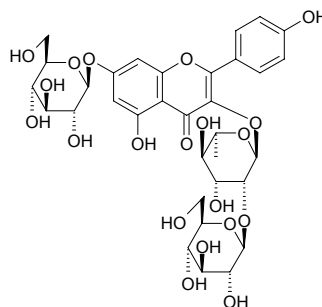
12054 Kaempferol 3-O- α -L-(2-O- β -D-glucopyranosyl)rhamnopyranoside-7-O- β -D-(6-O-acetyl)glucopyranoside

C₃₅H₄₂O₂₁ (798.71). Source: SHUANG HUA FAN HONG HUA *Crocus chrysanthus-biflorus*. Ref: 2343.



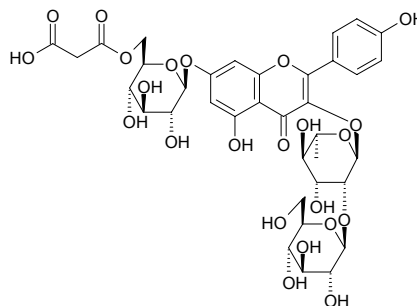
12055 Kaempferol 3-O- α -L-(2-O- β -D-glucopyranosyl)rhamnopyranoside-7-O- β -D-glucopyranoside

C₃₃H₄₀O₂₀ (756.67). Source: SHUANG HUA FAN HONG HUA *Crocus chrysanthus-biflorus*. Ref: 2343.



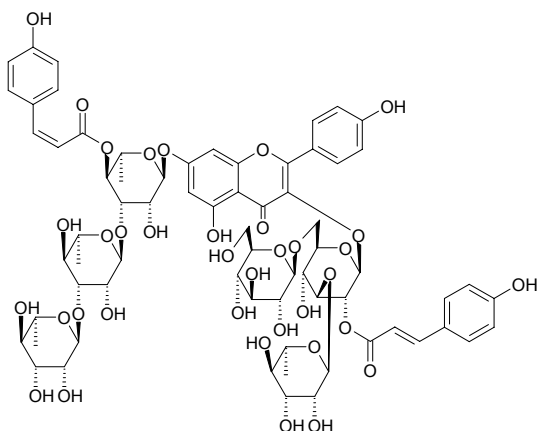
12056 Kaempferol 3-O- α -L-(2-O- β -D-glucopyranosyl)rhamnopyranoside-7-O- β -D-(6-O-malonyl)glucopyranoside

C₃₆H₄₂O₂₃ (842.72). Source: SHUANG HUA FAN HONG HUA *Crocus chrysanthus-biflorus*. Ref: 2343.



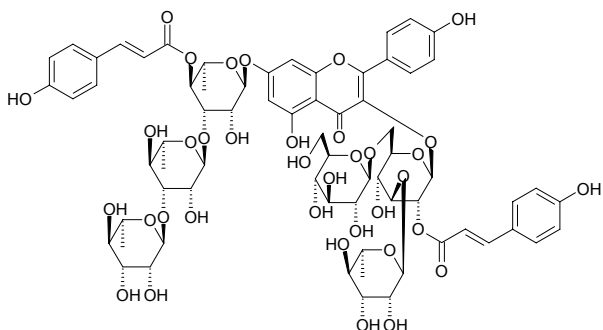
12057 Kaempferol-3-O- β -D-glucopyranosyl (1 \rightarrow 6)- α -L-rhamnopyranosyl(1 \rightarrow 3)-(2-O-trans-p-coumaroyl)- β -D-glucopyranoside-7-O-[α -L-rhamnopyranosyl(1 \rightarrow 3)- α -L-rhamnopyranosyl(1 \rightarrow 3)-(4-O-cis-p-coumaroyl)- α -L-rhamnopyranoside

C₆₉H₈₂O₃₆ (1487.40). [α]_D²⁰ = +342° (c = 0.045, MeOH). Source: GAO DA SHAN LAN *Planchonia grandis* (leaf). Ref: 3443.



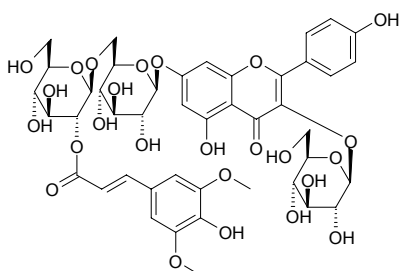
12058 Kaempferol-3-O- β -D-glucopyranosyl (1 \rightarrow 6)- α -L-rhamnopyranosyl(1 \rightarrow 3)-(2-O-trans-p-coumaroyl)- β -D-glucopyranoside-7-O-[α -L-rhamnopyranosyl(1 \rightarrow 3)- α -L-rhamnopyranosyl(1 \rightarrow 3)-(4-O-trans-p-coumaroyl)- α -L-rhamnopyranoside

C₆₉H₈₂O₃₆ (1487.40). [α]_D²⁰ = +228.7° (c = 0.167, MeOH). Source: GAO DA SHAN LAN *Planchonia grandis* (leaf). Ref: 3443.



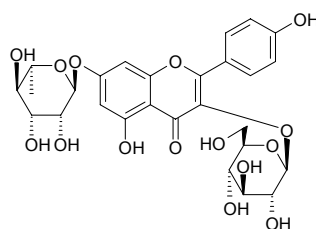
12059 Kaempferol-3- β -D-glucopyranosyl-7-O-[(2-O-trans-sinapoyl)- β -D-glucopyranosyl (1 \rightarrow 6)]- β -D-glucopyranoside

C₄₄H₅₀O₂₅ (978.87). Yellowish grain (MeOH), mp 215°C (dec). Source: BO NIANG HAO *Descurainia Sophia* (seed). Ref: 4829.



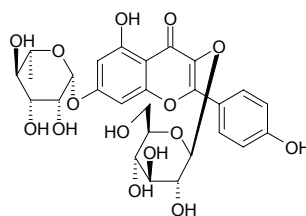
12060 Kaempferol-3- β -D-gluco-7- α -L-rhamnoside

C₂₇H₃₀O₁₅ (594.53). mp 249~251°C, mp 231~234°C. Pharm: Antioxidant (DPPH scavenger, 10 μ mol/L, ScRt = 15%, control BHT, 10 μ mol/L, ScRt = 43%)^[5319]; antibacterial (*Staphylococcus aureus* ATCC 25923, MIC = 64 μ g/mL, control Vancomycin, MIC = 2 μ g/mL; *Staphylococcus aureus* MRSA SK1, MIC = 64 μ g/mL, Vancomycin, MIC = 2 μ g/mL)^[5319]. Source: CAN DOU YE *Vicia faba*, NAN SHE TENG YE *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). Ref: 6, 5319.



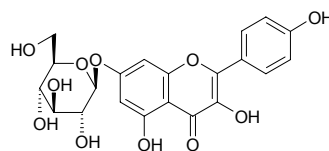
12061 Kaempferol-3- β -D-gluco-7- β -L-rhamnoside

C₂₇H₃₀O₁₅ (594.53). Source: TIAO JING CAO *Euonymus japonicus*. Ref: 6.



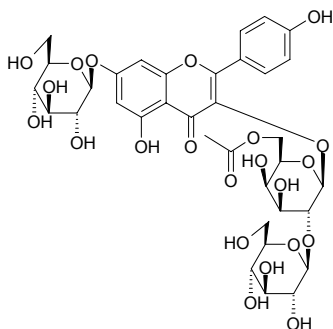
12062 Kaempferol-7-O-glucoside

Populnin C₂₁H₂₀O₁₁ (448.39). Pharm: DPPH scavenger (SC₅₀ = 12 μ mol/L)^[4247]; antioxidant (superoxide anion radical scavenger, superoxide dismutase method, IC₅₀ for Formazan formation activity = 32 μ mol/L)^[4247]; antioxidant (*in vitro*, DPPH radical scavenger, 0.1mg/mL, ScRt = 91.2%)^[3015]. Source: CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], LAN YU BAI JI *Bletilla formosana* (whole herb), XIAN REN ZHANG *Opuntia dillenii* (fresh stem: yield = 0.00019%), HUO TAN MU CAO *Polygonum chinense*, ZANG HONG HUA *Crocus sativus* (petal: yield = 0.00012%)^[3015]. Ref: 660, 3015, 4247, 4500.



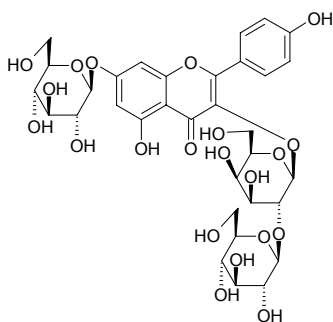
12063 Kaempferol 3-O- β -D-glucosyl(1 \rightarrow 2)-(6''-O-acetyl)- β -D-galactoside 7-O- β -D-glucoside

C₃₅H₄₂O₂₂ (814.71). Amorphous powder, mp 200–203°C, [α]_D²⁶ = -76° (c = 0.08, MeOH). Source: HU LU BA *Trigonella foenum-graecum* (stem). Ref: 5197.



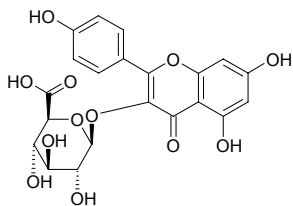
12064 Kaempferol 3-O- β -D-glucosyl(1 \rightarrow 2)- β -D-galactoside 7-O- β -D-glucoside

C₃₃H₄₀O₂₁ (772.67). Amorphous powder, mp 220–222°C, [α]_D²⁶ = -37° (c = 0.09, H₂O). Source: HU LU BA *Trigonella foenum-graecum* (stem). Ref: 5197.



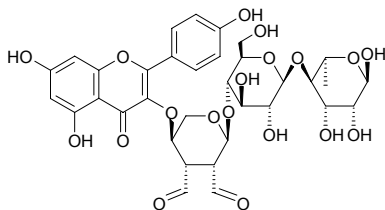
12065 Kaempferol 3- β -D-glucuronide

C₂₁H₁₈O₁₂ (462.37). mp 189–190.5°C. Source: JI CHANG LANG DU *Euphorbia esula*, LAO YA SHI *Diospyros rhombifolia* (leaf). Ref: 6, 4464.



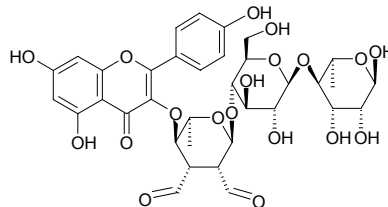
12066 Kaempferol 3-O-lysimachiatrioside

C₃₄H₃₈O₁₉ (750.67). Source: DA JIN QIAN CAO *Lysimachia christinae*. Ref: 660.



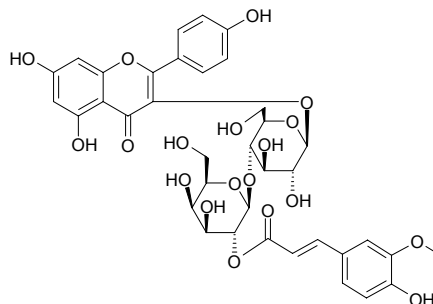
12067 Kaempferol 3-O-lysimachiatrioside

C₃₅H₄₀O₁₉ (764.70). Source: DA JIN QIAN CAO *Lysimachia christinae*. Ref: 2.



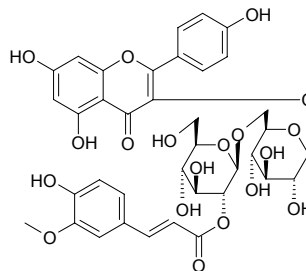
12068 Kaempferol 3-O-[2-O-(trans-3-methoxy-4-hydroxycinnamoyl)- β -D-galactopyranosyl(1 \rightarrow 4)-O- β -D-glucopyranoside

C₃₇H₃₈O₁₉ (786.70). Yellowish amorphous solid, [α]_D²⁵ = -9° (c = 0.02, MeOH). Source: JIU CONG *Allium porrum* (bulb). Ref: 5152.



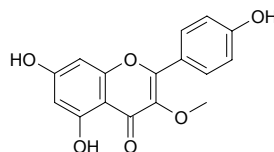
12069 Kaempferol 3-O-[2-O-(trans-3-methoxy-4-hydroxycinnamoyl)- β -D-glucopyranosyl(1 \rightarrow 6)-O- β -D-glucopyranoside

C₃₇H₃₈O₁₉ (786.70). Yellowish amorphous solid, [α]_D²⁵ = -13° (c = 0.02, MeOH). Source: JIU CONG *Allium porrum* (bulb). Ref: 5152.



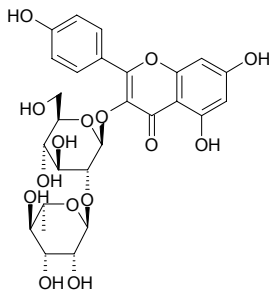
12070 Kaempferol 3-methyl ether

Isokempferide C₁₆H₁₂O₆ (300.27). Pharm: Antioxidant (Takamatsu DCFH method, myelomonocytic HL-60 cells, IC₅₀ = (50.7±3.0)μg/mL; control NDGA, IC₅₀ = (0.7±0.3)μg/mL, Vitamin C, IC₅₀ = (1.9±0.7)μg/mL, Trolox, IC₅₀ = (1.4±0.5)μg/mL)^[3850]; cytotoxic (XTT assay, HL-60 cells, IC₅₀ = (28.3±3.5)μg/mL; control NDGA, IC₅₀ = (2.6±0.2)μg/mL, Vitamin C, IC₅₀ > 10.0μg/mL, Trolox, IC₅₀ > 10.0μg/mL)^[3850]; antiviral; CYP3A4 inhibitor (IC₅₀ = 36.2μmol/L, control Ketoconazole, IC₅₀ = 0.245μmol/L)^[4669]; CYP2D6 inhibitor (IC₅₀ = 4.63μmol/L, control Quinidine, IC₅₀ = 0.078μmol/L)^[4669]. Source: SAN CHI LA RUI A *Larrea tridentata* (leaf), YE GUO QIE *Solanum sarrachoides*, FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00021%dw). Ref: 658, 3850, 4669.

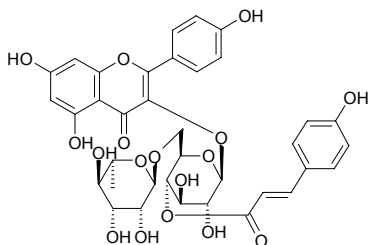


12071 Kaempferol-3-O-neohesperidoside

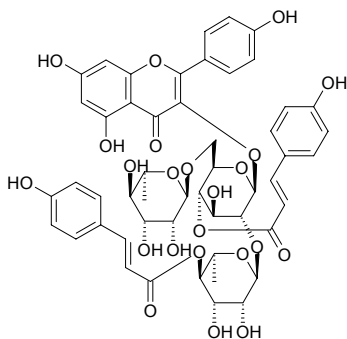
Kaempferol 3-O-(2"-O- α -rhamnopyranosyl)- β -glucopyranoside C₂₇H₃₀O₁₅ (594.53). Source: LAO YA SHI *Diospyros rhombifolia* (leaf), PU HUANG *Typha angustata*, KUAN YE XIANG PU *Typha latifolia*. Ref: 2, 660, 4464.

**12072 Kaempferol 3-O- α -L-rhamnopyranosyl(1 \rightarrow 6)-(4-O-*trans*-p-coumaroyl)- β -D-galactopyranoside**

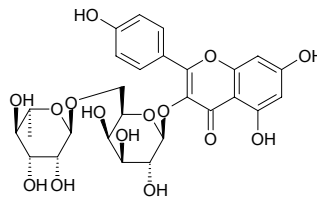
C₃₆H₃₆O₁₇ (740.68). Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (dried leaf, flower and twig: yield = 0.0044%dw). Ref: 3014.

**12073 Kaempferol 3-O- α -L-rhamnopyranosyl(1 \rightarrow 6)-[(4-O-*trans*-p-coumaroyl)- α -L-rhamnopyranosyl(1 \rightarrow 2)]-(4-O-*trans*-p-coumaroyl)- β -D-galactopyranoside**

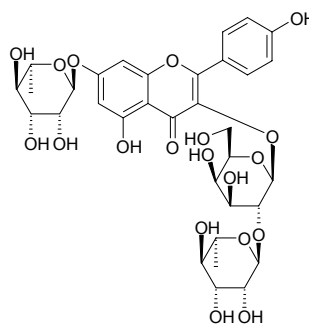
C₅₁H₅₂O₂₃ (1032.97). Yellow powder, $[\alpha]_D^{25} = -274^\circ$ ($c = 0.3$, MeOH). Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (dried leaf, flower and twig: yield = 0.0022%dw). Ref: 3014.

**12074 Kaempferol 3-O- α -L-rhamnopyranosyl(1 \rightarrow 6)- β -D-galactopyranoside**

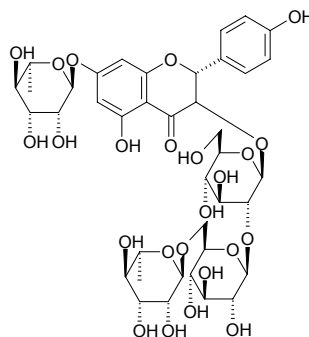
C₂₇H₃₀O₁₅ (594.53). Source: JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (dried leaf, flower and twig: yield = 0.0013%dw). Ref: 3014.

**12075 Kaempferol 3-O- α -L-rhamnopyranosyl(1 \rightarrow 2)- β -D-galactopyranosyl-7-O- α -L-rhamnopyranoside**

C₃₃H₄₀O₁₉ (740.68). Source: SI GUO HUANG QI *Astragalus shikokianus* (aerial parts). Ref: 3922.

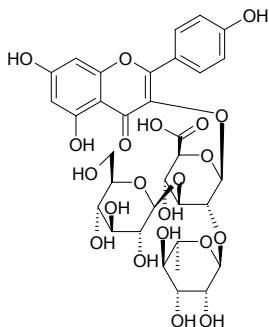
**12076 Kaempferol 3-O- α -L-rhamnopyranosyl(1 \rightarrow 6)- β -D-glucopyranosyl(1 \rightarrow 2)- β -D-glucopyranoside-7-O- α -L-rhamnopyranoside**

C₃₉H₅₂O₂₄ (904.83). Yellow amorphous powder. Source: HUIAI *Sophora japonica* (seed). Ref: 3391.



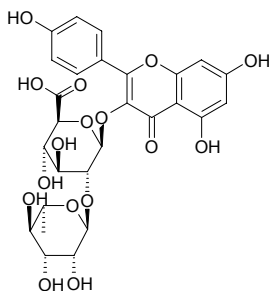
12077 Kaempferol 3-O-(2''-O- α -rhamnopyranosyl-3''-O- β -glucopyranosyl)- β -glucuronopyranoside

C₃₃H₃₈O₂₁ (770.66). Pale yellow solid, $[\alpha]_D = -59^\circ$ ($c = 0.1$, MeOH). Source: LAO YA SHI *Diospyros rhombifolia* (leaf). Ref: 4464.



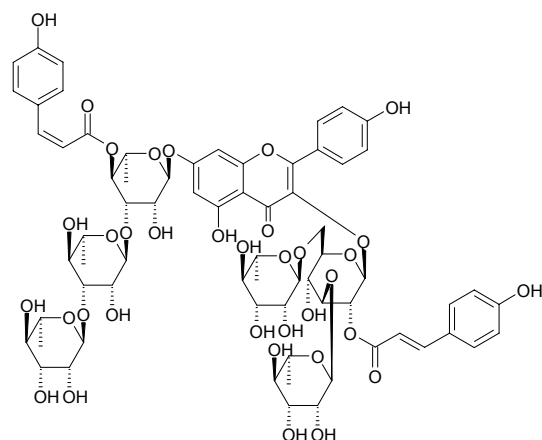
12078 Kaempferol 3-O-(2''- α -rhamnopyranosyl)- β -glucuronopyranoside

C₂₇H₂₈O₁₆ (608.51). Source: LAO YA SHI *Diospyros rhombifolia* (leaf). Ref: 4464.



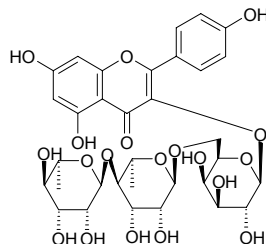
12079 Kaempferol-3-O-[α -L-rhamnopyranosyl (1→6)-{ α -L-rhamnopyranosyl(1→3)}-(2-O-*trans*-*p*-coumaroyl)]- β -D-glucopyranoside-7-O-[α -L-rhamnopyranosyl(1→3)- α -L-rhamnopyranosyl(1→3)-(4-O-*trans*-*p*-coumaroyl)]- α -L-rhamnopyranoside

C₆₉H₈₂O₃₅ (1471.40). $[\alpha]_D^{20} = -122.8^\circ$ ($c = 0.464$, MeOH). Source: GAO DA SHAN LAN *Planchonia grandis* (leaf). Ref: 3443.



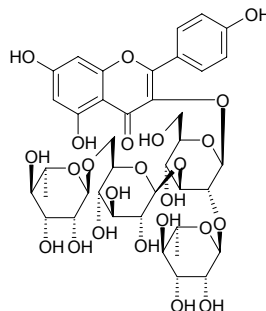
12080 Kaempferol-3-O-[α -rhamnopyranosyl-(1→4)-rhamnopyranosyl-(1→6)- β -galactopyranoside]

C₃₃H₄₀O₁₉ (740.68). Source: MI HOU LI GEN *Actinidia arguta*, MU TIAN LIAO *Actinidia polygama*. Ref: 660.



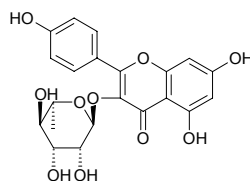
12081 Kaempferol 3-O-[2''-O- α -rhamnopyranosyl-3''-O-(6'''-O- α -rhamnopyranosyl)- β -glucopyranosyl]- β -glucopyranoside

C₃₉H₅₀O₂₄ (902.82). Pale-yellow solid, $[\alpha]_D = -36^\circ$ ($c = 0.1$, MeOH). Source: LAO YA SHI *Diospyros rhombifolia* (leaf). Ref: 4464.



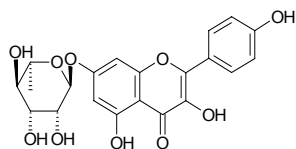
12082 Kaempferol-3-rhamnoside

Kaempferol 3-O- α -L-rhamnopyranoside; 3,4',5,7-Tetrahydroxyflavone-3-L-rhamnoside [482-39-3] C₂₁H₂₀O₁₀ (432.39). mp 172–174°C. Pharm: Antioxidant (6.25 μ g/mL, superoxide radical scavenging activity = 5.5 %, control Curcumin 16.1%; 6.25 μ g/mL, DPPH radical scavenging activity = 9.4 %, control Curcumin 50.0%)^[4535]; hepatoprotective (primary cultures of rat hepatocytes, H₂O₂-induced toxicity, 50 μ mol/L, relative protection = 50.8% (H₂O₂-treated, relative protection = 0.0%, control, relative protection = 100%), positive control Silibinin, Relative protection = 74.9%)^[4996]; CYP3A4 inhibitor inactive (IC₅₀ > 100 μ mol/L, control Ketoconazole, IC₅₀ = 0.245 μ mol/L)^[4669]; CYP2D6 inhibitor inactive (IC₅₀ > 100 μ mol/L, control Quinidine, IC₅₀ = 0.078 μ mol/L)^[4669]. Source: BAI GUO YE *Ginkgo biloba*, CHI YANG *Alnus japonica* (leaf), DA JIN NIU CAO *Polygala chinensis* [Syn. *Polygala glomerata*], FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00066%dw), LV BEI GUI HUA *Excoecaria cochinchinensis* var. *viridis*, MA HUANG *Ephedra sinica*, MANG QI GU *Dicranopteris pedata* [Syn. *Polypodium pedatum*; *Dicranopteris dichotoma*], MAO YAN CAO *Euphorbia lunulata*, RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts), YOU GAN YE *Phyllanthus emblica* (leaf and branch), YU XING CAO *Houttuynia cordata*. Ref: 2, 6, 603, 660, 4205, 4535, 4544, 4669, 4996.

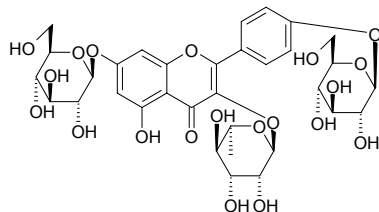


12083 Kaempferol-7-rhamnoside

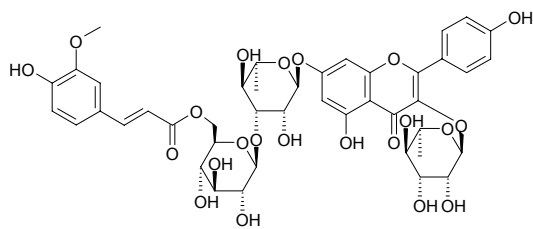
Kaempferol-7-*O*- α -L-rhamnoside [20196-89-8] C₂₁H₂₀O₁₀ (432.39). Yellow acicular crystals, mp 232~234°C (chloroform-methanol); mp 239~342°C, [α]_D²⁰ = -180 (methanol). **Pharm:** Ileal smooth muscle relaxant (gpg *in vitro*, nicotine antagonist, ED₅₀ = 9.0 μ g/mL, histamine antagonist, ED₅₀ = 13 μ g/mL, acetylcholine antagonist, ED₅₀ = 15~21 μ g/mL); aldose reductase inhibitor (rat eye lens, 10 μ mol/L, InRt = 40.9%). **Source:** BAI FAN DOU *Phaseolus vulgaris*, DA HUA HONG JING TIAN *Rhodiola crenulata* [Syn. *Rhodiola euryphylla*], GU JIE CAO *Equisetum palustre*, NAN SHE TENG YE *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], TU JING JIE *Chenopodium ambrosioides*, ZI HUA JING TIAN *Hylotelephium mingjiniatum*. **Ref:** 6, 900.

**12084 Kaempferol 3-O-alpha-rhamnoside-7,4'-di-O-beta-galactoside**

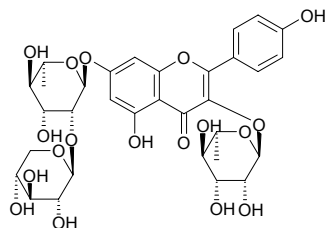
C₃₃H₄₀O₂₀ (756.67). Amorphous yellow powder. **Source:** *Warburgia ugandensis* (leaf). **Ref:** 3470.

**12085 Kaempferol-3-rhamnoside-7-O-[6-feruloylglucosyl(1-3)-rhamnoside]**

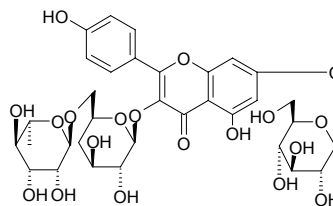
C₄₃H₄₈O₂₂ (916.85). **Source:** CHANG SHENG TIE JIAO JUE *Asplenium prolongatum*. **Ref:** 660.

**12086 Kaempferol-3-rhamnoside-7-xylosyl(1-2)-rhamnoside**

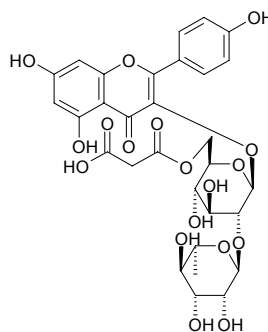
C₃₂H₃₈O₁₈ (710.65). Yellow amorphous powder. **Source:** BI SHENG LI *Chenopodium murale*. **Ref:** 2304.

**12087 Kaempferol-3-rhamnosyl glucoside-7-glucoside**

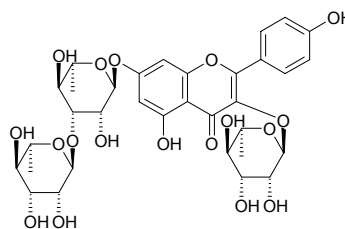
Kaempferol-3-rutinoside-7-glucoside C₃₃H₄₀O₂₀ (756.67). **Source:** MU ZEI *Equisetum hiemale* (aerial parts: mean content of 3 origins = 0.017%). **Ref:** 5508.

**12088 Kaempferol-3-O-(2''-O-alpha-rhamnosyl-6''-O-malonyl)-beta-glucoside**

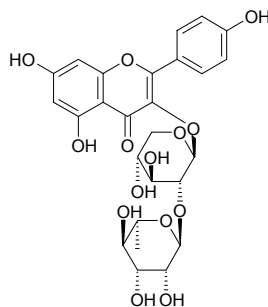
C₃₀H₃₂O₁₈ (680.58). Light-yellow amorphous powder. **Source:** HU DIE HUA DOU *Clitoria ternatea*. **Ref:** 2064.

**12089 Kaempferol-3-O-rhamnosyl-7-rhamnosyl-(1-3)-rhamnoside**

C₃₃H₄₀O₁₈ (724.68). **Source:** DA JIN QIAN CAO *Lysimachia christinae*. **Ref:** 660.

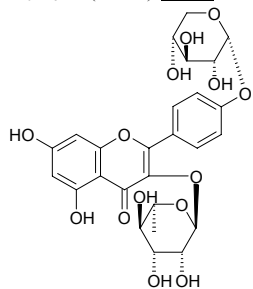
**12090 Kaempferol-3-O-alpha-L-rhamnosyl(1-2)-beta-D-xyloside**

C₂₆H₂₈O₁₄ (564.50). Yellow crystals, mp 186~188°C. **Source:** DA JIN QIAN CAO *Lysimachia christinae*. **Ref:** 2461.

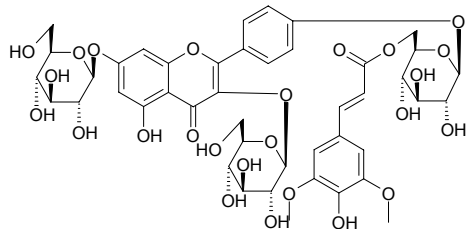


12091 Kaempferol-3-rhamno-4'-xyloside

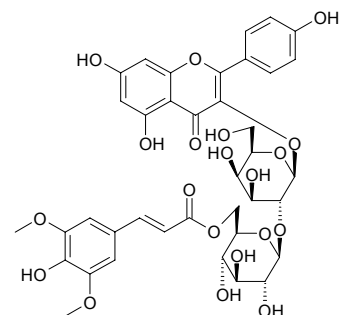
$C_{26}H_{28}O_{14}$ (564.50). Source: TU JING JIE *Chenopodium ambrosioides*. Ref: 660.

**12092 Kaempferol-4'-(6-O-E-sinapoyl-β-glucopyranoside)-3,7-di-O-β-glucopyranoside**

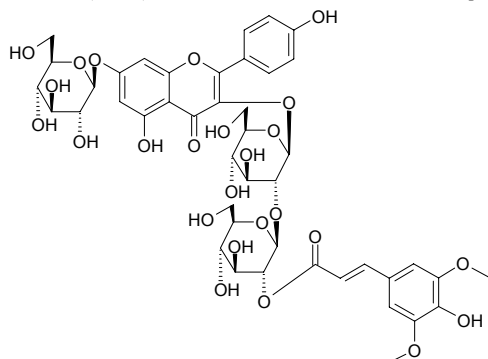
$C_{44}H_{50}O_{25}$ (978.87). Source: OU ZHOU YOU CAI *Brassica napus* (seed). Ref: 5289.

**12093 Kaempferol-3-O-[(6-O-sinapoyl)-β-D-glucopyranosyl-(1→2)-β-D-galactopyranoside]**

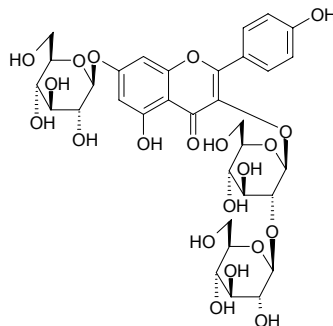
$C_{38}H_{40}O_{20}$ (816.73). Pharm: Anti-HIV-1 (RT (RDDP) inhibitor, $IC_{50} > 100\mu\text{mol/L}$, positive control Adriamycin, $IC_{50} = 27\mu\text{mol/L}$; DDDP inhibitor, $IC_{50} > 100\mu\text{mol/L}$, positive control Adriamycin, $IC_{50} = 6\mu\text{mol/L}$; HIV-1 IN inhibitor, $IC_{50} = 30\mu\text{mol/L}$, positive control Suramin, $IC_{50} = 2.4\mu\text{mol/L}$). Source: HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*] (leaf). Ref: 4187.

**12094 Kaempferol-3-(2''-O-E-sinapoylsophoroside)-7-O-β-glucopyranoside**

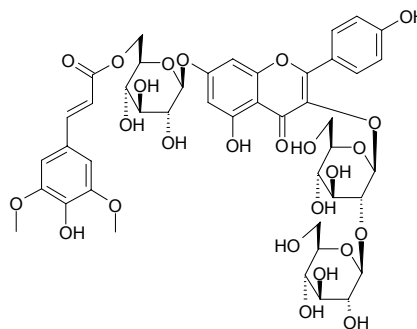
$C_{44}H_{50}O_{25}$ (978.87). Source: OU ZHOU YOU CAI *Brassica napus* (seed). Ref: 5289.

**12095 Kaempferol-3-O-sophoroside-7-O-β-glucopyranoside**

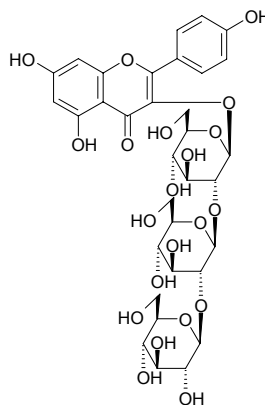
$C_{33}H_{40}O_{21}$ (772.67). Source: OU ZHOU YOU CAI *Brassica napus* (seed). Ref: 5289.

**12096 Kaempferol-3-O-sophoroside-7-O-(2-O-E-sinapoyl-β-glucopyranoside)**

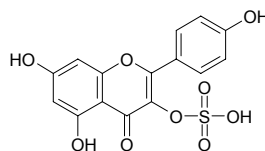
$C_{44}H_{50}O_{25}$ (978.87). Source: OU ZHOU YOU CAI *Brassica napus* (seed). Ref: 5289.

**12097 Kaempferol-3-sophorotrioside**

$C_{33}H_{40}O_{21}$ (772.67). Pharm: Hepatoprotective (*in vitro*, mus primary cultured hepatocytes, inhibits liver cytotoxicity induced by GalN, $100\mu\text{mol/L}$, $InRt = (27.0 \pm 3.6)\%$, $p < 0.01$). Source: WAN DOU *Pisum sativum* (young seedpot). Ref: 4110.

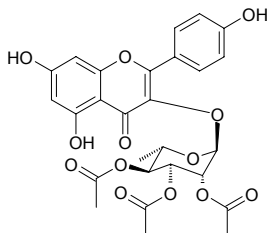
**12098 Kaempferol-3-sulphate**

$C_{15}H_{10}O_9S$ (366.31). Source: ZHU ZONG CAO *Adiantum capillus-veneris*. Ref: 660.

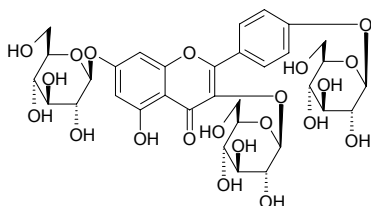


12099 Kaempferol-3-O-(2,3,4-tri-O-acetyl- α -L-rhamnopyranoside)

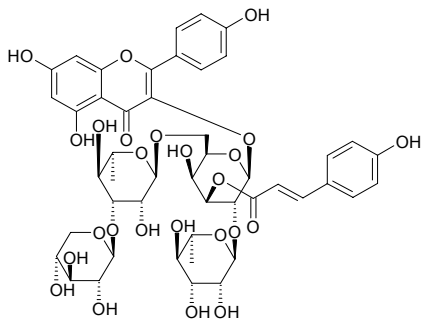
$C_{27}H_{26}O_{13}$ (558.50). **Pharm:** CYP3A4 inhibitor (IC_{50} = 14.4 μ mol/L, control Ketoconazole, IC_{50} = 0.245 μ mol/L); CYP2D6 inhibitor (IC_{50} = 43.3 μ mol/L, control Quinidine, IC_{50} = 0.078 μ mol/L). **Source:** FANG XIANG JIANG *Zingiber aromaticum* (rhizome: yield = 0.00013%dw). **Ref:** 4669.

**12100 Kaempferol-3,7,4'-tri-O- β -glucoside**

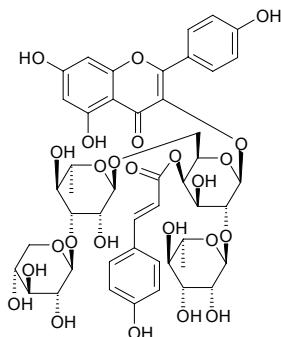
$C_{33}H_{40}O_{21}$ (772.67). Amorphous yellow powder. **Source:** *Warburgia ugandensis* (leaf). **Ref:** 3470.

**12101 Kaempferol-3-O- $\{\beta$ -D-xylopyranosyl(1 \rightarrow 3)- α -L-rhamnopyranosyl(1 \rightarrow 6)**

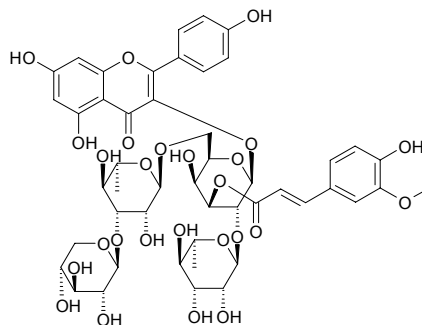
[α -L-rhamnopyranosyl(1 \rightarrow 2)]- β -D-3-trans-p-coumaroylgalactopyranoside
 $C_{47}H_{54}O_{25}$ (1018.94). $[\alpha]_D^{20}$ = -94.4° (c = 0.09, MeOH). **Source:** SHAN YANG HUANG QI *Astragalus caprinus* (leaf). **Ref:** 4215.

**12102 Kaempferol-3-O- $\{\beta$ -D-xylopyranosyl(1 \rightarrow 3)- α -L-rhamnopyranosyl(1 \rightarrow 6)**

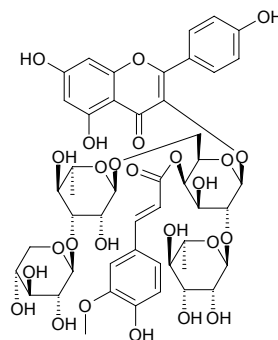
[α -L-rhamnopyranosyl(1 \rightarrow 2)]- β -D-4-trans-p-coumaroylgalactopyranoside
 $C_{47}H_{54}O_{25}$ (1018.94). $[\alpha]_D^{20}$ = +149.0° (c = 0.50, MeOH). **Source:** SHAN YANG HUANG QI *Astragalus caprinus* (leaf). **Ref:** 4215.

**12103 Kaempferol-3-O- $\{\beta$ -D-xylopyranosyl(1 \rightarrow 3)- α -L-rhamnopyranosyl(1 \rightarrow 6)**

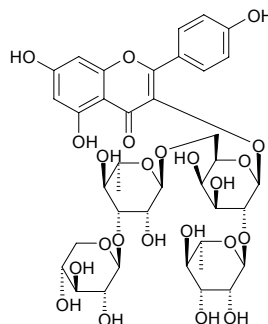
[α -L-rhamnopyranosyl(1 \rightarrow 2)]- β -D-3-trans-feruloylgalactopyranoside
 $C_{48}H_{56}O_{26}$ (1048.97). $[\alpha]_D^{20}$ = -87.5° (c = 0.40, MeOH). **Source:** SHAN YANG HUANG QI *Astragalus caprinus* (leaf). **Ref:** 4215.

**12104 Kaempferol-3-O- $\{\beta$ -D-xylopyranosyl(1 \rightarrow 3)- α -L-rhamnopyranosyl(1 \rightarrow 6)**

[α -L-rhamnopyranosyl(1 \rightarrow 2)]- β -D-4-trans-feruloylgalactopyranoside
 $C_{48}H_{56}O_{26}$ (1048.97). $[\alpha]_D^{20}$ = -146.6° (c = 0.09, MeOH). **Source:** SHAN YANG HUANG QI *Astragalus caprinus* (leaf). **Ref:** 4215.

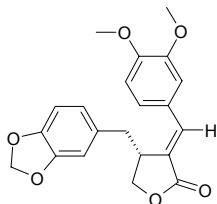
**12105 Kaempferol-3-O- $\{\beta$ -D-xylopyranosyl(1 \rightarrow 3)- α -L-rhamnopyranosyl(1 \rightarrow 6)**

[α -L-rhamnopyranosyl(1 \rightarrow 2)]- β -D-galactopyranoside
 $C_{38}H_{48}O_{23}$ (872.79). $[\alpha]_D^{20}$ = -97.3° (c = 0.38, MeOH). **Source:** SHAN YANG HUANG QI *Astragalus caprinus* (leaf). **Ref:** 4215.

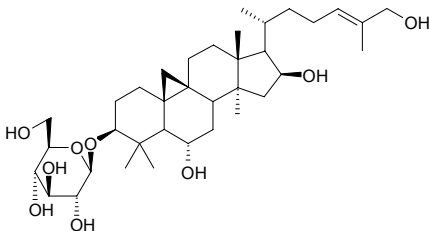


12106 Kaerophyllin

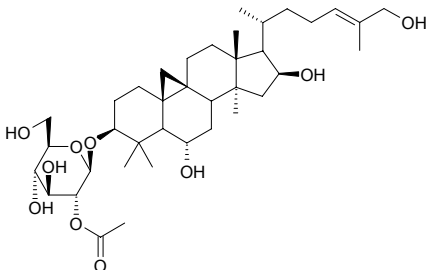
Chaerophyllin [75590-33-9] $C_{21}H_{20}O_6$ (368.39). **Pharm:** Cytotoxic (hmn peripheral blood T cells, dose = 2.0 $\mu\text{g/mL}$, T cell survival rate = 71%); immunosuppressant (inhibits IL-2 secretion costimulated by CD28, dose = 2.0 $\mu\text{g/mL}$, InRt = 49%). **Source:** HONG CHAI HU *Bupleurum scorzonrifolium* (root). **Ref:** 3498.

**12107 Kahircoside II**

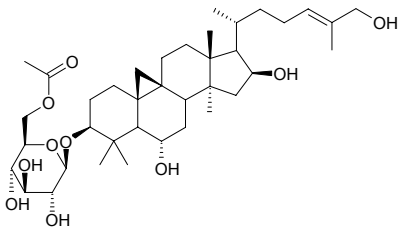
9 β ,19-Cyclolanost-24E-ene-3 β ,6 α ,16 β ,27-tetraol-3-O- β -D-glucopyranoside $C_{36}H_{60}O_9$ (636.87). Colorless needles, mp 118°C, $[\alpha]_D^{25} = +12.3^\circ$ ($c = 0.06$, MeOH). **Pharm:** Cytotoxic (A2780, $IC_{50} = 23.0 \mu\text{g/mL}$, weak activity). **Source:** KAI LUO HUANG QI *Astragalus kahircicus* (aerial parts). **Ref:** 3873.

**12108 Kahircoside III**

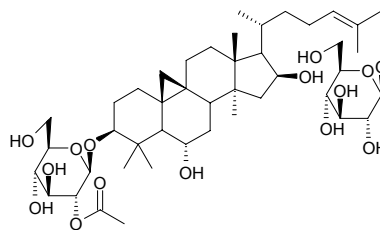
9 β ,19-Cyclolanost-24E-ene-3 β ,6 α ,16 β ,27-tetraol-3-O-(2'-O-acetyl)- β -D-glucopyranoside $C_{38}H_{62}O_{10}$ (678.91). Colorless needles, mp 140°C, $[\alpha]_D^{25} = +49^\circ$ ($c = 0.065$, MeOH). **Pharm:** Cytotoxic (A2780, $IC_{50} = 16.0 \mu\text{g/mL}$, weak activity). **Source:** KAI LUO HUANG QI *Astragalus kahircicus* (aerial parts). **Ref:** 3873.

**12109 Kahircoside IV**

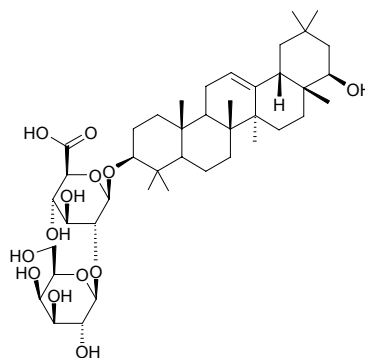
9 β ,19-Cyclolanost-24E-ene-3 β ,6 α ,16 β ,27-tetraol-3-O-(6'-O-acetyl)- β -D-glucopyranoside $C_{38}H_{62}O_{10}$ (678.91). Colorless needles, mp 165°C, $[\alpha]_D^{25} = +175^\circ$ ($c = 0.02$, MeOH). **Pharm:** Cytotoxic (A2780, $IC_{50} = 17.0 \mu\text{g/mL}$, weak activity). **Source:** KAI LUO HUANG QI *Astragalus kahircicus* (aerial parts). **Ref:** 3873.

**12110 Kahircoside V**

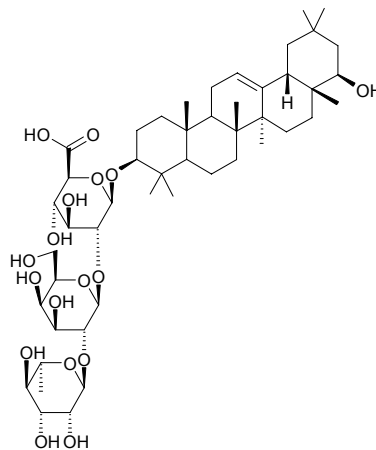
9 β ,19-Cyclolanost-24E-ene-3 β ,6 α ,16 β ,27-tetraol-3-O- β -D-glucopyranosyl-27-O- β -D-glucopyranoside $C_{44}H_{72}O_{15}$ (841.06). Colorless needles, mp 157–158°C, $[\alpha]_D^{25} = +86.7^\circ$ ($c = 0.015$, MeOH). **Pharm:** Cytotoxic (A2780, $IC_{50} = 17.0 \mu\text{g/mL}$, weak activity). **Source:** KAI LUO HUANG QI *Astragalus kahircicus* (aerial parts). **Ref:** 3873.

**12111 Kaikasaponin I**

$C_{42}H_{68}O_{13}$ (781.00). **Source:** HUAI *Sophora japonica*. **Ref:** 660.

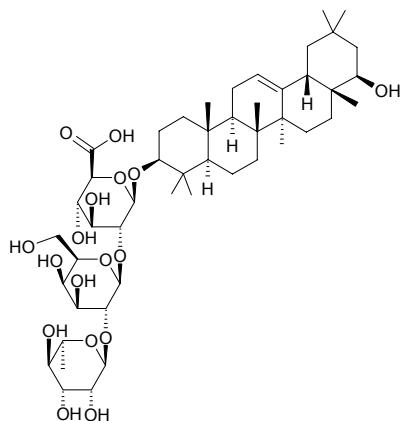
**12112 Kaikasaponin II**

$C_{48}H_{78}O_{17}$ (927.15). **Source:** HUAI *Sophora japonica*. **Ref:** 660.

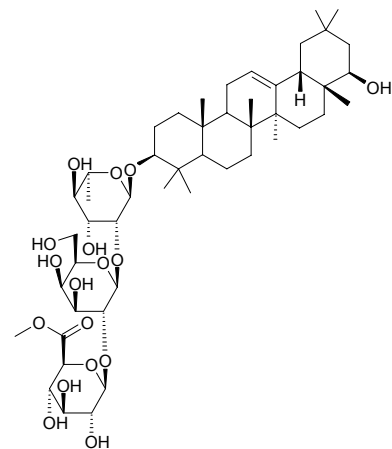


12113 Kaikasaponin III

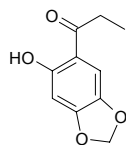
[115330-90-0] $C_{48}H_{78}O_{17}$ (927.15). Source: GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*], HUAI *Sophora japonica*, HUANG HUA DI DING *Crotalaria albida*, JI GU CAO *Abrus fruticosus* [Syn. *Abrus cantoniensis*]. Ref: 718, 1521.

**12114 Kaikasaponin III methyl ester**

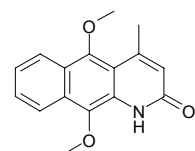
$C_{49}H_{80}O_{17}$ (941.17). Source: XIANG SI ZI *Abrus precatorius*. Ref: 660.

**12115 Kakuol**

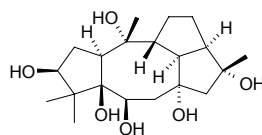
$C_{10}H_{10}O_4$ (194.19). Source: DU HENG *Asarum forbesii*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*. Ref: 660.

**12116 Kalasinamide**

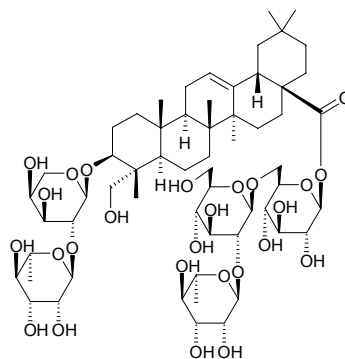
1-Aza-9,10-dimethoxy-4-methyl-2-oxo-1,2-dihydroanthracene $C_{16}H_{15}NO_3$ (269.30). Orange needles (EtOH- CH_2Cl_2), mp 233.8~235.5°C. Source: AN LUO *Polyalthia suberosa* (stem). Ref: 3946.

**12117 Kalmanol**

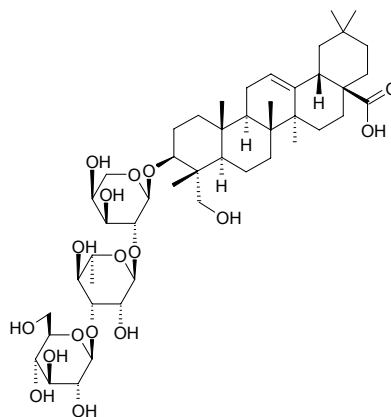
$C_{20}H_{34}O_6$ (370.49). Source: NAO YANG HUA *Rhododendron molle* (flower; yield = 0.00042% $dw^{[4780]}$). Ref: 660, 4780.

**12118 Kalopanax saponin C**

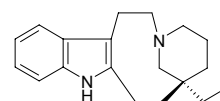
3-O-[α -L-Rhamnopyranosyl-(1 \rightarrow 2)- α -L-arabinopyranosyl]-hedragenin-28-[α -L-rhamnopyranosyl-(1 \rightarrow 2)- β -D-glucopyranosyl(1 \rightarrow 6)- β -D-glucopyranosyl] ester $C_{59}H_{96}O_{26}$ (1221.41). White crystals (methanol), mp 226~228°C, $[\alpha]_D^{14} = +14.2^\circ$ ($c = 0.005$, methanol). Source: CI QIU SHU PI *Kalopanax septemlobus*. Ref: 148.

**12119 Kalopanax saponin H**

$C_{47}H_{76}O_{17}$ (913.12). White powder, $[\alpha]_D^{20} = +8.6^\circ$ ($c = 0.5$, H_2O). Source: CI QIU SHU PI *Kalopanax septemlobus*. Ref: 457.

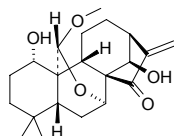
**12120 Kamassine**

Quebrachamine [14430-17-2] $C_{19}H_{26}N_2$ (282.43). Crystals (MeOH), mp 147~149°C, $[\alpha]_D = +98^\circ$ ($CHCl_3$), $[\alpha]_D = +108.9^\circ$ (Me_2CO). Source: LA BA ZHUANG DUO GUO SHU *Pleiocarpa tubicina* (leaf), ZHI LI CHANG CHUN HUA *Vinca erecta*. Ref: 1521.

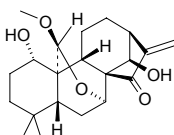


12121 Kamebacetal A

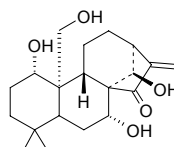
$C_{21}H_{30}O_5$ (362.47). mp 241~243°C, $[\alpha]_D^{26} = -37.5^\circ$ ($c = 0.11$, MeOH). Source: KA MEI XIANG CHA CAI *Isodon kameba*, YIN DI KUAN YE XIANG CHA CAI *Isodon umbrosa* var. *latifolia*. Ref: 4067.

**12122 Kamebacetal B**

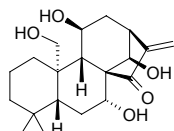
$C_{21}H_{30}O_5$ (362.47). mp 230~232°C, $[\alpha]_D^{26} = -58^\circ$ ($c = 0.43$, MeOH). Source: KA MEI XIANG CHA CAI *Isodon kameba*, YIN DI KUAN YE XIANG CHA CAI *Isodon umbrosa* var. *latifolia*. Ref: 4067.

**12123 Kamebakaurin**

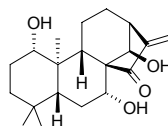
$C_{20}H_{30}O_5$ (350.46). mp 232~234°C, $[\alpha]_D^{21.5} = -107^\circ$ ($c = 1.0$, MeOH). Pharm: Cytotoxic (*in vitro*, P_{388} , $ED_{50} = 0.82\mu\text{g/mL}$)^[3012]; anti-inflammatory (specific NF- κ B inhibitor of DNA-binding activity of p50 subunit, valuable candidate for intervention in NF- κ B-dependent pathological condition such as inflammation)^[4988]; anti-inflammatory (*in vivo* animal models, induced by carrageenan, oral administration of 20mg/kg resulted in 75% decrease of paw edema volume)^[4988]; anti-inflammatory (LPS-stimulated RAW264.7 cells, inhibits not only expression of inflammatory NF- κ B target genes such as iNOS, COX-2 and TNF- α but also production of PGE₂ and TNF- α)^[4988]; anti-inflammatory (adjuvant arthritis model, suppresses recruitment of neutrophils, production of TNF- α as well as PGE₂ in pouch exudates induced by carrageenan)^[4988]. Source: CHANG GUAN XIANG CHA CAI *Rabdosia longituba*, KA MEI XIANG CHA CAI *Isodon kameba*, MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*], WEI YE XIANG CHA CAI *Rabdosia excisa* (aerial parts: yield = 0.020%dw), YIN DI KUAN YE XIANG CHA CAI *Isodon umbrosa* var. *latifolia*. Ref: 660, 3012, 4067, 4988.

**12124 Kamebakaurinin**

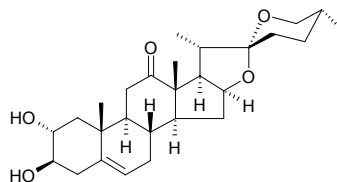
$C_{20}H_{30}O_5$ (350.46). mp 267~269°C, $[\alpha]_D^{25} = -101^\circ$ ($c = 0.92$, MeOH). Source: KA MEI XIANG CHA CAI *Isodon kameba*, YIN DI KUAN YE XIANG CHA CAI *Isodon umbrosa* var. *latifolia*. Ref: 4067.

**12125 Kamebanin**

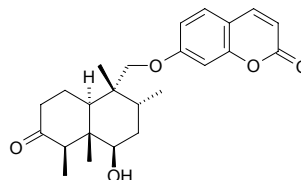
1 α ,7 α ,14 β -Trihydroxy-*ent*-kaur-16-en-15-one $C_{20}H_{30}O_4$ (334.46). mp 266~267°C, $[\alpha]_D^{19} = -108^\circ$ ($c = 1.0$, dioxane). Pharm: Cytotoxic (*in vitro*, P_{388} , $ED_{50} = 0.69\mu\text{g/mL}$)^[3012]. Source: KA MEI XIANG CHA CAI *Isodon kameba*, WEI YE XIANG CHA CAI *Rabdosia excisa* (aerial parts: yield = 0.0023%dw), YIN DI KUAN YE XIANG CHA CAI *Isodon umbrosa* var. *latifolia*. Ref: 3012, 4067.

**12126 Kammogenin**

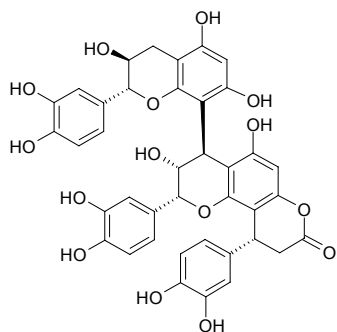
$C_{27}H_{40}O_5$ (444.62). mp 240~241°C. Source: WU CI FAN MA *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*]. Ref: 6.

**12127 Kamolonol**

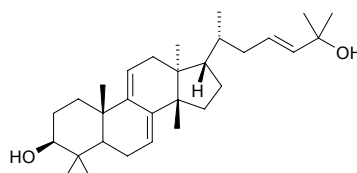
$C_{24}H_{30}O_5$ (398.50). Source: A WEI *Ferula assafoetida*. Ref: 660.

**12128 Kandelin A₁**

[88903-77-9] $C_{39}H_{32}O_{15}$ (740.68). Pharm: Tanning agent. Source: QIU QIE SHU *Kandelia candel*. Ref: 658.

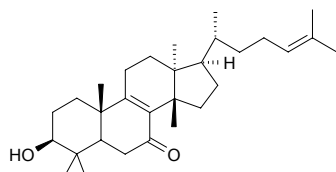
**12129 Kansanol**

$C_{30}H_{48}O_2$ (440.72). Colorless gum, $[\alpha]_D^{23} = -50.2^\circ$ ($c = 0.18$, MeOH)., Source: GAN SUI *Euphorbia kansui* (dried root). Ref: 4690.

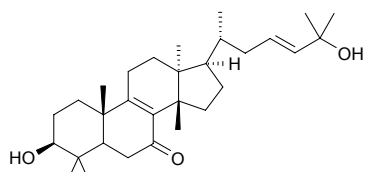


12130 Kansone

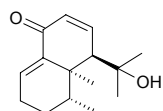
Eupha-8,24-diene-3 β -ol-7-one C₃₀H₄₈O₂ (440.72). Colorless gum, [α]_D²³ = +14.1° (*c* = 0.41, MeOH). **Pharm:** Cell division arrester (cultured individual *Xenopus laevis* cells at blastular stage, 10 μ g/mL, >50% cleavage arrest). **Source:** GAN SUI *Euphorbia kansui* (dried root: yield = 0.00034%). **Ref:** 4690.

**12131 Kansenonol**

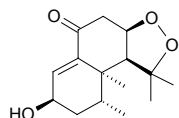
(23*E*)-Eupha-8,23-diene-3 β ,25-diol-7-one C₃₀H₄₈O₃ (456.72). Colorless gum, [α]_D²³ = +14.3° (*c* = 0.21, MeOH). **Pharm:** Cell division arrester (cultured individual *Xenopus laevis* cells at blastular stage, 10 μ g/mL, >50% cleavage arrest). **Source:** GAN SUI *Euphorbia kansui* (dried root: yield = 0.00007%). **Ref:** 4690.

**12132 Kanshone A**

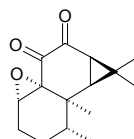
C₁₅H₂₂O₂ (234.34). **Source:** GAN SONG *Nardostachys chinensis*. **Ref:** 660.

**12133 Kanshone B**

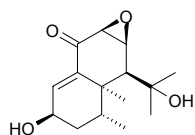
C₁₅H₂₂O₄ (266.34). **Source:** GAN SONG *Nardostachys chinensis*. **Ref:** 660.

**12134 Kanshone C**

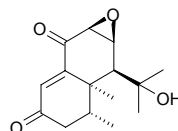
C₁₅H₂₀O₃ (248.32). **Source:** GAN SONG *Nardostachys chinensis*. **Ref:** 660.

**12135 Kanshone D**

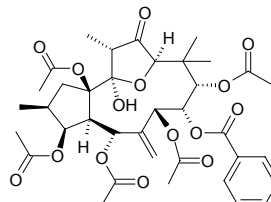
C₁₅H₂₂O₄ (266.34). **Source:** GAN SONG *Nardostachys chinensis*. **Ref:** 660.

**12136 Kanshone E**

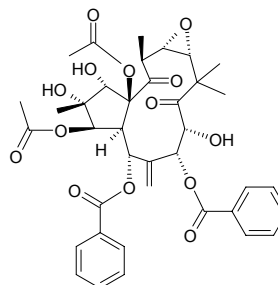
C₁₅H₂₀O₄ (264.32). **Source:** GAN SONG *Nardostachys chinensis*. **Ref:** 660.

**12137 Kansuinin A**

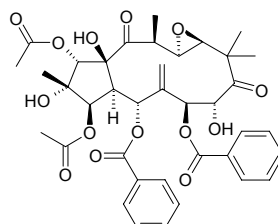
C₃₇H₄₆O₁₅ (730.77). **Pharm:** Cytotoxic inactive (*in vitro* animal cap assay to screen for inhibitors of cell division, treatment of cultured individual *Xenopus* cells from the early *Xenopus laevis* embryo at the blastular stage, 50 μ g/mL)^[4645]. **Source:** GAN SUI *Euphorbia kansui* (tuberoid: yield = 0.00037%dw^[4645]; yield = 0.005%dw^[4766]). **Ref:** 4645, 4766.

**12138 Kansuinin B**

[57685-46-8] C₃₈H₄₂O₁₄ (722.75). **Pharm:** Cytotoxic (*in vitro* animal cap assay to screen for inhibitors of cell division, treatment of cultured individual *Xenopus* cells from the early *Xenopus laevis* embryo at the blastular stage, 50 μ g/mL, cleavage arrest 87%)^[4645]; toxin. **Source:** GAN SUI *Euphorbia kansui* (tuberoid: yield = 0.00008%dw)^[4645]. **Ref:** 658, 4645.

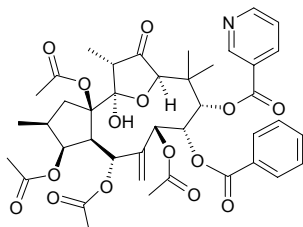
**12139 Kansuinin C**

C₃₈H₄₂O₁₄ (722.75). Colorless crystals (MeOH), mp 287~289°C, [α]_D²³ = 37.0° (*c* = 0.10, MeOH). **Pharm:** Cytotoxic inactive (*in vitro* animal cap assay to screen for inhibitors of cell division, treatment of cultured individual *Xenopus* cells from the early *Xenopus laevis* embryo at the blastular stage, 50 μ g/mL). **Source:** GAN SUI *Euphorbia kansui* (tuberoid: yield = 0.00009%dw). **Ref:** 4645.

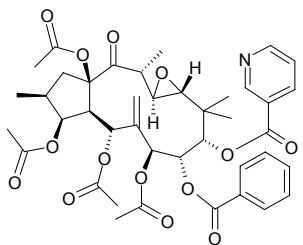


12140 Kansuinin D

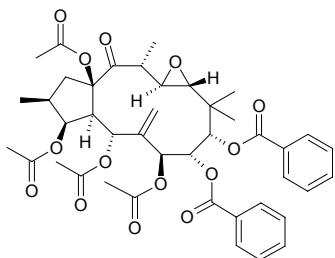
$C_{41}H_{47}NO_{15}$ (793.83). Colorless crystals (MeOH), mp 175–177°C, $[\alpha]_D^{23} = +76.5^\circ$ ($c = 0.40$, MeOH). **Pharm:** Induces cell cleavage arrest inactive (*Xenopus laevis* embryo cells at the blastular stage)^[4368]. **Source:** GAN SUI *Euphorbia kansui* (tuberoid: yield = 0.001%dw). **Ref:** 4368, 4766.

**12141 Kansuinin E**

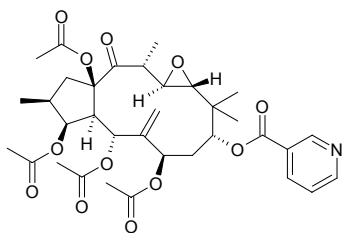
$C_{41}H_{47}NO_{14}$ (777.83). White crystals (MeOH), mp 126–128°C, $[\alpha]_D^{23} = +43.6^\circ$ ($c = 0.48$, MeOH). **Pharm:** Survival effect on fibroblasts that expressed (TrkA is a high-affinity receptor for nerve growth factor)^[4766]. **Source:** GAN SUI *Euphorbia kansui* (tuberoid: yield = 0.0004%dw). **Ref:** 4368, 4766.

**12142 Kansuinin F**

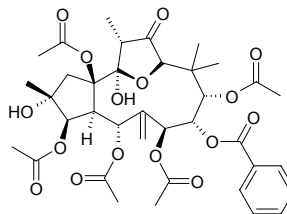
$C_{42}H_{48}O_{14}$ (776.84). Colorless needles (petroleum ether–ethyl acetate), mp 222–225°C, $[\alpha]_D^{25} = +41.0^\circ$ ($c = 0.322$, $CHCl_3$). **Source:** GAN SUI *Euphorbia kansui* (tuberoid: yield = 0.00015%dw). **Ref:** 4766.

**12143 Kansuinin G**

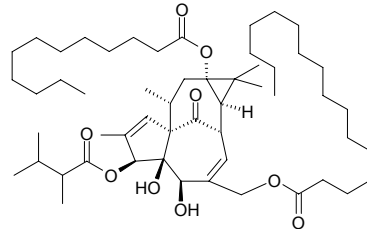
$C_{34}H_{43}NO_{12}$ (657.72). Colorless needles (petroleum ether–ethyl acetate), mp 220–223°C, $[\alpha]_D^{25} = -107.8^\circ$ ($c = 0.372$, $CHCl_3$). **Source:** GAN SUI *Euphorbia kansui* (tuberoid: yield = 0.00009%dw). **Ref:** 4766.

**12144 Kansuinin H**

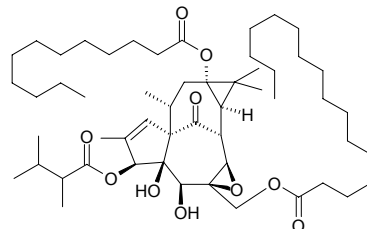
$C_{37}H_{46}O_{16}$ (746.77). Colorless needles (petroleum ether–acetone), mp 206–208°C, $[\alpha]_D^{25} = +28.4^\circ$ ($c = 0.081$, $CHCl_3$). **Source:** GAN SUI *Euphorbia kansui* (tuberoid: yield = 0.0002%dw). **Ref:** 4766.

**12145 Kansuiphorin A**

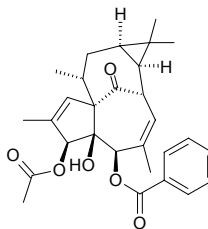
$C_{54}H_{90}O_9$ (883.31). **Pharm:** Antineoplastic. **Source:** GAN SUI *Euphorbia kansui*. **Ref:** 660, 4368.

**12146 Kansuiphorin B**

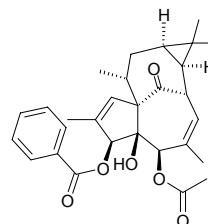
$C_{54}H_{90}O_{10}$ (899.31). **Pharm:** Antineoplastic. **Source:** GAN SUI *Euphorbia kansui*. **Ref:** 660.

**12147 Kansuiphorin C**

$C_{29}H_{34}O_6$ (478.59). Colorless oil. **Source:** GAN SUI *Euphorbia kansui*. **Ref:** 660, 2450.

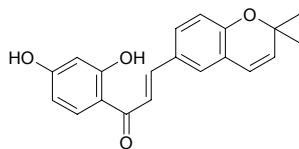
**12148 Kansuiphorin D**

$C_{29}H_{34}O_6$ (478.59). **Source:** GAN SUI *Euphorbia kansui*. **Ref:** 660.

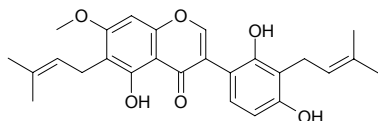


12149 Kanzonol B

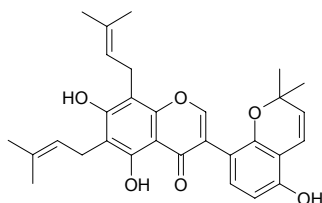
$C_{20}H_{18}O_4$ (322.36). Source: HUANG GAN CAO *Glycyrrhiza kansuensis*.
Ref: 2431.

**12150 Kanzonol K**

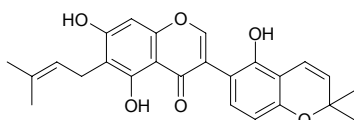
$C_{26}H_{28}O_6$ (436.51). Source: GAN CAO *Glycyrrhiza Uralensis*. Ref: 2431.

**12151 Kanzonol L**

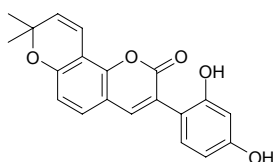
$C_{30}H_{32}O_6$ (488.59). Source: GAN CAO *Glycyrrhiza Uralensis*. Ref: 2431.

**12152 Kanzonol T**

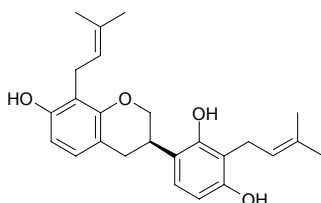
$C_{25}H_{24}O_6$ (420.47). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*.
Ref: 2431.

**12153 Kanzonol W**

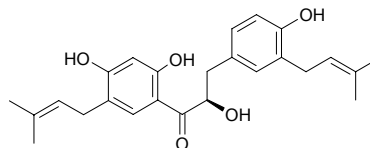
$C_{20}H_{16}O_5$ (336.35). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*.
Ref: 2431.

**12154 Kanzonol X**

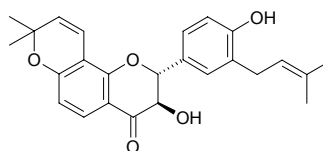
$C_{25}H_{30}O_4$ (394.52). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*.
Ref: 2431.

**12155 Kanzonol Y**

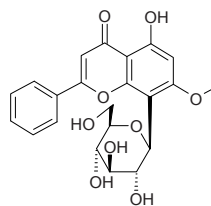
$C_{25}H_{30}O_5$ (410.51). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*.
Ref: 2431.

**12156 Kanzonol Z**

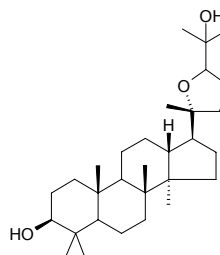
$C_{25}H_{26}O_5$ (406.48). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*.
Ref: 2431.

**12157 Kaplanin**

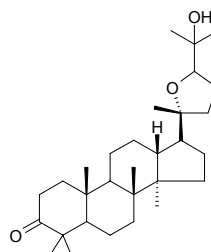
5-Hydroxy-7-methoxy-8-C- β -glucosylflavone $C_{22}H_{22}O_9$ (430.42). Yellow amorphous solid (CH_2Cl_2 -MeOH 20%). Source: *Piper lhotzkyanum* (leaf).
Ref: 5107.

**12158 Kapurool**

$C_{30}H_{52}O_3$ (460.75). Source: LONG NAO GAO XIANG *Dryobalanops aromatica*. Ref: 660.

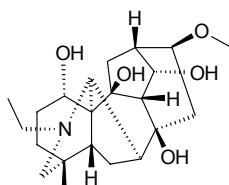
**12159 Kapurone**

$C_{30}H_{50}O_3$ (458.73). Source: LONG NAO GAO XIANG *Dryobalanops aromatica*. Ref: 660.

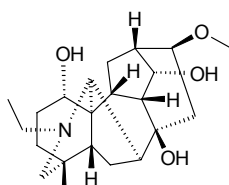


12160 Karacolidine

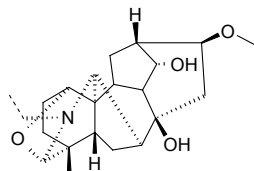
[41655-13-4] $C_{22}H_{35}NO_5$ (393.53). Source: DUO GEN WU TOU *Aconitum karakolicum*. Ref: 6, 660.

**12161 Karacoline**

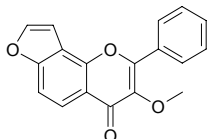
[39089-30-0] $C_{22}H_{35}NO_4$ (377.53). Source: WU TOU *Aconitum carmichaeli*, FU ZI *Aconitum carmichaeli*. Ref: 6, 239, 660.

**12162 Karakanine**

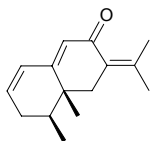
$C_{22}H_{33}NO_4$ (375.51). White needles, mp 193~195°C. Source: ZHONG BA E ZHANG YE FU ZI *Aconitum carmichaeli* cv. Ref: 2502.

**12163 Karanjin**

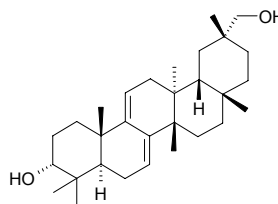
[521-88-0] $C_{18}H_{12}O_4$ (292.29). mp 158.5°C. Pharm: Antibacterial (*Mycobacterium tuberculosis*). Source: GAN HUA DOU *Fordia cauliflora* (root: content scope of 11 origins = 0.12%~1.48%, mean content = 0.48%)^[5508], SHUI LIU DOU *Pongamia pinnata*, MO LI YU TENG *Derris mollis*. Ref: 6, 658, 5508.

**12164 (+)-Karanone**

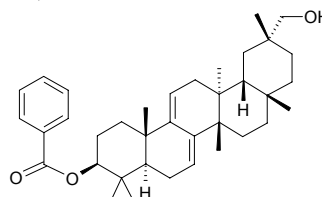
$C_{15}H_{20}O$ (216.33). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

**12165 Karoundiol**

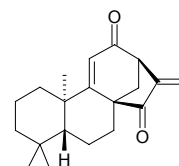
[118117-31-0] $C_{30}H_{48}O_2$ (440.72). mp 201~203°C. Pharm: Inhibits promotor of cancer (mus, inflammation caused by TPA, $ID_{50} = 0.4\text{mg/ear}$; mus skin cancer caused by DMBA and TPA). Source: GUA LOU *Trichosanthes kirilowii*. Ref: 2, 933, 998, 1041.

**12166 Karoundiol 3-benzoate**

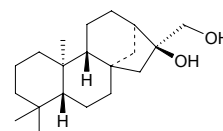
Karoundiol 3-*O*-benzoate [118117-32-1] $C_{37}H_{52}O_3$ (544.82). mp 119~122°C. Pharm: Inhibits promotor of cancer (mus, inflammation caused by TPA of $1\mu\text{g/ear}$, $ID_{50} = 0.2\text{mg/ear}$). Source: GUA LOU *Trichosanthes kirilowii*. Ref: 933, 1041.

**12167 ent-9(11),16-Kauradiene-12,15-dione**

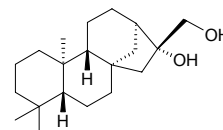
$C_{20}H_{26}O_2$ (298.43). mp 114~116°C, $[\alpha]_D^{20} = +386.6^\circ$ ($c = 0.41$, CHCl_3). Pharm: Cytotoxic (hmn leukemia cell line HL-60, $IC_{50} = 0.59\mu\text{mol/L}$). Source: XIN XI LAN YE TAI *Jungermannia* sp. Ref: 4390.

**12168 ent-Kauran-16α,17-diol**

[84711-16-0] $C_{20}H_{34}O_2$ (306.49). mp 174.0~176.5°C, $[\alpha]_D^{25} = -45.9^\circ$ ($c = 0.18$, CHCl_3). Source: HU BEI BEI MU *Fritillaria hupehensis*, ZI HUA E BEI BEI MU *Fritillaria ebeiensis* var. *purpurea*, ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 2182.

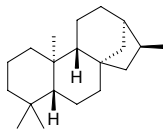
**12169 ent-Kauran-16β,17-diol**

[16836-31-0] $C_{20}H_{34}O_2$ (306.49). mp 187~190°C, $[\alpha]_D^{25} = -48.2^\circ$ ($c = 0.23$, CHCl_3). Source: HU BEI BEI MU *Fritillaria hupehensis*, ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 2182.

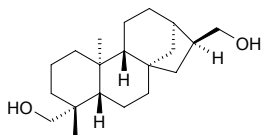


12170 Kaurane

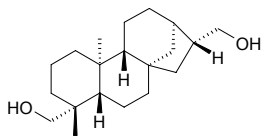
$C_{20}H_{34}$ (274.49). **Pharm:** Anti-inflammatory (NO production inhibitor)^[4415]. **Source:** SAN JIAO MA DOU LING *Aristolochia triangularis*. **Ref:** 1521, 4415.

**12171 16 α H-17,19-ent-Kauranediol**

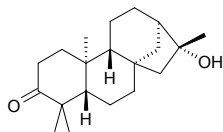
$C_{20}H_{34}O_2$ (306.49). **Pharm:** Antiproliferative and cytotoxic (*in vitro*, L-929, $GI_{50} = 12.8\mu\text{g/mL}$; K562, $GI_{50} = 13.6\mu\text{g/mL}$; HeLa, $CC_{50} = 35.7\mu\text{g/mL}$; control Paclitaxel, L-929, $GI_{50} = 0.1\mu\text{g/mL}$; K562, $GI_{50} = 0.01\mu\text{g/mL}$; HeLa, $CC_{50} = 0.01\mu\text{g/mL}$). **Source:** MU LAN⁽³⁾ *Bruguiera gymnorrhiza* (stem: yield = 0.00011%). **Ref:** 4770.

**12172 16 β H-17,19-ent-Kauranediol**

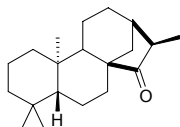
[74365-75-6] $C_{20}H_{34}O_2$ (306.49). **Source:** SI MIAN MAO JIA MI YE ZE LAN *Eupatorium tinifolium* **Ref:** 1521.

**12173 ent-Kauran-16 β -ol-3-one**

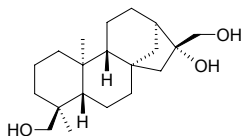
$C_{20}H_{32}O_2$ (304.48). Colorless needles (MeOH), mp 155–160°C, $[\alpha]_D^{25} = -65.2^\circ$ ($c = 0.32$, CHCl_3). **Source:** HAI QI *Excoecaria agallocha* (root: yield = 0.00063%dw). **Ref:** 4613.

**12174 (16R)-ent-Kauran-15-one**

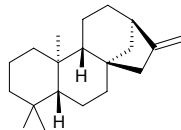
$C_{20}H_{32}O$ (288.48). **Source:** JIE XING YE TAI *Jungermannia truncata*. **Ref:** 4201.

**12175 ent-Kauran-16 β ,17,18-triol**

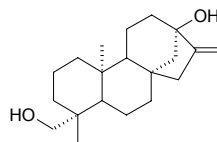
$C_{20}H_{34}O_3$ (322.49). **Source:** XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*]. **Ref:** 660.

**12176 Kaurene**

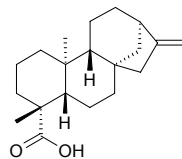
Podocarprene $C_{20}H_{32}$ (272.48). mp (+) 49°C, (–) 50°C, (±) 44–47°C. **Source:** LUO HAN SONG YE *Podocarpus macrophyllus*, LIU SHAN *Cryptomeria fortunei*. **Ref:** 6.

**12177 16-ent-Kaurene-13,19-diol**

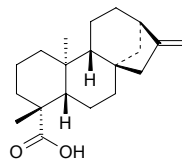
$C_{20}H_{32}O_2$ (304.48). **Pharm:** Antiproliferative and cytotoxic (*in vitro*, L-929, $GI_{50} = 50\mu\text{g/mL}$; K562, $GI_{50} = 50\mu\text{g/mL}$; HeLa, $CC_{50} = 50\mu\text{g/mL}$; control Paclitaxel, L-929, $GI_{50} = 0.1\mu\text{g/mL}$; K562, $GI_{50} = 0.01\mu\text{g/mL}$; HeLa, $CC_{50} = 0.01\mu\text{g/mL}$). **Source:** MU LAN⁽³⁾ *Bruguiera gymnorrhiza* (stem: yield = 0.00012%). **Ref:** 4770.

**12178 L-Kaur-16-en-19-oic acid**

Kaurenoic acid; Cunabic acid [6730-83-2] $C_{20}H_{30}O_2$ (302.46). Colorless crystals, mp 171–172°C, $[\alpha]_D^{20} = -109.6^\circ$ ($c = 1.0$, CHCl_3); mp 179–181°C; white cubic crystals, mp 176–178 °C, $[\alpha]_D^{25} = -97.0^\circ$ ($c = 0.55$, CHCl_3). **Pharm:** Platelet aggregation selected inhibitor (washed rabbit platelets, 200 $\mu\text{mol/L}$: 100 $\mu\text{mol/L}$ AA induced, InRt = 24.8%; 10 $\mu\text{g/mL}$ collagen induced, InRt = 100%; 1ng/mL PAF induced, InRt = 12.6%; 0.05U/mL thrombin induced, InRt = 5.6%)^[4654]; antioxidant (inhibits superoxide anion generation, fMLP/CB, $IC_{50} = (96.28 \pm 4.32)\mu\text{g/mL}$, $p < 0.001$, control DPI, $IC_{50} = (0.13 \pm 0.06)\mu\text{g/mL}$, $p < 0.001$)^[4950]; COX-1 inhibitor (*in vitro*, $IC_{50} = 0.15\text{ mmol/L}$)^[4957]; Na^+ , K^+ -ATP inhibitor (crude enzyme Na^+ , K^+ -ATPase from rat brain, $IC_{50} = 22\mu\text{mol/L}$)^[5404]. **Source:** TU DANG GUI *Aralia cordata*, FAN LI ZHI *Annona squamosa* (stem: 2.00%fw)^[4654], CI SAN JIA *Acanthopanax trifoliatum* (stem cortex), GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root), GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. **Ref:** 6, 4654, 4950, 4957, 5037, 5404.

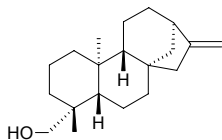
**12179 ent-Kaur-16-en-19-oic acid**

$C_{20}H_{30}O_2$ (302.46). **Pharm:** Cytotoxic inactive (Lu1, Col2, KB, LNCaP, hTERT-RPE1, HUVEC; control Taxol, $ED_{50} = 0.002\mu\text{g/mL}$, 0.003 $\mu\text{g/mL}$, 0.0005 $\mu\text{g/mL}$, 0.001 $\mu\text{g/mL}$, 0.004 $\mu\text{g/mL}$, 0.008 $\mu\text{g/mL}$, respectively). **Source:** *Parinari sprucei* (leaf). **Ref:** 4991.

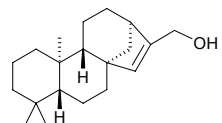


12180 (-)-Kaur-16-en-19-ol

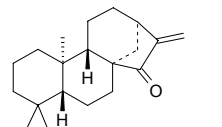
16-*ent*-Kaur-19-ol C₂₀H₃₂O (288.48). White solid, mp 133~134°C, [α]_D²⁰ = -51.6° (*c* = 1.0, CHCl₃). **Pharm:** Antiproliferative and cytotoxic (*in vitro*, L-929, GI₅₀ = 18.2μg/mL; K562, GI₅₀ = 6.80μg/mL; HeLa, CC₅₀ = 32.8μg/mL; control Paclitaxel, L-929, GI₅₀ = 0.1μg/mL; K562, GI₅₀ = 0.01μg/mL; HeLa, CC₅₀ = 0.01μg/mL)^[4770]; Na⁺,K⁺-ATP inhibitor (crude enzyme Na⁺,K⁺-ATPase from rat brain, IC₅₀ = 500μmol/L)^[5404]. **Source:** GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*] (semi-synthetic derivative), MU LAN⁽³⁾ *Bruguiera gymnorrhiza* (stem: yield = 0.00016%). **Ref:** 4770, 5404.

**12181 ent-Kaur-15-en-17-ol**

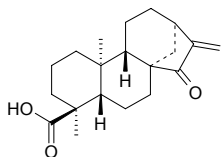
[14696-33-4] C₂₀H₃₂O (288.48). mp 136~137°C. **Source:** AN HUI BEI MU *Fritillaria anhuiensis*, ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. **Ref:** 660, 2182.

**12182 ent-16-Kauren-15-one**

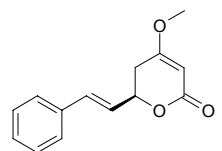
C₂₀H₃₀O (286.46). **Source:** JIE XING YE TAI *Jungmannia truncata*. **Ref:** 4201.

**12183 ent-Kaur-16-en-15-one 18-oic acid**

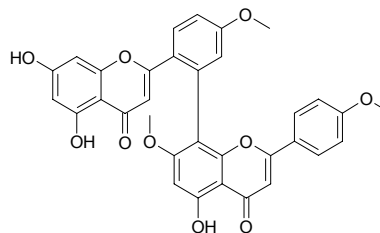
C₂₀H₂₈O₃ (316.44). **Source:** DONG JIN BA DOU *Croton tonkinensis* (leaf). **Ref:** 4444.

**12184 Kawain**

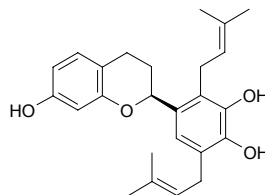
[500-64-1] C₁₄H₁₄O₃ (230.27). **Pharm:** Antifungal; anti-inflammatory; antispasmodic; detumescent; local anesthetic. **Source:** KA WA HU JIAO *Piper methysticum*. **Ref:** 658.

**12185 Kayaflavone**

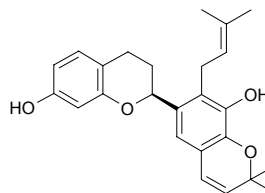
[481-45-8] C₃₃H₂₄O₁₀ (580.55). mp 335°C (dec). **Source:** LIU SHAN *Cryptomeria fortunei*. **Ref:** 6.

**12186 Kazinol A**

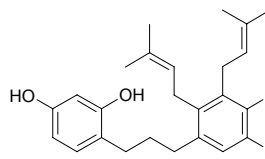
C₂₅H₃₀O₄ (394.52). **Source:** GOU SHU BAI PI *Broussonetia papyrifera*. **Ref:** 660.

**12187 Kazinol B**

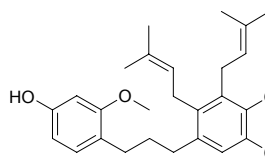
C₂₅H₂₈O₄ (392.50). **Source:** GOU SHU BAI PI *Broussonetia papyrifera*. **Ref:** 660.

**12188 Kazinol F**

C₂₅H₃₂O₄ (396.53). Colorless needles, mp 108~109°C. **Pharm:** Cytotoxic (*in vitro*, MTT Method, A549, ED₅₀ > 10μg/mL; HCT8, ED₅₀ > 10μg/mL; KB, ED₅₀ > 10μg/mL). **Source:** XIAO GOU SHU *Broussonetia kazinoki* (leaf). **Ref:** 3085.

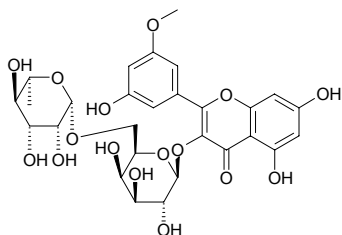
**12189 Kazinol J**

C₂₆H₃₄O₄ (410.56). Colorless needles. **Pharm:** Cytotoxic (*in vitro*, MTT Method, A549, ED₅₀ > 10μg/mL; HCT8, ED₅₀ > 10μg/mL; KB, ED₅₀ > 10μg/mL). **Source:** XIAO GOU SHU *Broussonetia kazinoki* (leaf). **Ref:** 3085.

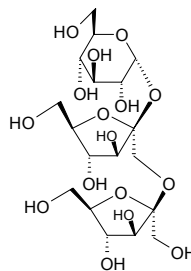


12190 Keioside

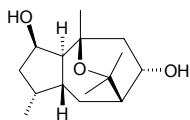
[53584-69-3] C₂₈H₃₂O₁₆ (624.56). mp 183~186°C. Source: LING LAN *Convallaria keiskei* [Syn. *Convallaria majalis*]. Ref: 6.

**12195 1-Kestose**

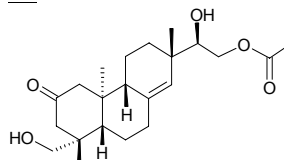
[470-69-9] C₁₈H₃₂O₁₆ (504.45). Source: GE CONG *Allium victorialis*. Ref: 6.

**12191 Kessoglycol**

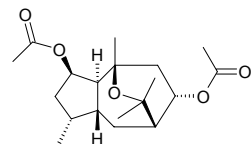
[6894-57-1] C₁₅H₂₆O₃ (254.37). mp 128°C. Source: KUO YE XIE CAO *Valeriana officinalis* var. *latifolia*. Ref: 6.

**12196 2-Keto-16-acetyl-kirenol**

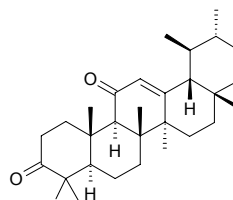
C₂₂H₃₄O₅ (378.51). White crystals, mp 223~224°C. Source: XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*]. Ref: 800.

**12192 Kessoglycol diacetate**

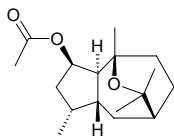
C₁₉H₃₀O₅ (338.45). mp 117°C. Source: KUO YE XIE CAO *Valeriana officinalis* var. *latifolia*. Ref: 6.

**12197 11-Keto-α-amyrenone**

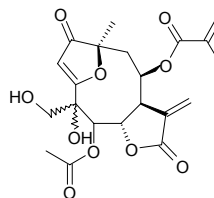
C₃₀H₄₆O₂ (438.70). Source: RU XIANG *Boswellia carterii*. Ref: 660.

**12193 Kessyl acetate**

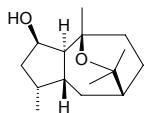
C₁₇H₂₈O₃ (280.41). mp 60~61°C. Source: KUO YE XIE CAO *Valeriana officinalis* var. *latifolia*. Ref: 6.

**12198 1-Keto-3,10-epoxy-8β-O-methacryloyl-4,15-dihydroxy-5-acetoxy-2,11-germacradiene,6α,12-olide**

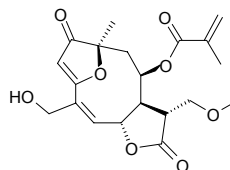
C₂₁H₂₄O₁₀ (436.42). Source: *Viguiera eriophora* ssp. *eriophora* (aerial parts). Ref: 5090.

**12194 Kessyl alcohol**

[3321-65-1] C₁₅H₂₆O₂ (238.37). mp 85°C. Source: KUO YE XIE CAO *Valeriana officinalis* var. *latifolia*. Ref: 6.

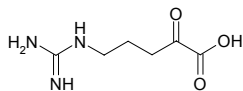
**12199 1-Keto-3,10-epoxy-11α-methoxymethyl-8β-O-methacryloyl-15-hydroxy-2,4-germacradiene,6α,12-olide**

C₂₀H₂₄O₈ (392.41). Source: *Viguiera eriophora* ssp. *eriophora* (aerial parts). Ref: 5090.

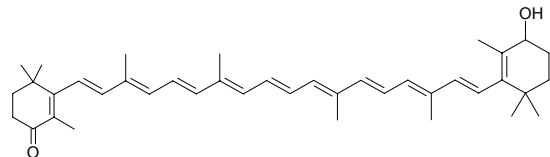


12200 α -Keto- δ -guanidino-valeric acid

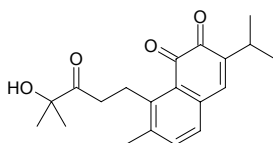
[3715-10-4] C₆H₁₁N₃O₃ (173.17). Source: XI SHUAI *Gryllulus chinensis*. Ref: 6.

**12201 4-Keto-4'-hydroxy- β -carotene**

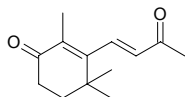
C₄₀H₅₄O₂ (566.88). Source: JIN YU *Carassius auratus*. Ref: 6.

**12202 3-Keto-4-hydroxysaprorthoquinone**

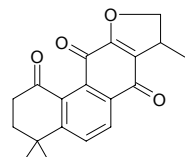
C₂₀H₂₄O₄ (328.41). Red syrup. Pharm: Cytotoxic (*in vitro*, HL-60, IC₅₀ = 4.6 μ mol/L; SGC7901, IC₅₀ = 0.2 μ mol/L; MKN28, IC₅₀ = 0.3 μ mol/L). Source: HONG GEN CAO *Salvia prionitis* (root: yield = 0.00030%dw). Ref: 4635.

**12203 3-Keto- β -ionone**

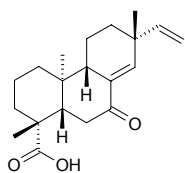
C₁₃H₁₈O₂ (206.29). Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*]. Ref: 660.

**12204 1-Keto-isocryptotanshinone**

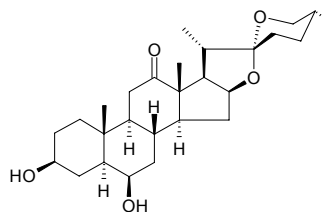
C₁₉H₁₈O₄ (310.35). Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 660.

**12205 7-Keto-L-pimara-8(14),15-dien-19-oic acid**

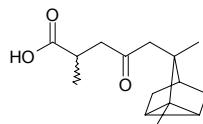
C₂₀H₂₈O₃ (316.44). mp 241–245°C. Source: TU DANG GUI *Aralia cordata*. Ref: 6.

**12206 12-Ketoporrigenin**

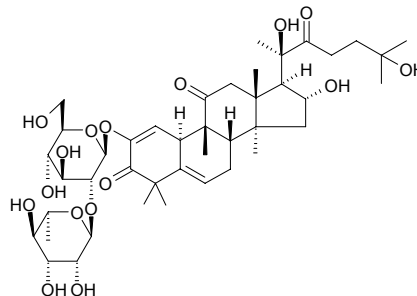
C₂₇H₄₂O₅ (426.63). Pharm: Cytotoxic (inhibits cancer cell proliferation, *in vitro*). Source: JIU CONG *Allium porrum*. Ref: 2165.

**12207 Ketosantallic acid**

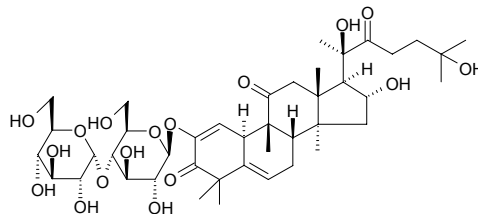
C₁₅H₂₂O₃ (250.34). Source: TAN XIANG *Santalum album*. Ref: 660.

**12208 Khekadaengoside A**

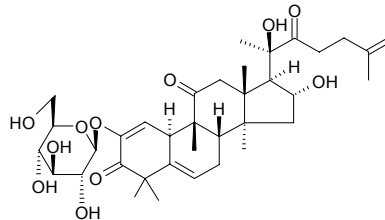
Cucurbitacin L 2-*O*- α -rhamnopyranosyl-(1 \rightarrow 2)- β -glucopyranoside C₄₂H₆₄O₁₆ (824.97). Amorphous powder, [α]_D²³ = -109.4° (*c* = 3.1, MeOH). Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.

**12209 Khekadaengoside B**

Cucurbitacin L 2-*O*- α -glucopyranosyl-(1 \rightarrow 4)- β -glucopyranoside C₄₂H₆₄O₁₇ (840.97). Amorphous powder, [α]_D²³ = -37.0° (*c* = 2.7, MeOH). Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.

**12210 Khekadaengoside C**

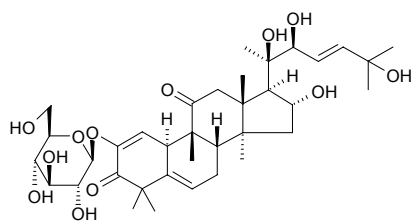
C₃₆H₅₂O₁₁ (660.81). Amorphous powder, [α]_D²³ = -42.3° (*c* = 4.9, MeOH). Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.



12211 Khekadaengoside D

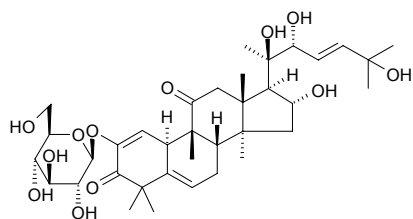
$C_{36}H_{54}O_{12}$ (678.82). Amorphous powder, $[\alpha]_D^{23} = -71.1^\circ$ ($c = 0.6$, MeOH).

Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.

**12212 Khekadaengoside E**

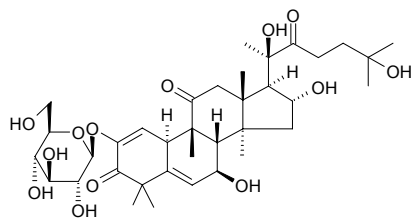
$C_{36}H_{54}O_{12}$ (678.82). Amorphous powder, $[\alpha]_D^{23} = -43.8^\circ$ ($c = 3.7$, MeOH).

Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.

**12213 Khekadaengoside F**

$C_{36}H_{54}O_{13}$ (694.82). Amorphous powder, $[\alpha]_D^{23} = -12.7^\circ$ ($c = 0.8$, MeOH).

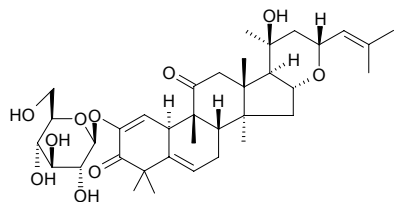
Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.

**12214 Khekadaengoside G**

Aoibaclin;

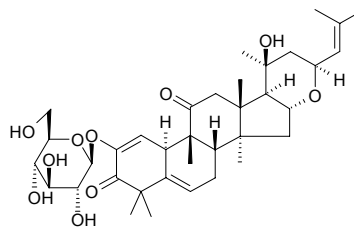
2,20(S)-dihydroxy-16 α ,23(R)-epoxycucurbita-5,24-diene-3,11-dione

2-O- β -glucopyranoside $C_{36}H_{52}O_{10}$ (644.81). Amorphous powder, $[\alpha]_D^{23} = -31.2^\circ$ ($c = 2.5$, MeOH); pale yellow amorphous solid, $[\alpha]_D = +3.5^\circ$ ($c = 0.78$, $CHCl_3$). Source: FENG GUA *Gymnopetalum integrifolium* (fruit), SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982, 4189.

**12215 Khekadaengoside H**

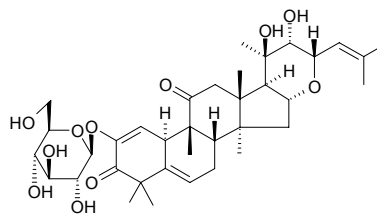
2,20(S)-dihydroxy-16 α ,23(S)-epoxycucurbita-5,24-diene-3,11-dione

2-O- β -glucopyranoside $C_{36}H_{52}O_{10}$ (644.81). Amorphous powder, $[\alpha]_D^{23} = +5.4^\circ$ ($c = 1.0$, MeOH). Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.

**12216 Khekadaengoside I**

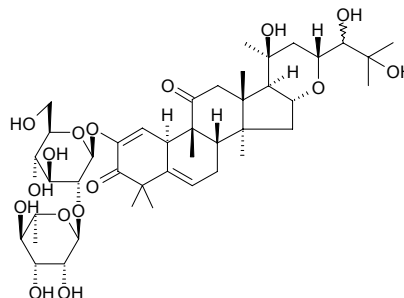
2,20(S),22-trihydroxy-16 α ,23(S)-epoxycucurbita-5,24-diene-3,11-dione

2-O- β -glucopyranoside $C_{36}H_{52}O_{11}$ (660.81). Amorphous powder, $[\alpha]_D^{23} = -10.5^\circ$ ($c = 0.5$, MeOH). Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.

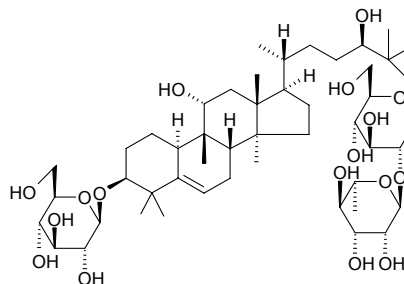
**12217 Khekadaengoside J**

2,20S,24 ζ -Trihydroxy-16 α ,23R-epoxycucurbita-5-ene-3,11-dione

2-O- α -rhamnopyranosyl-(1 \rightarrow 2)- β -glucopyranoside $C_{42}H_{64}O_{16}$ (824.97). Amorphous powder, $[\alpha]_D^{23} = -38.9^\circ$ ($c = 1.0$, MeOH). Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.

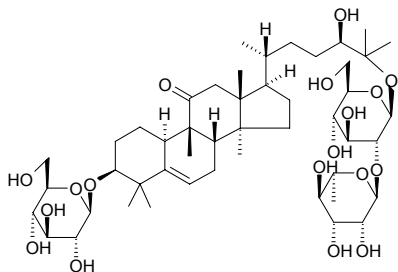
**12218 Khekadaengoside M**

Mogrol 3-O- β -glucopyranosyl-26-O- α -rhamnopyranosyl(1 \rightarrow 2)-O- β -glucopyranoside $C_{48}H_{82}O_{18}$ (947.18). Amorphous powder, $[\alpha]_D^{23} = +6.4^\circ$ ($c = 1.7$, MeOH). Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.

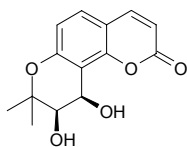


12219 Khekadaengoside N

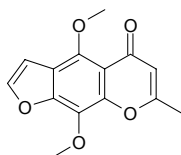
Bryodulcosigenin 3-*O*- β -glucopyranosyl-26-*O*- α -rhamnopyranosyl-(1 \rightarrow 2)-*O*- β -glucopyranoside C₄₈H₈₀O₁₈ (945.16). Amorphous powder, $[\alpha]_D^{23} = +26.1^\circ$ ($c = 2.8$, MeOH). Source: SAN YING JIAN GUA LOU *Trichosanthes tricuspidata*. Ref: 1982.

**12220 Khellactone**

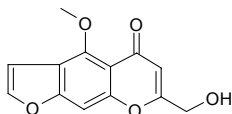
C₁₄H₁₄O₅ (262.26). Pharm: Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA: EBV-EA-positive cells = (36.9 \pm 1.2)% (viability > 80%), β -Carotene, EBV-EA-positive cells = (34.3 \pm 1.1)% (viability >80), Curcumin, EBV-EA-positive cells = (22.8 \pm 1.8)% (viability > 80%), compound IC₅₀ = 341mol ratio/32 pmol TPA, β -Carotene, IC₅₀ = 400mol ratio/32 pmol TPA, Curcumin, IC₅₀ = 341mol ratio/32 pmol TPA). Source: LI HUA JU *Citrus tachibana*. Ref: 5048.

**12221 Khellin**

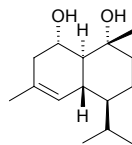
[82-02-0] C₁₄H₁₂O₅ (260.25). Crystals (methanol), bitter, mp 154–155°C, bp 180–200°C/0.05mmHg. Pharm: Anthelmintic; anti-phage (phage T4, phage M13); antispasmodic; phototoxic (virus); coronary vasodilator; LD₅₀ (rat, orl) = 80mg/kg. Source: CHI A MI *Ammi visnaga*. Ref: 661.

**12222 Khellol**

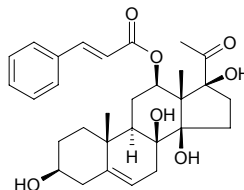
[478-79-5] C₁₃H₁₀O₅ (246.22). mp 176–178°C. Source: YE SHENG MA *Cimicifuga simplex*. Ref: 6.

**12223 Khusinodiol**

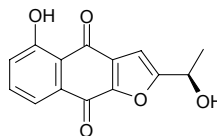
4-Cadinene-2 α ,10 α -diol C₁₅H₂₆O₂ (238.37). Source: TAI WAN SHAN *Taiwania cryptomerioides* (root). Ref: 4371.

**12224 Kidjolanin**

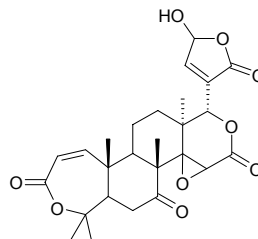
[38395-01-6] C₃₀H₃₈O₇ (510.63). mp 148–149°C. Source: BAI SHOU WU *Cynanchum bungei*. Ref: 6.

**12225 Kigelinone**

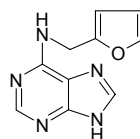
[80931-34-6] C₁₄H₁₀O₅ (270.25). Pharm: Cytotoxic. Source: DIAO DENG SHU *Kigelia pinnata*, PAO DAN GUO *Crescentia cujete*. Ref: 658.

**12226 Kihadanin B**

[73793-68-7] C₂₆H₃₀O₉ (486.52). White granular solid, soluble in hot acetone, mp 268–269°C. Source: BAI XIAN PI *Dictamnus dasycarpus*, HUANG BAI *Phellodendron amurense*. Ref: 1521, 4825.

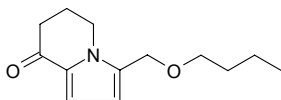
**12227 Kinetin**

6-Furfurylamino-purine C₁₀H₉N₅O (215.22). mp 266–267°C. Pharm: Plant growth regulator. Source: BAN LAN GEN *Isatis indigotica*. Ref: 6, 658.

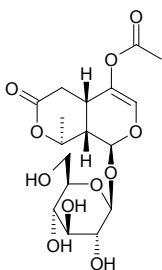


12228 Kinganone

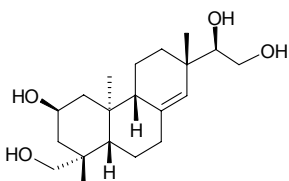
$C_{13}H_{19}NO_2$ (221.30). Yellow oil. **Pharm:** Antifungal (*Penicillium avellaneum* UC-4376, MIA = 100.0 μ g/disk, control Amphotericin B, MIA = 0.08 μ g/disk); antibacterial (*Staphylococcus aureus*, MIA = 300.0 μ g/disk, control Rifampicin, MIA = 1.0 μ g/disk; *Mycobacterium tuberculosis*, MIA = 200.0 μ g/disk, Rifampicin, MIA = 1.0 μ g/disk; *Streptococcus pneumoniae*, MIA = 200.0 μ g/disk, Rifampicin, MIA = 1.0 μ g/disk). **Source:** DIAN HUANG JING *Polygonatum kingianum* (dried rhizome). **Ref:** 5484.

**12229 Kingside**

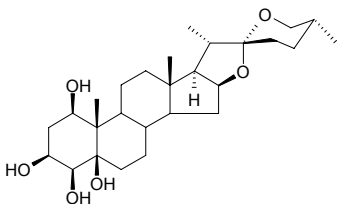
[25406-67-1] $C_{17}H_{24}O_{11}$ (404.37). $[\alpha]_D = -91^\circ$ ($c = 0.7$, ethanol); tetra-acetate, mp 165~166°C, $[\alpha]_D = -80^\circ$ ($c = 1$, chloroform). **Pharm:** Stomachic. **Source:** MO LUO SHI REN DONG *Lonicera morrowii* (the compound was separated from the plant by I. Souza et al. in 1969)^[5505]. **Ref:** 658, 5505.

**12230 Kirenol**

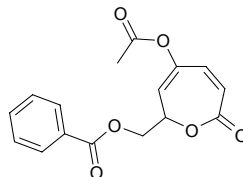
[52659-56-0] $C_{20}H_{34}O_4$ (338.49). mp 190~192°C. **Source:** XIAN GENG XI XIAN *Siegesbeckia orientalis* var. *pubescens* [Syn. *Siegesbeckia pubescens*], XI XIAN *Siegesbeckia orientalis* (aerial parts: yield = 0.00018%)^[4764]. **Ref:** 6, 377, 660, 4764.

**12231 Kitigenin**

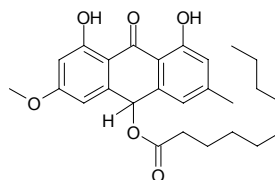
$C_{27}H_{44}O_6$ (464.65). **Source:** JI XIANG CAO *Reineckea carnea*. **Ref:** 660.

**12232 Klaivanolide**

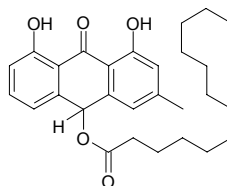
$C_{16}H_{14}O_6$ (302.29). Colorless powder. **Pharm:** Antileishmanial (*in vitro*, inhibits both sensitive and amphotericin B-resistant promastigote formation of *Leishmania donovani*, IC₅₀ = 1.75mmol/L and 3.12 mmol/L, respectively); antitrypanosomal (*in vitro*, inhibits trypomastigote formation of *Trypanosoma brucei brucei* GVR 35). **Source:** JIA PENG ZI YU PAN *Uvaria klaineana*. **Ref:** 2027.

**12233 Kleinioxanthrone 1**

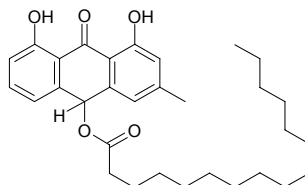
1,8-Dihydroxy-3-methyl-6-methoxy-9(10*H*)-anthracenone-10-oxydecanoate $C_{26}H_{32}O_6$ (440.54). $[\alpha]_D^{25} = -5.6^\circ$ ($c = 1.04$, $CHCl_3$). **Source:** KE LEI NI JUE MING *Cassia kleinii* (aerial parts). **Ref:** 5154.

**12234 Kleinioxanthrone 2**

1,8-Dihydroxy-3-methyl-9(10*H*)-anthracenone-10-oxytetradecanoate $C_{29}H_{38}O_5$ (466.62). $[\alpha]_D^{25} = -16^\circ$ ($c = 1.40$, $CHCl_3$). **Source:** KE LEI NI JUE MING *Cassia kleinii* (aerial parts). **Ref:** 5154.

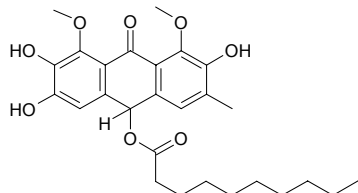
**12235 Kleinioxanthrone 3**

1,8-Dihydroxy-3-methyl-9(10*H*)-anthracenone-10-oxyhexadecanoate $C_{31}H_{42}O_5$ (494.68). Yellow needles (hexane), mp 177~178°C, $[\alpha]_D^{25} = -8^\circ$ ($c = 1.20$, $CHCl_3$). **Source:** KE LEI NI JUE MING *Cassia kleinii*. **Ref:** 1993.

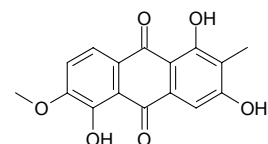


12236 Kleinioxanthone 4

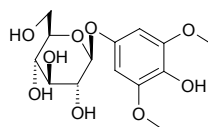
2,6,7-Trihydroxy-1,8-dimethoxy-3-methyl-9(10*H*)-anthracenone-10-oxydecanoate C₂₇H₃₄O₈ (486.57). Orangeneedles mp 196–198°C, $[\alpha]_D^{25} = -21.5^\circ$ ($c = 1.01$, CHCl₃). Source: KE LEI NI JUE MING *Cassia kleinii*. Ref: 1993.

**12237 Knoxiadin**

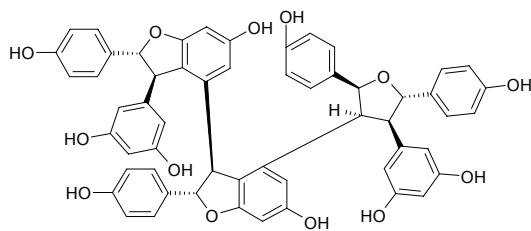
1,3,5-Trihydroxy-2-methyl-6-methoxyanthraquinone C₁₆H₁₂O₆ (300.27). Yellow acicular crystals, mp > 310°C. Source: HONG YA DA JI *Knoxia valerianoides*. Ref: 35.

**12238 Koaburaside**

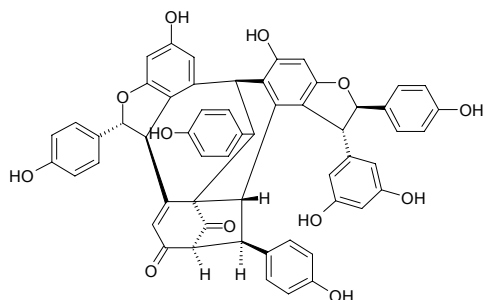
C₁₄H₂₀O₉ (332.31). Source: DU ZHONG *Eucommia ulmoides*. Ref: 2.

**12239 Kobophenol A**

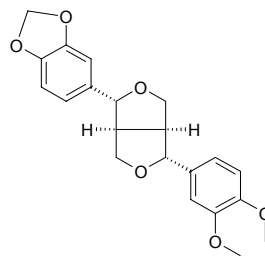
[124027-58-3] C₅₆H₄₄O₁₃ (924.97). Pale yellow oil or a morphour solid, mp 233.5–235°C (dec), $[\alpha]_D^{20} = +227^\circ$ ($c = 0.17$, MeOH). Source: SHA ZUAN TAI CAO *Carex kobomugi*, XIA YE JIN JI ER *Caragana stenophylla*. (root). Ref: 2557, 2558.

**12240 Kobophenol B**

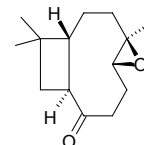
C₅₆H₄₀O₁₂ (904.94). Pale-yellow needles. Pharm: Ecdysteroid antagonist (*Drosophila melanogaster* B₁₁ cell line, IC₅₀ = 37 μmol/L). Source: XIA CHUI TAI CAO *Carex pendula* (seed). Ref: 5141.

**12241 Kobusin**

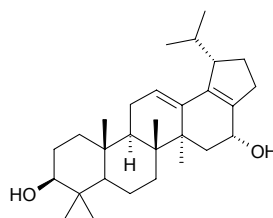
C₂₁H₂₂O₆ (370.41). Source: ZHOU YE MU LAN *Magnolia praecocissima* (seed). Ref: 4181.

**12242 Kobusone**

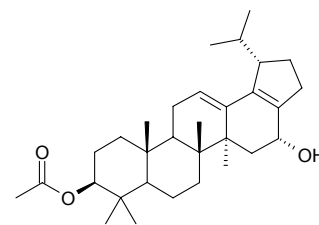
[24173-71-5] C₁₄H₂₂O₂ (222.33). Source: XIANG FU *Cyperus rotundus*. Ref: 6.

**12243 Koelpinin A**

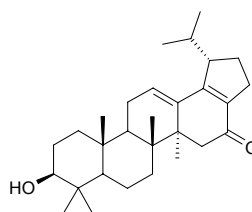
28-Nor-lup-12,17-dien-3β,16α-diol C₂₉H₄₆O₂ (426.69). mp 235–237°C (MeOH-C₆H₆), $[\alpha]_D^{25} = +21.2^\circ$. Source: XIE WEI JU *Koelpinia linearis* (aerial parts). Ref: 3912.

**12244 Koelpinin B**

3β-Acetoxy-28-nor-lup-12,17-dien-16α-ol C₃₁H₄₈O₃ (468.73). mp 222–223°C, $[\alpha]_D^{25} = +13.8^\circ$. Source: XIE WEI JU *Koelpinia linearis* (aerial parts). Ref: 3912.

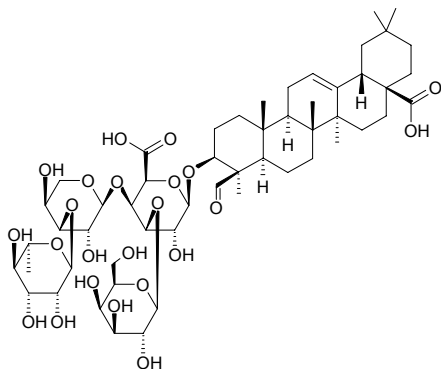
**12245 Koelpinin C**

28-Nor-lup-12,17-dien-3β-ol-16-one C₂₉H₄₄O₂ (424.67). mp 208–209°C (C₆H₆-MeOH), $[\alpha]_D^{25} = +6.5^\circ$. Source: XIE WEI JU *Koelpinia linearis* (aerial parts). Ref: 3912.

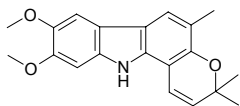


12246 Koelreuteriasaponin B

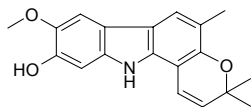
$C_{53}H_{82}O_{23}$ (1087.23). Source: LUAN HUA *Koelreuteria paniculata*. Ref: 6.

**12247 Koenigicine**

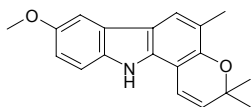
Koenidine [24123-92-0] $C_{20}H_{21}NO_3$ (323.4). Source: YIN DU JIU LI XIANG *Murraya koenigii*. Ref: 11.

**12248 Koenigine**

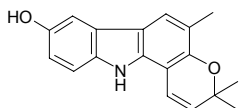
[28513-33-9] $C_{19}H_{19}NO_3$ (309.37). Source: YIN DU JIU LI XIANG *Murraya koenigii*. Ref: 11, 4681.

**12249 Koenimbine**

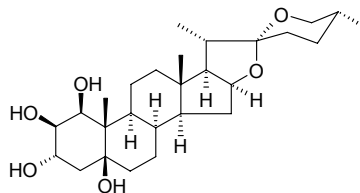
[21087-98-9] $C_{19}H_{19}NO_2$ (293.37). Source: YIN DU JIU LI XIANG *Murraya koenigii*. Ref: 11.

**12250 Koenine**

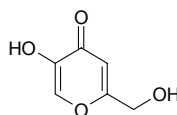
[28200-63-7] $C_{18}H_{17}NO_2$ (279.34). Source: YIN DU JIU LI XIANG *Murraya koenigii*. Ref: 11.

**12251 Kogagenin**

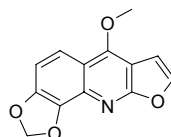
Spirostan-1,2,3,5-tetrol [639-93-0] $C_{27}H_{44}O_6$ (464.65). mp 318~322°C (dec). Source: SHAN BI XIE *Dioscorea tokoro*. Ref: 6, 660.

**12252 Kojic acid**

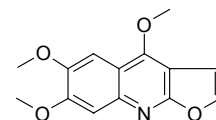
[501-30-4] $C_6H_6O_4$ (142.11). mp 152°C. Pharm: Tyrosinase inhibitor ($IC_{50} = 235.2 \mu\text{mol/L}$; $IC_{50} = (16.67 \pm 0.52) \mu\text{mol/L}$; $IC_{50} = 7.7 \mu\text{mol/L}$; $IC_{50} = 11.3 \mu\text{mol/L}$ ^[5409]). Source: JIANG *Glycine max*. Ref: 6, 2544, 4233, 4457, 5409.

**12253 Kokusagine**

[482-32-6] $C_{13}H_9NO_4$ (243.22). mp 195~197°C. Pharm: NO production inhibitor inactive (RAW264.7 cells, LPS/IFN- γ -induced, $30 \mu\text{mol/L}$)^[4774]. Source: CHOU SHAN YANG *Orixa japonica* (stem: yield = 0.019%dw)^[4774]. Ref: 6, 4774.

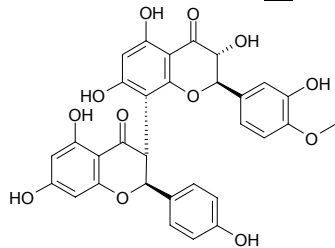
**12254 Kokusagineine**

[484-08-2] $C_{14}H_{13}NO_4$ (259.26). mp 171°C. Pharm: Increases level of arterenol and dopamine (murine cerebra); insect antifeedant; phototoxic (*Saccharomyces cerevisiae*, *Candida albicans*); photo-activated antibacterial (*Staphylococcus aureus*)^[4989]; photo-activated antifungal (*Candida albicans* weak)^[4989]; photo-activated DNA binding (16 restriction enzymes)^[4989]; cytotoxic (P₃₈₈ cell line, $ED_{50} = 12.0 \mu\text{g/mL}$, control Mithramycin, $ED_{50} = 0.06 \mu\text{g/mL}$; HT29, $ED_{50} = 16.8 \mu\text{g/mL}$, Mithramycin, $ED_{50} = 0.07 \mu\text{g/mL}$; A549, $ED_{50} = 1.4 \mu\text{g/mL}$, Mithramycin, $ED_{50} = 0.08 \mu\text{g/mL}$)^[5405]. Source: CHOU CAO *Ruta graveolens*, CHOU SHAN YANG *Orixa japonica*, SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*, *Orixa* sp., *Acronychia* sp., *Evodia* sp., *Haplophyllum* sp., *Melicope* sp., *Sarcomelicope glauca*. Ref: 6, 658, 4989, 5405.

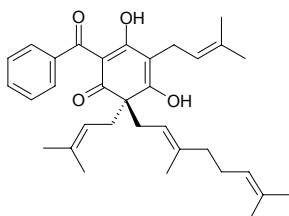


12255 Kolaflavanone

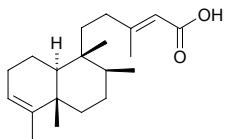
[68705-66-8] $C_{31}H_{24}O_{12}$ (588.53). **Pharm:** Anti-inflammatory; hypoglycemic (rat, caused by alloxan); reduces blood capillary brittleness. **Source:** KE LE TENG HUANG *Garcinia kola*. **Ref:** 658.

**12256 Kolanone**

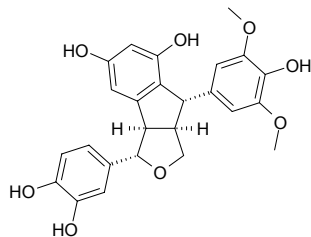
$C_{33}H_{42}O_4$ (502.70). **Pharm:** Antimicrobial (broad spectrum). **Source:** KE LE TENG HUANG *Garcinia kola*. **Ref:** 5386.

**12257 Kolavenic acid**

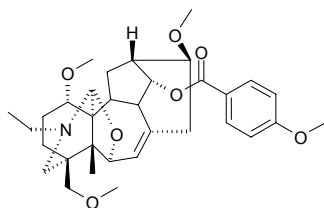
$C_{20}H_{32}O_2$ (304.48). **Source:** BIAN ZHONG CHANG YE AN LUO *Polyalthia longifolia* var. *pendula*. **Ref:** 5386.

**12258 Kompasinol A**

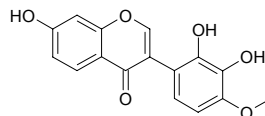
Maackolin [170663-51-1] $C_{25}H_{24}O_8$ (452.47). **Pharm:** Antioxidant (superoxide anion scavenger, $IC_{50} = (2.99 \pm 0.05) \mu\text{mol/L}$, control (+)-Catechin, $IC_{50} = (3.67 \pm 0.14) \mu\text{mol/L}$)^[4514]. **Source:** CHAO XIAN HUAI *Maackia amurensis*, MAO CI JIN JI ER *Caragana tibetica* (stem). **Ref:** 1521, 4514.

**12259 Kongboendine**

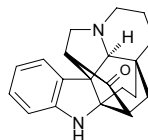
$C_{33}H_{45}NO_7$ (567.73). White amorphous powder, mp 68~70°C, $[\alpha]_D = -35^\circ$ ($c = 0.50$, $CHCl_3$). **Source:** GONG BU WU TOU *Aconitum kongboense*. **Ref:** 2207.

**12260 Koparin**

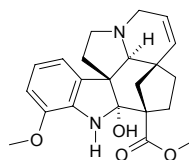
[65048-75-1] $C_{16}H_{12}O_6$ (300.27). **Source:** JIANG ZHEN XIANG *Dalbergia odorifera*. **Ref:** 716.

**12261 Kopsanone**

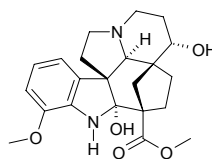
$C_{20}H_{22}N_2O$ (306.41). **Source:** HONG HUA RUI MU *Kopsia fruticosa* (leaf). **Ref:** 3830.

**12262 Kopsifoline A**

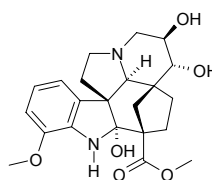
$C_{22}H_{26}N_2O_4$ (382.46). **Source:** HONG HUA RUI MU *Kopsia fruticosa* (leaf). **Ref:** 3830.

**12263 Kopsifoline B**

$C_{22}H_{28}N_2O_5$ (400.48). **Source:** HONG HUA RUI MU *Kopsia fruticosa* (leaf). **Ref:** 3830.

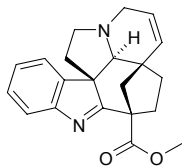
**12264 Kopsifoline C**

$C_{22}H_{28}N_2O_6$ (416.48). **Source:** HONG HUA RUI MU *Kopsia fruticosa* (leaf). **Ref:** 3830.

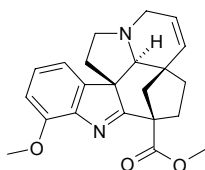


12265 Kopsifoline D

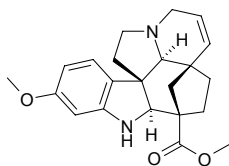
$C_{21}H_{22}N_2O_2$ (334.42). Source: HONG HUA RUI MU *Kopsia fruticosa* (leaf).
Ref: 3830.

**12266 Kopsifoline E**

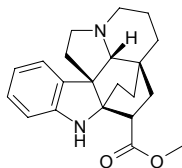
$C_{22}H_{24}N_2O_3$ (364.45). Source: HONG HUA RUI MU *Kopsia fruticosa* (leaf).
Ref: 3830.

**12267 Kopsifoline F**

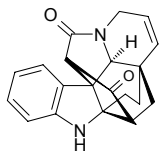
$C_{22}H_{26}N_2O_3$ (366.46). Source: HONG HUA RUI MU *Kopsia fruticosa* (leaf).
Ref: 3830.

**12268 Kopsinine**

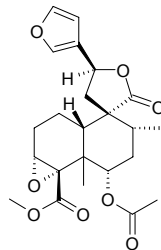
$C_{21}H_{26}N_2O_2$ (338.45). Source: CHANG HUA RUI MU *Kopsia longiflora*, CU SHENG HUA DUO GUO SHU *Pleiocarpa pycnantha* var. *tubicina*, DA CHANG CHUN HUA *Vinca herbacea* [Syn. *Vinca major*], DUO GUO SHU *Pleiocarpa mutica*, DUO HUA BAI JIAN MU *Aspidosperma multiflorum*, HONG HUA RUI MU *Kopsia fruticosa* (leaf), LA BA ZHUANG DUO GUO SHU *Pleiocarpa tubicina*, SI YANG SHU YE BAI JIAN MU *Aspidosperma populifolium*, YIN DU YA JIAO SHU *Alstonia venenata*, ZHI LI CHANG CHUN HUA *Vinca erecta*, ZI LAN SHU *Hunteria zeylanica*, *Hunteria elliotii*.
Ref: 1521, 3830.

**12269 Kopsorinine**

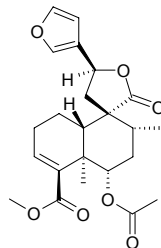
$C_{20}H_{18}N_2O_2$ (318.38). Light yellowish oil, $[\alpha]_D^{20} = +14^\circ$ ($c = 0.35$, $CHCl_3$).
Source: HONG HUA RUI MU *Kopsia fruticosa* (leaf). Ref: 3830.

**12270 Korberin A**

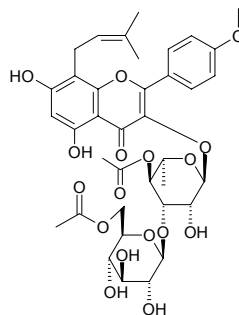
[152220-99-0] $C_{23}H_{28}O_8$ (432.47). Source: LAI KE BA DOU *Croton lechleri*. Ref: 4552.

**12271 Korberin B**

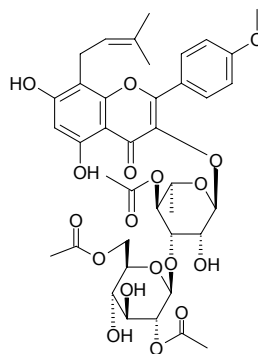
$C_{23}H_{28}O_7$ (416.48). Source: LAI KE BA DOU *Croton lechleri*. Ref: 4552.

**12272 Korepimedeside A**

Anhydroicaritin 3-*O*- β -D-(6-acetyl) glucopyranosyl-(1 \rightarrow 3)-*a*-L-(4-acetyl) rhamnopyranoside $C_{37}H_{44}O_{17}$ (760.75). Yellow powder, mp 170–171°C.
Source: CHAO XIAN YIN YANG HUO *Epimedium koreanum*. Ref: 361.

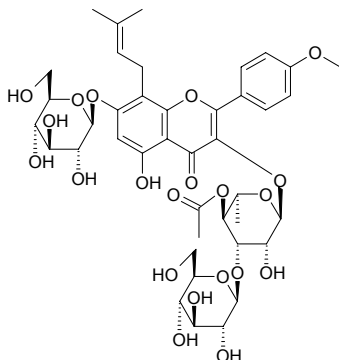
**12273 Korepimedeside B**

Anhydroicaritin 3-*O*- β -D-(2,6-diacetyl)glucopyranosyl-(1 \rightarrow 3)-*a*-L-(4-acetyl) rhamnopyranoside-7-*O*- β -D-glucopyranosyl $C_{39}H_{46}O_{18}$ (802.79). Yellow powder, mp 170–171°C. Source: CHAO XIAN YIN YANG HUO *Epimedium koreanum*. Ref: 361.

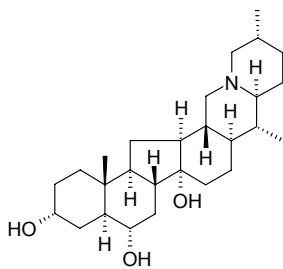


12274 Korpemedoside C

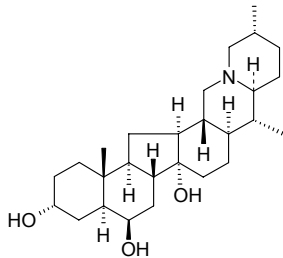
$C_{41}H_{52}O_{21}$ (880.86). Yellow powder. Source: CHAO XIAN YIN YANG HUO *Epimedium koreanum*. Ref: 417.

**12275 Korseveramine**

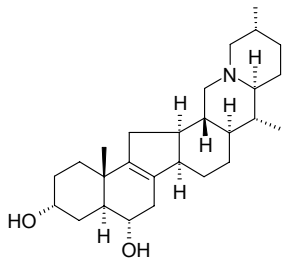
[30506-67-9] $C_{27}H_{45}NO_3$ (431.66). Source: CHUAN BEI MU *Fritillaria cirrhosa*. Ref: 6.

**12276 Korseveriline**

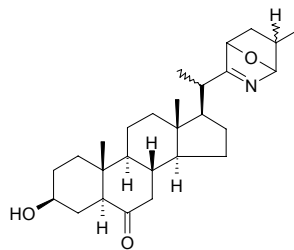
[21851-05-8] $C_{27}H_{45}NO_3$ (431.66). mp 240~242°C. Source: CHUAN BEI MU *Fritillaria cirrhosa*. Ref: 6.

**12277 Korseverinine**

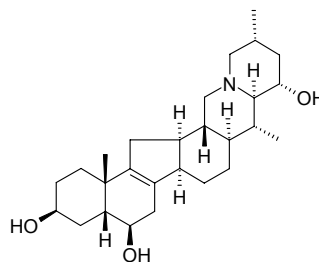
[36506-64-6] $C_{27}H_{43}NO_2$ (413.65). Source: CHUAN BEI MU *Fritillaria cirrhosa*. Ref: 6.

**12278 Korsevine**

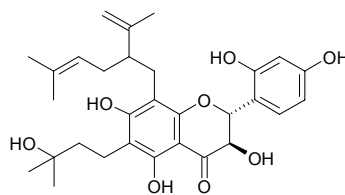
[27336-00-1] $C_{27}H_{41}NO_3$ (427.63). mp 224~245°C. Source: CHUAN BEI MU *Fritillaria cirrhosa*. Ref: 6.

**12279 Korsine**

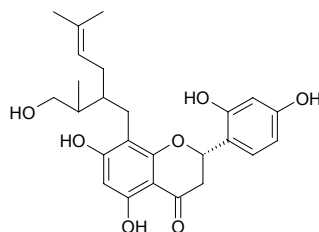
[20321-59-9] $C_{27}H_{43}NO_3$ (429.65). Source: CHUAN BEI MU *Fritillaria cirrhosa*. Ref: 6.

**12280 Kosamol A**

[182556-80-5] $C_{30}H_{38}O_8$ (526.63). Yellowish amorphous powder, $[\alpha]_D = +36^\circ$ ($c = 1.0$, methanol). Pharm: Phospholipase C_7 inhibitor ($IC_{50} = 10.2 \mu\text{mol/L}$); tyrosinase inhibitor ($IC_{50} = 36.9 \mu\text{mol/L}$, control Kojic acid, $IC_{50} = 11.3 \mu\text{mol/L}$)^[5409]. Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 1135, 1156, 5409.

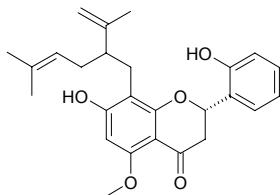
**12281 Kosamol Q**

$C_{25}H_{30}O_7$ (442.51). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 4430.

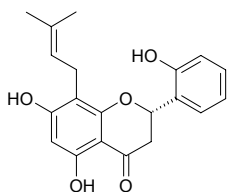


12282 Kosamol R

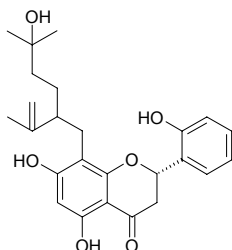
$C_{26}H_{30}O_5$ (422.53). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 4430.

**12283 Kosamol S**

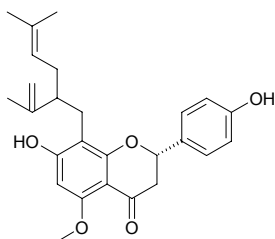
$C_{20}H_{20}O_5$ (340.38). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 4430.

**12284 Kosamol T**

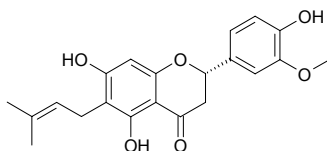
$C_{25}H_{30}O_6$ (426.51). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 4430.

**12285 Kosamol U**

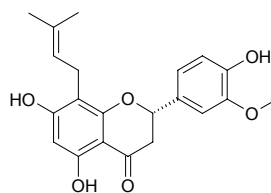
$C_{26}H_{30}O_5$ (422.53). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 4430.

**12286 Kosamol V**

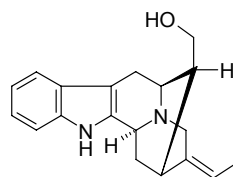
$C_{21}H_{22}O_6$ (370.41). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 4430.

**12287 Kosamol W**

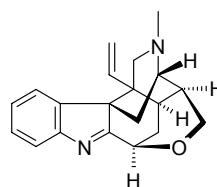
$C_{21}H_{22}O_6$ (370.41). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 4430.

**12288 Koumidine**

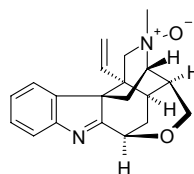
[1358-75-4] $C_{19}H_{22}N_2O$ (294.40). mp 200~201°C. Source: GOU WEN *Gelsemium elegans*. Ref: 14.

**12289 Koumine**

(-)-Koumine [1358-76-5] $C_{20}H_{22}N_2O$ (306.41). mp 170°C, $[\alpha]_D = -254^\circ$. Source: GOU WEN *Gelsemium elegans*. Ref: 14, 1521.

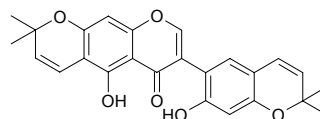
**12290 Koumine N-oxide**

$C_{20}H_{22}N_2O_2$ (322.41). mp 111~113°C. Source: GOU WEN *Gelsemium elegans*. Ref: 14.

**12291 Kraussianone 1**

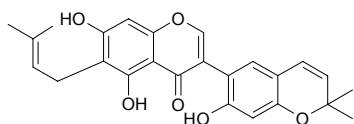
5,2'-Dihydroxy-[(6'',6''-dimethylpyrano(2'',3''-4',5'))][(6''',6'''-dimethylpyrano(2''',3''':7,6)]-isoflavone $C_{25}H_{22}O_6$ (418.45). Yellow crystals mp 185~187°C.

Pharm: Treatment of impotence (the erectile dysfunction test on rabbit penile smooth muscle, 78ng/mL, activity of 85% of that found in Viagra). Source: NAN FEI JI TOU SHU *Eriosema kraussianum*. Ref: 2034.

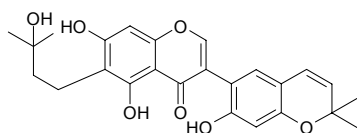


12292 Kraussianone 2

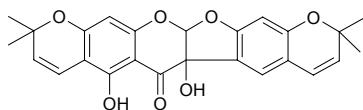
5,7,2'-Trihydroxy-6-(3,3-dimethylallyl)-[(6'',6''-dimethylpyrano(2'',3'':4',5'))]-isoflavone C₂₅H₂₄O₆ (420.47). White crystals, mp 162~168°C. **Pharm:** Treatment of impotence (the erectile dysfunction test on rabbit penile smooth muscle, 78ng/mL, activity of 65% of that found in Viagra). **Source:** NAN FEI JI TOU SHU *Eriosema kraussianum*. **Ref:** 2034.

**12293 Kraussianone 3**

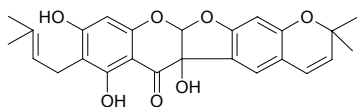
5,7,2'-Trihydroxy-6-(3-hydroxy-3-methylbutyl)-[(6'',6''-dimethylpyrano(2'',3'':4',5'))]-isoflavone C₂₅H₂₆O₇ (438.48). Orange yellow crystals, softening 156°C, melting 218~220°C. **Source:** NAN FEI JI TOU SHU *Eriosema kraussianum*. **Ref:** 2034.

**12294 Kraussianone 4**

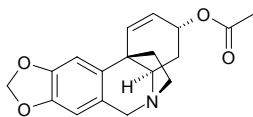
5b,7-Dihydroxy-2,2,10,10-tetramethyl-5b,13a-dihydro-2*H*,6*H*,10*H*-chromeno[6',7':4,5]furo[2,3-b]pyrano[3,2-g]chromene-6-one C₂₅H₂₂O₇ (434.45). Pale yellow oil. **Source:** NAN FEI JI TOU SHU *Eriosema kraussianum*. **Ref:** 2034.

**12295 Kraussianone 5**

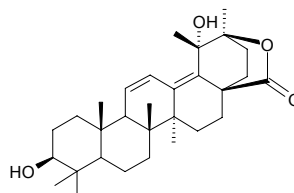
5b,7,9-Trihydroxy-2,2-dimethyl-8-(3-methyl-2-butenyl)-5b,11a-dihydro-2*H*,6*H*-chromeno[6',7':4,5]furo[2,3b]chromen-6-one C₂₅H₂₄O₇ (436.47). Oil. **Source:** NAN FEI JI TOU SHU *Eriosema kraussianum*. **Ref:** 2034.

**12296 Krepowine**

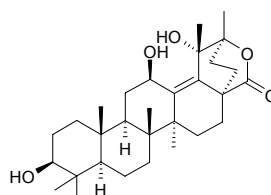
C₁₈H₁₉NO₄ (313.36). **Source:** GUAN MU WEN SHU LAN *Crinum macowanii* (bulb). **Ref:** 4000.

**12297 α-Kudinlactone**

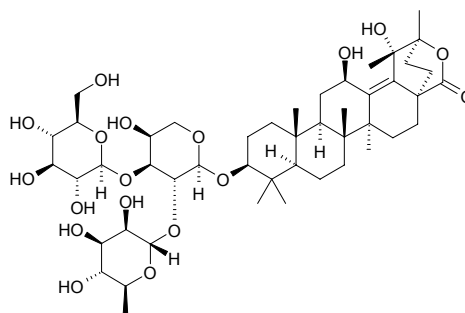
C₃₀H₄₄O₄ (468.68). **Source:** KU DING CHA DONG QING *Ilex kudingcha*. **Ref:** 5503.

**12298 β-Kudinlactone**

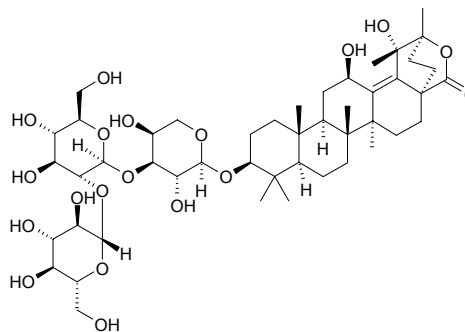
[173792-60-4] C₃₀H₄₆O₅ (486.70). **Source:** KU DING CHA DONG QING *Ilex kudingcha*. **Ref:** 5503.

**12299 Kudinoside A**

3-*O*-β-*D*-Glucopyranosyl-(1→3)-[α-*L*-rhamnopyranosyl-(1→2)]-α-*L*-arabino pyranosyl-β-kudinlactone [181362-75-4] C₄₇H₇₄O₁₈ (927.1). **Source:** KU DING CHA DONG QING *Ilex kudingcha*. **Ref:** 705.

**12300 Kudinoside B**

3-*O*-β-*D*-Glucopyranosyl-(1→2)-β-*D*-glucopyranosyl-(1→3)-α-*L*-arabinopyranosyl-β-kudinlactone [181362-76-5] C₄₇H₇₄O₁₉ (943.1). **Source:** KU DING CHA DONG QING *Ilex kudingcha*. **Ref:** 705.

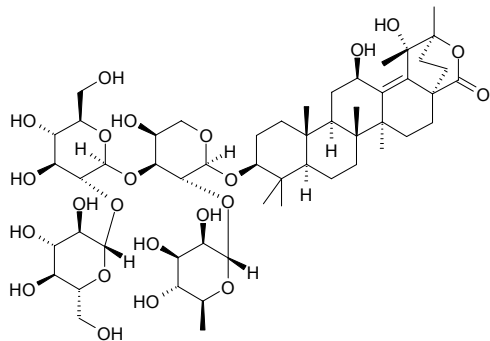


12301 Kudinoside C

3-*O*- β -*D*-Glucopyranosyl-(1 \rightarrow 2)- β -*D*-glucopyranosyl-(1 \rightarrow 3)-[α -*L*-rhamnopyranosyl-(1 \rightarrow 2)]- α -*L*-arabinopyranosyl- β -kudinlactone [181362-77-6]

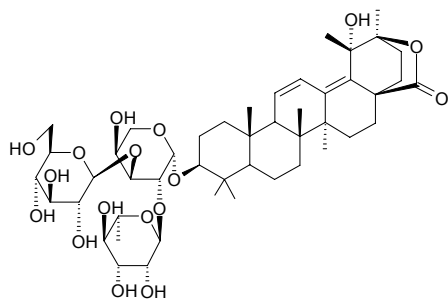
$C_{53}H_{84}O_{23}$ (1089.25). Source: KU DING CHA DONG QING *Ilex kudingcha*.

Ref: 705.

**12302 Kudinoside D**

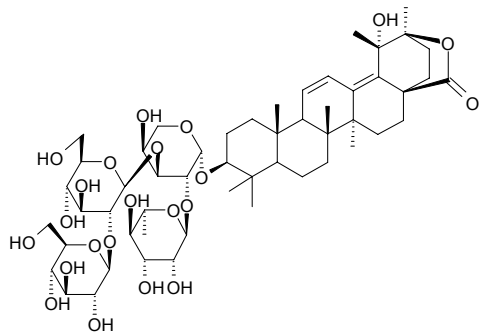
$C_{47}H_{72}O_{17}$ (909.09). Source: KU DING CHA DONG QING *Ilex kudingcha*.

Ref: 5503.

**12303 Kudinoside E**

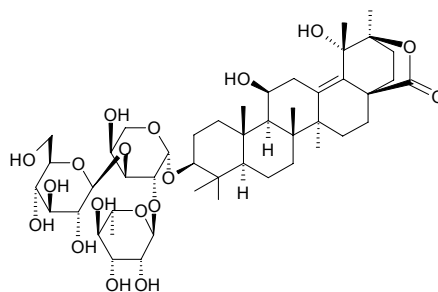
$C_{53}H_{82}O_{22}$ (1071.23). Source: KU DING CHA DONG QING *Ilex kudingcha*.

Ref: 5503.

**12304 Kudinoside F**

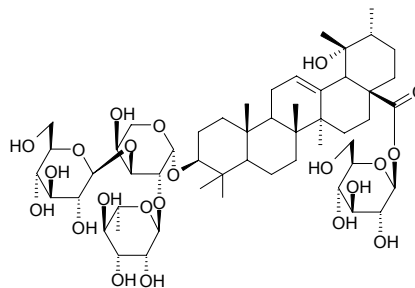
[173792-63-7] $C_{47}H_{74}O_{18}$ (927.10). Source: KU DING CHA DONG QING

Ilex kudingcha. Ref: 5503.

**12305 Kudinoside G**

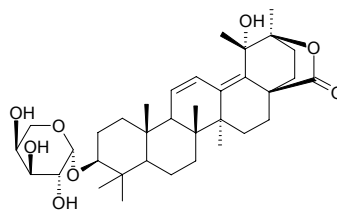
$C_{53}H_{86}O_{22}$ (1075.26). Source: KU DING CHA DONG QING *Ilex kudingcha*.

Ref: 5503.

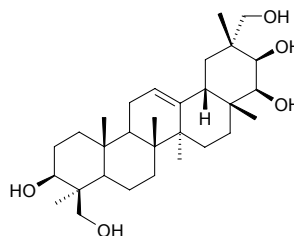
**12306 Kudinoside J**

$C_{35}H_{52}O_8$ (600.80). Source: KU DING CHA DONG QING *Ilex kudingcha*.

Ref: 5503.

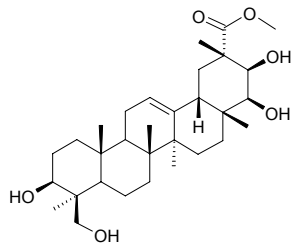
**12307 Kudzusapogenol A**

$C_{30}H_{50}O_5$ (490.73). Source: JI GU CAO *Abrus fruticulosus* [Syn. *Abrus cantoniensis*]. Ref: 660.

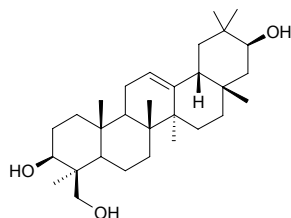


12308 Kudzusapogenol B methyl ester

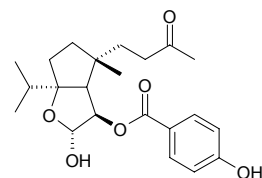
$C_{31}H_{50}O_6$ (518.74). Source: GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*]. Ref: 660.

**12309 Kudzusapogenol C**

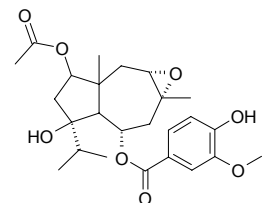
$C_{30}H_{50}O_3$ (458.73). Source: GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*]. Ref: 660.

**12310 Kuhistaferone**

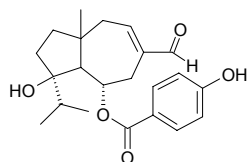
$C_{22}H_{30}O_6$ (390.48). Yellowish oil, $[\alpha]_D^{25} = +10.1^\circ$ ($c = 0.77$, MeOH). Pharm: Cytotoxic (*in vitro*, HCT116, $IC_{50} = 181 \mu\text{mol/L}$); antibacterial inactive (methicillin-resistant *Staphylococcus aureus* MRSA and methicillin-sensitive *Staphylococcus aureus* MSSA). Source: YI LANG A WEI *Ferula kuhistanica* (fruit: yield = 0.0016%dw). Ref: 4650.

**12311 Kuhistanicaol A**

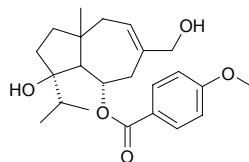
$C_{25}H_{34}O_8$ (462.54). Amorphous, $[\alpha]_D^{25} = +82.6^\circ$ ($c = 1.0$, MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3977.

**12312 Kuhistanicaol B**

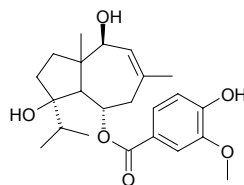
$C_{22}H_{28}O_5$ (372.47). Amorphous, $[\alpha]_D^{25} = +123.6^\circ$ ($c = 0.5$, MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3977.

**12313 Kuhistanicaol C**

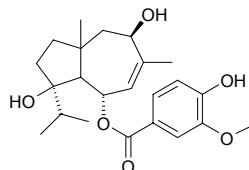
$C_{23}H_{32}O_5$ (388.51). Amorphous, $[\alpha]_D^{25} = +29.3^\circ$ ($c = 0.45$, MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3977.

**12314 Kuhistanicaol D**

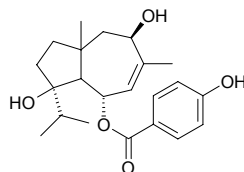
$C_{23}H_{32}O_6$ (404.51). Amorphous, $[\alpha]_D^{25} = -26.3^\circ$ ($c = 1.2$, MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3977.

**12315 Kuhistanicaol E**

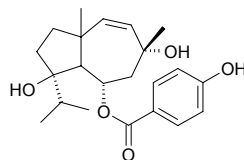
$C_{23}H_{32}O_6$ (404.51). Amorphous, $[\alpha]_D^{25} = +17.2^\circ$ ($c = 1.2$, MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (stem). Ref: 3977.

**12316 Kuhistanicaol F**

$C_{23}H_{32}O_5$ (388.51). Amorphous, $[\alpha]_D^{25} = +87.1^\circ$ ($c = 1.1$, MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (stem). Ref: 3977.

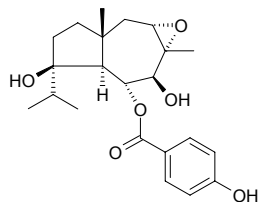
**12317 Kuhistanicaol G**

$C_{22}H_{30}O_5$ (374.48). Amorphous, $[\alpha]_D^{25} = -68.9^\circ$ ($c = 0.8$, MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3977.

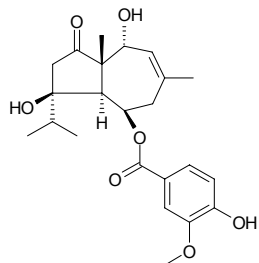


12318 Kuhistanicol H

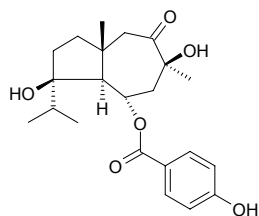
$C_{22}H_{30}O_6$ (390.48). $[\alpha]_D^{25} = +115.6^\circ$ ($c = 0.30$, MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (fruit). Ref: 5207.

**12319 Kuhistanicol I**

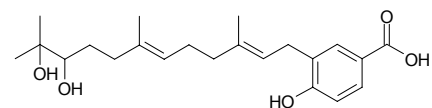
$C_{22}H_{30}O_7$ (418.49). $[\alpha]_D^{25} = +44.3^\circ$ ($c = 0.50$, MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (fruit). Ref: 5207.

**12320 Kuhistanicol J**

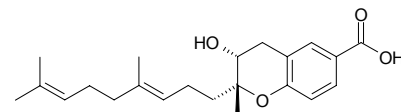
$C_{22}H_{30}O_6$ (390.48). $[\alpha]_D^{25} = +41.6^\circ$ ($c = 0.30$, MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (fruit). Ref: 5207.

**12321 Kuhistanol A**

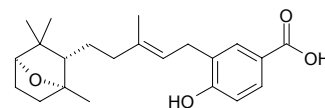
$C_{22}H_{32}O_5$ (376.50). Pharm: Antibacterial (MSSA, MIC = 63 μg/mL, control Ampicillin, MIC = 1 μg/mL; MRSA, MIC = 63 μg/mL, Ampicillin, MIC = 2 μg/mL; *Staphylococcus epidermidis* IFO 3762, MIC > 250 μg/mL, Ampicillin, MIC < 0.125 μg/mL; *Enterococcus faecalis* ATCC 21212, MIC > 250 μg/mL, Ampicillin, MIC = 1 μg/mL; *Bacillus subtilis* IFO 3134, MIC > 250 μg/mL, Ampicillin, MIC < 0.125 μg/mL; *Salmonella typhimurium* IFO 13245, MIC > 250 μg/mL, Ampicillin, MIC = 1 μg/mL; *Proteus mirabilis* IFO 3849, MIC > 250 μg/mL, Ampicillin, MIC = 2 μg/mL; *Escherichia coli* NIHJ JC-2, MIC > 250 μg/mL, Ampicillin, MIC = 4 μg/mL). Source: YI LANG A WEI *Ferula kuhistanica* (root and stem). Ref: 5207.

**12322 Kuhistanol D**

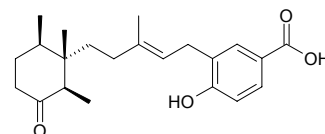
$C_{22}H_{30}O_4$ (358.48). Pharm: Antibacterial (MSSA, MIC = 31 μg/mL, control Ampicillin, MIC = 1 μg/mL; MRSA, MIC = 63 μg/mL, Ampicillin, MIC = 2 μg/mL; *Staphylococcus epidermidis* IFO 3762, MIC = 125 μg/mL, Ampicillin, MIC < 0.125 μg/mL; *Enterococcus faecalis* ATCC 21212, MIC = 125 μg/mL, Ampicillin, MIC = 1 μg/mL; *Bacillus subtilis* IFO 3134, MIC = 63 μg/mL, Ampicillin, MIC < 0.125 μg/mL; *Salmonella typhimurium* IFO 13245, MIC > 250 μg/mL, Ampicillin, MIC = 1 μg/mL; *Proteus mirabilis* IFO 3849, MIC > 250 μg/mL, Ampicillin, MIC = 2 μg/mL; *Escherichia coli* NIHJ JC-2, MIC > 250 μg/mL, Ampicillin, MIC = 4 μg/mL). Source: YI LANG A WEI *Ferula kuhistanica* (root and stem). Ref: 5207.

**12323 Kuhistanol E**

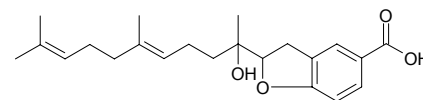
$C_{22}H_{30}O_4$ (358.48). $[\alpha]_D^{25} = 4.4^\circ$ ($c = 1.0$, MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3534.

**12324 Kuhistanol F**

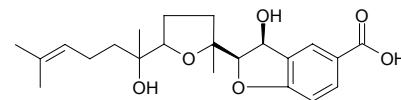
$C_{22}H_{30}O_4$ (358.48). $[\alpha]_D^{25} = 4.7^\circ$ ($c = 0.7$, MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3534.

**12325 Kuhistanol G**

$C_{22}H_{30}O_4$ (358.48). $[\alpha]_D^{25} = 0^\circ$ ($c = 0.8$, MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3534.

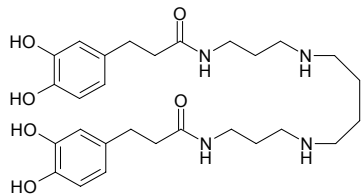
**12326 Kuhistanol H**

$C_{22}H_{30}O_6$ (390.48). $[\alpha]_D^{25} = 0^\circ$ ($c = 0.6$, MeOH). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3534.

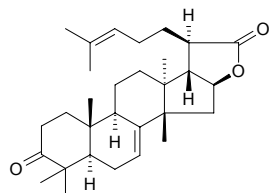


12327 Kukoamine A

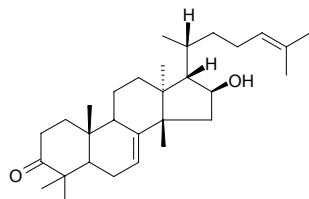
[75288-96-9] C₂₈H₄₂N₄O₆ (530.67). **Pharm:** Antihypertensive (rat, iv, 5mg/kg, strong action). **Source:** GOU QI GEN PI *Lycium chinense*. **Ref:** 2, 1700, 5501.

**12328 Kulactone**

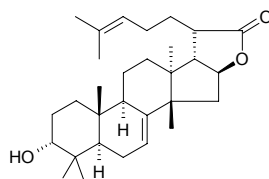
[22611-36-5] C₃₀H₄₄O₃ (452.68). mp 163.0~164.5°C. **Source:** KU LIAN PI *Melia azedarach*. **Ref:** 6.

**12329 Kulinone**

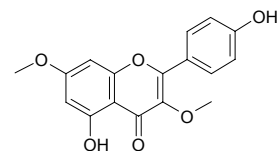
[21688-61-9] C₃₀H₄₈O₂ (440.72). mp 138°C. **Source:** KU LIAN PI *Melia azedarach*. **Ref:** 6.

**12330 Kulolactone**

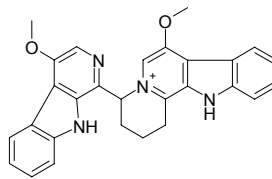
C₃₀H₄₆O₃ (454.70). **Source:** KU LIAN PI *Melia azedarach*. **Ref:** 6.

**12331 Kumatakenin**

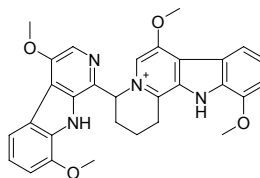
4',5-Dihydroxy-3,7-dimethoxyflavone [3301-49-3] C₁₇H₁₄O₆ (314.30). mp 246°C. **Source:** HUANG QI *Astragalus membranaceus*, NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.00001%dw)^[4752], TU SHA REN *Alpinia japonica*, *Glycyrrhiza* sp. **Ref:** 2, 6, 2431, 4752.

**12332 Kumujansine A**

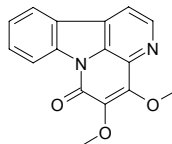
[116064-72-3] C₂₈H₂₅N₄O₂⁺ (449.54). Yellowish granular crystals, mp 249~250°C (dec). **Source:** KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. **Ref:** 101.

**12333 Kumujansine B**

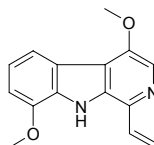
Picrasidine S [112503-87-4] C₃₀H₂₉N₄O₄⁺ (509.59). Yellowish granular crystals, mp 270°C (dec); yellowish acicular crystals (methanol), mp 215~217°C (dec). **Pharm:** cAMP phosphodiesterase inhibitor (*in vitro*, hydrochloride IC₅₀ = 30μmol/L). **Source:** KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. **Ref:** 101, 1011, 1521.

**12334 Kumujian D**

Methylnigakinone; 4,5-Dimethoxycanthin-6-one C₁₆H₁₂N₂O₃ (280.29). Yellowish needle crystals, mp 148~149°C; mp 145~146°C. **Pharm:** Antibacterial (*in vitro*, *Diplococcus pneumoniae*, *Bacillus subtilis*, EC = 1mg/mL). **Source:** CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.000011%dw)^[4728], KU MU *Picrasma quassioides* [Syn. *Picrasma ailanthoides*] (powder: content scope of 5 origins = 0.005%~0.167%, mean content = 0.053%^[5508]), KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. **Ref:** 6, 12, 658, 4728, 5501, 5508.

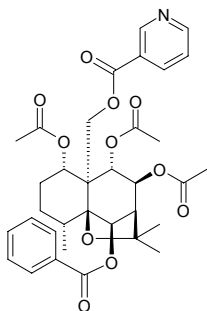
**12335 Kumujian G**

1-Vinyl-4,8-dimethoxy-β-carboline [65236-62-6] C₁₅H₁₄N₂O₂ (254.29). Yellowish prismatic crystals (methanol), mp 158~159°C. **Pharm:** Antibacterial (*Staphylococcus aureus* and its drug-resistant strain, *in vitro*). **Source:** KU MU *Picrasma quassioides* [Syn. *Picrasma ailanthoides*] (powder: content scope of 5 origins = 0.002%~0.033%, mean content = 0.016%^[5508]; content scope = 0.0%~2.72%^[5501]), KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. **Ref:** 12, 661, 5501, 5508.

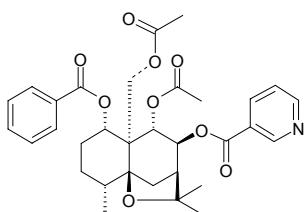


12336 Kupitengester 1

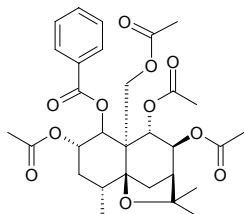
[135063-89-7] C₃₄H₃₉NO₁₁ (637.68). Rhombic crystals (petroleum ether–ethyl acetate), mp 238°C. **Pharm:** Insect antifeedant. **Source:** DIAO GAN MA *Celastrus angulatus*. **Ref:** 1185, 1205.

**12337 Kupitengester 2**

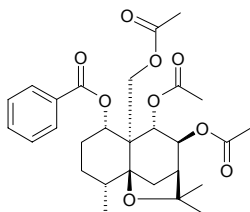
[149183-64-2] C₃₂H₃₇NO₉ (579.65). Rhombic crystals, mp 185–187°C. **Pharm:** Insect antifeedant. **Source:** DIAO GAN MA *Celastrus angulatus*. **Ref:** 1205.

**12338 Kupitengester 3**

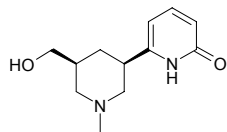
[149252-08-4] C₃₀H₃₈O₁₁ (574.62). Rhombic crystals, mp 224°C. **Pharm:** Insect antifeedant. **Source:** DIAO GAN MA *Celastrus angulatus*. **Ref:** 1205.

**12339 Kupitengester 4**

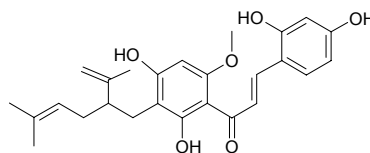
[132185-62-7] C₂₈H₃₆O₉ (516.59). Rhombic crystals, mp 214°C. **Pharm:** Insect antifeedant. **Source:** DIAO GAN MA *Celastrus angulatus*. **Ref:** 1205.

**12340 Kuraramine**

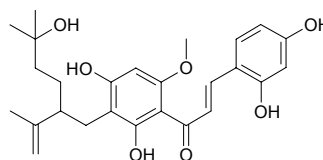
[In DNP] C₁₂H₁₈N₂O₂ (222.29). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2.

**12341 Kuraridin**

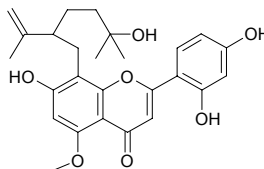
C₂₆H₃₀O₆ (438.53). **Pharm:** Tyrosinase inhibitor (IC₅₀ = 0.6 μmol/L)^[4430], tyrosinase inhibitor (IC₅₀ = 1.1 μmol/L, control Kojic acid, IC₅₀ = 11.3 μmol/L)^[5409]; DGAT inhibitor (*in vitro*, IC₅₀ = 9.8 μmol/L)^[4951]. **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 4430, 4951, 5409.

**12342 Kuraridinol**

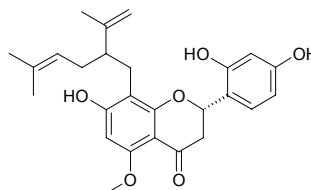
[52482-98-1] C₂₆H₃₂O₇ (456.54). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2.

**12343 Kurarinol**

[52482-99-2] C₂₆H₃₀O₇ (454.52). **Pharm:** DGAT inhibitor (*in vitro*, IC₅₀ = 8.6 μmol/L)^[4951]; tyrosinase inhibitor (IC₅₀ = 10.6 μmol/L, control Kojic acid, IC₅₀ = 11.3 μmol/L)^[5409]. **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2, 4951, 5409.

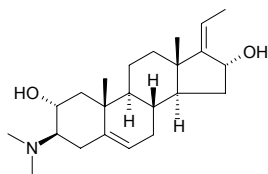
**12344 Kurarinone**

[34981-26-5] C₂₆H₃₀O₆ (438.53). **Pharm:** Estrogenic (yeast screen, EC₅₀ = 4.6 μmol/L; Ishikawa Var-I assay, EC₅₀ = 1.66 μmol/L)^[4776]; cytotoxic (*in vitro* sulforhodamine-B assay, MCF7/6, IC₅₀ = 22.2 μmol/L)^[4776]; cAMP phosphodiesterase inhibitor (IC₅₀ = 25 μmol/L); antifungal (various saprobic mold, 12.5 μg/mL, *Cladosporium cucumerinum* and *Candida albicans*, minimum dose on TLC chromatoplate = 5 μg); DGAT inhibitor (*in vitro*, IC₅₀ = 10.9 μmol/L)^[4951]; tyrosinase inhibitor (IC₅₀ = 1.3 μmol/L, control Kojic acid, IC₅₀ = 11.3 μmol/L)^[5409]. **Source:** QIN JIAO *Gentiana macrophylla*, KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]^[4776]. **Ref:** 707, 1007, 1333, 4776, 4951, 5409.

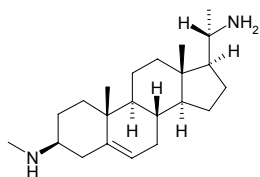


12345 Kurchaline

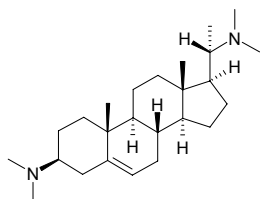
3-Aminopregna-5,17(20)-diene-2,16-diol [In DNP] $C_{23}H_{37}NO_2$ (359.56). mp 185°C. Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6.

**12346 Kurchamine**

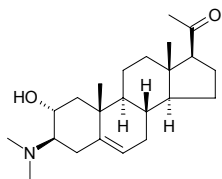
[3734-04-1] $C_{22}H_{38}N_2$ (330.56). mp 115~117°C. Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 1521.

**12347 Kurchessine**

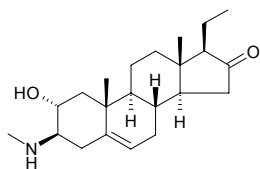
[6869-45-0] $C_{25}H_{44}N_2$ (372.64). mp 140~141°C. Pharm: Antiamebic (treatment of amebic dysentery). Source: DUAN ROU MAO ZHI XIE MU *Holarrhena pubescens*, ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6, 658.

**12348 Kurchiline**

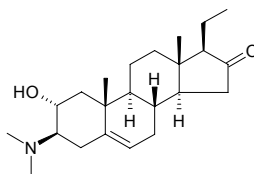
3β-Dimethylamino-2α-hydroxypregna-5-en-20-one [In DNP] $C_{23}H_{37}NO_2$ (359.56). Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6.

**12349 Kurchiphyllamine**

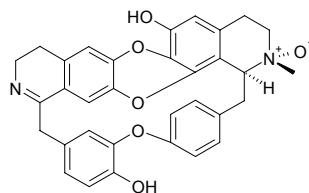
2α-Hydroxy-3β-methylaminopregna-5-en-16-one $C_{22}H_{35}NO_2$ (345.53). mp 161°C. Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6.

**12350 Kurchiphylline**

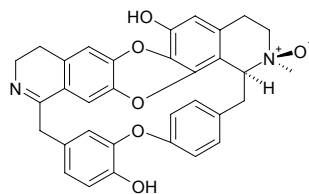
2α-Hydroxy-3β-dimethylaminopregna-5-en-16-one $C_{23}H_{37}NO_2$ (359.56). mp 184°C. Source: ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6.

**12351 Kurramine-2'-α-N-oxide**

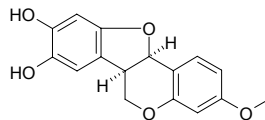
$C_{33}H_{28}N_2O_6$ (548.60). Yellow amorphous powder, $[\alpha]_D^{25} = +50^\circ$ ($c = 0.012$, MeOH). Pharm: AChE inhibitor (*in vitro*, $IC_{50} = (150.0 \pm 2.5) \mu\text{mol/L}$, control Galanthamine, $IC_{50} = (0.5 \pm 0.001) \mu\text{mol/L}$). Source: CHUI MU FANG JI *Cocculus pendulus*. Ref: 4051.

**12352 Kurramine-2'-β-N-oxide**

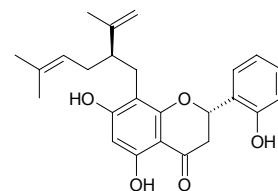
$C_{33}H_{28}N_2O_6$ (548.60). Yellow amorphous powder, $[\alpha]_D^{25} = +60^\circ$ ($c = 0.01$, MeOH). Pharm: AChE inhibitor (*in vitro*, $IC_{50} = (10.0 \pm 0.5) \mu\text{mol/L}$, control Galanthamine, $IC_{50} = (0.5 \pm 0.001) \mu\text{mol/L}$). Source: CHUI MU FANG JI *Cocculus pendulus*. Ref: 4051.

**12353 Kushenin**

[99217-66-0] $C_{16}H_{14}O_5$ (286.29). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 2.

**12354 Kushenol A**

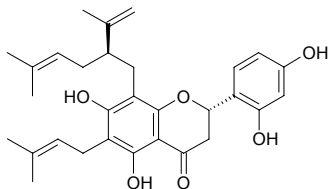
[99217-63-7] $C_{25}H_{28}O_5$ (408.50). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 2.



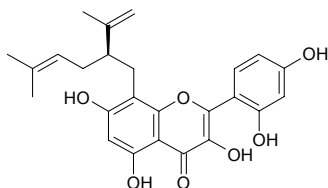
12355 Kushenol B

[99217-64-8] C₃₀H₃₆O₆ (492.61). Yellowish acicular crystals (benzene–acetone), mp 147–150°C, [α]_D²¹ = –40.2° (*c* = 0.39, methanol).

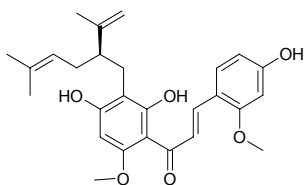
Pharm: cAMP phosphodiesterase inhibitor (*in vitro*, IC₅₀ = 31 μmol/L); phospholipase C_γ inhibitor (IC₅₀ = 7.5 μmol/L); tyrosinase inhibitor (IC₅₀ = 38.3 μmol/L, control Kojic acid, IC₅₀ = 11.3 μmol/L)^[5409]. **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2, 972, 1007, 1135, 1156, 5409.

**12356 Kushenol C**

[99119-73-0] C₂₅H₂₆O₇ (438.48). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2.

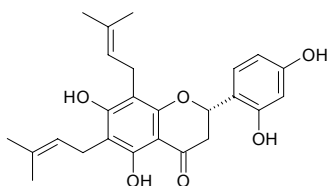
**12357 Kushenol D**

[99217-65-9] C₂₇H₃₂O₆ (452.55). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2.

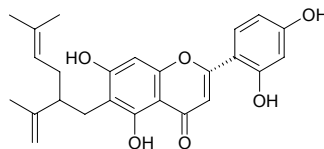
**12358 Kushenol E**

Flemiphilippin D [99119-72-9] C₂₅H₂₈O₆ (424.50). White solid, mp 161–163°C, [α]_D²⁵ = –15.2° (*c* = 0.5, ethanol), [α]_D²⁵ = –47° (*c* = 0.21, MeOH).

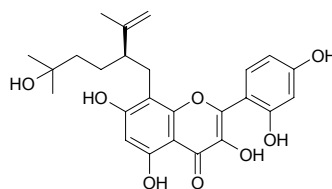
Pharm: cAMP phosphodiesterase inhibitor (*in vitro*, IC₅₀ = 40 μmol/L); phospholipase C_γ inhibitor (IC₅₀ = 11.8 μmol/L); tyrosinase inhibitor (IC₅₀ = 55.4 μmol/L, control Kojic acid, IC₅₀ = 11.3 μmol/L)^[5409]. **Source:** MAN XING QIAN JIN BA *Flemingia philippinensis* [Syn. *Moghania philippinensis*], KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2, 179, 900, 5409.

**12359 Kushenol F**

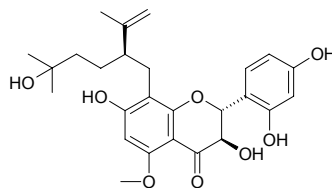
[99211-14-0] C₂₅H₂₆O₆ (422.48). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2.

**12360 Kushenol G**

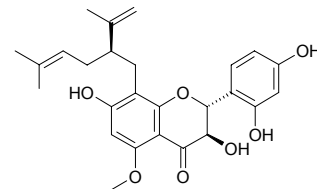
[99119-71-8] C₂₅H₂₈O₈ (456.50). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2.

**12361 Kushenol H**

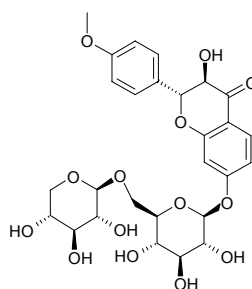
[99119-70-7] C₂₆H₃₂O₈ (472.54). **Pharm:** DGAT inhibitor (*in vitro*, IC₅₀ = 142.0 μmol/L)^[4951]; tyrosinase inhibitor (IC₅₀ = 40.0 μmol/L, control Kojic acid, IC₅₀ = 11.3 μmol/L)^[5409]. **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2, 4951, 5409.

**12362 Kushenol I**

[99119-69-4] C₂₆H₃₀O₇ (454.53). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2.

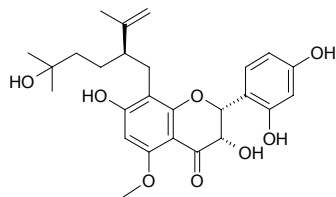
**12363 Kushenol J**

[101236-48-0] C₂₇H₃₂O₁₄ (580.55). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2.

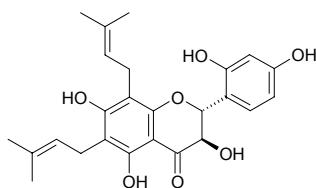


12364 Kushenol K

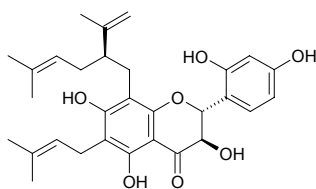
[101236-49-1] C₂₆H₃₂O₈ (472.54). Yellowish amorphous powder, [α]_D = -81° (c = 1.0, methanol). **Pharm:** Phospholipase C₇ inhibitor (IC₅₀ = 34.9 μmol/L); DGAT inhibitor (*in vitro*, IC₅₀ = 250 μmol/L)^[4951]. **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2, 1135, 1156, 4951.

**12365 Kushenol L**

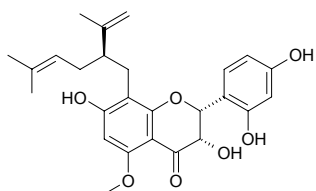
[101236-50-4] C₂₅H₂₈O₇ (440.49). Yellowish amorphous powder, [α]_D = +12° (c = 0.1, methanol). **Pharm:** Phospholipase C₇ inhibitor (IC₅₀ = 11.6 μmol/L); tyrosinase inhibitor (IC₅₀ = 43.3 μmol/L, control Kojic acid, IC₅₀ = 11.3 μmol/L)^[5409]. **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2, 1135, 1156, 5409.

**12366 Kushenol M**

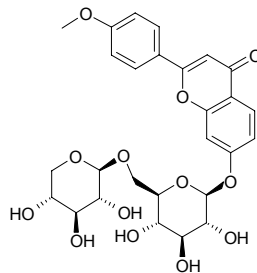
[101236-51-5] C₃₀H₃₆O₇ (508.61). Yellowish amorphous powder, [α]_D = +18° (c = 0.1, methanol). **Pharm:** Phospholipase C₇ inhibitor (IC₅₀ = 12.2 μmol/L); tyrosinase inhibitor (IC₅₀ = 37.5 μmol/L, control Kojic acid, IC₅₀ = 11.3 μmol/L)^[5409]. **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2, 1135, 1156, 5409.

**12367 Kushenol N**

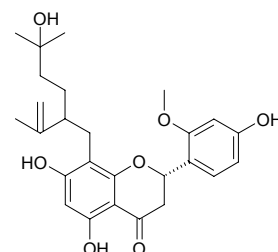
[102490-65-3] C₂₆H₃₀O₇ (454.52). Colorless amorphous, [α]_D = -52° (c = 0.1, methanol). **Pharm:** Phospholipase C₇ inhibitor (IC₅₀ = 31.2 μmol/L); tyrosinase inhibitor (IC₅₀ = 21.0 μmol/L, control Kojic acid, IC₅₀ = 11.3 μmol/L)^[5409]. **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2, 1135, 1156, 1196, 5409.

**12368 Kushenol O**

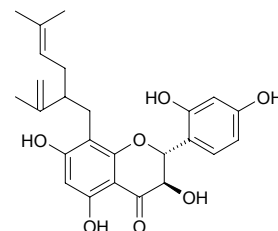
[102390-91-0] C₂₇H₃₀O₁₃ (562.53). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2.

**12369 Kushenol P**

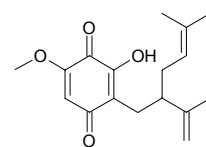
C₂₆H₃₂O₇ (456.54). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 4430.

**12370 Kushenol X**

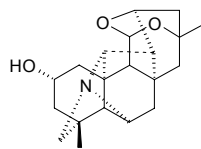
C₂₅H₂₈O₇ (440.50). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 4430.

**12371 Kushenquinone A**

[102390-90-9] C₁₇H₂₂O₄ (290.34). **Source:** KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. **Ref:** 2.

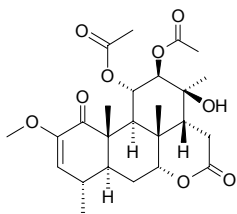
**12372 Kusnesoline**

C₂₀H₂₇NO₃ (329.44). Colorless needle crystals. **Source:** E MEI CUI QUE HUA *Delphinium omeiense*. **Ref:** 2190.

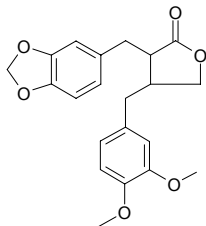


12373 Kusulactone

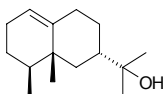
$C_{25}H_{34}O_9$ (478.54). Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12.

**12374 Kusunokinin**

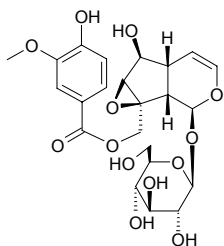
$C_{21}H_{22}O_6$ (370.41). Source: JIAN YE YUN XIANG CAO *Haplophyllum acutifolium*. Ref: 5175.

**12375 Kusunol**

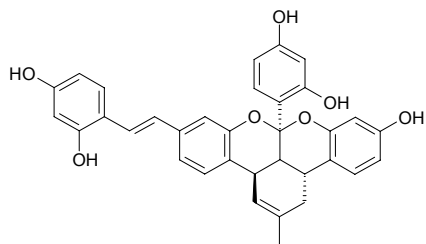
Valerianol [20489-45-6] $C_{15}H_{26}O$ (222.37). Source: CHEN XIANG *Aquilaria agallocha*, ZHANG MU *Cinnamomum camphora*. Ref: 6, 13, 660.

**12376 Kutkoside**

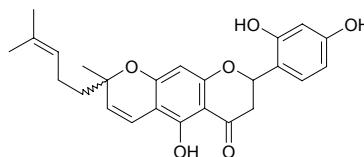
$C_{23}H_{28}O_{13}$ (512.47). Source: HU HUANG LIAN *Picrorhiza kurroa*. Ref: 660.

**12377 Kuwanol A**

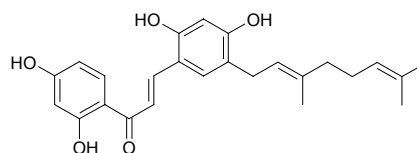
$C_{34}H_{28}O_7$ (548.60). Source: CAN SANG *Morus bombycis*. Ref: 2513.

**12378 Kuwanol C**

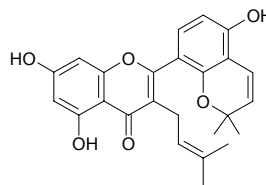
$C_{25}H_{26}O_6$ (422.48). Source: MENG SANG *Morus mongolica* (root cortex: yield = 0.00018%semi-dw). Ref: 3034.

**12379 Kuwanol D**

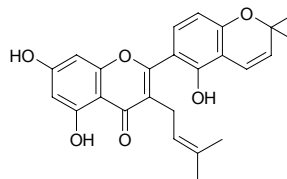
[123702-93-2] $C_{25}H_{28}O_5$ (408.50). Yellow amorphous powder. Source: SANG BAI PI *Morus alba*. Ref: 2513.

**12380 Kuwanon A**

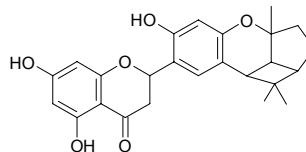
$C_{25}H_{24}O_6$ (420.47). Pharm: Antibacterial (*Staphylococcus aureus*, *Bacillus subtilis*, *Streptococcus faecalis*, *Mycobacterium smegmatis*). Source: SANG BAI PI *Morus alba*. Ref: 2513.

**12381 Kuwanon B**

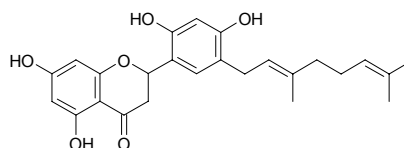
$C_{25}H_{24}O_6$ (420.47). Source: SANG BAI PI *Morus alba*. Ref: 660.

**12382 Kuwanon D**

$C_{25}H_{26}O_6$ (422.48). Source: SANG BAI PI *Morus alba*. Ref: 660.

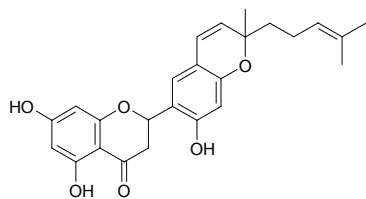
**12383 Kuwanon E**

$C_{25}H_{28}O_6$ (424.50). Source: SANG BAI PI *Morus alba*. Ref: 660.

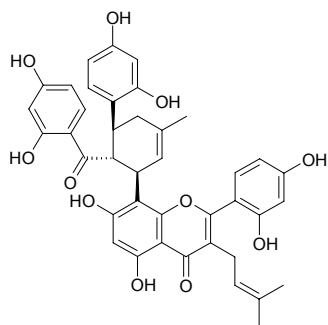


12384 Kuwanon F

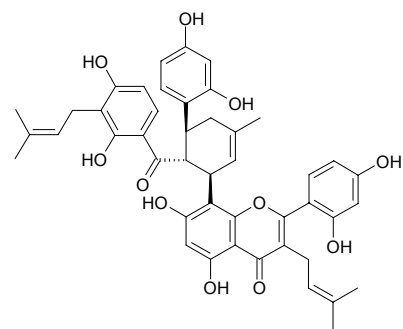
$C_{25}H_{26}O_6$ (422.48). Source: SANG BAI PI *Morus alba*. Ref: 660.

**12385 Kuwanon G**

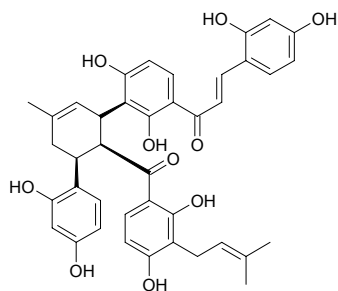
Moracenin B; Albanin F [75629-19-5] $C_{40}H_{36}O_{11}$ (692.73). Pharm: Antihypertensive (rbt, 1.0mg/kg iv). Source: MENG SANG *Morus mongolica* (root cortex: yield = 0.0014%semi-dw), SANG YE *Morus alba*. Ref: 658, 3034.

**12386 Kuwanon H**

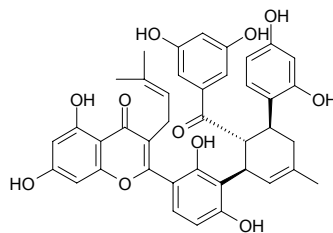
Moracenin A; Albanin G [76472-87-2] $C_{45}H_{44}O_{11}$ (760.85). Pharm: Antihypertensive. Source: MENG SANG *Morus mongolica* (root cortex: yield = 0.0036%semi-dw)^[3034], SANG YE *Morus alba*. Ref: 658, 3034.

**12387 Kuwanon I**

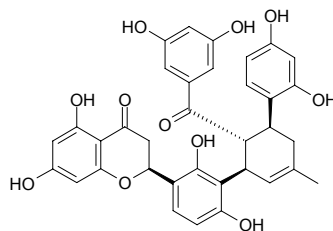
$C_{40}H_{38}O_{10}$ (678.74). Source: SANG BAI PI *Morus alba*. Ref: 660.

**12388 Kuwanon K**

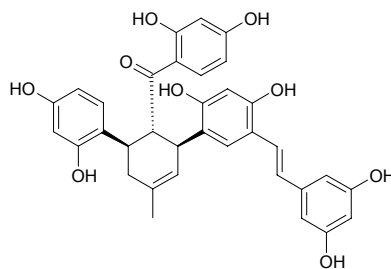
$C_{40}H_{36}O_{11}$ (692.73). Source: SANG BAI PI *Morus alba*. Ref: 660.

**12389 Kuwanon L**

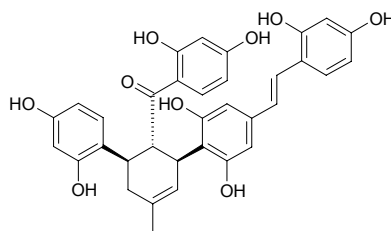
$C_{35}H_{30}O_{11}$ (626.62). Pharm: Antibacterial (*Staphylococcus aureus*, *Bacillus subtilis*, *Streptococcus faecalis*, *Mycobacterium smegmatis*)^[2513]. Source: SANG BAI PI *Morus alba*. Ref: 660, 2513.

**12390 Kuwanon P**

$C_{34}H_{30}O_9$ (582.61). $[\alpha]_D^{29} = -451.9^\circ$ ($c = 0.12$, MeOH). Source: NAI SANG *Morus macroura* (stem cortex). Ref: 5013.

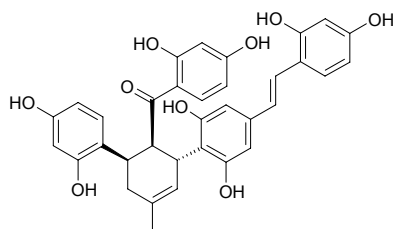
**12391 Kuwanon X**

$C_{34}H_{30}O_9$ (582.61). $[\alpha]_D^{29} = -351.6^\circ$ ($c = 0.11$, MeOH). Pharm: Antioxidant (100 μ mol/L, InRt of MDA = 101.7%, control Vitamin E, InRt of MDA = 81.5%; 10 μ mol/L, InRt of MDA = 80.8%, Vitamin E, InRt of MDA = 33.9%). Source: NAI SANG *Morus macroura* (stem cortex). Ref: 5013.

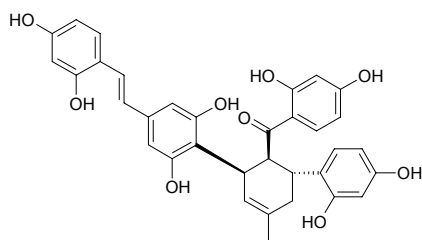


12392 Kuwanon Y

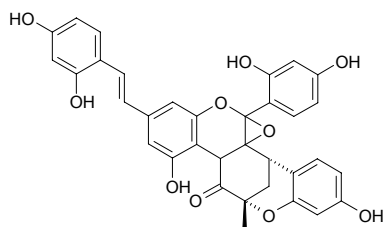
$C_{34}H_{30}O_9$ (582.61). $[\alpha]_D^{29} = +211.0^\circ$ ($c = 0.12$, MeOH). **Pharm:** Antioxidant (100 μ mol/L, InRt of MDA = 94.5%, control Vitamin E, InRt of MDA = 81.5%; 10 μ mol/L, InRt of MDA = 70.9%, Vitamin E, InRt of MDA = 33.9%). **Source:** NAI SANG *Morus macrourea* (stem cortex). **Ref:** 5013.

**12393 Kuwanon Y**

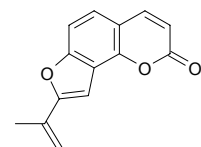
$C_{34}H_{30}O_9$ (582.61). **Source:** SANG BAI PI *Morus alba*. **Ref:** 660.

**12394 Kuwanon Z**

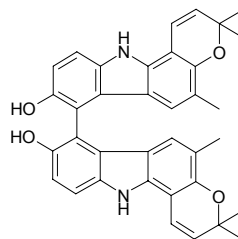
$C_{34}H_{26}O_{10}$ (594.58). **Source:** SANG BAI PI *Morus alba*. **Ref:** 660.

**12395 Kvannin**

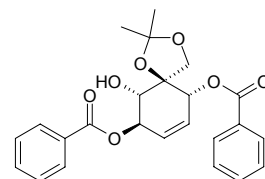
Oroselone [1760-27-6] $C_{14}H_{10}O_3$ (226.23). Crystals, mp 188~189°C, 170~174°C. **Source:** YUAN DANG GUI *Angelica archangelica*. **Ref:** 2071.

**12396 Kwangsine**

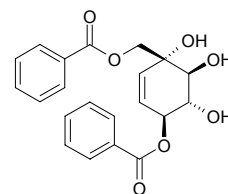
$C_{36}H_{32}N_2O_4$ (556.67). Yellow crystals, mp 263~273°C, $[\alpha]_D^{19} = -33.3^\circ$ ($c = 0.101$, $CHCl_3$). **Source:** GUANG XI JIU LI XIANG *Murraya kwangsiensis*. **Ref:** 863.

**12397 Kweichowenol A**

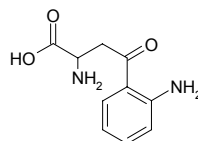
$C_{24}H_{24}O_7$ (424.45). White needles, mp 51~53°C, $[\alpha]_D^{20} = -95.8^\circ$ ($c = 0.011$, $CHCl_3$). **Pharm:** Cytotoxic (MTT assay, A549 bronchogenic carcinoma cell, $IC_{50} = 65\mu$ g/mL, SK-MES-1 bronchogenic carcinoma cell, $IC_{50} = 56\mu$ g/mL, NCI-H446 bronchogenic carcinoma cell, $IC_{50} = 50\mu$ g/mL). **Source:** LIU GUO ZI YU PAN *Uvaria kweichowensis* (leaf). **Ref:** 4480.

**12398 Kweichowenol B**

$C_{21}H_{20}O_7$ (384.39). White solid, mp 166~167°C, $[\alpha]_D^{20} = -5.78^\circ$ ($c = 0.019$, $CHCl_3$). **Pharm:** Cytotoxic (MTT assay, A549 bronchogenic carcinoma cell, $IC_{50} = 20\mu$ g/mL, SK-MES-1 bronchogenic carcinoma cell, $IC_{50} = 18\mu$ g/mL, NCI-H446 bronchogenic carcinoma cell, $IC_{50} = 23\mu$ g/mL). **Source:** LIU GUO ZI YU PAN *Uvaria kweichowensis* (leaf). **Ref:** 4480.

**12399 Kynurenine**

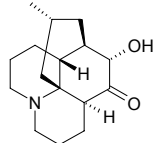
$C_{10}H_{12}N_2O_3$ (208.22). mp (+) 191°C, (-) 191°C, (\pm) 219°C (dec). **Source:** FENG RU *Apis cerana*, MO GU *Agaricus campestris*. **Ref:** 6.



L

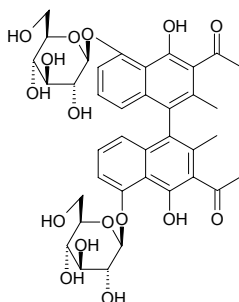
12400 L20

$C_{16}H_{25}NO_2$ (263.38). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388.



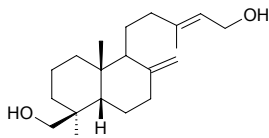
12401 Labadoside

4,4''-Binaphthalene-8,8''-*O,O*-di- β -*D*-glucopyranoside $C_{38}H_{42}O_{16}$ (754.75). Amorphous. Source: NIU XI XI *Rumex patientia*. Ref: 5138.

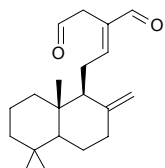


12402 Labdadiene

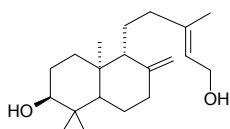
15,19-Dihydroxyl 8(17)-13(*E*)-labdatriene $C_{20}H_{34}O_2$ (306.49). White powder, mp 93–94°C (dec), $[\alpha]_D^{22} = -36.2^\circ$ ($c = 0.20$, $CHCl_3$). Source: CI BAI *Juniperus formosana* (fruit). Ref: 4581.

12403 (*E*)-Labda-8(17),12-diene-15,16-dial

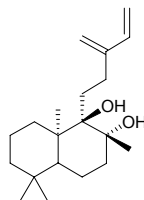
$C_{20}H_{30}O_2$ (302.46). Pharm: NO production Inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages, $IC_{50} = 22\mu\text{mol/L}$; control *L*-NMMA, $IC_{50} = 28\mu\text{mol/L}$); β -hexosaminidase release inhibitor (RBL-2H3 Cells, $100\mu\text{mol/L}$, InRt = 42.0%; control Curcumin, InRt = 62.6%). Source: YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.0011%dw). Ref: 4655.

12404 Labda-8(17),13*E*-diene-3 β ,15-diol

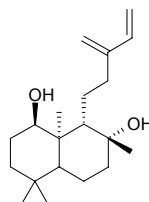
$C_{20}H_{34}O_2$ (306.49). Colorless needles (MeOH), mp 158–159°C, $[\alpha]_D^{25} = -24.3^\circ$ ($c = 0.5$, $CHCl_3$). Source: HAI QI *Excoecaria agallocha* (root). Ref: 5114.

12405 *ent*-Labda-13(16),14-diene-8 α ,9 β -diol

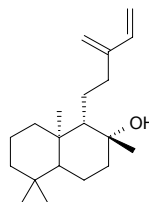
$C_{20}H_{34}O_2$ (306.49). Colorless oil, $[\alpha]_D^{20} = -2.8^\circ$ ($c = 0.51$, $CHCl_3$). Source: JIE MAO TAI *Blepharostoma trichophyllum*. Ref: 3843.

12406 *ent*-Labda-13(16),14-diene-1 β ,8 α ,9 β -diol

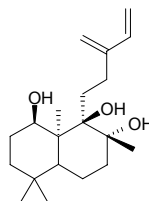
$C_{20}H_{34}O_2$ (306.49). Colorless oil, $[\alpha]_D^{20} = -14.7^\circ$ ($c = 0.21$, $CHCl_3$). Source: JIE MAO TAI *Blepharostoma trichophyllum*. Ref: 3843.

12407 *ent*-Labda-13(16),14-diene-8 α -ol

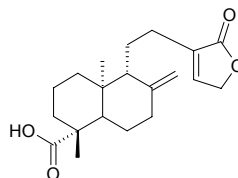
$C_{20}H_{34}O$ (290.49). Colorless oil, $[\alpha]_D^{20} = -15.7^\circ$ ($c = 0.19$, $CHCl_3$). Source: JIE MAO TAI *Blepharostoma trichophyllum*. Ref: 3843.

12408 *ent*-Labda-13(16),14-diene-1 β ,8 α ,9 β -triol

$C_{20}H_{34}O_3$ (322.49). Colorless needles, mp 114°C (*n*-hexane), $[\alpha]_D^{20} = -58.8^\circ$ ($c = 0.16$, $CHCl_3$). Source: JIE MAO TAI *Blepharostoma trichophyllum*. Ref: 3843.

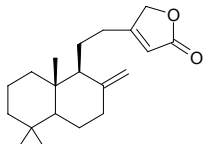
12409 8(17),13-*ent*-Labdadien-15 \rightarrow 16-lactone-19-oic acid

$C_{20}H_{28}O_4$ (332.44). Yellow oil, $[\alpha]_D^{25} = -33.0^\circ$ ($c = 0.74$, MeOH). Pharm: Anticidal (inhibits growth of alga *Raphidocelis subcapitata*, 72h $IC_{50} = 47.1\mu\text{mol/L}$). Source: BI CHI YAN ZI CAI *Potamogeton pectinatus* (whole herb). Ref: 3488.

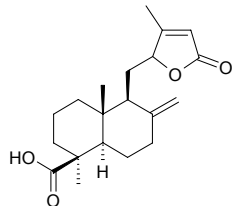


12410 Labda-8(17),13(14)-dien-15,16-olide

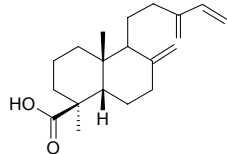
$C_{20}H_{30}O_2$ (302.46). Source: TU QIANG HUO *Hedychium coronarium* (rhizome). Ref: 4221.

**12411 8(17),13-Labdadien-12,15-olid-19-oic acid**

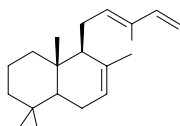
$C_{20}H_{28}O_4$ (332.44). Amorphous, $[\alpha]_D^{27} = +8.1^\circ$ ($c = 0.32$, $CHCl_3$). Source: TAI WAN SHAN MU *Cunninghamia konishii* (wood). Ref: 4176.

**12412 Labdatriene**

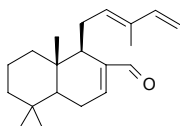
19-Carboxy 8(17)-13(16)-14-labdatriene $C_{20}H_{30}O_2$ (302.46). Yellowish solid, mp 107~108°C (dec), $[\alpha]_D^{22} = -19.1^\circ$ ($c = 0.30$, $CHCl_3$). Source: CI BAI *Juniperus formosana* (fruit). Ref: 4581.

**12413 Labda-7,12(E),14-triene**

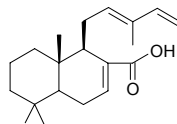
$C_{20}H_{32}$ (272.48). Viscous transparent oil, $[\alpha]_D^{30} = +3.77^\circ$ ($c = 1.76$, $CHCl_3$). Pharm: Cytotoxic inactive (*in vitro*, BT474, CHAGO, HepG2, Kato3, SW620: > 10µg/mL). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. Ref: 1903, 5363.

**12414 Labda-7,12(E),14-triene-17-al**

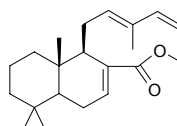
$C_{20}H_{30}O$ (286.46). Colorless needle crystals, mp 72~74°C, $[\alpha]_D^{30} = +37.48^\circ$ ($c = 1.51$, $CHCl_3$). Pharm: Cytotoxic (*in vitro*, BT474, IC₅₀ = 5.0µg/mL, control Doxorubicin hydrochloride, IC₅₀ = 0.08µg/mL; CHAGO, IC₅₀ = 4.8µg/mL, control Doxorubicin hydrochloride, IC₅₀ = 2.3µg/mL; HepG2, IC₅₀ = 5.2µg/mL, control Doxorubicin hydrochloride, IC₅₀ = 0.9µg/mL; Kato3, IC₅₀ = 4.2µg/mL, control Doxorubicin hydrochloride, IC₅₀ = 1.7µg/mL; SW620, IC₅₀ = 5.5µg/mL, control Doxorubicin hydrochloride, IC₅₀ = 1.1µg/mL). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. Ref: 1903, 5363.

**12415 Labda-7,12(E),14-triene-17-oic acid**

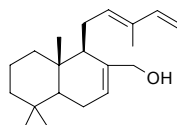
$C_{20}H_{30}O_2$ (302.46). Colorless needle crystals, mp 118~120°C, $[\alpha]_D^{30} = -15.93^\circ$ ($c = 1.67$, $CHCl_3$). Pharm: Cytotoxic inactive (*in vitro*, BT474, CHAGO, HepG2, Kato3, SW620: > 10µg/mL)^[5363]. Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. Ref: 1903, 5363.

**12416 Labda-7,12(E),14-triene-17-oic acid methyl ester**

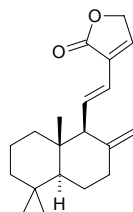
$C_{21}H_{32}O_2$ (316.49). Pharm: Cytotoxic inactive (*in vitro*, BT474, CHAGO, HepG2, Kato3, SW620: > 10µg/mL). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. Ref: 5363.

**12417 Labda-7,12(E),14-triene-17-ol**

$C_{20}H_{32}O$ (288.48). Colorless needle crystals, mp 90~92°C, $[\alpha]_D^{30} = +12.02^\circ$ ($c = 1.63$, $CHCl_3$). Pharm: Cytotoxic (*in vitro*, BT474, IC₅₀ = 5.4µg/mL, control Doxorubicin hydrochloride, IC₅₀ = 0.08µg/mL; CHAGO, IC₅₀ = 5.8µg/mL, control Doxorubicin hydrochloride, IC₅₀ = 2.3µg/mL; HepG2, IC₅₀ = 6.3µg/mL, control Doxorubicin hydrochloride, IC₅₀ = 0.9µg/mL; Kato3, IC₅₀ = 5.8µg/mL, control Doxorubicin hydrochloride, IC₅₀ = 1.7µg/mL; SW620, IC₅₀ = 5.7µg/mL, control Doxorubicin hydrochloride, IC₅₀ = 1.1µg/mL)^[5363]. Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. Ref: 1903, 5363.

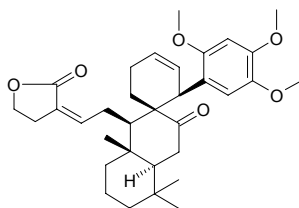
**12418 Labda-8(17),11,13-trien-15(16)-olide**

$C_{20}H_{28}O_2$ (300.44). Colorless needles, mp 118~120°C. Source: YUAN BAN JIANG HUA *Hedychium forrestii* (root). Ref: 4886.



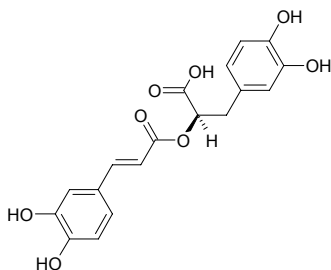
12419 rel-Labd-12-en-15(16)-olid-7-one-8R-spiro-1'-[2S-(2,4,5-trimethoxyphenyl)-3-cyclohexene]

$C_{33}H_{44}O_6$ (536.72). Colorless oil, $[\alpha]_D^{25} = -107.1^\circ$ ($c = 0.10$, $CHCl_3$). Source: SHAN SHAN JIANG *Alpinia flabellata* (leaf: yield = 0.00017%*dw*). Ref: 3051.



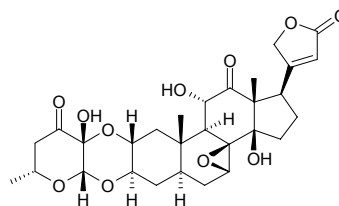
12420 Labiatic acid

Rosmarinic acid [537-15-5] $C_{18}H_{16}O_8$ (360.32). Crystals, $+2H_2O$, mp $204^\circ C$ (dec), $[\alpha]_D^{20} = +145^\circ$. Pharm: Antithrombotic (rat, *in vivo*, inhibits venous thrombosis); platelet aggregation inhibitor (rat, *in vivo*, induced by collagen); anti-inflammatory; stimulates fibrinolysis; antiviral (herpes simplex virus); antioxidant (lipid peroxidation inhibitor, microsomes of murine cerebral, hepatic and renal cells, induced by vitamin C-nicotinamide ADP and Fe^{2+} -cysteine, superoxide anion scavenger); antioxidant (DPPH scavenger, $IC_{50} = 0.0801$ mmol/L, control Propyl gallate, $IC_{50} = 0.03$ mol/L; superoxide radical inhibitor, $IC_{50} = 0.282$ mmol/L, control Propyl gallate, $IC_{50} = 0.106$ mmol/L; iron chelating assay, $IC_{50} = 0.034$ mmol/L, control Propyl gallate, $IC_{50} = 0.064$ mmol/L)^[4533]; antioxidant (*in vitro*, Cu^{2+} induced LDL peroxidation assay, $IC_{50} = 1.81$ μ mol/L; control Probucol, $IC_{50} = 4.7$ μ mol/L)^[4628]; antioxidant (enzyme-independent lipid peroxidation, $IC_{50} = 4.40$ μ mol/L; enzyme-dependent lipid peroxidation, $IC_{50} = 0.39$ μ mol/L)^[5494]; inhibits pathogenic bacteria; adenyl cyclase inhibitor. Source: BO HE *Mentha haplocalyx* [Syn. *Mentha canadasensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], DA XING QIN *Astrantia major*, DAN SHEN *Salvia miltiorrhiza* (dried root: content = 0.166%^[5508]), HUI HUI SU GENG *Perilla frutescens* var. *crispa*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], LA BO HE *Mentha piperita*, LIN SHI CAN *Teucrium scorodonia*, MI DIE XIANG *Rosmarinus officinalis*, MING XIAN HUA ZHU CHANG ZHU LIU LI CAO *Lindelofia stylosa* (地上部分), SHE XIANG CAO *Thymus vulgaris*, XI MEN FEI CAO *Symphytum officinale*, XIANG FENG HUA *Melissa officinalis*, YAO YONG DAN SHEN *Salvia officinalis*, ZI DAN TENG *Tournefortia sarmentosa* (stem: yield = 0.0625%^[4628]), *Anethum* sp., *Levisticum* sp., *Sanicula* sp. Ref: 2, 658, 660, 1521, 2592, 4533, 4628, 5494, 5508.



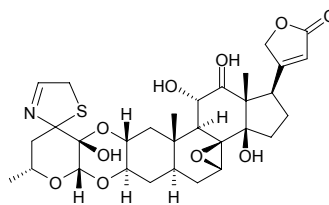
12421 Labriformidin

[66419-08-7] $C_{29}H_{36}O_{11}$ (560.60). Powder, mp $206\sim 210^\circ C$. Pharm: Toxin (vertebrate); LD_{50} (male Swiss Webster mus, ip) = 3.1 mg/kg. Source: MAO GUO MA LI JIN *Asclepias eriocarpa*. Ref: 658.



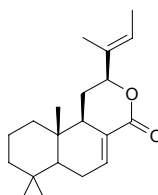
12422 Labriformine

[66419-07-6] $C_{31}H_{39}NO_{10}S$ (617.72). Crystals (Me_2CO -hexane), mp $222\sim 225^\circ C$, mp $213\sim 215^\circ C$. Pharm: Toxin (vertebrate); LD_{50} (male Swiss Webster mus, ip) = 9.2 mg/kg. Source: MAO GUO MA LI JIN *Asclepias eriocarpa*. Ref: 658, 1521.



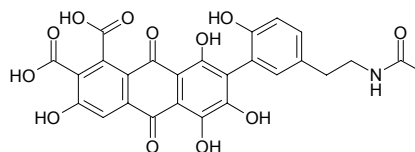
12423 Labta-7,13(E)-diene-17,12-olide

$C_{20}H_{30}O_2$ (302.46). mp $104\sim 106^\circ C$, $[\alpha]_D^{20} = -9.836^\circ$ ($c = 1.2$, $CHCl_3$). Pharm: Cytotoxic (*in vitro*, BT474, $IC_{50} = 4.9$ μ g/mL, control Doxorubicin hydrochloride, $IC_{50} = 0.08$ μ g/mL; CHAGO, $IC_{50} = 6.4$ μ g/mL, Doxorubicin hydrochloride, $IC_{50} = 2.3$ μ g/mL; HepG2, $IC_{50} = 6.0$ μ g/mL, Doxorubicin hydrochloride, $IC_{50} = 0.9$ μ g/mL; Kato3, $IC_{50} = 4.6$ μ g/mL, Doxorubicin hydrochloride, $IC_{50} = 1.7$ μ g/mL; SW620, $IC_{50} = 5.0$ μ g/mL, Doxorubicin hydrochloride, $IC_{50} = 1.1$ μ g/mL). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*]. Ref: 5363.



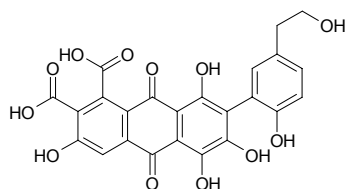
12424 Laccaic acid A

$C_{26}H_{19}NO_{12}$ (537.44). Source: SHENG QI *Rhus verniciflua* [Syn. *Toxicadendron verniciflum*]. Ref: 660.

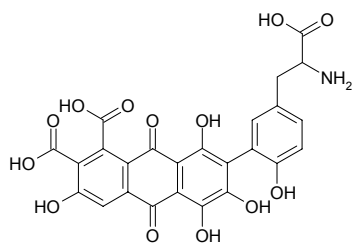


12425 Laccaic acid B

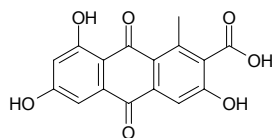
$C_{24}H_{16}O_{12}$ (496.39). Source: SHENG QI *Rhus verniciflua* [Syn. *Toxicodendron verniciflum*]. Ref: 660.

**12426 Laccaic acid C**

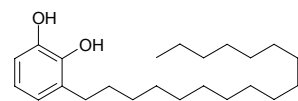
$C_{25}H_{17}NO_{13}$ (539.41). Source: SHENG QI *Rhus verniciflua* [Syn. *Toxicodendron verniciflum*]. Ref: 660.

**12427 Laccaic acid D**

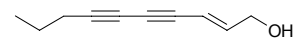
$C_{16}H_{10}O_7$ (314.25). Source: SHENG QI *Rhus verniciflua* [Syn. *Toxicodendron verniciflum*]. Ref: 660.

**12428 Laccol**

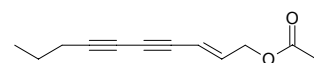
$C_{23}H_{40}O_2$ (348.57). mp 23°C. Source: LIN BEI ZI *Toxicodendron succedaneum* [Syn. *Rhus succedanea*]. Ref: 6.

**12429 Lachnophyllol**

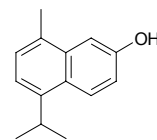
[23180-62-3] $C_{10}H_{12}O$ (148.21). Crystals (petroleum ether), mp 39~40°C. Source: ZI WAN *Aster tataricus*. Ref: 6.

**12430 Lachnophyllol acetate**

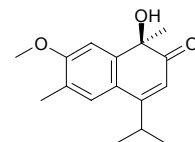
$C_{12}H_{14}O_2$ (190.24). bp 90°C/0.001mmHg. Source: ZI WAN *Aster tataricus*. Ref: 6.

**12431 Lacinilene A**

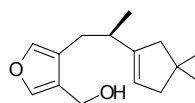
$C_{14}H_{16}O$ (200.28). Source: LANG YU PI *Ulmus parvifolia*. Ref: 660.

**12432 Lacinilene C 7-methyl ether**

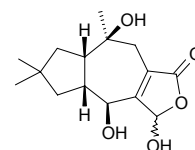
$C_{16}H_{20}O_3$ (260.34). Source: LU DI MIAN *Gossypium hirsutum* [Syn. *Gossypium mexicanum*]. Ref: 658.

**12433 Lactarol**

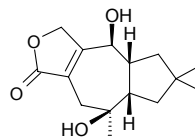
$C_{15}H_{22}O_2$ (234.34). Source: RONG BAI RU GU *Lactarius vellereus*. Ref: 660.

**12434 Lactarolide A**

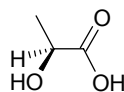
$C_{15}H_{22}O_5$ (282.34). Source: MEI WEI HONG GU *Russula delica* (sporocarp). Ref: 4374.

**12435 Lactarorufin A**

$C_{15}H_{22}O_4$ (266.34). Source: RONG BAI RU GU *Lactarius vellereus*. Ref: 660.

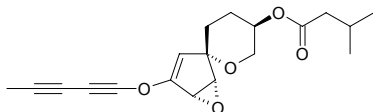
**12436 Lactic acid**

2-Hydroxypropanoic acid [50-21-5] $C_3H_6O_3$ (90.08). Pharm: Antiseptic (*L*-Lactic acid). Source: KUAN YE XIANG PU *Typha latifolia*, LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], MAO DI HUANG *Digitalis purpurea*. Ref: 2, 658, 660.

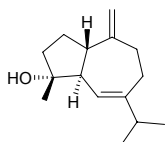


12437 Lactiflorasyn

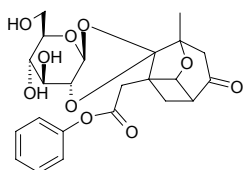
$C_{15}H_{22}O_5$ (330.38). White granular crystals, mp 92.5–93.5°C, $[\alpha]_D^{29} = +3^\circ$ ($c = 0.37$, chloroform). Source: YA JIAO AI *Artemisia lactiflora*. Ref: 66.

**12438 Lactifloreol**

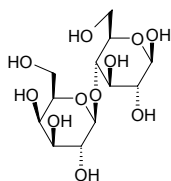
$C_{15}H_{24}O$ (220.36). Colorless oil, $[\alpha]_D^{20} = +15.8^\circ$ ($c = 0.09$, ethanol). Pharm: Antiasthmatic; antibacterial; antispasmodic. Source: YA JIAO AI *Artemisia lactiflora*. Ref: 661.

**12439 Lactiflorin**

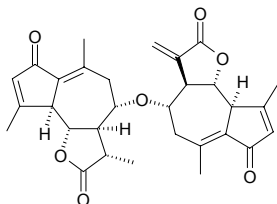
$C_{23}H_{26}O_{10}$ (462.46). Crystals ($CHCl_3$ -MeOH), mp 207–209°C, $[\alpha]_D^{23} = +37.2^\circ$ ($c = 0.01$, EtOH). Source: CHI SHAO *Paeonia lactiflora* wild. Ref: 2, 1521.

**12440 Lactose**

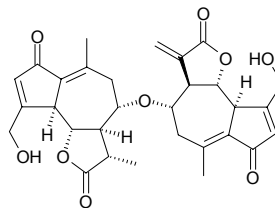
$C_{12}H_{22}O_{11}$ (342.30). Pharm: Treatment of hepatic coma and constipation. Source: LIAN QIAO *Forsythia suspensa*. Ref: 658.

**12441 Lactuain A**

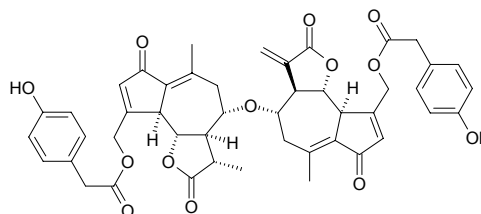
$C_{30}H_{32}O_7$ (504.59). Amorphous powder, $[\alpha]_D^{25} = -20.5^\circ$ ($c = 0.2$, MeOH). Source: SHAN WO JU *Lactuca indica* (Fresh whole herb: yield = 0.0027%fw). Ref: 4689.

**12442 Lactuain B**

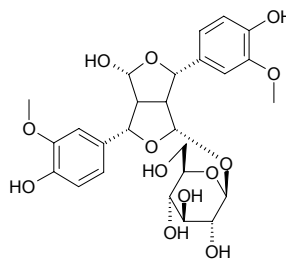
$C_{30}H_{32}O_9$ (536.58). Amorphous powder, $[\alpha]_D^{25} = -68.6^\circ$ ($c = 0.5$, MeOH). Source: SHAN WO JU *Lactuca indica* (Fresh whole herb: yield = 0.00027%fw). Ref: 4689.

**12443 Lactuain C**

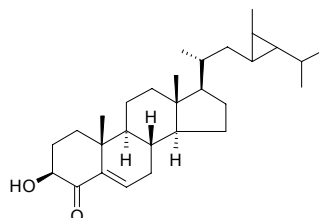
$C_{46}H_{44}O_{13}$ (804.86). Amorphous powder, $[\alpha]_D^{25} = +38.0^\circ$ ($c = 0.2$, MeOH). Pharm: Antidiabetic (STZ-induced diabetic rats *in vivo*, antihyperglycemic test, 1mmol/kg, $\Delta = (-22.74 \pm 12.53)\%$). Source: SHAN WO JU *Lactuca indica* (Fresh whole herb: yield = 0.0025%fw). Ref: 4689.

**12444 Lactucaside**

9 α -Hydroxy-9 α -O- β -D-glucopyranosylpinoresinol $C_{26}H_{32}O_{13}$ (552.54). Off-white amorphous powder, $[\alpha]_D^{25} = -44.3^\circ$ ($c = 0.4$, MeOH). Pharm: Antidiabetic (STZ-induced diabetic rats *in vivo*, antihyperglycemic test, 1mmol/kg, $\Delta = (-17.95 \pm 5.63)\%$). Source: SHAN WO JU *Lactuca indica* (Fresh whole herb: yield = 0.0018%fw). Ref: 4689.

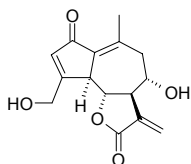
**12445 Lactuasterol**

$C_{29}H_{46}O_2$ (426.69). White powder, mp 148–150°C. Source: SHI CHUN *Ulva lactuca*. Ref: 837.

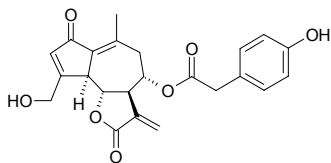


12446 Lactucin

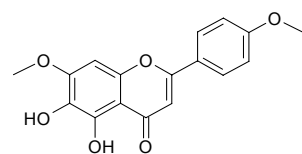
8 β ,15-Dihydroxy-2-oxo-guaia-1(10),3,11(13)-trien-5 α ,6 β ,7 α H-12,6-olide [1891-29-8] C₁₅H₁₆O₅ (276.29). Crystals (Me₂CO), mp 224–228°C, [α]_D = +49° (*c* = 0.9, MeOH). **Pharm:** Cytotoxic (hmn, *in vitro*, PC3 prostate cancer cells, IC₅₀ = 10.7 μ g/mL)^[2527]; cytotoxic (hmn tumor cells HeLa); antitussive; sedative; LD (mus, orl) = 800–1000mg/kg, (mus, sc) = 50mg/kg, (mus, iv) = 15mg/kg. **Source:** DU WO JU *Lactuca virosa*, JU QU *Cichorium intybus*, SHAN KU MAI *Ixeris chinensis*, SA LI LA WO JU *Lactuca sariola*, SUI BIAN WO JU *Lactuca laciniata*, WO JU *Lactuca sativa*. **Ref:** 5, 658, 2527.

**12447 Lactucopicrin**

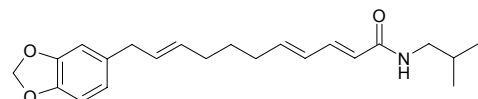
[65725-11-3] C₂₃H₂₂O₇ (410.43). **Pharm:** Hypoglycemic **Source:** DU WO JU *Lactuca virosa*, JIA NA DA WO JU *Lactuca canadensis*, JU QU *Cichorium intybus*, YE WO JU *Lactuca serriola*. **Ref:** 6, 658.

**12448 Ladanein**

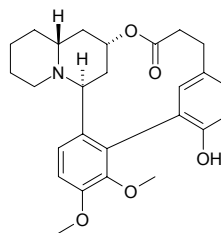
5,6-Dihydroxy-7,4'-dimethoxyflavone C₁₇H₁₄O₆ (314.30). Pale yellow powder, mp 213–216°C. **Pharm:** PFase inhibitor (100 μ g/mL, InRt = 63%)^[5378]; cytotoxic inactive (hmn breast cancer cell lines: MDA-MB-231, MCF7, T47D, 20 μ g/mL)^[5378]; angiogenesis inhibitor inactive (chicken embryo chorioallantoic membrane (CAM) assay, 10 μ g)^[5378]. **Source:** AI YE *Artemisia argyi*, XIONG RUI ZHUANG ZHI GUAN CAO *Orthosiphon stamineus* [Syn: *Orthosiphon aristatus*; *Orthosiphon grandiflorus*; *Orthosiphon spicatus*] (aerial parts: yield = 0.0058%dw). **Ref:** 3053, 5378.

**12449 Laetispicine**

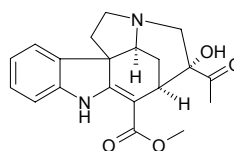
C₂₂H₂₉NO₃ (355.48). White needles, mp 93–94°C. **Source:** DA YE JU *Piper laetispicum*. **Ref:** 4865.

**12450 Lagerstremine**

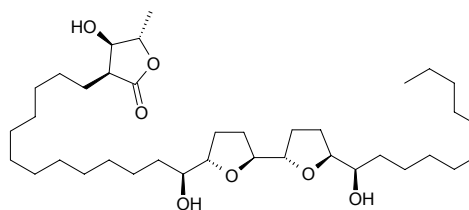
Lagerstroemine [10247-53-7] C₂₆H₃₁NO₅ (437.54). mp 226–228°C. **Source:** ZI WEI YE *Lagerstroemia indica*. **Ref:** 6.

**12451 Lagumicine**

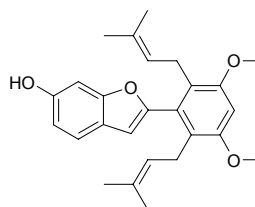
C₂₀H₂₂N₂O₄ (354.41). Light yellowish oil, [α]_D = –552° (*c* = 0.07, CHCl₃). **Source:** XIA YE JI GU CHANG SHAN *Alstonia angustifolia* (leaf). **Ref:** 3780.

**12452 Laherradurin**

C₃₇H₆₈O₇ (624.95). **Pharm:** Mitochondrial complex I selective inhibitor (NADH oxidase IC₅₀ = (0.18±0.02)nmol/L, *p* < 0.001, control Rotenone, IC₅₀ = (5.10±0.09)nmol/L). **Source:** MAO YE FAN LI ZHI *Annona cherimolia* (seed). **Ref:** 5024.

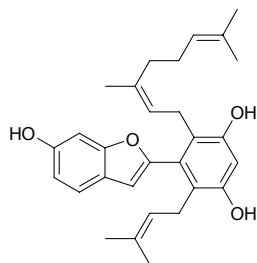
**12453 Lakoochin A**

C₂₆H₃₀O₄ (406.53). Off-white semisolid. **Pharm:** Antitubercular (*in vitro*, *Mycobacterium tuberculosis* H37Ra, MIC = 12.5 μ g/mL); cytotoxic (*in vitro*, BC, IC₅₀ = 6.1 μ g/mL; KB, inactive at 20 μ g/mL). **Source:** LA KOU SHA MIAN BAO GUO *Artocarpus lakoocha* (root: yield = 0.00050%dw). **Ref:** 3017.

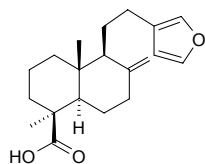


12454 Lakoochin B

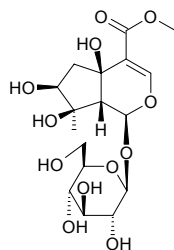
$C_{29}H_{34}O_4$ (446.59). Off-white semisolid. **Pharm:** Antitubercular (*in vitro*, *Mycobacterium tuberculosis* H37Ra, MIC = 50 $\mu\text{g}/\text{mL}$); cytotoxic (*in vitro*, BC, IC₅₀ = 3.1 $\mu\text{g}/\text{mL}$; KB, IC₅₀ = 6.1 $\mu\text{g}/\text{mL}$). **Source:** LA KOU SHA MIAN BAO GUO *Artocarpus lakoocha* (root; yield = 0.0011%dw). **Ref:** 3017.

**12455 Lambertianic acid**

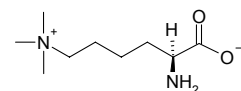
[4966-13-6] $C_{20}H_{28}O_3$ (316.44). Colorless oil, mp 126.5~127.5°C, $[\alpha]_D^{25} = +53^\circ$ ($c = 0.26$, CHCl_3), $[\alpha]_D^{25} = +55^\circ$ ($c = 0.69$, EtOH). **Pharm:** Antimalarial (*in vitro*, *Plasmodium falciparum* strain 3D7, IC₅₀ = (41.2±4) $\mu\text{g}/\text{mL}$ ((130.2±12.6) $\mu\text{mol}/\text{L}$))^[3022]. **Source:** CE BAI YE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*], HAI SONG ZI *Pinus koraiensis*. **Ref:** 6, 3022.

**12456 Lamiide**

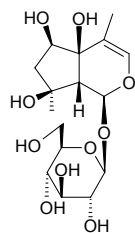
[27856-54-8] $C_{17}H_{26}O_{12}$ (422.39). **Source:** BAO GAI CAO *Lamium amplexicaule*, TIAN SHE CAO *Lippia dulcis* (aerial parts). **Ref:** 6, 4508.

**12457 Laminine**

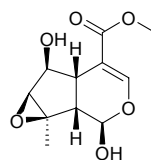
6-*N*-Trimethyl-*L*-lysine betaine [2408-79-9] $C_9H_{20}N_2O_2$ (188.27). **Source:** KUN BU *Laminaria japonica*. **Ref:** 5, 6, 5501.

**12458 Lamiol**

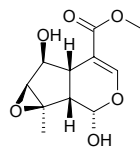
[30987-52-1] $C_{16}H_{26}O_{10}$ (378.38). **Source:** BAO GAI CAO *Lamium amplexicaule*. **Ref:** 6.

**12459 Lamiophlomiol A**

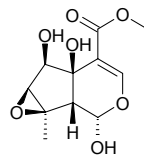
[134107-56-5] $C_{11}H_{14}O_6$ (242.23). Colorless prismatic crystals (acetic ester-methanol), mp 159~163°C, $[\alpha]_D^{22} = +43.2^\circ$ ($c = 1.325$, methanol). **Source:** DU YI WEI *Lamiophlomis rotata* [Syn. *Phlomis rotata*]. **Ref:** 178.

**12460 Lamiophlomiol B**

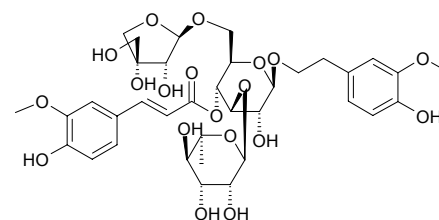
$C_{11}H_{14}O_6$ (242.23). **Source:** DU YI WEI *Lamiophlomis rotata* [Syn. *Phlomis rotata*]. **Ref:** 178.

**12461 Lamiophlomiol C**

$C_{11}H_{14}O_7$ (258.23). Colorless prismatic crystals, mp 155~157°C, $[\alpha]_D^{22} = +66.7^\circ$ ($c = 2.11$, methanol). **Source:** DU YI WEI *Lamiophlomis rotata* [Syn. *Phlomis rotata*]. **Ref:** 223.

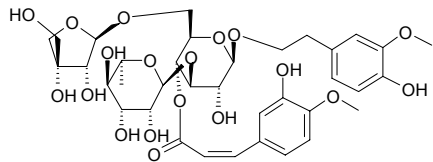
**12462 Lamiophlomoside A**

3-Methoxy-4-hydroxy-phenethyl-*O*-[α -*L*-rhamno-pyranosyl-(1→3)]-*O*-[β -*D*-apiofuranosyl-(1→6)]-4-*O*-feruloyl- β -*D*-glucopyranoside $C_{36}H_{48}O_{19}$ (784.77). Yellowish powder, mp 107~108°C. **Source:** DU YI WEI *Lamiophlomis rotata* [Syn. *Phlomis rotata*]. **Ref:** 323.

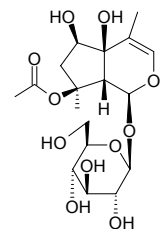


12463 cis-Lamiophlomiside A

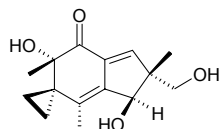
[239467-64-2] C₃₆H₄₈O₁₉ (784.77). Off-white amorphous powder. Source: DU YI WEI *Lamiophlomis rotata* [Syn. *Phlomis rotata*]. Ref: 2318.

**12464 Lamioside**

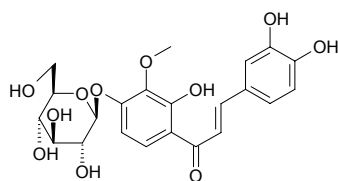
[19228-19-4] C₁₈H₂₈O₁₁ (420.42). Source: BAO GAI CAO *Lamium amplexicaule*, YE ZHI MA *Lamium barbatum*. Ref: 6.

**12465 Lampterol**

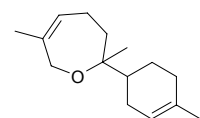
C₁₅H₂₀O₄ (264.32). mp 124~125°C. Pharm: Antineoplastic. Source: RI BEN CE ER *Lamptreomyces japonicus* (the compound was isolated from the plant by Masaru Tada et al. in 1964). Ref: 5505.

**12466 Lanceolin**

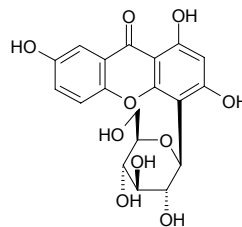
[64181-95-9] C₂₂H₂₄O₁₁ (464.43). mp 215~220°C. Source: XIAN YE JIN JU *Coreopsis lanceolata*. Ref: 6.

**12467 Lanceoloxide**

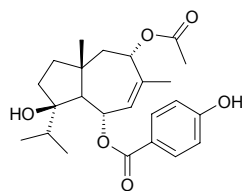
1,5-Dimethyl-1-(4-methylhexenyl)-4-cycloheptenylether C₁₅H₂₄O (220.36). Colorless oil. Source: XIAO HUA SHA ZHEN *Osyris tenuifolia* (essential oil). Ref: 3821.

**12468 Lancerin**

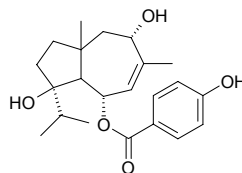
[81991-99-3] C₁₉H₁₈O₁₀ (406.35). Amorphous powder. Pharm: CNS stimulant (rat, sc, strengthens ephedrine-induced spontaneous motion). Source: XI BO LI YA YUAN ZHI *Polygala sibirica*. Ref: 691, 1829.

**12469 Lancerotriol 9-acetate-6-p-hydroxybenzoate**

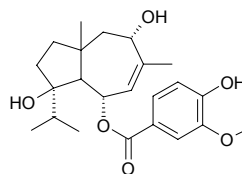
C₂₄H₃₂O₆ (416.52). Source: *Ferula sinaica* (leaf). Ref: 5145.

**12470 Lancerotriol 9α-(p-hydroxybenzoate)**

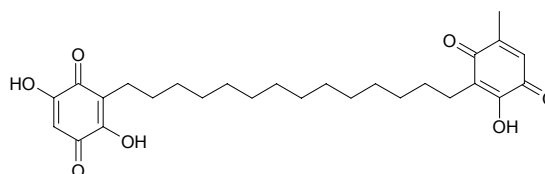
C₂₂H₃₀O₅ (374.48). Source: YI LANG A WEI *Ferula kuhistanica* (root), YI LANG A WEI *Ferula kuhistanica* (fruit). Ref: 3977, 5207.

**12471 Lancerotriol 6-vanillate**

C₂₃H₃₂O₆ (404.51). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3977.

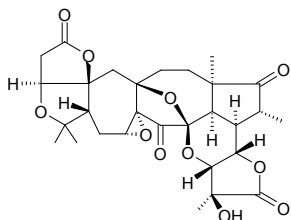
**12472 Lanciaquinone**

C₂₇H₃₆O₇ (472.58). Yellow brown crystals (MeOH), mp 141~143°C, [α]_D²⁵ = +29° (c = 0.5, CH₂Cl₂). Source: PI ZHEN DU JING SHAN *Maesa lanceolata* (fruit). Ref: 3464.

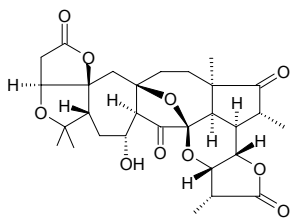


12473 Lancifodilactone B

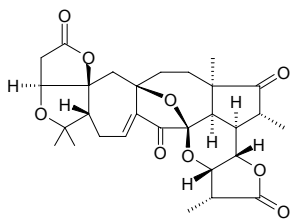
$C_{29}H_{34}O_{11}$ (558.59). Colorless needles (acetone), mp 222~224°C, $[\alpha]_D = +55.12^\circ$ ($c = 0.25$, C_5H_5N). [Source](#): XIA YE WU WEI ZI *Schisandra lancifolia* (stem and leaf: yield = 0.00068%dw). [Ref](#): 3006.

**12474 Lancifodilactone C**

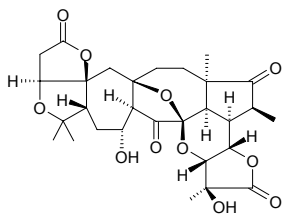
$C_{29}H_{36}O_{10}$ (544.6). Colorless prisms (MeOH), mp 209~211°C, $[\alpha]_D = +47.74^\circ$ ($c = 0.20$, C_5H_5N). [Source](#): XIA YE WU WEI ZI *Schisandra lancifolia* (stem and leaf: yield = 0.00095%dw). [Ref](#): 3006.

**12475 Lancifodilactone D**

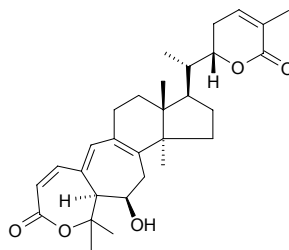
$C_{29}H_{34}O_9$ (526.59). Colorless prisms (MeOH), mp 230~232°C, $[\alpha]_D = +80.77^\circ$ ($c = 0.26$, C_5H_5N). [Source](#): XIA YE WU WEI ZI *Schisandra lancifolia* (stem and leaf: yield = 0.0018%dw). [Ref](#): 3006.

**12476 Lancifodilactone E**

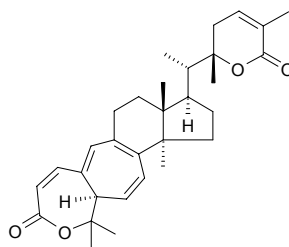
21 β -Methyl-20,22-dideoxy-25-hydroxymicrandilactone A $C_{29}H_{36}O_{11}$ (560.6). Colorless prisms (acetone), mp 200°C, $[\alpha]_D +70.42^\circ$ ($c = 0.21$, MeOH). [Source](#): XIA YE WU WEI ZI *Schisandra lancifolia* (stem and leaf: yield = 0.00074%dw). [Ref](#): 3006.

**12477 Lancilactone A**

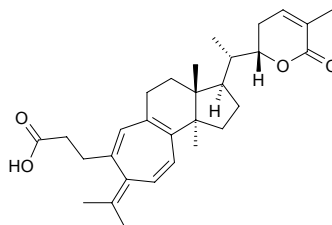
[218915-15-2] $C_{30}H_{40}O_5$ (480.65). [Source](#): PI ZHEN YE NAN WU WEI ZI *Kadsura lancilimba*. [Ref](#): 2436.

**12478 Lancilactone B**

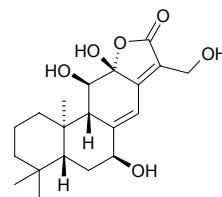
[218915-16-3] $C_{30}H_{38}O_4$ (462.63). [Source](#): PI ZHEN YE NAN WU WEI ZI *Kadsura lancilimba*. [Ref](#): 2436.

**12479 Lancilactone C**

$C_{30}H_{40}O_4$ (464.65). [Pharm](#): Anti-HIV (inhibits HIV replication). [Source](#): PI ZHEN YE NAN WU WEI ZI *Kadsura lancilimba*. [Ref](#): 928, 2268.

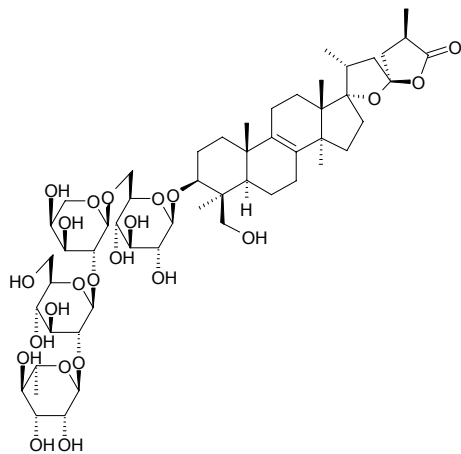
**12480 Languin B**

$C_{20}H_{28}O_6$ (364.44). Colorless crystals, mp 220~222°C, $[\alpha]_D^{26} = -143^\circ$ ($c = 0.002$, EtOH). [Source](#): LANG DU DA JI *Euphorbia fischeriana*. [Ref](#): 2350.

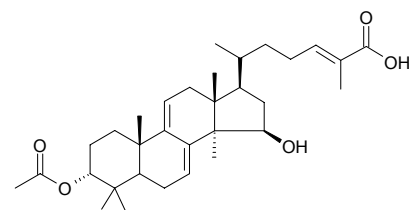


12481 Lanostane glycoside

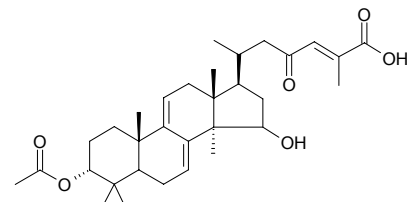
$C_{53}H_{84}O_{23}$ (1089.25). **Pharm:** Cytotoxic (HSC-2 hm oral squamous cell carcinoma cells, $IC_{50} = 42\mu\text{g/mL}$, control Etoposide, $IC_{50} = 24\mu\text{g/mL}$). **Source:** QI YI PU TAO FENG XIN ZI *Muscari paradoxum* (bulb). **Ref:** 3495.

**12482 Lanosta-7,9(11),24-trien-3 α -acetoxy-15 α ,22 β -dihydroxy-26-oic acid**

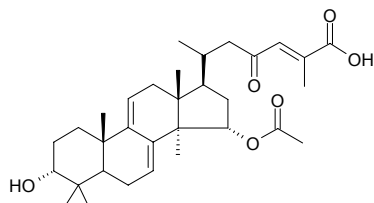
$C_{32}H_{48}O_5$ (512.74). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 660.

**12483 Lanosta-7,9(11),24-trien-3 α -acetoxy-15 α -hydroxy-23-oxo-26-oic acid**

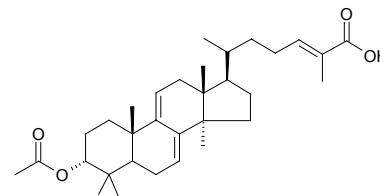
$C_{32}H_{46}O_6$ (526.72). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 660.

**12484 Lanosta-7,9(11),24-trien-15 α -acetoxy-3 α -hydroxy-23-oxo-26-oic acid**

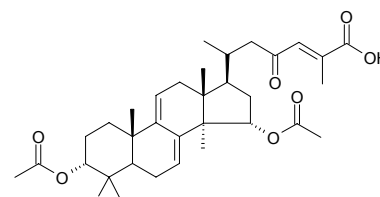
$C_{32}H_{46}O_6$ (526.72). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 660.

**12485 Lanosta-7,9(11),24-trien-3 α -acetoxy-26-oic acid**

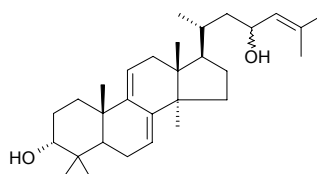
$C_{32}H_{48}O_4$ (496.74). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 660.

**12486 Lanosta-7,9(11),24-trien-3 α ,15 α -diacetoxy-23-oxo-26-oic acid**

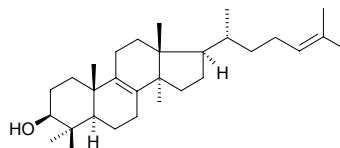
$C_{34}H_{48}O_7$ (568.76). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 660.

**12487 5 α -Lanosta-7,9(11),24-triene-3 α ,23-diol**

$C_{30}H_{48}O_2$ (440.72). Colorless needles (MeOH), mp 105°C, $[\alpha]_D = -20^\circ$ ($c = 0.01$, CHCl_3). **Pharm:** Antileishmanial (*Leishmania donovani* promastigotes, $IC_{50} = 20\mu\text{mol/L}$, SI = 1.06, control Pentamidine, $IC_{50} = 0.40\mu\text{mol/L}$, SI = 0.42, amastigotes, $IC_{50} = 20\mu\text{mol/L}$, SI = 1.06, control Pentostam, $IC_{50} = 9.75\mu\text{g/mL}$, SI = 34.90); antimalarial (*Plasmodium falciparum* K1, $IC_{50} = 69.6\mu\text{mol/L}$, SI = 0.30; control Chloroquine, $IC_{50} = 0.59\mu\text{mol/L}$, SI = 272.20); antitrypanosomal (*Trypanosoma brucei brucei* blood stream trypomastigotes, $IC_{50} = 1.75\mu\text{mol/L}$, SI = 12.11, control Pentamidine, $IC_{50} = 0.00034\mu\text{mol/L}$, SI = 500); cytotoxic (KB cells, $IC_{50} = 21.2\mu\text{mol/L}$, control Pentamidine, $IC_{50} = 0.17\mu\text{mol/L}$). **Source:** *Guarea rhopalocarpa* (leaf). **Ref:** 5127.

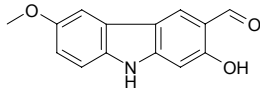
**12488 Lanosterol**

Lanosta-8,24-dien-3 β -ol [79-63-0] $C_{30}H_{50}O$ (426.73). mp 140–141°C. **Pharm:** Precursor to biosynthesis of sterol (in animals and in non-photosynthetic plants). **Source:** GOU QI ZI *Lycium chinense*, HOU PI SHU *Lansea grandis* [Syn. *Lansea coromandelica*], YI PIN HONG *Euphorbia pulcherrima*, A LI HONG *Fomes officinalis*, GUA JIN DENG *Physalis alkekengi* var. *franchetii*, LUO TUO PENG ZI *Peganum harmala*, QIE ZI *Solanum melongena*, SAN JIAO YE SHU YU *Dioscorea deltoidea*, TIAN QIE ZI *Solanum indicum*, YOU GAN LAN *Olea europaea*, YU MI HEI MEI *Ustilago maydis*, ZHANG LIU TOU *Costus speciosus*. **Ref:** 6, 658, 660.

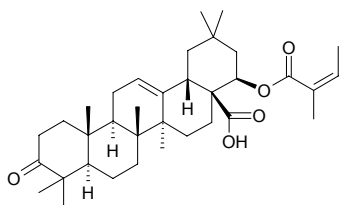


12489 Lansine

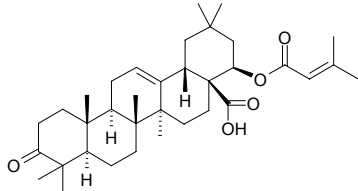
$C_{14}H_{11}NO_3$ (241.25). Yellow needles. **Pharm:** Antitubercular (MIC = $(31.5 \pm 0.2) \mu\text{g/mL}$, control Rifampin, MIC = $(0.040 \pm 0.017) \mu\text{g/mL}$); cytotoxic (vero, $IC_{50} > 102 \mu\text{g/mL}$, Rifampin, $IC_{50} = 100 \mu\text{g/mL}$). **Source:** YING MAO XIAO YUN MU *Micromelum hirsutum* (stem cortex). **Ref:** 5072.

**12490 Lantadene A**

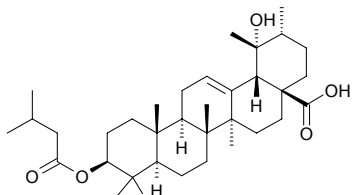
[467-81-2] $C_{35}H_{52}O_5$ (552.80). mp 282~286°C. **Pharm:** Anti-androgenic (testosterone 5α -reductase inhibitor, $50 \mu\text{g/mL}$, InRt = 75.08%, control Glabridine, $50 \mu\text{g/mL}$, InRt = 48.20%)^[4106]. **Source:** DUO SUI PO BU MU *Cordia multispicata* (leaf), WU SE MEI *Lantana camara*. **Ref:** 6, 253, 4106.

**12491 Lantadene B**

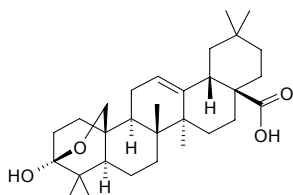
[467-82-3] $C_{35}H_{52}O_5$ (552.80). mp 295~300°C (dec). **Pharm:** Anti-androgenic (testosterone 5α -reductase inhibitor, $50 \mu\text{g/mL}$, InRt = 72.49%, control Glabridine, $50 \mu\text{g/mL}$, InRt = 48.20%)^[4106]. **Source:** DUO SUI PO BU MU *Cordia multispicata* (leaf), WU SE MEI *Lantana camara*. **Ref:** 6, 253, 4106.

**12492 Lantaiursolic acid**

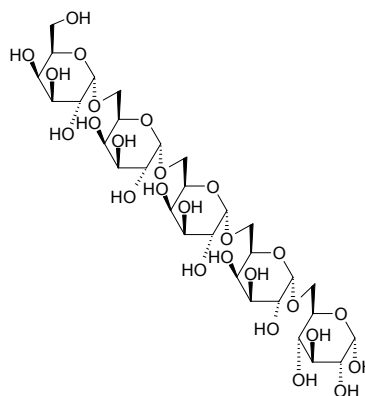
$C_{35}H_{56}O_5$ (556.83). **Source:** WU SE MEI *Lantana camara*. **Ref:** 254.

**12493 Lantanolic acid**

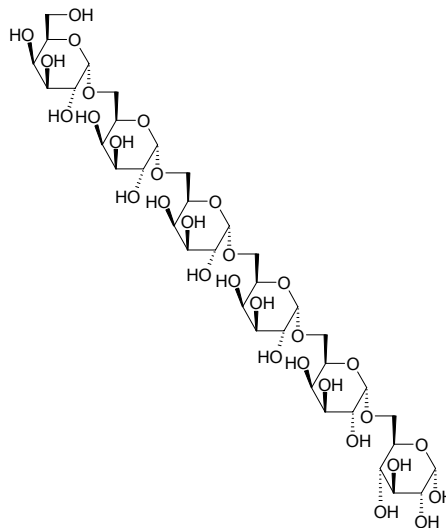
[32303-26-7] $C_{30}H_{46}O_4$ (470.70). mp 306~309°C. **Pharm:** Anti-androgenic (testosterone 5α -reductase inhibitor, $50 \mu\text{g/mL}$, InRt = 95.83%, control Glabridine, $50 \mu\text{g/mL}$, InRt = 48.20%)^[4106]. **Source:** DUO SUI PO BU MU *Cordia multispicata* (leaf), WU SE MEI *Lantana camara*. **Ref:** 6, 254, 4106, 4309.

**12494 Lantanose A**

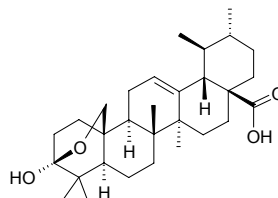
$C_{30}H_{52}O_{26}$ (828.73). White powder, $[\alpha]_D = +166$ ($c = 1.04$, H_2O). **Source:** WU SE MEI *Lantana camara*. **Ref:** 234.

**12495 Lantanose B**

$C_{36}H_{62}O_{31}$ (990.88). White powder, $[\alpha]_D = +114.2^\circ$ ($c = 1.06$, H_2O). **Source:** WU SE MEI *Lantana camara*. **Ref:** 234.

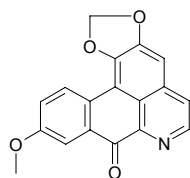
**12496 Lantic acid**

[22626-26-2] $C_{30}H_{46}O_4$ (470.70). Crystals, mp 256~259°C $[\alpha]_D^{35} = +152^\circ$ ($CHCl_3$). **Pharm:** Anti-androgenic (testosterone 5α -reductase inhibitor, $50 \mu\text{g/mL}$, InRt = 86.16%, control Glabridine, $50 \mu\text{g/mL}$, InRt = 48.20%)^[4106]. **Source:** DUO SUI PO BU MU *Cordia multispicata* (leaf), WU SE MEI *Lantana camara*. **Ref:** 6, 1521, 4106.

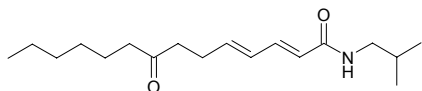


12497 Lanuginosine

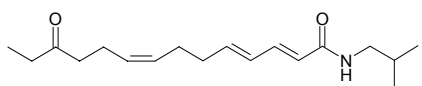
[23740-25-2] C₁₈H₁₁NO₄ (305.29). mp 302~303°C (dec). **Pharm:** Platelet aggregation inhibitor inactive (rat blood: 2~5μmol/L ADP-induced, IC₅₀ > 1000μmol/L, control Acetylsalicylic acid, IC₅₀ > 1000μmol/L; 2~5μg/mL collagen-induced, IC₅₀ > 500μmol/L, Acetylsalicylic acid, IC₅₀ = 420μmol/L; 1~4μmol/L epinephrine-induced with threshold concentration of collagen (0.8~1.0μg/mL), IC₅₀ > 100μmol/L, Acetylsalicylic acid, IC₅₀ = 53μmol/L; 10~40μmol/L AA-induced with threshold concentration of collagen (0.8~1.0μg/mL), IC₅₀ > 100μmol/L, Acetylsalicylic acid, IC₅₀ = 66μmol/L; 1~5μmol/L U46619-induced with threshold concentration of collagen (0.8~1.0μg/mL), IC₅₀ > 100μmol/L, Acetylsalicylic acid, IC₅₀ = 340μmol/L)^[5381]; antitrypanosomal (inhibits trypomastigote form of *Trypanosoma cruzi*, strain Y, IC₅₀ > 250μg/mL, IC₉₀ > 250μg/mL)^[3976]. **Source:** RI BEN HOU PO *Magnolia obovata* (leaf), XIN YI *Magnolia liliflora*, *Gutteria boliviana* (stem cortex). **Ref:** 6, 3976, 5381.

**12498 Lanyuamide I**

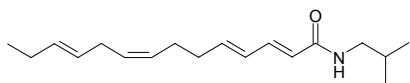
C₁₈H₃₁NO₂ (293.45). Colorless oil. **Pharm:** Platelet aggregation inhibitor. **Source:** QUAN YUAN YE HUA JIAO *Zanthoxylum integrifoliolum*. **Ref:** 2176, 2360.

**12499 Lanyuamide II**

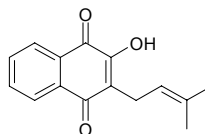
C₁₈H₂₉NO₂ (291.44). Colorless oil. **Pharm:** Platelet aggregation inhibitor. **Source:** QUAN YUAN YE HUA JIAO *Zanthoxylum integrifoliolum*. **Ref:** 2176, 2360.

**12500 Lanyuamide III**

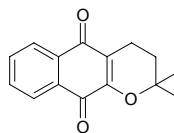
C₁₈H₂₉NO (275.44). Colorless oil. **Pharm:** Platelet aggregation inhibitor. **Source:** QUAN YUAN YE HUA JIAO *Zanthoxylum integrifoliolum*. **Ref:** 2176, 2360.

**12501 Lapachol**

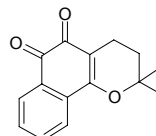
Greenhartin [84-79-7] C₁₅H₁₄O₃ (242.28). mp 140°C. **Pharm:** Antineoplastic (rat Walker sarcoma and mus P₃₈₈); antimalarial; antitrypanosomal; cytotoxic (high dose); immunoenhancer (low dose); herbicide (*Chlorella fytisca*)^[4467]; antifungal (*Ustilago violacea*)^[4467]; antibacterial (gram-positive bacteria *Bacillus megaterium*)^[4467]. **Source:** DIAO DENG SHU *Kigelia pinnata*, FEI ZHOU ZI WEI *Newbouldia laevis* (seed, root cortex and stem cortex), HUANG JIN *Hibiscus tiliaceus*. **Ref:** 5, 658, 4467.

**12502 α-Lapachone**

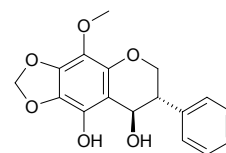
[4707-33-9] C₁₅H₁₄O₃ (242.28). mp 117°C. **Source:** ZI MU *Catalpa ovata*. **Ref:** 6.

**12503 β-Lapachone**

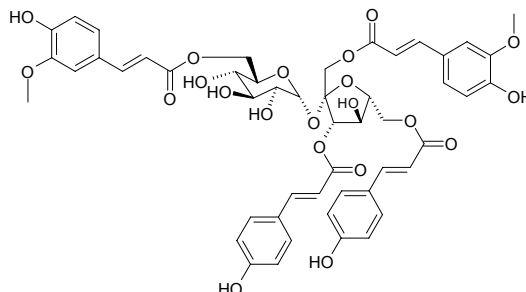
[4707-32-8] C₁₅H₁₄O₃ (242.28). **Pharm:** Antimicrobial; reverse transcriptase inhibitor; antineoplastic. **Source:** YOU MU *Tectona grandis*. **Ref:** 658.

**12504 Lapathinol**

C₁₇H₁₆O₆ (316.31). **Source:** YU LIAO *Polygonum lapathifolium*. **Ref:** 660.

**12505 Lapathoside A**

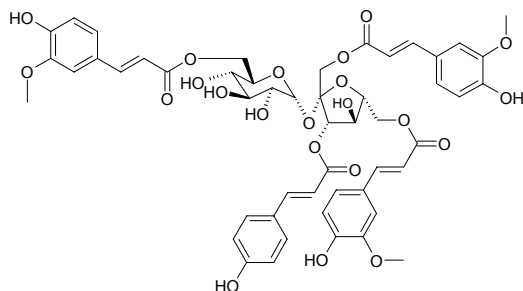
C₅₀H₅₀O₂₁ (986.94). Amorphous powder, [α]_D = 22.68° (c = 0.26, MeOH). **Source:** YU LIAO *Polygonum lapathifolium* (aerial parts). **Ref:** 3091.



12506 Lapatioside B

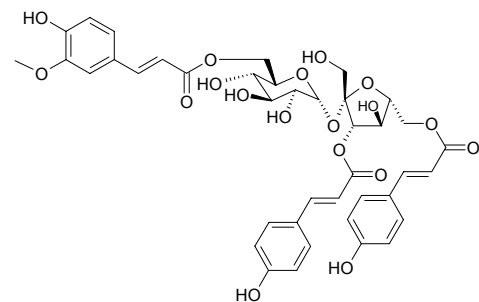
$C_{51}H_{52}O_{22}$ (1016.97). Amorphous powder, $[\alpha]_D = 18.56^\circ$ ($c = 0.20$, MeOH).

Source: YU LIAO *Polygonum lapathifolium* (aerial parts). Ref: 3091.

**12507 Lapatioside C**

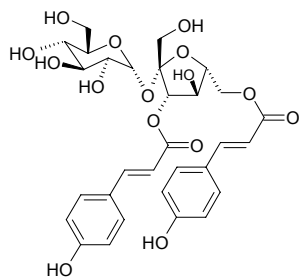
$C_{40}H_{42}O_{18}$ (810.77). Amorphous powder, $[\alpha]_D = -14.66^\circ$ ($c = 0.23$, MeOH).

Source: YU LIAO *Polygonum lapathifolium* (aerial parts). Ref: 3091.

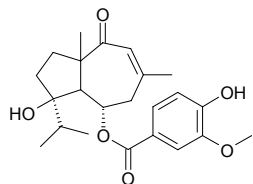
**12508 Lapatioside D**

$C_{30}H_{34}O_{15}$ (634.6). Amorphous powder, $[\alpha]_D = 10.30^\circ$ ($c = 0.15$, MeOH).

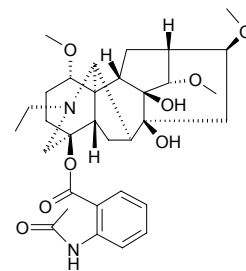
Source: YU LIAO *Polygonum lapathifolium* (aerial parts). Ref: 3091.

**12509 Lapidol vanillate**

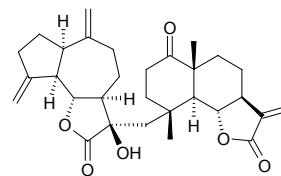
$C_{23}H_{30}O_6$ (402.49). Source: YI LANG A WEI *Ferula kuhistanica* (root). Ref: 3977.

**12510 Lappaconitine**

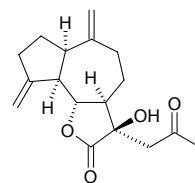
$C_{32}H_{44}N_2O_8$ (584.72). White columnar crystals (acetone), mp 224–225°C, $[\alpha]_D = +29.90^\circ$ ($c = 0.7$, chloroform). Pharm: Analgesic (hot plate model, murine writhing model and murine tail-swing model); antiarrhythmic (rat, caused by 0.07mg/kg 3-acetylaconitine, ED = 0.5mg/kg); anti-inflammatory (rat, caused by formaldehyde); antipyretic (mus with artificial fever by triad-vaccine); local anesthetic; anti-inflammatory (modified assay of Berridge, 100µg/mL, InRt = 29.34%)^[5271]; tyrosinase inhibitor (IC₅₀ = (93.33±0.16)µmol/L, control Kojic acid, IC₅₀ = (16.67±0.52)µmol/L, L-Mimosine, IC₅₀ = (3.68±0.02)µmol/L)^[5271]; antioxidant (DPPH scavenger, 1µmol/L, ScRt = 12.0%; control 3-*t*-Butyl-4-hydroxyanisole, 1µmol/L, ScRt = 92.5%)^[5271]; LD₅₀ (mus, iv) = 6.9mg/kg, (mus, ip) = 9.1mg/kg, (mus, orl) = 20mg/kg. Source: BEI FANG WU TOU *Aconitum septentrionale*, GAN WAN WU TOU *Aconitum finetianum*, GAO JIA SUO WU TOU *Aconitum orientale*, GAO WU TOU *Aconitum sinomontanum*, KE SHEN MI ER CUI QUE *Delphinium cashmerianum*, NIU BIAN *Aconitum barbatum* var. *puberulum* [Syn. *Aconitum ochranthum*], ZI HUA GAO WU TOU *Aconitum excelsum*, *Aconitum leave* (aerial parts). Ref: 658, 660, 846, 5271.

**12511 Lappadilactone**

$C_{30}H_{38}O_6$ (494.63). Colorless needles, mp 260°C (dec), $[\alpha]_D^{25} = +32.2^\circ$ ($c = 1.0$, CHCl₃). Pharm: Cytotoxic (*in vitro*, HepG₂, CD₅₀ = 2.4µg/mL; HeLa, CD₅₀ = 1.8µg/mL; OVCAR-3, CD₅₀ = 2.5µg/mL; control Cisplatin, HepG₂, CD₅₀ = 2.8µg/mL; HeLa, CD₅₀ = 5.2µg/mL; OVCAR-3, CD₅₀ = 3µg/mL; without significant antibacterial effect). Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*] (root: yield = 0.0002%dw). Ref: 4720.

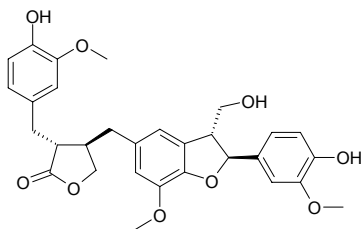
**12512 Lappalone**

$C_{17}H_{22}O_4$ (290.36). Pharm: Cytotoxic (*in vitro*, HepG₂, CD₅₀ > 100µg/mL; HeLa, CD₅₀ > 100µg/mL; OVCAR-3, CD₅₀ > 100µg/mL; control Cisplatin, HepG₂, CD₅₀ = 2.8µg/mL; HeLa, CD₅₀ = 5.2µg/mL; OVCAR-3, CD₅₀ = 3µg/mL). Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*] (root: yield = 0.00018%dw). Ref: 4720.

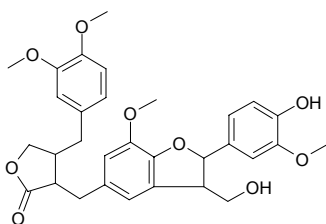


12513 Lappaol A

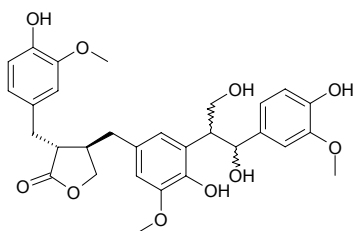
$C_{30}H_{32}O_9$ (536.58). **Source:** NIU BANG ZI *Arctium lappa* (dried ripe fruit: content scope of 11 origins = 0.024%~0.389%, mean content = 0.205%^[5508]). **Ref:** 660, 5508.

**12514 Lappaol B**

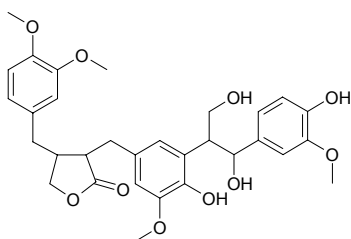
$C_{31}H_{34}O_9$ (550.61). **Source:** NIU BANG ZI *Arctium lappa*. **Ref:** 660.

**12515 Lappaol C**

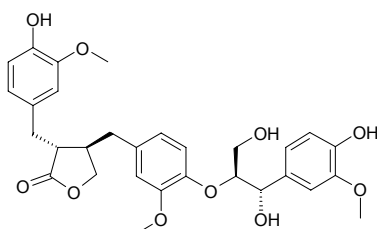
$C_{30}H_{34}O_{10}$ (554.60). **Source:** NIU BANG ZI *Arctium lappa*. **Ref:** 660.

**12516 Lappaol D**

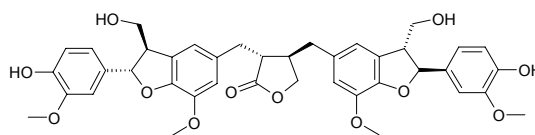
$C_{31}H_{36}O_{10}$ (568.63). **Source:** NIU BANG ZI *Arctium lappa*. **Ref:** 660.

**12517 Lappaol E**

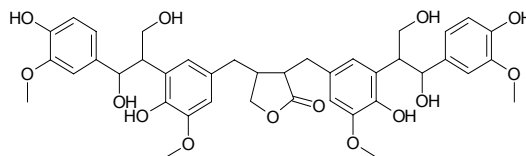
$C_{30}H_{34}O_{10}$ (554.60). **Source:** NIU BANG ZI *Arctium lappa*. **Ref:** 660.

**12518 Lappaol F**

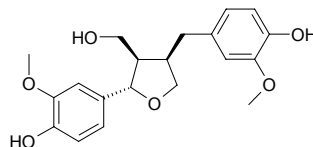
$C_{40}H_{42}O_{12}$ (714.77). **Source:** NIU BANG ZI *Arctium lappa* (dried ripe fruit: content scope of 11 origins = 0.004%~0.226%, mean content = 0.094%^[5508]). **Ref:** 660, 5508.

**12519 Lappaol H**

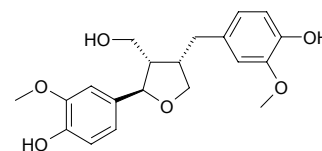
$C_{40}H_{46}O_{14}$ (750.80). **Source:** NIU BANG ZI *Arctium lappa*. **Ref:** 660.

**12520 (+)-Lariciresinol**

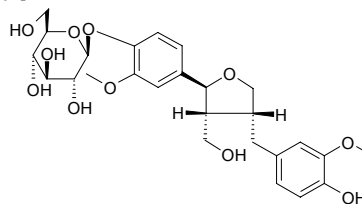
(7*S*,8*R*,8'*R*)-(+)-Lariciresinol [27003-73-2] $C_{20}H_{24}O_6$ (360.41). Colorless amorphous powder. **Pharm:** NO production inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages, 3μmol/L, 10μmol/L, 30μmol/L, 100μmol/L, InRt = 3%, 5.5%, -8.2%, 11.9%, respectively; control *L*-NMMA, 3μmol/L, 10μmol/L, 30μmol/L, 100μmol/L, InRt = 10.3%, 15%, 34.1%, 63.1%, respectively)^[4691], β-hexosaminidase release inhibitor (RBL-2H3 cells, 100μmol/L, InRt = (14.0±4.8)%)^[4347]. **Source:** HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.00014%dw)^[4779], MENG GU HUANG QI *Astragalus mongholicus*, XIAO HONG SHEN *Rubia yunnanensis* (root: yield = 0.018%dw)^[4691], YI YE TIE SHAN *Tsuga heterophylla* (sapwood), ZHAI YE NAN YANG SHAN *Araucaria angustifolia*. **Ref:** 660, 3965, 4347, 4691, 4779.

**12521 (-)-Lariciresinol**

$C_{20}H_{24}O_6$ (360.41). **Source:** RUI XIANG GEN *Daphne odora*, SHAN GAN RUI XIANG *Daphne tangutica*, *Eurycoma* sp. **Ref:** 1521, 4556.

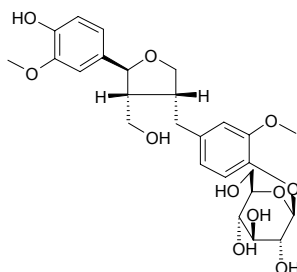
**12522 (+)-1-Lariciresinol-4'-β-D-glucopyranoside**

$C_{26}H_{34}O_{11}$ (522.55). Amorphous powder. **Source:** FENG MAO JU *Saussurea japonica*. **Ref:** 2179.

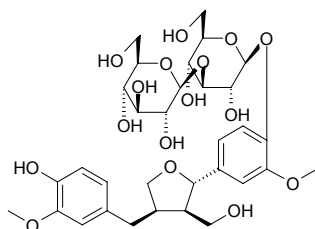


12523 (+)-Lariciresinol-4- β -D-glucopyranoside

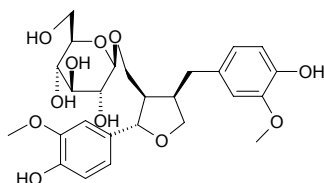
$C_{26}H_{34}O_{11}$ (522.55). Yellowish amorphous powder. **Pharm:** Anti-inflammatory (modulator of cytokine network: inhibits LPS-activated production of TNF- α in RAW264.7 cells, IC_{50} = 50~100 μ mol/L)^[4416]. **Source:** FENG MAO JU *Saussurea japonica*, RI BEN HUANG LIAN *Coptis japonica* (rhizome). **Ref:** 2179, 4416.

**12524 (+)-Lariciresinol-4'-O- β -D-glucopyranosyl-(1 \rightarrow 3)- β -D-glucopyranoside**

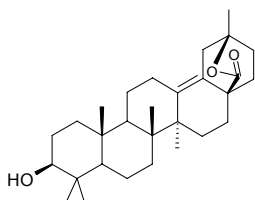
$C_{32}H_{44}O_{16}$ (684.70). Amorphous powder, $[\alpha]_D^{25}$ = -20.0° (c = 0.252, MeOH). **Source:** BAO MA ZI *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*] (leaf). **Ref:** 4363.

**12525 Lariciresinol-9-O- β -D-glucoside**

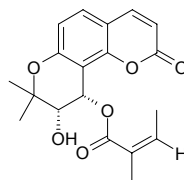
$C_{26}H_{34}O_{11}$ (522.55). **Source:** WU GONG CAO *Pteris vittata*, YI DA LI JIASNG NAN XING *Arum italicum* **Ref:** 660, 1521.

**12526 Larreagenin A**

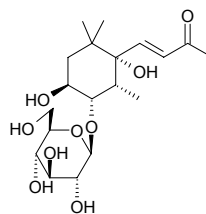
$C_{29}H_{44}O_3$ (440.67). **Source:** JI CHA KAI LA RUI A *Larrea divaricata*, LUO KUI SHU *Anredera cordifolia* [Syn. *Baussingaultia cordifolia*; *Baussingaultia gracilis* f. *pseudobaselloides*; *Baussingaultia gracilis* var. *pseudobaselloides*] **Ref:** 660.

**12527 D-Laserpitin**

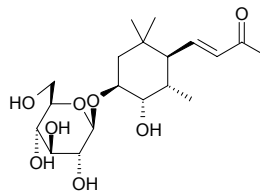
$C_{19}H_{20}O_6$ (344.37). Yellowish hyaloid, $[\alpha]_D^{20}$ = +92.3° (c = 0.53, $CHCl_3$). **Source:** QIAN HU *Angelica decursiva* [Syn. *Peucedanum decursivum*]. **Ref:** 9.

**12528 Lasianthionoside A**

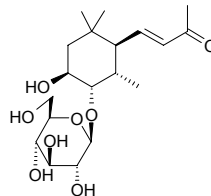
$C_{19}H_{32}O_9$ (404.46). Colorless needles, mp 209~210°C, $[\alpha]_D^{25}$ = -76° (c = 0.87, C_5H_5N). **Source:** *Lasianthus fordii* (leaf). **Ref:** 3774.

**12529 Lasianthionoside B**

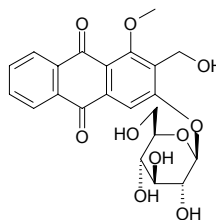
$C_{19}H_{32}O_8$ (388.46). Amorphous powder, $[\alpha]_D^{25}$ = -54.0° (c = 0.55, MeOH). **Source:** *Lasianthus fordii* (leaf). **Ref:** 3774.

**12530 Lasianthionoside C**

(3*S*,4*S*,6*S*,7*E*)-3,4-Dihydroxymegastigman-7-en-9-one-4-*O*- β -D-glucopyranoside $C_{19}H_{32}O_8$ (388.46). Colorless needles, mp 180~181°C, $[\alpha]_D^{25}$ = -55.7° (c = 0.26, MeOH). **Source:** *Lasianthus fordii* (leaf). **Ref:** 3774.

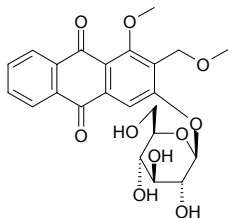
**12531 Lasianthuoside A**

3-Hydroxy-1-methoxy-2-hydroxymethyl-9,10-anthraquinone-3-*O*- β -D-glucopyranoside $C_{22}H_{22}O_{10}$ (446.41). Yellow needles, mp 223~225°C (MeOH). **Pharm:** Cytotoxic (hmn OVCAR-2780 Cells, IC_{50} = 0.84 μ g/mL); TNF- α release inhibitor (cultured mouse peritoneal macrophages, IC_{50} > 10 μ g/mL). **Source:** CHANG WEI CU YE MU *Lasianthus acuminatissimus* (root: yield = 0.00073%dw). **Ref:** 1605.

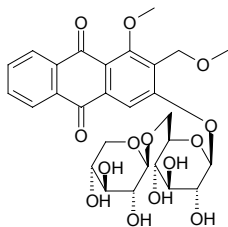


12532 Lasianthuoid B

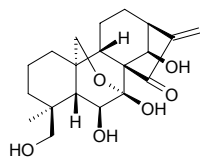
3-Hydroxy-1-methoxy-2-methoxymethylanthraquinone-3-*O*- β -D-glucopyranoside C₂₃H₂₄O₁₀ (460.44). Yellow needles, mp 224–226°C (MeOH). **Pharm:** Cytotoxic (hmn OVCAR-2780 Cells, IC₅₀ = 1 μ g/mL); TNF- α release inhibitor (cultured mouse peritoneal macrophages, IC₅₀ > 10 μ g/mL). **Source:** CHANG WEI CU YE MU *Lasianthus acuminatissimus* (root: yield = 0.00055%dw). **Ref:** 1605.

**12533 Lasianthuoid C**

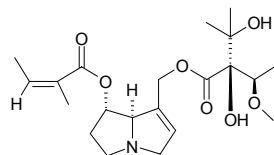
3-Hydroxy-1-methoxy-2-methoxymethylanthraquinone-3-*O*- β -D-primeveroside C₂₈H₃₂O₁₄ (592.56). Yellow needles, mp 238–240°C (MeOH). **Pharm:** Cytotoxic (hmn OVCAR-2780 Cells, IC₅₀ < 0.1 μ g/mL); TNF- α release inhibitor (cultured mouse peritoneal macrophages, IC₅₀ > 10 μ g/mL). **Source:** CHANG WEI CU YE MU *Lasianthus acuminatissimus* (root: yield = 0.00025%dw). **Ref:** 1605.

**12534 Lasiocarpinin**

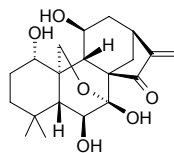
C₂₀H₂₈O₆ (364.44). Amorphous powder, [α]_D²⁷ = -59.4° (c = 0.4, MeOH). **Source:** CU GUO XIANG CHA CAI *Isodon lasiocarpa*. **Ref:** 4067.

**12535 Lasiocarpine**

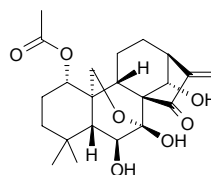
[303-34-4] C₂₁H₃₃NO₇ (411.50). mp 95°C. **Pharm:** Antineoplastic (rat, Walker carcinoma, liver cancer and sarcoma S45); antispasmodic (gpg, inhibits ileal contraction caused by BaCl₂ and *N*-formyl sinkaline); carcinogen (rat liver, skin, and small intestine); mutagen (Ames, drosophila, DNA recondition, cell culture experiments). **Source:** CU XI MEN FEI CAO *Symphytum asperum*, DA BAI DING CAO *Senecio oryzetorum*, MAO GUO TIAN JIE CAI *Heliotropium lasiocarpum*, OU ZHOU TIAN JIE CAI *Heliotropium europaeum*, XI MEN FEI CAO *Symphytum officinale*, YAN TIAN JIE CAI *Heliotropium curassavicum*, YAO YONG DAO TI HU *Cynoglossum officinale*, YING MAO TIAN JIE CAI *Heliotropium hirsutum*, ZHONG JIAN HE SHI *Lappula intermedia*. **Ref:** 5, 6, 658.

**12536 Lasiodonin**

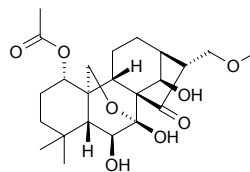
[38602-52-7] C₂₀H₂₈O₆ (364.44). mp 252–254°C (dec), [α]_D¹⁷ = -100° (c = 1.0, C₅H₅N). **Pharm:** Cytotoxic (K562, IC₅₀ = 5.35 μ mol/L, control Cisplatin IC₅₀ = 3.84 μ mol/L; Bcap37, IC₅₀ = 112.53 μ mol/L, control Cisplatin IC₅₀ = 1.54 μ mol/L) [4353]. **Source:** LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis* (leaf), CU GUO XIANG CHA CAI *Isodon lasiocarpa*. **Ref:** 4067, 4353.

**12537 Lasiokaurin**

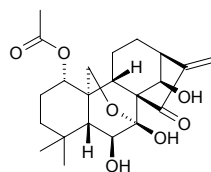
[28957-08-6] C₂₂H₃₀O₇ (406.48). Colorless needles (MeOH), mp 237–241°C, [α]_D²³ = -57° (c = 0.2, EtOH); mp 223–226°C, [α]_D = -68° (c = 0.05, EtOH); mp 226–229°C. **Pharm:** Cytotoxic (DNA-damaging activity, mutant yeast strain RAD 52Y, IC₁₂ = 90 μ g/mL, control Streptonigrin, IC₁₂ = 0.4 μ g/mL; wild type yeast strain RAD+, IC₁₂ > 100 μ g/mL, control Streptonigrin, IC₁₂ = 1.0 μ g/mL) [5348]; antineoplastic (EAC *in vivo*, 10mg/(kg-d), 7 days ip, biotic prolonged rate = 70.6%; HAC *in vivo*, 10mg/(kg-d), 7 days ip, biotic prolonged rate = 109.7%); antibacterial (*Staphylococcus aureus*, MIC = 15.6 μ g/mL; *Sarcina gamboge*, MIC = 7.8 μ g/mL; *Bacillus coli*, MIC \geq 250 μ g/mL; *Bacillus termo*, MIC \geq 250 μ g/mL); LD₅₀ (mus, ip) > 70mg/kg. **Source:** MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*], MIAN MAO GUO XIANG CHA CAI *Isodon lasiocarpus*, XIAN MAI XIANG CHA CAI *Rabdosia nervosa*, ZHOU YE XIANG CHA CAI *Isodon rugosus* [Syn. *Rabdosia rugosa*]. **Ref:** 4, 504, 661, 5348.

**12538 Lasiokaurinin**

C₂₃H₃₄O₈ (438.52). mp 219–222°C (dec), [α]_D²⁷ = -14° (c = 0.032, MeOH). **Source:** CU GUO XIANG CHA CAI *Isodon lasiocarpa*. **Ref:** 4067.

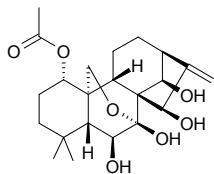
**12539 Lasiokaurin (Lasiodin)**

C₂₂H₃₀O₇ (406.48). mp 228–229°C, [α]_D¹⁷ = -94° (c = 1.0, C₅H₅N). **Source:** CU GUO XIANG CHA CAI *Isodon lasiocarpa*. **Ref:** 4067.

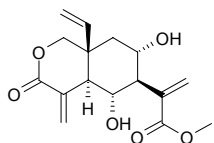


12540 Lasiokaurinol

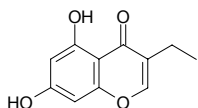
$C_{22}H_{32}O_7$ (408.50). mp 143~147°C, 218~221°C (dec), $[\alpha]_D^{27} = -12^\circ$ ($c = 0.085$, MeOH). Source: CU GUO XIANG CHA CAI *Isodon lasiocarpa*. Ref: 4067.

**12541 Lasiopulide**

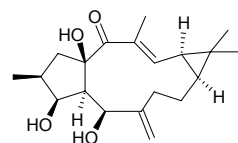
$C_{16}H_{20}O_6$ (308.33). mp 141°C, $[\alpha]_D^{25} = +56.3^\circ$ ($c = 0.3$, $CHCl_3$). Pharm: Cytotoxic (*in vitro*, hmn colon carcinoma cell lines HCT15, $IC_{50} = (109.79 \pm 4.06) \mu\text{mol/L}$, control 5-Fluorouracil, $IC_{50} = 66 \mu\text{mol/L}$; colon carcinoma HT29, $IC_{50} = (6.5 \pm 0.3) \mu\text{mol/L}$, control 5-Fluorouracil, $IC_{50} = 49 \mu\text{mol/L}$; breast carcinoma T47D, $IC_{50} = (43.5 \pm 1.7) \mu\text{mol/L}$, control Adriamycin, $IC_{50} = 0.075 \mu\text{mol/L}$; cervix carcinoma SiHa, $97.4 \mu\text{mol/L}$, InRt = 18%, control 5-Fluorouracil, $IC_{50} = 0.034 \mu\text{mol/L}$). Source: *Vernonia lasiopus*. Ref: 5359.

**12542 Lathodoratin**

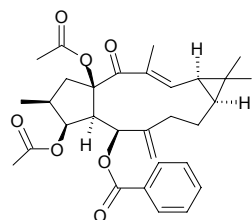
[76693-50-0] $C_{11}H_{10}O_4$ (206.20). Pharm: Antifungal (*Cladosporium herbarum*). Source: XIANG WAN DOU *Lathyrus odoratus*. Ref: 658.

**12543 Lathyrol**

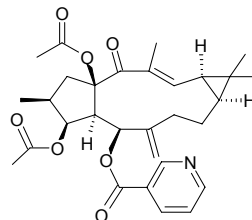
[34420-19-4] $C_{20}H_{30}O_4$ (334.46). Pharm: Carcinogen; irritant. Source: QIAN JIN ZI *Euphorbia lathyris*. Ref: 658.

**12544 Lathyrol-3,15-diacetate-5-benzoate**

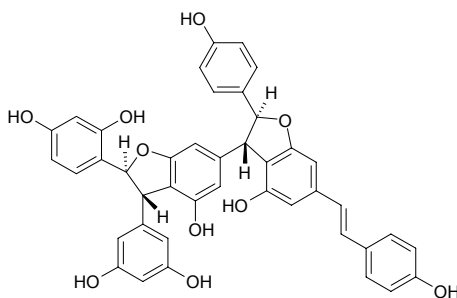
$C_{31}H_{38}O_7$ (522.64). Source: QIAN JIN ZI *Euphorbia lathyris*. Ref: 660.

**12545 Lathyrol-3,15-diacetate-5-nicotinate**

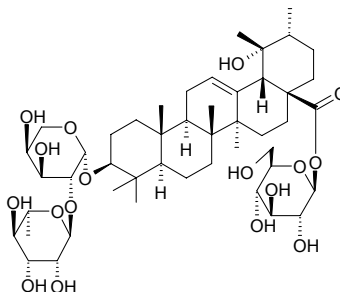
$C_{30}H_{37}NO_7$ (523.63). Source: QIAN JIN ZI *Euphorbia lathyris*. Ref: 660.

**12546 Latifolol**

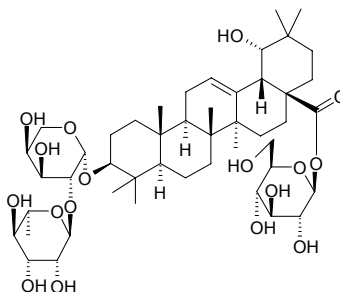
$C_{42}H_{32}O_{10}$ (692.72). Brown amorphous powder. Source: KUAN YE MAI MA TENG *Gnetum latifolium*. Ref: 1940.

**12547 Latifoloside A**

$C_{47}H_{76}O_{17}$ (913.12). Source: DA YE DONG QING *Ilex latifolia*. Ref: 2160.

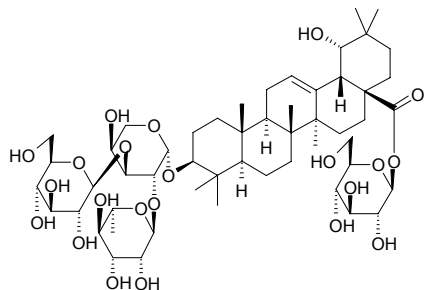
**12548 Latifoloside B**

$C_{47}H_{76}O_{17}$ (913.12). Source: DA YE DONG QING *Ilex latifolia*. Ref: 2160.

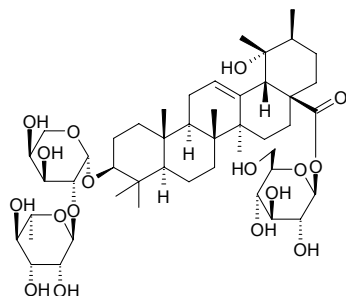


12549 Latifolioside C

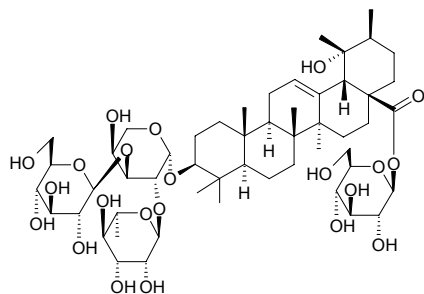
$C_{53}H_{86}O_{22}$ (1075.26). Source: DA YE DONG QING *Ilex latifolia*. Ref: 2160.

**12550 Latifolioside D**

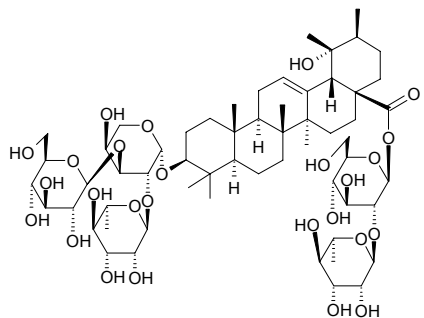
$C_{47}H_{76}O_{17}$ (913.12). Source: DA YE DONG QING *Ilex latifolia*. Ref: 2160.

**12551 Latifolioside E**

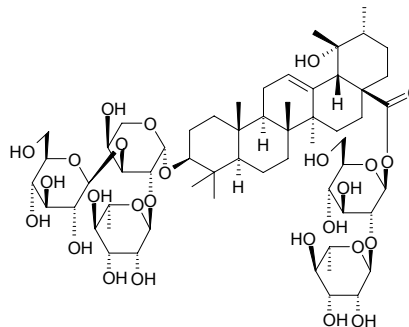
$C_{53}H_{86}O_{22}$ (1075.26). Source: DA YE DONG QING *Ilex latifolia*. Ref: 2160.

**12552 Latifolioside F**

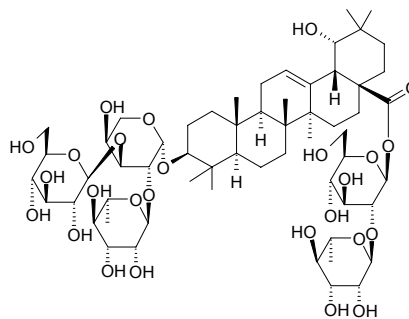
$C_{59}H_{96}O_{26}$ (1221.41). Source: DA YE DONG QING *Ilex latifolia*. Ref: 2160.

**12553 Latifolioside G**

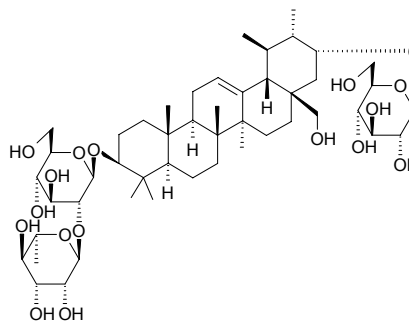
$C_{59}H_{96}O_{26}$ (1221.41). Source: DA YE DONG QING *Ilex latifolia*. Ref: 2160.

**12554 Latifolioside H**

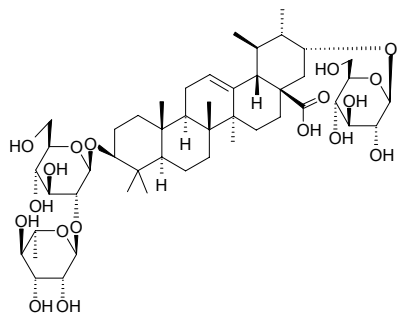
$C_{59}H_{96}O_{26}$ (1221.41). Source: DA YE DONG QING *Ilex latifolia*. Ref: 2160.

**12555 Latifolioside I**

3-*O*- α -L-Rhamnopyranosyl-(1 \rightarrow 2)- β -D-glucopyranosyl-3 β ,21 α ,28-trihydroxy-urs-12-ene 21-*O*- β -D-glucopyranoside $C_{48}H_{80}O_{17}$ (929.16). $[\alpha]_D^{25} = +36.7^\circ$ ($c = 0.21$, MeOH). Source: DA YE DONG QING *Ilex latifolia* (bark). Ref: 3511.

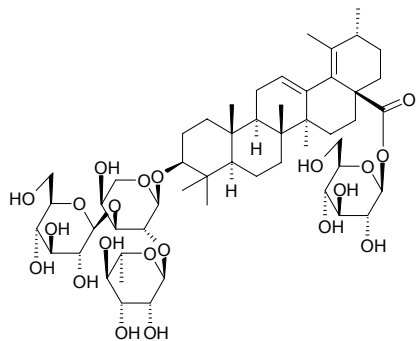
**12556 Latifolioside J**

3-*O*- α -L-Rhamnopyranosyl-(1 \rightarrow 2)- β -D-glucopyranosyl-3 β ,21 α -dihydroxy-ursolic acid 21-*O*- β -D-glucopyranoside $C_{48}H_{78}O_{18}$ (943.15). $[\alpha]_D^{25} = +7.4^\circ$ ($c = 0.67$, MeOH). Source: DA YE DONG QING *Ilex latifolia* (bark). Ref: 3511.

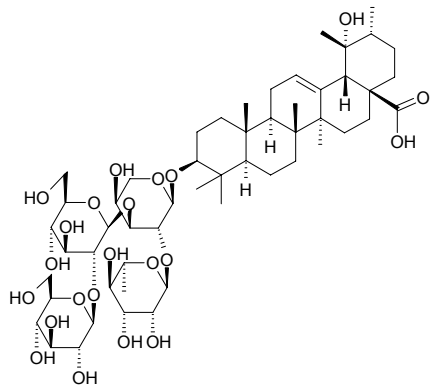


12557 Latifoloside K

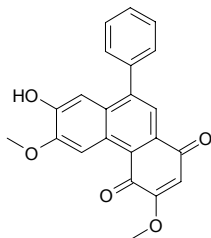
3-*O*- β -*D*-Glucopyranosyl-(1 \rightarrow 3)-[α -*L*-rhamnopyranosyl-(1 \rightarrow 2)]- α -*L*-arabinopyranosyl 3 β -hydroxy-urs-12,18-dien-28-oic acid 28-*O*- β -*D*-glucopyranosyl ester C₅₃H₈₄O₂₁ (1057.25). Colorless powder, $[\alpha]_D^{25} = +0.74^\circ$ ($c = 0.78$, MeOH). Source: DA YE DONG QING *Ilex latifolia* (bark). Ref: 3540.

**12558 Latifoloside L**

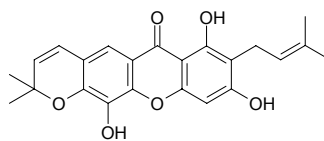
3-*O*- β -*D*-Glucopyranosyl-(1 \rightarrow 2)- β -*D*-glucopyranosyl-(1 \rightarrow 3)-[α -*L*-rhamnopyranosyl-(1 \rightarrow 2)]- α -*L*-arabinopyranosyl 3 β ,19 α -dihydroxyursolic acid C₅₃H₈₆O₂₂ (1075.26). Colorless powder, $[\alpha]_D^{25} = +7.46^\circ$ ($c = 0.35$, MeOH). Source: DA YE DONG QING *Ilex latifolia* (bark). Ref: 3540.

**12559 Latinone**

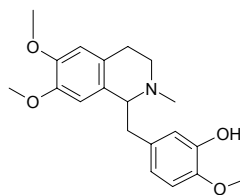
C₂₂H₁₆O₅ (360.37). Pharm: Testosterone 5 α -reductase inhibitor (25 μ g/mL, InRt = 42.8%, 50 μ g/mL, InRt = 52.0%, 100 μ g/mL, InRt = 65.6%; control Glycyrrhetic acid, 25 μ g/mL, InRt = 31.7%, 50 μ g/mL, InRt = 64.7%, 100 μ g/mL, InRt = 87.1%). Source: JIAO ZHI HUANG TAN *Dalbergia cochinchinensis* (stem: yield = 0.0014%dw). Ref: 4716.

**12560 Latisxanthone D**

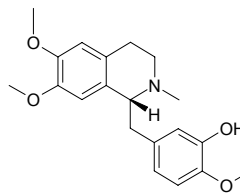
C₂₃H₂₂O₆ (394.43). Source: HEI XIAN TIAO TENG HUANG *Garcinia nigrolineata* (stam bark). Ref: 3482.

**12561 dl-Laudanidine**

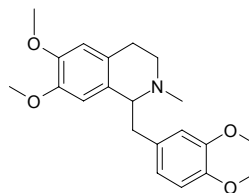
C₂₀H₂₅NO₄ (343.43). Source: YING SU *Papaver somniferum*, CU GUO TANG SONG CAO *Thalictrum dasycarpum*. Ref: 658.

**12562 Laudanine**

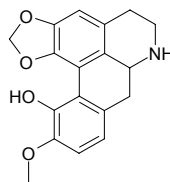
[301-21-3] C₂₀H₂₅NO₄ (343.43). mp 181~182°C, mp 184~185°C, $[\alpha]_D^{28} = -101^\circ$ (EtOH). Pharm: Causes convulsion and paralysis (L-isomer, high dose). Source: YA PIAN *Papaver somniferum*. Ref: 6, 1521.

**12563 Laudanosine**

[2688-77-9] C₂₁H₂₇NO₄ (357.45). mp (+) 89°C. Pharm: Supertoxic agent (strong, tetanic spasm activity). Source: YING SU *Papaver somniferum*, YA PIAN *Papaver somniferum*. Ref: 6, 658.

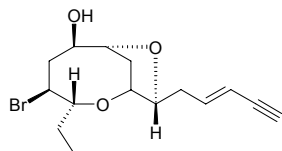
**12564 Launobine**

[20497-21-6] C₁₈H₁₇NO₄ (311.34). mp 214~215°C (dec). Pharm: Platelet aggregation inhibitor (rbt, 100 μ g/mL, induced by ADP, arachidonic acid, collagen and PAF); inhibits growth of green algae (< 10mmol/L). Source: DIAO ZHANG GEN PI *Lindera umbellata* [Syn. *Lindera erythrocarpa*], YUE GUI ZI *Laurus nobilis*, ZHEN CAI *Litsea pungens*. Ref: 6, 1751, 1752.

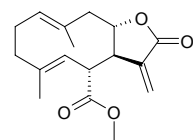


12565 Laurencin

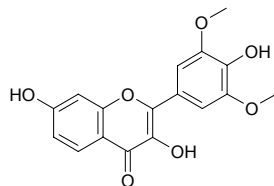
$C_{15}H_{21}BrO_3$ (329.24). Source: HUANG SE AO DING ZAO *Laurencia nipponica* (the compound was isolated from the plant by E.Fukuzawa, et al. in 1973). Ref: 5505.

**12566 Laurenbiolide**

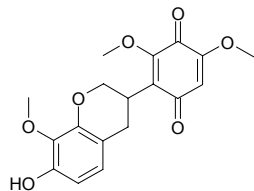
$C_{17}H_{22}O_4$ (290.36). Source: YUE GUI YE *Laurus nobilis*, YUE GUI ZI *Laurus nobilis*. Ref: 660.

**12567 Laurentinol**

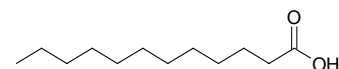
3,7,4'-Trihydroxy-3',5'-dimethoxyflavone $C_{17}H_{14}O_7$ (330.30). Green prisms, mp 206~208°C. Source: *Millettia laurentii*. Ref: 2319.

**12568 Laurentiquinone**

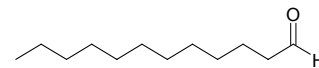
3',6'-Diketo-7-hydroxy-8,2',4'-trimethoxyisoflavan $C_{18}H_{18}O_7$ (346.34). Orange prisms (acetone), mp 205~207°C. Source: *Millettia laurentii*. Ref: 2319.

**12569 Lauric acid**

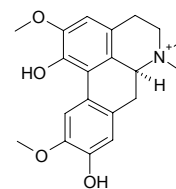
Lauric acid [143-07-7] $C_{12}H_{24}O_2$ (200.32). Pharm: Raw material for flavorant. Source: BA DOU *Croton tiglium*, BAN WEN LU HUI *Aloe vera* var. *chinensis*, BING LANG *Areca catechu*, CU LIU GUO *Hippophae rhamnoides*, DANG SHEN *Codonopsis pilosula*, FU LING *Portia cocos*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*], GUA LOU *Trichosanthes kirilowii*, HONG HUA *Carthamus tinctorius*, JI GUAN ZI *Celosia cristata* (seed), SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], YE ZI RANG *Cocos nucifera*, YIN MIAN YU *Holoptelea integrifolia*, YOU ZONG *Elaeis guineensis*. Ref: 2, 658, 660.

**12570 Lauric aldehyde**

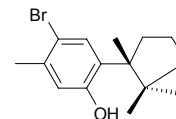
Dodecanal [112-54-9] $C_{12}H_{24}O$ (184.32). mp 44.5°C, bp 184~185°C/100mmHg. Source: YU XING CAO *Houttuynia cordata*. Ref: 6.

**12571 Laurifoline**

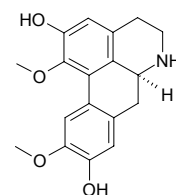
[7224-61-5] $C_{20}H_{24}NO_4^+$ (342.42). Pharm: Ganglionic blocker (curariform action); LD₅₀ (mus, ip) = 14mg/kg. Source: HENG ZHOU WU YAO *Cocculus laurifolius*, CHU YE HUA JIAO *Zanthoxylum ailanthoides*, HOU PI HUA JIAO *Zanthoxylum elephantiasis*, CHU YE HUA JIAO PI *Zanthoxylum ailanthoides*. Ref: 6, 658.

**12572 Laurinterol**

$C_{15}H_{19}BrO$ (295.22). Pharm: Antibacterial (marine bacteria: *Alteromonas* sp., MIC = 5µg/disc; *Azomonas agilis*, MIC = 5µg/disc; *Azotobacter beijerinckii*, MIC = 15µg/disc; *Erwinia amylovora*, MIC = 5µg/disc; *Escherichia coli*, MIC = 5µg/disc; *Alcaligenes aquamarinus*, *Halobacterium* sp., *Halococcus* sp., no inhibition). Source: CHAO AO DING CAO *Laurencia nidifica*. Ref: 5191.

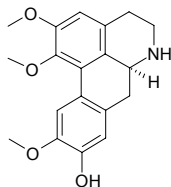
**12573 Lauroilsine**

(+)-Norboldine [5890-18-6] $C_{18}H_{19}NO_4$ (313.36). Maple amorphous powder, mp 113~115°C, 138~140°C, $[\alpha]_D^{20} = +101^\circ$ ($c = 0.69$, ethanol). Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 250µg/mL); antimalarial (*Plasmodium falciparum* D₂, IC₅₀ = 1240ng/mL; W₂, IC₅₀ = 1680ng/mL); anti-HIV-1 (HIV-1 IN inhibitor, IC₅₀ = 7.7µmol/L; positive control Suramin, IC₅₀ = 2.4µmol/L)^[4224]; antimalarial (antiplasmodial, *Plasmodium falciparum* PoW, IC₅₀ = 3.1µg/mL; *Plasmodium falciparum* Dd2, IC₅₀ = 5.4µg/mL). Source: CHENG QIE ZI *Litsea cubeba*, DIAO ZHANG GEN PI *Lindera umbellata* [Syn. *Lindera erythrocarpa*], WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*], ZHANG MU *Cinnamomum camphora*, DING HU DIAO ZHANG *Lindera chunii* (root), SHAO HUA XI PA MU *Siparuna pauciflora*. Ref: 6, 900, 1521, 3376, 4224.

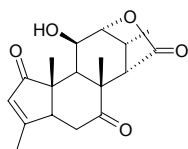


12574 Laurotetanine

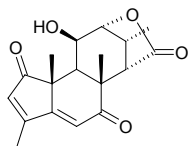
[128-76-7] $C_{19}H_{21}NO_4$ (327.38). mp 125°C. **Pharm:** Platelet aggregation inhibitor (rbt, 100µg/mL, strongly inhibits platelet aggregation induced by ADP); vasodilator (relaxes blood vessels, rat, 100µg/mL, inhibits aortal contraction induced by 80mmol/L potassium ion and 3µmol/L arterenol); antihypertensive (normal rat, 1.0µg/kg, blood pressure lowers by 29% in average, action holds 2min). **Source:** BI BA *Piper longum*, WU YE TENG *Cassytha filiformis*, ZHEN CAI *Litsea pungens*. **Ref:** 6, 1749, 1750.

**12575 Laurycolactone A**

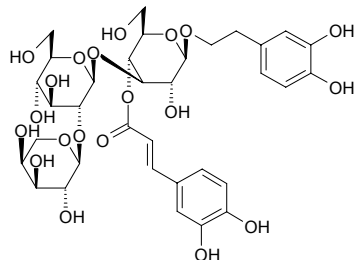
$C_{18}H_{22}O_5$ (318.37). **Source:** *Eurycoma* sp. **Ref:** 4556.

**12576 Laurycolactone B**

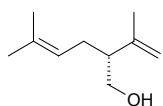
$C_{18}H_{20}O_5$ (316.36). **Source:** *Eurycoma* sp. **Ref:** 4556.

**12577 Lavandulifolioside**

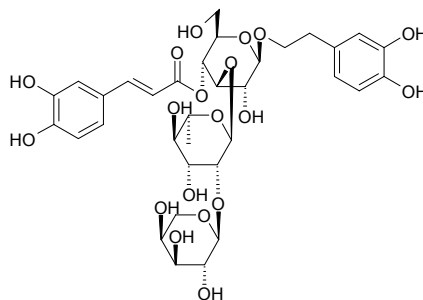
$C_{34}H_{44}O_{20}$ (772.72). **Source:** A LA BO PO PO NA *Veronica persica* (aerial parts), CHANG YE CHE QIAN *Plantago lanceolata*. **Ref:** 4211, 5020.

**12578 Lavandulol**

$C_{10}H_{18}O$ (154.25). **Source:** GAO BEN *Ligusticum sinense*. **Ref:** 660.

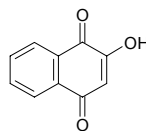
**12579 Lavansulifoliside**

$C_{34}H_{44}O_{19}$ (756.72). Amorphous powder. **Source:** HUI BAI YI MU CAO *Leonurus glaucescens*. **Ref:** 2499.

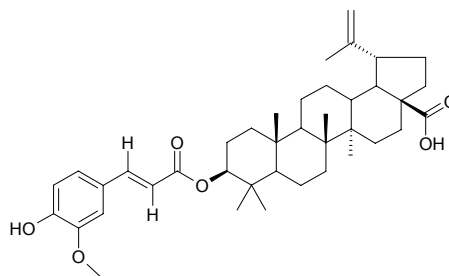
**12580 Lawsone**

2-Hydroxy-1,4-naphthalenedione [83-72-7] $C_{10}H_6O_3$ (174.16). mp 192°C.

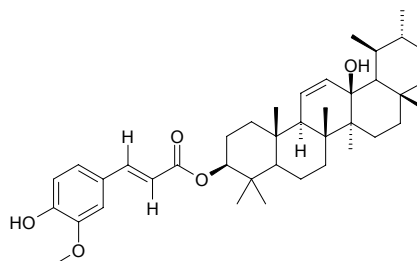
Pharm: Antifungal; hemostatic; stimulates cerebra. **Source:** BAI SAN MO HUA *Lawsonia alba*, FENG XIAN HUA *Impatiens balsamina*, JI XING ZI *Impatiens balsamina*, ZHI JIA HUA YE *Lawsonia inermis*. **Ref:** 6, 658.

**12581 Lawsonic acid**

3α-E-Ferulyloxy-lup-20(29)-en-28-oic acid $C_{40}H_{56}O_6$ (632.89). Amorphous powder, $[\alpha]_D^{26} = +7.8^\circ$ ($c = 0.76$, MeOH). **Source:** BAI SAN MO HUA *Lawsonia alba* (aerial parts). **Ref:** 5230.

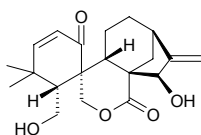
**12582 Lawsonin**

3α-E-Ferulyloxy-urs-11-en-13β-ol $C_{40}H_{58}O_5$ (618.91). Amorphous powder, $[\alpha]_D^{25} = +36.4^\circ$ ($c = 0.245$, MeOH). **Source:** BAI SAN MO HUA *Lawsonia alba* (aerial parts). **Ref:** 5230.

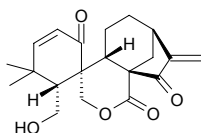


12583 Laxiflorin A

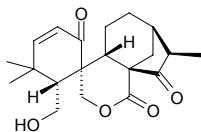
$C_{20}H_{26}O_5$ (346.43). mp 165~167°C, $[\alpha]_D^{27} = +71.3^\circ$ ($c = 0.06$, MeOH). Source: SHU HUA MAO E XIANG CHA CAI *Isodon eriocalyx* var. *laxiflora*. Ref: 4067.

**12584 Laxiflorin B**

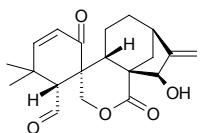
$C_{20}H_{24}O_5$ (344.41). mp 171~173°C, $[\alpha]_D = +75.3^\circ$ ($c = 0.09$, MeOH). Source: SHU HUA MAO E XIANG CHA CAI *Isodon eriocalyx* var. *laxiflora*. Ref: 4067.

**12585 Laxiflorin C**

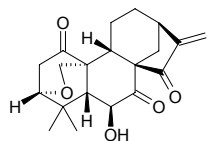
$C_{20}H_{26}O_5$ (346.43). mp 178~180°C, $[\alpha]_D = +95.9^\circ$ ($c = 0.14$, MeOH). Source: SHU HUA MAO E XIANG CHA CAI *Isodon eriocalyx* var. *laxiflora*. Ref: 4067.

**12586 Laxiflorin D**

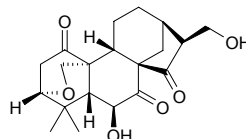
$C_{20}H_{24}O_5$ (344.41). mp 242~244°C, $[\alpha]_D^{23.0} = +137.6^\circ$ ($c = 0.616$, C_5H_5N). Source: SHU HUA MAO E XIANG CHA CAI *Isodon eriocalyx* var. *laxiflora*. Ref: 899, 4067.

**12587 Laxiflorin J**

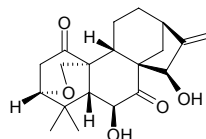
6 β -Hydroxy-3 α ,20-epoxy-*ent*-kaur-16-en-1,7,15-trione $C_{20}H_{24}O_5$ (344.41). Colorless crystals (Me₂CO), mp 180.5~182.5°C, $[\alpha]_D^{23.9} = -167.93^\circ$ ($c = 0.40$, CHCl₃). Pharm: Cytotoxic (*in vitro*, K562, IC₅₀ = 0.47 μ g/mL; A549, IC₅₀ = 49.1 μ g/mL; T24, IC₅₀ = 0.314 μ g/mL; control cis-Platin: K562, IC₅₀ = 2.02 μ g/mL; A549, IC₅₀ = 11.94 μ g/mL; T24, IC₅₀ = 1.16 μ g/mL). Source: SHU HUA MAO E XIANG CHA CAI *Isodon eriocalyx* var. *laxiflora* (leaf: yield = 0.00021%dw). Ref: 4668.

**12588 Laxiflorin K**

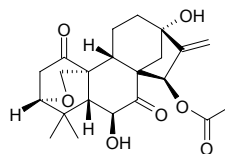
16(*S*)-6 β ,17-Dihydroxy-3 α ,20-epoxy-*ent*-kaur-1,7,15-trione $C_{20}H_{26}O_6$ (362.43). White powder, $[\alpha]_D^{11.7} = -65.17^\circ$ ($c = 0.29$, MeOH). Pharm: Cytotoxic (*in vitro*, K562, IC₅₀ = 11.9 μ g/mL; T24, IC₅₀ = 1753 μ g/mL; control cis-Platin: K562, IC₅₀ = 2.02 μ g/mL; T24, IC₅₀ = 1.16 μ g/mL). Source: SHU HUA MAO E XIANG CHA CAI *Isodon eriocalyx* var. *laxiflora* (leaf: yield = 0.000048%dw). Ref: 4668.

**12589 Laxiflorin L**

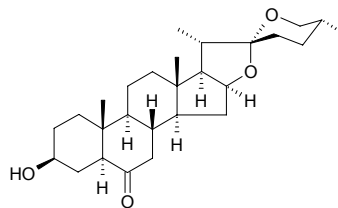
6 β ,15 β -Dihydroxy-3 α ,20-epoxy-*ent*-kaur-16-en-1,7-dione $C_{20}H_{26}O_5$ (346.43). Colorless needles (Me₂CO), mp 302.5~304°C, $[\alpha]_D^{15.1} = -131.84^\circ$ ($c = 0.20$, MeOH). Pharm: Cytotoxic (*in vitro*, K562, IC₅₀ = 1.13 μ g/mL; A549, IC₅₀ = 24.7 μ g/mL; T24, IC₅₀ = 5.16 μ g/mL; control cis-Platin: K562, IC₅₀ = 2.02 μ g/mL; A549, IC₅₀ = 11.94 μ g/mL; T24, IC₅₀ = 1.16 μ g/mL). Source: SHU HUA MAO E XIANG CHA CAI *Isodon eriocalyx* var. *laxiflora* (leaf: yield = 0.000092%dw). Ref: 4668.

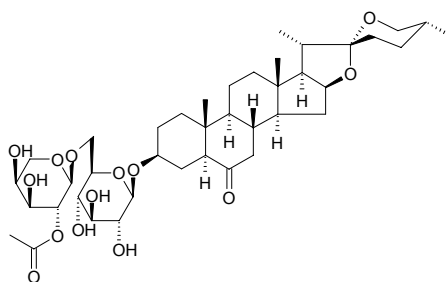
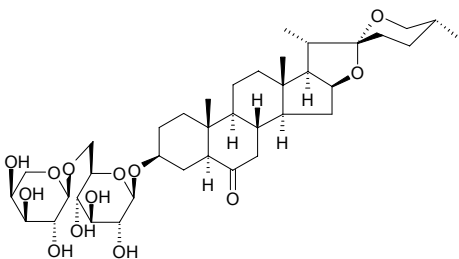
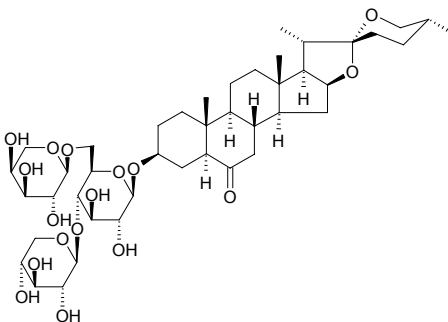
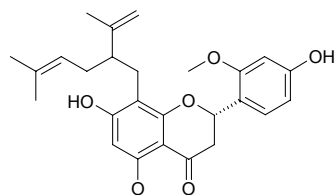
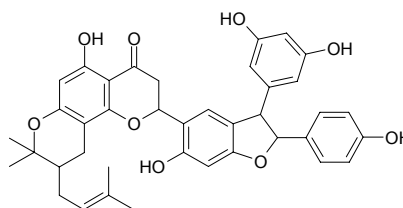
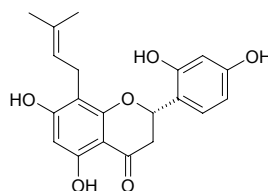
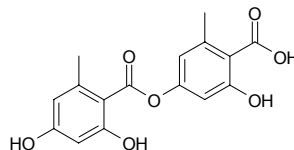
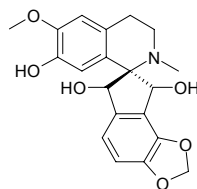
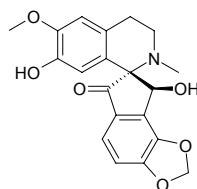
**12590 Laxiflorin M**

15 β -Acetoxy-6 β ,13 α -dihydroxy-3 α ,20-epoxy-*ent*-kaur-16-en-1,7-dione $C_{22}H_{28}O_7$ (404.46). Colorless needles (Me₂CO), mp 179.5~180.5°C, $[\alpha]_D^{15.2} = -56^\circ$ ($c = 0.25$, MeOH). Pharm: Cytotoxic (*in vitro*, K562, IC₅₀ = 219 μ g/mL; control cis-Platin: K562, IC₅₀ = 2.02 μ g/mL). Source: SHU HUA MAO E XIANG CHA CAI *Isodon eriocalyx* var. *laxiflora* (leaf: yield = 0.00019%dw). Ref: 4668.

**12591 Laxogenin**

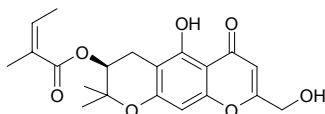
$C_{27}H_{42}O_4$ (430.63). mp 210°C. Pharm: Inhibits promotor of cancer (*in vitro*, lung cancer *in vivo*). Source: NIAN YU XU *Smilax sieboldii*, QIAO TOU *Allium chinense*. Ref: 6, 2165.



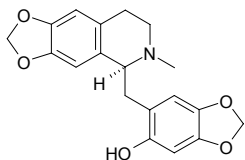
12592 Laxogenin 3-O-[O-(2-O-acetyl- α -L-arabinopyranosyl-(1 \rightarrow 6)- β -D-glucopyranoside)]C₄₀H₆₂O₁₄ (766.93). Amorphous solid, $[\alpha]_D^{30} = -62.9^\circ$ ($c = 0.1$, MeOH).Source: QIAO TOU *Allium chinense*. Ref: 710.**12593 Laxogenin 3-O-[O- α -L-arabinopyranosyl-(1 \rightarrow 6)- β -D-glucopyranoside]**(25*R*)-3 β -Hydroxy-5 α -spirostan-6-one 3-O-[O- α -L-arabinopyranosyl-(1 \rightarrow 6)- β -D-glucopyranoside] C₃₈H₆₀O₁₃ (724.89). Amorphous solid, $[\alpha]_D^{30} = -98.7^\circ$ ($c = 0.25$, MeOH). Source: QIAO TOU *Allium chinense*. Ref: 710.**12594 Laxogenin 3-O-{O- β -D-xylopyranosyl-(1 \rightarrow 4)-O-[α -L-arabinopyranosyl-(1 \rightarrow 6)- β -D-glucopyranoside]}**C₄₃H₆₈O₁₇ (857.01). Amorphous solid, $[\alpha]_D^{27} = -71^\circ$ ($c = 0.12$, MeOH).Source: QIAO TOU *Allium chinense*. Ref: 710.**12595 Leachianone A**C₂₆H₃₀O₆ (438.53). Pharm: Cytotoxic (HL-60 cells)^[4430]. Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*], LI QI HUIAI *Sophora leachiana*. Ref: 1521, 4430.**12596 Leachianone C**C₃₉H₃₈O₉ (650.73). Source: LI QI HUIAI *Sophora leachiana*. Ref: 1521.**12597 Leachianone G**C₂₀H₂₀O₆ (356.38). Pharm: Antibacterial (flabelline-resistance *Staphylococcus aureus*(MSRA), IC₅₀ = 12.5 μ g/mL); cytotoxic (hmn myeloid leukemia HL-60 cells, IC₅₀ = 11.3 μ mol/L; hmn hepatocarcinoma HepG2 cells, IC₅₀ = 13.3 μ mol/L). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 4430.**12598 Lecanoric acid**C₁₆H₁₄O₇ (318.29). Source: LIAN ZUO GE JUN *Thelephora vialis*, MEI YI *Parmelia tinctorum*, SHI ER *Umbilicaria esculenta* [Syn. *Gyrophora esculenta*]. Ref: 660.**12599 Ledeboridine**Ledebouridine C₂₀H₂₁NO₆ (371.39). Source: DUI YE YUAN HU *Corydalis ledebouriana*. Ref: 660.**12600 Ledeborine**Ledebourine C₂₀H₁₉NO₆ (369.38). Source: DUI YE YUAN HU *Corydalis ledebouriana*. Ref: 660.

12601 Ledebouriellol

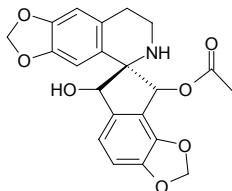
[84272-83-3] $C_{20}H_{22}O_7$ (374.39). Source: FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*]. Ref: 2, 660, 1521.

**12602 Ledecorine**

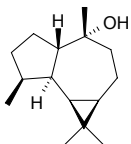
$C_{19}H_{19}NO_5$ (341.37). Source: DUI YE YUAN HU *Corydalis ledebouriana*, WEI LAN QIU GUO ZI JIN *Fumaria vaillantii*. Ref: 660, 1521.

**12603 Lederine**

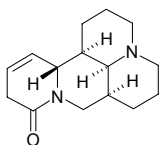
$C_{21}H_{19}NO_7$ (397.39). Source: DUI YE YUAN HU *Corydalis ledebouriana*, YI YANG HE BAO MU DAN *Dicentra peregrina*. Ref: 660, 1521.

**12604 Ledol**

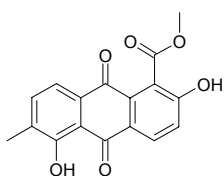
[577-27-5] $C_{15}H_{26}O$ (222.37). Crystals (petroleum ether), mp 105°C, bp 282~283°C, $[\alpha]_D = +8^\circ$ (EtOH). Source: HONG CHAI HU *Bupleurum scorzonerifolium*, XIE CAO *Valeriana officinalis*, YIN DU MA DOU LING *Aristolochia indica*. Ref: 2, 1521.

**12605 Lehmannine**

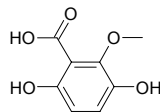
$C_{15}H_{22}N_2O$ (246.36). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 660.

**12606 Leiocarpaquinone**

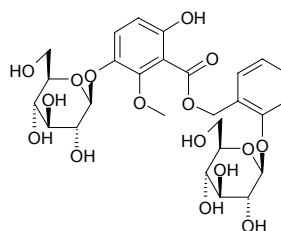
$C_{17}H_{12}O_6$ (312.28). Orange yellow lamellar crystals, mp 175~178°C. Source: YI HE GUO *Ventilago leiocarpa*. Ref: 97.

**12607 Leiocarpic acid**

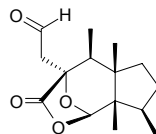
$C_8H_8O_5$ (184.15). Source: TE SI MAN NI HU TONG BIAN ZHONG *Calophyllum teysmannii* var. *inophylloide* (wood). Ref: 3937.

**12608 Leiocarposide**

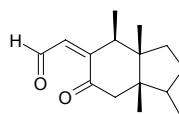
$C_{27}H_{34}O_{16}$ (614.56). Pharm: Analgesic; anti-inflammatory. Source: MAO GUO YI ZHI HUANG HUA *Solidago virgaurea*. Ref: 658.

**12609 Lejeuneapinguisanolid**

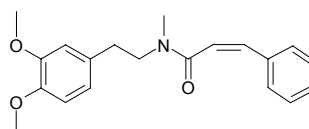
$C_{15}H_{22}O_4$ (266.34). mp 180~197°C, $[\alpha]_D^{25} = +23^\circ$ ($c = 0.1$, $CHCl_3$). Source: YE TAI *Trocholejeunea sandvicensis*. Ref: 3909.

**12610 Lejeuneapinguisenone**

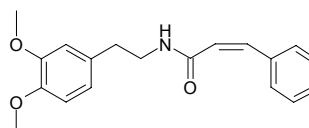
$C_{15}H_{22}O_2$ (234.34). Source: YE TAI *Trocholejeunea sandvicensis*. Ref: 3909.

**12611 Lemairamide**

$C_{20}H_{25}NO_3$ (325.41). Pharm: Anti-PAF. Source: *Zanthoxylum* sp. Ref: 2176.

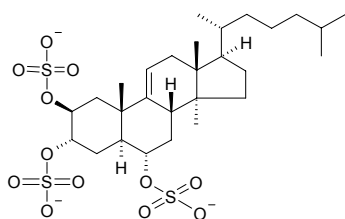
**12612 Lemairamin**

$C_{19}H_{21}NO_3$ (311.38). Pharm: Anti-PAF. Source: *Zanthoxylum* sp. Ref: 2176.

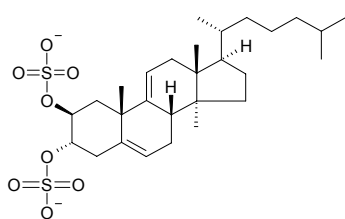


12613 Lembehsterol A

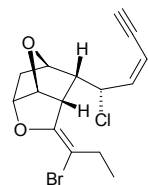
$C_{28}H_{45}O_{12}S_3^{3-}$ (669.86). $[\alpha]_D = +50.1^\circ$ ($c = 0.41$, MeOH). **Pharm:** Thymidine phosphorylase (TP) inhibitor ($IC_{50} = 41\mu\text{mol/L}$). **Source:** *Petrosia strongylata*. **Ref:** 4202.

**12614 Lembehsterol B**

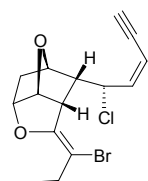
$C_{28}H_{44}O_8S_2^{2-}$ (572.79). $[\alpha]_D = +39.0^\circ$ ($c = 0.32$, MeOH). **Pharm:** Thymidine phosphorylase (TP) inhibitor ($IC_{50} = 45\mu\text{mol/L}$). **Source:** *Petrosia strongylata*. **Ref:** 4202.

**12615 Lembyne A**

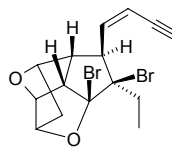
$C_{15}H_{16}BrClO_2$ (343.65). mp 95–96°C, $[\alpha]_D^{24} = +197.6^\circ$ ($c = 0.70$, $CHCl_3$). **Pharm:** Antibacterial (*Chromobacterium violaceum*, *Clostridium cellobioparum*, *Flavobacterium helmiphilum*, *Proteus mirabilis*, *Vibrio parahaemolyticus*, MIC = 40–60µg/disc; *Clostridium fallax*, *Clostridium novyi*, *Clostridium sordellii*, *Enterobacter aerogenes*, *Escherichia coli*, *Shigella flexneri*, *Vibrio cholerae*, *Vibrio vulnificus*, no inhibition). **Source:** *Laurencia* sp. **Ref:** 5183.

**12616 (12E)-Lembyne A**

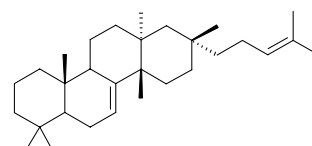
$C_{15}H_{16}BrClO_2$ (343.65). Oil, $[\alpha]_D^{24} = +42^\circ$ ($c = 0.02$, $CHCl_3$). **Pharm:** Antibacterial (marine bacteria: *Alcaligenes aquamarinus*, MIC = 20µg/disc; *Azomonas agilis*, MIC = 30µg/disc; *Erwinia amylovora*, MIC = 30µg/disc; *Escherichia coli*, MIC = 30µg/disc; *Alteromonas* sp., *Azobacter beijerinckii*, *Halobacterium* sp., *Halococcus* sp., no inhibition). **Source:** *Laurencia mariannensis*. **Ref:** 5191.

**12617 Lembyne B**

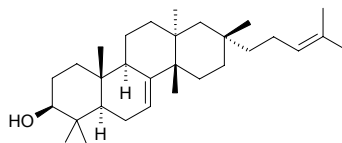
$C_{15}H_{16}Br_2O_2$ (388.10). Oil, $[\alpha]_D^{24} = +157.1^\circ$ ($c = 0.10$, $CHCl_3$). **Source:** *Laurencia* sp. **Ref:** 5183.

**12618 Lemmaphylla-7,21-diene**

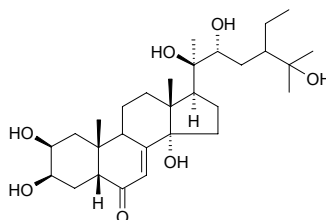
$C_{30}H_{50}$ (410.73). **Source:** DAO LUAN YE FU SHI JUE *Lemmaphyllum microphyllum* var. *obovatum*. **Ref:** 660.

**12619 Lemmaphylla-7,21-dien-3β-ol**

$C_{30}H_{50}O$ (426.73). **Pharm:** Antineoplastic (EBV-EA induced by TPA, mol ratio/TPA = 1000, relative percentage of EBV-EA = 2.2% (positive control value 32pmol, 20ng TPA = 100%), viability of Raji cells = 70%; reference compound β-Carotene, relative percentage = 8.6%). **Source:** HUO YANG LE *Euphorbia antiquorum* (latex). **Ref:** 4606.

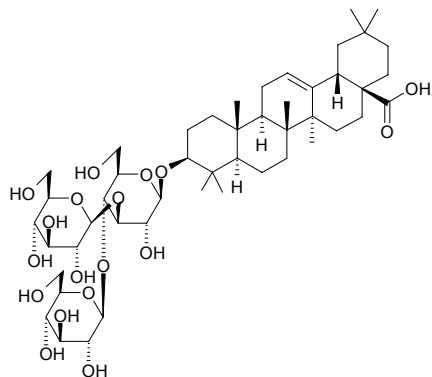
**12620 Lemmasterone**

Makisterone C [19974-41-5] $C_{29}H_{48}O_7$ (508.70). mp 263–265°C (dec). **Source:** LUO YAN CAO *Lemmaphyllum microphyllum*, LUO HAN SONG YE *Podocarpus macrophyllus*. **Ref:** 6.

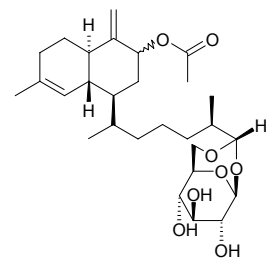


12621 Lemmatoxin

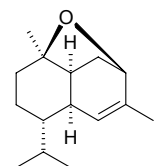
$C_{48}H_{78}O_{18}$ (943.15). **Pharm:** Spermaticidal (50mg/L); molluscicide (*Biomphalaria glabrata* snail, 1.5mg/L, 90% killed). **Source:** SHI ER RUI SHANG LU *Phytolacca dodecandra*. **Ref:** 658.

**12622 Lemnabourside D**

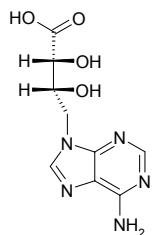
$C_{28}H_{44}O_8$ (508.66). Yellowish solid. **Pharm:** Cytotoxic (HepA IC_{50} = 39.3 μ g/mL, S₁₈₀A IC_{50} = 39.3 μ g/mL, EAC IC_{50} = 30.4 μ g/mL). **Source:** BO LUN LIN HUA RUAN SHAN HU *Lemna lia bournei*. **Ref:** 2505.

**12623 Lentideusether**

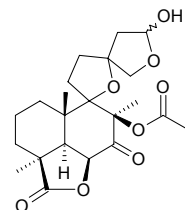
$C_{15}H_{24}O$ (220.36). **Source:** BAO PI GU *Lentinus lepidus*. **Ref:** 660.

**12624 Lentysine**

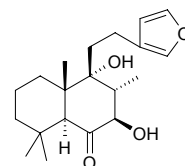
[23918-98-1] $C_9H_{11}N_5O_4$ (253.22). mp 261~263°C (dec). **Pharm:** Antihepatotoxin (liver toxicosis due to $CeCl_3$); antihypercholesterolemic (rat, reduces the level of cholesterol in serum). **Source:** XIANG XUN *Lentinus edodes*. **Ref:** 6, 658.

**12625 Leocardin**

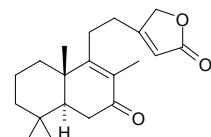
$C_{22}H_{30}O_8$ (422.48). Crystals. **Source:** WEI YI MU CAO *Leonurus cardiaca*. **Ref:** 2499.

**12626 Leoheterin**

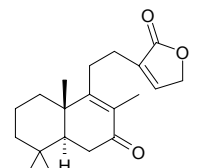
$C_{20}H_{30}O_4$ (334.46). White powder. **Source:** YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*]. **Ref:** 2499, 4493.

**12627 Leoheteronin A**

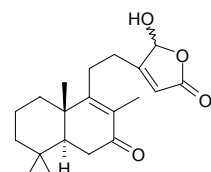
$C_{20}H_{28}O_3$ (316.44). White amorphous powder, $[\alpha]_D^{25} = +8.4^\circ$ ($c = 1.19$, $CHCl_3$). **Source:** YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (aerial parts). **Ref:** 4493.

**12628 Leoheteronin B**

$C_{20}H_{28}O_3$ (316.44). White amorphous powder, $[\alpha]_D^{25} = -10.7^\circ$ ($c = 1.77$, $CHCl_3$). **Source:** YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (aerial parts). **Ref:** 4493.

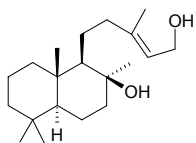
**12629 Leoheteronin C**

$C_{20}H_{28}O_4$ (332.44). White amorphous powder, $[\alpha]_D^{25} = +57.8^\circ$ ($c = 1.35$, $CHCl_3$). **Source:** YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*] (aerial parts). **Ref:** 4493.

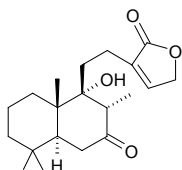


12630 Leoheteronin D

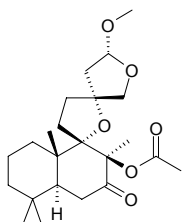
$C_{20}H_{36}O_2$ (308.51). Colorless needles, mp 134–135°C, $[\alpha]_D^{25} = 0.0^\circ$ ($c = 0.20$, $CHCl_3$). Source: YI MU CAO *Leonurus heterophyllum* [Syn. *Leonurus artemisia*] (aerial parts). Ref: 4493.

**12631 Leoheteronin E**

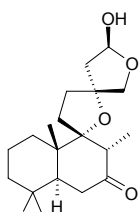
$C_{20}H_{30}O_4$ (334.46). White amorphous powder, $[\alpha]_D^{25} = -9.3^\circ$ ($c = 2.91$, $CHCl_3$). Source: YI MU CAO *Leonurus heterophyllum* [Syn. *Leonurus artemisia*] (aerial parts). Ref: 4493.

**12632 Leoheteronone A**

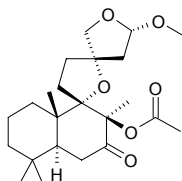
$C_{23}H_{36}O_6$ (408.54). Yellowish oil, $[\alpha]_D^{25} = -42.5^\circ$ ($c = 3.51$, $CHCl_3$). Source: YI MU CAO *Leonurus heterophyllum* [Syn. *Leonurus artemisia*] (aerial parts). Ref: 4534.

**12633 Leoheteronone B**

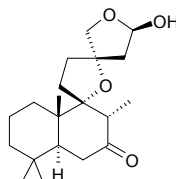
$C_{20}H_{32}O_4$ (336.48). White amorphous powder. Source: YI MU CAO *Leonurus heterophyllum* [Syn. *Leonurus artemisia*] (aerial parts). Ref: 4534.

**12634 Leoheteronone C**

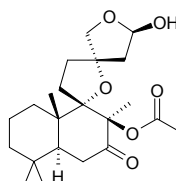
$C_{23}H_{36}O_6$ (408.54). White amorphous powder, $[\alpha]_D^{25} = +24.1^\circ$ ($c = 0.83$, $CHCl_3$). Source: YI MU CAO *Leonurus heterophyllum* [Syn. *Leonurus artemisia*] (aerial parts). Ref: 4534.

**12635 Leoheteronone D**

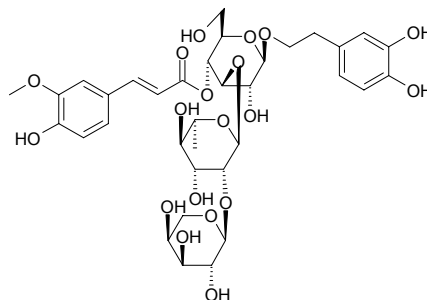
$C_{20}H_{32}O_4$ (336.48). White amorphous powder. Source: YI MU CAO *Leonurus heterophyllum* [Syn. *Leonurus artemisia*] (aerial parts). Ref: 4534.

**12636 Leoheteronone E**

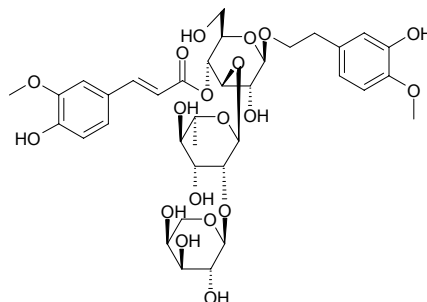
$C_{22}H_{34}O_6$ (394.51). White amorphous powder. Source: YI MU CAO *Leonurus heterophyllum* [Syn. *Leonurus artemisia*] (aerial parts). Ref: 4534.

**12637 Leonoside A**

$C_{35}H_{46}O_{19}$ (770.75). Amorphous powder. Source: HUI BAI YI MU CAO *Leonurus glaucescens*. Ref: 2499.

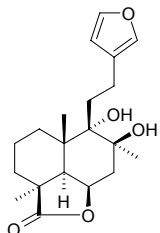
**12638 Leonoside B**

$C_{36}H_{48}O_{19}$ (784.77). Amorphous powder. Source: HUI BAI YI MU CAO *Leonurus glaucescens*. Ref: 2499.

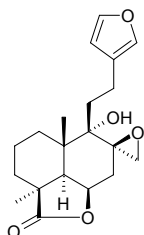


12639 Leonotin

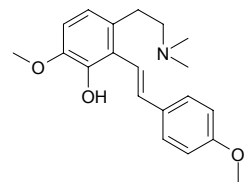
$C_{20}H_{28}O_5$ (348.44). **Pharm:** Cytotoxic (leukemia cells L₁₂₁₀ in tissue culture, IC₅₀ = 50–60 μg/mL). **Source:** XI YE YI MU CAO *Leonurus sibiricus* (aerial parts). **Ref:** 4328.

**12640 Leonotinin**

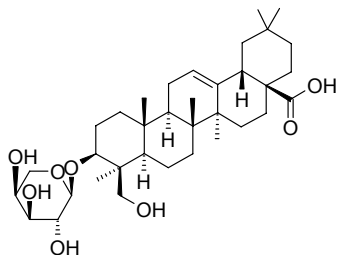
$C_{20}H_{26}O_5$ (346.43). **Pharm:** Cytotoxic (leukemia cells L₁₂₁₀ in tissue culture, IC₅₀ = 50–60 μg/mL). **Source:** XI YE YI MU CAO *Leonurus sibiricus* (aerial parts). **Ref:** 4328.

**12641 Leonticine**

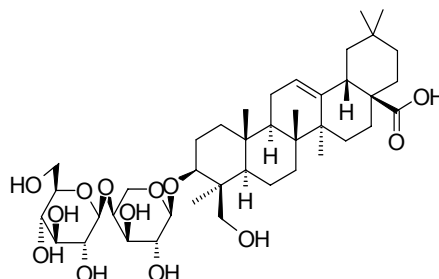
$C_{20}H_{25}NO_3$ (327.43). **Source:** BANG ZHUANG ZI JIN *Corydalis claviculata*, HUA BAN SHI ZU CAO *Leontice leontopetalum*, YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *yanhusuo*], *Alphonsea sclerocarpa*. **Ref:** 660, 1521.

**12642 Leontoside A**

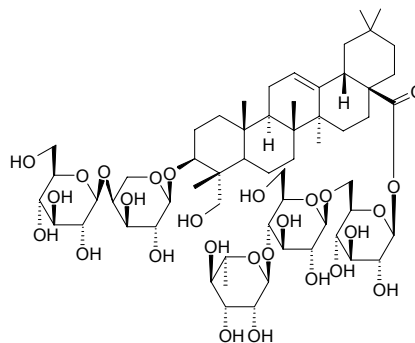
Scabioside A $C_{35}H_{56}O_8$ (604.83). mp 216–219°C. **Source:** HUANG HUA BAI JIANG *Patrinia scabiosaefolia*, XING AN BAI TOU WENG *Pulsatilla dahurica*, ZHONG E BAI TOU WENG *Pulsatilla campanella*, *Akebia* spp., *Fatsia* spp., *Caulophyllum* spp., *Patrinia* spp., *Phytolacca* spp., *Schefflera* spp., *Hedera* spp., *Leontice* spp., *Koelreuteria* spp. **Ref:** 2, 6, 660, 1521.

**12643 Leontoside B**

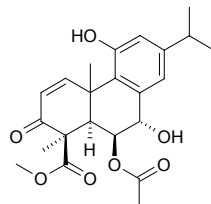
Scabioside C $C_{41}H_{66}O_{13}$ (766.98). mp 216–219°C. **Source:** HUANG HUA BAI JIANG *Patrinia scabiosaefolia*, ZHONG E BAI TOU WENG *Pulsatilla campanella*. **Ref:** 2, 660, 1521.

**12644 Leontoside D**

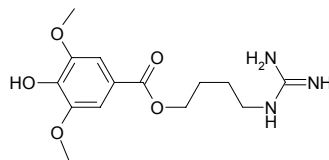
$C_{59}H_{96}O_{27}$ (1237.41). **Source:** XING AN BAI TOU WENG *Pulsatilla dahurica*. **Ref:** 660, 1521.

**12645 Leonubiastrin**

$C_{23}H_{28}O_7$ (416.48). Crystals. **Source:** XI YE YI MU CAO *Leonurus sibiricus*. **Ref:** 2499.

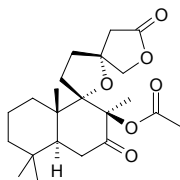
**12646 Leonurine**

[24697-74-3] $C_{14}H_{21}N_3O_5$ (311.34). mp 238°C (dec). **Pharm:** Uterine stimulant (rat, *in vitro*, 0.4g/mL); Antihypertensive. **Source:** XI YE YI MU CAO *Leonurus sibiricus* (the compound was isolated from the plant by Natsuki Kato et al. in 1962)^[5505], YI MU CAO *Leonurus heterophyllum* [Syn. *Leonurus artemisia*] (dried aerial parts: content = 0.218%^[5508]). **Ref:** 4, 658, 5505, 5508.

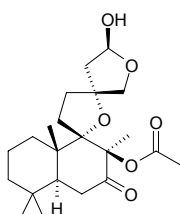


12647 Leopersin A

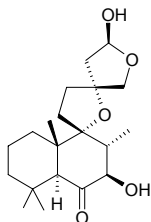
$C_{22}H_{32}O_6$ (392.50). White powder. Source: BO SI YI MU CAO *Leonurus persicus*. Ref: 2499.

**12648 Leopersin B**

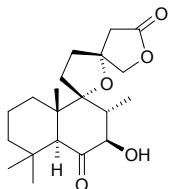
$C_{22}H_{34}O_6$ (394.51). White powder. Source: BO SI YI MU CAO *Leonurus persicus*, YI MU CAO *Leonurus heterophyllum* [Syn. *Leonurus artemisia*] (aerial parts). Ref: 2499, 4534.

**12649 Leopersin C**

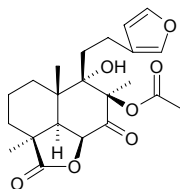
$C_{20}H_{32}O_5$ (352.48). Oil liquid. Source: BO SI YI MU CAO *Leonurus persicus*, YI MU CAO *Leonurus heterophyllum* [Syn. *Leonurus artemisia*] (aerial parts). Ref: 2499, 4534.

**12650 Leopersin D**

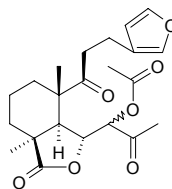
$C_{20}H_{30}O_5$ (350.46). White powder. Source: BO SI YI MU CAO *Leonurus persicus*. Ref: 2499.

**12651 Leopersin E**

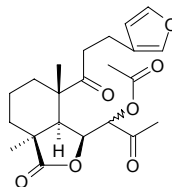
$C_{22}H_{38}O_7$ (404.46). White powder. Source: BO SI YI MU CAO *Leonurus persicus*. Ref: 2499.

**12652 7-epi-Leopersin F**

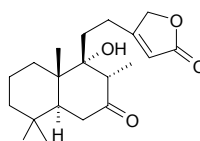
$C_{22}H_{38}O_7$ (404.46). Oil liquid. Source: BO SI YI MU CAO *Leonurus persicus*. Ref: 2499.

**12653 Leopersin F**

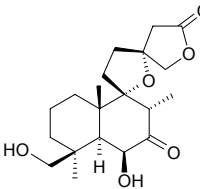
$C_{22}H_{38}O_7$ (404.46). White powder. Source: BO SI YI MU CAO *Leonurus persicus*. Ref: 2499.

**12654 Leopersin G**

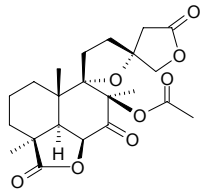
$C_{20}H_{30}O_4$ (334.46). Oil liquid. Source: BO SI YI MU CAO *Leonurus persicus*. Ref: 1521, 2499.

**12655 Leopersin H**

$C_{20}H_{30}O_6$ (366.46). White powder. Source: BO SI YI MU CAO *Leonurus persicus*. Ref: 2499.

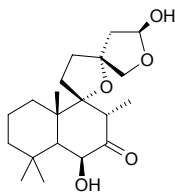
**12656 Leopersin I**

$C_{20}H_{28}O_8$ (420.46). Oil liquid. Source: BO SI YI MU CAO *Leonurus persicus*. Ref: 2499.

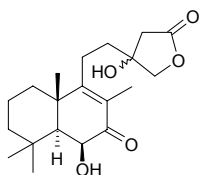


12657 Leopersin J

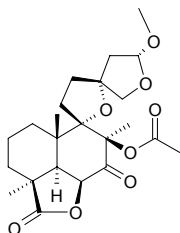
$C_{20}H_{32}O_5$ (352.48). Oil liquid. Source: BO SI YI MU CAO *Leonurus persicus*.
Ref: 2499.

**12658 Leopersin L**

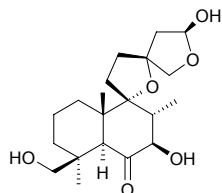
$C_{20}H_{30}O_5$ (350.46). Oil liquid. Source: BO SI YI MU CAO *Leonurus persicus*.
Ref: 2499.

**12659 Leopersin N**

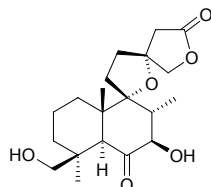
$C_{23}H_{32}O_8$ (436.51). Oil liquid. Source: BO SI YI MU CAO *Leonurus persicus*.
Ref: 2499.

**12660 Leopersin O**

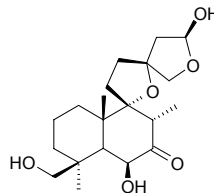
$C_{20}H_{32}O_6$ (368.47). Oil liquid. Source: BO SI YI MU CAO *Leonurus persicus*.
Ref: 2499.

**12661 Leopersin P**

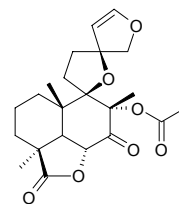
$C_{20}H_{30}O_6$ (366.46). White powder. Source: BO SI YI MU CAO *Leonurus persicus*. Ref: 2499.

**12662 Leopersin Q**

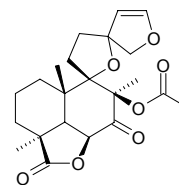
$C_{20}H_{32}O_6$ (368.47). Oil liquid. Source: BO SI YI MU CAO *Leonurus persicus*.
Ref: 2499.

**12663 (+)-Leosibiricin**

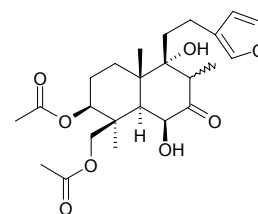
$C_{22}H_{28}O_7$ (404.46). Source: XI YE YI MU CAO *Leonurus sibiricus*. Ref: 660.

**12664 Leosibiricin**

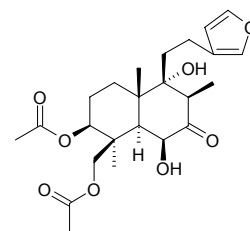
[86575-85-1] $C_{22}H_{28}O_7$ (404.46). Oil liquid, $[\alpha]_D^{19} = +33^\circ$ ($c = 0.09$, $CHCl_3$).
Source: BO SI YI MU CAO *Leonurus persicus*. Ref: 2499.

**12665 Leosibirin**

$C_{24}H_{32}O_8$ (450.53). Source: XI YE YI MU CAO *Leonurus sibiricus*. Ref: 660.

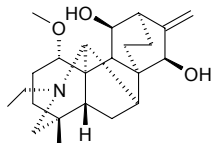
**12666 Leosibirin**

[86575-87-3] $C_{24}H_{34}O_8$ (450.53). Oil liquid, $[\alpha]_D^{20} = 0.7^\circ$ ($c = 0.3$, $CHCl_3$).
Source: XI YE YI MU CAO *Leonurus sibiricus*. Ref: 2499.



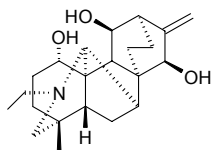
12667 Lepadine

$C_{22}H_{35}NO_3$ (373.54). Source: LEI BO WU TOU *Aconitum pseudohuiliense*. Ref: 660.

**12668 Lepenine**

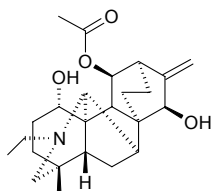
$C_{22}H_{33}NO_3$ (359.51). Colorless needles, mp 203–204°C (acetone). Source:

BAI HOU WU TOU *Aconitum leucostomum*, BEI WU TOU *Aconitum kusnezoffii*, JI LIN WU TOU *Aconitum kirinense*, LEI BO WU TOU *Aconitum pseudohuiliense*. Ref: 660, 1521, 2515.

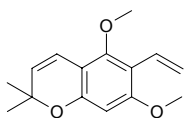
**12669 Lepetine**

$C_{24}H_{35}NO_4$ (401.55). Colorless needles, mp 134–136°C (acetone). Source: JI

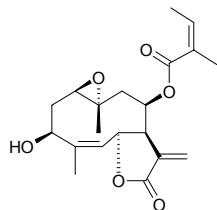
LIN WU TOU *Aconitum kirinense*, LEI BO WU TOU *Aconitum pseudohuiliense*. Ref: 660, 2515.

**12670 Leptene B**

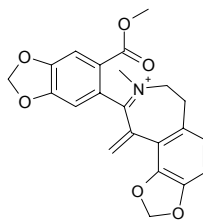
$C_{15}H_{18}O_3$ (246.31). Yellowish oleaginous substances. Source: SAN CHA KU *Evodia lepta* [Syn. *Ilex lepta*]. Ref: 393.

**12671 Leptocarpin**

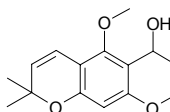
$C_{20}H_{26}O_6$ (362.43). Source: *Viguiera eriophora* ssp. *eriophora* (aerial parts), *Viguiera puruana* (aerial parts). Ref: 5090.

**12672 Leptocarpinine**

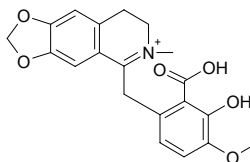
$C_{22}H_{20}NO_6^+$ (394.41). Amorphous powder, mp > 350°C (MeOH). Source: XI GUO JIAO HUI XIANG *Hypecoum leptocarpum*. Ref: 1899.

**12673 Leptol B**

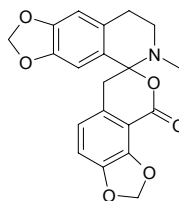
$C_{15}H_{20}O_4$ (264.32). Colorless oleaginous substances, $[\alpha]_D^{26} = -0.6$ ($c = 1.12$, Me₂CO). Source: SAN CHA KU *Evodia lepta* [Syn. *Ilex lepta*]. Ref: 393.

**12674 Leptopidine**

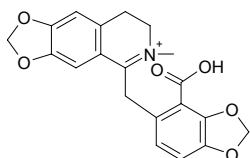
$C_{20}H_{20}NO_6^+$ (370.39). Yellow powder, mp. 235–239°C (MeOH). Source: XI GUO JIAO HUI XIANG *Hypecoum leptocarpum*. Ref: 1899.

**12675 Leptopidinine**

$C_{20}H_{17}NO_6$ (367.36). Yellow needles (MeOH–CHCl₃), mp. 345–350°C (CHCl₃), $[\alpha]_D^{20} = 0^\circ$ ($c = 1.5$, MeOH). Source: XI GUO JIAO HUI XIANG *Hypecoum leptocarpum*. Ref: 1899.

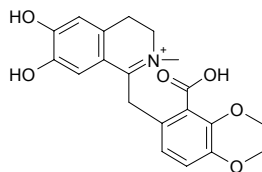
**12676 Leptopine**

$C_{20}H_{18}NO_6^+$ (368.37). Yellow cubic crystals, mp. 158–161°C (MeOH). Source: XI GUO JIAO HUI XIANG *Hypecoum leptocarpum*. Ref: 1899.

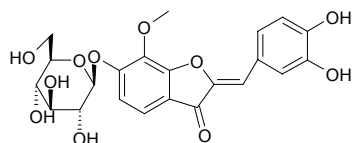


12677 Leptopinine

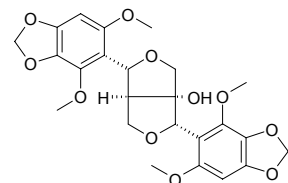
$C_{20}H_{22}NO_6^+$ (372.40). Yellow powder. mp. 207~210°C (MeOH). Source: XI GUO JIAO HUI XIANG *Hypecoum leptocarpum*. Ref: 1899.

**12678 Leptosin**

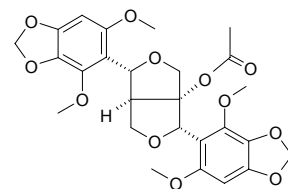
[486-23-7] $C_{22}H_{22}O_{11}$ (462.41). Orange needles, mp 229~231°C (dec). Source: XIAN YE JIN JI JU *Coreopsis lanceolata*. Ref: 6.

**12679 Leptostachyol**

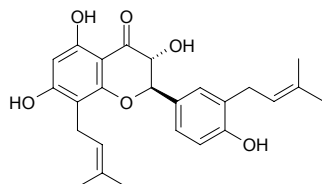
$C_{24}H_{26}O_{11}$ (490.47). Source: TOU GU CAO *Speranskia tuberculata*. Ref: 660.

**12680 Leptostachyol acetate**

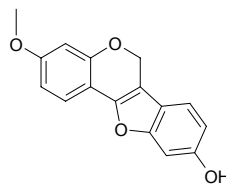
$C_{26}H_{28}O_{12}$ (532.51). Source: LAO PO ZI ZHEN XIAN *Phryma leptostachya*. Ref: 6.

**12681 (2R,3R)-Lespedezaflavanone C**

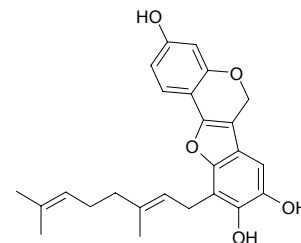
Anticancer Flavonoid PMV70P691-99 $C_{25}H_{28}O_6$ (424.50). Pharm: Aromatase inhibitor inactive (*in vitro*, $IC_{50} > 40\mu\text{mol/L}$; control Aminoglutethimide, $IC_{50} = 6.4\mu\text{mol/L}$)^[3090]; cytotoxic (cyclooxygenase-1 inhibitor)^[5038]. Source: GOU SHU *Broussonetia papyrifera*. Ref: 3090, 5038.

**12682 Lespedezol A₁**

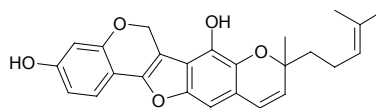
$C_{16}H_{12}O_4$ (268.27). Amorphous powder. Pharm: Antioxidant (rat brain homogenate lipid peroxidation test, $IC_{50} = 0.2\mu\text{mol/L}$, control EGCg, $IC_{50} = 0.07\mu\text{mol/L}$). Source: TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. Ref: 2356.

**12683 Lespedezol A₂**

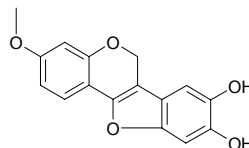
$C_{25}H_{26}O_5$ (406.48). Amorphous powder. Pharm: Antioxidant (rat brain homogenate lipid peroxidation test, $IC_{50} = 0.2\mu\text{mol/L}$, control EGCg, $IC_{50} = 0.07\mu\text{mol/L}$); Antiallergic (50mg/kg, InRt = 39.9%, control EGCg, InRt = 12.8%). Source: TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. Ref: 2356.

**12684 Lespedezol A₃**

$C_{25}H_{24}O_5$ (404.47). Amorphous powder. Pharm: Antioxidant (rat brain homogenate lipid peroxidation test, $IC_{50} = 0.3\mu\text{mol/L}$, control EGCg, $IC_{50} = 0.07\mu\text{mol/L}$). Source: TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. Ref: 2356.

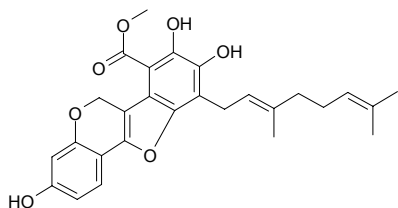
**12685 Lespedezol A₄**

$C_{16}H_{12}O_5$ (284.27). Amorphous powder. Pharm: Antioxidant (rat brain homogenate lipid peroxidation test, $IC_{50} = 0.2\mu\text{mol/L}$, control EGCg, $IC_{50} = 0.07\mu\text{mol/L}$). Source: TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. Ref: 2357.

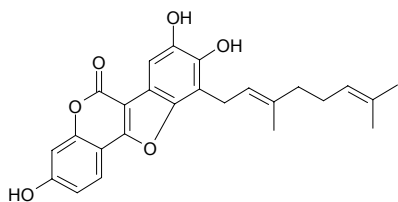


12686 Lespedezol A₅

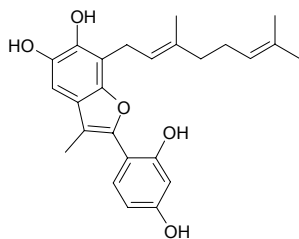
C₂₇H₂₈O₇ (464.52). Amorphous powder. **Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, IC₅₀ = 0.4 μmol/L, control EGCg, IC₅₀ = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

**12687 Lespedezol A₆**

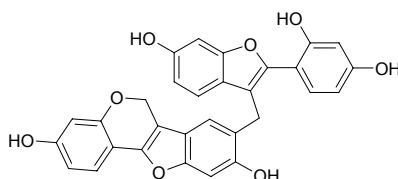
C₂₅H₂₄O₆ (420.47). Amorphous powder. **Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, IC₅₀ = 0.4 μmol/L, control EGCg, IC₅₀ = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

**12688 Lespedezol B₁**

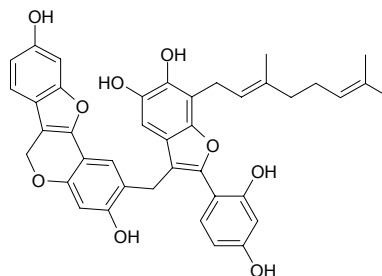
C₂₅H₂₈O₅ (408.50). Amorphous powder. **Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, IC₅₀ = 0.3 μmol/L, control EGCg, IC₅₀ = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2356.

**12689 Lespedezol B₂**

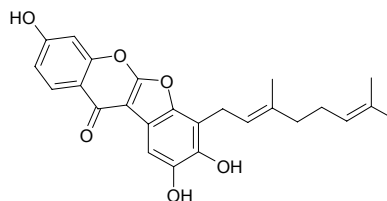
C₃₀H₂₀O₈ (508.49). Amorphous powder. **Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, IC₅₀ = 0.2 μmol/L, control EGCg, IC₅₀ = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2356.

**12690 Lespedezol B₃**

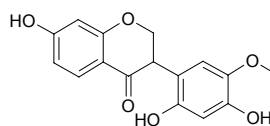
C₄₀H₃₆O₉ (660.73). Amorphous powder. **Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, IC₅₀ = 0.3 μmol/L, control EGCg, IC₅₀ = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2356.

**12691 Lespedezol C₁**

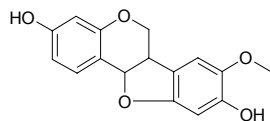
C₂₅H₂₄O₆ (420.47). Amorphous powder. **Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, IC₅₀ = 0.3 μmol/L, control EGCg, IC₅₀ = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2356.

**12692 Lespedezol D**

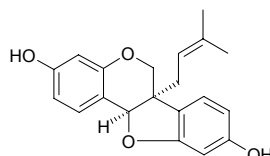
C₁₆H₁₄O₆ (302.29). Amorphous powder, [α]_D = 0° (c = 0.71, MeOH). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

**12693 Lespedezol D₁**

C₁₆H₁₄O₅ (286.29). Amorphous powder, [α]_D = -97.1° (c = 0.46, MeOH). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

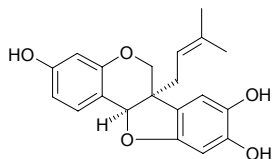
**12694 Lespedezol D₂**

C₂₀H₂₀O₄ (324.38). Amorphous powder, [α]_D = -136.9° (c = 0.16, MeOH). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

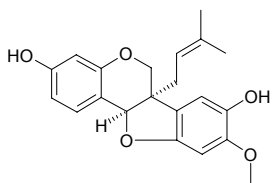


12695 Lespedezol D₃

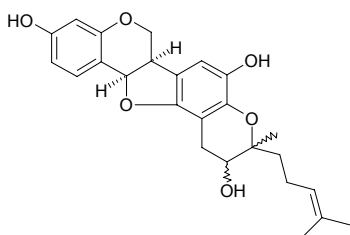
C₂₀H₂₀O₅ (340.38). Amorphous powder, $[\alpha]_D = -113.2^\circ$ ($c = 0.70$, MeOH).
Pharm: Antioxidant (rat brain homogenate lipid peroxidation test, IC₅₀ = 0.5 μmol/L, control EGCg, IC₅₀ = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

**12696 Lespedezol D₄**

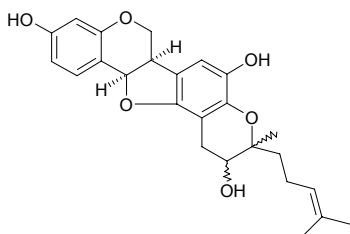
C₂₁H₂₂O₅ (354.41). Amorphous powder, $[\alpha]_D = -156.9^\circ$ ($c = 0.88$, MeOH).
Pharm: Antioxidant (rat brain homogenate lipid peroxidation test, IC₅₀ = 0.1 μmol/L, control EGCg, IC₅₀ = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

**12697 Lespedezol D₅**

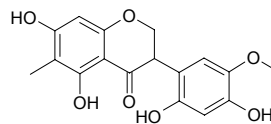
C₂₅H₂₈O₆ (424.50). Amorphous powder, $[\alpha]_D = -49.9^\circ$ ($c = 1.03$, MeOH).
Pharm: Antioxidant (rat brain homogenate lipid peroxidation test, IC₅₀ = 0.2 μmol/L, control EGCg, IC₅₀ = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

**12698 Lespedezol D₆**

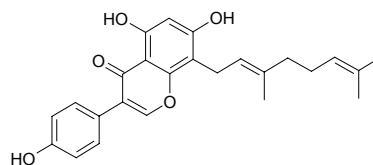
C₂₅H₂₈O₆ (424.50). Amorphous powder, $[\alpha]_D = -120.90^\circ$ ($c = 1.23$, MeOH).
Pharm: Antioxidant (rat brain homogenate lipid peroxidation test, IC₅₀ = 0.1 μmol/L, control EGCg, IC₅₀ = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

**12699 Lespedezol E**

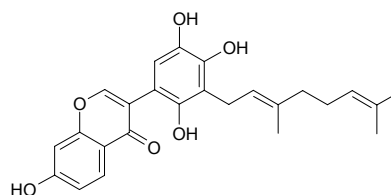
C₁₇H₁₆O₇ (332.31). Amorphous powder, $[\alpha]_D = 0^\circ$ ($c = 1.21$, MeOH). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

**12700 Lespedezol E₁**

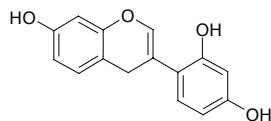
C₂₅H₂₆O₅ (406.48). Amorphous powder. **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

**12701 Lespedezol E₂**

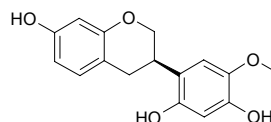
C₂₅H₂₆O₆ (422.48). Amorphous powder. **Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, IC₅₀ = 0.4 μmol/L, control EGCg, IC₅₀ = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

**12702 Lespedezol F₁**

C₁₅H₁₂O₄ (256.26). Amorphous powder. **Pharm:** Antioxidant (rat brain homogenate lipid peroxidation test, IC₅₀ = 0.4 μmol/L, control EGCg, IC₅₀ = 0.07 μmol/L). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

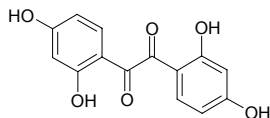
**12703 Lespedezol G₁**

C₁₆H₁₆O₅ (288.30). Amorphous powder, $[\alpha]_D = -16.7^\circ$ ($c = 0.98$, MeOH). **Source:** TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. **Ref:** 2357.

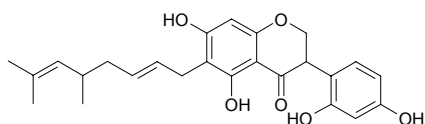


12704 Lespedezol H₁

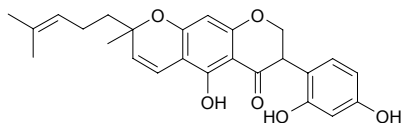
C₁₄H₁₀O₆ (274.23). Amorphous powder. Source: TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba*. Ref: 2357.

**12705 Lespedol A**

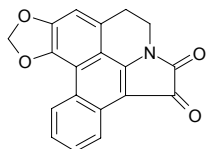
C₂₅H₂₈O₆ (424.50). mp 146.5~150°C. Source: TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba* (the compound was isolated from the plant by Akira Ueno et al. in 1973). Ref: 5505.

**12706 Lespedol B**

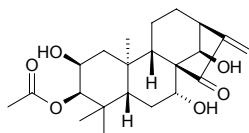
C₂₅H₂₈O₆ (422.48). mp 165~166°C. Source: TONG XING LIE PIAN HU ZHI ZI *Lespedeza homoloba* (the compound was isolated from the plant by Akira Ueno et al. in 1973). Ref: 5505.

**12707 Lettowianthine**

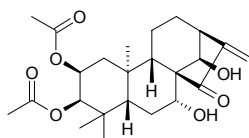
C₁₉H₁₁NO₄ (317.30). Dark red solid, mp 314~317°C (dec, CHCl₃). Source: *Lettowianthus stellatus* (root cortex). Ref: 3944.

**12708 Leucamenin A**

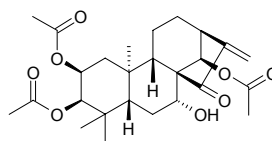
C₂₂H₃₂O₆ (392.50). mp 228~230°C, [α]_D²¹ = -63.8° (c = 1.04, MeOH). Source: KA MEI XIANG CHA CAI *Isodon kameba*. Ref: 4067.

**12709 Leucamenin B**

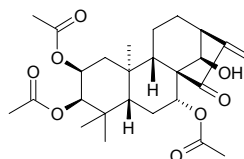
C₂₄H₃₄O₇ (434.53). mp 240~241°C, [α]_D²¹ = -32.5° (c = 1.17, CHCl₃). Source: KA MEI XIANG CHA CAI *Isodon kameba*. Ref: 4067.

**12710 Leucamenin C**

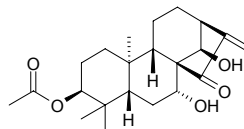
C₂₆H₃₆O₈ (476.57). Amorphous powder, [α]_D²¹ = -21.2° (c = 0.90, CHCl₃). Source: KA MEI XIANG CHA CAI *Isodon kameba*. Ref: 4067.

**12711 Leucamenin D**

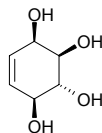
C₂₆H₃₆O₈ (476.57). mp 182~184°C, [α]_D²¹ = -27.3° (c = 1.32, CHCl₃). Source: KA MEI XIANG CHA CAI *Isodon kameba*. Ref: 4067.

**12712 Leucamenin E**

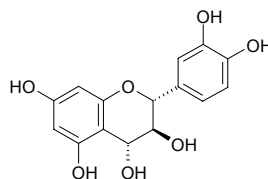
C₂₂H₃₂O₅ (376.50). mp 148~149°C, [α]_D²¹ = -55.8° (c = 0.39, MeOH). Source: KA MEI XIANG CHA CAI *Isodon kameba*, YIN DI KUAN YE XIANG CHA CAI *Isodon umbrosa* var. *latifolia*. Ref: 4067.

**12713 Leucanthemitol**

C₆H₁₀O₄ (146.14). Source: BAI SHOU WU *Cynanchum bungei*. Ref: 660.

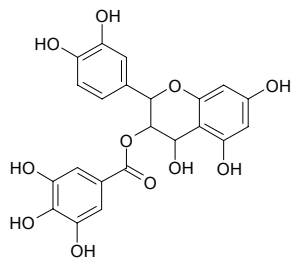
**12714 Leucocyanidin**

[480-17-1] C₁₅H₁₄O₇ (306.27). Monohydrate crystals (ethyl acetate-petroleum ether), mp 355°C; mp (+) > 355°C. Pharm: Platelet aggregation inhibitor; aldose reductase inhibitor (eye lens); similar action with vitamin P. Source: A LA BO JIN HE HUAN *Acacia arabica*, BAI FAN DOU *Phaseolus vulgaris*, CHANG YE AN LUO *Polyalthia longifolia*, FAN SHI LIU GAN *Psidium guajava*, FAN SHI LIU PI *Psidium guajava*, FAN SHI LIU YE *Psidium guajava*, HOU PI SHU *Lannea grandis* [Syn. *Lannea coromandelica*], JI YE SUAN MO *Rumex hastatus*, LUO HUA SHENG *Arachis hypogaea*, MO E SUAN MO *Rumex hymenosepalus*, OU *Nelumbo nucifera*, PI JIU HUA *Humulus lupulus*, SHAN ZHA YE *Crataegus pinnatifida*. Ref: 661.

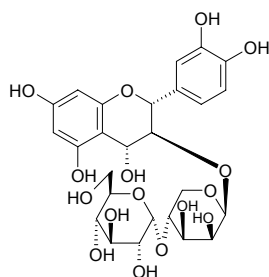


12715 (+)-Leucocyanidin gallate

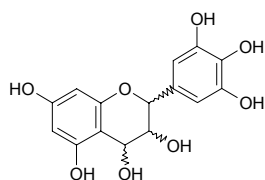
$C_{22}H_{18}O_{11}$ (458.38). Source: A LA BO JIAO JIN HE HUAN *Acacia nilotica*.
Ref: 5375.

**12716 Leucocyanidin-3-O- α -D-glucopyranosyl-(1 \rightarrow 4)-O- β -D-arabinopyranoside**

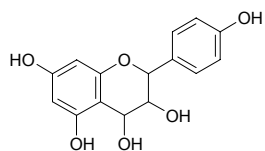
$C_{26}H_{32}O_{16}$ (600.54). Source: DUI YE RONG *Ficus hispida*. Ref: 660.

**12717 Leucodelphinidin**

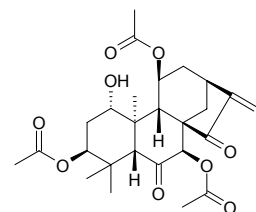
[491-52-1] $C_{15}H_{14}O_8$ (322.27). Source: MA HUANG *Ephedra sinica*. Ref: 2.

**12718 Leucopelargonidin**

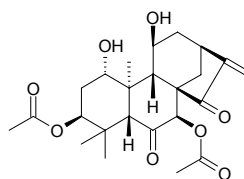
[520-17-2] $C_{15}H_{14}O_6$ (290.28). Source: BAI FAN DOU *Phaseolus vulgaris*. Ref: 6.

**12719 Leucophyllin A**

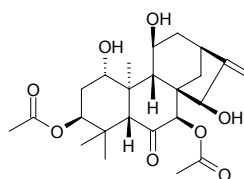
$C_{26}H_{34}O_9$ (490.56). mp 287~289°C, $[\alpha]_D^{12} = -47.5^\circ$ ($c = 0.58$, $CHCl_3$). Source:
 BAI YE XIANG CHA CAI *Isodon leucophyllus*. Ref: 4067.

**12720 Leucophyllin B**

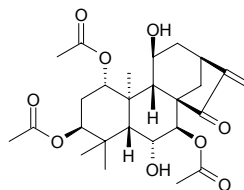
$C_{24}H_{32}O_8$ (448.52). mp 241~243°C, $[\alpha]_D^{12} = -36.3^\circ$ ($c = 0.40$, Me_2CO). Source:
 BAI YE XIANG CHA CAI *Isodon leucophyllus*. Ref: 4067.

**12721 Leucophyllin C**

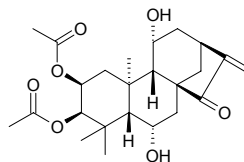
$C_{24}H_{34}O_8$ (450.53). mp 244~246°C, $[\alpha]_D^{12} = +27.4^\circ$ ($c = 0.19$, Me_2CO). Source:
 BAI YE XIANG CHA CAI *Isodon leucophyllus*. Ref: 4067.

**12722 Leucophyllin D**

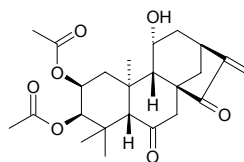
$C_{26}H_{36}O_9$ (492.57). mp 231~233°C, $[\alpha]_D^{12} = +2.3^\circ$ ($c = 0.51$, Me_2CO). Source:
 BAI YE XIANG CHA CAI *Isodon leucophyllus*. Ref: 4067.

**12723 Leucophyllin E**

$C_{24}H_{34}O_7$ (434.53). mp 218~220°C, $[\alpha]_D^{12} = -53.6^\circ$ ($c = 0.60$, Me_2CO). Source:
 BAI YE XIANG CHA CAI *Isodon leucophyllus*. Ref: 4067.

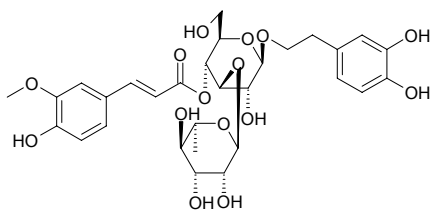
**12724 Leucophyllin F**

$C_{24}H_{32}O_7$ (432.52). mp 236~238°C, $[\alpha]_D^{12} = -55.2^\circ$ ($c = 0.58$, $CHCl_3$). Source:
 BAI YE XIANG CHA CAI *Isodon leucophyllus*. Ref: 4067.

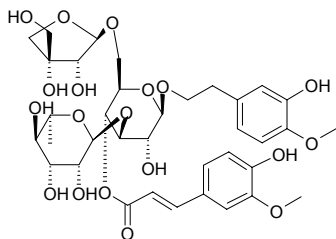


12725 Leucosceptoside A

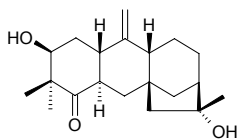
$C_{30}H_{38}O_{15}$ (638.63). Yellow powder. Source: BO SI YI MU CAO *Leonurus persicus*, CHANG YE CHE QIAN *Plantago lanceolata*, *Sideritis ozturkii* (aerial parts), CHE QIAN *Plantago asiatica*, DA YE ZUI YU CAO *Buddleja davidii*, SONG HAO *Phtheirospermum japonicum* [Syn. *Gerardia japonica*]. Ref: 660, 2499, 5020 3827.

**12726 Leucosceptoside B**

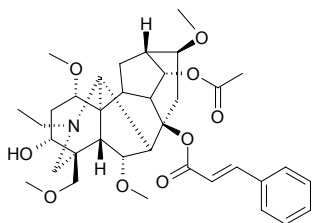
$C_{36}H_{48}O_{19}$ (784.77). Colorless amorphous powder, $[\alpha]_D^{20} = -82^\circ$ ($c = 0.1$, MeOH). Source: ZI HUA GUAN MAO RUI HUA *Verbascum wiedemannianum*. Ref: 5449.

**12727 Leucothol A**

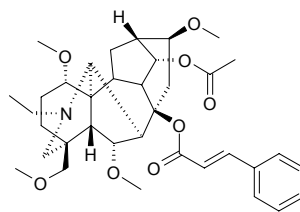
$C_{20}H_{30}O_3$ (318.46). White solid. Source: JIN YE ZI *Craibiodendron yunnanese* (leaf). Ref: 4575.

**12728 Leueantine A**

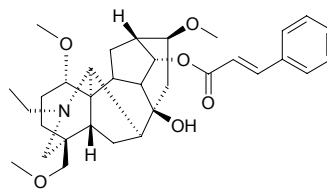
$C_{36}H_{49}NO_9$ (639.79). Amorphous powder, $[\alpha]_D^{20} +13.4^\circ$ ($c = 0.5$, $CHCl_3$). Source: ZHUA KUI GUA YE WU TOU *Aconitum hemsleyanum* var. *leueanthus* (root: yield = 0.0036%dw). Ref: 4678.

**12729 Leueantine B**

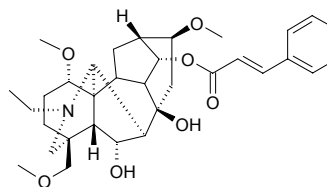
$C_{36}H_{49}NO_8$ (623.79). Amorphous powder, $[\alpha]_D^{20} = +19^\circ$ ($c = 0.5$, $CHCl_3$). Source: ZHUA KUI GUA YE WU TOU *Aconitum hemsleyanum* var. *leueanthus* (root: yield = 0.0027%dw). Ref: 4678.

**12730 Leueantine C**

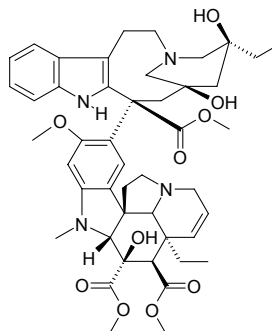
$C_{33}H_{45}NO_6$ (551.73). Amorphous powder, $[\alpha]_D^{20} = +34.6^\circ$ ($c = 0.5$, $CHCl_3$). Source: ZHUA KUI GUA YE WU TOU *Aconitum hemsleyanum* var. *leueanthus* (root: yield = 0.00040%dw). Ref: 4678.

**12731 Leueantine D**

$C_{33}H_{45}NO_7$ (567.73). Amorphous powder, $[\alpha]_D^{20} = +34.0^\circ$ ($c = 0.5$, $CHCl_3$). Source: ZHUA KUI GUA YE WU TOU *Aconitum hemsleyanum* var. *leueanthus* (root: yield = 0.0025%dw). Ref: 4678.

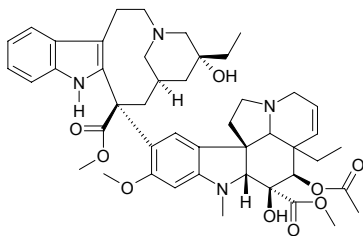
**12732 Leurocolumbine**

14'-Hydroxyvincalcoloblastine [56974-17-5] $C_{46}H_{58}N_4O_{10}$ (827.00). Pharm: Antineoplastic; antimitotic agent. Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochnera rosea*]. Ref: 2, 1521.

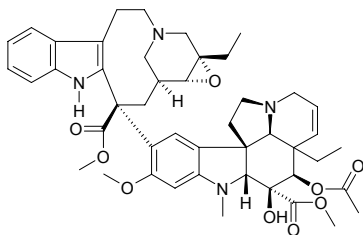


12733 Leurosidine

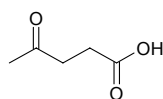
Inrosidine; Vinrosidine [15228-71-4] $C_{46}H_{58}N_4O_9$ (811.00). mp 208–211°C (dec). **Pharm:** Antineoplastic (mus, transplanted leukemia P1534, EAC); antiviral (poliomyelitis virus *in vitro*, vaccinia virus *in vitro*). **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochnera rosea*]. **Ref:** 2, 5, 658, 1521.

**12734 Leurosine**

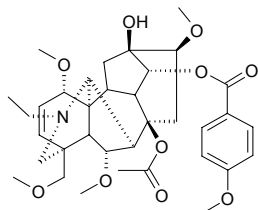
Vinleurosine [23360-92-1] $C_{46}H_{56}N_4O_9$ (808.98). Octa-hydrate: white crystals (nitrile-ethyl or methanol), mp 202–205°C (dec), $[\alpha]_D^{26} = +72$ (chloroform), Sulfate: mp 238–242°C, $[\alpha]_D^{26} = -8.3^\circ$ (methanol). **Pharm:** Antineoplastic (mus P₃₈₈, 45mg/kg, biotic prolonged rate = 39%, hm chorion cell carcinoma, lymphatic dyscrasia and EAC); hypoglycemic; LD₅₀ (rat, ip) = 15.2mg/kg, (mus, ip) = 80mg/kg, (mus, iv) = 10.5mg/kg. **Source:** CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochnera rosea*], CHANG YE CHANG CHUN HUA *Catharanthus longifolius*, JIAN ZHUANG CHANG CHUN HUA *Catharanthus lanceus*, LUAN YUAN CHANG CHUN HUA *Catharanthus ovalis*, XI XIAO CHANG CHUN HUA *Catharanthus pusillus*. **Ref:** 661, 1521.

**12735 Levulinic acid**

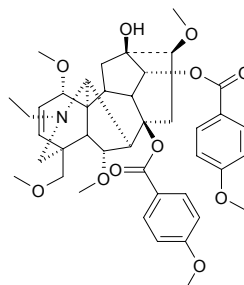
4-Oxopentanoic acid [123-76-2] $C_5H_8O_3$ (116.12). mp 33–35°C, bp 245–246°C. **Source:** HEI DA DOU PI *Glycine max*. **Ref:** 6.

**12736 Liaconitine A**

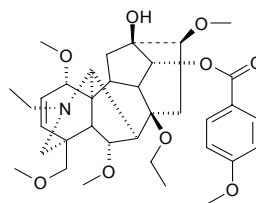
N-Ethyl-1 α ,6 α ,16 β ,18-tetramethoxy-13 β -ol-2,3-dehydroaconitane-8-acetate-1-4-anisoylate $C_{35}H_{47}NO_{10}$ (641.77). **Source:** *Aconitum* sp. **Ref:** 1900.

**12737 Liaconitine B**

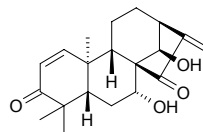
N-Ethyl-1 α ,6 α ,16 β ,18-tetramethoxy-13 β -ol-2,3-dehydroaconitane-8,14-dianisoylate $C_{41}H_{51}NO_{11}$ (733.86). **Source:** *Aconitum* sp. **Ref:** 1900.

**12738 Liaconitine C**

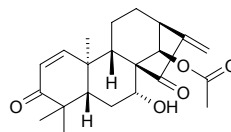
N-Ethyl-1 α ,6 α ,16 β ,18-tetramethoxy-8-ethoxy-13 β -ol-2,3-dehydroaconitane-1-4-anisoylate $C_{35}H_{49}NO_9$ (627.78). **Source:** *Aconitum* sp. **Ref:** 1900.

**12739 Liangshanin A**

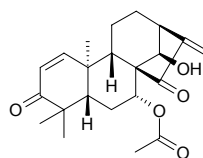
$C_{20}H_{26}O_4$ (330.43). mp 238–240°C, $[\alpha]_D = -192.5^\circ$ ($c = 0.517$, MeOH). **Source:** LIANG SHAN XIANG CHA CAI *Isodon liangshanica*. **Ref:** 4067.

**12740 Liangshanin B**

$C_{22}H_{28}O_5$ (372.47). mp 204–210°C. **Source:** LIANG SHAN XIANG CHA CAI *Isodon liangshanica*. **Ref:** 4067.

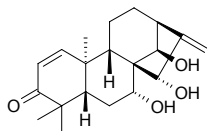
**12741 Liangshanin C**

$C_{22}H_{28}O_5$ (372.47). mp 204–210°C. **Source:** LIANG SHAN XIANG CHA CAI *Isodon liangshanica*. **Ref:** 4067.

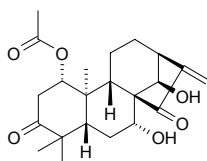


12742 Liangshanin D

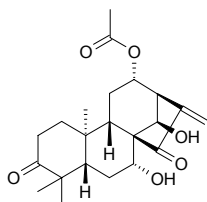
$C_{20}H_{28}O_4$ (332.44). mp 302~305°C. Source: LIANG SHAN XIANG CHA
CAI *Isodon liangshanica*. Ref: 4067.

**12743 Liangshanin E**

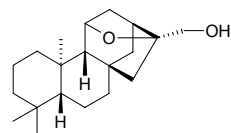
$C_{22}H_{30}O_6$ (390.48). mp 138~140°C. Source: LIANG SHAN XIANG CHA
CAI *Isodon liangshanica*. Ref: 4067.

**12744 Liangshanin F**

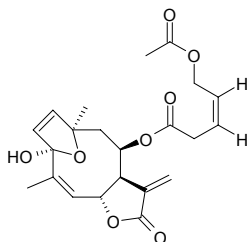
$C_{22}H_{30}O_6$ (390.48). mp 220~222°C. Source: LIANG SHAN XIANG CHA
CAI *Isodon liangshanica*. Ref: 4067.

**12745 Liangshanin G**

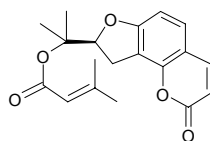
$C_{20}H_{32}O_2$ (304.48). mp 146~151°C. Source: LIANG SHAN XIANG CHA
CAI *Isodon liangshanica*. Ref: 4067.

**12746 Liatrin**

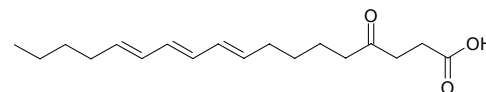
$C_{22}H_{26}O_8$ (418.45). Colorless acicular crystals (dichloromethane cyclohexane),
mp 130~132°C, $[\alpha]_D^{24} = -142^\circ$ ($c = 1.93$, chloroform). Pharm: Antineoplastic
(mus P_{388} , 5mg/kg, biotic prolonged rate = 57%); cytotoxic (KB). Source:
CHA SHI SHE BIAN JU *Liatris champmanii*. Ref: 661.

**12747 Libanorin**

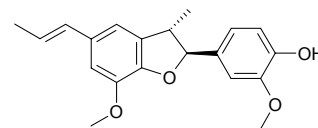
$C_{19}H_{20}O_5$ (328.37). Crystals (pet. ether), mp 79°C, $[\alpha]_D^{24} = +197^\circ$ ($c = 1.66$,
CHCl₃). Pharm: Antispasmodic; coronary vasodilator. Source: SHAN QIAN
HU *Peucedanum oreoselinum*. Ref: 658, 1521.

**12748 Licanic acid**

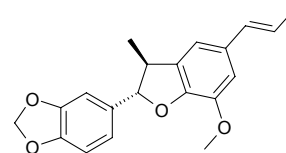
$C_{18}H_{28}O_3$ (292.42). Source: YI KOU KE MEI *Chrysobalanus icaco*. Ref: 658.

**12749 Licarin A**

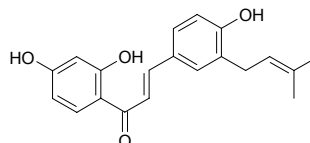
$C_{20}H_{22}O_4$ (326.40). Pharm: Antimicrobial; neuroprotective (glutamate-induced
neurotoxicity in primary cultures of cortical cells, 0.1 μmol/L, protection rate =
(45.3±3.6)%, $p < 0.01$, MK-801: 1.0 μmol/L, protection rate = (83.6±2.0)%,
 $p < 0.001$, CNQX: 1.0 μmol/L, protection rate = (70.5±1.5)%, $p < 0.001$)^[4927]. Source:
DA MA DOU LING *Aristolochia maxima*, HONG NAN PI *Machilus thunbergii*,
ROU DOU KOU *Myristica fragrans*. Ref: 658, 4927.

**12750 Licarin B**

$C_{20}H_{20}O_4$ (324.38). Source: ROU DOU KOU *Myristica fragrans*, YU LAN
Magnolia denudata [Syn. *Magnolia heptapata*]. Ref: 660, 4439.

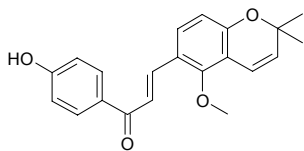
**12751 Licoagrochalcone A**

Licoagrochalcone; 2',4,4'-Trihydroxy-3-prenylchalcone $C_{20}H_{20}O_4$ (324.38).
Pharm: Antimalarial (*Plasmodium falciparum* D6, IC₅₀ = (12.7±3.2) μg/mL,
control Chloroquine, IC₅₀ = (0.009±0.002) μg/mL, Quinine, IC₅₀ =
(0.04±0.01) μg/mL; *Plasmodium falciparum* W2, IC₅₀ = (12.0±2.6) μg/mL,
Chloroquine, IC₅₀ = (0.08±0.003) μg/mL, Quinine, IC₅₀ =
(0.21±0.01) μg/mL)^[3879]; antimalarial (antiplasmodial *in vitro*, *Plasmodium*
falciparum, W2 strain, IC₅₀ = (12.8±2.5) μmol/L, control Quinine, IC₅₀ =
(0.21±0.01) μmol/L; D6 strain, IC₅₀ = (19.5±1.2) μmol/L, Quinine, IC₅₀ =
(0.042±0.002) μmol/L)^[5420]. Source: A BI XI NI YA CI TONG *Erythrina*
abyssinica (stem cortex), GUANG GUO GAN CAO *Glycyrrhiza glabra*,
Glycyrrhiza sp. Ref: 1521, 2431, 3879, 5420.

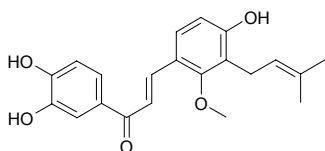


12752 Licoagrochalcone B

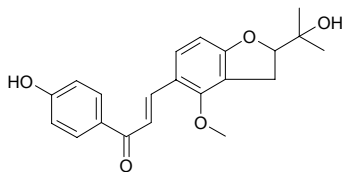
$C_{21}H_{20}O_4$ (336.39). Yellow powder. Source: GUANG GUO GAN CAO
Glycyrrhiza glabra. Ref: 761.

**12753 Licoagrochalcone C**

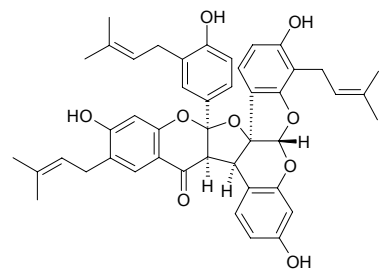
$C_{21}H_{22}O_5$ (354.41). Yellow powder. Source: GUANG GUO GAN CAO
Glycyrrhiza glabra. Ref: 761.

**12754 Licoagrochalcone D**

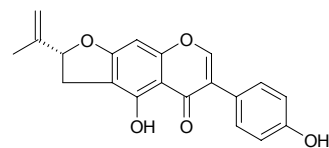
$C_{21}H_{22}O_5$ (354.41). Yellow powder, $[\alpha]_D^{24} = -8.7^\circ$ ($c = 0.23$, $CHCl_3$). Source:
GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 761.

**12755 Licoagrodin**

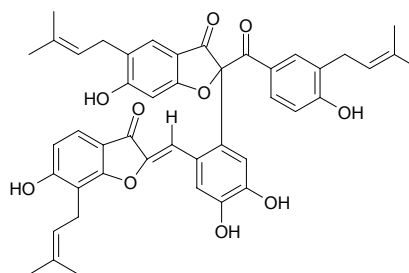
$C_{45}H_{44}O_9$ (728.85). Yellow powder, $[\alpha]_D^{24} = 0^\circ$ ($c = 1.12$, MeOH). Source:
GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 761.

**12756 Licoagroisoflavone**

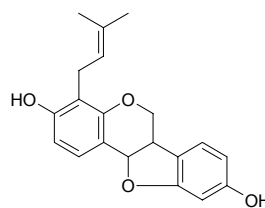
$C_{20}H_{16}O_5$ (336.35). Pale yellow powder, mp 196~198°C, $[\alpha]_D = -68.1^\circ$ ($c = 0.81$, MeOH). Source: CI GUO GAN CAO *Glycyrrhiza pallidiflora* (root),
Glycyrrhiza sp. Ref: 2431, 5200.

**12757 Licoagrone**

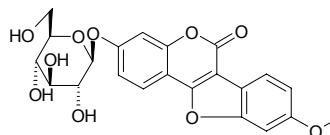
$C_{45}H_{42}O_{10}$ (742.83). Orange powder, $[\alpha]_D^{24} = \pm 0.13^\circ$ ($c = 1.01$, MeOH).
Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 1856.

**12758 Licoagropin**

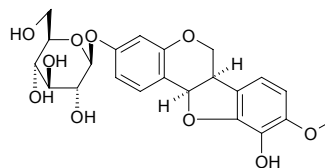
$C_{20}H_{20}O_4$ (324.38). Source: *Glycyrrhiza* sp. Ref: 2431.

**12759 Licoagroside C**

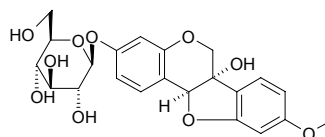
Licoagroside C $C_{22}H_{20}O_{10}$ (444.40). Colorless needles (MeOH), mp 245~247°C,
 $[\alpha]_D = -23.1^\circ$ ($c = 0.40$, MeOH). Source: CI GUO GAN CAO *Glycyrrhiza pallidiflora* (root),
Glycyrrhiza sp. Ref: 2431, 5200.

**12760 Licoagroside D**

$C_{22}H_{24}O_{10}$ (448.43). Powder, $[\alpha]_D = -117.4^\circ$ ($c = 1.09$, MeOH, 22°C). Source:
CI GUO GAN CAO *Glycyrrhiza pallidiflora*. Ref: 1954.

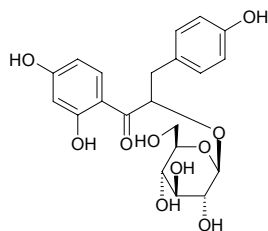
**12761 Licoagroside E**

$C_{22}H_{24}O_{10}$ (448.43). Powder, $[\alpha]_D = -176.4^\circ$ ($c = 0.66$, MeOH). Source: CI
GUO GAN CAO *Glycyrrhiza pallidiflora*. Ref: 1954.

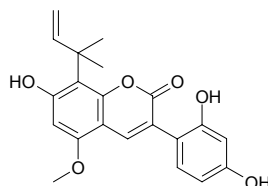


12762 Licoagroside F

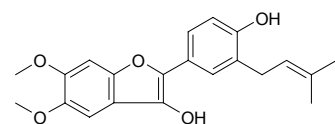
$C_{21}H_{24}O_{10}$ (436.42). Powder, $[\alpha]_D = 2.6^\circ$ ($c=0.91$, MeOH). Source: CI GUO GAN CAO *Glycyrrhiza pallidiflora*. Ref: 1954.

**12763 Licoarylcoumarin**

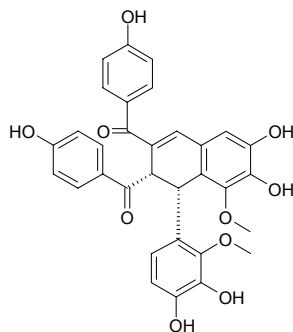
$C_{21}H_{20}O_6$ (368.39). Source: *Glycyrrhiza* sp. Ref: 2431.

**12764 Licobenzofuran**

Liconeolignan [82209-75-4] $C_{21}H_{22}O_5$ (354.41). White lamellar crystals, mp 80–81°C, 109–110°C. Pharm: Antibacterial (*Staphylococcus aureus* 20, 50, 109, 295µg/mL). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 658, 660.

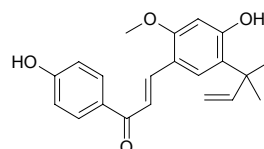
**12765 Licobichalcone**

$C_{32}H_{26}O_{10}$ (570.56). Yellow powder, $[\alpha]_D^{24} = 0^\circ$ ($c = 0.7$, MeOH). Source: GAN CAO *Glycyrrhiza uralensis* (root). Ref: 4382.

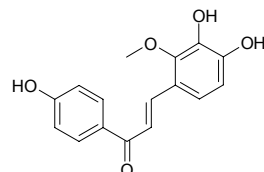
**12766 Licochalcone A**

[58749-22-7] $C_{21}H_{22}O_4$ (338.41). Yellow needles, mp 101–102°C. Pharm: Cytotoxic (HT1080 cell line, $IC_{50} = 57.0\mu\text{mol/L}$)^[4470]; anti-inflammatory (mus, 0.5mg/ear, inhibits edema on ears induced by TPA and arachidonic acid); antineoplastic (mus, *in vitro* inhibits TPA-induced ^{32}P combines with phospholipid in HeLa cells, $ID_{50} = 5.3\mu\text{g/mL}$; *in vivo* inhibits papillary epithelioma induced by DMBA and TPA); anti-HIV (20µg/mL, inhibits HIV-induced formation of giant-cell); antiallergic (inhibits synthesis of

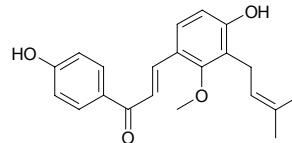
leukotriene in polymorphonuclear neutrocyte); xanthinoxidase inhibitor ($IC_{50} = 56\mu\text{mol/L}$); antibacterial (*Staphylococcus aureus*, MIC = 1.95µg/mL; *Bacillus subtilis*, MIC = 3.91µg/mL; methicillin-resistant *Staphylococcus aureus* MIC = 0.01µg/mL); antioxidant (antihemolysis induced by H_2O_2 , free radical scavenger); anticoagulant (hmn platelet, inhibits formation of COX metabolite TXB_2 induced by arachidonic acid, $IC_{50} = 3.9\mu\text{mol/L}$; 12(S)-HETE Production inhibitor ($IC_{50} = 82.3\mu\text{mol/L}$); antimalarial (*Plasmodium falciparum* strain 3D7, Dd2 *in vitro*; mouse, ip or orl, 3-6d, against *P. yoelii* plasmodial lethal infection). Source: ZHANG GUO GAN CAO *Glycyrrhiza inflata*, HUANG GAN CAO *Glycyrrhiza kansuensis*. Ref: 2, 591, 1521, 1679, 1681, 1690, 1691, 1692, 1693, 1694, 1695, 1696, 4470.

**12767 Licochalcone B**

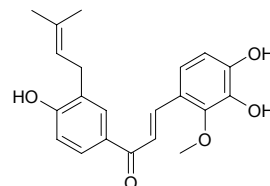
[58749-23-8] $C_{16}H_{14}O_5$ (286.29). Yellow needles, mp 195–197°C. Pharm: Antibacterial (*Staphylococcus aureus* MIC = 31.3µg/mL; *Bacillus subtilis* MIC = 31.3µg/mL); xanthinoxidase inhibitor ($IC_{50} = 30\mu\text{mol/L}$); antiallergic (hmn, inhibits synthesis of leukotriene in polymorphonuclear neutrocyte, enhances level of cAMP); platelet aggregation inhibitor; inhibits activation of leucocyte; used in treatment of arteriosclerosis, hyperlipidemia, thrombus and coronary heart disease. Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*, ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 2, 1521, 1681, 1691, 1695, 1842.

**12768 Licochalcone C**

$C_{21}H_{22}O_4$ (338.41). Pharm: Cytotoxic (HT1080 cell line, $IC_{50} = 72.8\mu\text{mol/L}$)^[4470]. Source: ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 660, 2431, 4470.

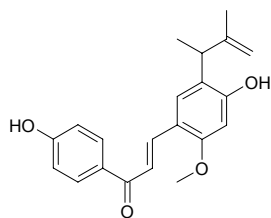
**12769 Licochalcone D**

$C_{21}H_{22}O_5$ (354.41). Source: ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 2431.

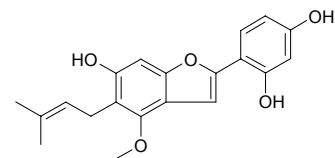


12770 Licochalcone E

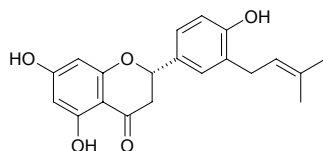
$C_{21}H_{22}O_4$ (338.41). amorphous powder, $[\alpha]_D = -10.0^\circ$ ($c = 0.2$, acetone).
Pharm: Cytotoxic (HT1080 cell line, $IC_{50} = 45.2 \mu\text{mol/L}$). **Source:** ZHANG GUO GAN CAO *Glycyrrhiza inflata* (root). **Ref:** 4470.

**12771 Licocoumarone**

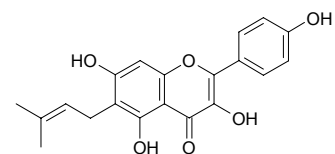
[118524-14-4] $C_{20}H_{20}O_5$ (340.38). Needles (EtOH aq.), mp 183–185°C.
Pharm: Antibacterial (*Streptococcus* sp. MIC = 12.5 $\mu\text{g/mL}$; *Staphylococcus aureus* MIC = 6.25 $\mu\text{g/mL}$; *Bacillus subtilis* MIC = 6.25 $\mu\text{g/mL}$; microzyme MIC = 25 $\mu\text{g/mL}$); antioxidant; xanthinoxidase inhibitor; monoamine oxidase inhibitor. **Source:** CU MAO GAN CAO *Glycyrrhiza aspera*, GAN CAO *Glycyrrhiza uralensis*. **Ref:** 2, 1521, 1681, 1682, 1701.

**12772 Licoflavanone**

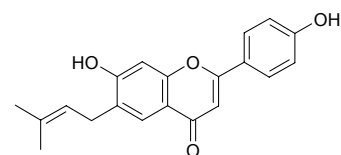
$C_{20}H_{20}O_5$ (340.38). **Source:** GUANG GUO GAN CAO *Glycyrrhiza glabra*. **Ref:** 2431.

**12773 Licoflavonal**

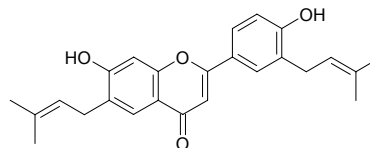
$C_{20}H_{18}O_6$ (354.36). **Source:** *Glycyrrhiza* sp. **Ref:** 2431.

**12774 Licoflavone A**

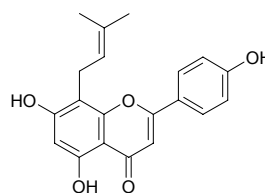
Licoflavone [61153-77-3] $C_{20}H_{18}O_4$ (322.36). **Source:** JI GAN CAO *Glycyrrhiza echinata* (cultured cell), ZHANG GUO GAN CAO *Glycyrrhiza inflata*. **Ref:** 2, 660, 1521.

**12775 Licoflavone B**

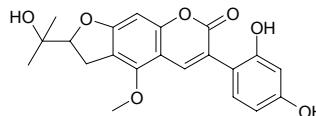
$C_{25}H_{26}O_4$ (390.48). **Source:** CU MAO GAN CAO *Glycyrrhiza aspera*. **Ref:** 2431.

**12776 Licoflavone C**

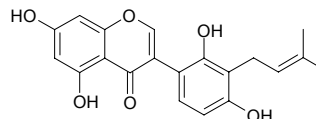
$C_{20}H_{18}O_5$ (338.36). **Source:** ZHANG GUO GAN CAO *Glycyrrhiza inflata*. **Ref:** 2431.

**12777 Licofuranocoumarin**

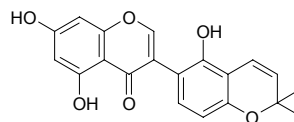
$C_{21}H_{20}O_7$ (384.39). Pale-yellow acicular crystals, mp 242°C, $[\alpha]_D = -4.2^\circ$ ($c = 1$, EtOH). **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 748.

**12778 Licoisoflavone**

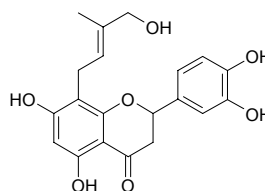
Licoisoflavone A [66056-19-7] $C_{20}H_{18}O_6$ (354.36). Pale-yellow prisms. **Pharm:** Antifungal. **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 2, 658, 1521.

**12779 Licoisoflavone B**

$C_{20}H_{16}O_6$ (352.35). **Source:** *Glycyrrhiza* spp. **Ref:** 2431.

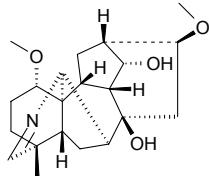
**12780 Licoleafol**

$C_{20}H_{20}O_7$ (372.38). Amorphous powder, $[\alpha]_D^{24} = -34^\circ$ ($c = 1.0$, MeOH). **Source:** GAN CAO *Glycyrrhiza uralensis* (leaf). **Ref:** 4387.

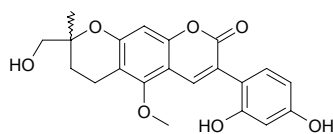


12781 Liconosine A

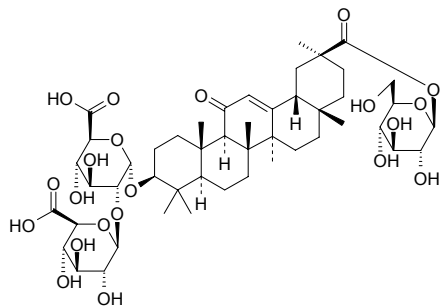
$C_{21}H_{31}NO_4$ (361.49). Source: LI JIANG WU TOU *Aconitum forrestii* [Syn. *Aconitum likiangense*]. Ref: 660.

**12782 Licopyranocoumarin**

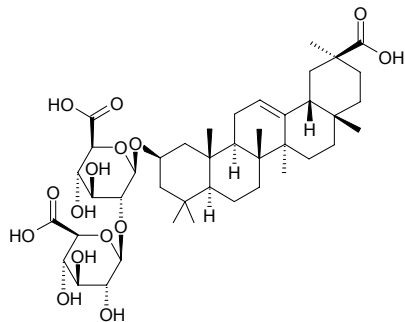
[117038-80-9] $C_{21}H_{20}O_7$ (384.39). Yellow crystals, mp 137°C, $[\alpha]_D^{25} = +14^\circ$ ($c = 1$, Me₂CO). Pharm: Anti-HIV (hmn, 20µg/mL, inhibits formation of giant-cell without cytotoxicity); monoamine oxidase inhibitor ($IC_{50} = 140\mu\text{mol/L}$). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2, 1521, 1679, 1682.

**12783 Licoricesaponin A₃**

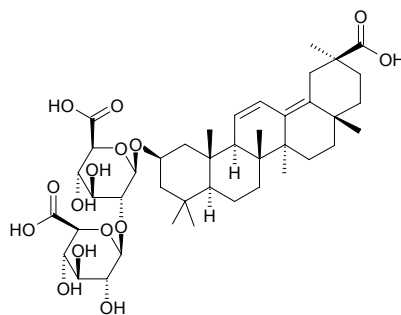
[118325-22-7] $C_{48}H_{72}O_{21}$ (985.10). Trihydrate, mp 196–199°C, $[\alpha]_D^{23} = +69^\circ$ (MeOH). Source: GAN CAO *Glycyrrhiza uralensis*, ZHANG GUO *Glycyrrhiza inflata*. Ref: 2, 1521.

**12784 Licoricesaponin B₂**

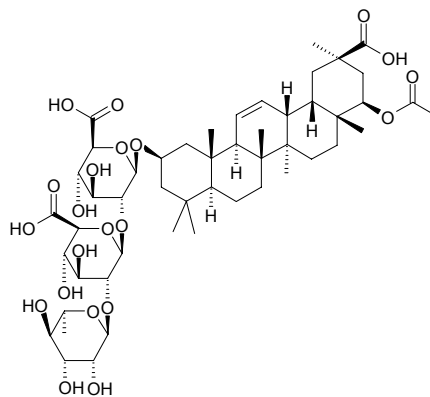
[118536-86-0] $C_{42}H_{64}O_{15}$ (808.97). Monohydrate, mp 209–210°C, $[\alpha]_D^{19} = +54^\circ$ (MeOH). Pharm: Antihepatotoxin (rat, *in vivo* and *in vitro*, liver damage caused by CCl₄). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2, 1521, 1781, 1782.

**12785 Licoricesaponin C₂**

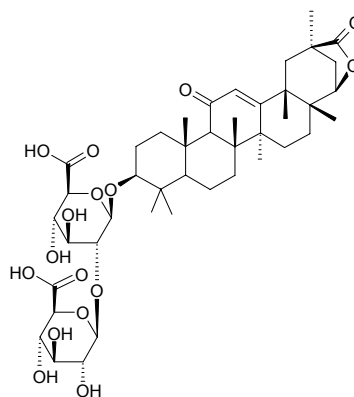
[120711-08-2] $C_{42}H_{62}O_{15}$ (806.95). Trihydrate, mp 249–251°C, $[\alpha]_D^{21} = -120^\circ$ (MeOH). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2, 1521.

**12786 Licoricesaponin D₃**

[118536-87-1] $C_{50}H_{76}O_{21}$ (1013.15). Powder, $[\alpha]_D^{20} = -5^\circ$ (MeOH). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2, 1521.

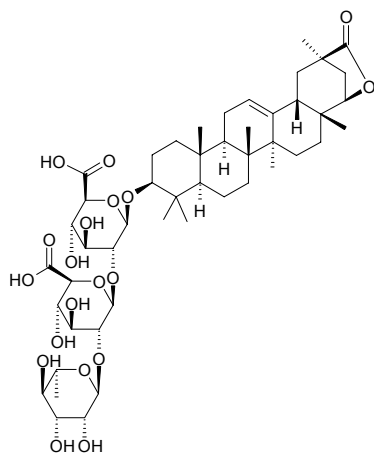
**12787 Licoricesaponin E₂**

$C_{42}H_{60}O_{16}$ (820.94). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 660.

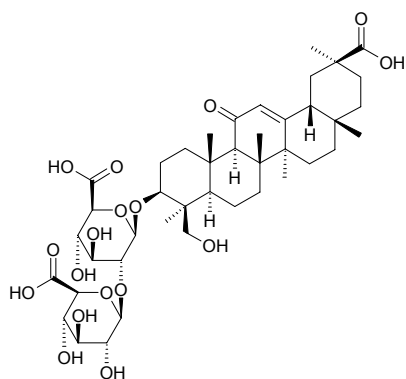


12788 Licoricesaponin F₃

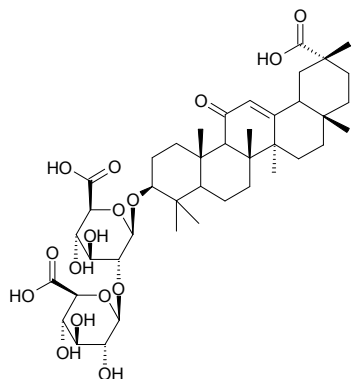
C₄₈H₇₂O₁₉ (953.10). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2.

**12789 Licoricesaponin G₂**

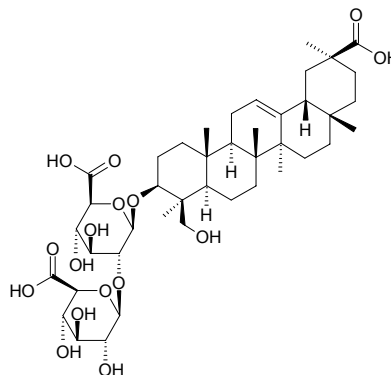
C₄₂H₆₂O₁₇ (838.95). mp 229–230°C, $[\alpha]_D^{20} = +34^\circ$ (MeOH). Source: GAN CAO *Glycyrrhiza uralensis*, ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 2, 1521.

**12790 Licoricesaponin H₂**

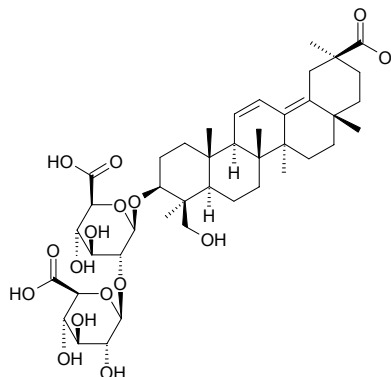
C₄₂H₆₂O₁₆ (822.95). mp 209–210°C, $[\alpha]_D^{25} = +31^\circ$ (MeOH). Source: GAN CAO *Glycyrrhiza uralensis*, ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 2, 1521.

**12791 Licoricesaponin J₂**

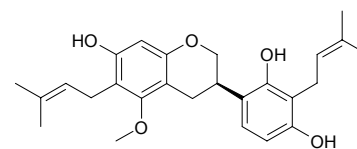
C₄₂H₆₄O₁₆ (824.97). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2.

**12792 Licoricesaponin K₂**

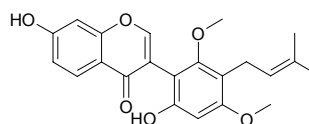
C₄₂H₆₂O₁₆ (822.95). mp 207–209°C, $[\alpha]_D^{25} = +28^\circ$ (MeOH). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2, 1521.

**12793 Licoricidin**

[30508-27-1] C₂₆H₃₂O₅ (424.54). Crystals (CHCl₃–Et₂O), mp 154–156°C, $[\alpha]_D^{22.5} = +20^\circ$ (*c* = 1, MeOH). Source: GAN CAO *Glycyrrhiza uralensis*, GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 2, 1521.

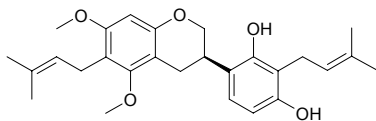
**12794 Licoricone**

C₂₂H₂₂O₆ (382.42). mp 250–251°C. Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2, 1521.

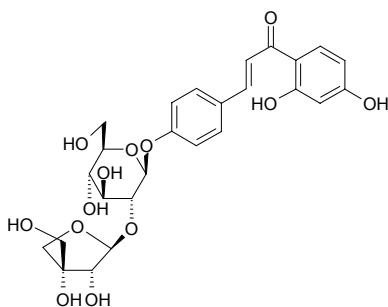


12795 Licorisoflavan A

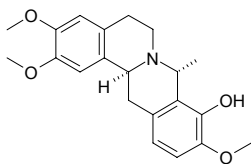
5-O-Methyl licoricidin $C_{27}H_{34}O_5$ (438.57). Source: CU MAO GAN CAO *Glycyrrhiza aspera*, GAN CAO *Glycyrrhiza uralensis*. Ref: 2, 660.

**12796 Licuroside**

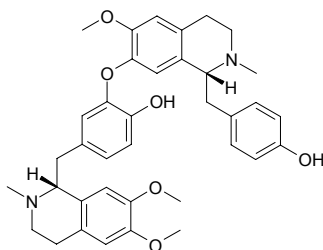
$C_{26}H_{30}O_{13}$ (550.52). Source: *Glycyrrhiza* sp. Ref: 2431.

**12797 Lienkonine**

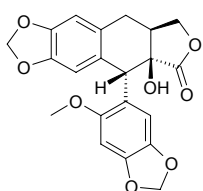
$C_{21}H_{25}NO_4$ (355.44). Source: HUANG ZI JIN *Corydalis ochotensis*. Ref: 660.

**12798 Liensinine**

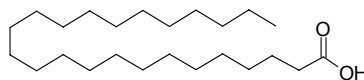
[2586-96-1] $C_{37}H_{42}N_2O_6$ (610.76). mp 95–99°C, $[\alpha]_D^{31} = +15.85^\circ$ ($c = 0.883$, Me₂CO). Pharm: Antihypertensive; antiarrhythmic (gpg, 3mg/kg); LD₅₀ = (mus, iv) = (34.9±5.5)mg/kg. Source: LIAN ZI *Nelumbo nucifera*, LIAN ZI XIN *Nelumbo nucifera* (dried plumule and radicle in seed: mean content of 7 origins = 0.793%^[5508]). Ref: 6, 658, 1521, 5501, 5508.

**12799 Lignan from *Justicia heterocarpa***

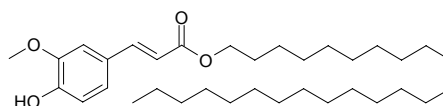
$C_{21}H_{18}O_8$ (398.37). Colorless crystals; mp 215 °C, $[\alpha]_D^{22} = +75.0^\circ$ ($c = 0.33$, CHCl₃). Source: *Justicia heterocarpa*. Ref: 4282.

**12800 Lignoceric acid**

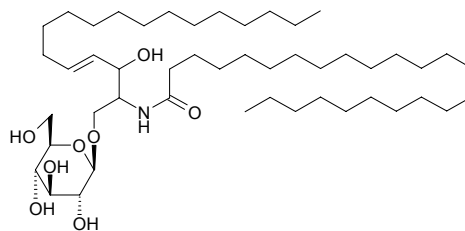
n-Tetracosanoic acid [557-59-5] $C_{24}H_{48}O_2$ (368.65). Crystals (AcOH), mp 87.5–88°C. Source: CHAI HU *Bupleurum chinense*, DANG GUI *Angelica sinensis*, FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], GUA LOU *Trichosanthes kirilowii*, HAI HONG DOU *Adenantha pavonina*, LI JIANG QIAN HU *Peucedanum govanianum* var. *bicolor*, MAO ZHU MA QIAN *Strychnos nitida*, QIANG HUO *Notopterygium incisum*, YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.040%dw)^[4655]. Ref: 2, 557, 576, 658, 1521, 4655.

**12801 Lignoceryl ferulate**

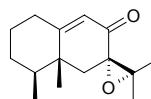
$C_{34}H_{58}O_4$ (530.84). Source: TAI WAN FU RONG *Hibiscus taiwanensis*. Ref: 2529.

**12802 *N*-Lignoceryl sphingosyl glucose**

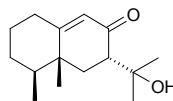
$C_{48}H_{93}NO_8$ (812.28). Pharm: Reagent used in biochemistry research. Source: JING MI *Oryza sativa*. Ref: 6, 658.

**12803 Ligudicin A**

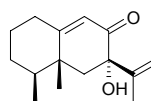
$C_{15}H_{22}O_2$ (234.34). Colorless oil. Source: WANG MAI TOU WU *Ligularia dictyoneura* [Syn. *Senecio dictyoneurus*]. Ref: 2478.

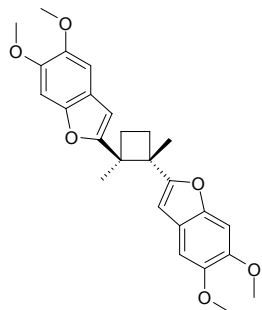
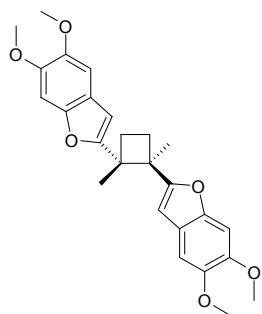
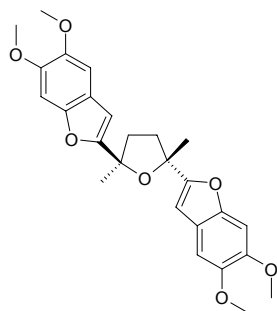
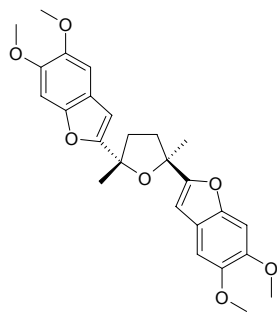
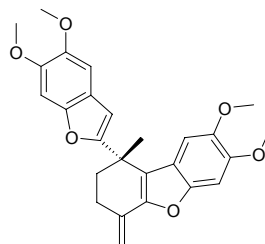
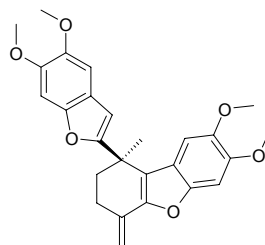
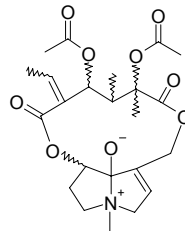
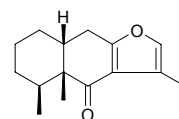
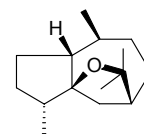
**12804 Ligudicin C**

$C_{15}H_{24}O_2$ (236.36). Colorless oleaginous liquid. Source: WANG MAI TOU WU *Ligularia dictyoneura* [Syn. *Senecio dictyoneurus*]. Ref: 2478.

**12805 Ligudicin D**

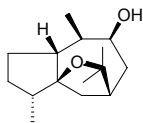
$C_{15}H_{22}O_2$ (234.34). Colorless oleaginous liquid. Source: WANG MAI TOU WU *Ligularia dictyoneura* [Syn. *Senecio dictyoneurus*]. Ref: 2478.



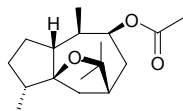
12806 (+)-(10S,10'S)-Ligulacephalin AC₂₆H₂₈O₆ (436.51). Amorphous powder, $[\alpha]_D^{25} = +146.1^\circ$ ($c = 0.05$, MeOH).Source: ZHAI TOU TUO WU *Ligularia stenocephala* (root). Ref: 4536.**12807 (-)-(10R,10'R)-Ligulacephalin A**C₂₆H₂₈O₆ (436.51). Amorphous powder, $[\alpha]_D^{26} = -151.2^\circ$ ($c = 0.05$, MeOH).Source: ZHAI TOU TUO WU *Ligularia stenocephala* (root). Ref: 4536.**12808 (+)-(10R,10'R)-Ligulacephalin B**C₂₆H₂₈O₇ (452.51). Amorphous powder, $[\alpha]_D^{27} = +65.5^\circ$ ($c = 0.06$, MeOH).Source: ZHAI TOU TUO WU *Ligularia stenocephala* (root). Ref: 4536.**12809 (-)-(10S,10'S)-Ligulacephalin B**C₂₆H₂₈O₇ (452.51). Amorphous powder, $[\alpha]_D^{28} = -67.6^\circ$ ($c = 0.05$, MeOH).Source: ZHAI TOU TUO WU *Ligularia stenocephala* (root). Ref: 4536.**12810 (+)-(10S)-Ligulacephalin C**C₂₆H₂₆O₆ (434.49). Amorphous powder, $[\alpha]_D^{22} = +89.3^\circ$ ($c = 0.06$, MeOH).Source: ZHAI TOU TUO WU *Ligularia stenocephala* (root). Ref: 4536.**12811 (-)-(10S)-Ligulacephalin C**C₂₆H₂₆O₆ (434.49). Amorphous powder, $[\alpha]_D^{24} = -80.8^\circ$ ($c = 0.05$, MeOH).Source: ZHAI TOU TUO WU *Ligularia stenocephala* (root). Ref: 4536.**12812 Ligularine**[34429-54-4] C₂₃H₃₁NO₉ (465.50). Noncrystal, $[\alpha]_D^{24} = -34^\circ$ ($c = 0.82$,CHCl₃). Source: CHI YE TUO WU *Ligularia dentata*, HU LU QI *Ligularia fischeri*, YA ZHI TUO WU *Ligularia elegans*. Ref: 6, 1521.**12813 Ligularone**[4234-94-0] C₁₅H₂₀O₂ (232.33). mp 64–65°C, $[\alpha]_D^{27} = -57.7^\circ$ ($c = 1$, CHCl₃).Source: FENG DOU CAI *Petasites japonicus*, HU LU QI *Ligularia fischeri*, XI BO LI YA TOU WU *Ligularia sibirica*. Ref: 6, 1521.**12814 Liguloxide**[21764-22-7] C₁₅H₂₆O (222.37). Crystals, mp 36°C, $[\alpha]_D^{23} = -58.2^\circ$ ($c = 1$,CHCl₃). Source: HU LU QI *Ligularia fischeri*. Ref: 6, 1521.

12815 Liguloxidol

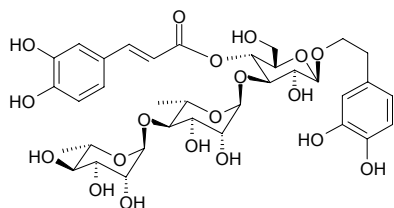
[21764-23-8] C₁₅H₂₆O₂ (238.37). Oil, $[\alpha]_D^{22} = -36.8^\circ$ ($c = 1$, CHCl₃). Source: HU LU QI *Ligularia fischeri*. Ref: 6, 1521.

**12816 Liguloxidol acetate**

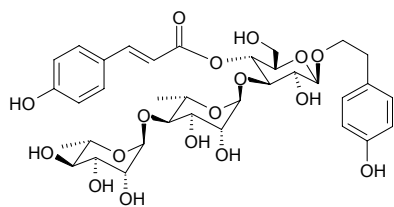
[18680-79-0] C₁₇H₂₈O₃ (280.41). mp 85°C. Source: HU LU QI *Ligularia fischeri*. Ref: 6.

**12817 Ligupurpuroside A**

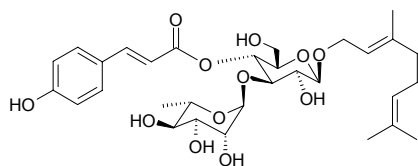
[147396-01-8] C₃₅H₄₆O₁₉ (770.75). Pharm: Antioxidant (antihemolysis, *in vitro*, AAPH-induced hemolysis of RBC, IC₅₀ = 26.3 μmol/L; control Trolox, IC₅₀ = 101 μmol/L). Source: CU ZHUANG NV ZHEN *Ligustrum robustum* (leaf: yield = 0.124%dw). Ref: 4698.

**12818 Ligupurpuroside B**

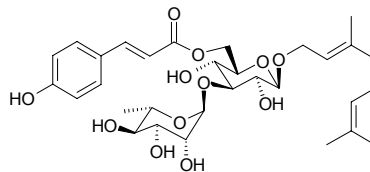
C₃₅H₄₆O₁₇ (738.75). Pharm: Antioxidant (antihemolysis, *in vitro*, AAPH-induced hemolysis of RBC, IC₅₀ = 80.4 μmol/L; control Trolox, IC₅₀ = 101 μmol/L). Source: CU ZHUANG NV ZHEN *Ligustrum robustum* (leaf: yield = 0.019%dw). Ref: 4698.

**12819 Ligurobustoside C**

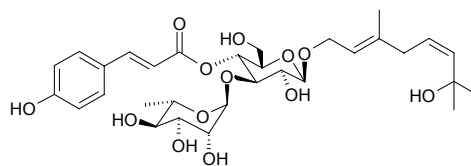
C₃₁H₄₄O₁₂ (608.69). Pharm: Antioxidant inactive (antihemolysis inactive, *in vitro*, AAPH-induced hemolysis of RBC; control Trolox, IC₅₀ = 101 μmol/L). Source: CU ZHUANG NV ZHEN *Ligustrum robustum* (leaf: yield = 0.594%dw). Ref: 4698.

**12820 Ligurobustoside E**

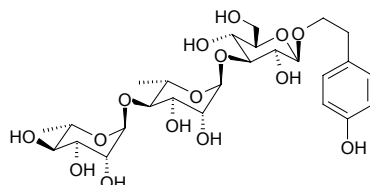
C₃₁H₄₄O₁₂ (608.69). Pharm: Antioxidant inactive (antihemolysis inactive, *in vitro*, AAPH-induced hemolysis of RBC; control Trolox, IC₅₀ = 101 μmol/L). Source: CU ZHUANG NV ZHEN *Ligustrum robustum* (leaf: yield = 0.013%dw). Ref: 4698.

**12821 Ligurobustoside I**

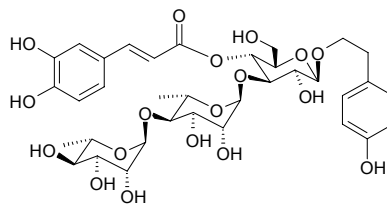
C₃₁H₄₄O₁₃ (624.69). Pharm: Antioxidant (antihemolysis, *in vitro*, AAPH-induced hemolysis of RBC, IC₅₀ = 340.1 μmol/L; control Trolox, IC₅₀ = 101 μmol/L). Source: CU ZHUANG NV ZHEN *Ligustrum robustum* (leaf: yield = 0.032%dw). Ref: 4698.

**12822 Ligurobustoside M**

C₂₆H₄₀O₁₅ (592.6). Amorphous powder, $[\alpha]_D^{24} = -67.4^\circ$ ($c = 0.03$, MeOH). Pharm: Antioxidant (antihemolysis, *in vitro*, AAPH-induced hemolysis of RBC, IC₅₀ = 134.1 μmol/L; control Trolox, IC₅₀ = 101 μmol/L). Source: CU ZHUANG NV ZHEN *Ligustrum robustum* (leaf: yield = 0.020%dw). Ref: 4698.

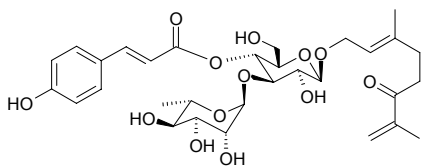
**12823 Ligurobustoside N**

C₃₅H₄₆O₁₈ (754.75). Amorphous powder, $[\alpha]_D^{24} = -109^\circ$ ($c = 0.06$, MeOH). Pharm: Antioxidant (antihemolysis, *in vitro*, AAPH-induced hemolysis of RBC, IC₅₀ = 21.8 μmol/L; control Trolox, IC₅₀ = 101 μmol/L). Source: CU ZHUANG NV ZHEN *Ligustrum robustum* (leaf: yield = 0.260%dw). Ref: 4698.

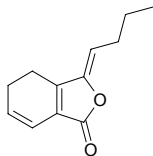


12824 Ligurobustoside O

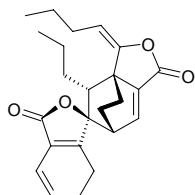
$C_{31}H_{42}O_{13}$ (622.67). Amorphous powder, $[\alpha]_D^{24} = -77.3^\circ$ ($c = 0.05$, MeOH). **Pharm:** Antioxidant inactive (antihemolysis inactive, *in vitro*, AAPH-induced hemolysis of RBC; control Trolox, $IC_{50} = 101 \mu\text{mol/L}$). **Source:** CU ZHUANG NV ZHEN *Ligustrum robustum* (leaf: yield = 0.028%dw). **Ref:** 4698.

**12825 Ligustilide**

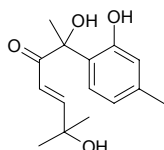
[4431-01-0] $C_{12}H_{14}O_2$ (190.24). **Pharm:** Anticholinergic; the strongest active component in Chinese Angelica, DANG GUI, *Angelica sinensis*; uterine relaxant (mus, caused by $PGF_{2\alpha}$). **Source:** CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*] (root and rhizome: content = 1.233%^[5508]), DANG GUI *Angelica sinensis* (root: content = 0.5%)^[5501], DONG DANG GUI *Angelica acutiloba* [Syn. *Ligusticum acutilobum*], DUAN PIAN GAO BEN *Ligusticum brachylobum* (root and rhizome: content = 0.05%)^[5508], GAO BEN *Ligusticum sinense* (root and rhizome: content = 0.04%)^[5508], LIAO GAO BEN *Ligusticum jeholense* (root and rhizome: content = 0.87%^[5508]), OU DANG GUI *Levisticum officinale*, YAO YONG SHE CHUANG *Cnidium officinale* [Syn. *Ligusticum officinale*] (the highest content found), XIN JIANG GAO BEN *Conioselinum vaginatum* (root and rhizome: content = 0.48%^[5508]). **Ref:** 2, 343, 601, 658, 5501, 5508.

**12826 Ligustilide dimer**

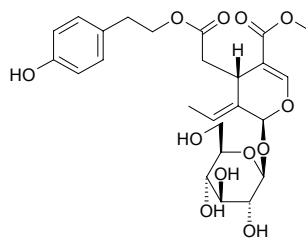
$C_{24}H_{28}O_4$ (380.49). **Source:** CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*] (root and rhizome: content = 0.15%^[5508]), DANG GUI *Angelica sinensis*, LIAO GAO BEN *Ligusticum jeholense* (root and rhizome: content = 0.15%^[5508]), OU DANG GUI *Levisticum officinale*, XIN JIANG GAO BEN *Conioselinum vaginatum* (root and rhizome: content = 0.03%^[5508]). **Ref:** 660, 5508.

**12827 Ligustilone**

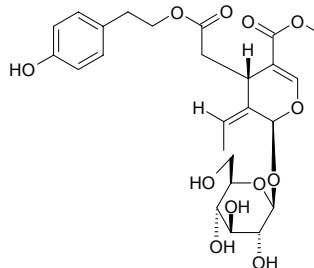
$C_{15}H_{20}O_4$ (264.32). **Pharm:** Immunosuppressant. **Source:** GAO BEN *Ligusticum sinense* (root and rhizome: content = 0.166%^[5508]). **Ref:** 5501, 5508.

**12828 (8E)-Ligustroside**

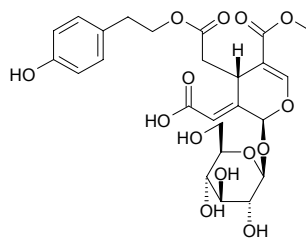
$C_{25}H_{32}O_{12}$ (524.53). **Pharm:** Antiviral (Hep2 cells, Para-3, $IC_{50} = 15.6 \mu\text{g/mL}$, $TI = 24.0$; MDCK cells, Flu-A, inactive; Vero cells, HSV-1, inactive)^[4141], anti-hemolysis inactive (rat, red blood cell *in vitro*, AAPH-induced, $IC_{50} > 200 \mu\text{mol/L}$, control Trolox, $IC_{50} = 55.0 \mu\text{mol/L}$)^[4141]. **Source:** NV ZHEN ZI *Ligustrum lucidum*. **Ref:** 660, 3545, 4141.

**12829 (8Z)-Ligustroside**

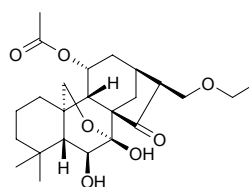
$C_{25}H_{32}O_{12}$ (524.53). Amorphous powder, $[\alpha]_D^{26} = -81.3^\circ$ ($c = 0.2$, MeOH). **Source:** BAO MA ZI *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*] (leaf). **Ref:** 4175.

**12830 Ligustrosidic acid**

$C_{25}H_{30}O_{14}$ (554.51). **Source:** NV ZHEN ZI *Ligustrum lucidum*. **Ref:** 660.

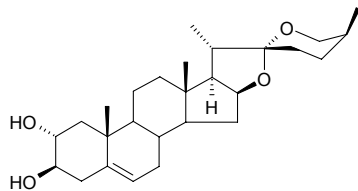
**12831 Lihsienin A**

$C_{24}H_{36}O_7$ (436.55). Amorphous powder, $[\alpha]_D = -76.9^\circ$ ($c = 0.09$, MeOH). **Source:** LI XIAN XIANG CHA CAI *Isodon lihsienensis*. **Ref:** 4067.

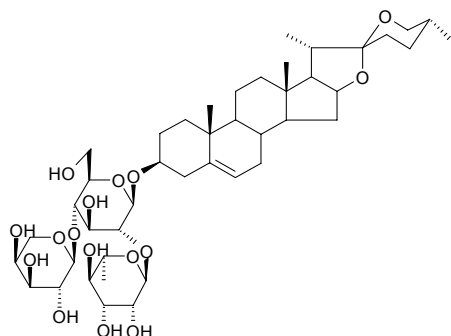


12832 Lilagenin

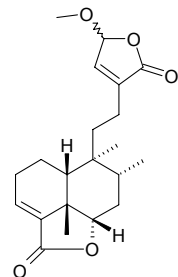
[469-99-8] C₂₇H₄₂O₄ (430.63). Source: HU LU BA *Trigonella foenum-graecum*. Ref: 2458.

**12833 Lililancifolioside A**

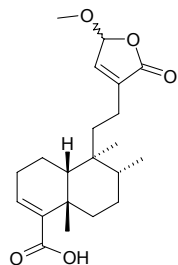
C₄₄H₇₀O₁₆ (855.04). White powder. Source: JUAN DAN *Lilium tigrinum* [Syn. *Lilium lancifolium*]. Ref: 2243.

**12834 Limbatolide A**

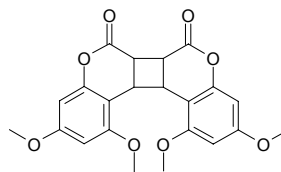
C₂₁H₂₈O₅ (360.45). Gummy solid, $[\alpha]_D^{23} = -85.79^\circ$ ($c = 0.25$, CHCl₃). Pharm: AChE inhibitor (*in vitro*, IC₅₀ = (38.5±0.2)μmol/L, positive control Galanthamine, IC₅₀ = (0.5±0.1)μmol/L); BChE inhibitor (*in vitro*, IC₅₀ = (22.3±0.5)μmol/L, positive control Galanthamine, IC₅₀ = (8.5±0.1)μmol/L). Source: YOU YAN AO TUO SI TE CAO *Otostegia limbata* (root). Ref: 4453.

**12835 Limbatolide B**

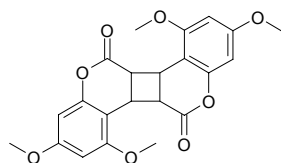
C₂₁H₃₀O₅ (362.47). Gummy solid, $[\alpha]_D^{23} = -32.80^\circ$ ($c = 0.16$, CHCl₃). Pharm: AChE inhibitor (*in vitro*, IC₅₀ = (47.2±0.3)μmol/L, positive control Galanthamine, IC₅₀ = (0.5±0.1)μmol/L); BChE inhibitor (*in vitro*, IC₅₀ = (17.5±0.6)μmol/L, positive control Galanthamine, IC₅₀ = (8.5±0.1)μmol/L). Source: YOU YAN AO TUO SI TE CAO *Otostegia limbata* (root). Ref: 4453.

**12836 (cis-head-to-head)-Limettin dimer**

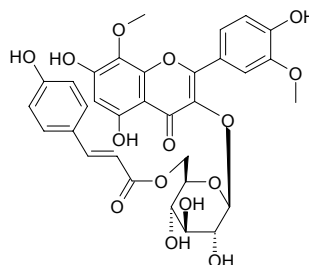
C₂₂H₂₀O₈ (412.40). Source: FO SHOU *Citrus medica* var. *sarcodactylis*. Ref: 660.

**12837 (cis-head-to-tail)-Limettin dimer**

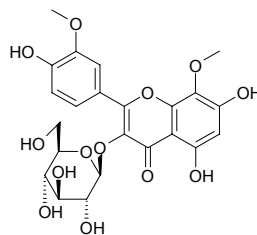
C₂₂H₂₀O₈ (412.40). Source: FO SHOU *Citrus medica* var. *sarcodactylis*. Ref: 660.

**12838 Limocitrin-3-O-(6''-O-p-coumaryl)-β-D-glucopyranoside**

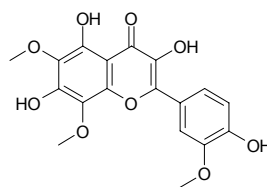
C₃₂H₃₀O₁₅ (654.59). Source: DONG NAN JING TIAN *Sedum alfredii* [Syn. *Sedum formosanum*]. Ref: 660.

**12839 Limocitrin-β-D-glucoside**

[38836-51-0] C₂₃H₂₄O₁₃ (508.44). Crystals (H₂O), mp 150°C. Pharm: Antihypertensive. Source: NING MENG *Citrus limon*, TIAN CHENG *Citrus sinensis*. Ref: 6, 1521.

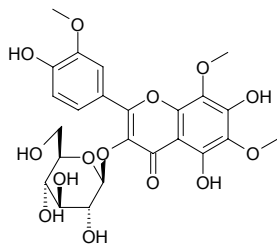
**12840 Limocitrol**

6-Hydroxy-limocitrin C₁₈H₁₆O₉ (376.32). Source: *Citrus* spp. Ref: 660.

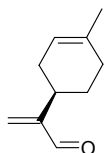


12841 Limocitrol- β -D-glucoside

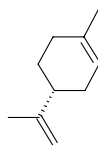
[77133-42-7] C₂₄H₂₆O₁₄ (538.47). mp 163°C, 203~204°C. Source: NING MENG *Citrus limon*. Ref: 6, 1521.

**12842 Limonene-10-al**

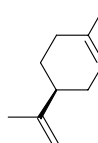
C₁₀H₁₄O (150.22). Colorless oil, $[\alpha]_D^{25} = +88^\circ$ ($c = 0.03$, CHCl₃). Pharm: Antitrypanosomal (epimastigotes of *Trypanosoma cruzi*, MLC = 3.1 μ mol/L, control Gentian violet, MLC = 6.2 μ mol/L). Source: YI LANG QING LAN *Dracocephalum kotschyi*. Ref: 2579.

**12843 D-Limonene**

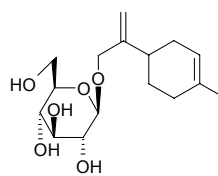
(R)-(+)-Limonene [5989-27-5] C₁₀H₁₆ (136.24). bp 178°C. Pharm: Antibacterial (*Diplococcus pneumoniae*, *Diplococcus catarrhal*, *Staphylococcus aureus* and α -Streptococcus); antitussive (dispels phlegm); irritant (to skin); sedative; antineoplastic (mus, skin cancer, lung cancer). Source: BAI PI SONG *Pinus bungeana*, BO HE *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], CHAI HU *Bupleurum chinense*, DA YE XIANG RU *Mosla dianthera*, DONG LING CAO *Rabdosia rubescens*, FENG XIANG SHU *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], GAN JIANG *Zingiber officinale*, GANG SONG *Baeckea frutescens*, GE LU ZI *Carum carvi*, HAI SONG ZI *Pinus koraiensis*, HOU PO *Magnolia officinalis*, HU SUI ZI *Coriandrum sativum*, HUA DONG LAN CI TOU *Echinops grijsii*, HUANG HUA HAO *Artemisia annua*, HUI HUI SU GENG *Perilla frutescens* var. *crispa*, HUI XIANG *Foeniculum vulgare*, HUO XIANG *Agastache rugosus*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], JU PI *Citrus reticulata*, JU YUAN *Citrus medica*, KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], KUO YE XIE CAO *Valeriana officinalis* var. *latifolia*, LIAN QIAO *Forsythia suspensa*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*, LU DOU LE HUA *Pandanus tectorius*, MU XU *Medicago sativa*, NAN HE SHI *Daucus carota*, OU ZHOU LENG SHAN *Abies alba*, QIANG HUO *Notopterygium incisum*, RU XIANG *Boswellia carterii*, SHENG JIANG *Zingiber officinale*, SHI LUO ZI *Anethum graveolens*, WU WEI ZI *Schisandra chinensis*, WU ZHU YU *Evodia rutaecarpa*, XI XIN *Asarum sieboldii*, XIAO YE PI PA *Rhododendron anthopogonoides*, YA ER QIN *Cryptotaenia japonica*, YIN CHEN HAO *Artemisia capillaris*, ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*], *Mentha* sp., occurs in many plants. Ref: 2, 11, 658, 660, 1582, 5501.

**12844 L-Limonene**

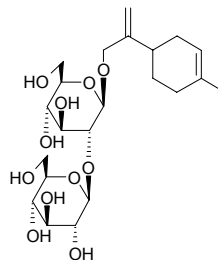
(S)-(-)-Limonene [5989-54-8] C₁₀H₁₆ (136.24). Source: ZI SU YE *Perilla frutescens* var. *arguta*. Ref: 2.

**12845 Limonene-10-ol 10-O- β -D-glucopyranoside**

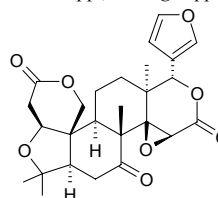
C₁₆H₂₆O₆ (314.38). Colorless gum, $[\alpha]_D^{24} = -7.6^\circ$ ($c = 0.26$, MeOH). Pharm: Antitrypanosomal inactive (epimastigotes of *Trypanosoma cruzi*, 400 μ mol/L). Source: YI LANG QING LAN *Dracocephalum kotschyi*. Ref: 2579.

**12846 Limonene-10-ol 10-O- β -D-glucopyranosyl-(1 \rightarrow 2)- β -D-glucopyranoside**

C₂₂H₃₆O₁₁ (476.53). Colorless powder, $[\alpha]_D^{24} = -8.3^\circ$ ($c = 0.03$, MeOH). Pharm: Antitrypanosomal inactive (epimastigotes of *Trypanosoma cruzi*, 400 μ mol/L). Source: YI LANG QING LAN *Dracocephalum kotschyi*. Ref: 2579.

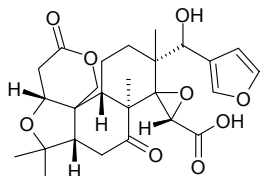
**12847 Limonin**

[1180-71-8] C₂₆H₃₀O₈ (470.52). White needles (EtOAc), mp 272~274°C. Pharm: Tyrosinase inhibitor (333 μ mol/L, InRt = 3.6%; control Kojic acid, IC₅₀ = 125 μ mol/L)^[4722]; Anti-HIV-1 (40 μ mol/L, InRt = (61 \pm 9)%, control Indinavir, 100nmol/L, InRt = 100%)^[5462]. Source: BEI CANG ZHU *Atractylodes chinensis*, SU DA QI GAN JU *Citrus sudachii* (seed), TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00039%dw)^[4722], YIN DU LIAN *Azadiractia indica*, CHENG ZI *Citrus junos*, CHENG ZI HE *Citrus junos*, HUANG LIAN *Coptis chinensis*, JU PI *Citrus reticulata*, ZHI SHI *Citrus aurantium*, *Citrus* spp., *Dictamnus* spp., *Evodia* spp., *Luvunga* spp. Ref: 660, 1521, 2510, 3532, 4722, 5462.

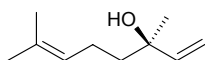


12848 Limonoic acid A ring lactone

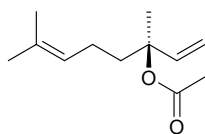
$C_{26}H_{32}O_9$ (488.54). Source: TIAN CHENG *Citrus sinensis*. Ref: 6.

**12849 Linalool**

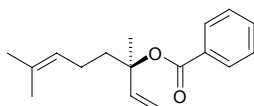
[78-70-6] $C_{10}H_{18}O$ (154.25). Pharm: Antibacterial; antifungal; antiviral (chicken ES4 virus, 1mg/day, orl, *in vivo*, biotic prolonged rate = (50~80)%); antiseptic; sedative (mus, orl, inhibits spontaneous movement). Source: CHAI HU *Bupleurum chinense*, HOU PO *Magnolia officinalis*, HUANG HUA HAO *Artemisia annua*, HUI HUI SU GENG *Perilla frutescens* var. *crispa*, HUO XIANG *Agastache rugosus*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], JIN YIN HUA *Lonicera japonica*, JU PI *Citrus reticulata*, LIAN QIAO *Forsythia suspensa*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], MU XU *Medicago sativa*, NAN HE SHI *Daucus carota*, SHAN XING REN *Prunus armeniaca* var. *ansu*, SHENG JIANG *Zingiber officinale*, WU WEI ZI *Schisandra chinensis*, XING REN *Prunus armeniaca*, YU XING CAO *Houttuynia cordata*, ZI SU YE *Perilla frutescens* var. *arguta*. Ref: 2, 638, 658, 660.

**12850 Linalyl acetate**

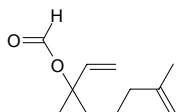
Linalool acetate [115-95-7] $C_{12}H_{20}O_2$ (196.29). bp 115~116°C/25mmHg. Pharm: Antineoplastic (mouse S₁₈₀, 1mg/kg ip, InRt = 45.3%). Source: HOU PO *Magnolia officinalis*, HU TAO REN *Juglans regia*, HUANG HUA HAO *Artemisia annua*, JU YUAN *Citrus medica*, NING MENG *Citrus limon*, SHE XIANG CAO *Thymus vulgaris*, YE HUA JIAO YE *Zanthoxylum simulans*. Ref: 2, 6, 658, 660.

**12851 Linalyl benzoate**

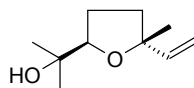
[126-64-7] $C_{17}H_{22}O_2$ (258.36). Source: MO LI HUA *Jasminum sambac*. Ref: 6.

**12852 Linalylformate**

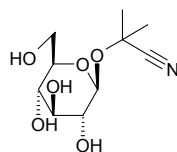
$C_{11}H_{18}O_2$ (182.26). Source: MEI GUI HUA *Rosa rugosa*. Ref: 660.

**12853 Linalyl oxide**

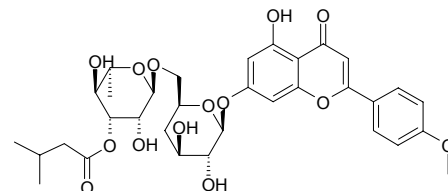
Epoxylinallol [60047-17-8] $C_{10}H_{18}O_2$ (170.25). Source: GUI HUA *Osmanthus fragrans*, JIN YIN HUA *Lonicera japonica*, MA HUA *Cannabis sativa*, PI PA YE *Eriobotrya japonica*, XIANG YE *Pelargonium graveolens*. Ref: 6, 660.

**12854 Linamarin**

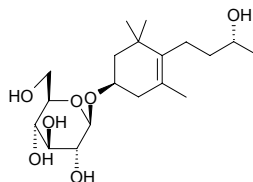
[554-35-8] $C_{10}H_{17}NO_6$ (247.25). mp 142~143°C. Pharm: Toxin (main active component in Cassava). Source: MU SHU DI SHANG BU FEN *Manihot esculenta*, YA MA *Linum usitatissimum*, YA MA ZI *Linum usitatissimum*, Ref: 6, 658, 5509.

**12855 Linarin isovalerate**

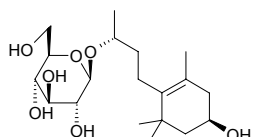
$C_{33}H_{40}O_{14}$ (660.68). mp 138~140°C. Source: ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*]. Ref: 6.

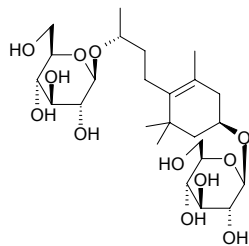
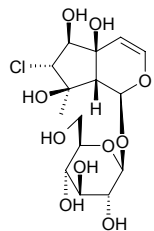
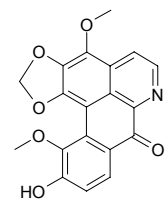
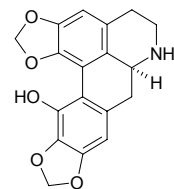
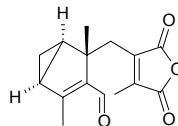
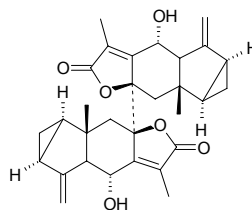
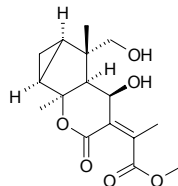
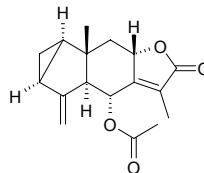
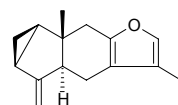
**12856 Linarionoside A**

[160169-57-3] $C_{19}H_{34}O_7$ (374.48). White powder, mp 108~110°C. Source: HAI BIN LIU CHUAN YU *Linaria japonica*, XI YANG SHEN *Panax quinquefolium*. Ref: 445, 652.

**12857 Linarionoside B**

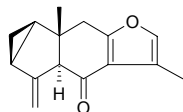
[160169-58-4] $C_{19}H_{34}O_7$ (374.48). Source: HAI BIN LIU CHUAN YU *Linaria japonica*. Ref: 652.



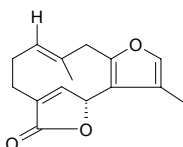
12858 Linarionoside C[160098-75-9] C₂₅H₄₄O₁₂ (536.62). Source: HAI BIN LIU CHUAN YU*Linaria japonica*. Ref: 652.**12859 Linarioside**C₁₅H₂₃ClO₁₀ (398.80). Source: HAI BIN LIU CHUAN YU *Linaria japonica* (the compound was isolated from the plant by I.Kitagawa et al. in 1972). Ref: 5505.**12860 Lindechunine A**C₁₉H₁₃NO₆ (351.32). Yellow powder, [α]_D²⁶ = 0° (c = 0.1, MeOH). Pharm: Anti-HIV-1 (HIV-1 IN inhibitor, IC₅₀ = 21.1 μmol/L, positive control Suramin, IC₅₀ = 2.4 μmol/L). Source: DING HU DIAO ZHANG *Lindera chunii* (root). Ref: 4224.**12861 Lindechunine B**C₁₈H₁₅NO₅ (325.32). Grayish amorphous powder, [α]_D^{26.5} = +43.0° (c = 0.01, MeOH). Pharm: Anti-HIV-1 inactive (HIV-1 IN inhibitor, IC₅₀ > 100 μmol/L, positive control Suramin, IC₅₀ = 2.4 μmol/L). Source: DING HU DIAO ZHANG *Lindera chunii* (root). Ref: 4224.**12862 Lindenanolide E**C₁₅H₁₆O₄ (260.29). Colorless needles (hexane–acetone), mp151–153°C, [α]_D²⁶ = –70.1° (c = 1.01, CHCl₃). Pharm: Anti-HIV-1 inactive (HIV-1 IN inhibitor, IC₅₀ > 100 μmol/L, positive control Suramin, IC₅₀ = 2.4 μmol/L). Source: DING HU DIAO ZHANG *Lindera chunii* (root). Ref: 4224.**12863 Lindenanolide F**C₃₀H₃₄O₆ (490.60). Amorphous powder, [α]_D²⁶ = –303.5° (c = 0.21, CHCl₃). Pharm: Anti-HIV-1 inactive (HIV-1 IN inhibitor, IC₅₀ > 100 μmol/L, positive control Suramin, IC₅₀ = 2.4 μmol/L). Source: DING HU DIAO ZHANG *Lindera chunii* (root). Ref: 4224.**12864 Lindenanolide G**C₁₆H₂₂O₆ (310.35). Oil, [α]_D²⁶ = –250° (c = 0.2, MeOH). Pharm: Anti-HIV-1 inactive (HIV-1 IN inhibitor, IC₅₀ > 100 μmol/L, positive control Suramin, IC₅₀ = 2.4 μmol/L). Source: DING HU DIAO ZHANG *Lindera chunii* (root). Ref: 4224.**12865 Lindenanolide H**C₁₇H₂₀O₄ (288.35). Pharm: Anti-HIV-1 inactive (HIV-1 IN inhibitor, IC₅₀ > 100 μmol/L, positive control Suramin, IC₅₀ = 2.4 μmol/L). Source: DING HU DIAO ZHANG *Lindera chunii* (root). Ref: 4224.**12866 Lindenene**[24173-83-9] C₁₅H₁₈O (214.31). Source: WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*]. Ref: 6.

12867 Lindenenone

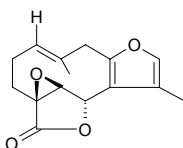
[26379-19-1] C₁₅H₁₆O₂ (228.29). mp 108°C. Source: WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*]. Ref: 6, 1521.

**12868 Linderalactone**

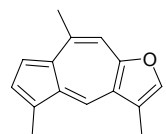
Neolinderalactone [728-61-0] C₁₅H₁₆O₃ (244.29). mp 140°C. Pharm: Anti-HIV-1 inactive (HIV-1 IN inhibitor, IC₅₀ > 100 μmol/L, positive control Suramin, IC₅₀ = 2.4 μmol/L)^[4224]. Source: DING HU DIAO ZHANG *Lindera chunii* (root), WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*] (root): content scope of 10 origins = 0.0198%~0.1460%, mean content = 0.0624%^[5508]. Ref: 6, 1521, 4224, 5508.

**12869 Linderane**

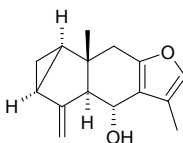
[13476-25-0] C₁₅H₁₆O₄ (260.29). mp 190~191°C (dec). Source: WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*] (root): content scope of 39 origins = 0.0283%~0.222%, mean content = 0.083%^[5508]. Ref: 6, 5508.

**12870 Linderazulene**

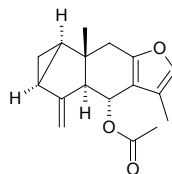
[489-79-2] C₁₅H₁₄O (210.28). mp 106~107°C. Source: WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*]. Ref: 6.

**12871 Linderene**

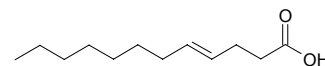
Lindeneol [26146-27-0] C₁₅H₁₈O₂ (230.31). mp 145°C. Pharm: Anti-HIV-1 inactive (HIV-1 IN inhibitor, IC₅₀ > 100 μmol/L, positive control Suramin, IC₅₀ = 2.4 μmol/L)^[4224]. Source: DING HU DIAO ZHANG *Lindera chunii* (root), WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*]. Ref: 6, 1521, 4224.

**12872 Linderene acetate**

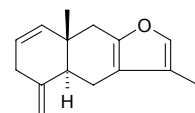
Lindeneol acetate C₁₇H₂₀O₃ (272.35). mp 82°C. Pharm: Anti-HIV-1 inactive (HIV-1 IN inhibitor, IC₅₀ > 100 μmol/L, positive control Suramin, IC₅₀ = 2.4 μmol/L)^[4224]. Source: WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*], DING HU DIAO ZHANG *Lindera chunii* (root). Ref: 6, 660, 4224.

**12873 Linderic acid**

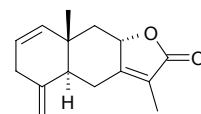
C₁₂H₂₂O₂ (198.31). Source: MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. Ref: 2.

**12874 Lindestrene**

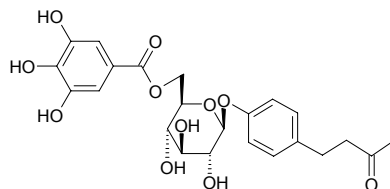
[2221-88-7] C₁₅H₁₈O (214.31). bp 100~102°C/2mmHg. Source: WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*]. Ref: 6.

**12875 Lindestrenolide**

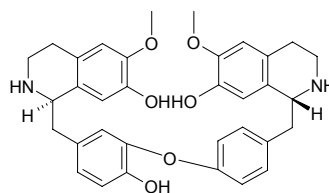
[20267-90-7] C₁₅H₁₈O₂ (230.31). bp 100~105°C/0.2mmHg. Source: WU YAO *Lindera strychnifolia* [Syn. *Lindera aggregata*]. Ref: 6.

**12876 Lindleyin**

[59282-56-3] C₂₃H₂₆O₁₁ (478.46). Source: TANG GU TE DA HUANG *Rheum tanguticum*. Ref: 2, 660, 1521.

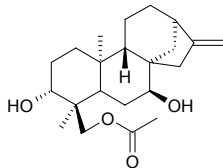
**12877 Lindoldhamine**

C₃₄H₃₆N₂O₆ (568.68). Source: HEI KE NAN *Lindera megaphylla*. Ref: 660.

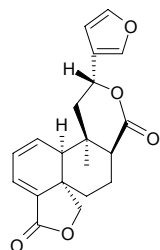


12878 Linearol

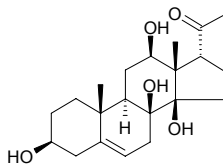
$C_{22}H_{34}O_4$ (362.51). Colorless needles ($CHCl_3$). Source: *Sideritis ozturkii* (aerial parts). Ref: 3827.

**12879 Linearolactone**

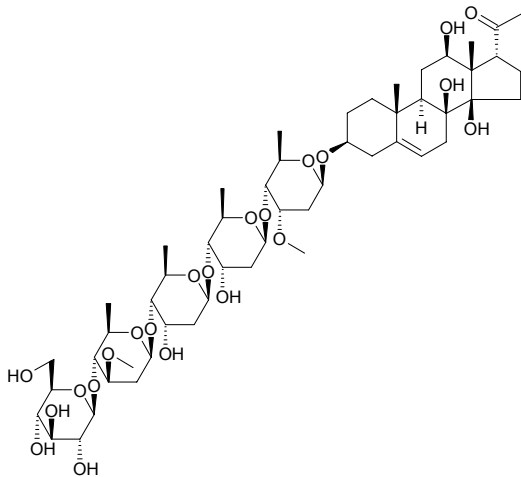
$C_{20}H_{20}O_5$ (340.38). Source: DUO SUI SHU WEI CAO *Salvia polystachya* (aerial parts), TIAO WEN SHU WEI CAO *Salvia lineata*. Ref: 1521, 3901.

**12880 Lineolone**

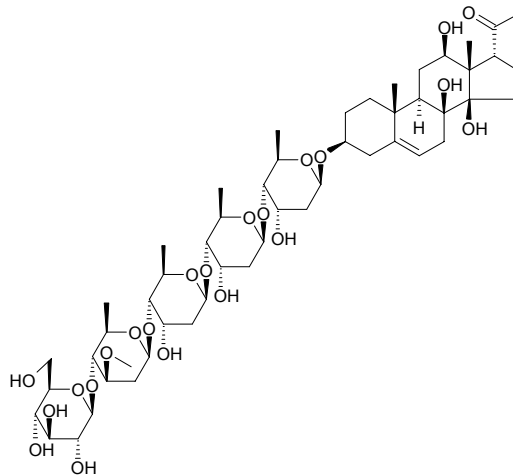
Deacylcynanchogenin $C_{21}H_{32}O_5$ (364.49). mp 240~244°C. Source: BAI SHOU WU *Cynanchum bungei*, FU SHOU CAO *Adonis amurensis*, LUO MO *Metaplexis japonica*, XU CHANG QING *Cynanchum paniculatum*, ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 6, 1521, 3925.

**12881 Lineolon-3-O-β-D-glucopyranosyl-(1→4)-β-D-oleandropyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-cymaropyranoside**

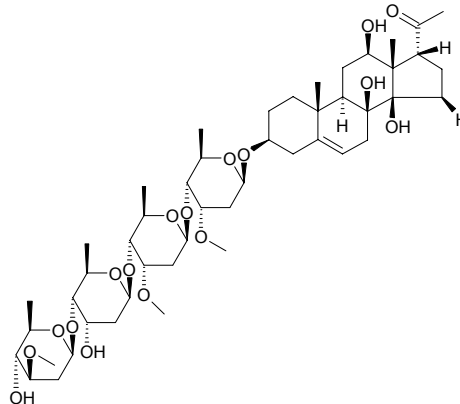
$C_{53}H_{86}O_{22}$ (1075.26). Amorphous powder, $[\alpha]_D^{27} = +18.7^\circ$ ($c = 0.78$, MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.

**12882 Lineolon-3-O-β-D-glucopyranosyl-(1→4)-β-D-oleandropyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranoside**

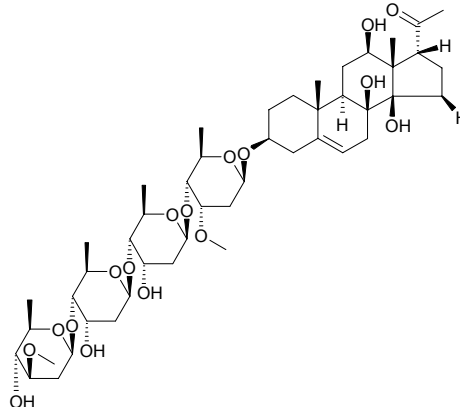
$C_{52}H_{84}O_{22}$ (1061.24). Amorphous powder, $[\alpha]_D^{27} = +6.5^\circ$ ($c = 0.73$, MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.

**12883 Lineolon-3-O-β-D-oleandropyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-cymaropyranosyl-(1→4)-β-D-cymaropyranoside**

$C_{48}H_{78}O_{17}$ (927.15). Amorphous powder, $[\alpha]_D^{27} = +14.2^\circ$ ($c = 0.46$, MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.

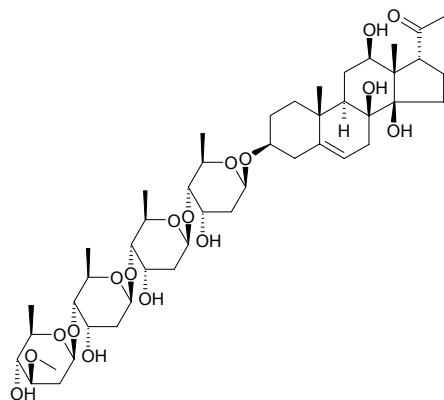
**12884 Lineolon-3-O-β-D-oleandropyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-cymaropyranoside**

$C_{47}H_{76}O_{17}$ (913.12). Amorphous powder, $[\alpha]_D^{27} = +8.9^\circ$ ($c = 0.97$, MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.



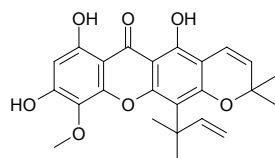
12885 Lineolon-3-O- β -D-oleandropyranosyl-(1 \rightarrow 4)- β -D-digitoxopyranosyl-(1 \rightarrow 4)- β -D-digitoxopyranosyl-(1 \rightarrow 4)- β -D-digitoxopyranoside

C₄₆H₇₄O₁₇ (899.09). Amorphous powder, $[\alpha]_D^{24} = +3.2^\circ$ ($c = 1.24$, MeOH).
Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). **Ref:** 3925.



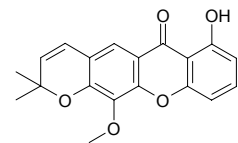
12886 Linixanthone A

C₂₄H₂₄O₇ (424.45). Light yellow needles (*n*-hexane-EtOAc), mp 174–176°C.
Pharm: Cytotoxic (P₃₈₈ ED₅₀ = 4.88 μ g/mL, control Mithramycin ED₅₀ = 0.06 μ g/mL, HT29 ED₅₀ = 5.34 μ g/mL, control Mithramycin ED₅₀ = 0.08 μ g/mL).
Source: TAI WAN LV DAO TENG HUANG *Garcinia linii*. **Ref:** 4094.



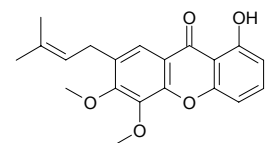
12887 Linixanthone B

C₁₉H₁₆O₅ (324.34). Colorless needles (EtOAc), mp 171–172°C. **Pharm:** Cytotoxic (P₃₈₈ ED₅₀ = 1.43 μ g/mL, control Mithramycin ED₅₀ = 0.06 μ g/mL, HT29 ED₅₀ = 3.14 μ g/mL, control Mithramycin ED₅₀ = 0.08 μ g/mL). **Source:** TAI WAN LV DAO TENG HUANG *Garcinia linii*. **Ref:** 4094.



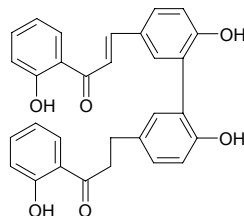
12888 Linixanthone C

C₂₀H₂₀O₅ (340.38). Light yellow needles (*n*-hexane-acetone), mp 127–129°C.
Pharm: Cytotoxic (P₃₈₈ ED₅₀ = 1.44 μ g/mL, control Mithramycin ED₅₀ = 0.06 μ g/mL, HT29 ED₅₀ = 1.54 μ g/mL, control Mithramycin ED₅₀ = 0.08 μ g/mL).
Source: TAI WAN LV DAO TENG HUANG *Garcinia linii*. **Ref:** 4094.



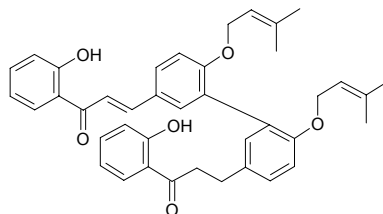
12889 3-3''Linked-(2'-hydroxy-4-hydroxychalcone)-(2'''-hydroxy-4'''-hydroxy dihydrochalcone)

C₃₀H₂₄O₆ (480.52). mp 107–109°C, hydrolysis product. **Pharm:** MAO-A inhibitor (rat brain mitochondrial enzyme, IC₅₀ = 12.5 μ g/mol/L); MAO-B inhibitor (rat brain mitochondrial enzyme, IC₅₀ = 6.2 μ g/mol/L). **Source:** HUANG LONG DAN *Gentiana lutea*. **Ref:** 3838.



12890 3-3''Linked-(2'-hydroxy-4-O-isoprenylchalcone)-(2'''-hydroxy-4'''-O-isoprenyl dihydrochalcone)

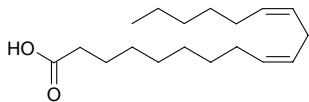
C₄₀H₄₀O₆ (616.76). Yellow needles (MeOH), mp 86–89°C. **Pharm:** MAO-A inhibitor (rat brain mitochondrial enzyme, IC₅₀ > 100 μ g/mol/L); MAO-B inhibitor (rat brain mitochondrial enzyme, IC₅₀ = 48.7 μ g/mol/L). **Source:** HUANG LONG DAN *Gentiana lutea*. **Ref:** 3838.



12891 cis-9,cis-12-Linoleic acid

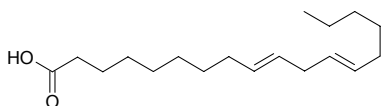
cis-9,*cis*-12-Octadecadienoic acid [60-33-3] C₁₈H₃₂O₂ (280.45). Yellowish oil, insoluble in water, soluble in absolute alcohol, diethyl ether, etc. **Pharm:** Antiallergic (rat, passive skin allergy, 300mg/kg orl, InRt = 60.9%); antihypercholesterolemic; nutrient; inhibits cancer cell invasion (MM1 cells, *in vitro*, 10 μ g/mL, InRt = 15.7%)^[4329]; COX-1 and COX-2 inhibitor (IC₅₀ = 3.9–180 μ mol/L, lacking selectivity)^[4415]. **Source:** BAI GUO *Ginkgo biloba*, BAN WEN LU HUI *Aloe vera* var. *chinensis*, BING LANG *Areca catechu*, CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], CU LIU GUO *Hippophae rhamnoides*, DA CHE QIAN *Plantago major*, DA ZAO *Ziziphus jujuba*, DONG CHONG XIA CAO *Cordyceps sinensis*, DU HENG *Asarum forbesii*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*], GOU QI GEN PI *Lycium chinense*, GOU QI ZI *Lycium chinense*, GUA LOU *Trichosanthes kirilowii*, HEI ZI LI GUO JI SHENG *Scurrula atropurpurea*, HONG HUA *Carthamus tinctorius*, HUA DONG LAN CI TOU *Echinops grijsii*, JI GUAN ZI *Celosia cristata* (seed), JIAN YE YIN YANG HUO *Epimedium sagittatum*, MAN JING ZI *Vitex trifolia*, MAN TUO LUO ZI *Datura metel*, MAO MAN TUO LUO ZI *Datura innoxia*, MENG GU HUANG QI *Astragalus mongholicus*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], QIANG HUO *Notopterygium incisum*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SHAN ZHA *Crataegus pinnatifida*, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*], SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], TIAN HUA FEN *Trichosanthes kirilowii*, XI YANG SHEN *Panax quinquefolium*, XING REN *Prunus armeniaca*, YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus*

javanica], YA MA *Linum usitatissimum*, YAO YONG PU GONG YING *Taraxacum officinale*, YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.020%dw)^[4655], YIN CHEN HAO *Artemisia capillaris*, YU XING CAO *Houttuynia cordata*, ZI SU *Perilla frutescens* var. *arguta*, occurs in many plants. Ref: 2, 500, 660, 900, 4329, 4415, 4655.



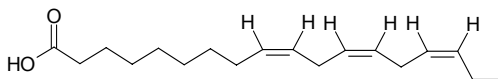
12892 *trans*-9,*trans*-12-Linoleic acid

trans,trans-Linoleic acid [506-21-8] C₁₈H₃₂O₂ (280.45). mp -5°C, bp 229-232°C/16mmHg. Source: LUO HUA SHENG *Arachis hypogaea*, XIANG RI KUI ZI *Helianthus annuus*. Ref: 6.



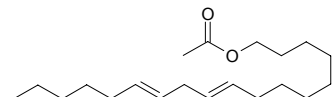
12893 Linolenic acid

(*Z,Z,Z*)-9,12,15-Octadecatrienoic acid [463-40-1] C₁₈H₃₀O₂ (278.44). Pharm: Nutrient; inhibits cancer cell invasion (MM1 cells, *in vitro*, 10µg/mL, InRt = 19.3%)^[4329]; 5α-reductase inhibitor (IC₅₀ = (160.3±24.6)µmol/L; control Finasteride, IC₅₀ = (0.38±0.06)µmol/L)^[5398]. Source: BA DOU *Croton tiglium*, BAN WEN LU HUI *Aloe vera* var. *chinensis*, CHAI HU *Bupleurum chinense*, CU LIU GUO *Hippophae rhamnoides*, DONG CHONG XIA CAO *Cordyceps sinensis*, GOU QI GEN PI *Lycium chinense*, GUA LOU *Trichosanthes kirilowii*, HEI ZI LI GUO JI SHENG *Scurrula atropurpurea*, HONG HUA *Carthamus tinctorius*, JI GUAN ZI *Celosia cristata* (seed), MENG GU HUANG QI *Astragalus mongholicus*, SHAN ZHA *Crataegus pinnatifida*, SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], TIAN HUA FEN *Trichosanthes kirilowii*, WU JIA PI *Acanthopanax gracilistylus*, XING REN *Prunus armeniaca*, YA MA *Linum usitatissimum*, YI ZHI REN *Alpinia oxyphylla* (fruit: yield = 0.0015%dw)^[4655], YIN YANG HUO *Epimedium brevicornum*, ZI SU *Perilla frutescens* var. *arguta*, ZI SU GENG *Perilla frutescens* var. *arguta*, occurs in many plants. Ref: 2, 658, 660, 4329, 4655, 5398.



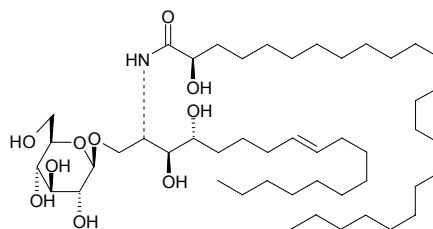
12894 Linoleyl acetate

[18266-22-3] C₂₀H₃₆O₂ (308.51). Source: QI ZHOU YI ZHI HAO *Conyza canadensis* [Syn. *Erigeron canadensis*]. Ref: 6.



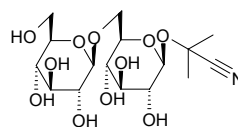
12895 Linum cerebroside

C₄₈H₉₃NO₁₀ (844.28). White amorphous powder, [α]_D¹⁵ = +5.0° (c = 0.002, MeOH-C₅H₅N). Source: YA MA *Linum usitatissimum* (root). Ref: 4562.



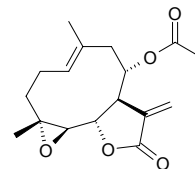
12896 Linustatin

[72229-40-4] C₁₆H₂₇NO₁₁ (409.39). Pharm: Toxin. Source: YA MA *Linum usitatissimum*. Ref: 658.



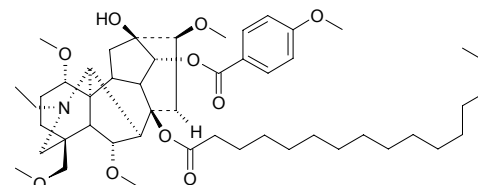
12897 Lipiferolide

[41059-80-7] C₁₇H₂₂O₅ (306.36). Crystals (ethanol-propane), mp 118-119°C, [α]_D²² = -125° (c = 0.06, methanol). Pharm: Cytotoxic (KB, ED₅₀ = 0.16µg/mL); insect antifeedant. Source: BEI MEI E ZHANG QIU *Liriodendron tulipifera*. Ref: 661.



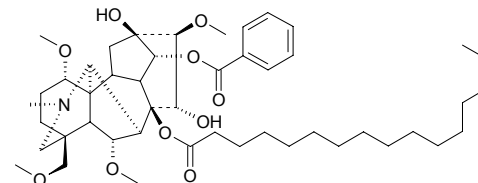
12898 Lipo-14-O-anisoylbikhaconine

C₄₉H₇₇NO₁₀ (840.16). Colorless oil (MeOH), [α]_D²³ = +18.7° (c = 0.135, CHCl₃). Source: FU ZI *Aconitum carmichaeli* (tuber). Ref: 4373.



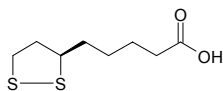
12899 Lipohyaconitine

C₄₇H₇₃NO₁₀ (812.11). Source: FU ZI *Aconitum carmichaeli* (tuber). Ref: 4373.

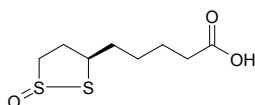


12900 α -Lipoic acid

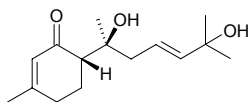
[62-46-4] C₈H₁₄O₂S₂ (206.33). mp (+) 46~48°C, (-) 45.0~47.5°C, (\pm) 59~61°C. Source: ZI CAI *Porphyra tenera*. Ref: 6.

**12901 β -Lipoic acid**

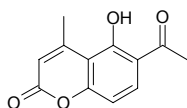
[6992-30-9] C₈H₁₄O₃S₂ (222.33). Source: ZI CAI *Porphyra tenera*. Ref: 6.

**12902 Lippidulcine A**

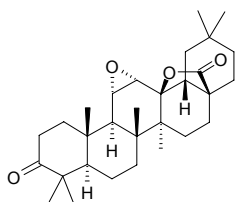
C₁₅H₂₄O₃ (252.36). Colorless oil, [α]_D³¹ = +123.6° (c = 0.1, CHCl₃). Source: TIAN SHE CAO *Lippia dulcis* (aerial parts). Ref: 4508.

**12903 Licooumarin**

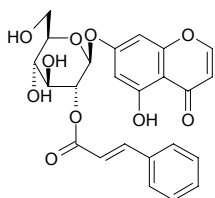
6-Acetyl-5-hydroxy-4-methyl coumarin [36695-19-9] C₁₂H₁₀O₄ (218.21). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 660.

**12904 Liquidambaric lactone**

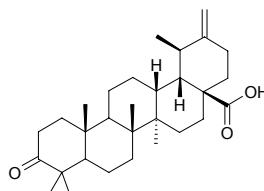
C₃₀H₄₄O₄ (468.68). White acicular crystals, mp > 300°C. Source: LU LU TONG *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*]. Ref: 356, 1521.

**12905 Liquidamboside**

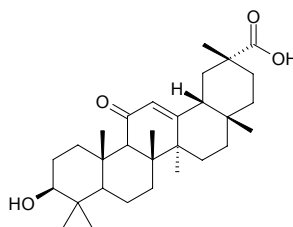
C₂₄H₂₂O₁₀ (470.44). Yellowish needles (Me₂CO), mp 210~212°C. Source: FENG XIANG JI SHENG *Viscum articulatum* (whole herb). Ref: 4864.

**12906 Liquidambronic acid**

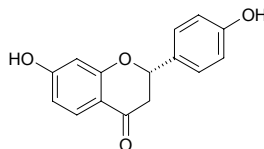
C₃₀H₄₆O₃ (454.70). Source: LU LU TONG *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*] (resin). Ref: 660.

**12907 Liquiritic acid**

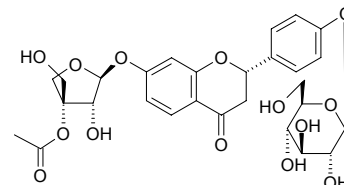
C₃₀H₄₆O₄ (470.70). Pharm: Anti-inflammatory. Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 660, 1521.

**12908 Liquiritigenin**

4,7-Dihydroxyflavanone [578-86-9] C₁₅H₁₂O₄ (256.26). White powder, mp 210~212°C. Pharm: Antispasmodic (releases intestinal spasm induced by histamine, acetylcholine and BaCl₂); antiulcerative (inhibits ulcer in pylorus-ligated rat); CNS activity; monoamine oxidase inhibitor (mitochondria in rat hepatic cells, *in vitro*). Source: CHAO XIAN YIN YANG HUO *Epimedium koreanum*, CI HUAI HUA *Robinia pseudoacacia*, GAN CAO *Glycyrrhiza uralensis*, GUANG GUO GAN CAO *Glycyrrhiza glabra*, HUI HUI DOU *Cicer arietinum*, JIANG ZHEN XIANG *Dalbergia odorifera*, MAO MAN TUO LUO YE *Datura innoxia*, SI TE WEN HUANG TAN *Dalbergia stevensonii*, ZHANG GUO GAN CAO *Glycyrrhiza inflata*, *Cicer* spp., *Dalbergia* spp., *Glycyrrhiza* spp., *Medicago* spp., *Myroxylon* spp., *Onobrychis* spp. Ref: 2, 458, 658, 660, 1521.

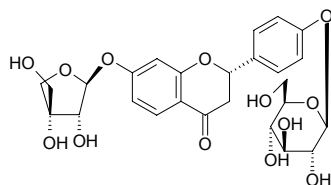
**12909 Liquiritigenin-7-O- β -D-(3-O-acetyl)-apiofuranosyl-4'-O- β -D-glucopyranoside**

C₂₈H₃₂O₁₄ (592.56). White powder, mp 201~202°C. Source: ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 376.

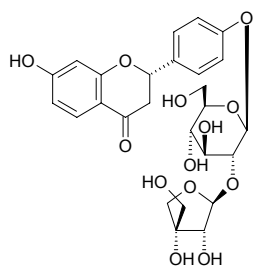


12910 Liquiritigenin-7-*O*- β -D-apiofuranosyl)-4'-*O*- β -D-glucopyranoside

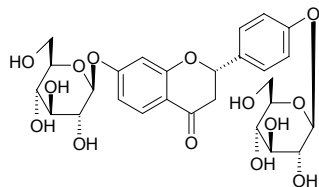
$C_{26}H_{30}O_{13}$ (550.52). White powder, mp 214–215°C. Source: ZHANG GUO GAN CAO *Glycyrrhiza inflata*. Ref: 376.

**12911 Liquiritigenin 4'-*O*- β -D-apio-D-furanosyl(1 \rightarrow 2)- β -D-glucopyranoside**

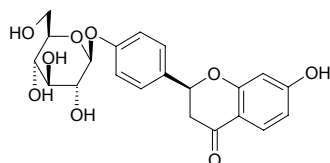
$C_{26}H_{30}O_{13}$ (550.52). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 660.

**12912 Liquiritigenin-7,4'-diglucoside**

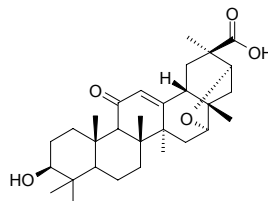
$C_{27}H_{32}O_{14}$ (580.55). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2, 660.

**12913 Liquiritin**

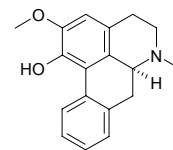
[551-15-5] $C_{21}H_{22}O_9$ (418.40). Source: CU MAO GAN CAO *Glycyrrhiza aspera*, GAN CAO *Glycyrrhiza uralensis* (root and rhizome: content = 0.492%^[5508]), GUANG GUO GAN CAO *Glycyrrhiza glabra* (root and rhizome: content = 0.220%^[5508]), HUANG GAN CAO *Glycyrrhiza kansuensis*, ZHANG GUO GAN CAO *Glycyrrhiza inflata* (root and rhizome: content = 0.915%^[5508]). Ref: 2, 660, 5508.

**12914 Licooric acid**

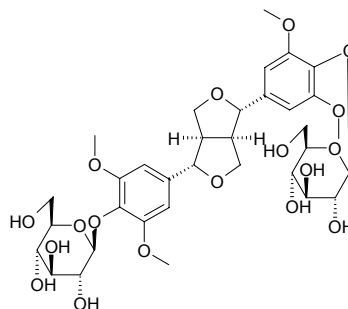
$C_{30}H_{44}O_5$ (484.68). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 2, 660.

**12915 Lirinidine**

$C_{18}H_{19}NO_2$ (281.36). Source: HE YE *Nelumbo nucifera*. Ref: 660.

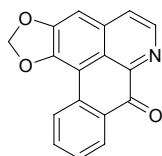
**12916 Liriodendrin**

(+)-Syringaresinol-di-*O*- β -D-glucoside [573-44-4] $C_{34}H_{46}O_{18}$ (742.73). Crystals (EtOH), mp 269–270°C, $[\alpha]_D^{18} = -18.5^\circ$ ($c = 0.2$, pyridine). Pharm: Calcium antagonist (frog, single heart cell); cytotoxic; Gonad stimulating principle; tonicity (mus, extends swimming time); inhibits fatigue and promotes interferon inducing formation; angiotensin I-converting enzyme inhibitor; antihepatotoxin; analgesic (mus, acetic acid-induced writhing model); antitrypanosomal (*Trypanosoma brucei rhodesiense*, $IC_{50} = 34.4\mu\text{g/mL}$, control Melarsoprol, $IC_{50} = 0.00098\mu\text{g/mL}$; *Trypanosoma cruzi*, $IC_{50} > 90\mu\text{g/mL}$, control Benzimidazole, $IC_{50} = 1.06\mu\text{g/mL}$)^[5009]; antileishmanial (*Leishmania donovani*, $IC_{50} = 11.6\mu\text{g/mL}$, control Miltefosine, $IC_{50} = 0.102\mu\text{g/mL}$)^[5009]; antimalarial (*Plasmodium falciparum*, $IC_{50} > 50\mu\text{g/mL}$, control Artemisinin, $IC_{50} = 0.0022\mu\text{g/mL}$)^[5009]; cytotoxic (L6, $IC_{50} > 90\mu\text{g/mL}$, control Podophyllotoxin, $IC_{50} = 0.008\mu\text{g/mL}$)^[5009]; anti-inflammatory (*in vivo*, carrageenan-induced edema of the hind paw in rats, 5mg/kg, 90min, InRt = 40%); analgesic (mouse *in vivo*, acetic acid-induced writhing and hotplate method, 5mg/kg)^[5425]. Source: CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*], DU ZHONG *Eucommia ulmoides*, LIU CHUAN YU *Linaria vulgaris*, ROU CONG RONG *Cistanche deserticola*, ZONG KUI CAO SU *Phlomis brunneogaleata*. Ref: 2, 660, 1521, 1711, 1712, 1713, 1714, 1715, 1716, 1717, 4237, 5009, 5425.

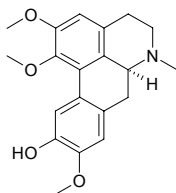


12917 Liriodenine

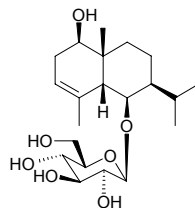
Oxoushinsunine; Spermatheridine [475-75-2] $C_{17}H_9NO_3$ (275.27). Green acicular crystals ($CHCl_3$), mp 275–277°C; Yellow solid, mp 280–281°C ($CHCl_3$); mp 289°C (dec). **Pharm:** Antifungal; cytotoxic (KB); platelet aggregation inhibitor (rat blood: 2-5 μ mol/L ADP-induced, $IC_{50} > 1000\mu$ mol/L, control Acetylsalicylic acid, $IC_{50} > 1000\mu$ mol/L; 2-5 μ g/mL collagen-induced, $IC_{50} > 1000\mu$ mol/L, Acetylsalicylic acid, $IC_{50} = 420\mu$ mol/L; 1-4 μ mol/L epinephrine-induced with threshold concentration of collagen (0.8-1.0 μ g/mL), $IC_{50} = 67\mu$ mol/L, Acetylsalicylic acid, $IC_{50} = 53\mu$ mol/L; 10-40 μ mol/L AA-induced with threshold concentration of collagen (0.8-1.0 μ g/mL), $IC_{50} = 44\mu$ mol/L, Acetylsalicylic acid, $IC_{50} = 66\mu$ mol/L; 1-5 μ mol/L U46619-induced with threshold concentration of collagen (0.8-1.0 μ g/mL), $IC_{50} > 100\mu$ mol/L, Acetylsalicylic acid, $IC_{50} = 340\mu$ mol/L)^[5381]; cytotoxic (inhibits growth of yeasts: values of RS321NYCp50(gal), $IC_{50} = 0.6\mu$ g/mL; RS321NpRAD52(gal), $IC_{50} = 1.5\mu$ g/mL; RS321NpRAD52(glu), $IC_{50} = 0.5\mu$ g/mL; Did not show selective DNA-damaging activity in the yeast assay)^[5457]; Reduces isolation-induced aggression (mouse). **Source:** BAI LAN HUA *Michelia alba*, BAI YE GUA FU MU *Fissistigma glaucescens* [Syn. *Melodorum glaucescens*], BEI MEI E ZHANG QIU *Liriodendron tulipifera* (heartwood; the compound was isolated from the plant by M.A.Buchanan et al. in 1961)^[5505], CHEN XIANG *Aquilaria agallocha*, DING KE LA QIAN JIN TENG *Stephania dinklagei* (stem), FAN LI ZHI *Annona squamosa* (root), GUAN GUANG MU *Tsoongiodendron odorum*, HE HUA YU LAN *Magnolia grandiflora*, HE YE *Nelumbo nucifera*, HUA JIAO LE *Zanthoxylum cuspidatum*, HUANG MIAN GUI *Michelia champaca*, LIAN ZI *Nelumbo nucifera*, NIU XIN FAN LI ZHI *Annona reticulata*, RI BEN HOU PO *Magnolia obovata*, RI BEN HOU PO *Magnolia obovata* (leaf), RU DI JIN NIU *Zanthoxylum nitidum*, TAI WAN GE NA XIANG *Goniotalamus amuyon* (fresh leaf: yield = 0.00027%fw)^[4686], YE HE HUA *Magnolia coco*, YING ZHAO *Artabotrys hexapetalus* [Syn. *Annona hexapetalus*], YOU GOU YING ZHAO *Artabotrys uncinatus* (root, stem and leaf)^[3083], *Lettowianthus stellatus* (root cortex), occurs in many plants. **Ref:** 6, 658, 660, 2177, 1521, 3083, 3944, 4686, 5381, 5457, 5505.

**12918 Lirioferine**

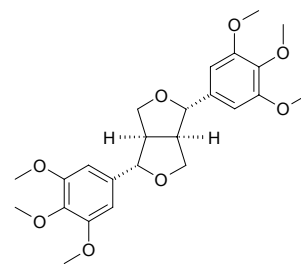
$C_{20}H_{23}NO_4$ (341.41). **Source:** YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtchaninovii* f. *yanhusuo*]. **Ref:** 660.

**12919 Liriopeoside A**

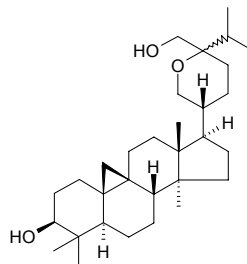
1 β ,6 β -Dihydroxy-*cis*-eudesm-3-ene-6-*O*- β -D-glucopyranoside $C_{21}H_{36}O_7$ (400.52). Colorless needles (MeOH), mp 169–171°C, $[\alpha]_D^{25} = -7.3^\circ$ ($c = 1.00$, MeOH). **Source:** DUAN TING SHAN MAI DONG *Liriope muscari* (tuber: yield = 0.000064%). **Ref:** 4772.

**12920 Lirioresinol B dimethyl ether**

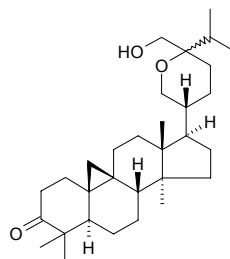
Yangambin $C_{24}H_{30}O_8$ (446.50). mp 122–123°C. **Source:** WANG CHUN YU LAN *Magnolia biondii* [Syn. *Magnolia fargesii*], ZHONG YA KU HAO *Artemisia absinthium*. **Ref:** 6, 543, 658.

**12921 Lithocarpdiol**

[54300-84-4] $C_{31}H_{52}O_3$ (472.76). mp 179–180°C. **Source:** DUO SUI SHI KE YE *Lithocarpus polystachyus*. **Ref:** 6.

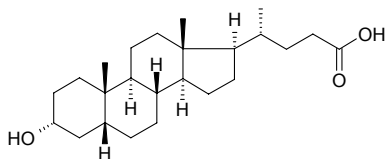
**12922 Lithocarpolone**

[54300-83-3] $C_{31}H_{50}O_3$ (470.74). mp 190–192°C. **Source:** DUO SUI SHI KE YE *Lithocarpus polystachyus*. **Ref:** 6.

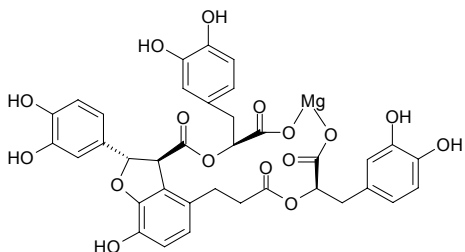


12923 Lithocholic acid

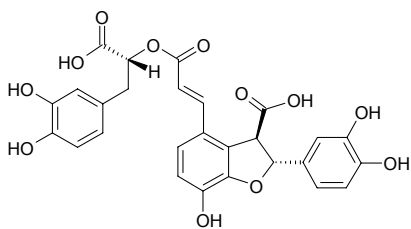
3 α -Hydroxy-5 β -cholan-24-oic acid [434-13-9] C₂₄H₄₀O₃ (376.58). Prisms (EtOH aq.), mp 186°C, [α]_D²⁰ = +33.7° (c = 1.5, EtOH). Source: NIU HUANG *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 2, 1521.

**12924 Lithospermate B**

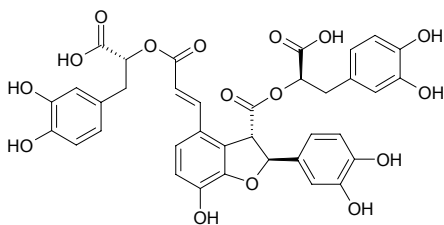
[122021-74-3] C₃₆H₃₀MgO₁₆ (742.94). [α]_D = +130.9° (c = 0.1, 50% aqueous MeOH). Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 724.

**12925 Lithospermic acid**

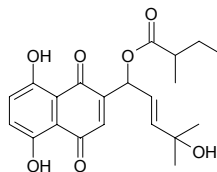
[28831-65-4] C₂₇H₂₂O₁₂ (538.47). Pharm: Antioxidant (*in vitro*, Cu²⁺ induced LDL peroxidation assay, IC₅₀ = 1 μ mol/L; control Probuocol, IC₅₀ = 4.7 μ mol/L)^[4628]; contraceptive. Source: BAI GUO ZI CAO *Lithospermum officinale*, FU JI NI YA DI SUN *Lycopus virginicus*, LAN JI *Echium vulgare*, LU BIAN ZI CAO *Lithospermum ruderales*, OU DI SUN *Lycopus europaeus*, YAO YONG NIU SHE CAO *Anchusa officinalis*, ZI DAN TENG *Tournefortia sarmentosa* (stem: yield = 0.625%)^[4628]. Ref: 658, 4628.

**12926 Lithospermic acid B**

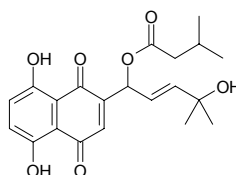
C₃₆H₃₀O₁₆ (718.63). Source: DAN SHEN *Salvia miltiorrhiza* (dried root: content = 2.87%)^[5508]. Ref: 660, 5508.

**12927 Lithospermidin A**

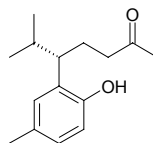
C₂₁H₂₄O₇ (388.42). Source: ZI CAO *Lithospermum erythrorhizon*. Ref: 2.

**12928 Lithospermidin B**

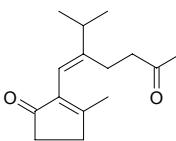
C₂₁H₂₄O₇ (388.42). Source: ZI CAO *Lithospermum erythrorhizon*. Ref: 2.

**12929 Litseachromolaevane A**

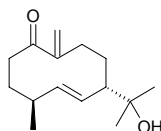
C₁₅H₂₂O₂ (234.34). Colorless gum, [α]_D²⁰ = +6.7° (c = 0.23, CHCl₃). Pharm: Anti-HIV-1 inactive (*in vitro*, HOG.R5). Source: DIE DA LAO *Litsea verticillata* (leaf and twig: yield = 0.00012%dw). Ref: 4688.

**12930 Litseachromolaevane B**

C₁₅H₂₂O₂ (234.34). Colorless gum, [α]_D²⁰ = +0° (c = 0.05, CHCl₃). Pharm: Anti-HIV-1 (HIV-1 replication inhibitor *in vitro*, HOG.R5, IC₅₀ = 28 μ g/mL (120 μ mol/L), cytotoxic, 20 μ g/mL, inactive). Source: DIE DA LAO *Litsea verticillata* (leaf and twig: yield = 0.00002%dw). Ref: 4688.

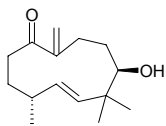
**12931 Litseagermacrane**

C₁₅H₂₄O₂ (236.36). Colorless gum, [α]_D²⁰ = +11.1° (c = 0.14, CHCl₃). Pharm: Anti-HIV-1 (HIV-1 replication inhibitor *in vitro*, HOG.R5, IC₅₀ = 6.5 μ g/mL (27.5 μ mol/L), cytotoxic, CC₅₀ = 15.9 μ g/mL (63.4 μ mol/L)). Source: DIE DA LAO *Litsea verticillata* (leaf and twig: yield = 0.00008%dw). Ref: 4688.

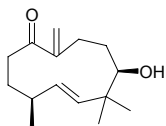


12932 Litseahumulane A

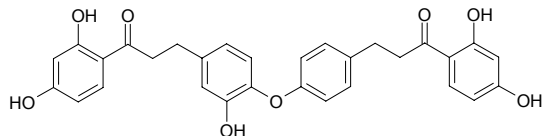
$C_{15}H_{24}O_2$ (236.36). Colorless gum, $[\alpha]_D^{20} = -34.1^\circ$ ($c = 0.09$, $CHCl_3$). **Pharm:** Anti-HIV-1 inactive (*in vitro*, HOG.R5). **Source:** DIE DA LAO *Litsea verticillata* (leaf and twig; yield = 0.00003%dw). **Ref:** 4688.

**12933 Litseahumulane B**

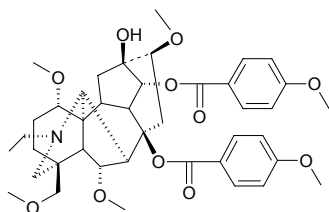
$C_{15}H_{24}O_2$ (236.36). Colorless gum, $[\alpha]_D^{20} = -23.8^\circ$ ($c = 0.02$, $CHCl_3$). **Pharm:** Anti-HIV-1 inactive (*in vitro*, HOG.R5). **Source:** DIE DA LAO *Litsea verticillata* (leaf and twig; yield = 0.00002%dw). **Ref:** 4688.

**12934 Littoralchalcone**

2',4',3'',2''',4''-Pentahydroxy-4-O-4''-tetrahydrobichalcone $C_{30}H_{26}O_8$ (514.54). Yellow powder (MeOH), mp 178–180°C. **Pharm:** Neurite outgrowth enhancer (PC12D cells, NGF-mediated neurite outgrowth, to enhance the ability of NGF, may be useful in the treatment of neurological disorders, such as Parkinson's disease (PD), Alzheimer's disease (AD), Huntington's disease (HD), amyotrophic lateral sclerosis (ALS), and hmn immunodeficiency virus associated dementia (HAD)). **Source:** HAI BIAN MA BIAN CAO *Verbena littoralis* (aerial parts). **Ref:** 4361.

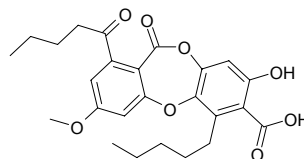
**12935 Liwaconitine**

$C_{41}H_{53}NO_{11}$ (735.88). **Source:** LI JIANG WU TOU *Aconitum forrestii* [Syn. *Aconitum likiangense*]. **Ref:** 660.

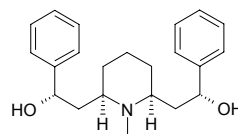
**12936 Lobaric acid**

$C_{25}H_{28}O_8$ (456.50). **Pharm:** 5-LOX inhibitor (porcine leucocytes, *in vitro*, $IC_{50} = 7.3\mu\text{mol/L}$, control Zileuton, $IC_{50} = 0.4\mu\text{mol/L}$, LOX has been implicated in carcinogenesis in various types); 12-LOX inhibitor (hmn platelet, *in vitro*); cytotoxic (acute promyelocytic leukemia (HL-60), $EC_{50} = (52.1\pm 9.9)\mu\text{g/mL}$, Zileuton, $EC_{50} = (38.8\pm 12.3)\mu\text{g/mL}$; colorectal adenocarcinoma (WiDr), $EC_{50} = (63.9\pm 2.2)\mu\text{g/mL}$, Zileuton, $EC_{50} > 80\mu\text{g/mL}$; erythro-leukemia (K562), $EC_{50} = (19.7\pm 1.2)\mu\text{g/mL}$, Zileuton, $EC_{50} = (38.5\pm 5.4)\mu\text{g/mL}$; gastric adenocarcinoma (AGS), $EC_{50} = (38.5\pm 2.7)\mu\text{g/mL}$, Zileuton, $EC_{50} = (70.5\pm 3.1)\mu\text{g/mL}$; mammary carcinoma (T47D), $EC_{50} = (21.4\pm 9.8)\mu\text{g/mL}$,

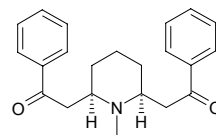
Zileuton, $EC_{50} = (23.9\pm 4.1)\mu\text{g/mL}$; ovarian adenocarcinoma (OVCAR-3), $EC_{50} = (36.7\pm 10.5)\mu\text{g/mL}$, Zileuton, $EC_{50} = (53.1\pm 7.7)\mu\text{g/mL}$; pancreas cancer (Capan1), $EC_{50} = (15.2\pm 3.5)\mu\text{g/mL}$, Zileuton, $EC_{50} = (12.9\pm 11.7)\mu\text{g/mL}$; pancreas cancer (Capan2), $EC_{50} = (34.4\pm 2.5)\mu\text{g/mL}$, Zileuton, $EC_{50} > 80\mu\text{g/mL}$; pancreas cancer (PANC1), $EC_{50} = (35.9\pm 7.7)\mu\text{g/mL}$, Zileuton, $EC_{50} = (46.6\pm 5.4)\mu\text{g/mL}$; prostatic cancer PC3, $EC_{50} = (28.0\pm 5.6)\mu\text{g/mL}$, Zileuton, $EC_{50} = (49.9\pm 9.0)\mu\text{g/mL}$; small cell lung cancer (NCI-H1417), $EC_{50} = (27.5\pm 3.8)\mu\text{g/mL}$, Zileuton, $EC_{50} > 80\mu\text{g/mL}$; T-cell leukemia (Jurkat-T), $EC_{50} = (35.5\pm 9.4)\mu\text{g/mL}$, Zileuton, $EC_{50} = (78.3\pm 5.0)\mu\text{g/mL}$. **Source:** Lichen *Stereocaulon alpinum*. **Ref:** 4082.

**12937 Lobelanidine**

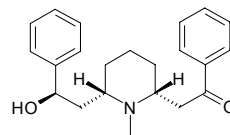
[552-72-7] $C_{22}H_{29}NO_2$ (339.48). **Pharm:** Toxin. **Source:** BAN BIAN LIAN *Lobelia chinensis* [Syn. *Lobelia radicans*], BEI MEI ZHOU SHAN GENG CAI *Lobelia inflata*, HA SHI SHAN GENG CAI *Lobelia hassleri*, TAI JING TIAN *Sedum acre*, TONG BAN CAO *Isotoma longiflora* [Syn. *Laurentia longiflora*]. **Ref:** 2, 658.

**12938 Lobelanine**

[579-21-5] $C_{22}H_{25}NO_2$ (335.45). **Source:** BAN BIAN LIAN *Lobelia chinensis* [Syn. *Lobelia radicans*]. **Ref:** 2, 1521.

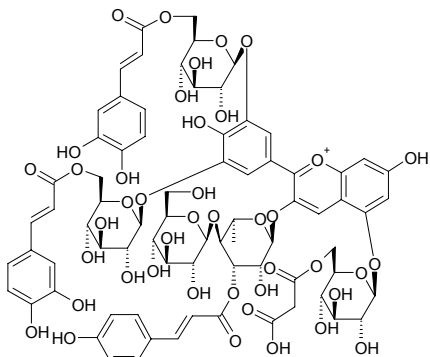
**12939 Lobeline**

Inflatine; α -Lobeline [90-69-7] $C_{22}H_{27}NO_2$ (337.47). Acicular crystals, mp 130–131°C, $[\alpha]_D^{15} = -42.85^\circ$ (ethanol), slightly soluble in water, petroleum ether, soluble in hot ethanol, benzene, ether, chloroform.^[5507] **Pharm:** Central stimulant (due to reflectivity, used in treatment of newborn asphyxia, toxicosis from opium, barbital, carbon monoxide, and respiratory failure induced by pneumonia and diphtheria). **Source:** BAN BIAN LIAN *Lobelia chinensis* [Syn. *Lobelia radicans*], BEI MEI ZHOU SHAN GENG CAI *Lobelia inflata* (in 1921, isolated from the plant for the first time^[5507]), FENG LING CAO *Campanula medium*, HA SHI SHAN GENG CAI *Lobelia hassleri*, YAN CAO HUA SHAN GENG CAI *Lobelia nicotianaefolia*. **Ref:** 2, 4, 658, 5501, 5507.

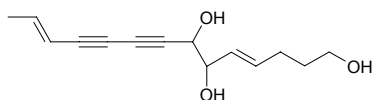


12940 Lobelinin A

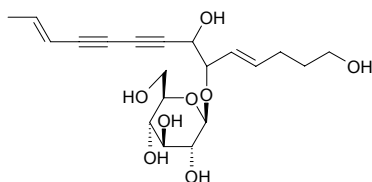
[127201-68-7] $C_{75}H_{81}O_{42}^+$ (1654.46). Source: BAN BIAN LIAN *Lobelia chinensis* [Syn. *Lobelia radicans*]. Ref: 2, 1521.

**12941 Lobetyol**

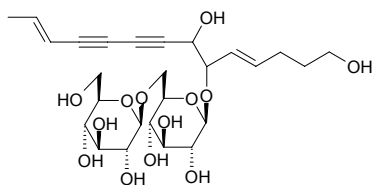
$C_{14}H_{18}O_3$ (234.30). Source: TONG CHUI YU DAI CAO *Pratia nummularia*. Ref: 3362.

**12942 Lobetyolin**

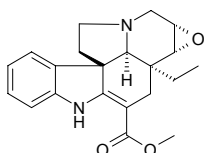
$C_{20}H_{28}O_8$ (396.44). Source: TONG CHUI YU DAI CAO *Pratia nummularia*. Ref: 3362.

**12943 Lobetyolinin**

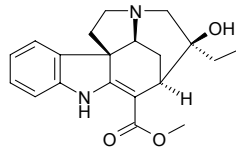
$C_{26}H_{38}O_{13}$ (558.58). Source: TONG CHUI YU DAI CAO *Pratia nummularia*. Ref: 3362.

**12944 Lochnericine**

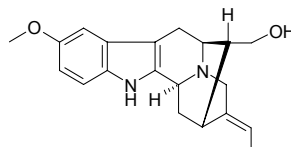
[72058-36-7] $C_{21}H_{24}N_2O_3$ (352.44). mp 188~191°C, $[\alpha]_D^{25} = +473^\circ$ ($c = 0.37$, EtOH). Pharm: Cytotoxic (KB, strong). Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. Ref: 2, 1521.

**12945 Lochneridine**

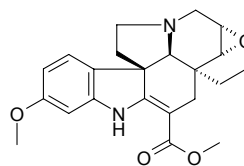
[5980-01-8] $C_{20}H_{24}N_2O_3$ (340.43). Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. Ref: 2, 1521.

**12946 Lochnerine**

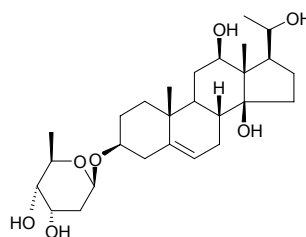
[482-68-8] $C_{20}H_{24}N_2O_2$ (324.43). Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. Ref: 2, 1521.

**12947 Lochnerinine**

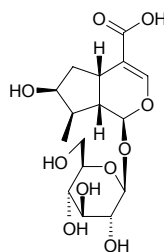
[22255-04-5] $C_{22}H_{26}N_2O_4$ (382.46). Source: CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*]. Ref: 2, 1521.

**12948 Locin**

[102071-99-8] $C_{27}H_{44}O_7$ (480.65). mp 110~115°C, $[\alpha]_D = +20^\circ$. Source: QING SHE TENG *Periploca calophylla*. Ref: 2498.

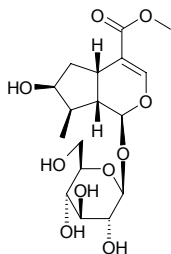
**12949 Loganic acid**

$C_{16}H_{24}O_{10}$ (376.36). $[\alpha]_D^{21} = -72.7^\circ$ ($c = 0.55$, MeOH). Source: CU JING QIN JIAO *Gentiana crassicaulis* (root: mean content = 1.53%)^[5534], JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (dried leaf, flower and twig: yield = 0.015%dw)^[3014], JIN YIN HUA *Lonicera japonica*, LIU QIU SHE GEN CAO *Ophiorrhiza liukiensis* (whole herb), LONG DAN *Gentiana scabra*, RI BEN SHUANG HU DIE *Tripterospermum japonicum*. Ref: 2, 638, 3014, 3533, 4527, 5534.

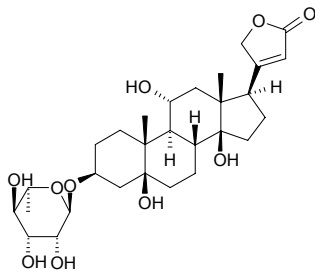


12950 loganin

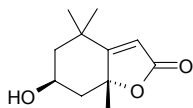
Loganoside [18524-94-2] $C_{17}H_{26}O_{10}$ (390.39). **Pharm:** Laxative. **Source:** BAI JIANG *Patrinia villosa*, CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], CHUAN XU DUAN *Dipsacus asperoides*, JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.0157%dw)^[4723], JIN YIN HUA *Lonicera japonica*, LIU QIU SHE GEN CAO *Ophiorrhiza liukiensis* (whole herb), LV SONG GUO *Strychnos ignatii*, MA QIAN ZI *Strychnos nux-vomica*, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*] (dried ripe fruit: mean content of 16 origins = 0.66%^[5508]), SHUI CAI *Menyanthes trifoliata* (the compound was isolated from the plant by Battersby et al. in 1968)^[5505], WU SHI REN DONG *Lonicera quinquelocularis* (root), *Hydrangea* sp. **Ref:** 2, 638, 658, 660, 3926, 4527, 4723, 5505, 5508.

**12951 Lokundjosiide**

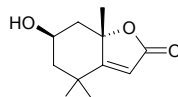
[6869-51-8] $C_{29}H_{44}O_{10}$ (552.67). **Pharm:** Toxin (vertebrate). **Source:** YANG JIAO AO ZI *Strophanthus divaricatus*, *Strophanthus* sp. **Ref:** 658, 1521.

**12952 (6S,7αR)-Loliolide**

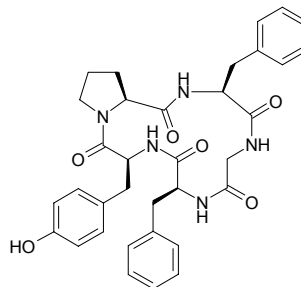
Digiprolactone $C_{11}H_{16}O_3$ (196.25). mp 149°C. **Pharm:** Antineoplastic (inhibits EBV-EA induction strongly). **Source:** BAI MAO XIA KU CAO *Ajuga decumbens*, DA CHE QIAN *Plantago major* (leaf), KU LIAN PI *Melia azedarach*, MAO DI HUANG *Digitalis purpurea*, MAO HUA MAO DI HUANG *Digitalis lanata*, MI HUA MEI DENG MU *Maytenus confertiflorus*, QIAN QU CAI *Lythrum salicaria*, QUN DAI CAI *Undaria pinnatifida* (dried thallus: yield = 0.0014%^[4602]), SHUI CAI *Menyanthes trifoliata*, XIANG RI KUI HUA *Helianthus annuus*, YA ZHI CAO *Commelina communis*, YAO YONG QIU GUO ZI JIN *Fumaria officinalis*, YIN XING CAO *Siphonostegia chinensis*. **Ref:** 6, 660, 693, 1521, 4602.

**12953 Loliolide isomer**

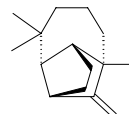
Anticancer Monoterpene PMV70P691-127 $C_{11}H_{16}O_3$ (196.25). **Pharm:** Cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells). **Source:** HUANG HUA REN *Sida acuta*. **Ref:** 5038.

**12954 Longicalycinin A**

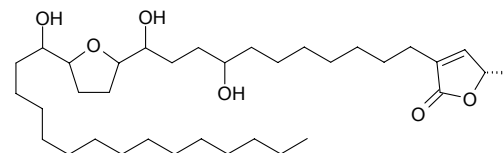
$C_{34}H_{37}N_5O_6$ (611.70). Pale-yellow powder, $[\alpha]_D^{25} = -12^\circ$ ($c = 0.01$, MeCN). **Pharm:** Cytotoxic (hmn hepatocellular carcinoma HepG2 cancer cell line, $IC_{50} = 13.52\mu\text{g/mL}$). **Source:** CHANG E QU MAI *Dianthus superbus* var. *longicalycinus*. **Ref:** 4450.

**12955 Longifolene**

[1S-(1α,3β,4α,8β)]-Decahydro-9-methylene-4,8,8-trimethyl-1,4-methanoazulene [475-20-7] $C_{15}H_{24}$ (204.36). **Source:** CHANG YE SONG *Pinus palustris*, CHAI HU *Bupleurum chinense*, WU WEI ZI *Schisandra chinensis*, *Pinus* sp. **Ref:** 2.

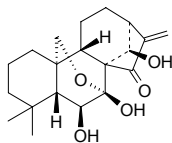
**12956 Longifolicin**

$C_{35}H_{64}O_6$ (580.9). Colorless oil, $[\alpha]_D^{25} = +8.3^\circ$ ($c = 0.12$, $CHCl_3$). **Pharm:** Cytotoxic (*in vitro*, HepG2, $IC_{50} = 0.000404\mu\text{g/mL}$, Hep2,2,15, $IC_{50} = 0.0049\mu\text{g/mL}$; control Adriamycin, HepG2, $IC_{50} = 0.241\mu\text{g/mL}$, Hep2,2,15, $IC_{50} = 0.45\mu\text{g/mL}$). **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed). **Ref:** 3067.

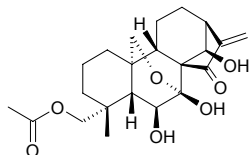


12957 Longikaurin A

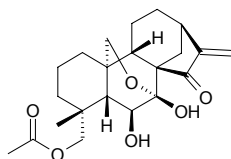
[75207-67-9] C₂₀H₂₈O₅ (348.44). mp 223~225°C, [α]_D²⁵ = -91.1° (*c* = 0.21, C₅H₅N). **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 12.5µg/mL; *Bacillus coli*, MIC > 200µg/mL); cytotoxic (mammary cancer cells in rat, *in vitro*, 1µg/mL, InRt = 74%). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 5, 658, 4067.

**12958 Longikaurin B**

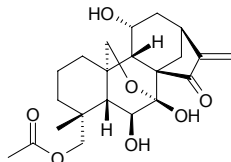
[75207-66-8] C₂₂H₃₀O₇ (406.48). mp 238~239.5°C, [α]_D²⁵ = -115.9° (*c* = 0.12, C₅H₅N). **Pharm:** Cytotoxic (K562, IC₅₀ = 0.30µg/mL, control Mitoxantrone, IC₅₀ = 0.29µg/mL; HL-60, IC₅₀ = 0.44µg/mL, Mitoxantrone, IC₅₀ = 0.29µg/mL; HCT, IC₅₀ = 8.61µg/mL, Mitoxantrone, IC₅₀ = 1.54µg/mL; MKN28, IC₅₀ = 0.46µg/mL, Mitoxantrone, IC₅₀ = 0.02µg/mL)^[5182]; cytotoxic (rat mammary cancer cells *in vitro*); antibacterial (*Staphylococcus aureus*, MIC = 25µg/mL; *Bacillus coli*, MIC ≥ 200µg/mL). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*, HAN SHENG XIANG CHA CAI *Isodon xerophilus* (leaf). **Ref:** 5, 658, 4067, 5182.

**12959 Longikaurin C**

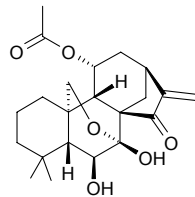
C₂₂H₃₀O₆ (390.48). mp 248~250°C, [α]_D²⁵ = -137.5° (*c* = 0.12, C₅H₅N). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 4067.

**12960 Longikaurin D**

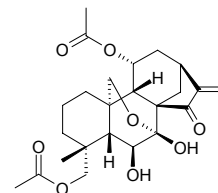
C₂₂H₃₀O₇ (406.48). mp 225~227°C, [α]_D¹⁹ = -150.0°. **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 4067.

**12961 Longikaurin E**

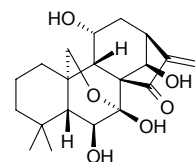
C₂₂H₃₀O₆ (390.48). mp 251~253°C, [α]_D¹⁹ = -76° (CHCl₃). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 4067.

**12962 Longikaurin F**

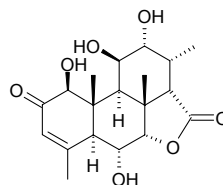
C₂₄H₃₂O₈ (448.52). mp 249~251°C, [α]_D²⁵ = -120.4° (*c* = 0.11, C₅H₅N). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 4067.

**12963 Longikaurin G**

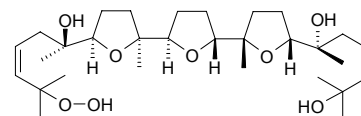
C₂₀H₂₈O₆ (364.44). mp 281~282°C, [α]_D²² = -82.0° (*c* = 0.85, MeOH). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 4067.

**12964 Longilactone**

C₁₉H₂₆O₇ (366.41). **Pharm:** Cytotoxic (KB, IC₅₀ = 3.4µg/mL; P₃₈₈, IC₅₀ = 1.3µg/mL; A549, remarkable activity)^[4556]; plant growth inhibitor (Cucumber seedling, root growth, IC₅₀ = (66±10)µmol/L; shoot growth, IC₅₀ = (95.0±1.0)µmol/L; Rice seedling, root growth, IC₅₀ > 200µmol/L; shoot growth, IC₅₀ > 200µmol/L)^[5215]. **Source:** CHANG YE KUAN MU *Eurycoma longifolia* (leaf), *Eurycoma* sp. **Ref:** 4556, 5215.

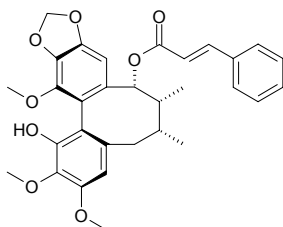
**12965 Longilene peroxide**

C₃₀H₅₂O₈ (540.74). **Source:** CHANG YE KUAN MU *Eurycoma longifolia*. **Ref:** 1521, 4556.

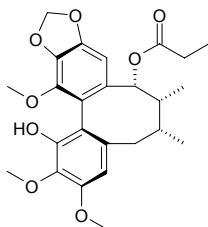


12966 Longipedunin A

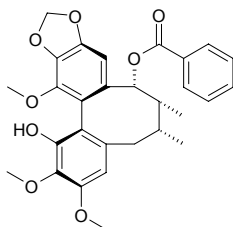
$C_{31}H_{32}O_8$ (532.60). Colorless prisms (MeOH); mp 176–178°C, $[\alpha]_D = 52.2^\circ$ ($c = 0.2$, MeOH). **Pharm:** HIV-1 protease inhibitor (100mg/mL, InRt = (77.8±3.3)%), $IC_{50} = 50\mu\text{g/mL}$; control Acetyl pepstatin, InRt = 100%, $IC_{50} = 0.15\mu\text{g/mL}$. **Source:** CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*] (stem and root: yield = 0.00023%dw). **Ref:** 918.

**12967 Longipedunin B**

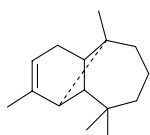
$C_{25}H_{30}O_8$ (458.51). Amorphous powder, $[\alpha]_D = 8.3^\circ$ ($c = 0.1$, MeOH). **Pharm:** HIV-1 protease inhibitor (100mg/mL, InRt = (40.1±12.6)%), $IC_{50} > 100\mu\text{g/mL}$; control Acetyl pepstatin, InRt = 100%, $IC_{50} = 0.15\mu\text{g/mL}$. **Source:** CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*] (stem and root: yield = 0.00005%dw). **Ref:** 918.

**12968 Longipedunin C**

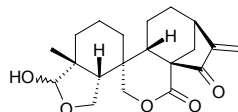
$C_{29}H_{30}O_8$ (506.56). Amorphous powder, $[\alpha]_D = 25.4^\circ$ ($c = 0.2$, MeOH). **Pharm:** HIV-1 protease inhibitor (100mg/mL, InRt = (47.3±1.4)%), $IC_{50} > 100\mu\text{g/mL}$; control Acetyl pepstatin, InRt = 100%, $IC_{50} = 0.15\mu\text{g/mL}$. **Source:** CHANG GENG NAN WU WEI ZI *Kadsura peltigera* [Syn. *Kadsura longipedunculata*] (stem and root: yield = 0.00008%dw). **Ref:** 918.

**12969 α -Longipinene**

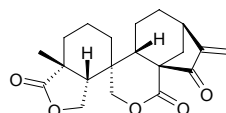
[5989-08-2] $C_{15}H_{24}$ (204.36). **Source:** CHAI HU *Bupleurum chinense*, WU WEI ZI *Schisandra chinensis*. **Ref:** 2, 1521.

**12970 Longirabdacetal**

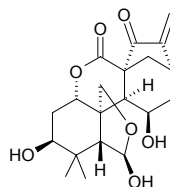
$C_{20}H_{26}O_5$ (346.43). mp 202–208°C, $[\alpha]_D^{22.5} = -160.6^\circ$ ($c = 1.23$, MeOH). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 4067.

**12971 Longirabdolactone**

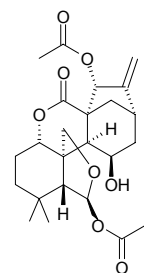
$C_{20}H_{24}O_5$ (344.41). mp 244–246°C, $[\alpha]_D^{22} = -121.6^\circ$ ($c = 0.51$, MeOH). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 4067.

**12972 Longirabdolide C**

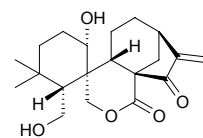
$C_{20}H_{26}O_7$ (378.43). mp 204–206°C, $[\alpha]_D^{22} = -120.6^\circ$ ($c = 0.80$, MeOH). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 4067.

**12973 Longirabdolide D**

$C_{24}H_{32}O_8$ (448.52). mp 257–260°C, $[\alpha]_D^{22} = -156.3^\circ$ ($c = 0.45$, $CHCl_3$). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 4067.

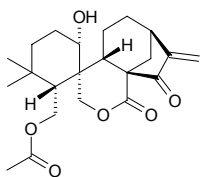
**12974 Longirabdolide E**

$C_{20}H_{28}O_5$ (348.44). mp 258–260°C, $[\alpha]_D^{21} = +24.8^\circ$ ($c = 1.02$, C_5H_5N). **Source:** CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. **Ref:** 4067.

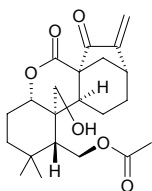


12975 Longirabdolide F

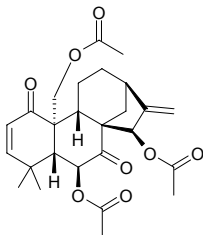
$C_{22}H_{30}O_6$ (390.48). Source: CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. Ref: 4067.

**12976 Longirabdolide G**

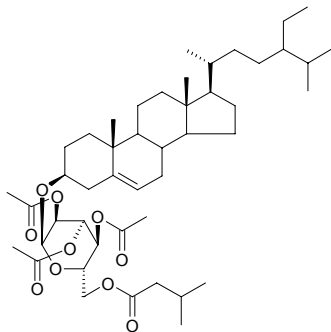
$C_{22}H_{30}O_6$ (390.48). Source: CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. Ref: 4067.

**12977 Longirabdosin**

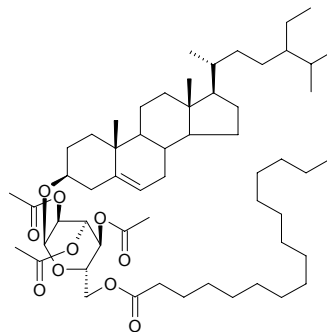
$C_{26}H_{32}O_8$ (472.54). $[\alpha]_D = -150^\circ$ (MeOH). Source: CHANG GUAN XIANG CHA CAI *Rabdosia longituba*. Ref: 4067.

**12978 Longiside A**

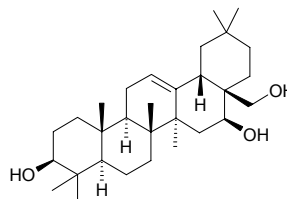
$C_{46}H_{74}O_{10}$ (787.10). $[\alpha]_D = +79.90^\circ$ ($c = 0.082$, chloroform). Source: OU BO HE *Mentha longifolia*. Ref: 2012.

**12979 Longiside B**

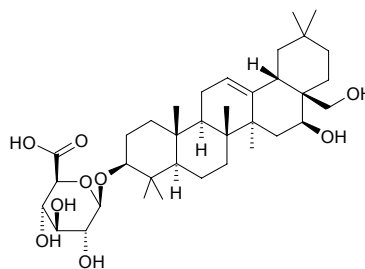
$C_{57}H_{96}O_{10}$ (941.39). $[\alpha]_D = +61.9^\circ$ ($c = 0.069$, chloroform). Source: OU BO HE *Mentha longifolia*. Ref: 2012.

**12980 Longispinogenin**

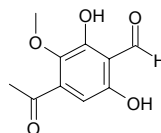
[465-94-1] $C_{30}H_{50}O_3$ (458.73). Crystals (Me₂CO), mp 247~249°C, $[\alpha]_D^{25} = +51^\circ$ (CHCl₃). Source: CHAI HU *Bupleurum chinense*, JIN ZHAN JU *Calendula officinalis*. Ref: 2, 1521.

**12981 Longispinogenin 3-O-β-D-glucuronopyranoside**

$C_{36}H_{58}O_9$ (634.86). Amorphous powder, mp 198~202°C, $[\alpha]_D^{20} = 16^\circ$ ($c = 0.1$, MeOH). Source: CHI GENG TENG *Gymnema sylvestre*. Ref: 766.

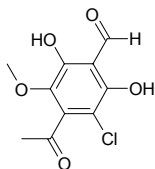
**12982 Longissiminone A**

$C_{10}H_{10}O_5$ (210.19). White amorphous solid, mp 132°C. Pharm: Anti-inflammatory (modified assay of Tan and Berridge, 400μg/mL, InRt = 72.13%, IC₅₀ = (165.1±0.8)μg/mL; control Aspirin, InRt = 70.45%, IC₅₀ = (50.30±4.42)μg/mL); cell viability (hmn isolated neutrophils, 12.5μg/mL, cell viability = 89.68%, 50μg/mL, cell viability = 90.05%, 100μg/mL, cell viability = 52.91%). Source: SONG LUO *Usnea longissima*. Ref: 5316.

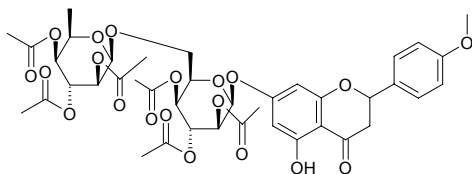


12983 Longissiminone B

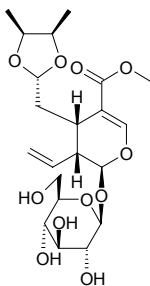
$C_{10}H_9ClO_5$ (244.63). White amorphous material, mp 113°C. **Pharm:** Anti-inflammatory (modified assay of Tan and Berridge, 400 μ g/mL, InRt = 34.34%, control Aspirin, InRt = 70.45%); cell viability (hmn isolated neutrophils, 12.5 μ g/mL, cell viability = 78.81%, 50 μ g/mL, cell viability = 100%, 200 μ g/mL, cell viability = 68.85%). **Source:** SONG LUO *Usnea longissima*. **Ref:** 5316.

**12984 Longitin**

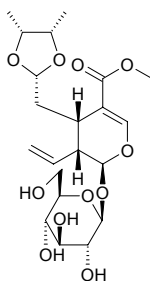
$C_{40}H_{46}O_{20}$ (846.80). $[\alpha]_D^{20} = +81^\circ$ ($c = 0.071$, chloroform). **Source:** OU BO HE *Mentha longifolia*. **Ref:** 2012.

**12985 Loniceracetalide A**

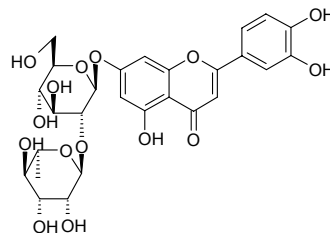
$C_{21}H_{32}O_{11}$ (460.48). Amorphous powder, $[\alpha]_D^{20} = -106^\circ$ ($c = 0.1$, MeOH). **Source:** JIN YIN HUA *Lonicera japonica*. **Ref:** 747.

**12986 Loniceracetalide B**

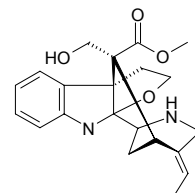
$C_{21}H_{32}O_{11}$ (460.48). Amorphous powder, $[\alpha]_D^{20} = -115^\circ$ ($c = 0.3$, MeOH). **Source:** JIN YIN HUA *Lonicera japonica*. **Ref:** 747.

**12987 Lonicerin**

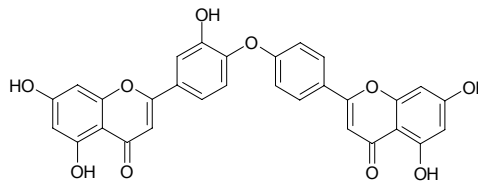
Luteolin-7-O- α -L-rhamnopyranosyl(1 \rightarrow 2)- β -D-glucopyranoside [25694-72-8] $C_{27}H_{30}O_{15}$ (594.53). Crystals (MeOH), mp 249~251°C. **Pharm:** Xanthinioxidase inhibitor (50 μ g/mL, InRt = 20.1%); aldose reductase inhibitor (rat eye lens, 10 μ mol/L InRt = 91.5%, 1 μ mol/L InRt = 55.6%); anti-inflammatory (activity matches with aspirin). **Source:** JIN YIN HUA *Lonicera japonica*, ZHAN LONG JIAN *Veronicastrum sibiricum*, ZHI SHI *Citrus aurantium*, JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*], REN DONG TENG *Lonicera japonica*, SHUI MU XUE LIAN HUA *Saussurea medusa*, XIANG MAO *Cymbopogon citratus*. **Ref:** 2, 660, 1632, 1631, 1671.

**12988 Lonicerine**

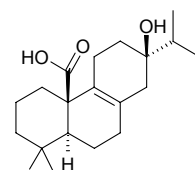
$C_{21}H_{26}N_2O_4$ (370.45). **Source:** HONG HUA RUI MU *Kopsia fruticosa* (leaf). **Ref:** 3830.

**12989 Loniflavone**

5,5'',7,7'',3'-Pentahydroxy 4',4'''-biflavonyl ether $C_{30}H_{18}O_{10}$ (538.47). Yellowish powder, mp 212~214°C. **Source:** JIN YIN HUA *Lonicera japonica* (leaf). **Ref:** 5335.

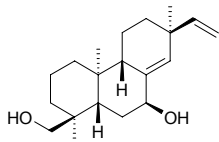
**12990 Lophanic acid**

$C_{20}H_{32}O_3$ (320.48). mp 163.0~165.0°C, $[\alpha]_D^{22} = +260.26^\circ$ ($c = 0.54$, MeOH). **Source:** XIAN WEN XIANG CHA CAI *Isodon lophanthoides*. **Ref:** 4067.

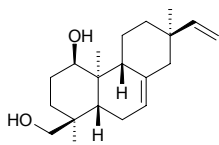


12991 Lophanthin A

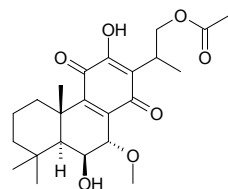
$C_{20}H_{32}O_2$ (304.48). mp 79~81°C, $[\alpha]_D = -4.1^\circ$ ($c = 0.98$, C_5H_5N). Source: XIA JI XIAN WEN XIANG CHA CAI *Isodon lophanthoides* var. *gerardiana*. Ref: 4067.

**12992 Lophanthin B**

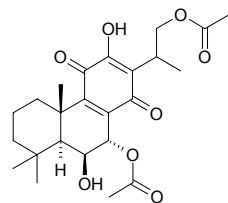
$C_{20}H_{32}O_2$ (304.48). mp 174~176°C, $[\alpha]_D = -37.5^\circ$ ($c = 0.8$, C_5H_5N). Source: XIA JI XIAN WEN XIANG CHA CAI *Isodon lophanthoides* var. *gerardiana*. Ref: 4067.

**12993 Lophanthoidin A**

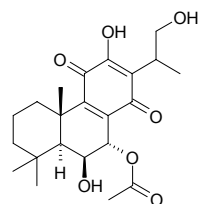
$C_{23}H_{32}O_7$ (420.51). mp 198~202°C. Source: XI HUA XIAN WEN XIANG CHA CAI *Isodon lophanthoides* [Syn. *Rabdosia lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*]. Ref: 660, 4067.

**12994 Lophanthoidin B**

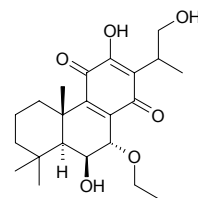
$C_{24}H_{32}O_8$ (448.52). mp 138~139°C. Source: XI HUA XIAN WEN XIANG CHA CAI *Isodon lophanthoides* [Syn. *Rabdosia lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*]. Ref: 660, 4067.

**12995 Lophanthoidin C**

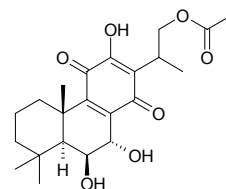
$C_{22}H_{30}O_7$ (406.48). mp 167~169.5°C. Source: XI HUA XIAN WEN XIANG CHA CAI *Isodon lophanthoides* [Syn. *Rabdosia lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*]. Ref: 660, 4067.

**12996 Lophanthoidin D**

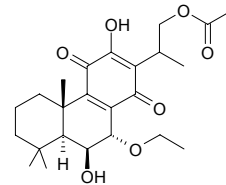
$C_{22}H_{32}O_6$ (392.50). mp 205~210°C. Source: XI HUA XIAN WEN XIANG CHA CAI *Isodon lophanthoides* [Syn. *Rabdosia lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*]. Ref: 660, 4067.

**12997 Lophanthoidin E**

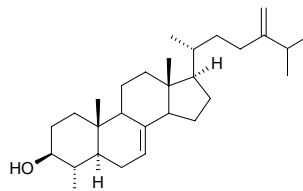
$C_{22}H_{30}O_7$ (406.48). mp 152.5~154°C. Source: XI HUA XIAN WEN XIANG CHA CAI *Isodon lophanthoides* [Syn. *Rabdosia lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*]. Ref: 660, 4067.

**12998 Lophanthoidin F**

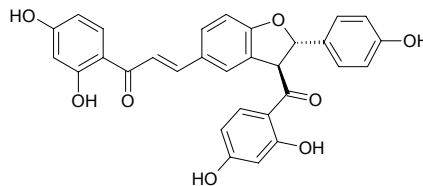
6 β -Hydroxy-7- α -ethoxy-16-acetoxy royleanone $C_{24}H_{34}O_7$ (434.53). Yellow crystals, mp 184~185°C. Source: XI HUA XIAN WEN XIANG CHA CAI *Isodon lophanthoides* [Syn. *Rabdosia lophanthoides*; *Hyssopus lophanthoides*; *Plectranthus striatus*; *Isodon striatus*]. Ref: 646, 660, 4067.

**12999 24-Lophenolmethylene**

$C_{29}H_{48}O$ (412.71). Source: DUO ZU JUE *Polypodium vulgare*. Ref: 660.

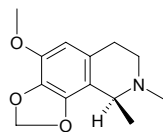
**13000 Lophirone C**

$C_{30}H_{22}O_8$ (510.51). Yellow crystals, mp 190~191°C (Me_2CO), mp 191~193°C, $[\alpha]_D^{25} = -16.4^\circ$ ($c = 0.5$, Me_2CO). Source: *Ochna afzelii* (stem cortex). Ref: 5153.

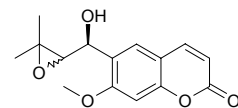


13001 Lophophorine

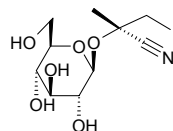
[17627-78-0] C₁₃H₁₇NO₃ (235.29). Oil, bp 140~145°C/0.05mmHg, [α]_D²⁵ = -47.3° (CHCl₃). **Pharm:** Eclamptogenic; respiratory stimulant; LD₅₀ (rbt, iv) = 15~20mg/kg. **Source:** AN LU LONG SHE LAN *Lophophora williamsii*. **Ref:** 658.

**13002 Lophoptrol**

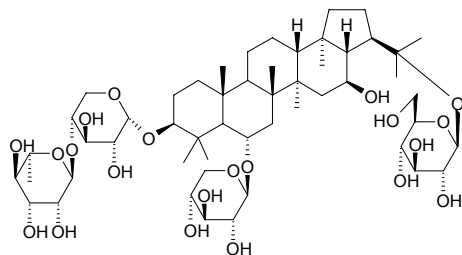
C₁₅H₁₆O₅ (276.29). **Pharm:** Antineoplastic (Raji cells, antitumor promotor, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA: EBV-EA-positive cells = (17.9±2.1)% (viability > 80%), β-Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability > 80%), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability > 80%), compound IC₅₀ = 205mol ratio/32 pmol TPA, β-Carotene, IC₅₀ = 400mol ratio/32 pmol TPA, Curcumin, IC₅₀ = 341mol ratio/32 pmol TPA). **Source:** PU TAO YOU DA HONG JU ZA JIAO ZHONG *Citrus paradisi* x *Citrus tangerina*. **Ref:** 5048.

**13003 Lotaustralin**

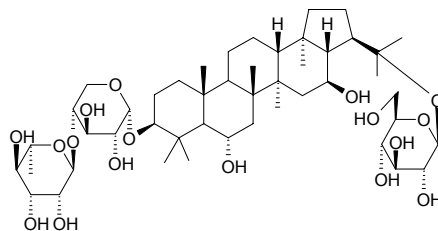
[534-67-8] C₁₁H₁₉NO₆ (261.28). mp 121°C. **Pharm:** Similar action with linamarin. **Source:** AO ZHOU BAI MAI GEN *Lotus australis*, DAN LI XIAO MAI *Triticum monococcum*, SAN XIAO CAO *Trifolium repens*, XIA YE HONG JING TIAN *Rhodiola kirilowii*, YA MA *Linum usitatissimum*, *Passiflora* sp., *Triticum* sp. **Ref:** 516, 658.

**13004 Lotoideside A**

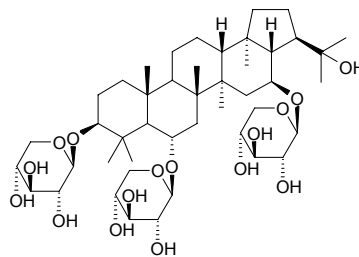
3-*O*-β-*D*-Xylopyranosyl (1→2)-α-*L*-rhamnopyranosyl-6α-*O*-β-*D*-xylopyranosyl-22-*O*-β-*D*-glucopyranosyl-16β-hydroxy hopane C₅₂H₈₈O₂₁ (1049.27). White amorphous solid, [α]_D^{27.6} = -7.5° (c = 3.9, MeOH). **Source:** XING SU CAO *Glinus lotoides* [Syn. *Mollugo lotoides*] (whole herb). **Ref:** 5258.

**13005 Lotoideside B**

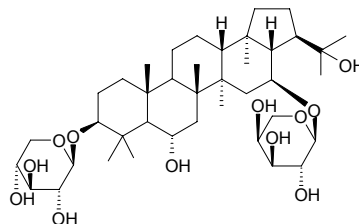
3-*O*-β-*D*-Xylopyranosyl (1→2)-α-*L*-rhamnopyranosyl-22β-*O*-β-*D*-glucopyranosyl-6α,16β-dihydroxyhopane C₄₇H₈₀O₁₇ (917.15). White amorphous solid, [α]_D^{27.6} = -10.4° (c = 1.18, MeOH). **Source:** XING SU CAO *Glinus lotoides* [Syn. *Mollugo lotoides*] (whole herb). **Ref:** 5258.

**13006 Lotoideside C**

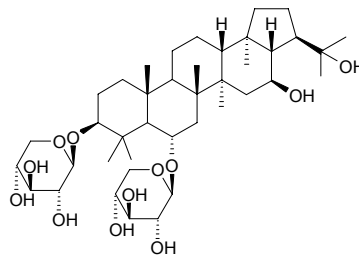
3-*O*-β-*D*-Xylopyranosyl-6α-*O*-β-*D*-xylopyranosyl-16β-*O*-β-*D*-xylopyranosyl-22β-hydroxyhopane C₄₅H₇₆O₁₆ (873.10). White crystalline solid, mp 240°C, [α]_D^{27.6} = +6.4° (c = 1.00, pyridine). **Source:** XING SU CAO *Glinus lotoides* [Syn. *Mollugo lotoides*] (whole herb). **Ref:** 5258.

**13007 Lotoideside D**

3-*O*-β-*D*-Xylopyranosyl-16β-*O*-α-*L*-arabinopyranosyl-6α,22β-dihydroxyhopane C₄₀H₆₈O₁₂ (740.98). White crystalline solid, mp 222~223°C, [α]_D^{27.6} = +15.5° (c = 1.42, MeOH). **Source:** XING SU CAO *Glinus lotoides* [Syn. *Mollugo lotoides*] (whole herb). **Ref:** 5258.

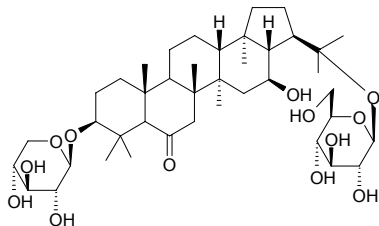
**13008 Lotoideside E**

3-*O*-β-*D*-Xylopyranosyl-6α-*O*-β-*D*-xylopyranosyl-16β,22β-dihydroxyhopane C₄₀H₆₈O₁₂ (740.98). White crystalline solid, mp 225~226°C, [α]_D^{27.6} = +17.5° (c = 0.73, MeOH). **Source:** XING SU CAO *Glinus lotoides* [Syn. *Mollugo lotoides*] (whole herb). **Ref:** 5258.

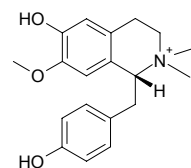


13009 Lotoideside F

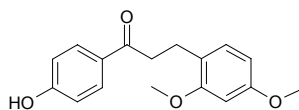
3-*O*- β -*D*-Xylopyranosyl-22 β -*O*- β -*D*-glucopyranosyl-16 β -hydroxyhopan-6-one C₄₁H₆₈O₁₃ (768.99). White crystalline solid, mp 205~206°C, $[\alpha]_D^{27.6} = -22.3^\circ$ ($c = 1.19$, pyridine). Source: XING SU CAO *Glinus lotoides* [Syn. *Mollugo lotoides*] (whole herb). Ref: 5258.

**13010 Lotusine**

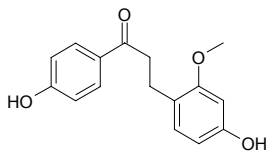
[6871-67-6] C₁₉H₂₄NO₃ (314.41). Source: LIAN ZI XIN *Nelumbo nucifera*. Ref: 6.

**13011 Loureirin A**

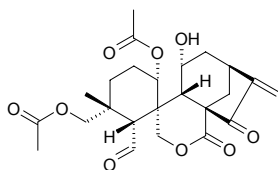
[119425-89-7] C₁₇H₁₈O₄ (286.33). Yellow rhombus crystals (chloroform-methanol), mp 124°C, $[\alpha]_D^{21} = 0^\circ$ ($c = 0.082$, ethanol). Pharm: Antifungal. Source: JIAN YE LONG XUE SHU *Dracaena cochinchinensis*. Ref: 904, 1046.

**13012 Loureirin C**

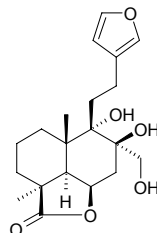
C₁₆H₁₆O₄ (272.30). Source: LONG XUE SHU *Dracaena draco* (stem cortex). Ref: 4696.

**13013 Loxothyrisin A**

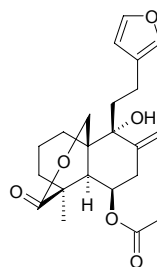
C₂₄H₃₀O₉ (462.50). mp 242~244°C, $[\alpha]_D = -76.3^\circ$ ($c = 0.05$, MeOH). Source: WAN ZHUI XIANG CHA CAI *Isodon loxothyrsa*. Ref: 4067.

**13014 LS-1(furanoditerpenolactone)**

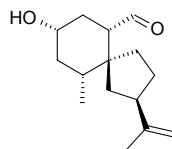
C₂₀H₂₈O₆ (364.44). Amorphous, $[\alpha]_D^{20} = +22.0^\circ$ ($c = 0.6$, MeOH). Pharm: Cytotoxic (leukemia cells L₁₂₁₀ in tissue culture, IC₅₀ = 50~60µg/mL). Source: XI YE YI MU CAO *Leonurus sibiricus* (aerial parts). Ref: 4328.

**13015 LS-2(furanoditerpenolactone)**

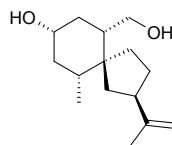
C₂₂H₂₈O₆ (388.46). Amorphous, $[\alpha]_D^{20} = +18.0^\circ$ ($c = 0.5$, MeOH). Pharm: Cytotoxic (leukemia cells L₁₂₁₀ in tissue culture, IC₅₀ = 50~60µg/mL). Source: XI YE YI MU CAO *Leonurus sibiricus* (aerial parts). Ref: 4328.

**13016 Lubimin**

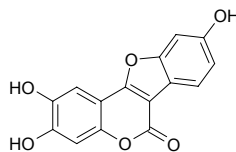
[35951-50-9] C₁₅H₂₄O₂ (236.36). Pharm: Antifungal. Source: MA LING SHU *Solanum tuberosum*, QIE ZI *Solanum melongena*. Ref: 658.

**13017 Lubiminol**

C₁₅H₂₆O₂ (238.37). Source: HONG HAI JIAO *Capsicum annuum* (stem and root: yield = 0.0003%dw). Ref: 4779.

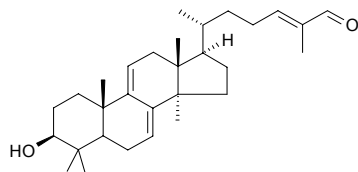
**13018 Lucernol**

[15402-22-9] C₁₅H₈O₆ (284.23). mp > 350°C. Source: MU XU *Medicago sativa*. Ref: 6, 1521.

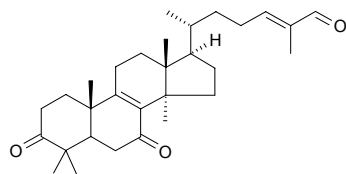


13019 Lucialdehyde A

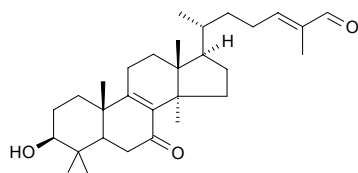
(24E)-3 β -Hydroxy-5 α -lanosta-7,9(11),24-trien-26-al C₃₁H₄₆O₂ (438.70). Amorphous powder (MeOH-H₂O), [α]_D = +32° (c = 0.097, CHCl₃). **Pharm:** Cytotoxic (mus lung carcinoma LLC cell, ED₅₀ > 20 μ g/mL; hmn carcinoma T-47D, ED₅₀ > 20 μ g/mL; mus sarcoma S₁₈₀, ED₅₀ > 20 μ g/mL; mus sarcoma Meth-A, ED₅₀ = 10.4 μ g/mL; control Adriamycin, ED₅₀ = 0.06 μ g/mL, 0.02 μ g/mL, 0.11 μ g/mL, 0.13 μ g/mL, respectively). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 4204.

**13020 Lucialdehyde B**

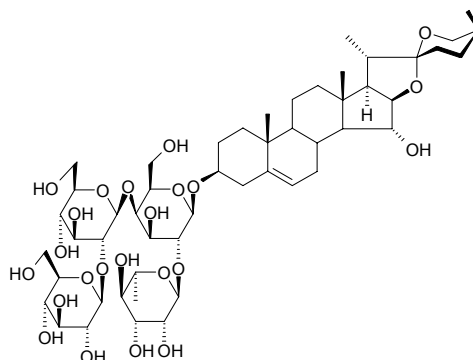
(24E)-3,7-Dioxo-5 α -lanosta-8,24-dien-26-al C₃₀H₄₄O₃ (452.68). Amorphous powder (MeOH-H₂O), [α]_D = +31° (c = 0.105, CHCl₃). **Pharm:** Cytotoxic (mus lung carcinoma LLC cell, ED₅₀ = 14.3 μ g/mL; hmn breast carcinoma T47D, ED₅₀ = 15.0 μ g/mL; mus sarcoma S₁₈₀, ED₅₀ > 20 μ g/mL; mus sarcoma Meth-A, ED₅₀ = 4.0 μ g/mL; control Adriamycin, ED₅₀ = 0.06 μ g/mL, 0.02 μ g/mL, 0.11 μ g/mL, 0.13 μ g/mL, respectively). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 4204.

**13021 Lucialdehyde C**

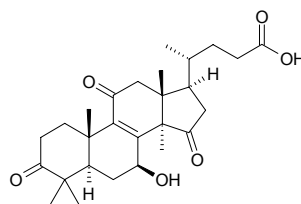
(24E)-3 β -Hydroxy-7-oxo-5 α -lanosta-8,24-dien-26-al C₃₀H₄₆O₃ (454.70). Amorphous powder (MeOH-H₂O), [α]_D = +18° (c = 0.092, CHCl₃). **Pharm:** Cytotoxic (mus lung carcinoma LLC cell, ED₅₀ = 10.7 μ g/mL; hmn breast carcinoma T47D, ED₅₀ = 4.7 μ g/mL; mus sarcoma S₁₈₀, ED₅₀ = 7.1 μ g/mL; mus sarcoma Meth-A, ED₅₀ = 3.8 μ g/mL; control Adriamycin, ED₅₀ = 0.06 μ g/mL, 0.02 μ g/mL, 0.11 μ g/mL, 0.13 μ g/mL, respectively). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 4204.

**13022 Luciamin**

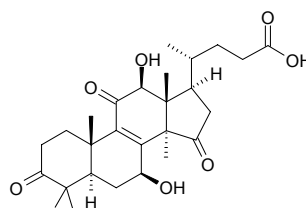
(22R,25S)-Spirost-5-en-3 β ,15 α -diol 3-O- β -D-glucopyranosyl-(1 \rightarrow 2)- β -D-glucopyranosyl-(1 \rightarrow 4)- α -L-rhamnopyranosyl-(1 \rightarrow 2)- β -D-galactopyranoside) C₅₁H₈₂O₂₃ (1063.21). Pale yellow powder, [α]_D²⁰ = -65° (c = 0.3, MeOH). **Pharm:** Insecticidal (aphid *Schizaphis graminum*). **Source:** XI SHU QIE *Solanum laxum* (aerial parts). **Ref:** 5086.

**13023 Lucidenic acid A**

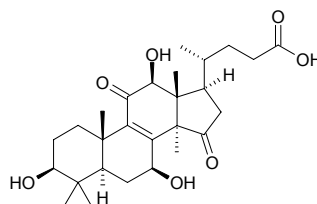
C₂₇H₃₈O₆ (458.60). **Pharm:** Cytotoxic (*in vitro*, HepG2, IC₅₀ = 0.164nmol/L; Hep2,2,15, IC₅₀ = 0.205nmol/L; KB, IC₅₀ = 17 μ mol/L; CCM2, IC₅₀ = 27.5 μ mol/L; P₃₈₈, IC₅₀ = 0.017 μ mol/L)^[3081]; EBV-EA activation inhibitor (Raji cells, *in vitro*, TPA-induced, IC₅₀ = 280mol ratio/32pmol TPA, control β -Carotene, IC₅₀ = 400mol ratio/32pmol TPA)^[4737]. **Source:** LING ZHI *Ganoderma lucidum* (dried sporocarp: mean content of 2 origins = 0.06%^[5508]). **Ref:** 660, 3081, 4737, 5508.

**13024 Lucidenic acid B**

C₂₇H₃₈O₇ (474.60). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 660.

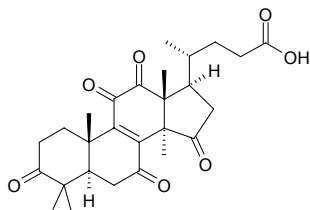
**13025 Lucidenic acid C**

C₂₇H₄₀O₇ (476.62). **Pharm:** EBV-EA activation inhibitor (Raji cells, *in vitro*, TPA-induced, IC₅₀ = 284mol ratio/32pmol TPA, control β -Carotene, IC₅₀ = 400mol ratio/32pmol TPA)^[4737]. **Source:** LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.011%dw). **Ref:** 660, 3081, 4737.

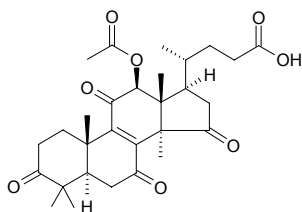


13026 Lucidenic acid D₁

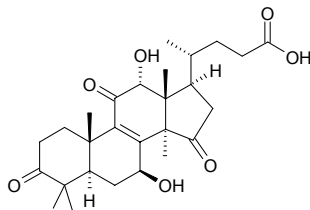
$C_{27}H_{34}O_7$ (470.57). [Source](#): LING ZHI *Ganoderma lucidum*. [Ref](#): 660.

**13027 Lucidenic acid D₂**

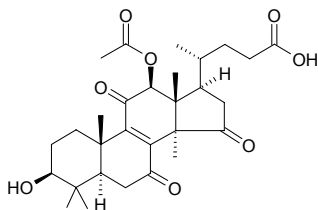
Lucidenic acid D $C_{29}H_{38}O_8$ (514.62). [Pharm](#): EBV-EA activation inhibitor (Raji cells, *in vitro*, TPA-induced, IC_{50} = 287mol ratio/32pmol TPA, control β -Carotene, IC_{50} = 400mol ratio/32pmol TPA)^[4737]. [Source](#): LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.054%dw). [Ref](#): 660, 4737.

**13028 Lucidenic acid E₁**

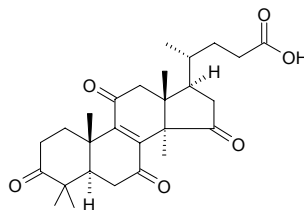
$C_{27}H_{38}O_7$ (474.60). [Source](#): LING ZHI *Ganoderma lucidum*. [Ref](#): 660.

**13029 Lucidenic acid E₂**

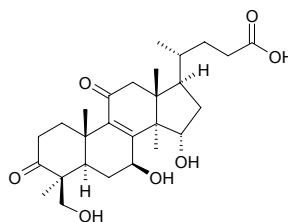
$C_{29}H_{40}O_8$ (516.64). [Pharm](#): EBV-EA activation inhibitor (Raji cells, *in vitro*, TPA-induced, IC_{50} = 280mol ratio/32pmol TPA, control β -Carotene, IC_{50} = 400mol ratio/32pmol TPA)^[4737]. [Source](#): LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.034%dw). [Ref](#): 660, 4737.

**13030 Lucidenic acid F**

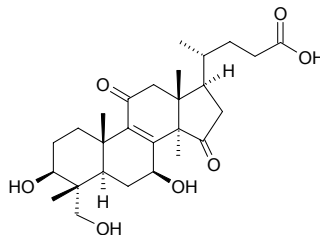
$C_{27}H_{36}O_6$ (456.58). [Source](#): LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.0033%dw). [Ref](#): 660, 4737.

**13031 Lucidenic acid G**

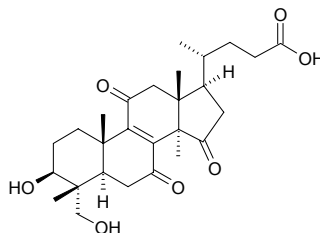
$C_{28}H_{42}O_7$ (490.64). [Source](#): LING ZHI *Ganoderma lucidum*. [Ref](#): 660.

**13032 Lucidenic acid H**

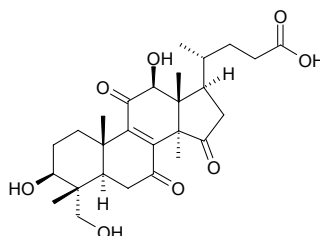
$C_{27}H_{40}O_7$ (476.62). [Source](#): LING ZHI *Ganoderma lucidum*. [Ref](#): 660.

**13033 Lucidenic acid I**

$C_{27}H_{38}O_7$ (474.60). [Source](#): LING ZHI *Ganoderma lucidum*. [Ref](#): 660.

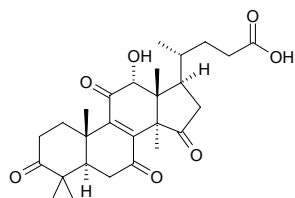
**13034 Lucidenic acid J**

$C_{27}H_{38}O_8$ (490.60). [Source](#): LING ZHI *Ganoderma lucidum*. [Ref](#): 660.

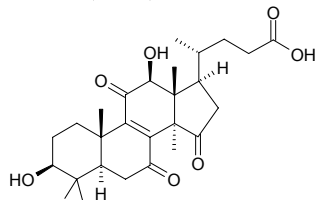


13035 Lucidenic acid K

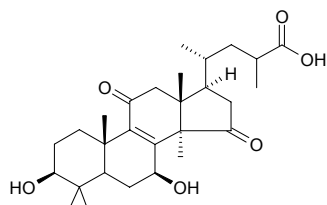
$C_{27}H_{36}O_7$ (472.58). Source: LING ZHI *Ganoderma lucidum*. Ref: 660.

**13036 Lucidenic acid L**

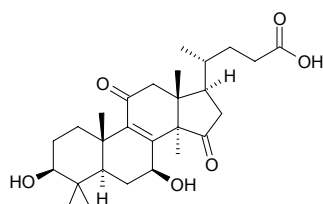
$C_{27}H_{38}O_7$ (474.60). Source: LING ZHI *Ganoderma lucidum*. Ref: 660.

**13037 Lucidenic acid LM₁**

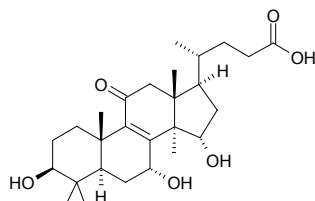
$C_{28}H_{42}O_6$ (474.64). mp 130~131°C, $[\alpha]_D = +140^\circ$. Source: LING ZHI *Ganoderma lucidum*. Ref: 2235.

**13038 Lucidenic acid LW₁**

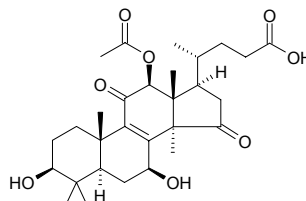
3 β ,7 β -Dihydroxy-4,4,14 α -trimethyl-11,15-dioxo-5 α -chol-8-en-24-oic acid
 $C_{27}H_{40}O_6$ (460.62). White amorphous mp 130~131°C (Me₂CO), $[\alpha]_D^{25} = +140^\circ$ ($c = 0.014$, Me₂CO); Colorless powder (CHCl₃), mp 202~204°C, $[\alpha]_D = +119.5^\circ$ ($c = 0.23$, CHCl₃). Pharm: Cytotoxic (*in vitro*, HepG2, IC₅₀ = 0.206nmol/L; Hep2,2,15, IC₅₀ = 1.66nmol/L; KB, IC₅₀ = 26.7 μ mol/L; CCM2, IC₅₀ = 35.5 μ mol/L; P₃₈₈, IC₅₀ = 0.012 μ mol/L)^[3081]. Source: LING ZHI *Ganoderma lucidum*. Ref: 2123, 3081.

**13039 Lucidenic acid M**

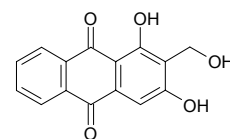
$C_{27}H_{42}O_6$ (462.63). Source: LING ZHI *Ganoderma lucidum*. Ref: 660.

**13040 Lucidenic acid P**

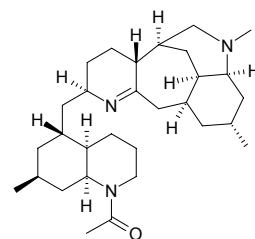
$C_{29}H_{42}O_8$ (518.65). Colorless needles (acetone-MeOH), mp 135~137°C, $[\alpha]_D^{25} = +14.7^\circ$ ($c = 0.38$, CHCl₃). Pharm: EBV-EA activation inhibitor (Raji cells, *in vitro*, TPA-induced, IC₅₀ = 286mol ratio/32pmol TPA, control β -Carotene, IC₅₀ = 400mol ratio/32pmol TPA). Source: LING ZHI *Ganoderma lucidum*. Ref: 4737.

**13041 Lucidin**

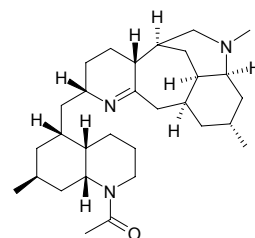
[478-08-0] $C_{15}H_{10}O_5$ (270.24). mp > 330°C. Pharm: Antibacterial (*Salmonella typhimurium*); cytotoxic (KB, ED₅₀ > 25 μ g/mL, control Doxorubicin, ED₅₀ = 0.12 μ g/mL; Hep3B, ED₅₀ > 25 μ g/mL, control Doxorubicin, ED₅₀ = 0.14 μ g/mL; Colon205, ED₅₀ > 25 μ g/mL, control Doxorubicin, ED₅₀ = 0.10 μ g/mL; HeLa, ED₅₀ > 25 μ g/mL, control Doxorubicin, ED₅₀ = 0.11 μ g/mL)^[4369]. Source: GUANG JING QIAN CAO *Rubia wallichiana* (stem), TU LIAN QIAO *Hymenodictyon excelsum*, XIANG CHE YE CAO *Asperula odorata*, YANG JIAO TENG *Morinda umbellata*, YANG QIAN CAO *Rubia tinctorum*, *Galium* sp. Ref: 6, 658, 4369.

**13042 Lucidine A**

$C_{30}H_{49}N_3O$ (467.74). Source: GUANG LIANG SHI SONG *Lycopodium lucidulum*. Ref: 3927.

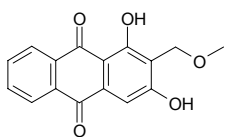
**13043 Lucidine B**

$C_{30}H_{49}N_3O$ (467.74). Source: GUANG LIANG SHI SONG *Lycopodium lucidulum*. Ref: 3927.

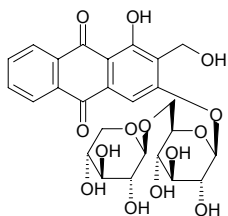


13044 Lucidin *o*-methyl ether

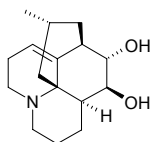
$C_{16}H_{12}O_5$ (284.27). **Pharm:** Cytotoxic (*in vitro* leukemia). **Source:** BAI YAN TENG *Morinda parvifolia*. **Ref:** 658.

**13045 Lucidin primeveroside**

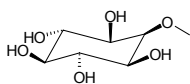
$C_{26}H_{28}O_{14}$ (564.50). **Source:** GUANG JING QIAN CAO *Rubia wallichiana* (stem). **Ref:** 4369.

**13046 Lucidioline**

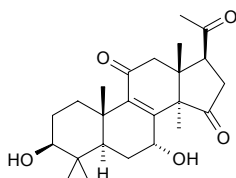
$C_{16}H_{25}NO_2$ (263.38). **Source:** GUANG LIANG SHI SONG *Lycopodium lucidulum*, QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. **Ref:** 660, 1521, 4388.

**13047 Lucidol**

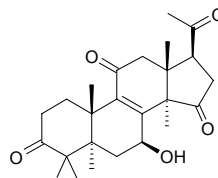
1 β -Methoxy-2 β ,3 α ,4 β ,5 α ,6 β -pentahydroxycyclohexane $C_7H_{14}O_6$ (194.19). White amorphous crystals, white amorphous crystals (MeOH). **Source:** LI BING JIN FEN JUE *Onychium lucidum*. **Ref:** 881.

**13048 Lucidone A**

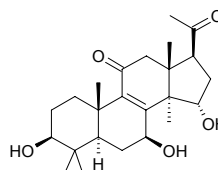
$C_{24}H_{34}O_5$ (402.54). **Source:** LING ZHI *Ganoderma lucidum* (dried sporocarp; yield = 0.00025%). **Ref:** 660, 4603.

**13049 Lucidone B**

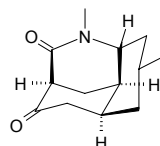
$C_{24}H_{32}O_5$ (400.52). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 660.

**13050 Lucidone C**

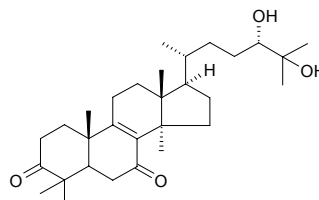
$C_{24}H_{36}O_5$ (404.55). **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 660.

**13051 Lucidulinone**

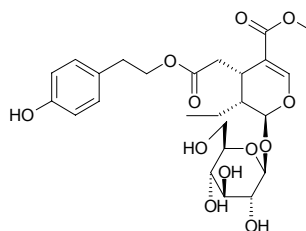
$C_{13}H_{19}NO_2$ (221.30). $[\alpha]_D^{21.5} = +185.0^\circ$ ($c = 1.1$, $CHCl_3$). **Source:** GUANG LIANG SHI SONG *Lycopodium lucidulum*. **Ref:** 3927.

**13052 Lucidumol A**

$C_{30}H_{48}O_4$ (472.71). mp 185–187°C, $[\alpha]_D = +35^\circ$. **Source:** LING ZHI *Ganoderma lucidum*. **Ref:** 2235.

**13053 Lucidumoside A**

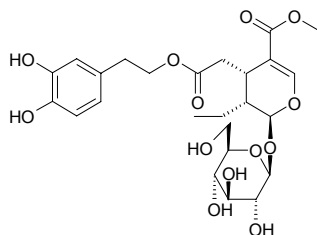
$C_{25}H_{34}O_{12}$ (526.54). Colorless powder, $[\alpha]_D^{15} = -90^\circ$ ($c = 0.41$, MeOH). **Pharm:** Antiviral (Hep2 cells, Para-3, $IC_{50} = 41.7\mu g/mL$, TI = 6.0; MDCK cells, Flu-A, inactive; Vero cells, HSV-1, inactive)^[4141]; anti-hemolysis inactive (rat, red blood cell *in vitro*, AAPH-induced, $IC_{50} > 200\mu mol/L$, control Trolox, $IC_{50} = 55.0\mu mol/L$)^[4141]. **Source:** NV ZHEN ZI *Ligustrum lucidum*. **Ref:** 757, 4141.



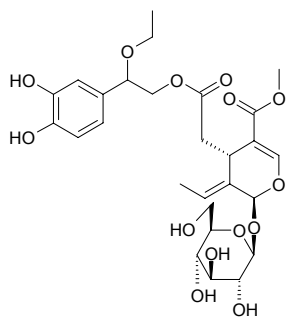
13054 Lucidumside B

$C_{25}H_{34}O_{13}$ (542.54). Colorless powder, $[\alpha]_D^{15} = -103^\circ$ ($c = 0.21$, MeOH).

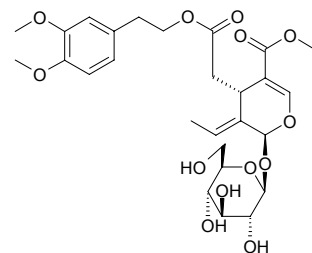
Pharm: Antioxidant (against hemolysis of red blood cells induced by free radicals). **Source:** NV ZHEN ZI *Ligustrum lucidum*. **Ref:** 757, 3545.

**13055 Lucidumside C**

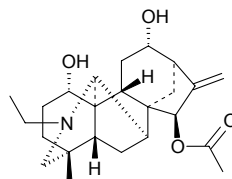
$C_{27}H_{36}O_{14}$ (584.58). Powder, $[\alpha]_D^{15} = -112^\circ$ ($c = 0.22$, MeOH). **Pharm:** Antiviral (Hep2 cells, Para-3, $IC_{50} = 20.8 \mu\text{g/mL}$, $TI = 12.0$; MDCK cells, Flu-A, inactive; Vero cells, HSV-1, inactive)^[4141]; anti-hemolysis (rat, red blood cell *in vitro*, AAPH-induced, $IC_{50} = 9.3 \mu\text{mol/L}$, control Trolox, $IC_{50} = 55.0 \mu\text{mol/L}$)^[4141]; anti-hemolysis (against hemolysis of red blood cells induced by AAPH free radicals, $IC_{50} = 9.3 \mu\text{mol/L}$)^[3545]. **Source:** NV ZHEN ZI *Ligustrum lucidum*. **Ref:** 3545, 4141.

**13056 Lucidumside D**

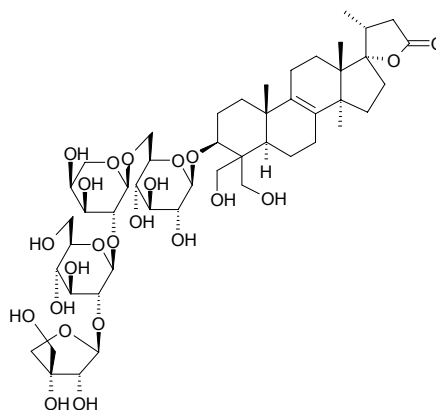
$C_{27}H_{36}O_{13}$ (568.58). Powder, $[\alpha]_D^{15} = -143^\circ$ ($c = 0.32$, MeOH). **Source:** NV ZHEN ZI *Ligustrum lucidum*. **Ref:** 3545.

**13057 Lucidusculine**

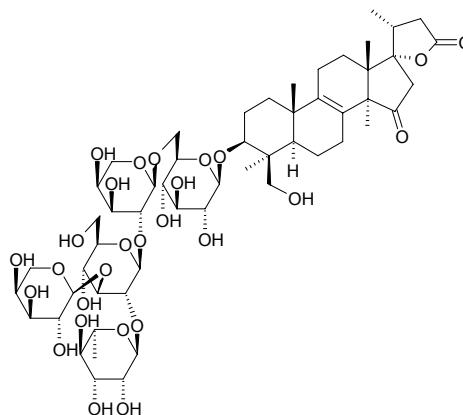
$C_{24}H_{35}NO_4$ (401.55). Lamellar crystals (methanol), mp 170–171°C, $[\alpha]_D = -95.5^\circ$ (chloroform); hydrochloride crystals, containing 3.5 hydrous water, mp 98–115°C, absolute substance mp 245–265°C (dec). **Pharm:** Anti-diuretic (caused by purine group). **Source:** GUANG ZE WU TOU *Aconitum lucidusculum*. **Ref:** 6, 658.

**13058 Lucilianoside C**

3β -[(*O*- β -D-Apiofuranosyl-(1→2)-*O*- β -D-glucopyranosyl-(1→2)-*O*- α -L-arabinopyranosyl-(1→6)- β -D-glucopyranosyl)oxy]-28,29-dihydroxy-24,25,26,27-tetranorlanost-8-en-17 α ,23-olide $C_{48}H_{76}O_{23}$ (1021.13). Amorphous solid, $[\alpha]_D^{27} = 48.0^\circ$ ($c = 0.10$, MeOH). **Pharm:** Cytotoxic inactive (HSC-2 hmn oral squamous cell carcinoma cells, $IC_{50} > 100 \mu\text{g/mL}$; control Etoposide, $IC_{50} = 24 \mu\text{g/mL}$). **Source:** QI YI PU TAO FENG XIN ZI *Muscari paradoxum* (bulb). **Ref:** 3495.

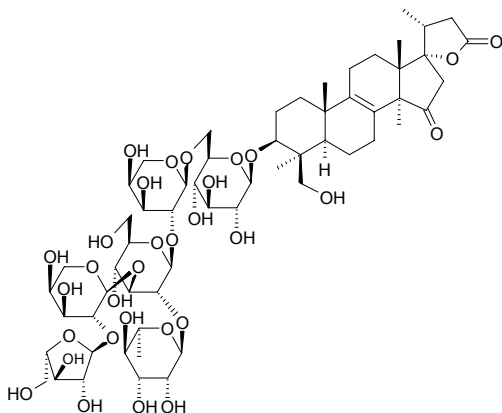
**13059 Lucilianoside D**

3β -[(*O*- α -L-Arabinopyranosyl-(1→3)-*O*-[α -L-rhamnopyranosyl-(1→2)]-*O*- β -D-glucopyranosyl-(1→2)-*O*- α -L-arabinopyranosyl-(1→6)- β -D-glucopyranosyl)oxy]-29-hydroxy-15-oxo-24,25,26,27-tetranorlanost-8-en-17 α ,23-olide $C_{54}H_{84}O_{27}$ (1165.26). Amorphous solid, $[\alpha]_D^{26} = 32.0^\circ$ ($c = 0.10$, MeOH). **Pharm:** Cytotoxic inactive (HSC-2 hmn oral squamous cell carcinoma cells, $IC_{50} > 100 \mu\text{g/mL}$; control Etoposide, $IC_{50} = 24 \mu\text{g/mL}$). **Source:** QI YI PU TAO FENG XIN ZI *Muscari paradoxum* (bulb). **Ref:** 3495.

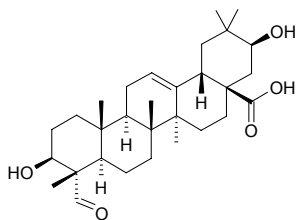


13060 Lucilianoside E

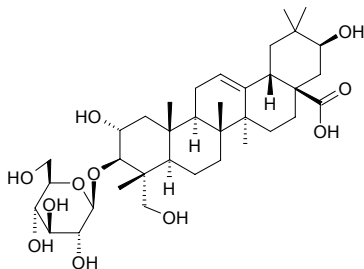
3 β -[(*O*- α -L-Arabinofuranosyl-(1 \rightarrow 2)-*O*- α -L-arabinopyranosyl-(1 \rightarrow 3)-*O*-[α -L-rhamnopyranosyl-(1 \rightarrow 2)]-*O*- β -D-glucopyranosyl-(1 \rightarrow 2)-*O*- α -L-arabinopyranosyl-(1 \rightarrow 6)- β -D-glucopyranosyl)oxy]-29-hydroxy-15-oxo-24,25,26,27-tetranorlanost-8-en-17 α ,23-olide C₅₉H₉₂O₃₁ (1297.37). Amorphous solid, [α]_D²⁶ = 38.5° (*c* = 0.13, MeOH). **Pharm:** Cytotoxic inactive (HSC-2 hmn oral squamous cell carcinoma cells, IC₅₀ > 100 μ g/mL; control Etoposide, IC₅₀ = 24 μ g/mL). **Source:** QI YI PU TAO FENG XIN ZI *Muscari paradoxum* (bulb). **Ref:** 3495.

**13061 Lucyin**

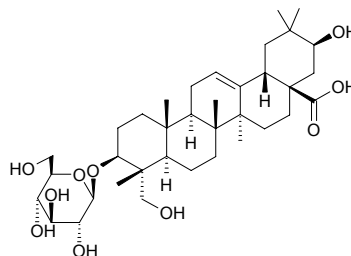
21 β -Hydroxy-gypsogenin C₃₀H₄₆O₅ (486.70). Colorless claviform crystals, mp 240–242°C. **Source:** SI GUA *Luffa cylindrica*. **Ref:** 284.

**13062 Lucyoside R**

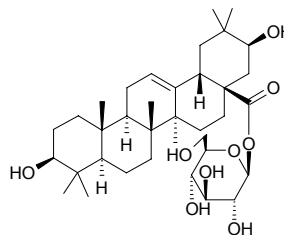
2 α ,21 β -Dihydroxyhederagenin-3-*O*- β -D-glucopyranoside C₃₆H₅₈O₁₁ (666.86). Colorless granular crystals, mp 234–236°C, [α]_D = +35.7° (*c* = 0.40, methanol). **Source:** SI GUA *Luffa cylindrica*. **Ref:** 396.

**13063 Lucyoside N**

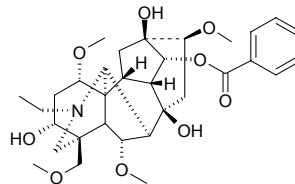
3-*O*- β -D-Glucopyranosyl-21- β -hydroxyhederagenin C₃₆H₅₈O₁₀ (650.86). Colorless granular crystals, mp 221–223°C. **Source:** SI GUA *Luffa cylindrica*. **Ref:** 284.

**13064 Lucyoside Q**

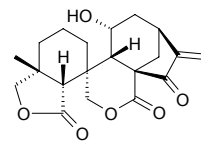
21 β -Hydroxyloleanoic acid-28-*O*- β -D-glucopyranoside C₃₆H₅₈O₉ (634.86). White powder, mp 238–240°C, [α]_D¹⁵ = +23.5° (*c* = 0.40, methanol). **Source:** SI GUA *Luffa cylindrica*. **Ref:** 346.

**13065 Ludaconitine**

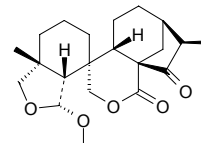
[82144-72-7] C₃₂H₄₅NO₉ (587.72). White amorphous powder. **Source:** GONG GA SHAN WU TOU *Aconitum liljestrandii*. **Ref:** 2191.

**13066 Ludongnin A**

C₂₀H₂₄O₆ (360.41). mp 265–267°C, [α]_D¹² = –94.1° (*c* = 0.68, C₅H₅N). **Source:** LU SHI DONG LING CAO *Isodon rubescens* var. *lushiensis*. **Ref:** 4067.

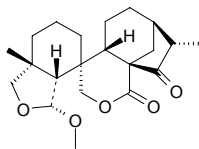
**13067 Ludongnin F**

(16*R*)-6 α -Methoxy-6,7-seco-6,19-epoxy-7,20-olide-*ent*-kaur-15-one C₂₁H₃₀O₅ (362.47). Colorless cube crystals (MeOH), mp 214–215°C, [α]_D²⁰ = –281.9° (*c* = 0.26, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, K562, IC₅₀ > 50 μ g/mL; control *cis*-Platin, IC₅₀ = 0.52 μ g/mL). **Source:** LU SHI DONG LING CAO *Isodon rubescens* var. *lushiensis* (leaf: yield = 0.00014%dw). **Ref:** 4732.

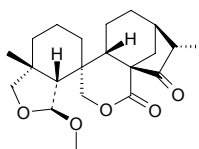


13068 Ludongnin G

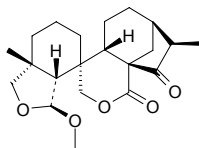
(16*S*)-6 α -Methoxy-6,7-seco-6,19-epoxy-7,20-olide-*ent*-kaur-15-one C₂₁H₃₀O₅ (362.47). Colorless diamond crystals (MeOH), mp 203~204°C, [α]_D²⁰ = -183.6° (*c* = 0.31, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, K562, IC₅₀ > 50µg/mL; control *cis*-Platin, IC₅₀ = 0.52µg/mL). **Source:** LU SHI DONG LING CAO *Isodon rubescens* var. *lushiensis* (leaf: yield = 0.00011%dw). **Ref:** 4732.

**13069 Ludongnin H**

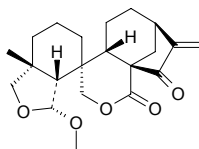
(16*S*)-6 β -Methoxy-6,7-seco-6,19-epoxy-7,20-olide-*ent*-kaur-15-one C₂₁H₃₀O₅ (362.47). White amorphous powder, [α]_D²⁰ = +2.7° (*c* = 0.92, acetone). **Pharm:** Cytotoxic inactive (*in vitro*, K562, IC₅₀ > 50µg/mL; control *cis*-Platin, IC₅₀ = 0.52µg/mL). **Source:** LU SHI DONG LING CAO *Isodon rubescens* var. *lushiensis* (leaf: yield = 0.000053%dw). **Ref:** 4732.

**13070 Ludongnin I**

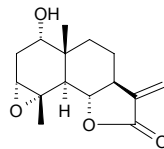
(16*R*)-6 β -Methoxy-6,7-seco-6,19-epoxy-7,20-olide-*ent*-kaur-15-one C₂₁H₃₀O₅ (362.47). White amorphous powder, [α]_D²⁰ = -16.7° (*c* = 0.12, acetone). **Pharm:** Cytotoxic inactive (*in vitro*, K562, IC₅₀ > 50µg/mL; control *cis*-Platin, IC₅₀ = 0.52µg/mL). **Source:** LU SHI DONG LING CAO *Isodon rubescens* var. *lushiensis* (leaf: yield = 0.00004%dw). **Ref:** 4732.

**13071 Ludongnin J**

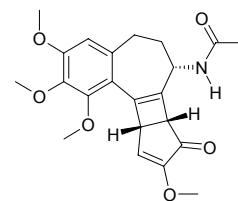
6 α -Methoxy-6,7-seco-6,19-epoxy-7,20-olide-*ent*-kaur-16(17)-en-15-one C₂₁H₂₈O₅ (360.45). Colorless cube crystals (MeOH), mp 164~165°C, [α]_D²⁰ = -233.9° (*c* = 0.93, MeOH). **Pharm:** Cytotoxic (*in vitro*, K562, IC₅₀ = 0.18µg/mL; CA, IC₅₀ = 0.09µg/mL; HeLa, IC₅₀ = 0.7µg/mL; control *cis*-Platin: K562, IC₅₀ = 0.52µg/mL; CA, IC₅₀ = 0.88µg/mL; HeLa, IC₅₀ = 3.6µg/mL). **Source:** LU SHI DONG LING CAO *Isodon rubescens* var. *lushiensis* (leaf: yield = 0.00026%dw). **Ref:** 4732.

**13072 Ludovicin A**

[27740-13-2] C₁₅H₂₀O₄ (264.32). Crystals (Et₂O-CH₂Cl₂), mp 215°C, [α]_D²⁵ = +128° (CHCl₃). **Pharm:** Antineoplastic; cytotoxic. **Source:** LU DE WEI HAO *Artemisia ludoviciana*, MO XI GE HAO *Artemisia mexicana* var. *angustifolia*. **Ref:** 658.

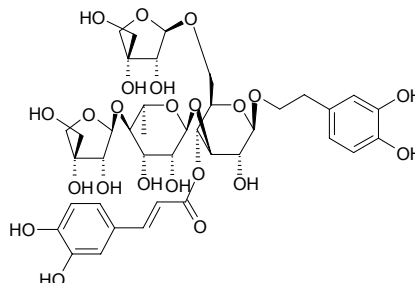
**13073 β -Lumicolchicine**

[6901-13-9] C₂₂H₂₅NO₆ (399.45). mp 184~186°C. **Source:** CAO BEI MU *Iphigenia indica*. **Ref:** 6, 1521.

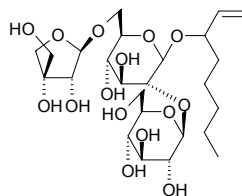
**13074 Lunariifolioside**

2-(3,4-Dihydroxyphenyl)ethyl

O- β -apiofuranosyl-(1 \rightarrow 6)-*O*-[*O*- β -apiofuranosyl-(1 \rightarrow 4)- α -rhamnopyranosyl-(1 \rightarrow 3)]-4-*O*-(*E*)-caffeoyl- β -glucopyranoside C₃₉H₅₂O₂₃ (888.84). Amorphous pale yellow solid, [α]_D²⁰ = -88° (*c* = 0.1, MeOH). **Source:** XIN YUE XING YE CAO SU *Phlomis lunariifolia* (aerial parts). **Ref:** 3864.

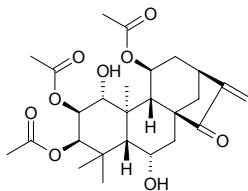
**13075 Lunaroside**

1-Octen-3-yl *O*- β -apiofuranosyl-(1 \rightarrow 6)-*O*-[β -glucopyranosyl-(1 \rightarrow 2)]- β -glucopyranoside C₂₅H₄₄O₁₅ (584.62). Amorphous colorless solid, [α]_D²⁰ = -54° (*c* = 0.1, MeOH). **Source:** XIN YUE XING YE CAO SU *Phlomis lunariifolia* (aerial parts). **Ref:** 3864.

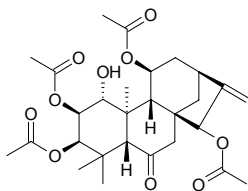


13076 Lungshengenin A

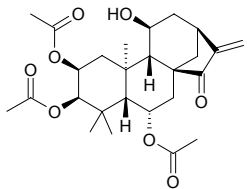
$C_{28}H_{36}O_9$ (492.57). mp 138~140°C, $[\alpha]_D^{21} = -21.9^\circ$ ($c = 1.2$, C_5H_5N). **Pharm:** Antineoplastic ($IC_{50} \leq 10\mu g/kg$); cytotoxic (K562). **Source:** LONG SHENG XIANG CHA CAI *Isodon lungshengensis*. **Ref:** 690, 4067.

**13077 Lungshengenin B**

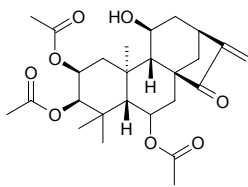
$C_{28}H_{38}O_{10}$ (354.64). Colorless cubes (cyclohexane); mp 166~167°C, $[\alpha]_D^{22} = -66.5^\circ$ ($c = 0.57$, $CHCl_3$); mp 166.3~167.8°C, $[\alpha]_D^{22.5} = -65.47^\circ$ ($c = 0.57$, $CHCl_3$). **Source:** LONG SHENG XIANG CHA CAI *Isodon lungshengensis*. **Ref:** 690, 4067.

**13078 Lungshengenin C**

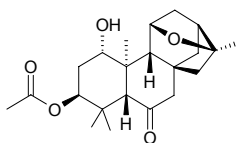
$C_{26}H_{36}O_8$ (476.57). Colorless acicular crystals (Me_2CO); mp 199~201°C, $[\alpha]_D^{22} = -53.7^\circ$ ($c = 0.39$, $CHCl_3$). **Pharm:** Cytotoxic (K562). **Source:** LONG SHENG XIANG CHA CAI *Isodon lungshengensis*. **Ref:** 690.

**13079 Lungshengenin C**

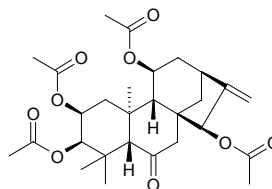
$C_{26}H_{36}O_8$ (476.57). mp 199.3~201.1°C, $[\alpha]_D^{22.5} = -53.71^\circ$ ($c = 0.39$, $CHCl_3$). **Source:** LONG SHENG XIANG CHA CAI *Isodon lungshengensis*. **Ref:** 4067.

**13080 Lungshengenin D**

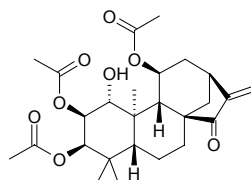
$C_{22}H_{32}O_5$ (376.50). Colorless prisms (Me_2CO); mp 199~200°C, $[\alpha]_D^{22} = +26.4^\circ$ ($c = 0.27$, $CHCl_3$). **Source:** LONG SHENG XIANG CHA CAI *Isodon lungshengensis*. **Ref:** 690, 4067.

**13081 Lungshengenin E**

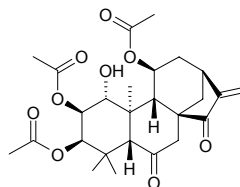
$C_{28}H_{38}O_9$ (518.61). Colorless cubes, mp 241~243, $[\alpha]_D^{22} = -44.5^\circ$ ($c = 0.25$, $MeOH$). **Source:** LONG SHENG XIANG CHA CAI *Isodon lungshengensis*. **Ref:** 690.

**13082 Lungshengenin F**

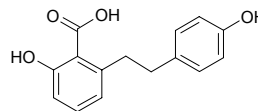
$C_{26}H_{36}O_8$ (476.57). Colorless cubes, mp 95~96°C, $[\alpha]_D^{22} = -94.9^\circ$ ($c = 0.47$, $CHCl_3$); mp 94.7~96.1°C, $[\alpha]_D^{22} = +26.42^\circ$ ($c = 0.27$, $CHCl_3$). **Source:** LONG SHENG XIANG CHA CAI *Isodon lungshengensis*. **Ref:** 690, 4067.

**13083 Lungshengenin G**

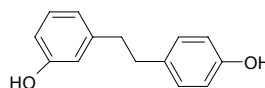
$C_{26}H_{34}O_9$ (490.56). Amorphous powder, $[\alpha]_D^{27} = -80.4^\circ$ ($c = 0.34$, $MeOH$). **Pharm:** Antineoplastic ($IC_{50} \leq 10\mu g/kg$); cytotoxic (K562). **Source:** LONG SHENG XIANG CHA CAI *Isodon lungshengensis*. **Ref:** 690, 4067.

**13084 Lunularic acid**

[23255-59-6] $C_{15}H_{14}O_4$ (258.28). mp 192°C. **Pharm:** Controls growth of *Hepatica lunularia*; dormancy factor; germination inhibitor (fungi spores); used to resist aridity in agriculture. **Source:** BA XIAN HUA *Hydrangea macrophylla*, *Marchantia* sp. **Ref:** 6, 658.

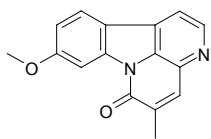
**13085 Lunularin**

[37116-80-6] $C_{14}H_{14}O_2$ (214.27). **Pharm:** Antifungal (*Uromyces fabae*, germination inhibitor of spore). **Source:** BA XIAN HUA *Hydrangea macrophylla*, PING HUA SANG *Morus laevigata*. **Ref:** 658.

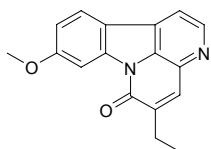


13086 Luotonin C

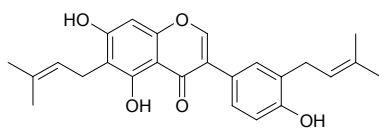
$C_{16}H_{12}N_2O_2$ (264.29). Pale yellow needles (acetone), mp 166–168°C. Source: LUO TUO HAO *Peganum nigellastrum* (aerial parts). Ref: 3945.

**13087 Luotonin D**

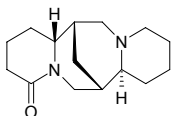
$C_{17}H_{14}N_2O_2$ (278.31). Pale yellow needles (acetone), mp 141–143°C. Source: LUO TUO HAO *Peganum nigellastrum* (aerial parts). Ref: 3945.

**13088 Lupalbigenin**

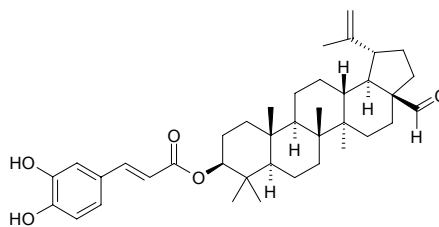
5,7,4'-Trihydroxy-6,5'-diprenylisoflavone $C_{25}H_{26}O_5$ (406.48). Pale yellow amorphous. Pharm: Antifungal (dermatophyte *Trichophyton mentagrophytes*, 250µg/mL)^[2347]; antioxidant (DPPH scavenger, ScRt = 26.32%; control BHT, ScRt = 71.5%)^[3810]; antioxidant (DPPH scavenger, 10µmol/L, ScRt = 20%; control BHT, 10µmol/L, ScRt = 43%)^[5319]; antibacterial (*Staphylococcus aureus* ATCC 25923, MIC = 2µg/mL, Vancomycin, MIC = 0.5µg/mL; MRSA SK1, MIC = 4µg/mL, Vancomycin, MIC = 1.0µg/mL)^[3810]; antibacterial (*Staphylococcus aureus* ATCC 25923, MIC = 8µg/mL, control Vancomycin, MIC = 2µg/mL; *Staphylococcus aureus* MRSA SK1, MIC = 8µg/mL, Vancomycin, MIC = 2µg/mL)^[5319]; anti-inflammatory (inhibit brain liposomal peroxidation, 50µg/mL, optical density of DMSO control = (19.3±0.3)%, $p < 0.001$; positive control Propyl gallate, 7.5µmol/mL, optical density of DMSO control = (20.6±0.2)%)^[4984]. Source: BAI YU SHAN DOU *Lupinus albus*, KU TAN ZI *Millettia pachycarpa*, PAN YUAN YU TENG *Derris scandens* (stem), TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). Ref: 1521, 2347, 3810, 4984, 5319.

**13089 Lupanine**

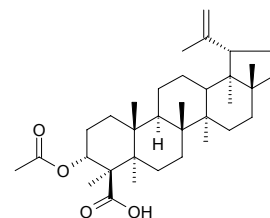
[550-90-3] $C_{15}H_{24}N_2O$ (248.37). mp (+) 44°C, (–) 44°C. Pharm: Antiarrhythmic; antihypertensive; uterine stimulant (rbt, *in vitro*); MLD (gpg, ip) = 200–225mg/kg. Source: BAI YU SHAN DOU *Lupinus albus*, JIN QUE ER *Cytisus scoparius* [Syn. *Spartium scoparium*], HONG MAO QI *Leontice robustum*, KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*], MU MA DOU *Thermopsis lanceolata*. Ref: 2, 6, 658.

**13090 Lup-20(29)en-28-al-3β-yl-caffeate**

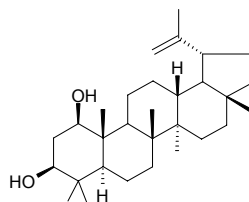
Betunaldehyde-3β-yl-caffeate $C_{39}H_{54}O_5$ (602.86). Amorphous powder, $[\alpha]_D^{25} = +48^\circ$ ($c = 1.0$, MeOH). Source: NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*], *Celastrus stephanotifolius*. Ref: 2310, 2511.

**13091 Lup-20(29)ene-3α-acetoxy-24-oic acid**

$C_{32}H_{50}O_4$ (498.75). Colorless needles, mp 271–173°C, $[\alpha]_D^{15} = +15.5^\circ$ ($c = 0.12$, CH₃OH). Source: RU XIANG *Boswellia carterii*. Ref: 2238.

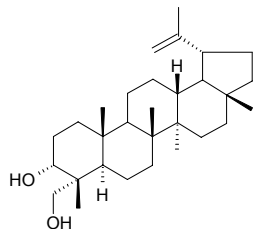
**13092 Lup-20(29)ene-1β,3β-diol**

$C_{30}H_{50}O_2$ (442.73). mp 245–246.5°C, $[\alpha]_D^{23} = +11^\circ$ ($c = 0.25$, CHCl₃); mp 248–249°C (hexane), $[\alpha]_D^{20} = +30.2^\circ$ ($c = 0.7g/100mL$, CHCl₃). Pharm: Antineoplastic (EBV-EA induced by TPA, IC₅₀ = 300(mol ratio/32pmol TPA); control Curcumin IC₅₀ = 343(mol ratio/32pmol TPA))^[4099]; cytotoxic (inhibition growth of hmn tumor cell lines, MCF7 (breast), GI₅₀ = (79.2±2.4)µmol/L, control Doxorubicin, GI₅₀ = (42.8±8.2)µmol/L; NCI-H460 (lung), GI₅₀ > 100µmol/L, Doxorubicin, GI₅₀ = (94.0±8.7)µmol/L; SF268(CNS), GI₅₀ > 100µmol/L, Doxorubicin, GI₅₀ = (93.0±7.0)µmol/L)^[5065]. Source: CHUI ZHU SUAN PAN ZI *Glochidion zeylanicum* (stem cortex), MAO GUO SUAN PAN ZI *Glochidion eriocarpum* (root and stem wood). Ref: 4099, 5065.

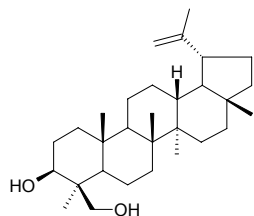


13093 Lup-20(29)-ene-3 α ,23-diol

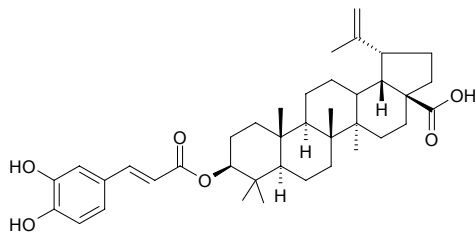
$C_{30}H_{50}O_2$ (442.73). mp 213~214°C (hexane), $[\alpha]_D^{20} = +16.3^\circ$ ($c = 0.6g/100mL$, $CHCl_3$). **Pharm:** Cytotoxic (inhibition growth of hmn tumor cell lines, MCF7 (breast), $GI_{50} = (12.7 \pm 1.6)\mu mol/L$, control Doxorubicin, $GI_{50} = (42.8 \pm 8.2)\mu mol/L$; NCI-H460 (lung), $GI_{50} = (17.9 \pm 1.1)\mu mol/L$, Doxorubicin, $GI_{50} = (94.0 \pm 8.7)\mu mol/L$; SF268(CNS), $GI_{50} = (17.9 \pm 0.5)\mu mol/L$, Doxorubicin, $GI_{50} = (93.0 \pm 7.0)\mu mol/L$). **Source:** MAO GUO SUAN PAN ZI *Glochidion eriocarpum* (root and stem wood). **Ref:** 5065.

**13094 Lup-20(29)-ene-3 β ,24-diol**

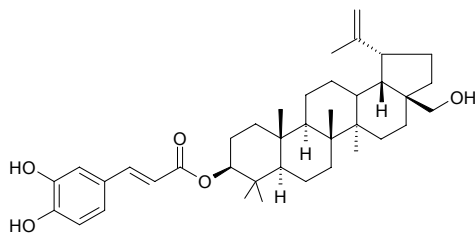
$C_{30}H_{50}O_2$ (442.73). mp 249~250°C, $[\alpha]_D^{23} = +41^\circ$ ($c = 0.58$, $CHCl_3$). **Pharm:** Antineoplastic (EBV-EA induced by TPA, $IC_{50} = 350$ (mol ratio/32pmol TPA); control Curcumin $IC_{50} = 343$ (mol ratio/32pmol TPA)). **Source:** LUO E YE XIA ZHU *Phyllanthus flexuosus* (stem cortex). **Ref:** 4099.

**13095 Lup-20(29)-en-28-oi-3 β -yl caffeate**

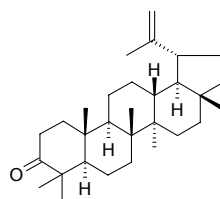
$C_{39}H_{54}O_6$ (618.86). **Source:** NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*]. **Ref:** 2511.

**13096 Lup-20(29)-en-28-ol-3 β -yl caffeate**

$C_{39}H_{56}O_5$ (604.88). **Source:** NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*]. **Ref:** 2511.

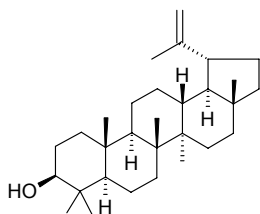
**13097 Lupenone**

$C_{30}H_{48}O$ (424.72). mp 170°C; $[\alpha]_D^{20} = +60.6^\circ$ ($c = 0.5$, $CHCl_3$). **Pharm:** Cytotoxic inactive (NSCLC-N6 cell line)^[3806]; cytotoxic inactive (A2780 ovarian cancer cell line, $IC_{50} = 30.8mg/mL$)^[5379]; 15-Lipoxygenase inhibitor ($IC_{50} = (22 \pm 3)\mu mol/L$)^[4953]; tyrosinase inhibitor (333 $\mu mol/L$, InRt = -2.4%; control Kojic acid, $IC_{50} = 125\mu mol/L$)^[4722]. **Source:** CHI YANG *Alnus japonica*, DU HUI MAO DOU *Tephrosia toxicaria* (stem: yield = 0.00074%dw)^[4718], JU MI JIN HE HUAN *Acacia mellifera* (stem cortex), MU SHU DI SHANG BU FEN *Manihot esculenta*, RI BEN HUANG BAI *Phellodendron japonicum* (leaf), SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.00053%)^[4721], TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.055%dw)^[4721], WU TONG BAI PI *Firmiana simplex*, XIAO HUA MU LAN GUO *Bruguiera parviflora*, XI CHANG NAN MEI DOU *Anadenanthera colubrine* (aerial parts). **Ref:** 6, 2532, 3806, 4502, 4718, 4721, 4722, 4953, 5379.

**13098 Lupeol**

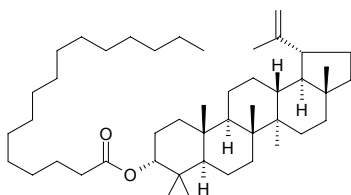
[545-47-1] $C_{30}H_{50}O$ (426.73). Colorless acicular crystals, mp 214~216°C, $[\alpha]_D^{18} = +20^\circ$ ($c = 0.101$, $CHCl_3$); white amorphous powder, $[\alpha]_D^{23} = +23^\circ$ ($c = 0.1$, $CHCl_3$); $[\alpha]_D^{20} = +26.4^\circ$ ($c = 1$, $CHCl_3$). mp 212~214°C, $[\alpha]_D^{23} = +28^\circ$ ($c = 0.55$, $CHCl_3$); mp 199~200°C (EtOH), $[\alpha]_D^{20} = +14.2^\circ$ ($c = 0.08g/mL$, $CHCl_3$). **Pharm:** Antineoplastic (rat W₂₅₆); cytotoxic (hmn fibrosarcoma cells HT1080, $ED_{50} = 16.7\mu g/mL$; control Adriamycin, $ED_{50} = 0.1\mu g/mL$)^[4437]; antihypertensive; hypoglycemic; anti-HSV-1 ($EC_{50} = 11.7\mu mol/L$, $IC_{50} = 49.3\mu mol/L$, SI = 4.20, control Acyclovir, $EC_{50} = 1.72\mu mol/L$, $IC_{50} = 15860\mu mol/L$, SI = 9220)^[2577]; 15-Lipoxygenase inhibitor ($IC_{50} = (35 \pm 9)\mu mol/L$)^[4953]; antineoplastic (EBV-EA induced by TPA, $IC_{50} = 380$ (mol ratio/32pmol TPA), control Curcumin $IC_{50} = 343$ (mol ratio/32pmol TPA))^[4099]; anti-inflammatory (mouse, inhibits TPA-induced ear oedema; myeloperoxidase inhibitor)^[4415]; cytotoxic (inhibition growth of hmn tumor cell lines, MCF7 (breast), $GI_{50} = (75.6 \pm 11.7)\mu mol/L$, control Doxorubicin, $GI_{50} = (42.8 \pm 8.2)\mu mol/L$; NCI-H460 (lung), $GI_{50} = (86.1 \pm 12.4)\mu mol/L$, Doxorubicin, $GI_{50} = (94.0 \pm 8.7)\mu mol/L$; SF268(CNS), $GI_{50} = (80.9 \pm 2.6)\mu mol/L$, Doxorubicin, $GI_{50} = (93.0 \pm 7.0)\mu mol/L$)^[5065]; platelet aggregation inhibitor (100 $\mu mol/L$ AA-induced, 20 $\mu g/mL$, InRt = (12.2 \pm 4.5)%), control Aspirin, 50 $\mu g/mL$, InRt = (100 \pm 0.0)%; 10 $\mu g/mL$ collagen-induced, 20 $\mu g/mL$, InRt = (10.3 \pm 3.0)%, $p < 0.001$, Aspirin, 50 $\mu g/mL$, InRt = (12.2 \pm 1.7)%; 2nmol/L PAF-induced, 20 $\mu g/mL$, InRt = (3.1 \pm 2.1)%, $p < 0.001$, Aspirin, 50 $\mu g/mL$, InRt = (9.6 \pm 1.2)%; 0.1 $\mu g/mL$ thrombin-induced, 20 $\mu g/mL$, InRt = (0.5 \pm 0.3)%); cytotoxic (NSCLC-N6 cell line, $IC_{50} > 30\mu g/mL$)^[3806]; cytotoxic inactive (*in vitro*, HeLa, Vero, K562, Raji, Wish, and Calu1 tumor cell lines, $IC_{50} > 100\mu mol/L$)^[3057]. **Source:** AN MO LE *Phyllanthus emblica*, BAI JIANG CAN *Bombyx mori*, BO TE LAN DA JI *Euphorbia portlandica* (whole herb), CAN JIAN *Bombyx mori*, DA YE DONG QING *Ilex latifolia*, *Fagara xanthoxyloides*, GOU GU SHU PI *Ilex cornuta*, GOU QI ZI *Lycium chinense*, GUI GAI *Coprinus atramentarius*, HUANG LONG DAN *Gentiana*

lutea (rhizome and root), HUO YAN HUA *Phlogacanthus curviflorus* (root: yield = 0.0231%dw)^[4799], JIAN YE TOU WU GEN *Ligularia sagitta*, JU MI JIN HE HUAN *Acacia mellifera* (stem cortex), JUN QIAN ZI *Diospyros lotus*, KU DI DAN *Elephantopus scaber*, LIE WEI LIE LAN *Bursera graveolens* (stem), LUO E YE XIA ZHU *Phyllanthus flexuosus* (stem cortex), MA LAN GEN *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], MAO GUO SUAN PAN ZI *Glochidion eriocarpum* (root and stem wood), QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.00069%dw)^[4783], SANG JI SHENG *Loranthus parasiticus* [Syn. *Loranthus chinensis*; *Taxillus chinensis*], SANG YE *Morus alba*, SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*], SHAN REN YE *Rhodomyrtus tomentosa*, SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.0028%)^[4721], TAI WAN FENG DOU CAI *Petasites formosanus*, WU HUA GUO *Ficus carica*, WU HUA GUO YE *Ficus carica*, XI CHANG NAN MEI DOU *Anadenanthera colubrine* (aerial parts), XIAO HUA MU LAN GUO *Bruguiera parviflora*, YANG MEI *Myrica rubra*, YI HE GUO *Ventilago leiocarpa* (stem)^[3057], YOU GAN GEN *Phyllanthus emblica*, YOU GAN MU PI *Phyllanthus emblica*, YOU GAN YE *Phyllanthus emblica*, YUAN CAN SHA *Bombyx mori*, YUN SHI *Caesalpinia decapetala* (leaf), occurs in many plants (*Ficus* spp.; *Achras* spp.; *Raucheria* spp.). Ref: 6, 453, 658, 660, 2377, 2532, 2577, 3806, 4099, 4307, 4415, 4437, 4456, 4953, 5019, 5065, 5382, 5385.



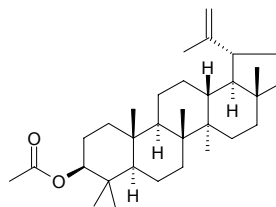
13099 Lupeol palmitate

Balanophorin B [32214-80-5] C₄₆H₈₀O₂ (665.15). White amorphous powder (Me₂CO), mp 68–69°C. Source: YIN DU SHE GU *Balanophora indica* [Syn. *Langodorfia indica*]. Ref: 633.



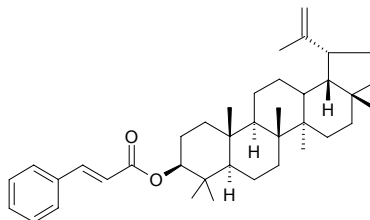
13100 Lupeol acetate

Lupenyl acetate C₃₂H₅₂O₂ (468.77). Crystals, mp 206–209°C, mp 217–218°C. Pharm: Antineoplastic; hypoglycemic; inhibitory activity against NFAT Transcription (IC₅₀ > 100 μmol/L, positive control Cyclosporin A, IC₅₀ = (0.29±0.01) μmol/L)^[2536]. Source: HUA CHA BIAO *Ribes fasciculatum* var. *chinense*, HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*], KU DI DAN *Elephantopus scaber*, MANG GUO SHU PI *Mangifera indica*, SU KU BA DOU HUA *Himatanthus sucuuba*, WU LOU ZI *Phoenix dactylifera*, XIANG PI MU *Alstonia scholaris*. Ref: 6, 658, 2536, 4143.



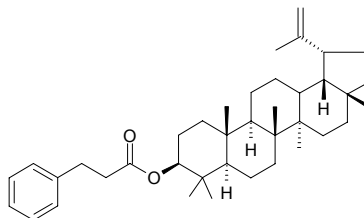
13101 Lupeol cinnamate

C₃₉H₅₆O₂ (556.88). Amorphous solid. Source: SU KU BA DOU HUA *Himatanthus sucuuba*. Ref: 4143.



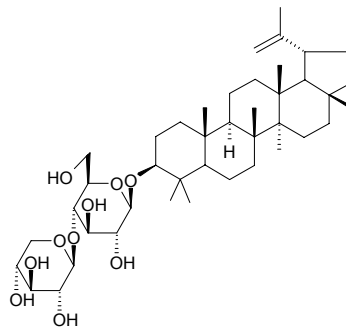
13102 Lupeol β-phenyl propionate

C₃₉H₅₈O₂ (558.90). Amorphous solid. Source: SU KU BA DOU HUA *Himatanthus sucuuba*. Ref: 4143.



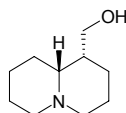
13103 Lupeol-3-O-β-D-xylopyranosyl(1→4)-O-β-D-glucopyranoside

C₄₁H₆₈O₁₀ (720.99). Source: YANG DAO DOU *Canavalia ensiformis*. Ref: 660.



13104 Lupinine

C₁₀H₁₉NO (169.27). Pharm: Insect antifeedant; insect growth inhibitor (grasshoppers). Source: WU YE JIA MU ZEII *Anabasis aphylla*, HUANG YU SHAN DOU *Lupinus luteus*. Ref: 658.

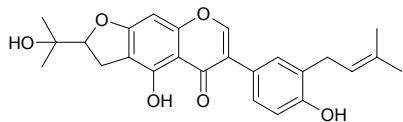


13105 Lupinisoflavone G

$C_{25}H_{26}O_6$ (422.48). Pale yellow amorphous, $[\alpha]_D = -8.2^\circ$ ($c = 0.14$, EtOH).

Pharm: Antifungal (dermatophyte *Trichophyton mentagrophytes*,

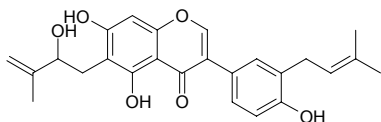
500~1000 μ g/mL). **Source:** PAN YUAN YU TENG *Derris scandens*. **Ref:** 2347.

**13106 Lupinisol A**

$C_{25}H_{26}O_6$ (422.48). Pale yellow amorphous, $[\alpha]_D = +36.1^\circ$ ($c = 0.056$, EtOH).

Pharm: Antifungal (dermatophyte *Trichophyton mentagrophytes*,

500~1000 μ g/mL). **Source:** PAN YUAN YU TENG *Derris scandens*. **Ref:** 2347.

**13107 Lupiwighteone**

5,7,4'-Trihydroxy-8-prenylisoflavone [104691-86-3] $C_{20}H_{18}O_5$ (338.36).

Pharm: Antibacterial (*Escherichia coli*, MIA = 10.0 μ g, control

Chloramphenicol, MIA = 0.001 μ g; *Bacillus subtilis*, MIA = 0.50 μ g,

Chloramphenicol, MIA = 0.001 μ g; *Staphylococcus aureus*, MIA = 0.5 μ g,

Chloramphenicol, MIA = 0.001 μ g)^[3785]; antifungal (*Candida mycoderma*,

MIA = 0.05 μ g, Miconazole, MIA = 0.0001 μ g)^[3785]; antioxidant (DPPH

scavenger, TLC detection limit = 1.0 μ g, IC₅₀ = 670 μ g/mL; control Quercetin,

TLC detection limit < 0.05 μ g, IC₅₀ = 7 μ g/mL; Gallic acid, TLC detection

limit < 0.05 μ g, IC₅₀ = 4 μ g/mL; Ascorbic acid, TLC detection limit < 0.10 μ g,

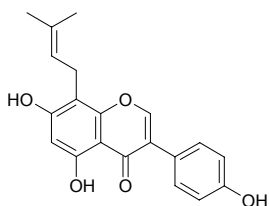
IC₅₀ = 18 μ g/mL)^[3785]; antioxidant (DPPH scavenger, ScRt = 15.79%, control

BHT, ScRt = 71.5%)^[3810]. **Source:** CHI DOU *Vigna angularis* [Syn. *Dolichus*

angularis; *Phaseolus angularis*], GAN CAO *Glycyrrhiza uralensis*, HUANG

YU SHAN DOU *Lupinus luteus*, *Bolusanthus speciosus* (root wood), PAN

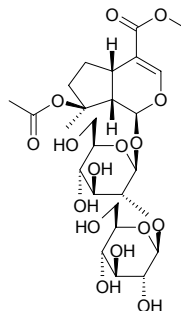
YUAN YU TENG *Derris scandens* (stem). **Ref:** 660, 1521, 3785, 3810.

**13108 Lupuloside**

$C_{25}H_{38}O_{16}$ (594.57). Colorless amorphous solid, $[\alpha]_D^{29} = -41.6^\circ$ ($c = 0.125$,

MeOH). **Pharm:** Cytotoxic inactive (vero cells); COX-2 inhibitor inactive.

Source: HUA YE JIA DU JUAN *Barleria lupulina* (flower). **Ref:** 5456.

**13109 Lupulone**

β -Bitter acid [468-28-0] $C_{26}H_{38}O_4$ (414.59). Prismatic crystals (90%

methanol), mp 92~94°C. **Pharm:** Anti-inflammatory (NO production inhibitor,

in vitro, macrophage RAW264.7 cells, induced by LPS/IFN- γ , IC₅₀ =

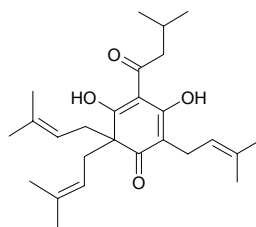
17 μ mol/L, but with very strong cytotoxicity)^[4795]; antibacterial

(*Staphylococcus aureus*, MIC = 0.60~1.25 μ g/mL; *Mycobacterium*

tuberculosis, IC = 1~10 μ g/mL; gram-positive bacteria, *Bacillus subtilis*); LD₅₀

(rat, orl) = 1.8g/kg. **Source:** LV CAO *Humulus japonicus* [Syn. *Humulus*

scandens], PI JIU HUA *Humulus lupulus* (strobile)^[4795]. **Ref:** 4, 6, 661, 4795.

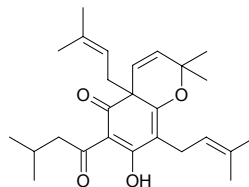
**13110 Lupulone A**

$C_{26}H_{36}O_4$ (412.57). Yellow oil, $[\alpha]_D^{25} = 0^\circ$ ($c = 0.3$, MeOH). **Pharm:**

Anti-inflammatory (NO production inhibitor, *in vitro*, macrophage RAW264.7

cells, induced by LPS/IFN- γ , IC₅₀ = 20 μ mol/L, but with very strong cytotoxicity).

Source: PI JIU HUA *Humulus lupulus* (strobile). **Ref:** 4795.

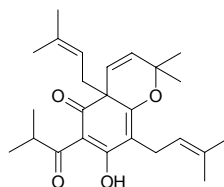
**13111 Lupulone B**

$C_{25}H_{34}O_4$ (398.55). Yellow oil, $[\alpha]_D^{25} = 0^\circ$ ($c = 0.4$, MeOH). **Pharm:**

Anti-inflammatory (NO production inhibitor, *in vitro*, macrophage RAW264.7

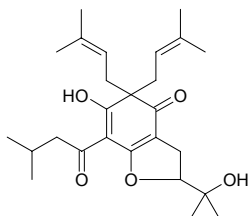
cells, induced by LPS/IFN- γ , IC₅₀ = 14 μ mol/L, but with very strong cytotoxicity).

Source: PI JIU HUA *Humulus lupulus* (strobile). **Ref:** 4795.

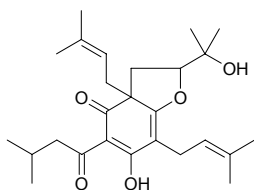


13112 Lupulone C

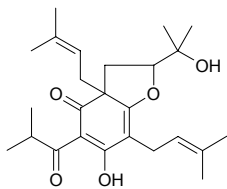
$C_{26}H_{38}O_5$ (430.59). Yellow oil, $[\alpha]_D^{25} = 0^\circ$ ($c = 0.4$, MeOH). **Pharm:** Anti-inflammatory (NO production inhibitor, *in vitro*, macrophage RAW264.7 cells, induced by LPS/IFN- γ , $IC_{50} = 63\mu\text{mol/L}$, but with very strong cytotoxicity). **Source:** PI JIU HUA *Humulus lupulus* (strobile). **Ref:** 4795.

**13113 Lupulone D**

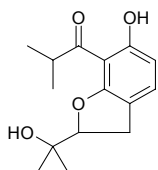
$C_{26}H_{38}O_5$ (430.59). Yellow oil, $[\alpha]_D^{25} = 0^\circ$ ($c = 0.4$, MeOH). **Pharm:** Anti-inflammatory (NO production inhibitor, *in vitro*, macrophage RAW264.7 cells, induced by LPS/IFN- γ , $IC_{50} = 11\mu\text{mol/L}$, but with very strong cytotoxicity, $2\mu\text{mol/L}$, $80\% < \text{cell viability} < 95\%$). **Source:** PI JIU HUA *Humulus lupulus* (strobile). **Ref:** 4795.

**13114 Lupulone E**

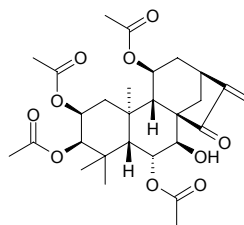
$C_{25}H_{36}O_5$ (416.56). Yellow oil, $[\alpha]_D^{25} = 0^\circ$ ($c = 0.5$, MeOH). **Pharm:** Anti-inflammatory (NO production inhibitor, *in vitro*, macrophage RAW264.7 cells, induced by LPS/IFN- γ , $IC_{50} = 15\mu\text{mol/L}$, but with very strong cytotoxicity, $2\mu\text{mol/L}$, $80\% < \text{cell viability} < 95\%$). **Source:** PI JIU HUA *Humulus lupulus* (strobile). **Ref:** 4795.

**13115 Lupulone F**

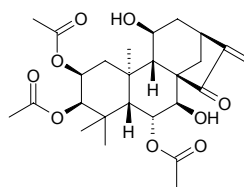
$C_{15}H_{20}O_4$ (264.32). Yellow oil, $[\alpha]_D^{25} = 0^\circ$ ($c = 0.7$, MeOH). **Pharm:** NO production Inhibitor inactive (*in vitro*, macrophage RAW264.7 cells, induced by LPS/IFN- γ , $IC_{50} > 100\mu\text{mol/L}$). **Source:** PI JIU HUA *Humulus lupulus* (strobile). **Ref:** 4795.

**13116 Lushanrubescensin A**

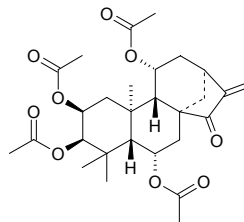
$C_{28}H_{38}O_{10}$ (534.61). mp 185–186°C, $[\alpha]_D^{22} = -49.10^\circ$ ($c = 0.54$, MeOH). **Source:** LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis*. **Ref:** 4067.

**13117 Lushanrubescensin B**

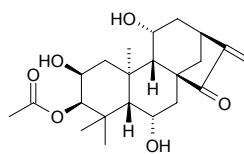
$C_{26}H_{36}O_9$ (492.57). mp 182–184°C, $[\alpha]_D^{22} = -78.5^\circ$ ($c = 0.52$, MeOH). **Source:** LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis*. **Ref:** 4067.

**13118 Lushanrubescensin C**

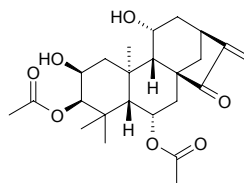
[110325-78-5] $C_{28}H_{38}O_9$ (518.61). mp 190–192°C, $[\alpha]_D^{19} = -51.25^\circ$ ($c = 0.17$, MeOH). **Source:** LONG SHENG XIANG CHA CAI *Isodon lungshengensis*, LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis*. **Ref:** 690, 1521, 4067.

**13119 Lushanrubescensin D**

$C_{22}H_{32}O_6$ (392.50). mp 238°C. **Source:** LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis*. **Ref:** 4067.

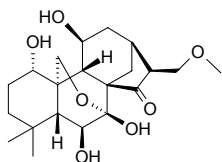
**13120 Lushanrubescensin E**

$C_{24}H_{34}O_7$ (434.53). mp 215–217.5°C, $[\alpha]_D^{19} = -77.5^\circ$ ($c = 0.1$, MeOH). **Source:** LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis*. **Ref:** 4067.

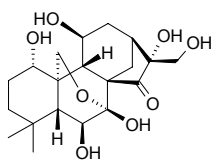


13121 Lushanrubescensin F

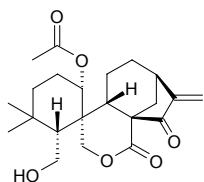
$C_{21}H_{32}O_7$ (396.48). Colorless needles, mp 202~203°C, $[\alpha]_D^{20} = -77.3^\circ$ ($c = 0.11$, acetone). Source: LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis* (leaf). Ref: 4353.

**13122 Lushanrubescensin G**

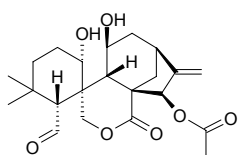
$C_{20}H_{30}O_8$ (398.46). White amorphous powder, $[\alpha]_D^{20} = -40.2^\circ$ ($c = 0.06$, acetone). Source: LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis* (leaf). Ref: 4353.

**13123 Lushanrubescensin H**

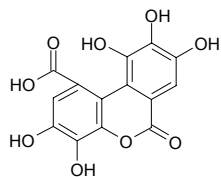
$C_{22}H_{30}O_6$ (390.48). Colorless needles, mp 201~202°C, $[\alpha]_D^{20} = +31.8^\circ$ ($c = 0.32$, acetone). Pharm: Cytotoxic (K562, $IC_{50} = 3.56\mu\text{mol/L}$, control Cisplatin $IC_{50} = 3.84\mu\text{mol/L}$; Beap37, $IC_{50} = 13.42\mu\text{mol/L}$, control Cisplatin $IC_{50} = 1.54\mu\text{mol/L}$; BGC823, $IC_{50} = 8.91\mu\text{mol/L}$, control Cisplatin $IC_{50} = 2.54\mu\text{mol/L}$; CA, $IC_{50} = 8.25\mu\text{mol/L}$, control Cisplatin $IC_{50} = 0.88\mu\text{mol/L}$; HeLa, $IC_{50} > 100\mu\text{mol/L}$, control Cisplatin $IC_{50} = 3.60\mu\text{mol/L}$). Source: LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis* (leaf). Ref: 4353.

**13124 Lushanrubescensin I**

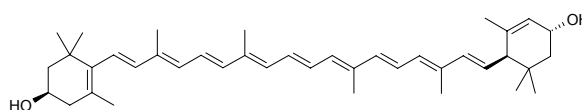
$C_{22}H_{30}O_7$ (406.48). amorphous powder, $[\alpha]_D^{20} = +45.2^\circ$ ($c = 1.99$, MeOH). Source: LU SHAN XIANG CHA CAI *Isodon rubescens* var. *lushanensis* (leaf). Ref: 4353.

**13125 Luteic acid**

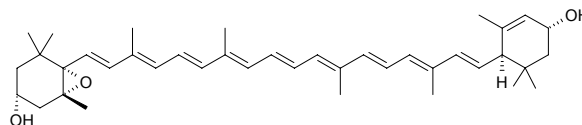
$C_{14}H_8O_9$ (320.21). mp 338~342°C (dec). Source: FAN SHI LIU PI *Psidium guajava*. Ref: 6.

**13126 Lutein**

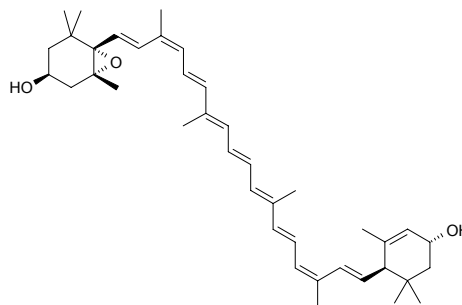
[127-40-2] $C_{40}H_{56}O_2$ (568.89). mp 196°C. Source: DA TU SI ZI *Cuscuta japonica*, DAO CAO *Oryza sativa*, FENG LI *Ananas comosus*, HAI XIA *Panaeus orientalis*, HUO SUO MA *Helicteres isora*, JI ZI BAI *Gallus gallus domesticus*, JI ZI HUANG *Gallus gallus domesticus*, JIA LIAN QIAO YE *Duranta repens*, JIN YU *Carassius auratus*, JING MI *Oryza sativa*, LI MENG *Citrus limonia*, LI MENG YE *Citrus limonia*, LI YU PI *Cyprinus carpio*, MEI ZHOU SUAN GUO LUO *Vaccinium macrocarpon*, NAN FANG TU SI ZI *Cuscuta australis*, NING MENG *Citrus limon*, SU MI *Setaria italica*, SUAN SHUI CAO *Potamogeton perfoliatus*, WAN SHOU JU *Tagetes erecta*, YAO YONG PU GONG YING *Taraxacum officinale*, YUN NAN SUI HUA SHAN *Amentotaxus yunnanensis* (twig and leaf: yield = 0.00015%dw)^[4707], ZI CAI *Porphyra tenera*, *Citrus* sp., *Prunus* sp., *Malus* sp., occurs in many plants. Ref: 6, 660, 4707.

**13127 Lutein epoxide**

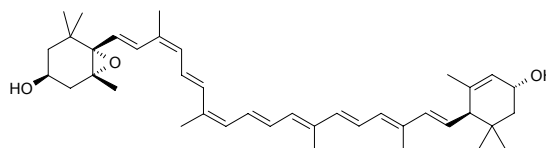
Taraxanthin $C_{40}H_{56}O_3$ (584.89). mp 184~185°C. Source: DAO CAO *Oryza sativa*, KUAN DONG HUA *Tussilago farfara*, NAN FANG TU SI ZI *Cuscuta australis*, NI TAN XIAN *Sphagnum palustre* [Syn. *Sphagnum obtusifolium*; *Sphagnum cymbifolium*], SHUI JIN FENG *Impatiens nolitangere*, WENG CAI *Ipomoea aquatica* [Syn. *Convolvulus repens*; *Ipomoea reptans*], XIANG YUAN *Citrus wilsonii*, YI ZHU QIAN MA *Urtica dioica*. Ref: 6, 660.

**13128 (9Z,9'Z)-Lutein-5,6-epoxide**

$C_{40}H_{56}O_3$ (584.89). Source: DA HUA JU *Dendranthema grandiflorum* (petal). Ref: 3865.

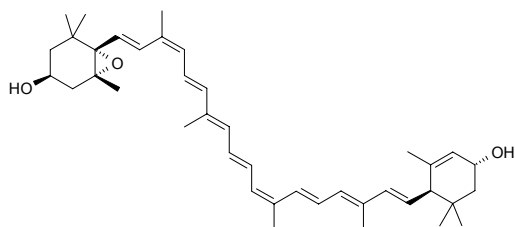
**13129 (9Z,13Z)-Lutein-5,6-epoxide**

$C_{40}H_{56}O_3$ (584.89). Source: DA HUA JU *Dendranthema grandiflorum* (petal). Ref: 3865.

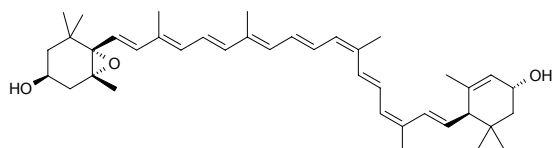


13130 (9Z,13'Z)-Lutein-5,6-epoxide

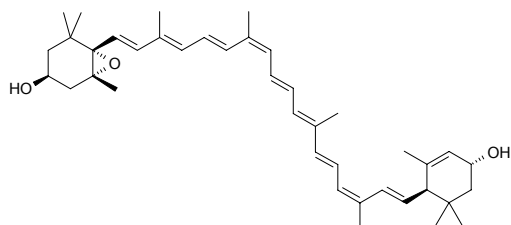
C₄₀H₅₆O₃ (584.89). Source: DA HUA JU *Dendranthema grandiflorum* (petal). Ref: 3865.

**13131 (9'Z,13'Z)-Lutein-5,6-epoxide**

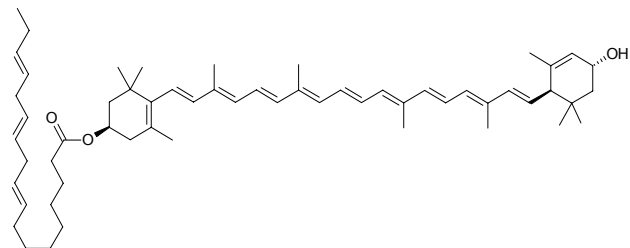
C₄₀H₅₆O₃ (584.89). Source: DA HUA JU *Dendranthema grandiflorum* (petal). Ref: 3865.

**13132 (13Z,9'Z)-Lutein-5,6-epoxide**

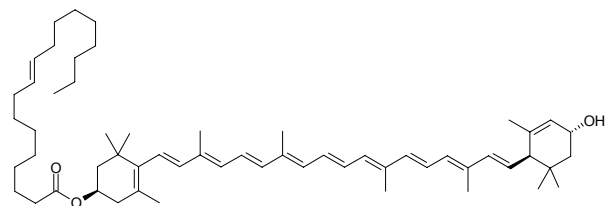
C₄₀H₅₆O₃ (584.89). Source: DA HUA JU *Dendranthema grandiflorum* (petal). Ref: 3865.

**13133 Lutein-3-linolenate**

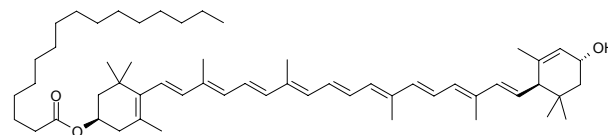
C₅₈H₈₄O₃ (829.31). Source: XIANG RI KUI YE *Helianthus annuus*. Ref: 6.

**13134 Lutein oleic acid ester**

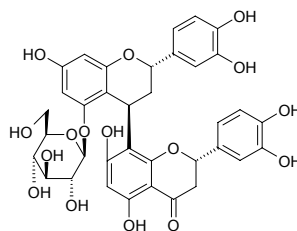
C₅₈H₈₈O₃ (833.35). Source: DI TANG HUA *Kerria japonica*. Ref: 6.

**13135 Lutein-3-palmitate**

C₅₆H₈₆O₃ (807.31). Source: XIANG RI KUI YE *Helianthus annuus*. Ref: 6.

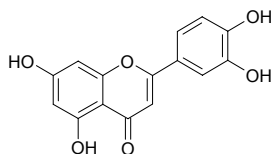
**13136 Luteoilflavan-(4β→8)-eriodictyol-5-glucoside**

C₃₆H₃₆O₁₆ (724.66). Pharm: Tanning agent. Source: GAO LIANG *Sorghum vulgare*. Ref: 658.

**13137 Luteolin**

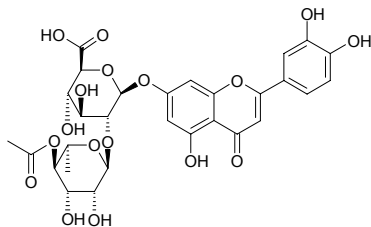
5,7,3',4'-Tetrahydroxyflavone [491-70-3] C₁₅H₁₀O₆ (286.24). Yellow needles, mp 328–330°C (dec). Pharm: Antiallergic; antibacterial (*Staphylococcus aureus* and *Bacillus subtilis*, EC = 1:35000, *Diplococcus pneumoniae*, *Coccus catarrhalis*, *Bacillus typhosus*, *Bacillus dysenteriae*, *Bacillus pyocyaneus* and *Bacillus termo*); antifungal (*Candida albicans*); cytotoxic (NK/LY ascites cancer *in vitro*); anti-inflammatory (rat, caused by woolball-embedding, 20mg/(kg·d), 7 days); antispasmodic (rbt intestine *in vitro*, gpg trachea smooth muscle and ileum); antitussive (inhibits coughing center); dispels phlegm (rat capillary tube method, mus P.S.P. method); antiviral (*H. suis* virus); enhances arterial tension and lowers intravenous tension (dog heart *in vitro*, 5–10mg); enhances blood capillary permeability (rat, 0.5g/kg sc); immunoenhancer; increases coronary flow; dihydrocoenzyme I (NADH) oxidase inhibitor; iodine-induced thyronine deiodinase inhibitor; aldose reductase inhibitor (eye lens, IC₅₀ = 0.45μmol/L, control Epalrestat, IC₅₀ = 0.072μmol/L)^[4214,4530]; protein kinase C inhibitor; succinic oxidase inhibitor; antihypercholesterolemic (rbt, reduces the level of cholesterol and triglyceride in serum); anti-inflammatory (modulator of cytokine network: inhibits LPS-stimulated TNF-α and IL-6 release in RAW264.7 macrophages, IC₅₀ < 1μmol/L)^[4416]; anti-inflammatory (*in vivo*, inhibits production of TNF-α and decreases both PMA and oxazolone-induced allergic ear oedema)^[4416]; anti-inflammatory (significantly reduces LPS-stimulated ICAM-1 expression in liver of LPS-treated mouse)^[4416]; anti-inflammatory (treatment of airway bronchoconstriction and bronchial hyperreactivity, reduces level of both IL-4 and IL-5, a suggested lead compound to treat asthma)^[4416]; anti-inflammatory (IL-5 inhibitor, concentration-dependent manner, mean IC₅₀ = 18.7μmol/L)^[4416]; anti-inflammatory (COX-2 inhibitor, rat renal medulla, moderate activity)^[4415]; 15-lipoxygenase inhibitor^[4415]; anti-inflammatory (NO production inhibitor)^[4415]; anti-HIV; LD₅₀ (mus, ip) = 180mg/kg. Source: DA CHE QIAN *Plantago major*, DAN HUANG MU XI CAO *Reseda luteola* (first isolated in 1832), HEI SHUI XIE CAO *Valeriana amurensis*, HUANG HE MAO REN DONG *Lonicera fulvotomentosa*, HUANG HUA HAO

Artemisia annua, JI YAN CAO *Kummerowia striata*, JIA MA CHI XIAN *Bacopa monniera* (whole herb: yield = 0.0001%fw)^[4664], JIN FEI CAO *Inula japonica*, JIN YIN HUA *Lonicera japonica* (flower bud: content scope = 0.45%–5.18%), JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], JU HUA *Chrysanthemum morifolium* [Syn. *Dendranthema morifolium*] (dried capitulum: content scope of 24 origins = 0.002%–0.105%, mean content = 0.0563%^[5508]), LANG PA CAO *Bidens tripartita* (whole herb: mean content = 0.171%^[5508]), LUO HUA SHENG *Arachis hypogaea*, MI MENG HUA *Buddleja officinalis*, NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.00007%dw)^[4752], SHAN WO JU *Lactuca indica* (fresh whole herb: yield = 0.0024%fw)^[4689], SHI SHENG BIAN LEI *Gentianopsis paludosa*, SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb), WU JU LOU DOU CAI *Aquilegia ecalcarata* (whole herb: yield = 0.00017%dw)^[3029], XIA KU CAO *Prunella vulgaris*, XIONG RUI ZHUANG SHU WEI CAO *Salvia staminea*, YAO YONG PU GONG YING *Taraxacum officinale*, YE JU HUA *Chrysanthemum indicum*, YUAN HUA *Daphne genkwa* (dried bud: mean content of 19 origins = 0.048%^[5535]), occurs in many plants (Fabaceae spp., Resedaceae spp., Euphorbiaceae spp., Apiaceae spp., Scrophulariaceae spp., Asteraceae spp., Cistaceae spp. and Passifloraceae spp.). Ref: 2, 4, 369, 602, 658, 660, 1521, 3029, 4214, 4415, 4416, 4530, 4664, 4689, 4752, 5400, 5501, 5508, 5535.



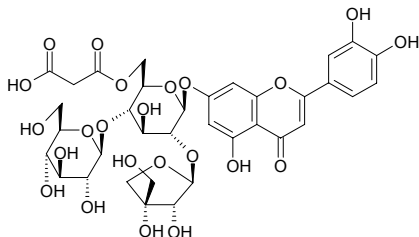
13138 Luteolin 7-O-[2''-O-(4'''-O-acetyl- α -L-rhamnopyranosyl)]- β -D-glucuronopyranoside

C₂₉H₃₀O₁₇ (650.55). Amorphous yellow solid, $[\alpha]_D^{20} = -87^\circ$ ($c = 0.1$, MeOH). Source: XIN YUE XING YE CAO SU *Phlomis lunariifolia* (aerial parts). Ref: 3864.



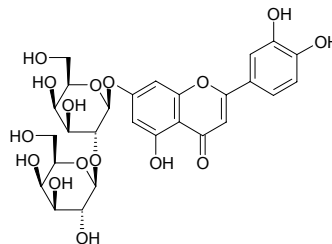
13139 Luteolin 7-O-[2-(β -D-apiofuranosyl)-4-(β -D-glucopyranosyl)-6-malonyl]- β -D-glucopyranoside

C₃₅H₄₀O₂₃ (828.70). Yellow amorphous powder. Source: HONG HAI JIAO *Capsicum annuum* (fruit). Ref: 3419.



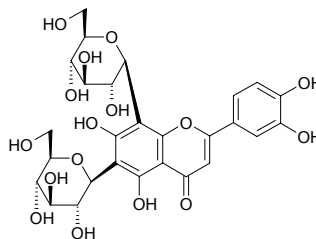
13140 Luteolin-7-O-digalactoside

C₂₇H₃₀O₁₆ (610.53). Source: REN DONG TENG *Lonicera japonica*. Ref: 660.



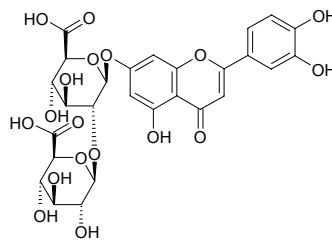
13141 Luteolin-6,8-C-diglucoside

C₂₇H₃₀O₁₆ (610.53). Source: BAI CHANG *Acorus calamus*. Ref: 660.



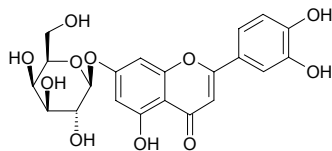
13142 Luteolin-7-O-diglucuronide

C₂₇H₂₆O₁₈ (638.50). Source: HUI HUI SU GENG *Perilla frutescens* var. *crispa*. Ref: 660.



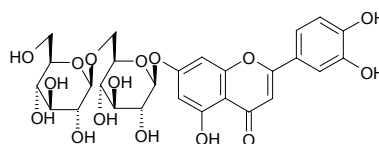
13143 Luteolin 7-O- β -D-galactoside

C₂₁H₂₀O₁₁ (448.39). Source: NIU SHE TOU *Sonchus arvensis*, YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. Ref: 2, 521.



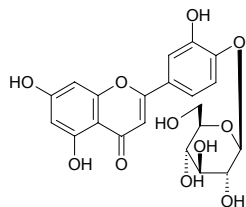
13144 Luteolin-7-O-gentiobioside

C₂₇H₃₀O₁₆ (610.53). Source: LUO SHI TENG *Trachelospermum jasminoides*. Ref: 660.

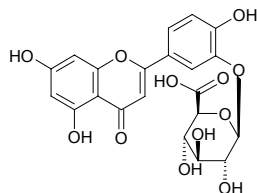


13145 Luteolin-4'-O-glucoside

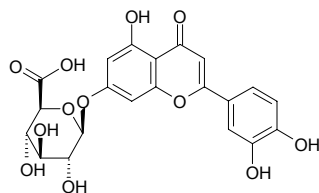
[6920-38-3] C₂₁H₂₀O₁₁ (448.39). mp 168~178°C. **Pharm:** Anti-inflammatory (IL-5 inhibitor, concentration-dependent manner, mean IC₅₀ = 3.7 μmol/L)^[4416]; Xanthinoxidase inhibitor (IC₅₀ = 2.0 μmol/L); cAMP phosphodiesterase inhibitor (IC₅₀ = 79 μmol/L); aldose reductase inhibitor (IC₅₀ = 4.8 μmol/L, control Epalrestat, IC₅₀ = 0.072 μmol/L)^[4530]. **Source:** JI YAN CAO *Kummerowia striata*, LUO SHI TENG *Trachelospermum jasminoides*, MU DI XIANG WAN DOU *Lathyrus pratensis*, SHU QU CAO *Gnaphalium affine* [Syn. *Gnaphalium multiceps*], SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb). **Ref:** 6, 660, 1652, 1699, 4416, 4530.

**13146 Luteolin-3'-O-glucuronide**

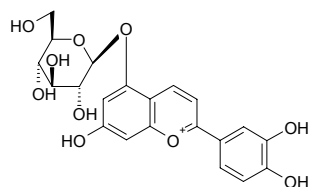
C₂₁H₁₈O₁₂ (462.37). **Source:** MI DIE XIANG *Rosmarinus officinalis*, SHE TAI *Conocephalum conicum*. **Ref:** 660.

**13147 Luteolin-7-O-β-D-glucuronide**

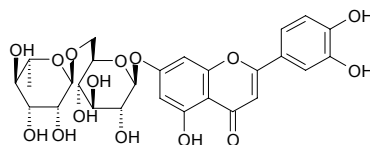
Luteolin 7-O-β-D-glucopyranosiduronic acid C₂₁H₁₈O₁₂ (462.37). mp 182~182°C. **Source:** SHAN WO JU *Lactuca indica* (Fresh whole herb: yield = 0.0030%fw)^[4689], WO JU *Lactuca sativa*, YE JU HUA *Chrysanthemum indicum*. **Ref:** 6, 4214, 4689.

**13148 Luteolinidin-5-glucoside**

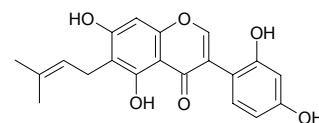
C₂₁H₂₁O₁₀⁺ (433.40). **Source:** MAN JIANG HONG *Azolla imbricata* [Syn. *Salvinia imbricata*] **Ref:** 660.

**13149 Luteolin-7-rutinoside**

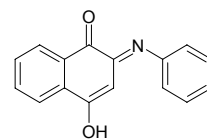
Luteolin 7-O-rutinoside C₂₇H₃₀O₁₅ (594.53). **Pharm:** Aldose reductase inhibitor (IC₅₀ = 0.92 μmol/L, control Epalrestat, IC₅₀ = 0.072 μmol/L)^[4530]. **Source:** JI CAI *Capsella bursa-pastoris*, SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb). **Ref:** 6, 4530.

**13150 Luteone**

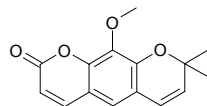
[41743-56-0] C₂₀H₁₈O₆ (354.36). **Pharm:** Antifungal. **Source:** BAI YU SHAN DOU *Lupinus albus*. **Ref:** 658.

**13151 Lutine**

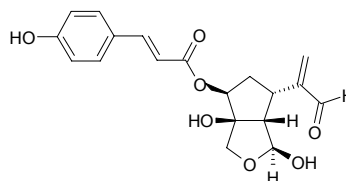
2-Anilino-1,4-naphthoquinone [66855-47-8] C₁₆H₁₁NO₂ (249.27). **Source:** DAN HUANG MU XI CAO *Reseda luteola*, NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.00001%dw). **Ref:** 1521, 4752.

**13152 Luvangetin**

[483-92-1] C₁₅H₁₄O₄ (258.28). mp 108~109°C. **Source:** YAN JIAO CAO *Boenninghausenia albiflora*. **Ref:** 2495.

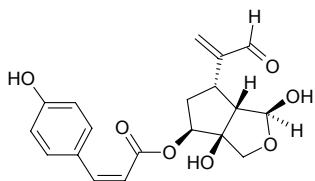
**13153 Luzonial A**

C₁₉H₂₀O₇ (360.37). Yellow oil; [α]_D²¹ = -7.1° (c = 1.04, MeOH). **Pharm:** Cytotoxic (HeLa-S3 cancer cells, moderate, IC₅₀ = 3.5 μmol/L, control 5-Fluorouracil IC₅₀ = 5.4 μmol/L, Cisplatin IC₅₀ = 2.46 μmol/L). **Source:** LV SONG JIA MI *Viburnum luzonicum*. **Ref:** 2538.

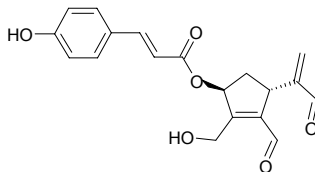


13154 Luzonial B

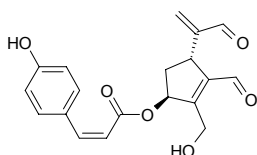
$C_{19}H_{20}O_7$ (360.37). Yellow oil; $[\alpha]_D^{21} = -1.9^\circ$ ($c = 1.17$, MeOH). **Pharm:** Cytotoxic (HeLa-S3 cancer cells, moderate, $IC_{50} = 1.93\mu\text{mol/L}$, control 5-Fluorouracil $IC_{50} = 5.4\mu\text{mol/L}$, Cisplatin $IC_{50} = 2.46\mu\text{mol/L}$). **Source:** LV SONG JIA MI *Viburnum luzonicum*. **Ref:** 2538.

**13155 Luzonidial A**

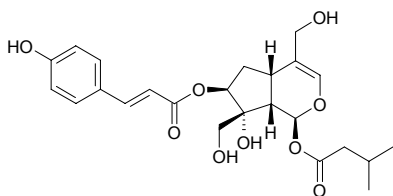
$C_{19}H_{18}O_6$ (342.35). Yellow oil; $[\alpha]_D^{21} = -183.4^\circ$ ($c = 0.94$, $CHCl_3$). **Pharm:** Cytotoxic (HeLa-S3 cancer cells, moderate, $IC_{50} = 24.5\mu\text{mol/L}$, control 5-Fluorouracil $IC_{50} = 5.4\mu\text{mol/L}$, Cisplatin $IC_{50} = 2.46\mu\text{mol/L}$). **Source:** LV SONG JIA MI *Viburnum luzonicum*. **Ref:** 2538.

**13156 Luzonidial B**

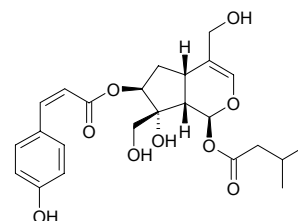
$C_{19}H_{18}O_6$ (342.35). Yellow oil; $[\alpha]_D^{21} = -32.4^\circ$ ($c = 0.54$, $CHCl_3$). **Source:** LV SONG JIA MI *Viburnum luzonicum*. **Ref:** 2538.

**13157 Luzonoid A**

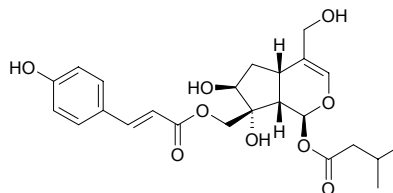
$C_{24}H_{30}O_9$ (462.5). Yellow oil, $[\alpha]_D^{21} = +41.0^\circ$ ($c = 0.64$, MeOH). **Pharm:** Cytotoxic (*in vitro*, HeLa-S3, $IC_{50} = 2.89\mu\text{mol/L}$; control Cisplatin, $IC_{50} = 2.46\mu\text{mol/L}$). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.0033%). **Ref:** 4777.

**13158 Luzonoid B**

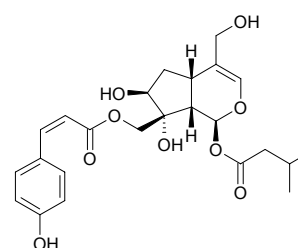
$C_{24}H_{30}O_9$ (462.5). Yellow oil, $[\alpha]_D^{21} = -53.7^\circ$ ($c = 2.11$, MeOH). **Pharm:** Cytotoxic (*in vitro*, HeLa-S3, $IC_{50} = 3.11\mu\text{mol/L}$; control Cisplatin, $IC_{50} = 2.46\mu\text{mol/L}$). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.0020%). **Ref:** 4777.

**13159 Luzonoid C**

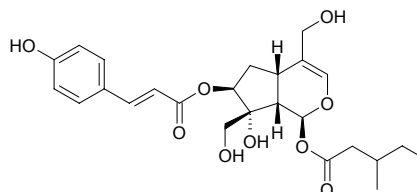
$C_{24}H_{30}O_9$ (462.5). Yellow oil, $[\alpha]_D^{21} = -54.1^\circ$ ($c = 0.35$, MeOH). **Pharm:** Cytotoxic (*in vitro*, HeLa-S3, $IC_{50} = 3.57\mu\text{mol/L}$; control Cisplatin, $IC_{50} = 2.46\mu\text{mol/L}$). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.00069%). **Ref:** 4777.

**13160 Luzonoid D**

$C_{24}H_{30}O_9$ (462.5). Yellow oil, $[\alpha]_D^{21} = -43.3^\circ$ ($c = 1.03$, MeOH). **Pharm:** Cytotoxic (*in vitro*, HeLa-S3, $IC_{50} = 4.56\mu\text{mol/L}$; control Cisplatin, $IC_{50} = 2.46\mu\text{mol/L}$). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.00026%). **Ref:** 4777.

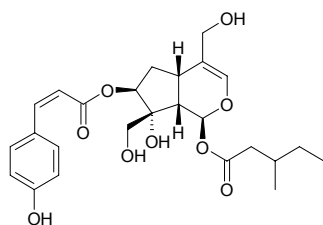
**13161 Luzonoid E**

1-*O*-Deisovaeroyl-1-*O*-3-methylvaleroylluzonoid A $C_{25}H_{32}O_9$ (476.53). Yellow oil, $[\alpha]_D^{21} = +54.1^\circ$ ($c = 0.21$, MeOH). **Pharm:** Cytotoxic (*in vitro*, HeLa-S3, $IC_{50} = 7.4\mu\text{mol/L}$; control Cisplatin, $IC_{50} = 2.46\mu\text{mol/L}$). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.00061%). **Ref:** 4777.

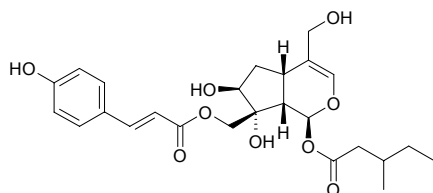


13162 Luzonoid F

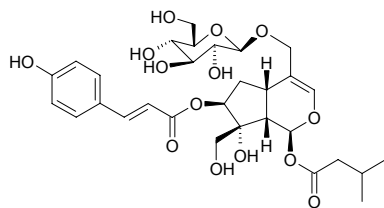
$C_{25}H_{32}O_9$ (476.53). Colorless oil, $[\alpha]_D^{21} = -32.1^\circ$ ($c = 2.10$, MeOH). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.00012%). **Ref:** 4777.

**13163 Luzonoid G**

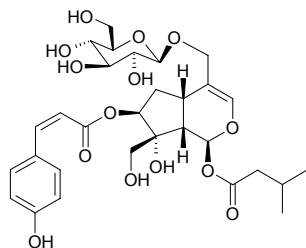
$C_{25}H_{32}O_9$ (476.53). Colorless oil, $[\alpha]_D^{21} = -36.1^\circ$ ($c = 0.80$, MeOH). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.00011%). **Ref:** 4777.

**13164 Luzonoside A**

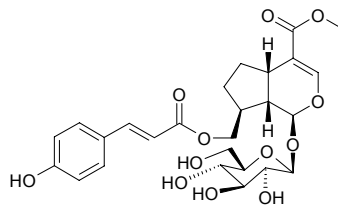
7-*O*-(*E*)-*p*-Coumaroylsuspensolide F $C_{30}H_{40}O_{14}$ (624.64). Yellow paste, $[\alpha]_D^{21} = -18.6^\circ$ ($c = 0.60$, MeOH). **Pharm:** Cytotoxic (*in vitro*, HeLa-S3, $IC_{50} = 3.39\mu\text{mol/L}$; control Cisplatin, $IC_{50} = 2.46\mu\text{mol/L}$). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.00016%). **Ref:** 4777.

**13165 Luzonoside B**

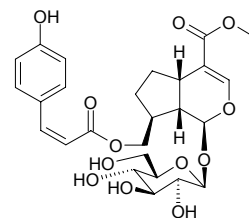
7-*O*-(*Z*)-*p*-Coumaroylsuspensolide F $C_{30}H_{40}O_{14}$ (624.64). Yellow paste, $[\alpha]_D^{21} = -41.1^\circ$ ($c = 0.45$, MeOH). **Pharm:** Cytotoxic (*in vitro*, HeLa-S3, $IC_{50} = 4.67\mu\text{mol/L}$; control Cisplatin, $IC_{50} = 2.46\mu\text{mol/L}$). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.00022%). **Ref:** 4777.

**13166 Luzonoside C**

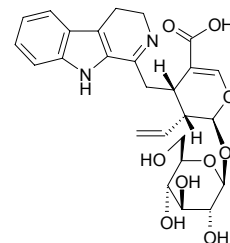
10-*O*-(*E*)-*p*-Coumaroyladoxoside $C_{26}H_{32}O_{12}$ (536.54). Yellow paste, $[\alpha]_D^{21} = -9.6^\circ$ ($c = 0.31$, MeOH). **Pharm:** Cytotoxic (*in vitro*, HeLa-S3, $IC_{50} > 100\mu\text{mol/L}$; control Cisplatin, $IC_{50} = 2.46\mu\text{mol/L}$). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.00021%). **Ref:** 4777.

**13167 Luzonoside D**

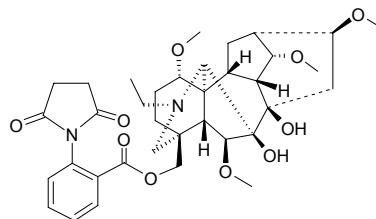
10-*O*-(*Z*)-*p*-Coumaroyladoxoside $C_{26}H_{32}O_{12}$ (536.54). Yellow paste, $[\alpha]_D^{21} = +32.6^\circ$ ($c = 0.27$, MeOH). **Pharm:** Cytotoxic (*in vitro*, HeLa-S3, $IC_{50} > 100\mu\text{mol/L}$; control Cisplatin, $IC_{50} = 2.46\mu\text{mol/L}$). **Source:** LV SONG JIA MI *Viburnum luzonicum* (leaf: yield = 0.00021%). **Ref:** 4777.

**13168 Lyalosidic acid**

$C_{26}H_{30}N_2O_9$ (514.54). **Source:** LIU QIU SHE GEN CAO *Ophiorrhiza liukiensis* (whole herb). **Ref:** 4527.

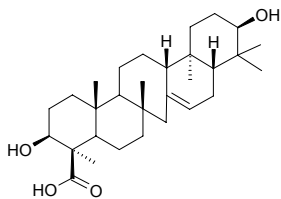
**13169 Lycaconitine**

[25867-19-0] $C_{36}H_{48}N_2O_{10}$ (668.79). **Pharm:** Increases blood pressure (anesthetic rbt, dose $> 0.25\text{mg/kg}$, blood pressure rises slightly). **Source:** KE SHEN MI ER CUI QUE *Delphinium cashmerianum*, LANG DU WU TOU *Aconitum lycoctonum*, NIU BIAN *Aconitum barbatum* var. *puberulum* [Syn. *Aconitum ochranthum*]. **Ref:** 658, 660.

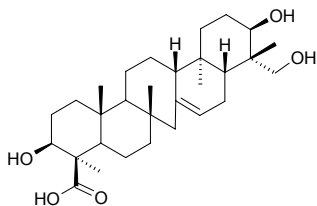


13170 Lycernuic acid A

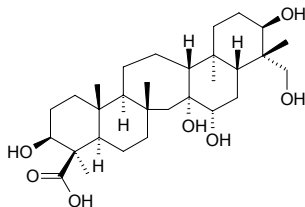
$C_{30}H_{48}O_4$ (472.71). Colorless powder, mp 322–324°C (MeOH/CHCl₃), $[\alpha]_D^{26} = -21.0^\circ$ ($c = 0.10$, MeOH). Source: PU DI WU GONG *Lycopodium cernuum* (root, stem and leaf: yield = 0.0030%dw). Ref: 660, 4633.

**13171 Lycernuic acid B**

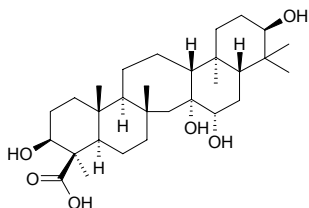
$C_{30}H_{48}O_5$ (488.71). Colorless powder, mp 304–305°C (MeOH/CHCl₃), $[\alpha]_D^{26} = -31.0^\circ$ ($c = 0.10$, MeOH). Source: PU DI WU GONG *Lycopodium cernuum* (root, stem and leaf: yield = 0.0013%dw). Ref: 660, 4633.

**13172 Lycernuic acid C**

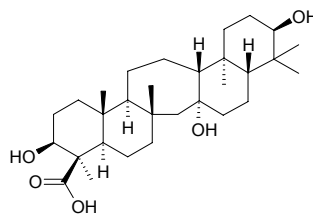
$C_{30}H_{50}O_7$ (522.73). Colorless powder, mp 265–266°C (MeOH/CHCl₃), $[\alpha]_D^{22} = -42.0^\circ$ ($c = 0.20$, MeOH). Source: PU DI WU GONG *Lycopodium cernuum* (root, stem and leaf: yield = 0.0022%dw). Ref: 4633.

**13173 Lycernuic acid D**

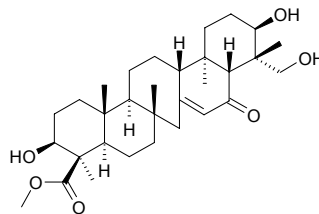
$C_{30}H_{50}O_6$ (506.73). Colorless powder, mp 289–290°C (MeOH/CHCl₃), $[\alpha]_D^{26} = -35.0^\circ$ ($c = 0.10$, MeOH). Source: PU DI WU GONG *Lycopodium cernuum* (root, stem and leaf: yield = 0.00058%dw). Ref: 4633.

**13174 Lycernuic acid E**

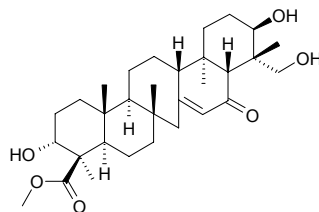
$C_{30}H_{50}O_5$ (490.73). Colorless powder, mp 245–246°C (MeOH/CHCl₃), $[\alpha]_D^{26} = -46.0^\circ$ ($c = 0.10$, MeOH). Source: PU DI WU GONG *Lycopodium cernuum* (root, stem and leaf: yield = 0.00067%dw). Ref: 4633.

**13175 Lycernuic ketone A**

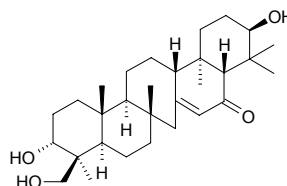
$C_{31}H_{48}O_6$ (516.72). Colorless powder, mp 176–177°C (MeOH/CHCl₃), $[\alpha]_D^{26} = -22.5^\circ$ ($c = 0.20$, MeOH). Source: PU DI WU GONG *Lycopodium cernuum* (root, stem and leaf: yield = 0.00067%dw). Ref: 4633.

**13176 Lycernuic ketone B**

$C_{31}H_{48}O_6$ (516.72). Colorless powder, mp 189–190°C (MeOH/CHCl₃), $[\alpha]_D^{26} = +51.7^\circ$ ($c = 0.30$, MeOH). Source: PU DI WU GONG *Lycopodium cernuum* (root, stem and leaf: yield = 0.0027%dw). Ref: 4633.

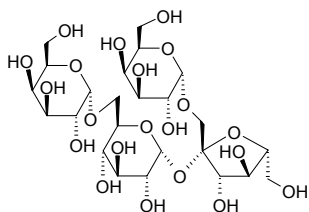
**13177 Lycernuic ketone C**

3 α ,21 β ,24-Trihydroxyserrat-14-en-16-one $C_{30}H_{48}O_4$ (472.71). Colorless powder, mp 235–236°C (MeOH/CHCl₃), $[\alpha]_D^{26} = +28.3^\circ$ ($c = 0.30$, MeOH). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*] (whole herb: yield = 0.00017%dw), PU DI WU GONG *Lycopodium cernuum* (root, stem and leaf: yield = 0.0031%dw). Ref: 4633, 4729.

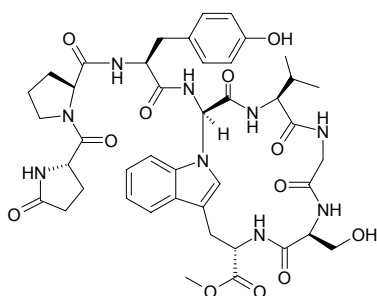


13178 Lychnose

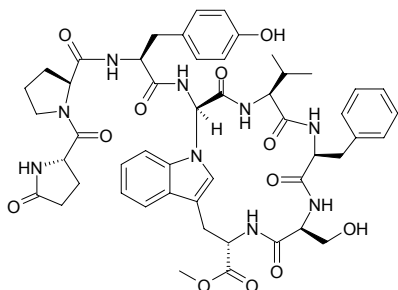
$C_{24}H_{42}O_{21}$ (666.59). Source: BAI NIU XI *Cucubalus baccifer*. Ref: 6.

**13179 Lyciumin A methylate**

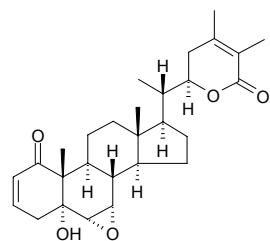
$C_{43}H_{53}N_9O_{12}$ (887.95). Source: QIANG XIANG *Celosia argentea* (seed; yield = 0.00001%). Ref: 4771.

**13180 Lyciumin C methylate**

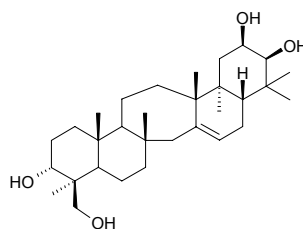
$C_{50}H_{59}N_9O_{12}$ (978.08). Source: QIANG XIANG *Celosia argentea* (seed; yield = 0.00003%). Ref: 4771.

**13181 Lycium substance B**

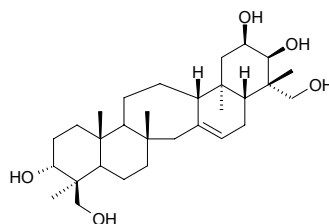
$C_{28}H_{38}O_5$ (454.61). Source: CUI MIAN SHUI QIE *Withania somnifera* (root). Ref: 4198.

**13182 Lyclaninol**

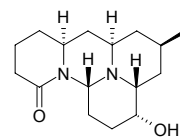
$C_{30}H_{50}O_4$ (474.73). Source: SHEN JIN CAO *Lycopodium japonicum* [Syn. *Lycopodium clavatum*]. Ref: 660.

**13183 Lyclanitin**

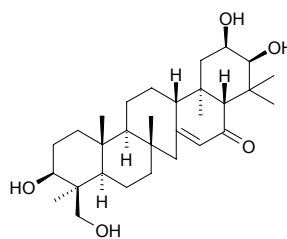
$C_{30}H_{50}O_5$ (490.73). Source: GUO JIANG LONG *Lycopodium complanatum*. Ref: 660.

**13184 Lycocernuine**

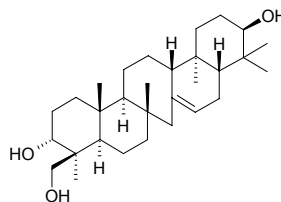
[6871-55-2] $C_{16}H_{26}N_2O_2$ (278.40). mp 230°C. Source: PU DI WU GONG *Lycopodium cernuum*. Ref: 6, 1521.

**13185 Lycoclavanin**

[27832-90-2] $C_{30}H_{48}O_5$ (488.71). mp 344–346°C. Source: SHEN JIN CAO *Lycopodium japonicum* [Syn. *Lycopodium clavatum*]. Ref: 6, 1521.

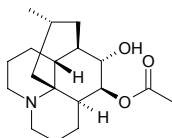
**13186 Lycoclavanol**

[13956-51-9] $C_{30}H_{50}O_3$ (458.73). mp 308–310°C. Source: SHEN JIN CAO *Lycopodium japonicum* [Syn. *Lycopodium clavatum*]. Ref: 6, 1521.

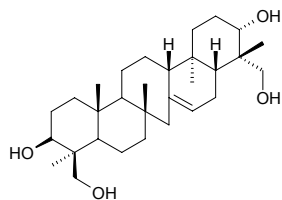


13187 Lycoclavine

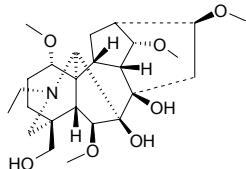
$C_{18}H_{29}NO_3$ (307.44). Source: GAO SHAN BIAN ZHI SHI SONG
Lycopodium alpinum [Syn. *Diphasiastrum alpinum*], QIAN CENG TA
Huperzia serrata [Syn. *Lycopodium serratum*]. Ref: 660.

**13188 Lycocryptol**

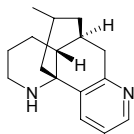
$C_{30}H_{50}O_4$ (474.73). Source: MA WEI SHAN *Phlegmariurus phlegmaria* [Syn.
Lycopodium phlegmaria]. Ref: 660.

**13189 Lycoctonine**

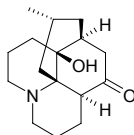
Methyl-1-cyclohexen-1-yl-1,3,5,7,9,11,13-tetradecaheptaene [26000-17-9]
 $C_{25}H_{41}NO_7$ (476.61). Pharm: Antihypertensive (cat, iv, 2~5mg/kg; anesthetic
cat, iv, 5~15mg/kg). Source: E MEI CUI QUE HUA *Delphinium omeiense*,
LANG DU WU TOU *Aconitum lycoctonum*, QIANG GU FEI YAN CAO
Delphinium consolida, XI MA XUAN FU HUA *Inula royleana*, XUE
SHANG YI ZHI HAO *Aconitum brachypodium*. Ref: 618, 658, 2190.

**13190 Lycodine**

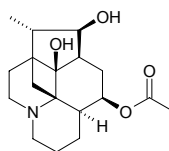
[20316-18-1] $C_{16}H_{22}N_2$ (242.37). mp 118°C. Source: QIAN CENG TA
Huperzia serrata [Syn. *Lycopodium serratum*]. Ref: 6.

**13191 Lycodoline**

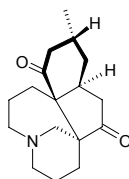
[6900-92-1] $C_{16}H_{25}NO_2$ (263.38). mp 180°C; $[\alpha]_D^{25} = -123^\circ$ (MeOH). Source:
DONG BEI SHI SHAN *Huperzia miyoshiana*, QIAN CENG TA *Huperzia*
serrata [Syn. *Lycopodium serratum*], SHEN JIN CAO *Lycopodium japonicum*
[Syn. *Lycopodium clavatum*], XIAO JIE JIN CAO *Huperzia selago* [Syn.
Lycopodium selago]. Ref: 6, 5412.

**13192 Lycofawcine**

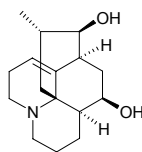
$C_{18}H_{27}NO_4$ (321.42). Source: DAN SUI SHI SONG *Lycopodium annotinum*.
Ref: 660.

**13193 Lycoflexine**

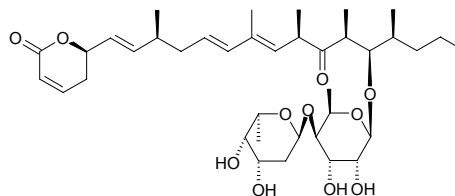
Lycobergine $C_{17}H_{25}NO_2$ (275.39). Source: MA WEI SHAN *Phlegmariurus*
phlegmaria [Syn. *Lycopodium phlegmaria*]. Ref: 660.

**13194 Lycofoline**

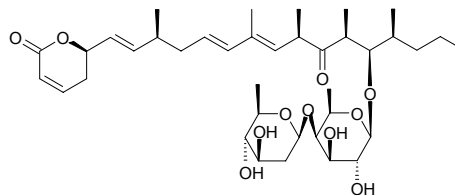
$C_{16}H_{25}NO_2$ (263.38). Source: YU BAI SHI SONG *Lycopodium obscurum*.
Ref: 660.

**13195 Lycogalinoside A**

$C_{38}H_{60}O_{11}$ (692.90). White powder, $[\alpha]_D^{23} = -19^\circ$ ($c = 0.09$, MeOH). Pharm:
Antibacterial (gram-positive bacteria: 10µg sample were applied on 6.35mm
paper disks, *Staphylococcus aureus*, DIZ = 52mm; *Bacillus subtilis*, DIZ =
12mm; *Escherichia coli*, DIZ = 8mm); antifungal (*Candida albicans*, DIZ =
2mm; *Saccharomyces cerevisiae*, DIZ = 7mm). Source: FEN LIU JUN
Lycogala epidendrum. Ref: 3427.

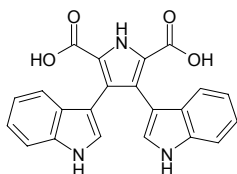
**13196 Lycogalinoside B**

$C_{38}H_{60}O_{11}$ (692.90). White powder, $[\alpha]_D^{23} = -41^\circ$ ($c = 0.08$, MeOH). Pharm:
Antibacterial (gram-positive bacteria: 10µg sample were applied on 6.35mm
paper disks, *Staphylococcus aureus*, DIZ = 6.4mm; *Bacillus subtilis*, DIZ =
1.6mm, *Escherichia coli*, DIZ = 2mm); antifungal (*Candida albicans*, DIZ =
9mm; *Saccharomyces cerevisiae*, DIZ = 32mm). Source: FEN LIU JUN
Lycogala epidendrum. Ref: 3427.

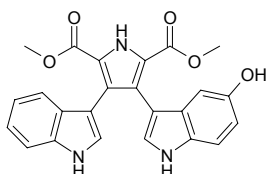


13197 Lycogaric acid A

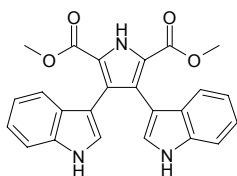
$C_{22}H_{15}N_3O_4$ (385.38). **Pharm:** Cytotoxic inactive (HeLa cells, $IC_{50} > 100\mu\text{g/mL}$). **Source:** FEN LIU JUN *Lycogala epidendrum* (wild sporocarp). **Ref:** 4465.

**13198 Lycogarubi B**

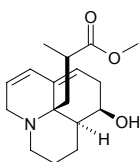
$C_{24}H_{19}N_3O_5$ (429.44). **Pharm:** Cytotoxic inactive (HeLa cells, $IC_{50} > 100\mu\text{g/mL}$). **Source:** FEN LIU JUN *Lycogala epidendrum* (wild sporocarp). **Ref:** 4465.

**13199 Lycogarubin C**

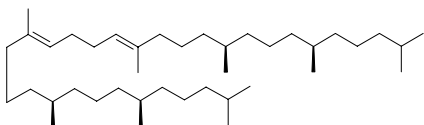
$C_{24}H_{19}N_3O_4$ (413.44). **Pharm:** Cytotoxic (HeLa cells, $IC_{50} = 24.0\mu\text{g/mL}$). **Source:** FEN LIU JUN *Lycogala epidendrum* (wild sporocarp). **Ref:** 4465.

**13200 Lyconnotine**

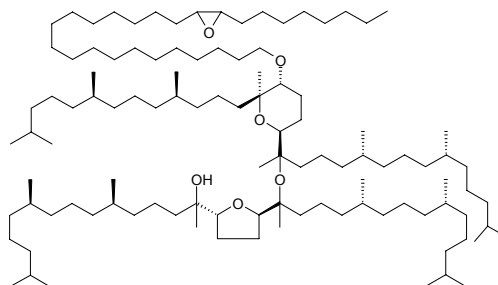
$C_{17}H_{25}NO_3$ (291.39). **Source:** DAN SUI SHI SONG *Lycopodium annotinum*. **Ref:** 660.

**13201 Lycopadiene**

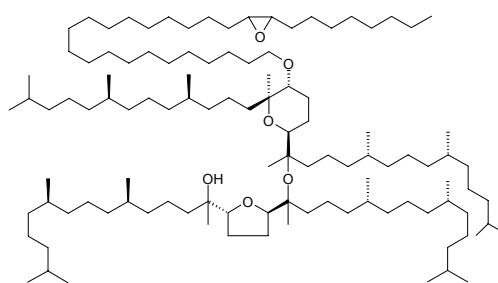
$C_{40}H_{78}$ (559.07). **Source:** CONG LI ZAO *Botryococcus braunii*. **Ref:** 3964.

**13202 Lycopanero B1**

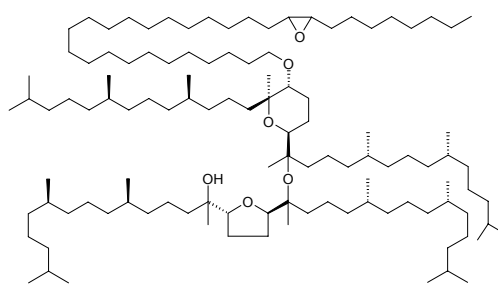
$C_{108}H_{212}O_6$ (1606.89). Clear oil. **Source:** CONG LI ZAO *Botryococcus braunii*. **Ref:** 3964.

**13203 Lycopanero B2**

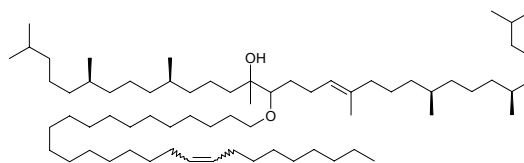
$C_{110}H_{216}O_6$ (1634.94). Clear oil. **Source:** CONG LI ZAO *Botryococcus braunii*. **Ref:** 3964.

**13204 Lycopanero B3**

$C_{112}H_{220}O_6$ (1663.00). Clear oil. **Source:** CONG LI ZAO *Botryococcus braunii*. **Ref:** 3964.

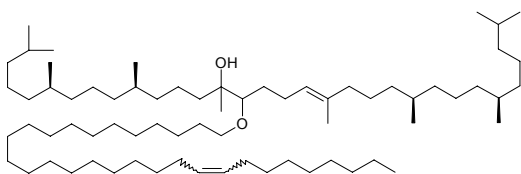
**13205 Lycopanero C1**

$C_{68}H_{134}O_2$ (983.82). Clear oil. **Source:** CONG LI ZAO *Botryococcus braunii*. **Ref:** 3964.

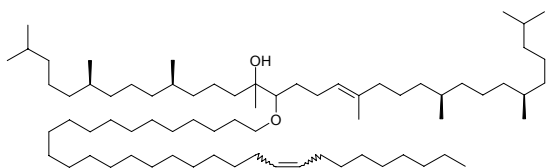


13206 Lycopanerol C₂

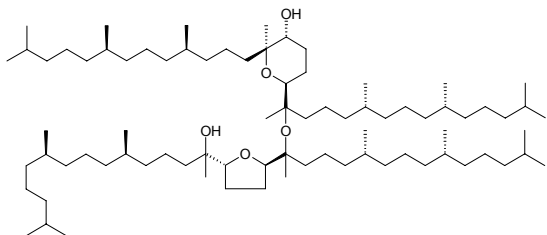
C₇₀H₁₃₈O₂ (1011.88). Clear oil. Source: CONG LI ZAO *Botryococcus braunii*. Ref: 3964.

**13207 Lycopanerol C₃**

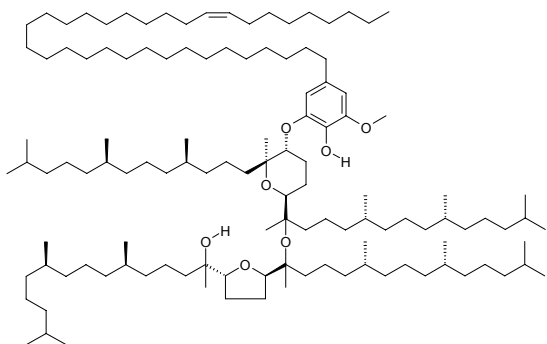
C₇₂H₁₄₂O₂ (1039.93). Clear oil. Source: CONG LI ZAO *Botryococcus braunii*. Ref: 3964.

**13208 Lycopanerol D**

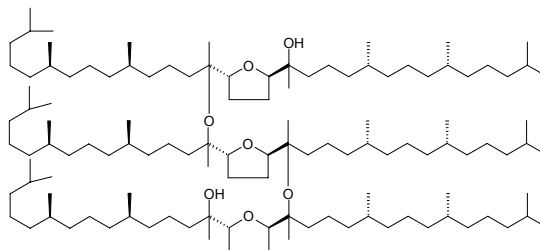
C₈₀H₁₅₈O₅ (1200.15). Clear oil, $[\alpha]_D^{20} = -1.7^\circ$ ($c = 7.5$, CHCl₃). Source: CONG LI ZAO *Botryococcus braunii*. Ref: 3964.

**13209 Lycopanerol E**

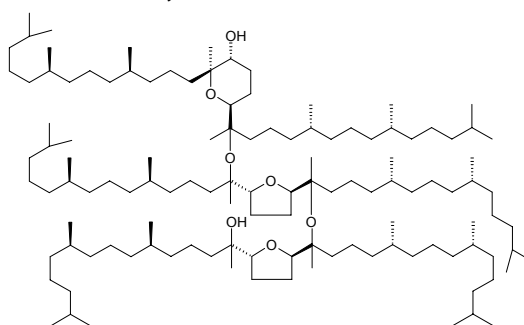
C₁₂₂H₂₃₂O₇ (1811.21). Source: CONG LI ZAO *Botryococcus braunii*. Ref: 3964.

**13210 Lycopanerol F**

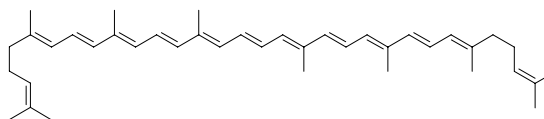
C₁₂₀H₂₃₆O₇ (1791.21). Clear oil, $[\alpha]_D^{20} = -2.4^\circ$ ($c = 5$, CHCl₃). Source: CONG LI ZAO *Botryococcus braunii*. Ref: 3964.

**13211 Lycopanerol G**

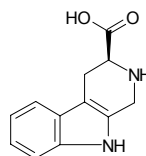
C₁₂₀H₂₃₆O₇ (1791.21). Clear oil, $[\alpha]_D^{20} = -7.4^\circ$ ($c = 6.3$, CHCl₃). Source: CONG LI ZAO *Botryococcus braunii*. Ref: 3964.

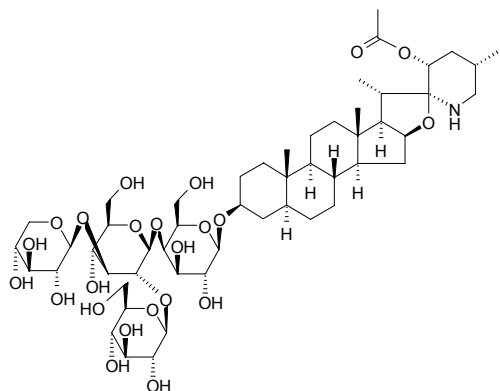
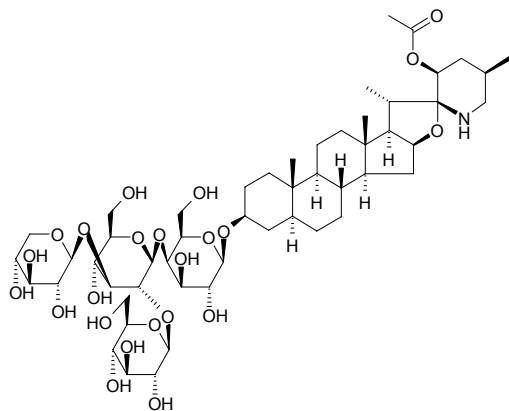
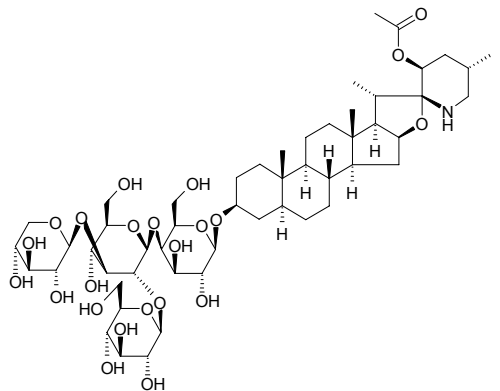
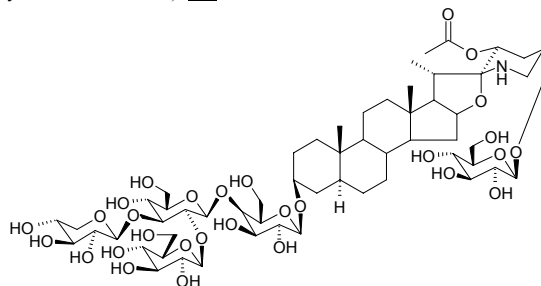
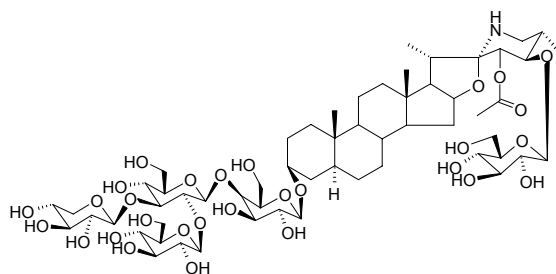
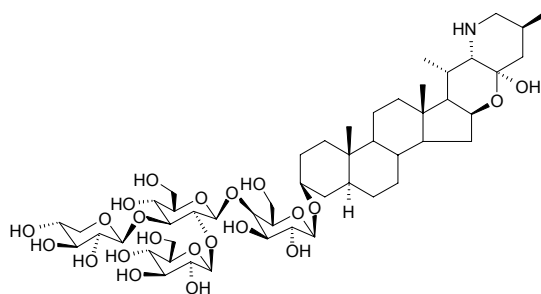
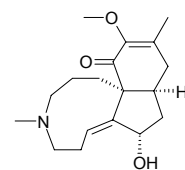
**13212 Lycopene**

[502-65-8] C₄₀H₅₆ (536.89). Pharm: Antioxidant (LDL oxidation inhibitor, free radical scavenger); cytotoxic (*in vitro*, *in vivo*); anti-atherosclerotic; used in treatment of sterilitas virilis (sterile male, orl, 2mg/d for three weeks, effective rate = 60%); antineoplastic (mus B6C3F1, bladder carcinoma). Source: FAN QIE *Lycopersicon esculentum*, JIN ZHAN JU *Calendula officinalis*, KU GUA *Momordica charantia*, NAN HE SHI *Daucus carota*, QUAN CHI QIANG WEI *Rosa canina*, RUI DIAN GAN LAN *Brassica rutabaga*, SHI DI *Diospyros kaki*, *Citrus* sp. Ref: 658, 1582, 1834, 1835, 1836, 1837, 1838, 1839, 1840.

**13213 Lycoperodine 1**

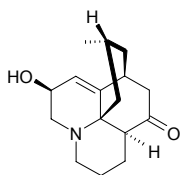
C₁₂H₁₂N₂O₂ (216.24). Pale yellow amorphous powder, $[\alpha]_D^{19} = -30.3^\circ$ ($c = 0.26$, MeOH). Source: FAN QIE *Lycopersicon esculentum* (ripe fruit: yield = 0.0003%fw). Ref: 3018.



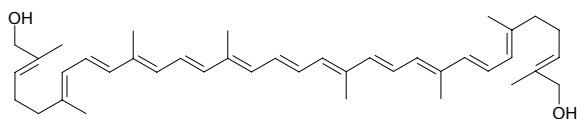
13214 Lycoperside A23*R*-Acetoxytomatine [23*R*-Acetoxytomatine] C₅₂H₈₅NO₂₃ (1092.25).Source: FAN QIE *Lycopersicon esculentum* (ripe fruit: yield = 0.00005%fw). Ref: 3018.**13215 Lycoperside B**C₅₂H₈₅NO₂₃ (1092.25). Source: FAN QIE *Lycopersicon esculentum* (ripe fruit: yield = 0.00015%fw). Ref: 3018.**13216 Lycoperside C**C₅₂H₈₅NO₂₃ (1092.25). Source: FAN QIE *Lycopersicon esculentum* (ripe fruit: yield = 0.00045%fw). Ref: 3018.**13217 Lycoperside F**3-*O*-β-Lycotetraosyl-(23*R*)-23-acetoxy-27-hydroxy-27-*O*-β-*D*-glucopyranosyl tomatidine C₅₈H₉₅NO₂₉ (1270.39). White amorphous powder, [α]_D²⁹ = -38.5° (*c* = 0.80, MeOH). Source: FAN QIE *Lycopersicon esculentum* (ripe fruit: yield = 0.00013%fw). Ref: 3018.**13218 Lycoperside G**3-*O*-β-Lycotetraosyl-(23*S*,24*R*)-23-acetoxy-24-*O*-β-*D*-glucopyranosylsoladulidene-24-ol C₅₈H₉₅NO₂₉ (1270.39). White amorphous powder, [α]_D²⁰ = -44.1° (*c* = 0.68, MeOH). Source: FAN QIE *Lycopersicon esculentum* (ripe fruit: yield = 0.00011%fw). Ref: 3018.**13219 Lycoperside H**3-*O*-β-Lycotetraosyl-22-isopimpifolidine C₅₀H₈₃NO₂₂ (1050.21). White amorphous powder, [α]_D²⁰ = -29.8° (*c* = 1.20, MeOH). Source: FAN QIE *Lycopersicon esculentum* (ripe fruit: yield = 0.0006%fw). Ref: 3018.**13220 Lycophlegmarine**C₁₈H₂₇NO₃ (305.42). Source: MA WEI SHAN *Phlegmariusus phlegmaria* [Syn. *Lycopodium phlegmaria*]. Ref: 660.

13221 Lycophlegmine

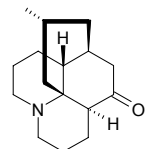
$C_{16}H_{23}NO_2$ (261.37). Source: MA WEI SHAN *Phlegmariusus phlegmaria* [Syn. *Lycopodium phlegmaria*]. Ref: 660.

**13222 Lycophyll**

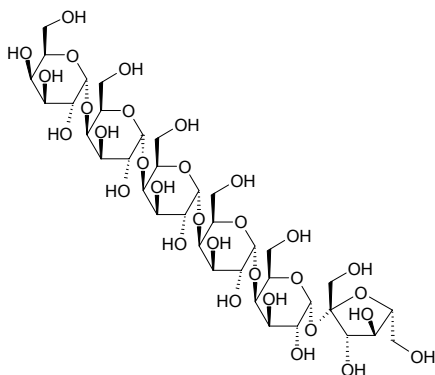
[19891-75-9] $C_{40}H_{56}O_2$ (568.89). mp 179°C. Source: FAN QIE *Lycopersicon esculentum*, QIAN NIAN BU LAN XIN *Solanum dulcamara*. Ref: 6, 660, 1521.

**13223 Lycopodine**

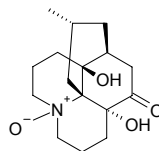
[466-61-5] $C_{16}H_{25}NO$ (247.38). mp 116°C, bp 125°C/0.2mmHg; $[\alpha]_D^{25} = -26^\circ$ (MeOH). Pharm: Uterine stimulant; paralysis (frog); promotes small intestinal motion (rbt, rat and gpg); treatment of dermatosis. Source: DONG BEI SHI SHAN *Huperzia miyoshiana*, GUO JIANG LONG *Lycopodium complanatum*, SHEN JIN CAO *Lycopodium japonicum* [Syn. *Lycopodium clavatum*], XIAO JIE JIN CAO *Huperzia selago* [Syn. *Lycopodium selago*]. Ref: 6, 658, 5412.

**13224 Lycopose**

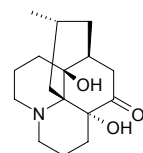
$C_{36}H_{62}O_{31}$ (990.88). mp 270°C. Source: ZE LAN GEN *Lycopus lucidus*, ZE LAN *Lycopus lucidus*. Ref: 6.

**13225 Lycoserramine F**

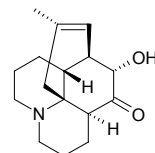
Miyoshianine A $C_{16}H_{25}NO_4$ (295.38). Colorless prisms, mp >300°C (MeOH–AcOEt), $[\alpha]_D^{24} = -15.2^\circ$ ($c = 0.06$, MeOH); colorless prisms (Me₂CO–CH₃OH), mp 216–218°C, $[\alpha]_D^{25} = -85^\circ$ ($c = 0.083$, CH₃OH). Source: DONG BEI SHI SHAN *Huperzia miyoshiana*, QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 5412, 4388.

**13226 Lycoserramine G**

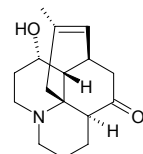
$C_{16}H_{25}NO_3$ (279.38). Colorless amorphous powder. Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388.

**13227 Lycoserramine H**

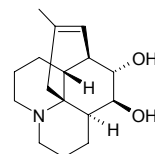
$C_{16}H_{23}NO_2$ (261.37). Colorless prisms, mp 227–228°C. Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388.

**13228 Lycoserramine I**

$C_{16}H_{23}NO_2$ (261.37). Colorless amorphous powder. Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388.

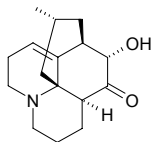
**13229 Lycoserramine J**

Miyoshianine B $C_{16}H_{25}NO_2$ (263.38). Colorless prisms (Me₂CO–CH₃OH), mp 264–266°C, $[\alpha]_D^{25} = -117^\circ$ ($c = 0.250$, CH₃OH); colorless solid, $[\alpha]_D^{22} = -67.7^\circ$ ($c = 0.11$, CHCl₃). Source: DONG BEI SHI SHAN *Huperzia miyoshiana*, QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388, 5412.

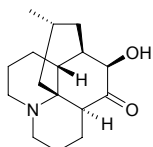


13230 Lycoposerramine K

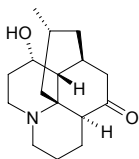
$C_{16}H_{23}NO_2$ (261.37). Colorless amorphous powder. Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388.

**13231 Lycoposerramine L**

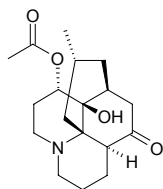
$C_{16}H_{25}NO_2$ (263.38). Yellowish amorphous powder. Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388.

**13232 Lycoposerramine M**

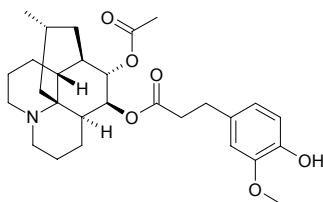
$C_{16}H_{25}NO_2$ (263.38). Colorless solid. Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388.

**13233 Lycoposerramine N**

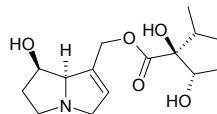
$C_{18}H_{27}NO_4$ (321.42). Colorless amorphous powder. Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388.

**13234 Lycoposerramine O**

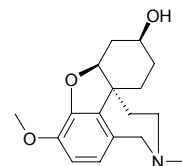
$C_{28}H_{39}NO_6$ (485.63). Colorless amorphous powder, $[\alpha]_D^{23} = -27.8^\circ$ ($c = 0.06$, $CHCl_3$). Source: QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. Ref: 4388.

**13235 Lycopsamine**

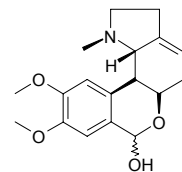
[10285-07-1] $C_{15}H_{25}NO_5$ (299.37). Pharm: Hepatotoxin. Source: E GUO XI MEN FEI CAO *Symphytum x uplandicum*, FU YE ZE LAN *Eupatorium compositifolium*, LIU LI JU *Borago officinalis*, SI SHI TIAN JIE CAI *Heliotropium steudneri*. Ref: 658.

**13236 Lycoramine**

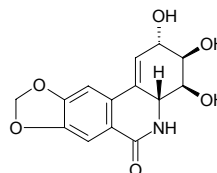
[21133-52-8] $C_{17}H_{23}NO_3$ (289.38). mp $121^\circ C$. Pharm: Cholinesterase inhibitor; LD_{50} (mus, orl) = 131mg/kg, (mus, sc) = 112mg/kg, (mus, ip) = 103mg/kg, (mus, iv) = 16.65mg/kg. Source: BAI SHUI XIAN *Narcissus papyraceus*, DA YI ZHI JIAN *Lycoris aurea*, SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], SHUI XIAN GEN *Narcissus tazetta* var. *chinensis*, TIE SE JIAN *Lycoris sanguinea*. Ref: 4, 658.

**13237 Lycorenine**

[477-19-0] $C_{18}H_{23}NO_4$ (317.39). mp $198\text{--}200^\circ C$. Pharm: Insect antifeedant (*Eurema hecabe mandarina*); bidirectional action to heart (toad heart, *in vitro*, first stimulates and then inhibits); increases blood pressure (dog, iv); antihypertensive (anesthetic rat, iv); vasodilator (rbt ear, perfusion); smooth muscle stimulant (rbt small intestinal, *in vitro*); uterine stimulant (gpg and rbt, *in vivo* and *in vitro*); LD_{50} (mus, sc) = 270mg/kg. Source: DA YI ZHI JIAN *Lycoris aurea*, SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], XIA XUE PIAN LIAN *Leucjum aestivum*. Ref: 6, 658.

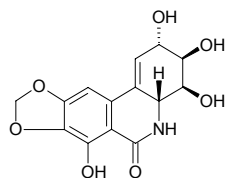
**13238 Lycoricidine**

Margetine [19622-83-4] $C_{14}H_{13}NO_6$ (291.26). mp $214.5\text{--}215.5^\circ C$. Pharm: Insect antifeedant (*Eurema hecabe mandarina*); cytotoxic (EAC cells); plant growth inhibitor. Source: SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], TIE SE JIAN *Lycoris sanguinea*. Ref: 5, 658.

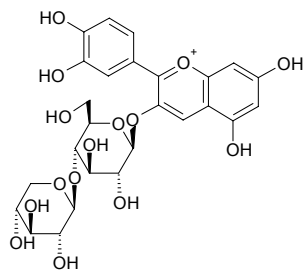


13239 Lycoricidinol

Narciclasine [29477-83-6] $C_{14}H_{13}NO_7$ (307.26). mp 260°C (dec). **Pharm:** Antibacterial (*Bacillus coli*, $IC_{50} = 5\mu\text{g/mL}$); antineoplastic (HeLa and EAC *in vivo*); insect antifeedant (larva of *Eurema hecabe mandarina*); prevents cell division, (inhibits mitosis by immediately stopping protein synthesis in eukaryotic cells); antiviral (inhibits biosynthesis of RNA in endomyocarditis virus); LD_{50} (mus) = 5mg/kg. **Source:** HUANG SHUI XIAN *Narcissus pseudonarcissus*, SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], TIE SE JIAN *Lycoris sanguinea*. **Ref:** 5, 658.

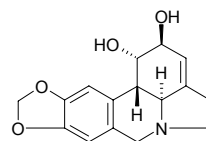
**13240 Lycoricyanin**

$C_{26}H_{29}O_{15}^+$ (581.51). **Source:** SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], SHUI MA TIAO *Polygonum thunbergii*. **Ref:** 660.

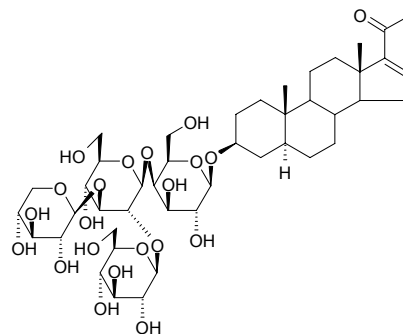
**13241 Lycorine**

Amarylline; Belamarine; Narcissine; Galanthidine [476-28-8] $C_{16}H_{17}NO_4$ (287.32). Colorless prismatic crystals (ethanol), mp 275–278°C (dec), $[\alpha]_D^{15} = -129^\circ$ ($c = 0.16$, 98% ethanol), slightly soluble in ethanol, chloroform, petroleum ether, almost insoluble in water.^[5507] **Pharm:** Cytotoxic (*in vitro*, inhibits a number of hmn tumor cell lines including LXFL529L, Molt4, HL-60, K562, U937, GXF251L, and CXF94L)^[5369]; cytotoxic (Meth-A cell, $ED_{50} = 0.3\mu\text{g/mL}$, control Adriamycin, $ED_{50} < 0.09\mu\text{g/mL}$; LLC cell, $ED_{50} = 0.5\mu\text{g/mL}$, control Adriamycin, $ED_{50} = 0.1\mu\text{g/mL}$)^[4125]; antineoplastic (mus, *in vivo*, LLC tumor, number of mouse = 6, control tumor size = $(9089 \pm 545)\text{mm}^3$; dose = 10mg/(kg·d), tumor size = $(7321 \pm 587)\text{mm}^3$ (on day 19), T/C = 80.5%, $p < 0.05$; positive control Adriamycin, dose = 2mg/(kg·d), tumor size = $(3566 \pm 168)\text{mm}^3$, $p < 0.001$); antineoplastic (mus, ascites lymphoma and sarcoma S37, rat lymphatic sarcoma and hepatocarcinoma, HeLa, S_{180} , EAC, ascites liver cancer and Kichita sarcoma); antiviral (poliomyelitis virus, Cocksackie virus and herpes virus A); inhibits mitosis of plant cells; uterine stimulant (rat, gpg and rbt, *in vivo* and *in vitro*, slow and persistent action); emetic; AChE inhibitor ($IC_{50} = (213 \pm 1)\mu\text{mol/L}$, control Galanthamine, $IC_{50} = (1.9 \pm 0.2)\mu\text{mol/L}$)^[4952]; antiretroviral and cytotoxic ($ID_{50} = 0.4\mu\text{g/mL}$, $TC_{50} = 0.75\mu\text{g/mL}$, $TI_{50} (TC_{50}/ID_{50}) = 1.9$)^[5026]; antimalarial (*Plasmodium falciparum* strain NF-54, stage IEF, $IC_{50} =$

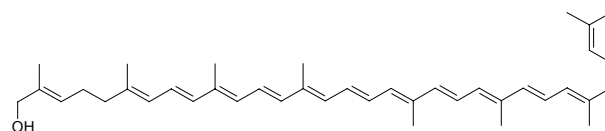
$0.34\mu\text{g/mL}$)^[4000]; antiplasmodial (strain D10, $IC_{50} = 0.6\mu\text{g/mL}$, control Hamayne, $IC_{50} = 15.6\mu\text{g/mL}$, Chloroquine, $IC_{50} = 0.002\mu\text{g/mL}$; strain FAC8, $IC_{50} = 0.7\mu\text{g/mL}$, Hamayne, $IC_{50} = 18.2\mu\text{g/mL}$, Chloroquine, $IC_{50} = 0.01\mu\text{g/mL}$; cytotoxic, BL6, $IC_{50} = 1.8\mu\text{g/mL}$, Hamayne, $IC_{50} = 9.4\mu\text{g/mL}$, Chloroquine, $IC_{50} = 20.9\mu\text{g/mL}$, Daunomycin, $IC_{50} = 0.43\mu\text{g/mL}$)^[3931]; antifungal (*Candida albicans*, IZD = 40mm, MIC = 39 $\mu\text{g/mL}$)^[3829]; toxin (in genus *Narcissus* plants); LD_{50} (dog) = 41mg/kg, (mouse, orl) = 230mg/kg, (mouse, sc) = 145mg/kg, (mouse, ip) = 117mg/kg, (mouse, iv) = 123mg/kg. **Source:** DA YI ZHI JIAN *Lycoris aurea*, GAN FENG CAO *Zephyranthes candida*, JUN ZI LAN *Clivia miniata*, RI BEN WEN SHU LAN *Crinum asiaticum* var. *japonicum* (bulb), SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*], SHUI GUI JIAO YE *Hymenocallis littoralis* [Syn. *Hymenocallis americana*; *Pancreatium littoralis*], SHUI XIAN GEN *Narcissus tazetta* var. *chinensis*, SHUI XIAN HUA *Narcissus tazetta* var. *chinensis*, WEN SHU LAN *Crinum asiaticum* var. *sinicum*, GU TING HUA *Amaryllis belladonna* (bulb)^[3829], GUAN MU WEN SHU LAN *Crinum macowanii* (bulb), XI NAN WEN SHU LAN *Crinum latifolium*^[5507], XIAN MAO *Curculigo orchioides*, XUE PIAN LIAN *Leucojum vernum* (bulb), *Ammocharis coranica* (bulb). **Ref:** 4, 658, 3829, 3931, 3952, 4000, 4125, 4952, 5026, 5369, 5501, 5507.

**13242 3-O-β-Lycotetraosyl 3β-hydroxy-5α-pregn-16-en-20-one**

$C_{44}H_{70}O_{21}$ (935.04). **Source:** YING TAO FAN QIE *Lycopersicon esculentum* var. *cerasiforme* (fruit). **Ref:** 4463.

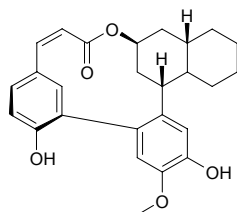
**13243 Lycoxanthin**

[19891-74-8] $C_{40}H_{56}O$ (552.89). mp 168°C. **Pharm:** Pigment. **Source:** FAN QIE *Lycopersicon esculentum*, JIANG GUO SHU YU *Tamus communis*, QIAN NIAN BU LAN XIN *Solanum dulcamara*. **Ref:** 6, 658.

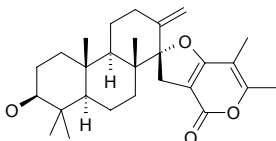


13244 Lyfoline

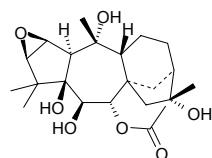
$C_{26}H_{28}O_5$ (420.51). Source: DAN SUI SHI SONG *Lycopodium annotinum*. Ref: 660.

**13245 Lygodinolide**

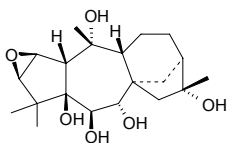
$C_{27}H_{38}O_4$ (426.60). Source: QU ZHOU HAI JIN SHA *Lygodium flexuosum* [Syn. *Lygodium pinnatifidum*; *Ophioglossum flexuosum*]. Ref: 660.

**13246 Lyoniol A**

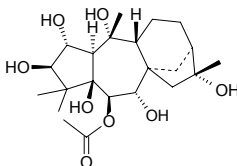
[31136-61-5] $C_{22}H_{34}O_7$ (410.51). mp 250~253°C. Pharm: Antihypertensive (rat, 2mg/kg iv); spasmogenic (produces spasm in rbt, iv, leads to Parkinson's disease in sheep orl, causes muscular tremor in mus, ip, causes ileal contraction in gpg iv *in vivo*); used in treatment of tinea and sarcoptidosis (main effective component in *Lyonia ovalifolia* LI MU); LD₅₀ (mus, ip) = 3.01mg/kg. Source: XIAO GUO NAN ZHU *Lyonia ovalifolia* var. *elliptica*, LI MU *Lyonia ovalifolia*. Ref: 6, 658.

**13247 Lyoniol B**

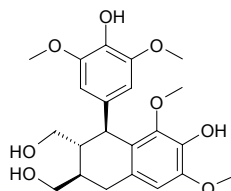
[28894-74-8] $C_{20}H_{32}O_6$ (368.47). mp 280~283°C. Pharm: Used in treatment of tinea and sarcoptidosis (main effective component in *Lyonia ovalifolia* LI MU); LD₅₀ (mus, ip) = 0.61mg/kg. Source: XIAO GUO NAN ZHU *Lyonia ovalifolia* var. *elliptica*, LI MU *Lyonia ovalifolia*. Ref: 6, 658.

**13248 Lyoniol D**

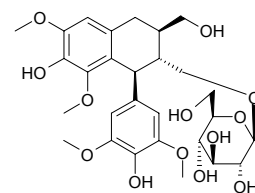
$C_{22}H_{36}O_8$ (428.53). Source: LI MU *Lyonia ovalifolia*, XIAO GUO NAN ZHU *Lyonia ovalifolia* var. *elliptica*. Ref: 660.

**13249 (+)-Lyoniresinol**

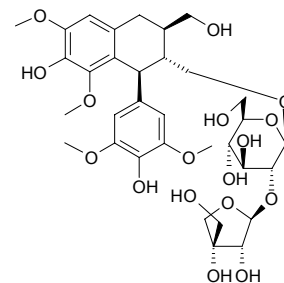
$C_{22}H_{28}O_8$ (420.46). Pharm: Antioxidant (DPPH scavenger, for 40μmol/L DPPH radical, SC₅₀ = 6.6μmol/L). Source: SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). Ref: 4378.

**13250 (+)-Lyoniresinol-2α-O-β-D-glucopyranoside (D₄)**

(+)-9-O-β-D-Glucopyranosyl lyoniresinol $C_{28}H_{38}O_{13}$ (582.61). White granular crystals, mp 119~120°C; white amorphous powder (MeOH), [α]_D = +24.8° (*c* = 0.1, MeOH). Pharm: Antioxidant (DPPH scavenger, IC₅₀ = (42.6±3.1)μmol/L, control BHT, IC₅₀ = (15.3±0.6)μmol/L; superoxide radical inhibitor, IC₅₀ > 100μmol/L, control BHT, IC₅₀ = (48.9±2.5)μmol/L; lipid peroxidation scavenger, IC₅₀ = (39.1±3.1)μmol/L, control BHT, IC₅₀ = (0.11±0.02)μmol/L)^[4402]; anti-HSV-1 inactive (EC₅₀ > 172μmol/L)^[2577]. Source: BAI ZHU SHU *Gaultheria leucocarpa* var. *cumingiana* (root: content = 0.142%)^[5508], DIAN BAI ZHU SHU *Gaultheria yunnanensis* (root: content scope of 3 origins = 0.022%~0.082%, mean content = 0.047%)^[5508], FANG XIANG BAI ZHU *Gaultheria fragrantissima* (root: content = 0.356%)^[5508], MA LAN GEN *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*], MAO MAI LIAO *Pleuropterus ciliinervis* (root), SI LIE BAI ZHU *Gaultheria tetramera* (root: content = 0.061%)^[5508], WEI YE BAI ZHU *Gaultheria griffithiana* (root: content = 0.014%)^[5508]. Ref: 664, 2577, 4402, 5508.

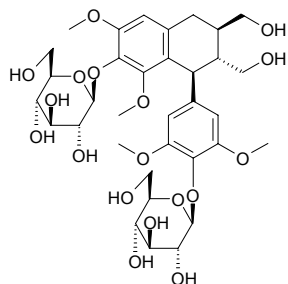
**13251 (+)-Lyoniresinol-3α-O-β-D-apiofuranosyl-(1→2)-β-D-glucopyranoside**

$C_{33}H_{46}O_{17}$ (714.72). White amorphous powder, [α]_D = -2.5° (MeOH). Pharm: Anti-HSV-1 inactive (EC₅₀ > 172μmol/L). Source: MA LAN GEN *Baphicacanthus cusia* [Syn. *Strobilanthes cusia*]. Ref: 2577.

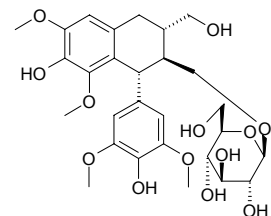


13252 (+)-Lyoniresinol-4,4'-bis-O-β-D-glucopyranoside

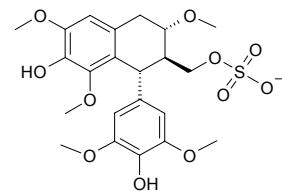
$C_{34}H_{48}O_{18}$ (744.75). Colorless gummy solid, $[\alpha]_D^{25} = +18.2^\circ$ ($c = 0.21$, MeOH). **Pharm:** Lipoxygenase inhibitor (lipoxygenase (1.13.11.12) type I-B, $IC_{50} = (41.5 \pm 1.7) \mu\text{mol/L}$, control Baicalein, $IC_{50} = (22.6 \pm 0.1) \mu\text{mol/L}$). **Source:** YI HUA MU LAN *Indigofera heterantha* (Whole plant). **Ref:** 4442.

**13253 (-)-Lyoniresinol-3α-O-β-D-glucopyranoside**

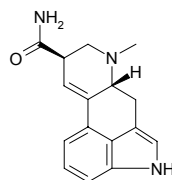
$C_{28}H_{38}O_{13}$ (582.61). White amorphous powder (MeOH), $[\alpha]_D = -23.4^\circ$ ($c = 0.1$, MeOH). **Pharm:** Antioxidant (DPPH scavenger, $IC_{50} = (45.7 \pm 4.0) \mu\text{mol/L}$, control BHT, $IC_{50} = (15.3 \pm 0.6) \mu\text{mol/L}$; superoxide radical inhibitor, $IC_{50} > 100 \mu\text{mol/L}$, control BHT, $IC_{50} = (48.9 \pm 2.5) \mu\text{mol/L}$; lipid peroxidation scavenger, $IC_{50} = (37.4 \pm 2.1) \mu\text{mol/L}$, control BHT, $IC_{50} = (0.11 \pm 0.02) \mu\text{mol/L}$). **Source:** MAO MAI LIAO *Pleuropterus ciliinervis* (root). **Ref:** 4402.

**13254 (-)-Lyoniresinol-2a-sulfate**

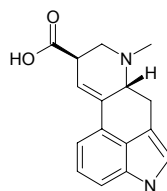
(-)-1R-3-Hydroxymethyl-1-(4'-hydroxy-3',5'-dimethoxyphenyl)-7-hydroxy-6,8-dimethoxy-1,2,3,4-tetrahydro-2-naphthalenylmethanol sulfate $C_{22}H_{27}O_{11}S$ (499.52). Amorphous powder, $[\alpha]_D^{25} = -17.0^\circ$ ($c = 0.13$, MeOH). **Source:** HU ZHANG *Polygonum cuspidatum*. **Ref:** 4186.

**13255 Lysergamide**

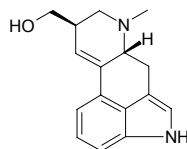
$C_{16}H_{17}N_3O$ (267.33). Prismatic crystals (methanol), mp 242°C (dec). **Pharm:** 5-HT inhibitor; hallucinogen; cholinesterase inhibitor (hmn serum); CNS stimulant (causes mania); toxin (embryo of gravid mus). **Source:** QING ZI QIAN NIU *Ipomoea violacea*, SAN SE QIAN NIU *Ipomoea tricolor*, YIN YE SHU *Ipomoea argyrophylla*. **Ref:** 658.

**13256 Lysergic acid**

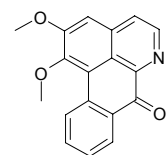
$C_{16}H_{16}N_2O_2$ (268.32). **Source:** MAI JIAO *Claviceps purpurea*. **Ref:** 660.

**13257 Lysergol**

[602-85-7] $C_{16}H_{18}N_2O$ (254.33). **Source:** QIAN NIU ZI *Pharbitis nil*. **Ref:** 6.

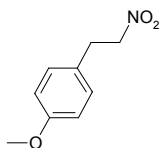
**13258 Lysicamine**

[15444-20-9] $C_{18}H_{13}NO_3$ (291.31). **Source:** BEI MA DOU LING GEN *Aristolochia contorta*, SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*, TAI WAN GE NA XIANG *Goniothalamus amuyon* (fresh leaf: yield = 0.00010%fw)^[4686]. **Ref:** 583, 660, 4686.

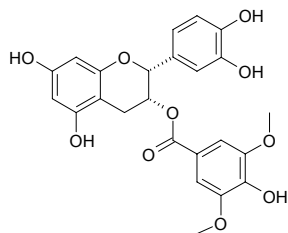


13259 Lysichitalexin

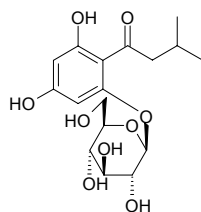
2-(4-Methoxyphenyl)-1-nitroethane C₉H₁₁NO₃ (181.19). Pale yellow oil. **Pharm:** Antifungal (TLC, *Candida albicans*, 31.4μg/cm², IZD = 0mm; *Fusarium oxysporum*, 31.4μg/cm², IZD = 9mm, 15.7μg/cm², IZD = 9mm, 7.9μg/cm², slight inhibition; *Cladosporium herbarum*, 31.4μg/cm², IZD < 9mm, 15.7μg/cm², IZD < 9mm, 7.9μg/cm², slight inhibition); antibacterial inactive (TLC, *Bacillus subtilis*, *Staphylococcus aureus*, *Escherichia coli*, 31.4μg/cm²). **Source:** MEI ZHOU GUAN YIN LIAN *Lysichitum americanum* (leaf). **Ref:** 3897.

**13260 Lysidicichin**

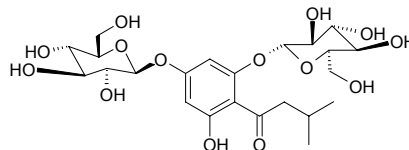
C₂₄H₂₂O₁₀ (470.44). Yellow powder, mp 138~141°C; [α]_D²⁵ = -173.1° (c = 0.5, C₂H₅OH). **Pharm:** Vasodilator (rat aortic rings, inhibits Phenylephrine (Phe)-induced vasoconstriction in the presences of Indomethacin (Indo) and N⁰-L-nitroarginine (L-NA) at 10μmol/L Ach, 10μmol/L, relaxation = (39±1)%, control Sodium nitroprusside, relaxation = (109±5)%). **Source:** YI HUA *Lysidice rhodostegia* (root). **Ref:** 4086.

**13261 Lysidiside A**

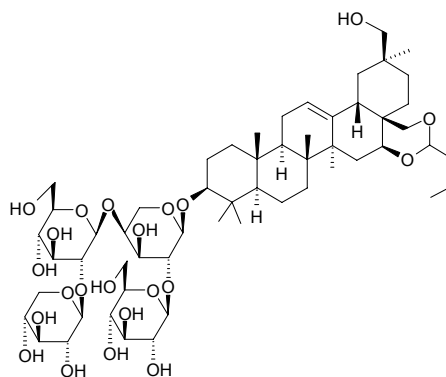
2-β-D-Glucopyranosyloxy-4,6-dihydroxyisovalerophenone; 1-[(3-Methylbutanoyl)phloroglucinyl]-β-D-glucopyranoside C₁₇H₂₄O₉ (372.38). Light yellow amorphous powder, mp 112~115°C; [α]_D²⁵ = -63.48° (c = 0.1, Me₂CO); [α]_D²⁶ = -55° (c = 0.14, MeOH); colorless gummy solid, [α]_D²⁵ = -62.2° (c = 0.11, MeOH). **Pharm:** Vasodilator (rat aortic rings, inhibits Phenylephrine (Phe)-induced vasoconstriction in the presences of Indomethacin (Indo) and N⁰-L-nitroarginine (L-NA) at 10μmol/L Ach, 10μmol/L, relaxation = (78±1)%, control Sodium nitroprusside, relaxation = (109±5)%^[4086]; CYP3A4 inhibitor (hmn CYP3A4, enzyme activity was monitored by nifedipine oxidation, IC₅₀ = 120μmol/L^[4778]; lipoxygenase inhibitor (lipoxygenase (1.13.11.12) type I-B, IC₅₀ = (45.5±0.3)μmol/L, control Baicalein, IC₅₀ = (22.6±0.1)μmol/L^[4442]). **Source:** CAO MEI *Fragaria ananassa* (fruit: yield = 0.00013%), YI HUA *Lysidice rhodostegia* (root), YI HUA MU LAN *Indigofera heteranthazha* (Whole plant). **Ref:** 4086, 4442, 4778.

**13262 Lysidiside B**

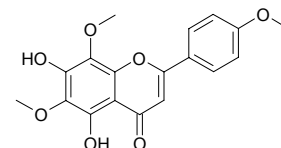
C₂₃H₃₄O₁₄ (534.52). Yellow amorphous powder, mp 142~144°C; [α]_D²⁵ = -86.0° (c = 0.3, Me₂CO). **Pharm:** Vasodilator (rat aortic rings, inhibits Phenylephrine (Phe)-induced vasoconstriction in the presences of Indomethacin (Indo) and N⁰-L-nitroarginine (L-NA) at 10μmol/L Ach, 10μmol/L, relaxation = (66±5)%, control Sodium nitroprusside, relaxation = (109±5)%). **Source:** YI HUA *Lysidice rhodostegia* (root). **Ref:** 4086.

**13263 Lysimachoside**

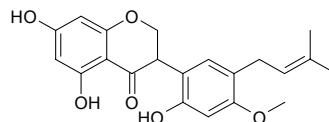
C₅₆H₉₂O₂₂ (1117.34). White powder. **Source:** JU HUA GUO LU HUANG *Lysimachia congestiflora*. **Ref:** 834.

**13264 Lysionotin**

Nevadensin [10176-66-6] C₁₈H₁₆O₇ (344.32). mp 195~196°C. **Pharm:** Antibacterial (*Mycobacterium tuberculosis*, 20μg/mL, *in vitro* and *in vivo*); antitussive (dispels phlegm); antihypertensive (dog, iv); treatment of bronchitis, scrofula, pulmonary tuberculosis and basal tuberculosis. **Source:** AI XIANG RI KUI *Helianthus pumilus*, CI SAN JIA *Acanthopanax trifoliatum*, JIAO ZHI ZI *Gardenia gummifera*, SHI DIAO LAN *Lysionotus pauciflorus*, XIANG RI KUI YE *Helianthus annuus*, ZHANG NAO LUO LE *Ocimum canum*. **Ref:** 4, 658, 660.

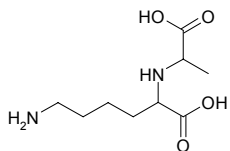
**13265 Lysisteisoflavanone**

5,7,2'-Trihydroxy-4'-methoxy-5'-(3''-methylbut-2''-enyl)isoflavanone C₂₁H₂₂O₆ (370.41). Dark yellow amorphous solid, mp 98°C, [α]_D²⁵ = 0.0° (c = 1.0, MeOH). **Source:** AI JI ZAI PEI CI TONG *Erythrina lysitemon*. **Ref:** 1971.

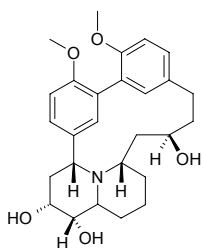


13266 Lysopine

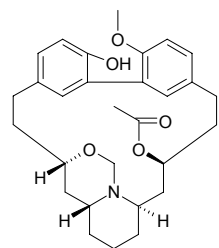
[34522-31-1] $C_9H_{18}N_2O_4$ (218.25). Source: DI JIN *Parthenocissus tricuspidata*. Ref: 6.

**13267 Lythracine I**

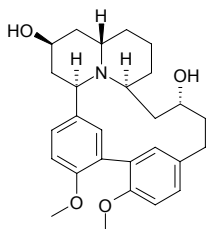
$C_{27}H_{35}NO_5$ (453.58). Source: RI BEN QIAN QU CAI *Lythrum anceps* (the compound was isolated from the plant by Japanese scientists in 1971). Ref: 5505.

**13268 Lythramine**

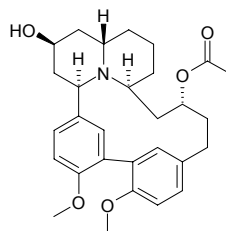
$C_{27}H_{37}NO_5$ (479.62). Source: QIAN QU CAI *Lythrum salicaria*. Ref: 6.

**13269 Lythrancepine I**

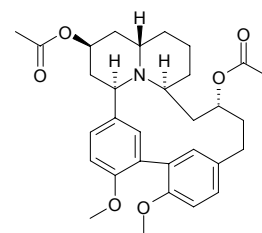
[32209-75-9] $C_{27}H_{35}NO_4$ (437.58). mp 149~151°C. Source: QIAN QU CAI *Lythrum salicaria*. Ref: 6.

**13270 Lythrancepine II**

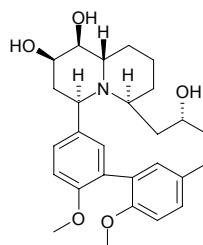
[32209-76-0] $C_{29}H_{37}NO_5$ (479.62). mp 187~189°C. Source: QIAN QU CAI *Lythrum salicaria*. Ref: 6.

**13271 Lythrancepine III**

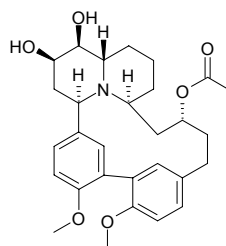
[32209-77-1] $C_{31}H_{39}NO_6$ (521.66). mp 174~178°C. Source: QIAN QU CAI *Lythrum salicaria*. Ref: 6.

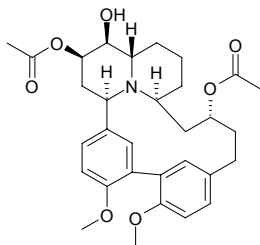
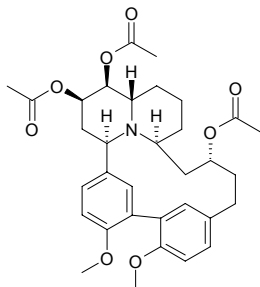
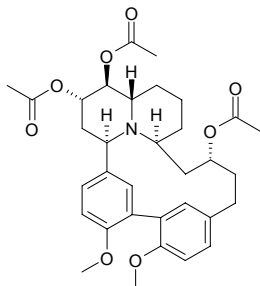
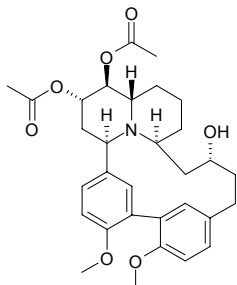
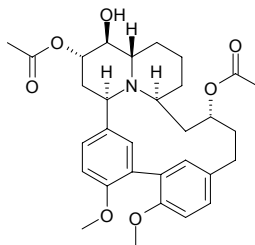
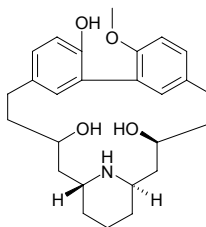
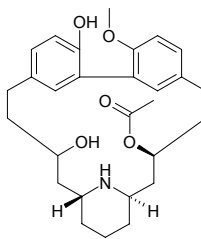
**13272 Lythracine I**

[32209-71-5] $C_{27}H_{35}NO_5$ (453.58). Source: QIAN QU CAI *Lythrum salicaria*. Ref: 6.

**13273 Lythrancepine II**

[32209-72-6] $C_{29}H_{37}NO_6$ (495.62). mp 274~275°C. Source: QIAN QU CAI *Lythrum salicaria*. Ref: 6.

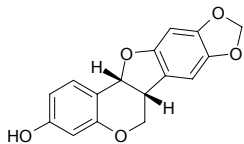


13274 Lythrancine III[32209-73-3] C₃₁H₃₉NO₇ (537.66). mp 134~136°C. Source: QIAN QU CAI*Lythrum salicaria*. Ref: 6.**13275 Lythrancine IV**[32209-74-8] C₃₃H₄₁NO₈ (579.70). mp 237~238°C. Source: QIAN QU CAI*Lythrum salicaria*. Ref: 6.**13276 Lythrancine V**[40179-98-4] C₃₃H₄₁NO₈ (579.70). mp 133~134°C. Source: QIAN QU CAI*Lythrum salicaria*. Ref: 6.**13277 Lythrancine VI**[40175-99-5] C₃₁H₃₉NO₇ (537.66). Source: QIAN QU CAI *Lythrum salicaria*.Ref: 6.**13278 Lythrancine VII**[40180-00-5] C₃₁H₃₉NO₇ (537.66). Source: QIAN QU CAI *Lythrum salicaria*.Ref: 6.**13279 Lythranidine**[17812-78-1] C₂₆H₃₅NO₄ (425.57). Source: QIAN QU CAI *Lythrum salicaria*.Ref: 6.**13280 Lythranine**[32420-54-5] C₂₈H₃₇NO₅ (467.61). Source: QIAN QU CAI *Lythrum salicaria*.Ref: 6.

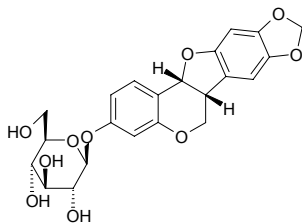
M

13281 Maackiain

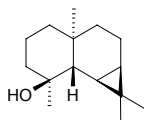
[2035-15-6] C₁₆H₁₂O₅ (284.27). mp (–) 195–196°C, (±) 199–200°C. **Pharm.**: Antifungal (EC = 10 μg/mL); hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by *D*-galactosamine (GalN), 100 μmol/L, InRt = (35.2±3.0)%, weak, control Silybin, 100 μmol/L, InRt = (77.0±5.5)%^[4095]); antibacterial (*Staphylococcus aureus* ATCC 25923, MIC > 512 μg/mL, Vancomycin, MIC = 0.5 μg/mL; MRSA SK1, MIC > 512 μg/mL, Vancomycin, MIC = 1.0 μg/mL)^[3810]; increases blood pressure (anesthetized rats, increases in mean arterial blood pressure, 0.4 mg/kg, 8.3 mmHg)^[3810]. **Source**: CHAO XIAN HUAI *Maackia amurensis*, GUANG BU DING GONG TENG *Erycibe expansa*, HUAI GEN *Sophora japonica* (the compound was isolated from the plant by Shoji Kuwada, et al. in 1962)^[5505], KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*] (dried root: content scope of 7 origins = 0.01%–0.15%, mean content = 0.06%)^[5508], LING NAN HUAI SHU *Sophora tomentosa*, PAN YUAN YU TENG *Derris scandens* (stem), SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*], WU CI KE YA SHU *Andira inermis*, *Glycyrrhiza* sp. **Ref.**: 6, 658, 2431, 3810, 4095, 5505, 5508.

**13282 α-Maackiain-β-D-glucoside**

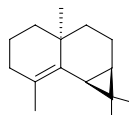
Trifolirhizin [6807-83-6] C₂₂H₂₂O₁₀ (446.41). mp 202–204°C (dec); mp 142–144°C (dec). **Source**: HONG CHE ZHOU CAO *Trifolium pratense*, HUAI GEN *Sophora japonica*, KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*] (dried root: content scope of 7 origins = 0.04%–0.28%, mean content = 0.13%)^[5508], SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*]. **Ref.**: 5, 6, 5508.

**13283 Maaliolcohol**

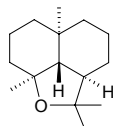
Maaliol [527-90-2] C₁₅H₂₆O (222.37). Crystals (EtOH), mp 103.5–105.0°C, [α]_D = +18.4° (c = 1.1, EtOH). **Source**: SHI YE GAN SONG *Nardostachys jatamansi*, XIE CAO *Valeriana officinalis*, ZHI ZHU XIANG *Valeriana jatamansi* [Syn. *Valeriana wallichii*]. **Ref.**: 6, 1521.

**13284 β-Maaliene**

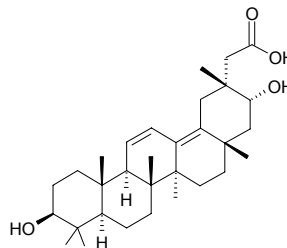
C₁₅H₂₄ (204.36). **Source**: CANG ZHU *Atractylodes lancea*, HUANG HUA HAO *Artemisia annua*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref.**: 2, 660.

**13285 (+)-Maalioloxide**

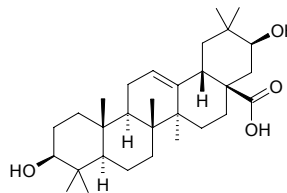
C₁₅H₂₆O (222.37). mp 66°C, [α]_D = +33.3° (c = 4, CHCl₃). **Source**: ZHI ZHU XIANG *Valeriana jatamansi* [Syn. *Valeriana wallichii*]. **Ref.**: 1521.

**13286 Macedonic acid**

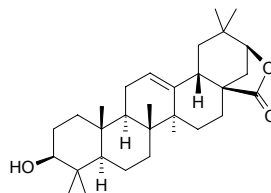
[39022-00-9] C₃₁H₄₈O₄ (484.73). mp 340–343°C. **Source**: CI GUO GAN CAO *Glycyrrhiza pallidiflora*, YUN NAN GAN CAO *Glycyrrhiza yunnanensis*, YA DAN ZI *Brucea javanica* [Syn. *Brucea sumatrana*; *Rhus javanica*]. **Ref.**: 660, 1222, 1521.

**13287 Machaerinic acid**

C₃₀H₄₈O₄ (472.71). **Source**: JIN ZHAN JU *Calendula officinalis* (flower). **Ref.**: 3551.

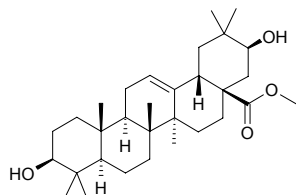
**13288 Machaerinic acid lactone**

C₃₀H₄₆O₃ (454.70). **Source**: HE HUAN PI *Albizia julibrissin*, SI GUA *Luffa cylindrica*. **Ref.**: 1223, 1224.

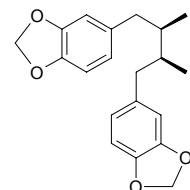


13289 Machaerinic acid methyl ester

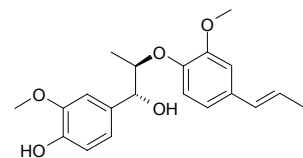
C₃₁H₅₀O₄ (486.74). Source: HE HUAN PI *Albizia julibrissin*. Ref: 1225.

**13290 Machilin A**

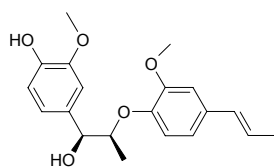
C₂₀H₂₂O₄ (326.40). Pharm: Neuroprotective (glutamate-induced neurotoxicity in primary cultures of cortical cells, 0.1 μmol/L, protection rate = (15.1±4.1)%, MK-801: 1.0 μmol/L, protection rate = (83.6±2.0)%, *p*<0.001, CNQX: 1.0 μmol/L, protection rate = (70.5±1.5)%, *p*<0.001). Source: HONG NAN PI *Machilus thunbergii*. Ref: 4927.

**13291 Machilin C**

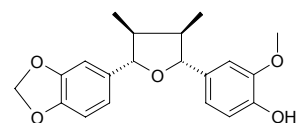
C₂₀H₂₄O₅ (344.41). Colorless amorphous, [α]_D²³ = -30° (*c* = 0.07, CHCl₃). Pharm: Antioxidant (DPPH scavenger). Source: FENG CHAO CAO *Leucas aspera* (whole herb). Ref: 4344.

**13292 Machilin D**

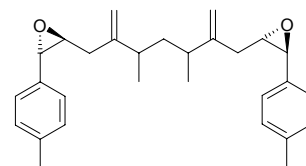
C₂₀H₂₄O₅ (344.41). Colorless oil, [α]_D²⁵ = -88° (*c* = 4.0, CHCl₃); colorless oil, [α]_D = -160° (*c* = 0.7, CHCl₃). Pharm: Antioxidant (*in vitro*, low-density lipoprotein peroxidation, IC₅₀ = 2.9 μmol/L; control Probucol, IC₅₀ = 1.3 μmol/L)^[3096]. Source: SAN BAI CAO *Saururus chinensis*. (underground part). Ref: 3096, 4122.

**13293 Machilin F**

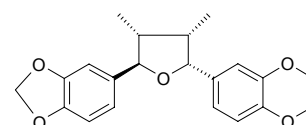
[114488-90-3] C₂₀H₂₂O₅ (342.40). Pharm: NO production inhibitor (mus, macrophage-like cell line RAW264.7 activated by LPS/IFN, IC₅₀ = 85.9 μmol/L, control Quercetin, IC₅₀ = 26.8 μmol/L)^[2537]. Source: HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*], HONG NAN PI *Machilus thunbergii*. Ref: 1521, 2537.

**13294 Machillene**

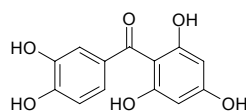
C₂₉H₃₆O₂ (416.61). Colorless oil, [α]_D²⁵ = +22.2° (*c* = 0.094, CHCl₃). Pharm: Cytotoxic (*in vitro*, 20 μg/mL, NUGC-3 cell line, survival percent = 0%, HONE-1 cancer cell line, survival percent = 5%). Source: TAI WAN RUI FANG RUN NAN *Machilus zuihoensis* (stem wood). Ref: 5287.

**13295 (-)-Machilusin**

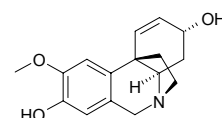
[61989-57-9] C₂₁H₂₄O₅ (356.42). Pharm: NO production inhibitor (mus, macrophage-like cell line RAW264.7 activated by LPS/IFN, IC₅₀ = 39.2 μmol/L, control Quercetin, IC₅₀ = 26.8 μmol/L)^[2537]. Source: HAI FENG TENG *Piper kadsura* [Syn. *Piper futokadsura*], RI BEN NAN *Machilus japonica*. Ref: 1521, 2537.

**13296 Maclurin**

2,3',4,4',6-Pentahydroxy benzophenone [519-34-6] C₁₃H₁₀O₆ (262.22). Yellowish prisms (H₂O), mp 220~222°C. Pharm: Cytotoxic (BST, LD₅₀ = 43.1 μmol/L; control Berberine, LD₅₀ = 67 μmol/L); antioxidant (DPPH scavenger, IC₅₀ = 5.3 μmol/L; control Catechin, IC₅₀ = 2.53 μmol/L)^[4708]. Source: DAO NIAN ZI *Garcinia mangostana*, JIA HONG SHU *Laguncularia racemosa*, SANG YE *Morus alba*, SANG ZHI *Morus alba*, SHAN ZHU ZI *Garcinia multiflora* (stem: yield = 0.000083%_{dw})^[4708], HUANG YAN MU *Chlorophora tinctoria*, *Acacia* sp. Ref: 6, 1521, 4708.

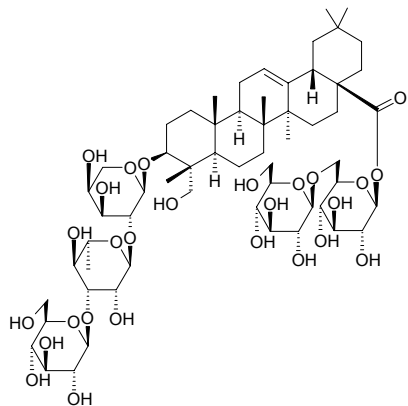
**13297 Macowine**

C₁₆H₁₉NO₃ (273.33). mp 115~117°C, [α]_D²⁰ = -34° (*c* = 0.235, CHCl₃). Pharm: Antitrypanosomal (*Trypanosoma brucei rhodesiense* strain STIB-900, stage trypomastigotes); antimalarial inactive (*Plasmodium falciparum* strain NF-54, stage IEF). Source: GUAN MU WEN SHU LAN *Crinum macowanii* (bulb). Ref: 4000.

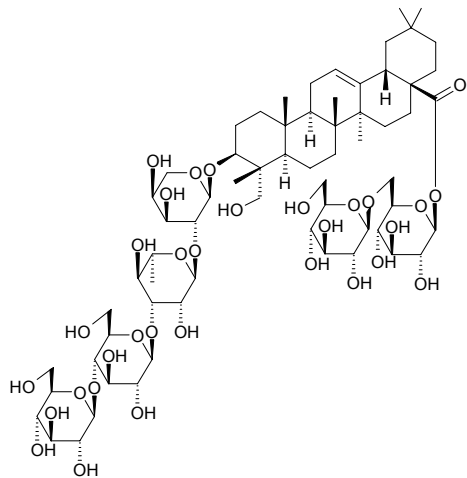


13298 Macranthoidin A

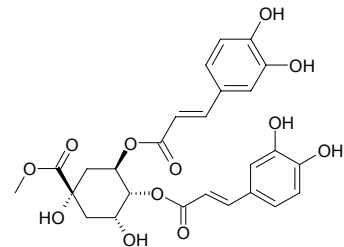
3-*O*- β -*D*-Glucopyranosyl(1 \rightarrow 3)- α -*L*-rhamnopyranosyl(1 \rightarrow 2)- α -*L*-arabinopyranosyl hederagenin 28-*O*- β -*D*-glucopyranosyl(1 \rightarrow 6)- β -*D*-glucopyranosyl ester C₅₉H₉₆O₂₇ (1237.41). White clustered crystals, mp 229~232°C, $[\alpha]_D^{16} = -12.0^\circ$ ($c = 3.2$, MeOH); white granular Crystals (methanol), mp 218~220°C, $[\alpha]_D^{21} = -3.3^\circ$ ($c = 0.3$, pyridine). **Source:** CHUAN XU DUAN *Dipsacus asperoides*, JIN YIN HUA *Lonicera japonica*, HUI ZHAN MAO REN DONG *Lonicera macranthoides*. **Ref:** 211, 263, 638.

**13299 Macranthoidin B**

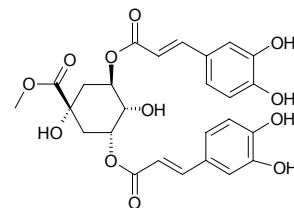
3-*O*- β -*D*-Glucopyranosyl-(1 \rightarrow 4)- β -*D*-glucopyranosyl-(1 \rightarrow 3)- α -*L*-rhamnopyranosyl-(1 \rightarrow 2)- α -*L*-arabinopyranosyl-hederagenin-28-*O*- β -*D*-glucopyranosyl-(1 \rightarrow 6)- β -*D*-glucopyranosyl ester C₆₅H₁₀₆O₃₂ (1399.55). White acicular crystals, mp 230~233°C, $[\alpha]_D^{22} = -13.4^\circ$ ($c = 1.5$, MeOH); white powder, mp 223~225°C. **Source:** HUI ZHAN MAO REN DONG *Lonicera macranthoides*, JIN YIN HUA *Lonicera japonica*. **Ref:** 263, 638, 895.

**13300 Macranthoin F**

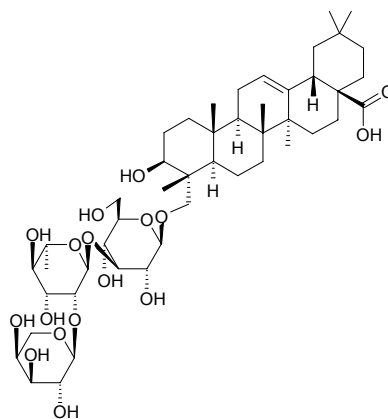
C₂₆H₂₆O₁₂ (530.49). Yellowish powder, mp 115~116°C. **Source:** HUI ZHAN MAO REN DONG *Lonicera macranthoides*. **Ref:** 311.

**13301 Macranthoin G**

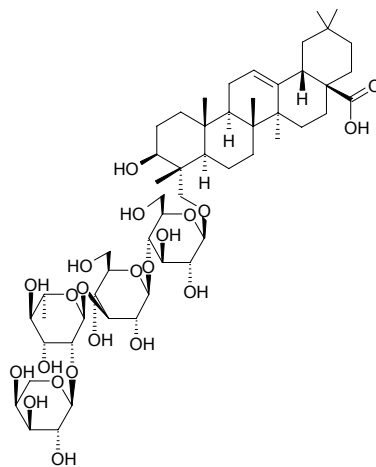
C₂₆H₂₆O₁₂ (530.49). Yellowish powder, mp 123~124°C. **Source:** HUI ZHAN MAO REN DONG *Lonicera macranthoides*. **Ref:** 311.

**13302 Macranthoside A**

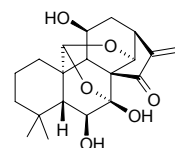
C₄₇H₇₆O₁₇ (913.12). **Source:** JIN YIN HUA *Lonicera japonica*. **Ref:** 638.

**13303 Macranthoside B**

C₅₃H₈₆O₂₂ (1075.26). **Source:** JIN YIN HUA *Lonicera japonica*. **Ref:** 638.

**13304 Macrocalin B**

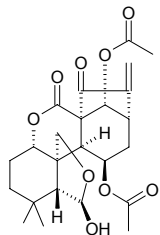
C₂₀H₂₆O₆ (362.43). mp 208~210°C, $[\alpha]_D^{12.5} = -42.5^\circ$ ($c = 1.0$, C₅H₅N). **Source:** DA E XIANG CHA CAI *Isodon macrocalyx*. **Ref:** 4067.



13305 Macrocalyxin A (Macrocalin A)

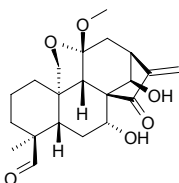
$C_{24}H_{30}O_9$ (462.50). mp 316–318°C, $[\alpha]_D^{26} = -189.97^\circ$ ($c = 0.5$, $CHCl_3$).

Source: DA E XIANG CHA CAI *Isodon macrocalyx*. Ref: 4067.

**13306 Macrocalyxin B**

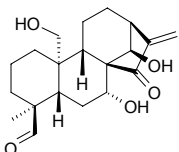
$C_{21}H_{28}O_6$ (376.45). mp > 300°C, $[\alpha]_D^{22} = -62.8^\circ$ ($c = 0.07$, MeOH). Source:

DA E XIANG CHA CAI *Isodon macrocalyx*. Ref: 4067.

**13307 Macrocalyxin D**

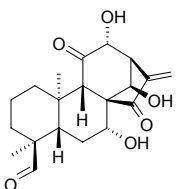
$C_{20}H_{28}O_5$ (348.44). mp 237–238°C. Source: DA E XIANG CHA CAI *Isodon*

macrocalyx. Ref: 4067.

**13308 Macrocalyxin E**

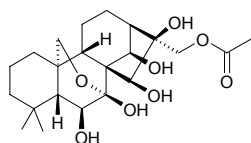
$C_{20}H_{26}O_6$ (362.43). mp 232–234°C, $[\alpha]_D^{25} = +17.75^\circ$ ($c = 0.50$, EtOH). Source:

DA E XIANG CHA CAI *Isodon macrocalyx*. Ref: 4067.

**13309 Macrocalyxin G**

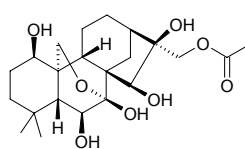
$C_{22}H_{34}O_8$ (426.51). mp 130–133°C, $[\alpha]_D^{25} = -38.66^\circ$ ($c = 0.45$, MeOH).

Source: DA E XIANG CHA CAI *Isodon macrocalyx*. Ref: 4067.

**13310 Macrocalyxin H**

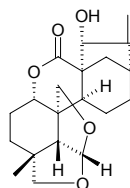
$C_{22}H_{34}O_8$ (426.51). mp 230°C, $[\alpha]_D^{25} = -41.8^\circ$ ($c = 0.22$, MeOH). Source: DA

E XIANG CHA CAI *Isodon macrocalyx*. Ref: 4067.

**13311 Macrocalyxoformin A**

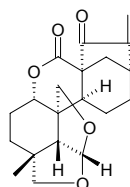
$C_{20}H_{26}O_5$ (346.43). mp 273–275°C, $[\alpha]_D^{27} = -79.8^\circ$ ($c = 0.30$, C_5H_5N). Source:

DA E BIAN XING XIANG CHA CAI *Isodon macrocalyx*. Ref: 4067.

**13312 Macrocalyxoformin B**

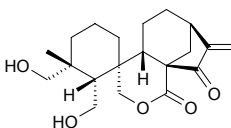
$C_{20}H_{24}O_5$ (344.41). mp 320–323°C, $[\alpha]_D^{16} = -164.9^\circ$ ($c = 1.0$, $CHCl_3$). Source:

DA E BIAN XING XIANG CHA CAI *Isodon macrocalyx*. Ref: 4067.

**13313 Macrocalyxoformin D**

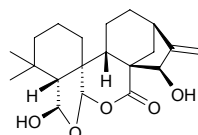
$C_{20}H_{28}O_5$ (348.44). mp 194–196°C, $[\alpha]_D^{25} = -20.4^\circ$ ($c = 4.7$, $CHCl_3$). Source:

DA E BIAN XING XIANG CHA CAI *Isodon macrocalyx*. Ref: 4067.

**13314 Macrocalyxoformin E**

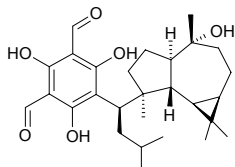
$C_{20}H_{28}O_5$ (348.44). mp 298–300°C. Source: DA E BIAN XING XIANG CHA

CAI *Isodon macrocalyx*. Ref: 4067.

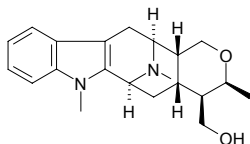


13315 Macrocarpal A

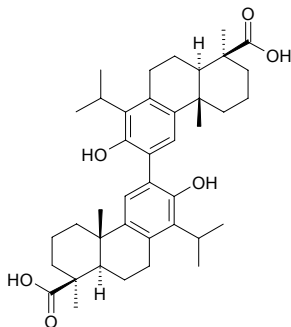
[132951-90-7] C₂₈H₄₀O₆ (472.63). Colorless crystals, mp 191~192°C, [α]_D²⁴ = -61.7° (*c* = 1.1, ethanol). **Pharm:** Antibacterial (pathogenic bacteria in mouth, MIC = 0.39~6.25µg/mL); aldose reductase inhibitor; glucose transferase inhibitor (10µg/mL, InRt = 75.4%, 100µg/mL, InRt = 97.1%); HIV reverse transcriptase inhibitor (IC₅₀ = 10.0µmol/L). **Source:** AN YE *Eucalyptus globulus*. **Ref:** 944, 1074, 1176.

**13316 Macrocarpine A**

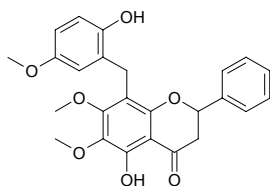
C₂₁H₂₈N₂O₂ (340.47). **Source:** DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0002%). **Ref:** 3020.

**13317 Macrophyllic acid**

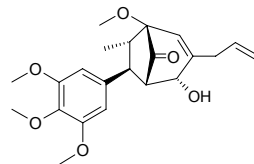
[2785-58-2] C₄₀H₅₄O₆ (630.87). mp 237~238°C (dec). **Source:** LUO HAN SONG YE *Podocarpus macrophyllus*. **Ref:** 6.

**13318 Macrophyllin**

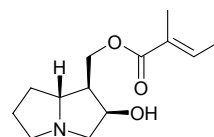
C₂₅H₂₄O₇ (436.47). Yellow plate crystals, mp 132~133°C, [α]_D²⁰ = +4.92 (*c* = 0.06, MeOH). **Source:** DA YE ZI YU PAN *Uvaria macrophylla*. **Ref:** 2220.

**13319 Macrophyllin B**

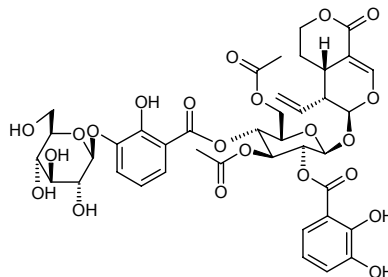
[74944-98-2] C₂₂H₂₈O₆ (388.46). **Source:** MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. **Ref:** 575.

**13320 Macrophylline**

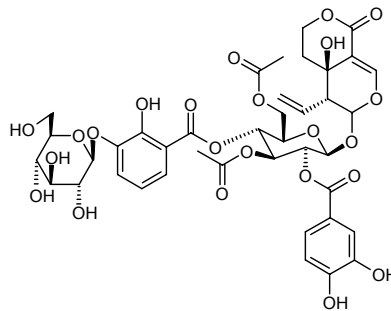
[27814-97-0] C₁₃H₂₁NO₃ (239.32). mp 42~44°C, bp 100°C/0.2mmHg. **Source:** HUANG WAN *Senecio nemorensis*. **Ref:** 6.

**13321 Macrophylliside A**

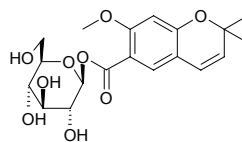
[179457-66-0] C₄₀H₄₄O₂₂ (876.78). **Source:** XI ZANG QIN JIAO *Gentiana tibetica*. **Ref:** 702.

**13322 Macrophylliside B**

[179457-67-1] C₄₀H₄₄O₂₃ (892.78). Amorphous powder, mp 127~133°C, [α]_D²⁰ = -9° (*c* = 0.385, MeOH). **Source:** QIN JIAO *Gentiana macrophylla*. **Ref:** 707.

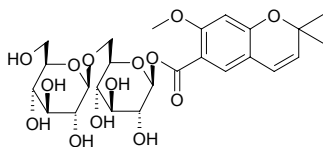
**13323 Macrophylliside C**

[179457-68-2] C₁₉H₂₄O₉ (396.40). Amorphous powder, mp 72~75°C, [α]_D²⁰ = -23° (*c* = 0.037, MeOH). **Source:** QIN JIAO *Gentiana macrophylla*. **Ref:** 707.

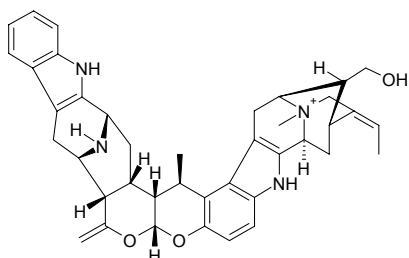


13324 Macrophyllaside D

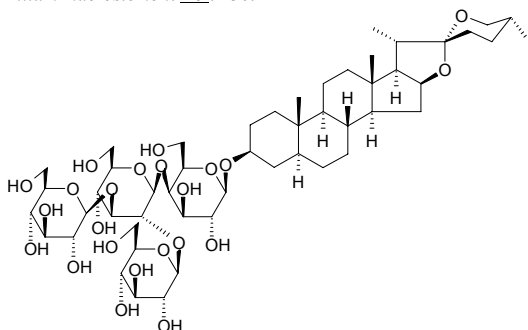
[179457-69-3] C₂₅H₃₄O₁₄ (558.54). Amorphous powder, mp 132~134°C, [α]_D²⁰ = -4° (c = 0.511, MeOH). Source: QIN JIAO *Gentiana macrophylla*. Ref: 707.

**13325 Macropegatrine**

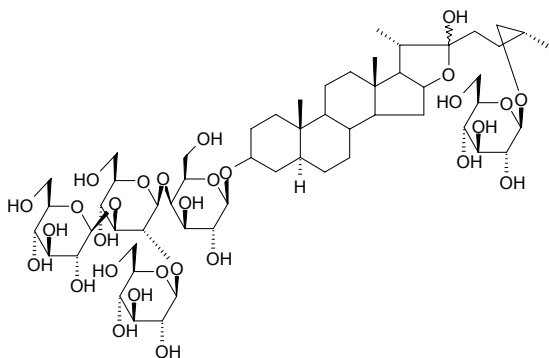
[113775-81-8] C₄₀H₄₅N₄O₃ (629.83). Colorless rhomboid crystals, mp 300°C (changing into black), [α]_D¹⁷ = +215° (chloroform). Source: HAI NAN LUO FU MU *Rauvolfia verticillata* var. *hainanensis*. Ref: 89.

**13326 Macrostemnoside A**

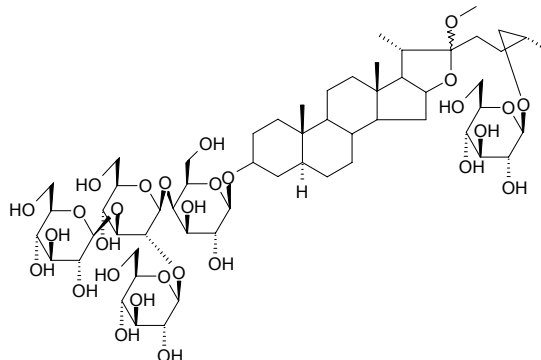
Tigogenin-3-*O*-β-*D*-glucopyranosyl-(1→2)[β-*D*-glucopyranosyl-(1→3)]-β-*D*-glucopyranosyl-(1→4)-β-*D*-galactopyranoside C₅₁H₈₄O₂₃ (1065.22). White powder, mp 276~278°C, [α]_D²⁰ = 0° (c = 0.1, pyridine). Source: XIE BAI *Allium macrostemon*. Ref: 250.

**13327 Macrostemnoside B**

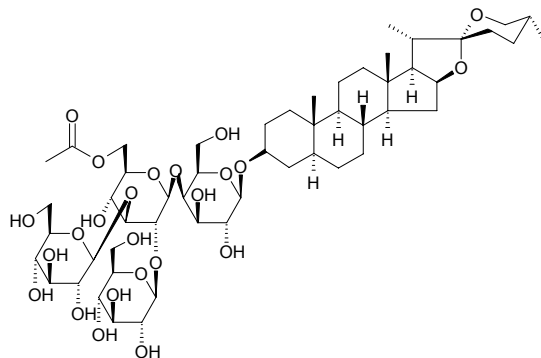
C₅₇H₉₆O₂₉ (1245.38). White powder. Source: XIE BAI *Allium macrostemon*. Ref: 4897.

**13328 Macrostemnoside C**

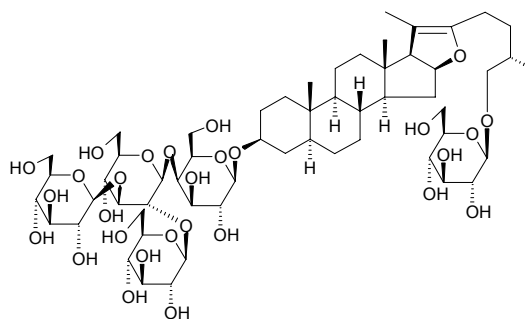
C₅₈H₉₈O₂₉ (1257.44). White powder. Pharm: Cytotoxic (SF268 cells, EC = 25μg/mL, NCI-H460 cells, EC = 25μg/mL, HepG2 cells, inactive). Source: XIE BAI *Allium macrostemon*. Ref: 4897.

**13329 Macrostemnoside D**

Tigogenin-3-*O*-β-*D*-glucopyranosyl-(1→2)[β-*D*-glucopyranosyl-(1→3)(6-*O*-acetyl-β-*D*-glucopyranosyl)]-(1→4)-β-*D*-galactopyranoside C₅₃H₈₆O₂₄ (1107.26). White powder, mp 270~273°C, [α]_D²⁰ = 0° (c = 0.1, pyridine). Source: XIE BAI *Allium macrostemon*. Ref: 250.

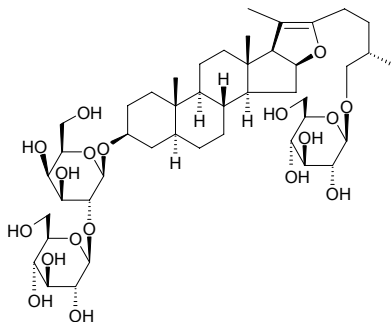
**13330 Macrostemnoside E**

[151140-39-5] C₅₇H₉₄O₂₈ (1227.37). White amorphous powder, mp 227.5~230.0°C, mp 209~212°C [α]_D²⁵ = -32.7° (c = 0.101, H₂O). Pharm: Platelet aggregation inhibitor (hmn *in vitro*, induced by ADP, IC₅₀ = 0.417mmol/L). Source: XIE BAI *Allium macrostemon*. Ref: 273, 4897.

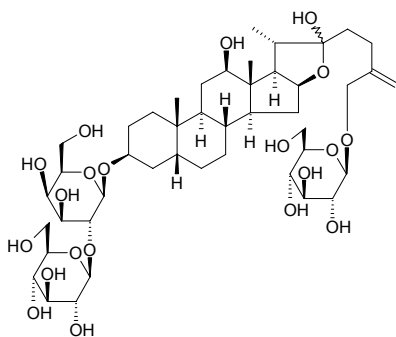


13331 Macrostemoside F

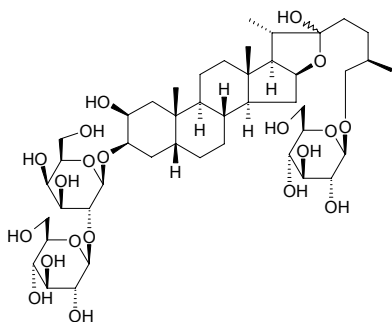
[151215-11-1] C₄₅H₇₄O₁₈ (903.08). White amorphous powder, mp 196.0~198.5°C; white powder, mp 180~184°C [α]_D²⁷ = -22.9° (c = 0.131, H₂O). **Pharm:** Platelet aggregation inhibitor (hmn *in vitro*, induced by ADP, IC₅₀ = 0.020mmol/L); free radical scavenger (·OH free radical). **Source:** ZHI MU *Anemarrhena asphodeloides*, XIE BAI *Allium macrostemon*. **Ref:** 273, 2165, 4897.

**13332 Macrostemoside G**

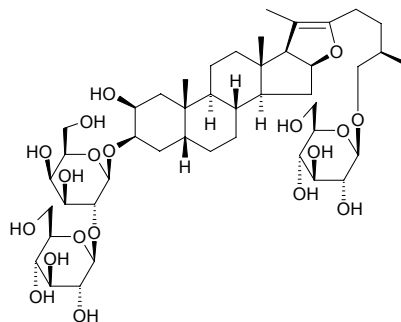
[162413-62-9] C₄₅H₇₄O₂₀ (935.08). White amorphous powder, mp 198~200°C. **Pharm:** Platelet aggregation inhibitor (hmn *in vitro*, induced by ADP, IC₅₀ = 0.871mmol/L). **Source:** XIE BAI *Allium macrostemon*. **Ref:** 1153.

**13333 Macrostemoside J**

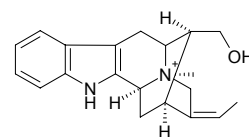
(25*R*)-26-*O*-β-*D*-glucopyranosyl-22-hydroxy-5β-furost-2β,3β,26-triol-3-*O*-β-*D*-glucopyranosyl-(1→2)-β-*D*-galactopyranoside C₄₅H₇₆O₂₀ (937.10). White amorphous powder, mp 230~232°C. **Source:** XIE BAI *Allium macrostemon*. **Ref:** 309.

**13334 Macrostemoside L**

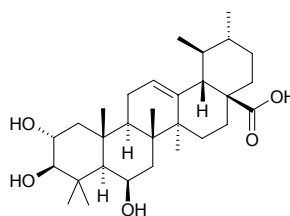
(25*R*)-26-*O*-β-*D*-Glucopyranosyl-22-methoxy-5β-furost-2β,3β,26-triol-3-*O*-β-*D*-glucopyranosyl-(1→2)-β-*D*-galactopyranoside C₄₅H₇₄O₁₉ (919.08). White amorphous powder, mp 206~208°C. **Source:** XIE BAI *Allium macrostemon*. **Ref:** 309.

**13335 Macusine B**

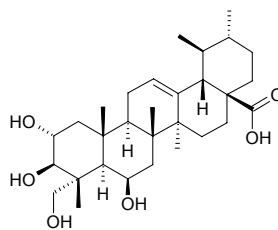
C₂₀H₂₅N₂O (309.44). **Source:** *Strychnos guianensis* (stem cortex). **Ref:** 3943.

**13336 Madasiatic acid**

[26532-66-1] C₃₀H₄₈O₅ (488.71). Crystals, mp 248~250°C (dec). **Source:** JI XUE CAO *Centella asiatica*. **Ref:** 6.

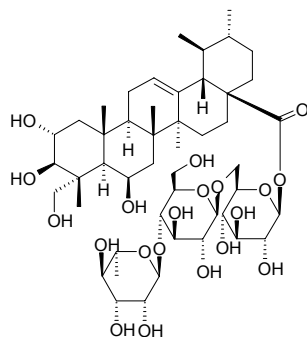
**13337 Madecassic acid**

C₃₀H₄₈O₆ (504.71). **Pharm:** Induces gene expression changes (hmn fibroblast, IC₉₀ = (175±20)μg/mL)^[5430]. **Source:** JI XUE CAO *Centella asiatica* (dried whole herb: content scope of 3 origins = 0.26%~0.72%, mean content = 0.454%^[5508]). **Ref:** 5430, 5508.

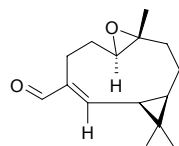


13338 Madecassoside

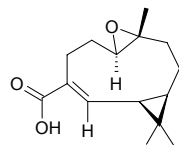
$C_{48}H_{78}O_{20}$ (975.14). **Pharm:** Induces gene expression changes (hmn fibroblast, $IC_{90} > 400 \mu\text{g/mL}$)^[5430]. **Source:** JI XUE CAO *Centella asiatica* (dried whole herb: content scope of 9 origins = trace~1.59%, mean content = 0.603%^[5508]). **Ref:** 6, 4135, 5430, 5508.

**13339 Madolin A**

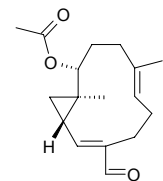
$C_{15}H_{22}O_2$ (234.34). **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.0019%dw). **Ref:** 3026.

**13340 Madolin B**

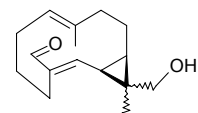
$C_{15}H_{22}O_3$ (250.34). **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00031%dw). **Ref:** 3026.

**13341 Madolin H**

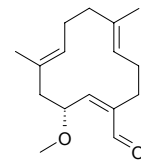
$C_{17}H_{24}O_3$ (276.38). **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.0012%dw). **Ref:** 3026.

**13342 Madolin K**

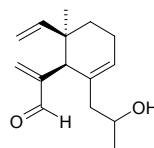
$C_{16}H_{24}O_2$ (248.37). **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00031%dw). **Ref:** 3026.

**13343 Madolin M**

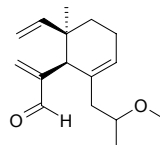
$C_{16}H_{24}O_2$ (248.37). **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.0012%dw). **Ref:** 3026.

**13344 Madolin R**

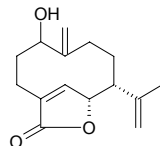
$C_{15}H_{22}O_2$ (234.34). Colorless oil, $[\alpha]_D = -63^\circ$ ($c = 0.07$, CHCl_3). **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00062%dw). **Ref:** 3026.

**13345 Madolin S**

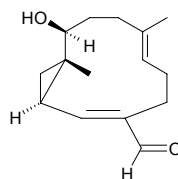
$C_{16}H_{24}O_2$ (248.37). Colorless oil, $[\alpha]_D = -41.7^\circ$ ($c = 0.06$, CHCl_3). **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00062%dw). **Ref:** 3026.

**13346 Madolin U**

$C_{15}H_{20}O_3$ (248.32). Colorless oil, $[\alpha]_D = +84.9^\circ$ ($c = 0.08$, CHCl_3). **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00092%dw). **Ref:** 3026.

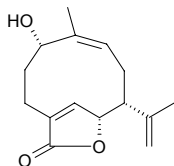
**13347 Madolin W**

$C_{15}H_{22}O_2$ (234.34). Colorless oil, $[\alpha]_D = -83.4^\circ$ ($c = 0.1$, CHCl_3). **Source:** MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.0012%dw). **Ref:** 3026.

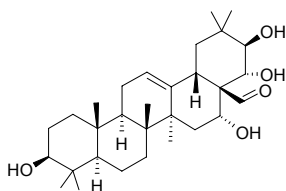


13348 Madolin X

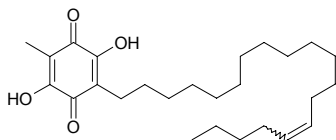
$C_{15}H_{20}O_3$ (248.32). Colorless oil, $[\alpha]_D^{20} = +32.6^\circ$ ($c = 0.05$, $CHCl_3$). Source: MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem): yield = 0.00062% dw). Ref: 3026.

**13349 Maesagenin A**

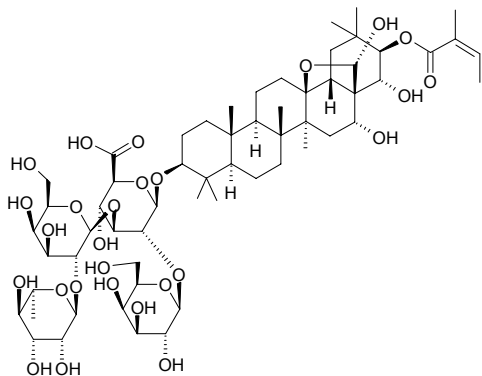
$C_{30}H_{48}O_5$ (488.71). White acicular crystals, mp 248–250°C. Source: JI YU DAN *Maesa perlaris*. Ref: 840.

**13350 Maesaquinone**

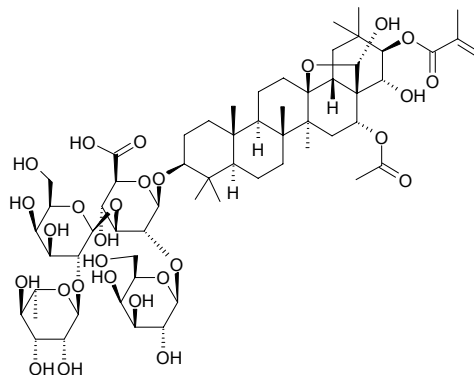
[19833-20-6] $C_{26}H_{42}O_4$ (418.62). mp 123°C. Source: DU JING SHAN *Maesa japonica*, LIANG MIAN QING *Maesa indica*. Ref: 6, 1521.

**13351 Maesasaponin I**

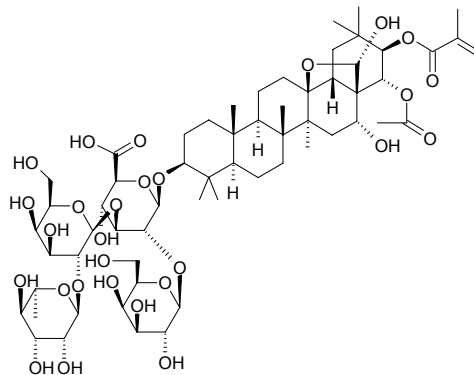
3 β -O- {[α -L-Rhamnopyranosyl-(1 \rightarrow 2)- β -D-galactopyranosyl-(1 \rightarrow 3)]-[β -D-galactopyranosyl-(1 \rightarrow 2)]- β -D-glucuronopyranosyl}-21-angeloyloxy-13,28-oxidoolean-16 α ,22 α ,28 α -triol $C_{59}H_{94}O_{27}$ (1235.39). $[\alpha]_D^{31.4} = -27.7^\circ$ ($c = 0.84$, pyridine). Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 2386.

**13352 Maesasaponin II**

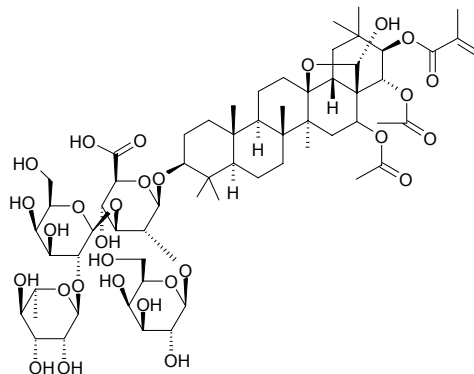
3 β -O- {[α -L-Rhamnopyranosyl-(1 \rightarrow 2)- β -D-galactopyranosyl-(1 \rightarrow 3)]-[β -D-galactopyranosyl-(1 \rightarrow 2)]- β -D-glucuronopyranosyl}-16 α -acetoxy-21 β -angeloyloxy-13 β ,28-oxidoolean-22 α ,28 α -diol $C_{61}H_{96}O_{28}$ (1277.43). $[\alpha]_D^{32.5} = -29.7^\circ$ ($c = 0.69$, pyridine). Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 2386.

**13353 Maesasaponin III**

3 β -O- {[α -L-Rhamnopyranosyl-(1 \rightarrow 2)- β -D-galactopyranosyl-(1 \rightarrow 3)]-[β -D-galactopyranosyl-(1 \rightarrow 2)]- β -D-glucuronopyranosyl}-22 α -acetoxy-21 β -angeloyloxy-13 β ,28-oxidoolean-16 α ,28 α -diol $C_{61}H_{96}O_{28}$ (1277.43). $[\alpha]_D^{33.7} = -45.5^\circ$ ($c = 1.0$, pyridine). Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 2386.

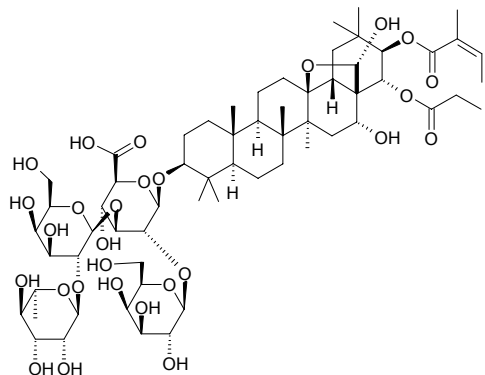
**13354 Maesasaponin IV₂**

3 β -O- {[α -L-Rhamnopyranosyl-(1 \rightarrow 2)- β -D-galactopyranosyl-(1 \rightarrow 3)]-[β -D-galactopyranosyl-(1 \rightarrow 2)]- β -D-glucuronopyranosyl}-16 α ,22 α -diacetoxy-21 β -angeloyloxy-13 β ,28-oxidoolean-28 α -ol $C_{63}H_{98}O_{29}$ (1319.47). $[\alpha]_D^{35} = -19.5^\circ$ ($c = 1.0$, pyridine). Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 2386.

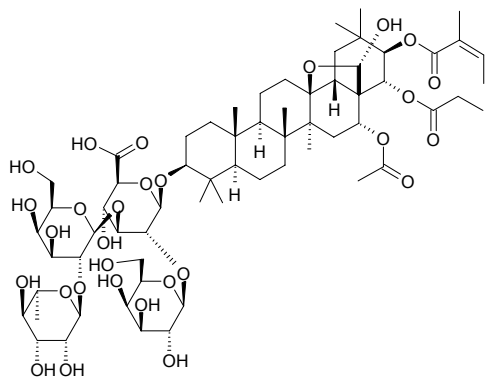


13355 Maesasaponin IV₃

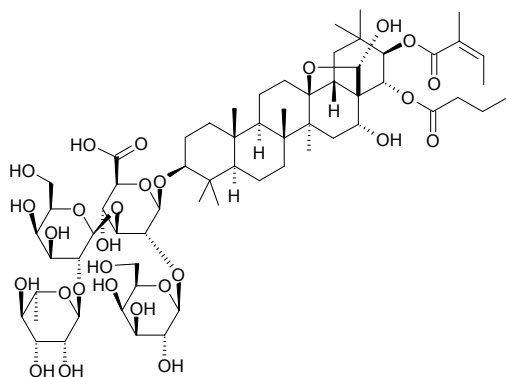
3 β -O- $\{[\alpha$ -L-Rhamnopyranosyl-(1 \rightarrow 2)]- β -D-galactopyranosyl-(1 \rightarrow 3)]- β -D-galactopyranosyl-(1 \rightarrow 2)]- β -D-glucuronopyranosyl}-21 β -angeloyloxy-22 α -propanoyloxy-13 β ,28-oxidoolean-16 α ,28 α -diol C₆₄H₉₈O₂₈ (1291.46). [α]_D²⁸ = -41.5° (c = 1.0, pyridine). Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 2386.

**13356 Maesasaponin V₂**

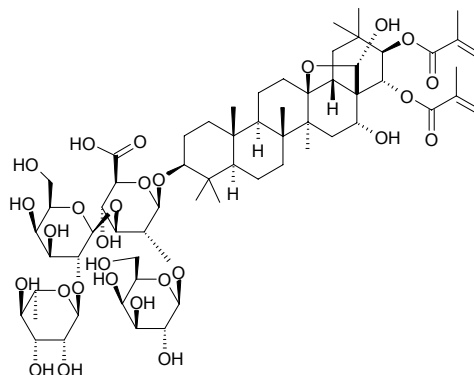
3 β -O- $\{[\alpha$ -L-Rhamnopyranosyl-(1 \rightarrow 2)]- β -D-galactopyranosyl-(1 \rightarrow 3)]- β -D-galactopyranosyl-(1 \rightarrow 2)]- β -D-glucuronopyranosyl}-21 β -angeloyloxy-22 α -butanoyloxy-13 β ,28-oxidoolean-16 α ,28 α -diol C₆₄H₁₀₀O₂₉ (1333.49). [α]_D³² = -30.0° (c = 0.5, pyridine). Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 2386.

**13357 Maesasaponin V₃**

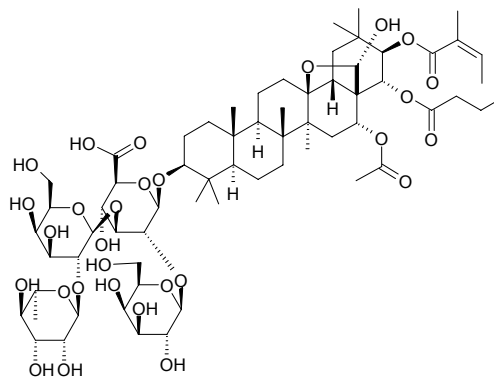
3 β -O- $\{[\alpha$ -L-Rhamnopyranosyl-(1 \rightarrow 2)]- β -D-galactopyranosyl-(1 \rightarrow 3)]- β -D-galactopyranosyl-(1 \rightarrow 2)]- β -D-glucuronopyranosyl}-16 α -acetoxy-21 β -angeloyloxy-22 α -propanoyloxy-13 β ,28-oxidoolean-28 α -ol C₆₃H₁₀₀O₂₈ (1305.48). [α]_D^{29.5} = -47.0° (c = 1.0, pyridine). Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 2386.

**13358 Maesasaponin VI₂**

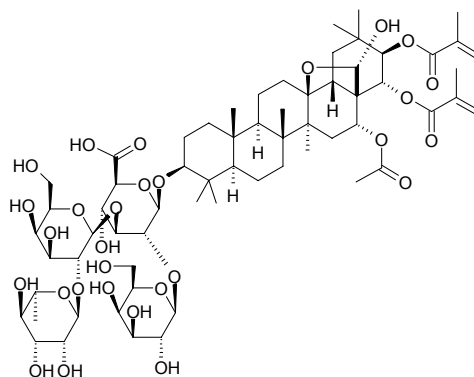
Maesasaponin; 3 β -O- $\{[\alpha$ -L-Rhamnopyranosyl-(1 \rightarrow 2)]- β -D-galactopyranosyl-(1 \rightarrow 3)]- β -D-galactopyranosyl-(1 \rightarrow 2)]- β -D-glucuronopyranosyl}-21 β ,22 α -diangeloyloxy-13 β ,28-oxidoolean-16 α ,28 α -diol C₆₄H₁₀₀O₂₈ (1317.49). Yellow powder, mp 250°C; [α]_D³³ = -33.0° (c = 1.0, pyridine). Source: JI YU DAN *Maesa perlaris*, PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 840, 2386.

**13359 Maesasaponin VI₃**

3 β -O- $\{[\alpha$ -L-Rhamnopyranosyl-(1 \rightarrow 2)]- β -D-galactopyranosyl-(1 \rightarrow 3)]- β -D-galactopyranosyl-(1 \rightarrow 2)]- β -D-glucuronopyranosyl}-16 α -acetoxy-21 β -angeloyloxy-22 α -butanoyloxy-13 β ,28-oxidoolean-28 α -ol C₆₅H₁₀₂O₂₉ (1347.52). [α]_D³⁴ = -44.5° (c = 1.0, pyridine). Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 2386.

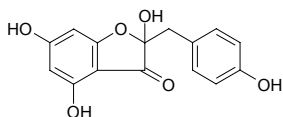
**13360 Maesasaponin VII₁**

3 β -O- $\{[\alpha$ -L-Rhamnopyranosyl-(1 \rightarrow 2)]- β -D-galactopyranosyl-(1 \rightarrow 3)]- β -D-galactopyranosyl-(1 \rightarrow 2)]- β -D-glucuronopyranosyl}-16 α -acetoxy-21 β ,22 α -diangeloyloxy-13 β ,28-oxidoolean-28 α -ol C₆₆H₁₀₂O₂₉ (1359.53). [α]_D^{34.5} = -41.5° (c = 0.59, pyridine). Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 2386.

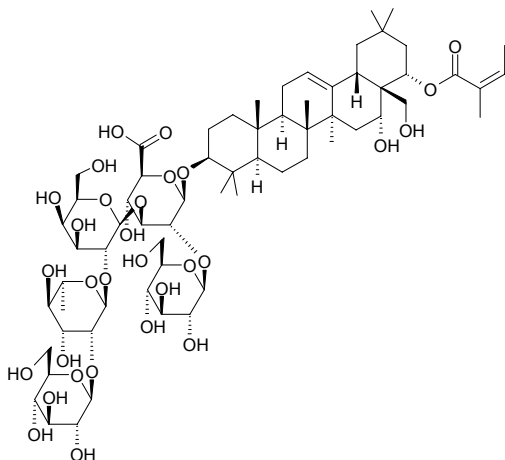


13361 Maesopsin

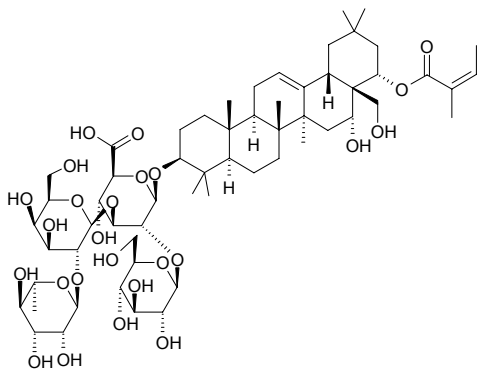
$C_{15}H_{12}O_6$ (288.26). Whitegranular substance ($CHCl_3$ -acetone), mp 184–185°C. **Pharm:** Antioxidant (DPPH radical scavenger, $IC_{50} = 5.3\mu g/mL$; control Ascorbic acid, $IC_{50} = 3.9\mu g/mL$)^[4711]. **Source:** AI DA HUANG *Rheum nanum*, ZANG BIAN DA HUANG *Rheum emodi* [Syn. *Rheum australe*] (root: yield = 0.0067%dw)^[4711]. **Ref:** 4711, 4807.

**13362 Maetenoside A**

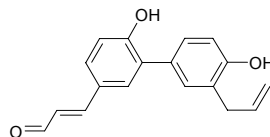
3-*O*-[β -*D*-Glucopyranosyl-(1→2)- α -*L*-rhamnopyranosyl-(1→2)- β -*D*-galactopyranosyl-(1→3)] [β -*D*-glucopyranosyl-(1→2)]- β -*D*-glucuronopyranosyl camelliagenin A 22-*O*-angelate $C_{65}H_{104}O_{30}$ (1365.54). Amorphous solid, $[\alpha]_D^{22} = -15.0^\circ$ ($c = 0.7$, MeOH). **Source:** RUAN RUO DU JING SHAN *Maesa tenera* (aerial parts). **Ref:** 3539.

**13363 Maetenoside B**

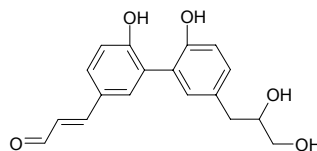
3-*O*-[α -*L*-Rhamnopyranosyl-(1→2)- β -*D*-galactopyranosyl-(1→3)] [β -*D*-glucopyranosyl-(1→2)]- β -*D*-glucuronopyranosyl camelliagenin A 22-*O*-angelate $C_{59}H_{94}O_{25}$ (1203.39). Amorphous solid, $[\alpha]_D^{22} = -21.3^\circ$ ($c = 0.6$, MeOH). **Source:** RUAN RUO DU JING SHAN *Maesa tenera* (aerial parts). **Ref:** 3539.

**13364 Magnaldehyde B**

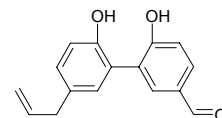
$C_{18}H_{16}O_3$ (280.33). **Source:** HOU PO *Magnolia officinalis*. **Ref:** 2.

**13365 Magnaldehyde C**

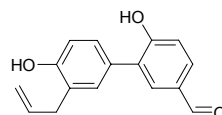
$C_{18}H_{18}O_5$ (314.34). **Source:** HOU PO *Magnolia officinalis*. **Ref:** 2.

**13366 Magnaldehyde D**

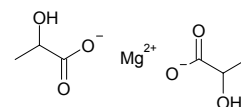
[93753-33-4] $C_{16}H_{14}O_3$ (254.29). Pale yellow needles ($CHCl_3$ - C_6H_6), mp 140–143°C. **Source:** HOU PO *Magnolia officinalis*. **Ref:** 2.

**13367 Magnaldehyde E**

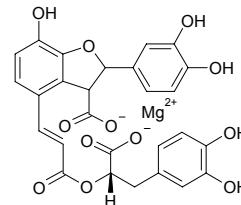
[138591-09-9] $C_{16}H_{14}O_3$ (254.29). Pale yellow needles ($CHCl_3$ - C_6H_6), mp 160–162°C. **Source:** HOU PO *Magnolia officinalis*. **Ref:** 2.

**13368 Magnesium lactate**

[18917-93-6] $C_6H_{10}MgO_6$ (202.46). **Source:** LU HUI *Aloe vera* [Syn. *Aloe barbadensis*]. **Ref:** 2.

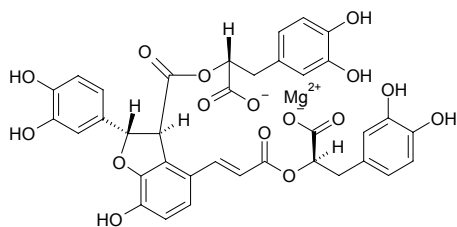
**13369 Magnesium lithospermate**

$C_{27}H_{20}MgO_{12}$ (560.76). **Pharm:** Anti-HIV (non-competitively inhibits enzymatic substrates). **Source:** YOU CI PO BU MU *Cordia spinescens*. **Ref:** 2268.

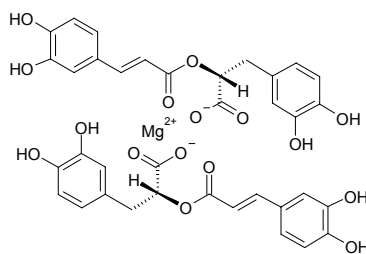


13370 Magnesium lithospermate B

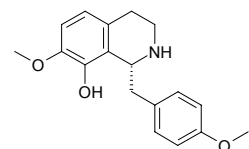
$C_{36}H_{28}MgO_{16}$ (740.92). **Pharm:** Antioxydant. **Source:** DAN SHEN *Salvia multiorrhiza*. **Ref:** 4933.

**13371 Magnesium rosmarinat**

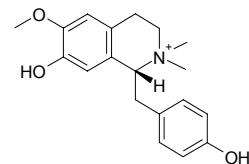
$C_{36}H_{30}MgO_{16}$ (742.95). **Source:** YOU CI PO BU MU *Cordia spinescens*. **Ref:** 2268.

**13372 Magnococline**

$C_{18}H_{21}NO_3$ (299.37). **Source:** YE HE HUA *Magnolia coco*. **Ref:** 6.

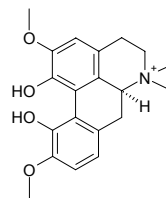
**13373 Magnocurarine**

[6801-40-7] $C_{19}H_{24}NO_3^+$ (314.41). mp (+)(S) 198~199°C (dec), (-)(R) 199~200°C. **Pharm:** Ganglionic blocker (curariform action, rbt, nutation experiment, ED_{50} = 6mg/kg); antihypertensive (anesthetic dog, cat, and rbt); LD_{50} (mus ip) = 3mg/kg. **Source:** CHENG QIE ZI *Litsea cubeba*, DA YE HOU PO *Magnolia rostrata*, HOU PO *Magnolia officinalis*, RI BEN HOU PO *Magnolia obovata*, WU DANG MU LAN *Magnolia sprengeri*. **Ref:** 2, 4, 6, 625, 658.

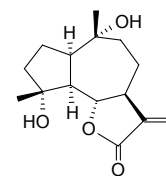
**13374 Magnoflorine**

Escholine; Thalictrine [2141-09-5] $C_{20}H_{24}NO_4$ (342.42). mp 169~170°C. **Pharm:** Ganglionic blocker (curariform action); antihypertensive (rodents and anesthetic cat, 2mg/kg iv, reduces blood pressure by (30~50)% for 90~120min, renal hypertensive dog, 6mg/kg iv, particularly diastolic pressure). **Source:** BEI JIA ER TANG SONG CAO *Thalictrum baicalense*, BEI MA DOU LING

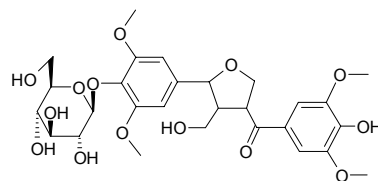
Aristolochia contorta, BEI MA DOU LING GEN *Aristolochia contorta*, CU GUO TANG SONG CAO *Thalictrum dasycarpum*, DONG YA TANG SONG CAO *Thalictrum minus* var. *hypoleucum*^[5507], FAN BAI CAO *Potentilla discolor*^[5507], GUAN MU TONG *Aristolochia manshuriensis*, GUANG FANG JI *Aristolochia fangchi*, HAN FANG JI *Aristolochia heterophylla*, HE HUA YU LAN *Magnolia grandiflora*, HOU PO *Magnolia officinalis*, HUA NAN GONG LAO MU *Mahonia japonica*, HUA NAN GONG LAO YE *Mahonia japonica*, HUAI TONG *Aristolochia moupinensis*, HUANG BAI *Phellodendron amurense*, HUANG LIAN *Coptis chinensis*, HUANG PI SHU *Phellodendron chinense*, KA MING BA DOU *Croton cuningii*, MA DOU LING *Aristolochia debilis* [Syn. *Aristolochia longa*], MA TI YE *Caltha palustris*, MA WEI LIAN *Thalictrum foliolosum*, MU FANG JI *Cocculus trilobus* [Syn. *Cocculus sarmentosus*], OU ZHOU MA DOU LING *Aristolochia siphon*^[5507], QING FENG TENG *Sinomenium acutum*, QING MU XIANG *Aristolochia debilis* [Syn. *Aristolochia longa*], RI BEN XIAO BO *Berberis thunbergii*, SAN JIAO YE HUANG LIAN *Coptis deltoidea*, TAI WAN XIAO BO *Berberis kawakamii*^[5507], TU YE HUANG PI SHU *Phellodendron chinense* var. *glabriusculum*, XI YE GONG LAO MU *Mahonia fortunei*, XI YE GONG LAO YE *Mahonia fortunei*, XIANG TANG SONG CAO *Thalictrum foetidum*, XIAO BO *Berberis amurensis*, XIAO TANG SONG CAO *Thalictrum minus*^[5507], YAN GUO CAO *Thalictrum thunbergii*, YIN YANG HUO *Epimedium brevicornum*, YU LAN *Magnolia denudata* [Syn. *Magnolia heptapata*], YUN NAN HUANG LIAN *Coptis teetoides* [Syn. *Coptis teeta*], occurs in many plants. **Ref:** 2, 4, 6, 306, 625, 658, 660, 5501, 5507.

**13375 Magnograndiolide**

[92618-98-9] $C_{15}H_{22}O_4$ (266.34). Prisms, mp 176~177°C. **Source:** HE HUA YU LAN *Magnolia grandiflora*. **Ref:** 1226.

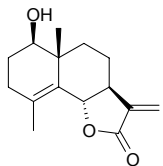
**13376 Magnolenin C**

[66779-67-7] $C_{28}H_{36}O_{14}$ (596.59). **Source:** HE HUA YU LAN *Magnolia grandiflora*. **Ref:** 1228.

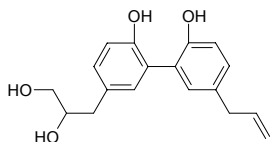


13377 Magnolialide

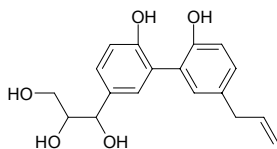
[72145-13-2] C₁₅H₂₀O₃ (248.32). Crystals (hexane–Et₂O), mp 152–153°C, [α]_D²⁵ = +74° (c = 0.23, EtOH). Source: JU QU *Cichorium intybus*, HE HUA YU LAN *Magnolia grandiflora*. Ref: 736, 1229, 1521.

**13378 Magnolignan A**

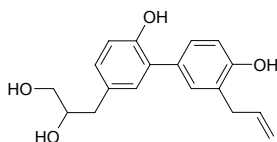
[93673-81-5] C₁₈H₂₀O₄ (300.36). Powder, [α]_D¹⁷ = –0.8° (c = 1.5, MeOH). Source: HOU PO *Magnolia officinalis*. Ref: 2, 6, 1521.

**13379 Magnolignan B**

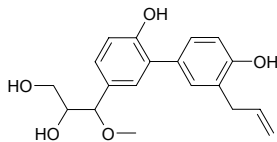
[138591-07-8] C₁₈H₂₀O₅ (316.36). Powder, [α]_D²⁸ = +0.3° (c = 2.5, MeOH). Source: HOU PO *Magnolia officinalis*. Ref: 2, 6, 1521.

**13380 Magnolignan C**

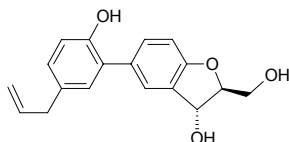
[93697-42-8] C₁₈H₂₀O₄ (300.36). Powder, [α]_D²² = –6.8° (c = 0.9, MeOH). Source: HOU PO *Magnolia officinalis*. Ref: 2, 6, 1521.

**13381 Magnolignan D**

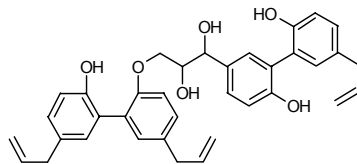
[138749-67-4] C₁₉H₂₂O₅ (330.38). Powder, [α]_D¹⁷ = +3.0° (c = 0.9, MeOH). Source: HOU PO *Magnolia officinalis*. Ref: 2, 1521.

**13382 Magnolignan E**

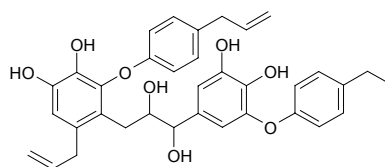
[138591-08-9] C₁₈H₁₈O₄ (298.34). Powder, [α]_D²⁹ = –2.0° (c = 2.1, MeOH). Source: HOU PO *Magnolia officinalis*. Ref: 2, 1521.

**13383 Magnolignan F**

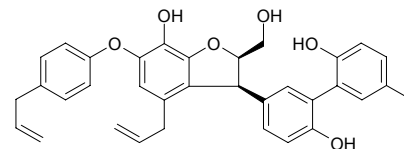
[138591-10-3] C₃₆H₃₆O₆ (564.68). Pale brown powder, [α]_D²⁸ = –1.5° (c = 1.04, MeOH). Source: HOU PO *Magnolia officinalis*. Ref: 2, 1521.

**13384 Magnolignan G**

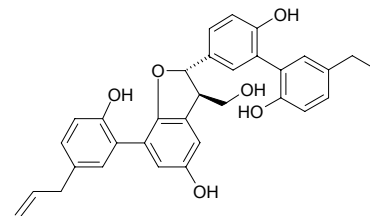
[138591-11-4] C₃₆H₃₆O₈ (596.68). Pale brown powder, [α]_D²⁹ = +0.1° (c = 1.25, MeOH). Source: HOU PO *Magnolia officinalis*. Ref: 2, 1521.

**13385 Magnolignan H**

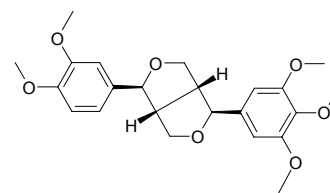
[138591-12-5] C₃₅H₃₄O₆ (550.66). Source: HOU PO *Magnolia officinalis*. Ref: 2, 1521.

**13386 Magnolignan I**

[138591-13-6] C₃₃H₃₀O₆ (522.60). Pale brown powder, [α]_D²⁸ = +2.1° (c = 1, MeOH). Source: HOU PO *Magnolia officinalis*. Ref: 2, 1521.

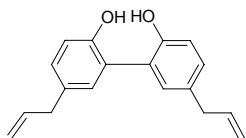
**13387 Magnolin**

[31008-18-1] C₂₃H₂₈O₇ (416.48). mp 96–97°C, [α]_D = +55.7° (CHCl₃). Pharm: Platelet aggregation inhibitor (induced by PAF, IC₅₀ = 10 μmol/L, PAF receptor antagonist, ED₅₀ = 4.4 μmol/L). Source: WANG CHUN YU LAN *Magnolia biondii* [Syn. *Magnolia fargesii*], XIN YI *Magnolia liliflora*. Ref: 6, 543, 1577.

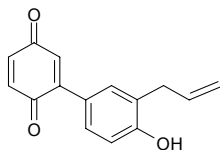


13388 Magnolol

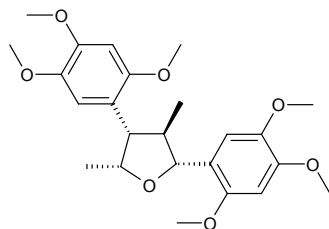
[528-43-8] $C_{18}H_{18}O_2$ (266.34). Crystals (Et_2O -hexane), mp 101.5–102°C. **Pharm:** Antibacterial (*Streptococcus* sp., MIC = 0.63 µg/mL); antiulcerative (rat, prevents stress ulcer due to waterlogging, 5–20 mg/kg); muscle relaxant (MED = 90 mg/kg); hepatoprotective (inhibits cellular leakage of LDH and AST, and cell death, induced by 1.5 µmol/L tBH for 1h, effective dose = 40 µmol/L; induced by 30 µmol/L GalN, effective dose = 1, 5, and 20 µmol/L)^[5344]; Hepatoprotective (inhibits tBH-induced lipid peroxidation, primary cultured rat hepatocytes, thiobarbituric acid reactive substance (TBARS) assay, effective dose = 20 and 40 µmol/L)^[5344]; Hepatoprotective (inhibits GSH depletion, GSH concentration in tBH-treated hepatocytes was significantly reduced to 17 % of that of normal hepatocytes, effective dose = 20, and 40 µmol/L; induced by GalN, effective dose = 5 and 20 µmol/L)^[5344]. **Source:** DA YE HOU PO *Magnolia rostrata*, HE HUA YU LAN *Magnolia grandiflora*, HOU PO *Magnolia officinalis* (bark: content scope = 2.622%–6.415%^[5501]; content scope of 5 origins = 3.25%–6.13%, mean content = 4.96%^[5508]), RI BEN HOU PO *Magnolia obovata*, TAI WAN CHA MU *Sassafras randainense*. **Ref:** 4, 625, 658, 660, 5344, 5501, 5508.

**13389 Magnoquinone**

$C_{15}H_{12}O_3$ (240.26). Red powder, mp 73–76°C. **Source:** DA YE HOU PO *Magnolia rostrata*. **Ref:** 2134.

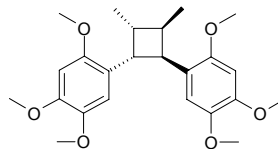
**13390 Magnosalicin**

[93376-03-5] $C_{24}H_{32}O_7$ (432.52). Crystals (MeOH), mp 134.5–135°C. **Pharm:** PAF antagonist; used in treatment of allergy and empyema in nose. **Source:** LIU YE MU LAN *Magnolia salicifolia*. **Ref:** 658, 1521.

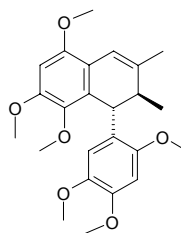
**13391 Magnosalin**

[81861-74-7] $C_{24}H_{32}O_6$ (416.52). Crystals (Et_2O -hexane), mp 98–99°C, $[\alpha]_D^{20} = 0^\circ$ ($CHCl_3$). **Pharm:** Anti-angiogenic (rat, inhibits formation of vaso-endothelial cell induced by fetal bovine serum FBS and IL-1 α); Anti-inflammatory (mus, 50 µg/d, remarkably reduces weight of granuloma and volume of diffuse in granulation gasbag); antirheumatic (remarkably inhibits IL-1 α -induced proliferation of synovial cells); CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4, $IC_{50} = 85.4 \mu\text{mol/L}$; CYP2D6, $IC_{50} >$

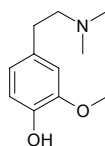
100 µmol/L; control Ketoconazole, CYP3A4, $IC_{50} = 0.72 \mu\text{mol/L}$; control Quinidine, CYP2D6, $IC_{50} = 0.082 \mu\text{mol/L}$)^[4797]. **Source:** SHI JI NING *Mosla scabra* [Syn. *Mosla punctata*], BI CHENG QIE *Piper cubeba* (fruit: yield = 0.00011% dw)^[4797]. **Ref:** 740, 1208, 1744, 1745, 1746, 4797.

**13392 Magnoshinin**

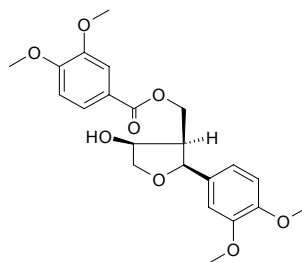
[86702-02-5] $C_{24}H_{30}O_6$ (414.50). Crystals (Et_2O), mp 113.5–115°C. **Pharm:** Anti-inflammatory; sedative; treatment of headache and diseases of the nasal cavity. **Source:** LIU YE MU LAN *Magnolia salicifolia*. **Ref:** 658, 1521.

**13393 Magnosprengerine**

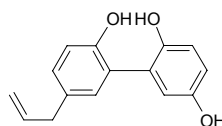
[35266-63-8] $C_{11}H_{17}NO_2$ (195.26). mp 258–260°C. **Source:** HOU PO *Magnolia officinalis*, WU DANG MU LAN *Magnolia sprengeri*. **Ref:** 625, 1521.

**13394 Magnostellin B**

$C_{22}H_{26}O_8$ (418.45). **Source:** ZHOU YE MU LAN *Magnolia praecocissima* (seed). **Ref:** 4181.

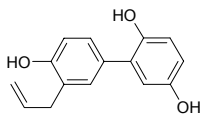
**13395 Magnotriol A**

[87562-14-9] $C_{15}H_{14}O_3$ (242.28). **Source:** HOU PO *Magnolia officinalis*. **Ref:** 2, 1521.

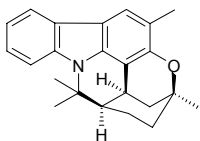


13396 Magnotriol B

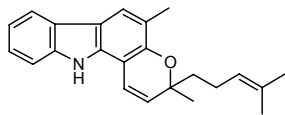
$C_{15}H_{14}O_3$ (242.28). Source: HOU PO *Magnolia officinalis*. Ref: 2.

**13397 Mahanimbidine**

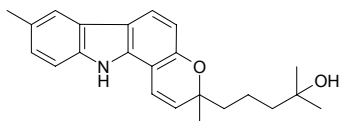
Murrayazoline $C_{23}H_{25}NO$ (331.46). Needles (Me₂CO), mp 276–278°C, $[\alpha]_D^{25} = +2.25^\circ$ ($c = 0.4$, CHCl₃). Source: DOU YE JIU LI XIANG *Murraya euchrestifolia* [Syn. *Clausena euchrestifolia*], JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. Ref: 11, 1339, 1521.

**13398 (+)-Mahanimbine**

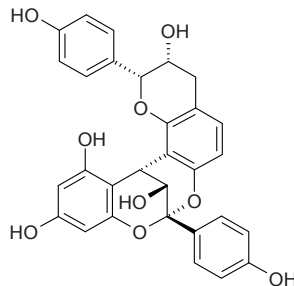
[21104-28-9] $C_{23}H_{25}NO$ (331.46). Crystals (hexane), mp 94–95°C, $[\alpha]_D = +40.6^\circ$ ($c = 2.1$, CHCl₃), $[\alpha]_D = +52^\circ$ (CHCl₃). Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 50 μg/mL, MIC = 0.151 μmol/L, control Kanamycin, MIC = 3.13 μg/mL; *Bacillus subtilis*, MIC = 25 μg/mL, MIC = 0.076 μmol/L, Kanamycin, MIC = 6.25 μg/mL; *Escherichia coli*, MIC = 50 μg/mL, MIC = 0.151 μmol/L, Kanamycin, MIC = 12.5 μg/mL; *Proteus vulgaris*, MIC = 25 μg/mL, MIC = 0.076 μmol/L, Kanamycin, MIC = 12.5 μg/mL)^[5299]; antifungal (*Aspergillus niger*, MIC = 50 μg/mL, MIC = 0.151 μmol/L; *Candida albicans*, MIC = 100 μg/mL, MIC = 0.392 μmol/L, control Fluconazole, MIC = 25 μg/mL, MIC = 0.082 μmol/L)^[5299]. Source: DOU YE JIU LI XIANG *Murraya euchrestifolia* [Syn. *Clausena euchrestifolia*], XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*, YIN DU JIU LI XIANG *Murraya koenigii*, ZHONG HUA JIU LI XIANG *Murraya exotica*. Ref: 11, 1211, 1212, 5299.

**13399 Mahanimbinine**

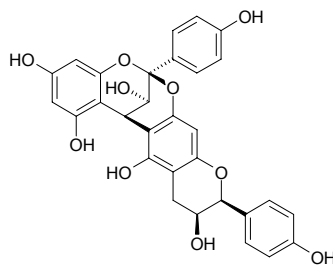
$C_{22}H_{25}NO_2$ (335.45). Source: YIN DU JIU LI XIANG *Murraya koenigii*, XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. Ref: 11, 1212.

**13400 Mahuangnin B**

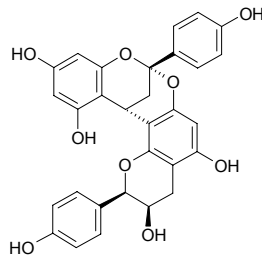
$C_{30}H_{24}O_9$ (528.52). Source: MA HUANG GEN *Ephedra sinica*. Ref: 1230.

**13401 Mahuangnin C**

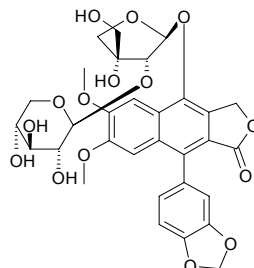
$C_{30}H_{24}O_{10}$ (544.52). Source: MA HUANG GEN *Ephedra sinica*. Ref: 1230.

**13402 Mahuangnin D**

ent-Apigeninflavan-(2 α →7,4 α →8)-epiafzelechin $C_{30}H_{24}O_9$ (528.52). Pharm: Tanning agent. Source: MA HUANG GEN *Ephedra sinica*. Ref: 1230.

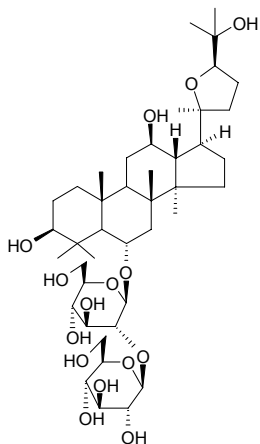
**13403 Majidine**

$C_{31}H_{32}O_{15}$ (644.59). Pharm: Cytotoxic (hmn LoVo Cell Line *in vitro*, IC₅₀ = (20.22±1.88) μl/mL). Source: *Haplophyllum patavinum* (shoot). Ref: 4206.

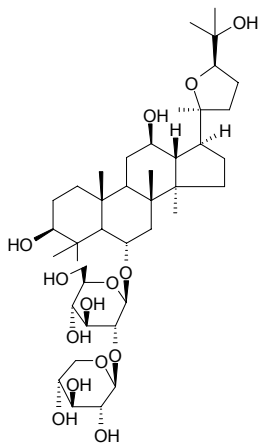


13404 Majonoside R₁

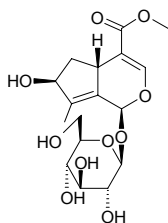
[81534-62-5] C₄₂H₇₂O₁₅ (817.03). Amorphous powder, $[\alpha]_D^{15} = +1.0^\circ$ ($c = 1.13$, MeOH). Source: YU YE SAN QI *Panax japonicus* var. *bipinnatifidus*, QIN LING ZHU ZI SHEN *Panax japonicus* var. *major*. Ref: 660, 1521.

**13405 Majonoside R₂**

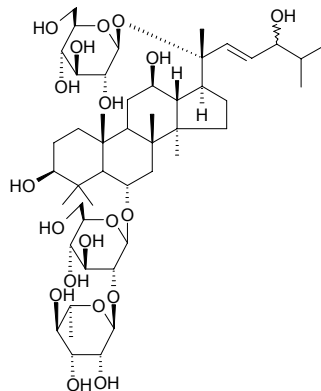
[81534-63-6] C₄₁H₇₀O₁₄ (787.01). Amorphous powder, $[\alpha]_D^{15} = -2.4^\circ$ ($c = 1.13$, MeOH). Source: QIN LING ZHU ZI SHEN *Panax japonicus* var. *major*, YU YE SAN QI *Panax japonicus* var. *bipinnatifidus*, ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (underground part: yield = 0.26%dw)^[4610]. Ref: 660, 1521, 4610.

**13406 Majoroside**

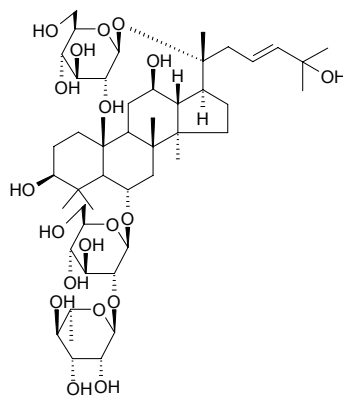
[134140-02-6] C₁₇H₂₄O₁₀ (388.37). Source: DA CHE QIAN *Plantago major*. Ref: 1231.

**13407 Majoroside F₅**

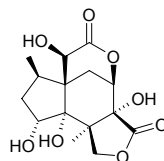
Dammar-22(32)-ene-3 β ,6 α ,12 β ,20 S ,24 ζ -pentaol-(20-*O*- β -*D*-glucopyranosyl-6-*O*- α -*L*-rhamnopyranosyl-(1 \rightarrow 2)- β -*D*-glucopyranoside) [125309-99-1] C₄₈H₈₂O₁₉ (963.18). White powder, mp 192~194°C. Source: QIN LING ZHU ZI SHEN *Panax japonicus* var. *major*. Ref: 137.

**13408 Majoroside F₆**

Dammar-23(24)-ene-3 β ,6 α ,12 β ,20(*S*),25-pentaol-(20-*O*- β -*D*-glucopyranosyl-6-*O*- α -*L*-rhamnopyranosyl-(1 \rightarrow 2)- β -*D*-glucopyranoside) C₄₈H₈₂O₁₉ (963.18). White powder, mp 182.5~184.0°C. Source: QIN LING ZHU ZI SHEN *Panax japonicus* var. *major*. Ref: 137.

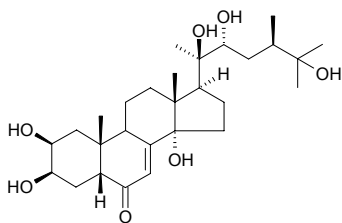
**13409 Majucin**

C₁₅H₂₀O₈ (328.32). Source: JIA DI FENG PI *Illicium jiadifengpi* (pericarp). Ref: 4621.

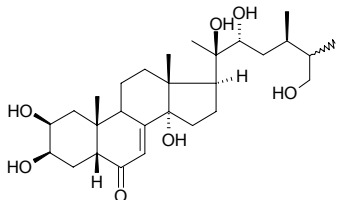


13410 Makisterone A

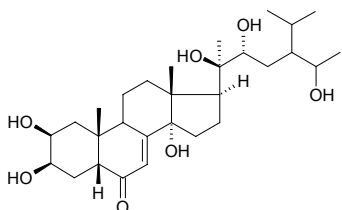
[20137-14-8] C₂₈H₄₆O₇ (494.67). Crystals, mp 263~265°C (dec). Source: LUO HAN SONG YE *Podocarpus macrophyllus*. Ref: 6, 408, 1521.

**13411 Makisterone B**

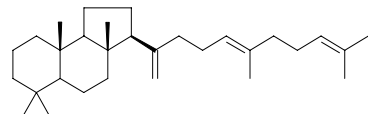
[20512-31-6] C₂₈H₄₆O₇ (494.67). Crystals, mp 172~173°C (dec). Pharm: Insect ecdysone (Steroidal compound). Source: CANG BAI CHENG GOU FENG *Diploclisia glaucescens*, HUANG JIN GU CAO *Ajuga chamaepitys*, LUO HAN SONG SHI *Podocarpus macrophyllus*, LUO HAN SONG YE *Podocarpus macrophyllus*. Ref: 6, 658, 1521.

**13412 Makisterone D**

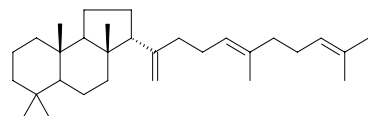
[20137-11-5] C₂₉H₄₈O₇ (508.70). Noncrystals. Source: LUO HAN SONG YE *Podocarpus macrophyllus*. Ref: 6, 1521.

**13413 13aH-Malabaricatriene**

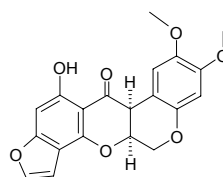
C₃₀H₅₀ (410.73). Source: DAO LUAN YE FU SHI JUE *Lemnaphyllum microphyllum* var. *obovatum*. Ref: 1232.

**13414 13βH-Malabaricatriene**

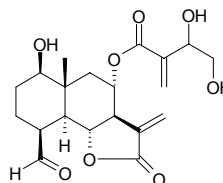
C₃₀H₅₀ (410.73). Source: DAO LUAN YE FU SHI JUE *Lemnaphyllum microphyllum* var. *obovatum*. Ref: 1232.

**13415 (+)-Malaccol**

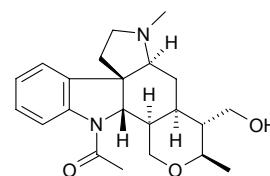
[478-07-9] C₂₀H₁₆O₇ (368.35). Yellow prisms or acicular crystals (CHCl₃-EtOH), mp 225°C, mp 249°C (double mp), [α]_D¹⁸ = +190° (c = 1.02, CHCl₃). Source: MA LIU JIA YU TENG *Derris malaccensis*. Ref: 1521.

**13416 Malacitanolide**

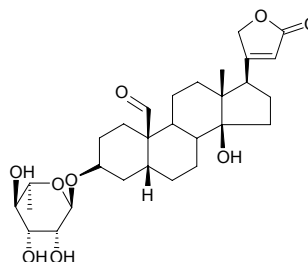
C₂₀H₂₆O₈ (394.43). Pharm: Antifungal (*Aspergillus niger*, MIC = 0.5 μg/mL, control Miconazole, MIC = 1.5 μg/mL; *Aspergillus ochraceus*, MIC = 0.5 μg/mL, Miconazole, MIC = 1.5 μg/mL; *Aspergillus versicolor*, MIC = 1 μg/mL, Miconazole, MIC = 2 μg/mL; *Aspergillus flavus*, MIC = 0.25 μg/mL, Miconazole, MIC = 0.5 μg/mL; *Penicillium ochrochloron*, MIC = 0.5 μg/mL, Miconazole, MIC = 2 μg/mL; *Penicillium funiculosum*, MIC = 1 μg/mL, Miconazole, MIC = 2 μg/mL; *Trichoderma viride*, MIC = 1 μg/mL, Miconazole, MIC = 2 μg/mL; *Cladosporium cladosporioides*, MIC = 0.5 μg/mL, Miconazole, MIC = 0.03 μg/mL; *Alternaria alternata*, MIC = 0.5 μg/mL, Miconazole, MIC = 0.5 μg/mL). Source: *Centaurea attica* ssp. *attica* (aerial parts). Ref: 5115.

**13417 Malagashanol**

C₂₂H₃₀N₂O₃ (370.50). Crystals (EtOAc-*n*-hexane which char without melting), [α]_D²⁰ = +23.3° (c = 0.3, CH₂Cl₂). Source: *Strychnos myrtoides*. Ref: 2297.

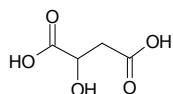
**13418 Malayoside**

C₂₉H₄₂O₉ (534.65). Needles (MeOH-Et₂O), mp 220~230°C, [α]_D = -44.2° (MeOH). Source: JIAN XUE FENG HOU *Antiaris toxicaria* [Syn. *Ambora toxicaria*], HUANG HUA JIA ZHU TAO *Thevetia nerifolia* [Syn. *Thevetia peruviana*]. Ref: 1233, 1234.

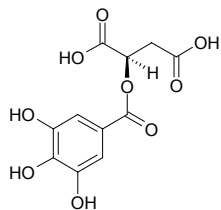


13419 Malic acid

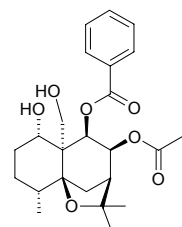
Hydroxysuccinic acid; Hydroxybutanedioic acid $C_4H_6O_5$ (134.09). mp (+) 98–99°C, (–) 100°C, (\pm) 133°C, 125–126°C. Source: BAI BU *Stemona tuberosa*, CU LIU GUO *Hippophae rhamnoides*, DA ZAO *Ziziphus jujuba*, DUO ZU JUE *Polypodium vulgare*, HU ZHANG YE *Polygonum cuspidatum*, JU YUAN *Citrus medica*, KUAN YE XIANG PU *Typha latifolia*, MU ZEI MA HUANG *Ephedra equisetina*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*], WU MEI *Prunus mume* (closing-ripe fruit: content = 8.84%)^[5508], YE SHAN ZHA *Crataegus cuneata*, YI ZHU QIAN MA *Urtica dioica*. Ref: 2, 660, 5508.

**13420 L-Malic acid 2-O-gallate**

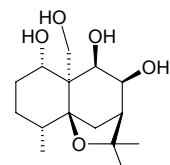
$C_{11}H_{10}O_9$ (286.20). White amorphous powder, $[\alpha]_D^{22} = -0.4^\circ$ ($c = 0.24$, MeOH). Source: AN MO LE *Phyllanthus emblica* (fruit juice). Ref: 3521.

**13421 Malkangunin**

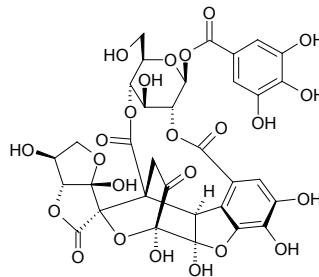
[52691-06-2] $C_{24}H_{32}O_7$ (432.52). Crystals (Et₂O–petroleum ether), mp 240–245°C, $[\alpha]_D = -58.8^\circ$ ($c = 1$, CHCl₃). Source: DENG YOU TENG ZI *Celastrus paniculatus*. Ref: 1235, 1521.

**13422 Malkanguniol**

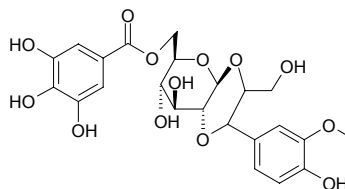
[41719-36-8] $C_{15}H_{26}O_5$ (286.37). Crystals, mp 171–172°C, $[\alpha]_D = -32.94^\circ$ ($c = 3$, dioxane). Source: DENG YOU TENG ZI *Celastrus paniculatus*. Ref: 1236, 1521.

**13423 Mallonin**

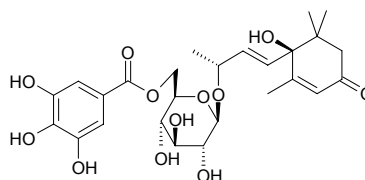
$C_{33}H_{28}O_{24}$ (808.58). Source: AN MO LE *Phyllanthus emblica* (fruit juice, leaf, branch). Ref: 3094.

**13424 Mallophenol A**

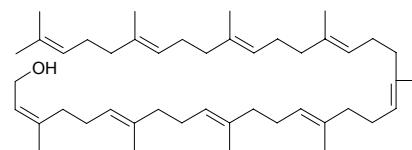
$C_{23}H_{26}O_{13}$ (510.46). Colorless oil, $[\alpha]_D^{25} = +19.4^\circ$ ($c = 0.968$, MeOH). Source: *Mallotus furetiatus* (leaf). Ref: 4301.

**13425 Mallophenol B**

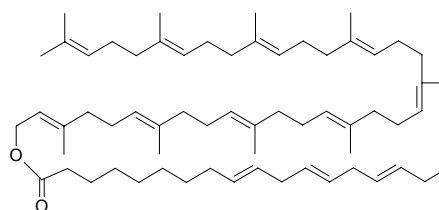
$C_{26}H_{34}O_{12}$ (538.55). Colorless oil, $[\alpha]_D^{25} = +54.1^\circ$ ($c = 1.127$, MeOH). Source: *Mallotus furetiatus* (leaf). Ref: 4301.

**13426 Malloprenol**

$C_45H_{74}O$ (631.09). Source: YE WU TONG *Mallotus japonicus*. Ref: 6.

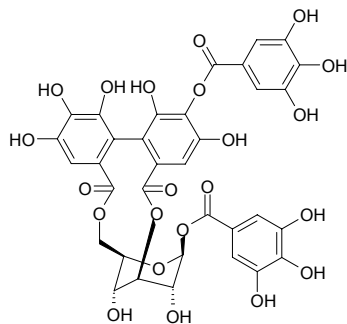
**13427 Malloprenyl linolenate**

$C_{63}H_{102}O_2$ (891.51). Source: YE WU TONG *Mallotus japonicus*. Ref: 6.

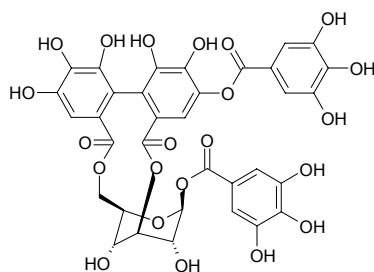


13428 Mallorepanin

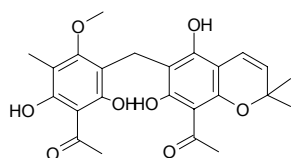
$C_{34}H_{26}O_{22}$ (786.57). Pale brown. **Pharm:** Antibacterial (*Erwinia carotovora*, IZD = 15mm/100 μ g, control Quercetin sulfate, IZD = 21mm/10 μ g; *Staphylococcus aureus*, IZD = 10mm/100 μ g, Quercetin sulfate, IZD = 14mm/10 μ g; *Corynebacterium accolens*, IZD = 10mm/100 μ g, Quercetin sulfate, IZD = 28mm/10 μ g); antifungal (*Candida albicans*, IZD = 10mm/100 μ g, control Nystatin, IZD = 11mm/20 μ g); xanthine oxidase inhibitor ($IC_{50} > 100\mu\text{g/mL}$, $IC_{50} > 100\mu\text{mol/L}$; control Quercetin, $IC_{50} = 3.4\mu\text{g/mL}$, $IC_{50} = 10\mu\text{mol/L}$). **Source:** DA YE KU NUO NI *Cunonia macrophylla* (leaf). **Ref:** 5250.

**13429 Mallotinic acid**

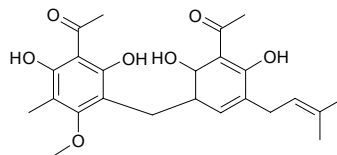
$C_{34}H_{26}O_{22}$ (786.57). Pale brown. **Pharm:** Antibacterial (*Erwinia carotovora*, IZD = 13mm/100 μ g, control Quercetin sulfate, IZD = 21mm/10 μ g; *Staphylococcus aureus*, IZD = 9mm/100 μ g, Quercetin sulfate, IZD = 14mm/10 μ g; *Corynebacterium accolens*, IZD = 9mm/100 μ g, Quercetin sulfate, IZD = 28mm/10 μ g); antifungal (*Candida albicans*, IZD = 9mm/100 μ g, control Nystatin, IZD = 11mm/20 μ g); xanthine oxidase inhibitor ($IC_{50} > 100\mu\text{g/mL}$, $IC_{50} > 100\mu\text{mol/L}$; control Quercetin, $IC_{50} = 3.4\mu\text{g/mL}$, $IC_{50} = 10\mu\text{mol/L}$). **Source:** DA YE KU NUO NI *Cunonia macrophylla* (leaf). **Ref:** 5250.

**13430 Mallotchromene**

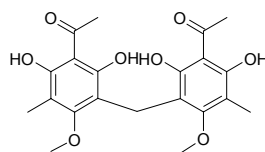
[98569-62-1] $C_{24}H_{26}O_8$ (442.47). Yellow crystals (MeOH), mp 216–218°C, $[\alpha]_D^{23} = -0.74^\circ$ ($c = 1$, CHCl_3). **Pharm:** Antineoplastic (leukemia); cytotoxic (KB). **Source:** YE WU TONG *Mallotus japonicus*. **Ref:** 658.

**13431 Mallotojaponin**

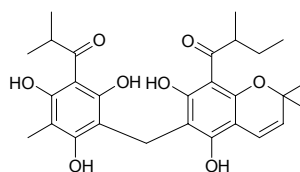
$C_{24}H_{30}O_7$ (359.32). **Pharm:** Anti-HIV (HIV-RT inhibitor). **Source:** YE WU TONG *Mallotus japonicus*. **Ref:** 2268.

**13432 Mallotphenone**

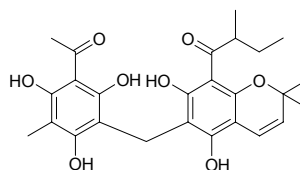
$C_{21}H_{24}O_8$ (404.42). Yellow crystals (MeOH), mp 223–225°C. **Pharm:** Cytotoxic (mus L5178Y and KB cells, *in vitro*). **Source:** YE WU TONG *Mallotus japonicus*. **Ref:** 658.

**13433 Mallotophilippen A**

1-[5,7-Dihydroxy-2,2-dimethyl-6-(2,4,6-trihydroxy-3-isobutyryl-5-methylbenzyl)-2H-chromen-8-yl]-2-methyl-butan-1-one $C_{28}H_{34}O_8$ (498.58). Yellow powder, $[\alpha]_D^{23} = 0^\circ$ ($c = 0.1$, MeOH). **Pharm:** Anti-inflammatory (NO production inhibitor, murine macrophage-like cell line RAW264.7, $IC_{50} = 4.2\mu\text{mol/L}$, inhibits NO production and inducible NO synthase (iNOS) gene expression activated by LPS and recombinant mus interferon- γ (IFN- γ), furthermore, inhibits histamine release from rat peritoneal mast cells). **Source:** CU KANG CHAI *Mallotus philippinensis* (fruit). **Ref:** 4251.

**13434 Mallotophilippen B**

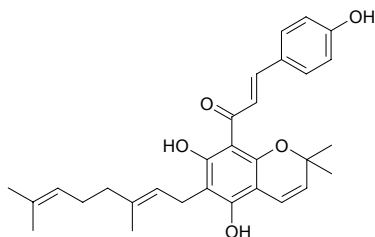
1-[6-(3-Acetyl-2,4,6-trihydroxy-5-methyl-benzyl)-5,7-dihydroxy-2,2-dimethyl-1-2H-chromen-8-yl]-2-methyl-butan-1-one $C_{26}H_{30}O_8$ (470.52). Yellow powder, $[\alpha]_D^{23} = 0^\circ$ ($c = 0.1$, MeOH). **Pharm:** Anti-inflammatory (NO production inhibitor, murine macrophage-like cell line RAW264.7, $IC_{50} = 3.2\mu\text{mol/L}$, inhibits NO production and inducible NO synthase (iNOS) gene expression activated by LPS and recombinant mus interferon- γ (IFN- γ), furthermore, inhibits histamine release from rat peritoneal mast cells). **Source:** CU KANG CHAI *Mallotus philippinensis* (fruit). **Ref:** 4251.



13435 Mallotophilippen C

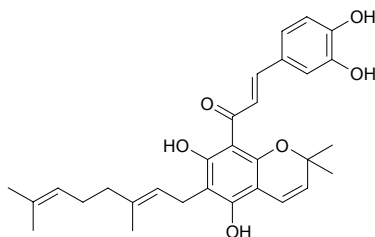
1-[6-(3,7-Dimethyl-octa-2,6-dienyl)-5,7-dihydroxy-2,2-dimethyl-2H-chromen-8-yl]-3-(4-hydroxy-phenyl)-propenone C₃₀H₃₄O₅ (474.60). Reddish-yellow plate.

Pharm: NO production inhibitor (mus, macrophage-like cell line, RAW264.7, activated by LPS and recombinant mouse IFN- γ , IC₅₀ = 7.6 μ mol/L, control Quercetin, IC₅₀ = 26.8 μ mol/L); inhibits the inducible nitric oxide synthase (iNOS) gene expression; downregulates cyclooxygenase-2 (COX-2) gene expression; downregulates interleukin-6 (IL-6) gene expression; downregulates interleukin-1b (IL-1b) gene expression; anti-inflammatory; immunomodulator. **Source:** LV SONG QIU MAO *Mallotus philippinensis*. **Ref:** 2556.

**13436 Mallotophilippen D**

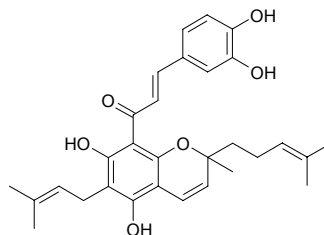
3-(3,4-Dihydroxy-phenyl)-1-[6-(3,7-dimethyl-octa-2,6-dienyl)-5,7-dihydroxy-2,2-dimethyl-2H-chromen-8-yl]-propenone C₃₀H₃₄O₆ (490.60). Reddish-yellow plate.

Pharm: NO production inhibitor (mus, macrophage-like cell line, RAW264.7, activated by LPS and recombinant mouse IFN- γ , IC₅₀ = 9.5 μ mol/L, control Quercetin, IC₅₀ = 26.8 μ mol/L); inhibits the inducible nitric oxide synthase (iNOS) gene expression; downregulates cyclooxygenase-2 (COX-2) gene expression; downregulates interleukin-6 (IL-6) gene expression; downregulates interleukin-1b (IL-1b) gene expression; anti-inflammatory; immunomodulator. **Source:** LV SONG QIU MAO *Mallotus philippinensis*. **Ref:** 2556.

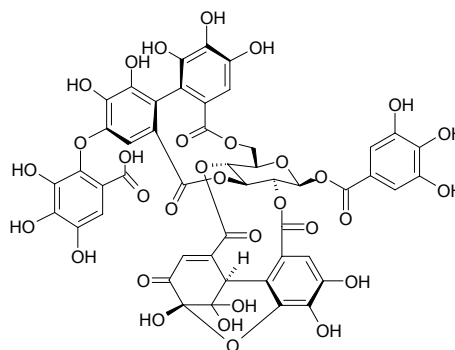
**13437 Mallotophilippen E**

1-[5,7-Dihydroxy-2-methyl-6-(3-methyl-but-2-enyl)-2-(4-methyl-pent-3-enyl)-2H-chromen-8-yl]-3-(3,4-dihydroxy-phenyl)-propenone C₃₀H₃₄O₆ (490.60). Reddish-yellow plate, $[\alpha]_D^{22} = \pm 0^\circ$ ($c = 0.5$, MeOH). **Pharm:** NO production inhibitor (mus, macrophage-like cell line, RAW264.7, activated by LPS and recombinant mouse IFN- γ , IC₅₀ = 38.6 μ mol/L, control Quercetin, IC₅₀ = 26.8 μ mol/L); inhibits the inducible nitric oxide synthase (iNOS) gene expression; downregulates cyclooxygenase-2 (COX-2) gene expression; downregulates interleukin-6 (IL-6) gene expression; downregulates interleukin-1b (IL-1b) gene expression; anti-inflammatory; immunomodulator.

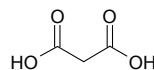
Source: LV SONG QIU MAO *Mallotus philippinensis*. **Ref:** 2556.

**13438 Mallotusinic acid**

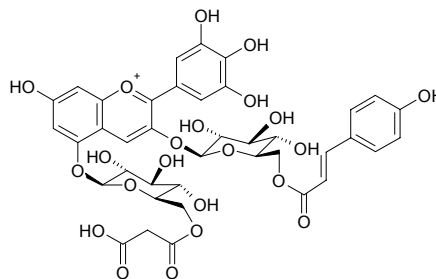
[66421-47-4] C₄₈H₃₂O₃₂ (1120.77). **Pharm:** Antioxidant (lipid peroxidation inhibitor, rat microsome in liver cells); promotes lipolysis (rat fat cells, induced by adrenal cortex hormone). **Source:** HONG BEI SHAN MA GAN *Alchornea trewioides*, TONG YOU *Aleurites cordata* [Syn. *Aleurites fordii*], YE WU TONG *Mallotus japonicus*, *Euphorbia* spp. **Ref:** 658.

**13439 Malonic acid**

Propanedioic acid [141-82-2] C₃H₄O₄ (104.06). mp 135.6°C. **Pharm:** Irritant. **Source:** DUO HUA CAI DOU *Phaseolus coccineus*, HAN QIN *Apium graveolens*, JIAO GU LAN *Gynostemma pentaphyllum*, MAI YA *Hordeum vulgare*, TIAN CAI *Beta vulgaris*. **Ref:** 2, 658.

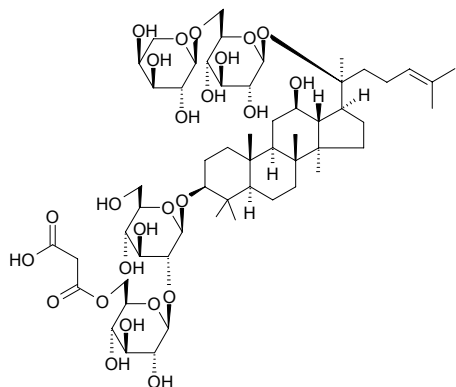
**13440 Malonylawobanin**

[88399-23-9] C₃₉H₃₉O₂₂⁺ (859.73). **Source:** YA ZHI CAO *Commelina communis*. **Ref:** 658.

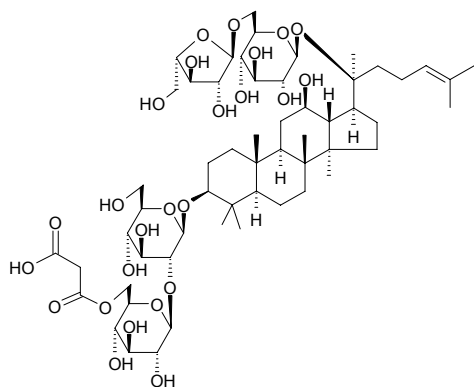


13441 Malonylginsenoside Rb₂

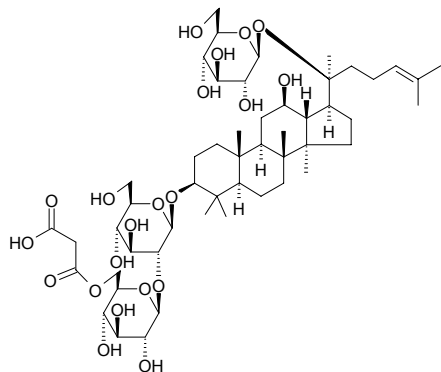
C₅₆H₉₂O₂₅ (1165.34). mp 148~150°C. **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*] (rhizome: content = 0.42%^[5508]), XI YANG SHEN *Panax quinquefolium* (rhizome: content = 0.21%^[5508]). **Ref:** 2, 524, 5508.

**13442 Malonylginsenoside Rc**

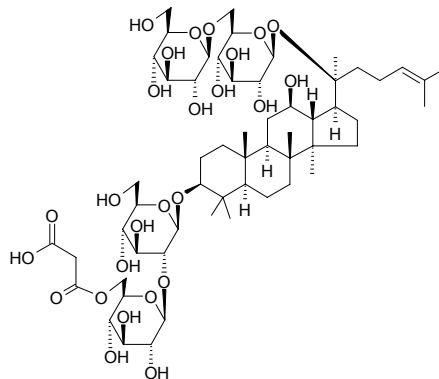
C₅₆H₉₂O₂₅ (1165.34). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. **Ref:** 2.

**13443 Malonylginsenoside Rd**

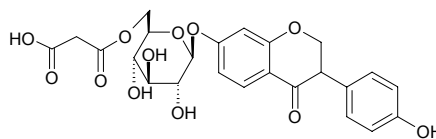
C₅₁H₈₄O₂₁ (1033.23). **Source:** JIAO GU LAN *Gynostemma pentaphyllum*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*] (rhizome: content = 0.35%^[5508]), XI YANG SHEN *Panax quinquefolium* (rhizome: content = 0.27%^[5508]), ZHU JIE SAN QI *Panax pseudo-ginseng* var. *japonicus* (rhizome: content ≈ 0.001%^[5508]). **Ref:** 2, 524, 5508.

**13444 6''-Malonylginsenoside Rd₁**

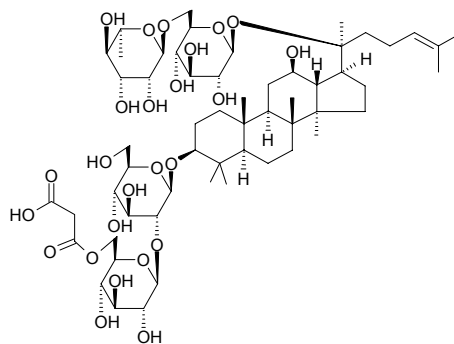
Malonylginsenoside Rb₁ C₅₇H₉₄O₂₆ (1195.37). mp 150~152°C. **Source:** JIAO GU LAN *Gynostemma pentaphyllum*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], XI YANG SHEN *Panax quinquefolium*, JIAO GU LAN *Gynostemma pentaphyllum*. **Ref:** 2, 524, 613.

**13445 7-(6-O-Malonyl-β-D-glucopyransyloxy)-3-(4-hydroxyphenyl)-4H-1-benzopyran-4-one**

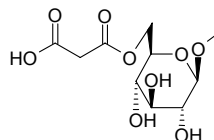
C₂₄H₂₄O₁₂ (504.45). **Source:** GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*]. **Ref:** 2.

**13446 6''-Malonylgypenoside V**

C₅₇H₉₄O₂₅ (1179.37). **Source:** JIAO GU LAN *Gynostemma pentaphyllum*. **Ref:** 2.

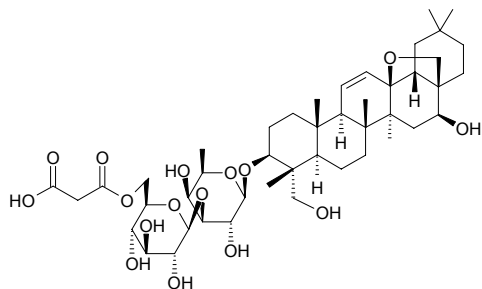
**13447 6-O-malonyl-β-methyl-D-glucopyranoside**

C₁₀H₁₆O₉ (280.23). **Source:** DUN YE SUAN MO *Rumex obtusifolius*. **Ref:** 660.

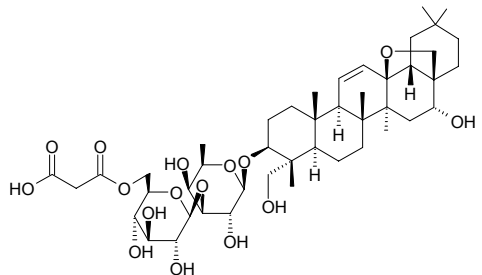


13448 Malonylsaikosaponin A

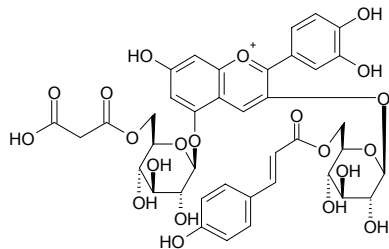
$C_{45}H_{70}O_{16}$ (867.05). Source: ZI HU *Bupleurum falcatum*. Ref: 2247.

**13449 Malonylsaikosaponin D**

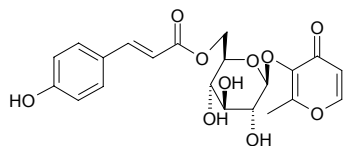
$C_{45}H_{70}O_{16}$ (867.05). Source: ZI HU *Bupleurum falcatum*. Ref: 2247.

**13450 Malonyl shisonin**

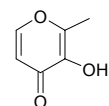
3-*O*-(6-*O*-*p*-coumaryl- β -*D*-glucopyranosyl)-5-*O*-(6-*O*-malonyl- β -*D*-glucopyranosyl)cyanidin $C_{39}H_{39}O_{21}^+$ (843.73). Source: HUI HUI SU GENG *Perilla frutescens* var. *crispa*. Ref: 1237.

**13451 Malto-3-*O*-[6'-*O*-(4''-hydroxy-*trans*-cinnamoyl)]- β -*D*-glucopyranoside**

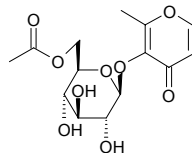
$C_{21}H_{22}O_{10}$ (434.40). Source: HUAI *Sophora japonica* (bud). Ref: 4823.

**13452 Maltol**

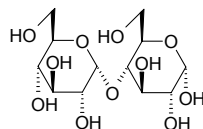
Larixinic acid [118-71-8] $C_6H_6O_3$ (126.11). Source: JIN JI WEI BA CAO GEN *Macrothelypteris oligophlebia*. Ref: 1238.

**13453 Maltol-(6-*O*-acetyl)- β -*D*-glucopyranoside**

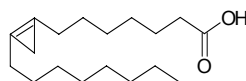
$C_{14}H_{18}O_9$ (330.29). $[\alpha]_D^{25} = -31.9^\circ$ ($c = 0.27$, MeOH). Source: SHUAN CHI QIN *Prangos pabularia*. Ref: 2004.

**13454 Maltose**

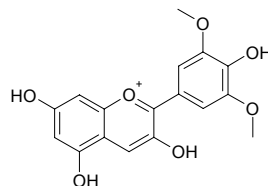
4-*O*- α -*D*-Glucopyranosyl-*D*-glucose; *D*-(+)-Maltose; *D*-Maltose; Finetose; Maltobiose; Maltodiose [69-79-4] $C_{12}H_{22}O_{11}$ (342.30). Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2.

**13455 Malvic acid**

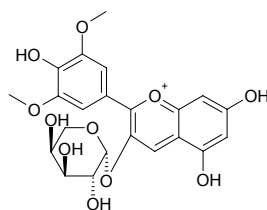
Malvic acid [503-05-9] $C_{18}H_{32}O_2$ (280.45). Oil, mp 10.3~10.5°C. Source: MU JIN ZI *Hibiscus syriacus*. Ref: 6.

**13456 Malvidin**

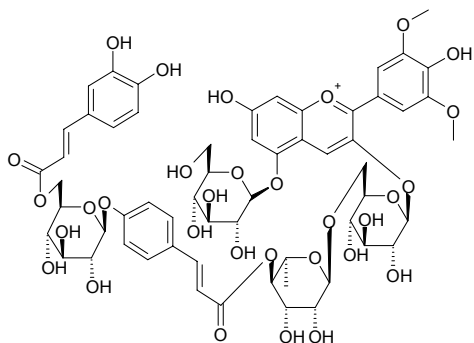
[10463-84-0] $C_{17}H_{15}O_7$ (331.30). Pharm: Pigment (amaranth phytochrome). Source: FENG XIAN HUA *Impatiens balsamina*, JIU Liquor, MU XU *Medicago sativa*, PU⁽³⁾ TAO *Syzygium jambos*. Ref: 6, 658.

**13457 Malvidin-3-arabinoside**

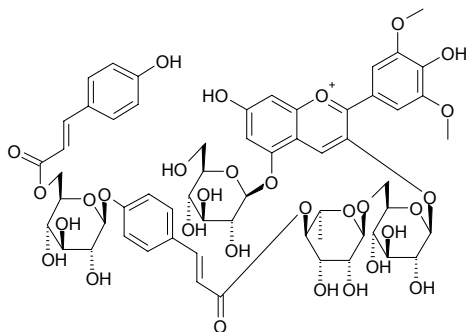
[28500-04-1] $C_{22}H_{23}O_{11}^+$ (463.42). Source: ZI BEI TIAN KUI CAO *Senecio nudicaulis*. Ref: 6.



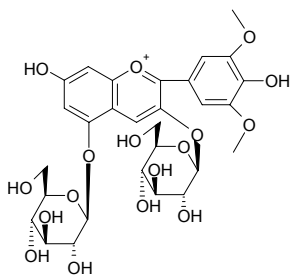
13458 Malvidin 3-O-(6-O-(4-O-(4-O-(6-O-caffeoyl- β -D-glucopyranosyl)-E-p-coumaroyl)- α -rhamnosyl)- β -D-glucopyranoside)-5-O- β -D-glucopyranoside
 $C_{59}H_{67}O_{31}^+$ (1272.17). Source: BI DONG QIE *Petunia hybrida* (flower). Ref: 5240.



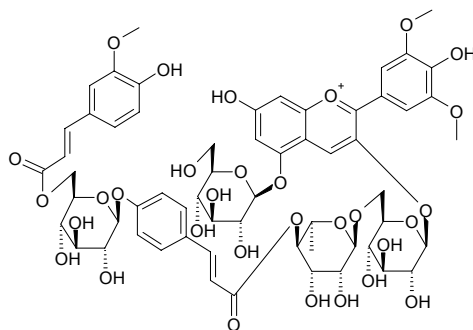
13459 Malvidin 3-O-(6-O-(4-O-(4-O-(6-O-E-p-coumaroyl- β -D-glucopyranosyl)-E-p-coumaroyl)- α -rhamnosyl)- β -D-glucopyranoside)-5- β -D-glucopyranoside
 $C_{59}H_{67}O_{30}^+$ (1256.17). Source: BI DONG QIE *Petunia hybrida* (flower). Ref: 5240.



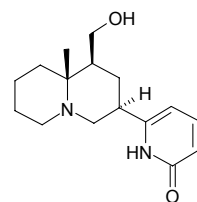
13460 Malvidin-3,5-diglucoside
 Malvin [16727-30-3] $C_{29}H_{35}O_{17}^+$ (655.59). mp 165°C. Pharm: Pigment (amaranth phytochrome). Source: DU JUAN HUA *Rhododendron simsii*, OU JIN KUI *Malva sylvestris*, QIAN QU CAI *Lythrum salicaria*, *Vitis* sp. Ref: 6, 658, 1239.



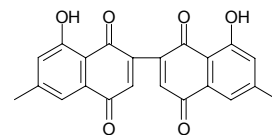
13461 Malvidin 3-O-(6-O-(4-O-(4-O-(6-O-feruloyl- β -D-glucopyranosyl)-E-p-coumaroyl)- α -rhamnosyl)- β -D-glucopyranoside)-5- β -D-glucopyranoside
 $C_{60}H_{69}O_{31}^+$ (1286.20). Source: BI DONG QIE *Petunia hybrida* (flower). Ref: 5240.



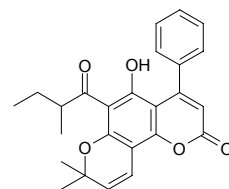
13462 Mamanine
 [60394-92-5] $C_{15}H_{22}N_2O_2$ (262.35). mp 100°C (remelts 171~172°C), $[\alpha]_D^{25} = +31.7^\circ$ ($c = 2.32$, EtOH). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 2, 1521.



13463 Mamegakinone
 [17734-93-9] $C_{22}H_{14}O_6$ (374.35). mp 253°C (dec). Source: JUN QIAN ZI *Diospyros lotus* (the compound was isolated from the plant by K.yoshihira, et al. in 1970)^[5505]. Ref: 6, 5505.

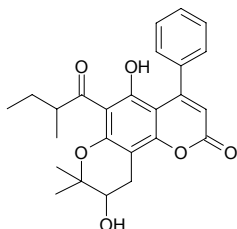


13464 Mamea A/AB cyclo D
 $C_{25}H_{24}O_5$ (404.47). Pharm: Cytotoxic (P_{388} , $ED_{50} > 20\mu\text{g/mL}$, control Ellipticine $ED_{50} = 0.61\mu\text{g/mL}$; KB, $ED_{50} = 15.1\mu\text{g/mL}$, Ellipticine $ED_{50} = 0.54\mu\text{g/mL}$; Col2, $ED_{50} > 20\mu\text{g/mL}$, Ellipticine $ED_{50} = 0.60\mu\text{g/mL}$; Lu1, $ED_{50} > 20\mu\text{g/mL}$, Ellipticine $ED_{50} = 0.61\mu\text{g/mL}$; BCA-1, $ED_{50} > 20\mu\text{g/mL}$, Ellipticine $ED_{50} = 0.52\mu\text{g/mL}$)^[5478]. Source: FEI ZHOU HUANG GUO MU *Mamea africana*, *Mamea harmandii* (leaf and twig), *Mesua thwaitesii*. Ref: 1521, 5478.

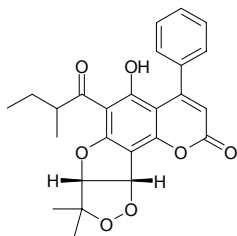


13465 Mammea A/AB cyclo E

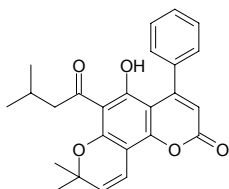
9,10-Dihydro-5,9-dihydroxy-8,8-dimethyl-6-(2-methyl-1-oxobutyl)-4-phenyl-2*H*,8*H*-benzo[1,2-*b*:5,6-*b'*]dipyran-2-one C₂₅H₂₆O₆ (422.48). [α]_D²⁵ = 0° (*c* = 0.2, CHCl₃). **Source:** BU DENG HONG HOU KE *Calophyllum dispar* (fruit and stem cortex). **Ref:** 5196.

**13466 Mammea A/AB dioxalano cyclo F**

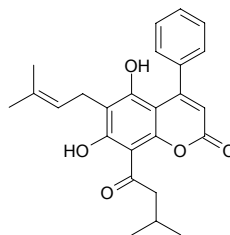
7*a*,10*a*-Dihydro-5-hydroxy-8,8-dimethyl-6-(2-methyl-1-oxobutyl)-4-phenyl-2-*H*-8*H*-[1,2]-dioxolano[4",5":4',5']furo[2',3':5,6]benzo[1,2-*b*]pyran-2-one C₂₅H₂₄O₇ (436.47). [α]_D²⁵ = 0° (*c* = 0.06, CHCl₃). **Source:** BU DENG HONG HOU KE *Calophyllum dispar* (fruit and stem cortex). **Ref:** 5196.

**13467 Mammea A/A cyclo D**

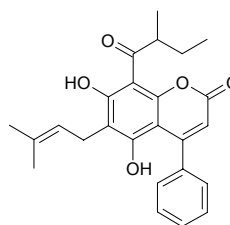
Mammeigin [2289-11-4] C₂₅H₂₄O₅ (404.47). **Pharm:** Cytotoxic inactive (P₃₈₈, ED₅₀ > 20μg/mL, control Ellipticine ED₅₀ = 0.61μg/mL; KB, ED₅₀ > 20μg/mL, Ellipticine ED₅₀ = 0.54μg/mL; Col2, ED₅₀ > 20μg/mL, Ellipticine ED₅₀ = 0.60μg/mL; Lu1, ED₅₀ > 20μg/mL, Ellipticine ED₅₀ = 0.61μg/mL; BCA-1, ED₅₀ > 20μg/mL, Ellipticine ED₅₀ = 0.52μg/mL)^[5478]. **Source:** FEI ZHOU HUANG GUO MU *Mammea africana*, MEI ZHOU MAN MI PING GUO *Mammea americana*, *Mammea harmandii* (leaf and twig), TIE LI MU *Mesua ferrea*. **Ref:** 1240, 1521, 5478.

**13468 Mammea A/BA**

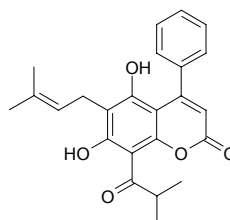
C₂₅H₂₆O₅ (406.48). **Pharm:** Cytotoxic (P₃₈₈, ED₅₀ = 1.94μg/mL, control Ellipticine ED₅₀ = 0.61μg/mL; KB, ED₅₀ = 2.80μg/mL, Ellipticine ED₅₀ = 0.54μg/mL; Col2, ED₅₀ = 3.37μg/mL, Ellipticine ED₅₀ = 0.60μg/mL; Lu1, ED₅₀ = 2.95μg/mL, Ellipticine ED₅₀ = 0.61μg/mL; BCA-1, ED₅₀ = 2.99μg/mL, Ellipticine ED₅₀ = 0.52μg/mL). **Source:** MEI ZHOU MAN MI PING GUO *Mammea Americana* (seeds), *Mammea harmandii* (leaf and twig). **Ref:** 1521, 5478.

**13469 Mammea A/BB**

Isomammeisin C₂₅H₂₆O₅ (406.48). **Pharm:** Cytotoxic (P₃₈₈, ED₅₀ = 2.22μg/mL, control Ellipticine ED₅₀ = 0.61μg/mL; KB, ED₅₀ = 2.58μg/mL, Ellipticine ED₅₀ = 0.54μg/mL; Col2, ED₅₀ = 2.99μg/mL, Ellipticine ED₅₀ = 0.60μg/mL; Lu1, ED₅₀ = 2.14μg/mL, Ellipticine ED₅₀ = 0.61μg/mL; BCA-1, ED₅₀ = 3.19μg/mL, Ellipticine ED₅₀ = 0.52μg/mL)^[5478]; antibacterial (*Enterococcus faecalis* 18292, MIC = 8μg/mL; *Enterococcus faecalis* 19250, MIC = 8μg/mL)^[3870]; antibacterial (*Staphylococcus aureus* 18268, MIC = 16μg/mL; *Staphylococcus aureus* 17380, MIC = 32μg/mL; *Staphylococcus aureus* 17592, MIC = 2μg/mL; *Staphylococcus aureus* 18110, MIC = 2μg/mL; *Staphylococcus aureus* 17547, MIC = 4μg/mL; *Staphylococcus aureus* 17728, MIC = 2μg/mL; *Staphylococcus aureus* 3012, MIC = 2μg/mL; *Staphylococcus aureus* 414, MIC = 4μg/mL; *Staphylococcus epidermidis* 3112, MIC = 2μg/mL; *Staphylococcus epidermidis* 2515, MIC = 4μg/mL; *Staphylococcus saprophyticus* 3010, MIC = 16μg/mL; *Staphylococcus simulans* 214, MIC = 2μg/mL)^[3870]. **Source:** MEI ZHOU MAN MI PING GUO *Mammea Americana* (seeds), TIE LI MU *Mesua ferrea* (blossom), *Mammea harmandii* (leaf and twig). **Ref:** 1521, 3870, 5478.

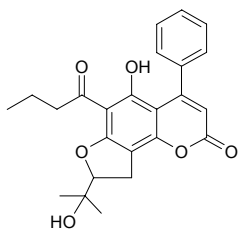
**13470 Mammea A/BD**

Isomesuol C₂₄H₂₄O₅ (392.46). White powder, mp 167~169°C (CH₂Cl₂-hexane). **Pharm:** Cytotoxic (P₃₈₈, ED₅₀ = 2.53μg/mL, control Ellipticine ED₅₀ = 0.61μg/mL; KB, ED₅₀ = 2.48μg/mL, Ellipticine ED₅₀ = 0.54μg/mL; Col2, ED₅₀ = 3.42μg/mL, Ellipticine ED₅₀ = 0.60μg/mL; Lu1, ED₅₀ = 2.33μg/mL, Ellipticine ED₅₀ = 0.61μg/mL; BCA-1, ED₅₀ = 6.51μg/mL, Ellipticine ED₅₀ = 0.52μg/mL)^[5478]. **Source:** TIE LI MU *Mesua ferrea*, *Mammea harmandii* (leaf and twig). **Ref:** 1521, 5478.

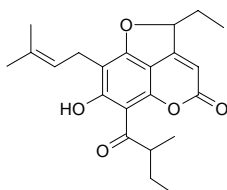


13471 Mammea A/AC cyclo F

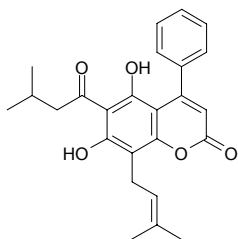
$C_{24}H_{24}O_6$ (408.46). Yellow prisms (C_6H_{14} :EtOAc = 9:1), mp 119.0°C, $[\alpha]_D = 0^\circ$ ($c = 4.5$, $CHCl_3$). Source: ZONG ZHUANG TIE LI MU *Mesua racemosa*. Ref: 1871.

**13472 Mammearin A**

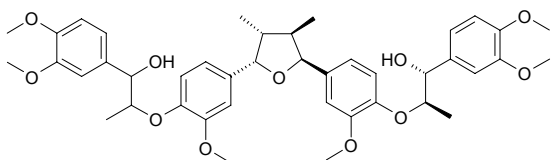
$C_{22}H_{26}O_5$ (370.45). White powder, mp 110~111°C (CH_2Cl_2 :hexane), $[\alpha]_D^{29} = +14.0^\circ$ ($c = 0.1$, $CHCl_3$). Pharm: Cytotoxic (P_{388} , $ED_{50} > 20\mu g/mL$, control Ellipticine $ED_{50} = 0.61\mu g/mL$; KB, $ED_{50} = 14.49\mu g/mL$, Ellipticine $ED_{50} = 0.54\mu g/mL$; Col2, $ED_{50} = 16.79\mu g/mL$, Ellipticine $ED_{50} = 0.60\mu g/mL$; Lu1, $ED_{50} > 20\mu g/mL$, Ellipticine $ED_{50} = 0.61\mu g/mL$; BCA-1, $ED_{50} > 20\mu g/mL$, Ellipticine $ED_{50} = 0.52\mu g/mL$). Source: *Mammea harmandii* (leaf and twig). Ref: 5478.

**13473 Mammeisin**

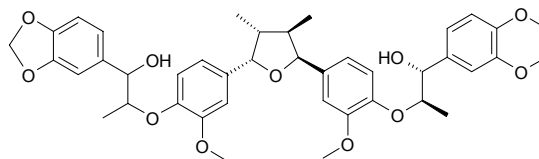
[18483-64-2] $C_{25}H_{26}O_5$ (406.48). Pharm: Cytotoxic (*in vitro*). Source: FEI ZHOU HUANG GUO MU *Mammea africana*. Ref: 658.

**13474 Manassantin A**

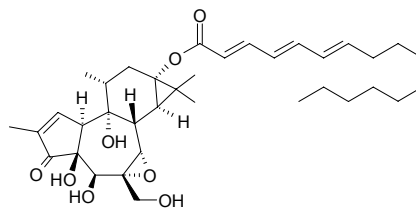
$C_{42}H_{52}O_{11}$ (732.88). Colorless powder, mp 82~85°C, $[\alpha]_D^{25} = -102.1^\circ$ ($c = 0.5$, $CHCl_3$). Pharm: Anti-inflammatory (NF- κ B inhibitor, $IC_{50} = 2.5\mu mol/L$)^[3453]; inhibits PMA-induced ICAM-1 expression (MIC = 1.0nmol/L)^[5492]. Source: SAN BAI CAO *Saururus chinensis* (root), YU XING CAO *Houttuynia cordata*, *Saururus* sp. Ref: 3453, 5492, 2428.

**13475 Manassantin B**

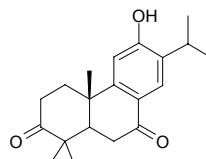
$C_{41}H_{48}O_{11}$ (716.83). Colorless powder, mp 83~86°C, $[\alpha]_D^{25} = -99.8^\circ$ ($c = 0.5$, $CHCl_3$). Pharm: Anti-inflammatory (NF- κ B inhibitor, $IC_{50} = 2.7\mu mol/L$)^[3453]; inhibits PMA-induced ICAM-1 expression (MIC = 5.5nmol/L)^[5492]. Source: SAN BAI CAO *Saururus chinensis* (root), YU XING CAO *Houttuynia cordata*, *Saururus* sp. Ref: 3453, 5492, 2428.

**13476 Mancinellin**

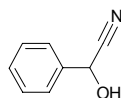
[57672-76-1] $C_{36}H_{52}O_8$ (612.81). Pharm: Carcinogen promotor; irritant; supertoxic agent. Source: MA FENG MU *Hippomane mancinella*. Ref: 658.

**13477 Mandarone A**

(5*R*,10*S*)-12-Hydroxy-8,11,13-abietatriene-3,7-dione $C_{20}H_{26}O_3$ (314.43). Yellowish rectangles, mp 212~214°C ($CHCl_3$). Source: HAI TONG *Clerodendrum mandarinorum*. Ref: 2333.

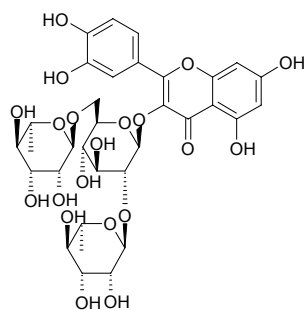
**13478 Mandelonitrile**

2-Hydroxy-2-phenylacetone nitrile [532-28-5] C_8H_7NO (133.15). mp (+) 28.5~29.5°C. Source: XING REN *Prunus armeniaca*. Ref: 2, 660.

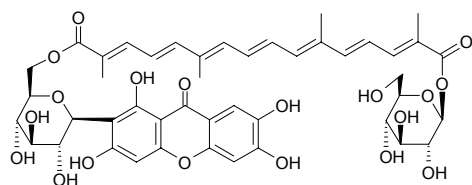


13479 Manghaslin

Quercetin-3-*O*- α -L-rhamnopyranosyl (1 \rightarrow 2)-[α -L-rhamnopyranosyl(1 \rightarrow 6)]- β -D-glucopyranoside [55696-57-6] C₃₃H₄₀O₂₀ (756.67). **Pharm:** Antioxidant (DPPH scavenger, SC₅₀ = 5.6 μ mol/L, positive control Vitamin E, SC₅₀ = 5.2 mmol/L)^[4464]; DPPH scavenger (SC₅₀ = 13 μ mol/L)^[4247]; antioxidant (superoxide anion radical scavenger, superoxide dismutase method, IC₅₀ for Formazan formation activity = 3.9 μ mol/L)^[4247]. **Source:** JIN ZHAN JU *Calendula officinalis* (flower), KUAN YE XIANG PU *Typha latifolia*, LAO YA SHI *Diospyros rhombifolia* (leaf), LV DOU *Onobrychis viciifolia* (leaf), NIU XIN QIE ZI *Cerbera manghas*, PU HUANG *Typha angustata*, XIAN REN ZHANG *Opuntia dillenii* (fresh stem: yield = 0.003%). **Ref:** 1521, 3551, 4041, 4247, 4464, 5084.

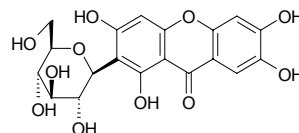
**13480 Mangicrocin**

[122575-51-3] C₄₅H₅₀O₁₉ (894.89). [α]_D²⁸ = +17.5° (*c* = 0.53, MeOH) **Source:** ZANG HONG HUA *Crocus sativus*. **Ref:** 1521.

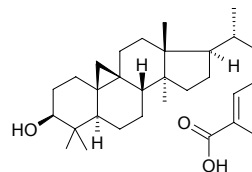
**13481 Mangiferin**

Chimonin; Euxanthogen; 2- β -D-Glucosyl-1,3,6,7-tetrahydroxyxanthone [4773-96-0] C₁₉H₁₈O₁₁ (422.35). mp 271~273°C. **Pharm:** Antihepatotoxic; anti-inflammatory (rat, tampon granuloma model and swollen foot model caused by carrageenan, orl or ip, 50mg/kg); tuberculostatic (*Mycobacterium tuberculosis*, MIC = 200 μ g/mL); antiviral (herpes simplex virus); choleric and antihepatotoxic (main effective component in Tibet Wormwood, ZANG YIN CHEN, used to treat hepatitis); CNS depressant (rat and mus, 50~200mg/kg ip); antioxidant (DPPH scavenger, for 40 μ mol/L DPPH radical, SC₅₀ = 5.9 μ mol/L)^[4378]. **Source:** AN SHI JIN SI TAO *Hypericum ancherii*, BEI JING SHI WEI *Pyrrosia davidii*, BIAN TAO *Mangifera persiciformis*, CHUAN XI ZHANG YA CAI *Swertia mussotii*, DI TAO HUA *Urena lobata*, GUANG SHI WEI *Pyrrosia calvata* (dried leaf: content = 11.4%)^[5508], LU SHAN SHI WEI *Pyrrosia sheareri* (dried leaf: mean content = 0.16%)^[5508], MANG GUO *Mangifera indica*, MANG GUO YE *Mangifera indica* (leaf: mean content of 3 origins = 1.76%)^[5508], MU MIAN HUA *Bombax malabaricum* [Syn. *Gossampinus malabarica*], NI GUANG SHI WEI

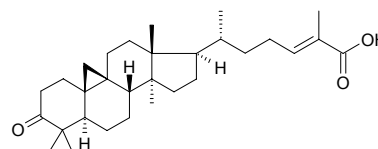
Pyrrosia pseudocalvata (dried leaf: content = 0.19%)^[5508], SHE GAN *Belamcanda chinensis* (dried rhizome), SHI WEI *Pyrrosia lingua* (dried leaf: content scope = 0.01%~0.34%)^[5501], mean content = 0.029%^[5508], SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem), YOU BING SHI WEI *Pyrrosia petiolosa* (dried leaf: content = 0.035%)^[5508], ZHI MU *Anemarrhena asphodeloides* (dried rhizome: content scope of 8 origins = 0.60%~2.38%, mean content = 1.48%)^[5508]. **Ref:** 4, 6, 550, 658, 660, 4378, 5485, 5501, 5508.

**13482 Mangiferolic acid**

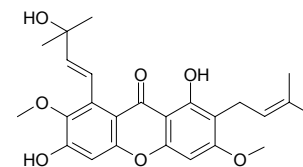
[4184-34-3] C₃₀H₄₈O₃ (456.72). mp 181~183°C. **Source:** DI FENG PI *Illicium difengpi*, MANG GUO SHU PI *Mangifera indica*. **Ref:** 6, 395.

**13483 Mangiferonic acid**

[13878-90-5] C₃₀H₄₆O₃ (454.70). mp 184~187°C. **Source:** DI FENG PI *Illicium difengpi*, MANG GUO SHU PI *Mangifera indica*. **Ref:** 6, 395.

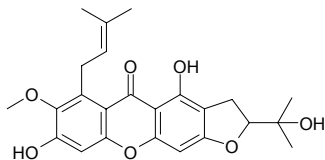
**13484 Mangostanin**

C₂₅H₂₈O₇ (440.50). Yellow solid, mp 215~217°C, [α]_D = -0.7° (*c* = 1.17, CHCl₃). **Pharm:** Cytotoxic (KB cancer cell lines, inactive; BC-1, inactive; NCI-H187, IC₅₀ = 8.04 μ g/mL Ellipticine, IC₅₀ = 0.39 μ g/mL)^[1619]. **Source:** DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.0021%dw)^[1619]. **Ref:** 1619, 1964.

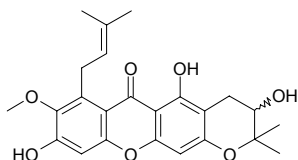


13485 Mangostanin A

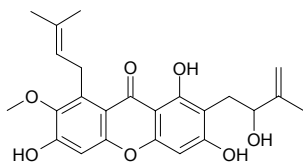
$C_{24}H_{26}O_7$ (426.47). **Pharm:** Antitubercular (*Mycobacterium tuberculosis*, MIC = 25 μ g/mL). **Source:** DAO NIAN ZI *Garcinia mangostana* (fruit). **Ref:** 4358.

**13486 Mangostanol**

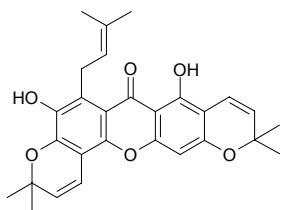
$C_{24}H_{26}O_7$ (426.47). **Pharm:** Antitubercular (*Mycobacterium tuberculosis*, MIC = 200 μ g/mL)^[4358]. **Source:** DAO NIAN ZI *Garcinia mangostana* (fruit, fruit hull). **Ref:** 3066, 4358.

**13487 Mangostenol**

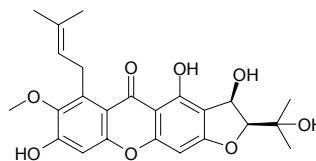
$C_{24}H_{26}O_7$ (426.47). **Pharm:** Cytotoxic (KB cancer cell lines, inactive; BC-1, inactive; NCI-H187, IC₅₀ = 1.15 μ g/mL Ellipticine, IC₅₀ = 0.39 μ g/mL)^[1619]; antitubercular (*Mycobacterium tuberculosis*, MIC = 100 μ g/mL)^[4358]. **Source:** DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.0030%dw)^[1619]. **Ref:** 1619, 4358.

**13488 Mangostenone A**

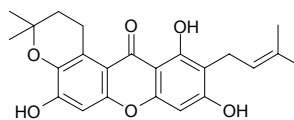
$C_{28}H_{28}O_6$ (460.53). **Pharm:** Antitubercular (*Mycobacterium tuberculosis*, MIC = 25 μ g/mL). **Source:** DAO NIAN ZI *Garcinia mangostana* (fruit). **Ref:** 4358.

**13489 Mangostenone C**

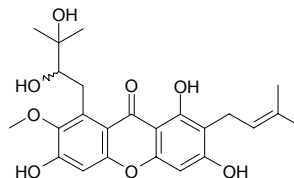
$C_{24}H_{26}O_8$ (442.47). Yellow solid, mp 126–127°C, $[\alpha]_D^{27} = -28.3^\circ$ ($c = 0.12$, MeOH). **Pharm:** Cytotoxic (KB cancer cell lines, IC₅₀ = 2.8 μ g/mL, control Ellipticine, IC₅₀ = 1.33 μ g/mL; BC-1, IC₅₀ = 3.53 μ g/mL, Ellipticine, IC₅₀ = 1.46 μ g/mL; NCI-H187, IC₅₀ = 3.72 μ g/mL, Ellipticine, IC₅₀ = 0.39 μ g/mL). **Source:** DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.0014%dw). **Ref:** 1619.

**13490 Mangostenone D**

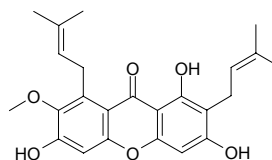
$C_{23}H_{24}O_6$ (396.44). Yellow solid, mp 208–210°C. **Pharm:** Cytotoxic (KB cancer cell lines, IC₅₀ = 9.79 μ g/mL, control Ellipticine, IC₅₀ = 1.33 μ g/mL; BC-1, IC₅₀ = 3.88 μ g/mL, Ellipticine, IC₅₀ = 1.46 μ g/mL; NCI-H187, IC₅₀ = 9.07 μ g/mL, Ellipticine, IC₅₀ = 0.39 μ g/mL). **Source:** DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.002%dw). **Ref:** 1619.

**13491 Mangostenone E**

$C_{24}H_{28}O_8$ (444.49). Yellow amorphous solid, $[\alpha]_D^{28} = 0.0^\circ$ ($c = 0.13$, MeOH). **Pharm:** Cytotoxic (KB cancer cell lines, IC₅₀ = 19.96 μ g/mL, control Ellipticine, IC₅₀ = 1.33 μ g/mL; BC-1, IC₅₀ = 17.53 μ g/mL, Ellipticine, IC₅₀ = 1.46 μ g/mL; NCI-H187, inactive). **Source:** DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.003%dw). **Ref:** 1619.

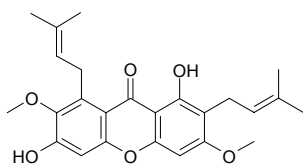
**13492 Mangostin**

α -Mangostin [6147-11-1] $C_{24}H_{26}O_6$ (410.47). **Pharm:** Anti-inflammatory; antimicrobial; antiulcerative (*in vitro*); antioxidant (DPPH scavenger, 10 μ mol/L, ScRt = 18%, control BHT, 10 μ mol/L, ScRt = 43%)^[5319]; antioxidant inactive (DPPH scavenger, 50 μ mol/L, ScRt = 5.2%; control BHT, 50 μ mol/L, ScRt = 51.7%, IC₅₀ = 28.9 μ mol/L)^[4423]; antibacterial (*Staphylococcus aureus* ATCC 25923, MIC = 4 μ g/mL, control Vancomycin, MIC = 2 μ g/mL; *Staphylococcus aureus* MRSA SK1, MIC = 4 μ g/mL, Vancomycin, MIC = 2 μ g/mL)^[5319]; antitubercular (*Mycobacterium tuberculosis*, MIC = 6.25 μ g/mL)^[4358]; cytotoxic (*in vitro*, HL-60, IC₅₀ = 6.8 μ mol/L, 10 μ mol/L, InRt = 100%, through the induction of apoptosis)^[4715]; cytotoxic (KB cancer cell lines, IC₅₀ = 2.08 μ g/mL, control Ellipticine, IC₅₀ = 1.33 μ g/mL; BC-1, IC₅₀ = 0.92 μ g/mL, Ellipticine, IC₅₀ = 1.46 μ g/mL; NCI-H187, IC₅₀ = 2.87 μ g/mL Ellipticine, IC₅₀ = 0.39 μ g/mL)^[1619]. **Source:** DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 2.32%dw)^[1619], DAO NIAN ZI *Garcinia mangostana* (fruit hull)^[3066], DAO NIAN ZI *Garcinia mangostana* (pericarp)^[4715], HUANG NIU MU *Cratoxylum cochinchinense* (root), TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit), TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). **Ref:** 658, 1619, 3066, 4358, 4422, 4423, 4715, 5319.

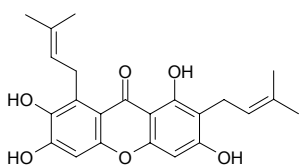


13493 β -Mangostin

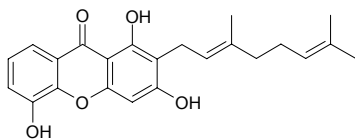
$C_{23}H_{28}O_6$ (424.50). **Pharm:** Cytotoxic (KB cancer cell lines, $IC_{50} = 2.5\mu\text{g/mL}$, control Ellipticine, $IC_{50} = 1.33\mu\text{g/mL}$; BC-1, $IC_{50} = 2.04\mu\text{g/mL}$, Ellipticine, $IC_{50} = 1.46\mu\text{g/mL}$; NCI-H187, $IC_{50} = 2.88\mu\text{g/mL}$ Ellipticine, $IC_{50} = 0.39\mu\text{g/mL}$)^[1619]; cytotoxic (*in vitro*, HL-60, $IC_{50} = 7.6\mu\text{mol/L}$)^[4715]; antitubercular (*Mycobacterium tuberculosis*, MIC = $6.25\mu\text{g/mL}$)^[4358]; antioxidant inactive (DPPH scavenger, $10\mu\text{mol/L}$, ScRt = 2%; control BHT, $10\mu\text{mol/L}$, ScRt = 43%, $IC_{50} = 19.00\mu\text{mol/L}$)^[4422]; antioxidant inactive (DPPH scavenger, $50\mu\text{mol/L}$, ScRt = 1.7%; control BHT, $50\mu\text{mol/L}$, ScRt = 51.7%, $IC_{50} = 28.9\mu\text{mol/L}$)^[4423]. **Source:** DAO NIAN ZI *Garcinia mangostana* (fruit hull), DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.0017%dw)^[1619], HUANG NIU MU *Cratoxylum cochinchinense* (root), TIAN SHAN ZHU ZI *Garcinia dulcis* (flower). **Ref:** 1619, 3066, 4358, 4422, 4423, 4715.

**13494 γ -Mangostin**

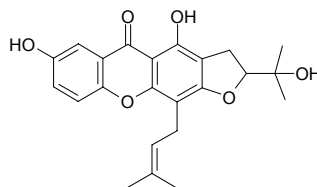
$C_{23}H_{24}O_6$ (396.44). **Pharm:** Cytotoxic (KB cancer cell lines, $IC_{50} = 4.69\mu\text{g/mL}$, control Ellipticine, $IC_{50} = 1.33\mu\text{g/mL}$; BC-1, $IC_{50} = 1.6\mu\text{g/mL}$, Ellipticine, $IC_{50} = 1.46\mu\text{g/mL}$; NCI-H187, $IC_{50} = 2.55\mu\text{g/mL}$ Ellipticine, $IC_{50} = 0.39\mu\text{g/mL}$)^[1619]; cytotoxic (*in vitro*, HL-60, $IC_{50} = 6.1\mu\text{mol/L}$)^[4715]; antitubercular (*Mycobacterium tuberculosis*, MIC = $25\mu\text{g/mL}$)^[4358]. **Source:** DAO NIAN ZI *Garcinia mangostana* (fruit, fruit hull), DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.30%dw)^[1619]. **Ref:** 1619, 3066, 4358, 4715.

**13495 Mangostinone**

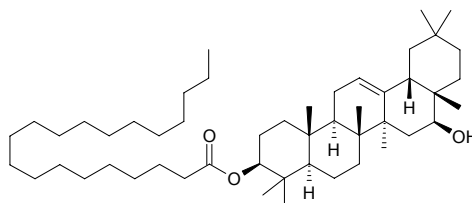
$C_{23}H_{24}O_5$ (380.44). **Pharm:** Cytotoxic (KB cancer cell lines, $IC_{50} = 12.79\mu\text{g/mL}$, control Ellipticine, $IC_{50} = 1.33\mu\text{g/mL}$; BC-1, $IC_{50} = 7.26\mu\text{g/mL}$, Ellipticine, $IC_{50} = 1.46\mu\text{g/mL}$; NCI-H187, $IC_{50} = 17.88\mu\text{g/mL}$ Ellipticine, $IC_{50} = 0.39\mu\text{g/mL}$)^[1619]; cytotoxic (*in vitro*, HL-60, $IC_{50} = 19.0\mu\text{mol/L}$)^[4715]; antitubercular (*Mycobacterium tuberculosis*, MIC = $200\mu\text{g/mL}$)^[4358]. **Source:** DAO NIAN ZI *Garcinia mangostana* (young fruit: yield = 0.0042%dw)^[1619], YUN NAN SHAN ZHU ZI *Garcinia cowa* (latex). **Ref:** 1619, 4358, 4715, 5281.

**13496 Mangoxanthone**

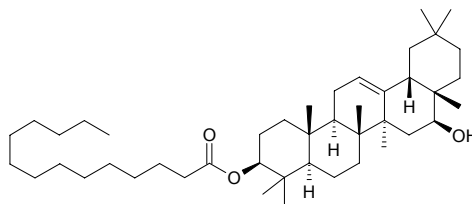
$C_{23}H_{24}O_6$ (396.44). Yellow needles, mp 195–197°C (acetone–hexane), $[\alpha]_D = -40.0^\circ$ ($c = 0.62$, acetone). **Source:** DAO NIAN ZI *Garcinia mangostana* (heartwood). **Ref:** 5311.

**13497 Maniladiol 3-O-eicosanoate**

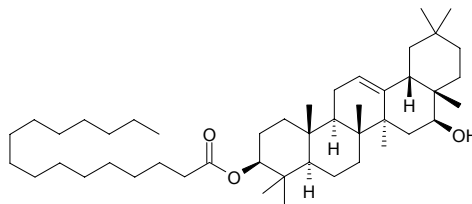
$C_{50}H_{88}O_3$ (737.26). mp 93–94°C, $[\alpha]_D = +39.2^\circ$ ($c = 0.1$, CHCl_3). **Source:** SAI ER WEI YA SHI CAO *Achillea alexandri-regis* (dried aerial parts). **Ref:** 2545.

**13498 Maniladiol 3-O-myristate**

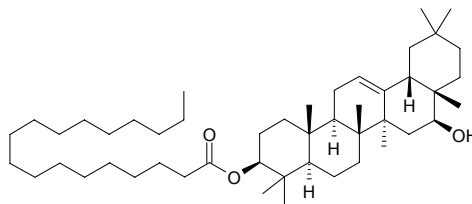
$C_{44}H_{76}O_3$ (653.09). **Source:** SAI ER WEI YA SHI CAO *Achillea alexandri-regis* (dried aerial parts). **Ref:** 2545.

**13499 Maniladiol 3-O-palmitate**

$C_{46}H_{80}O_3$ (681.15). Colorless powder. **Source:** SAI ER WEI YA SHI CAO *Achillea alexandri-regis* (dried aerial parts). **Ref:** 2545.

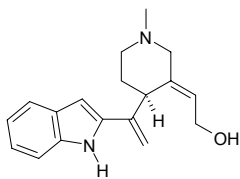
**13500 Maniladiol 3-O-stearate**

$C_{48}H_{84}O_3$ (709.20). **Source:** SAI ER WEI YA SHI CAO *Achillea alexandri-regis* (dried aerial parts). **Ref:** 2545.

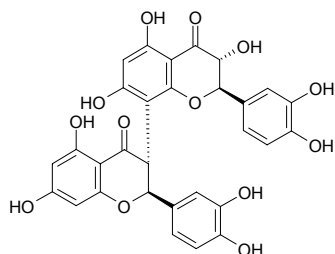


13501 (+)-Manilamine

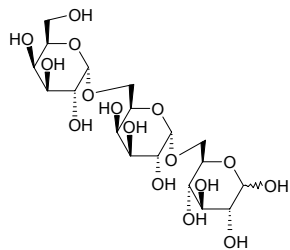
2-[4-[1-(1*H*-Indol-2-yl)-vinyl]-1-methyl-piperidin-3-ylidene} ethanol
 $C_{18}H_{22}N_2O$ (282.39). Flesh~colored (beige) amorphous solid, mp 88~92°C,
 $[\alpha]_D = +15.5^\circ$ ($c = 0.50$, MeOH). Source: XIANG PI MU *Alstonia scholaris*
 (leaf). Ref: 5283.

**13502 Manniflavanone**

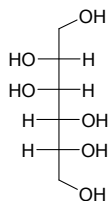
[73428-17-8] $C_{30}H_{22}O_{13}$ (590.50). Pharm: Aldose reductase inhibitor (eye lens); used in treatment of diseases due to maladjustment of blood capillary permeability. Source: MAN TENG HUANG *Garcinia mannii*. Ref: 658.

**13503 Mannitriose**

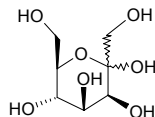
[13382-86-0] $C_{18}H_{32}O_{16}$ (504.45). Source: XIAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*]. Ref: 1241.

**13504 D-Mannitol**

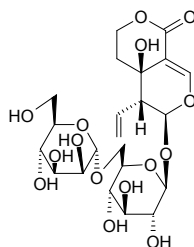
[69-65-8] $C_6H_{14}O_6$ (182.17). mp (–) 166°C. Pharm: Diuretic (administered by injection to supplement other diuretics in the treatment of edema, to treat some kidney disorders and to relieve intracranial pressure in brain injuries). Source: DONG CHONG XIA CAO *Cordyceps sinensis* (dried fungal stroma growing on larva of a caterpillar: content scope = 0.37%~14.45%^[5501]), FA GUO CHENG LIU *Tamarix gallica*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*], HU HUANG LIAN *Picrorhiza kurrooa*, HUA BAI LA SHU *Fraxinus ornus*, KUN BU *Laminaria japonica* (dried thallus: content = 7.21%^[5501]), NIU SHE TOU *Sonchus arvensis*, NV ZHEN ZI *Ligustrum lucidum*, PU HUANG *Typha angustata*, SAN TAI HONG HUA *Clerodendron serratum*, SHUI ZHI *Gardenia jasminoides* var. *grandiflora*, TIAN NAN XING *Arisaema consanguineum*, XI ZANG HU HUANG LIAN *Picrorhiza scrophulariiflora*, YA ZHI CAO *Commelina communis*, YI ZHI XIANG *Veronica spuria*, ZHAN LONG JIAN *Veronicastrum sibiricum*, ZHI Phasianus *colchicus*. Ref: 2, 373, 502, 658, 660, 5501.

**13505 D-Mannoheptulose**

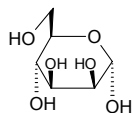
[3615-44-9] $C_7H_{14}O_7$ (210.19). mp 152°C. Source: YING SU KE *Papaver somniferum*. Ref: 6, 1521.

**13506 6'-O-α-D-Mannopyranosylswertiamarin**

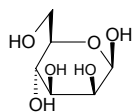
$C_{22}H_{32}O_{15}$ (536.49). Amorphous powder, $[\alpha]_D^{25} = -28.1^\circ$ ($c = 0.09$, MeOH). Source: RI BEN ZHANG YA CAI *Swertia japonica*. Ref: 2573.

**13507 Mannose**

$C_6H_{12}O_6$ (180.16). Pharm: Reagent used in biochemistry research. Source: CHUAN DANG SHEN *Codonopsis tangshen*, DANG SHEN *Codonopsis pilosula*, GUAN HUA DANG SHEN *Codonopsis tubulosa*, HUANG JING *Polygonatum sibiricum*, HUI MAO DANG SHEN *Codonopsis canescens*, LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], QIU HUA DANG SHEN *Codonopsis subglobosa*, REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2, 658, 660.

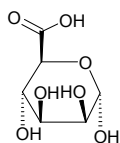
**13508 Mannose-b**

$C_6H_{12}O_6$ (180.16). Source: LU HUI *Aloe vera* [Syn. *Aloe barbadensis*], REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 2.

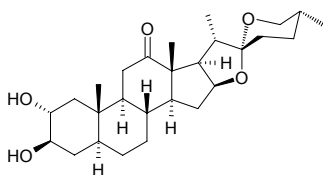


13509 D-Mannuronic acid

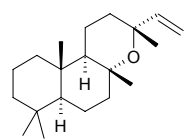
[6814-36-4] $C_6H_{10}O_7$ (194.14). mp (α) 120~130°C, (β) 165~167°C. Source: LUO LE ZI *Ocimum basilicum*. Ref: 6.

**13510 Manogenin**

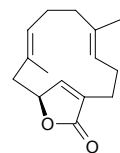
[564-43-2] $C_{27}H_{42}O_5$ (446.63). Crystals (Me_2CO), mp 245~247°C, $[\alpha]_D = -5^\circ$ ($CHCl_3$). Source: DONG YI HAO JIAN MA *Agave east-one*, DUAN YE LONG SHE LAN *Agave angustifolia*, FAN MA *Agave americana*, WU CI FAN MA *Agave americana* var. *marginata* [Syn. *Agave americana* var. *variegata*], XIA YE LONG SHE LAN *Agave cantala*. Ref: 10.

**13511 Manoyloxide**

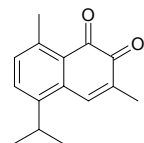
$C_{20}H_{34}O$ (290.49). $[\alpha]_D^{26} = +22^\circ$ ($c = 1.0$, $CHCl_3$). Source: XIONG RUI ZHUANG SHU WEI CAO *Salvia staminea*. Ref: 5400.

**13512 Manshuriolide**

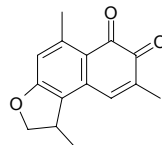
$C_{15}H_{22}O_2$ (232.33). Source: GUAN MU TONG *Aristolochia manshuriensis*, MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem; yield = 0.0049%dw). Ref: 1521, 3026.

**13513 Mansonone C**

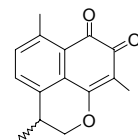
[5574-34-5] $C_{15}H_{16}O_2$ (228.29). Crystals (hexane), mp 134~138°C. Pharm: Antifungal; plant antitoxin from seeds and seedling of elm. Source: SHAN YU *Ulmus glabra*, LANG YU PI *Ulmus parvifolia*, YANG YE XIAO JIN *Thespesia populnea* [Syn. *Hibiscus populneus*]. Ref: 6, 658, 660, 2069.

**13514 Mansonone D**

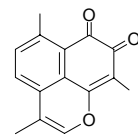
[5090-86-8] $C_{15}H_{14}O_3$ (242.28). mp 73~75°C. Pharm: Antineoplastic (hmn thymocyte MCF7); inhibits cytochrome C and P450; antioxidant, inhibits lipid peroxidation. Source: YANG YE XIAO JIN *Thespesia populnea* [Syn. *Hibiscus populneus*]. Ref: 2069, 2074.

**13515 Mansonone E**

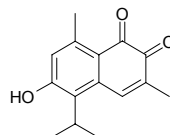
[5090-87-9] $C_{15}H_{14}O_3$ (242.28). mp 148~149°C. Source: LANG YU PI *Ulmus parvifolia*, SHAN ZHI MA *Helicteres angustifolia*, TAI WAN FU RONG *Hibiscus taiwanensis*, YANG YE XIAO JIN *Thespesia populnea* [Syn. *Hibiscus populneus*]. Ref: 660, 2069, 2529.

**13516 Mansonone F**

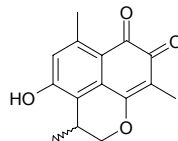
[5090-88-0] $C_{15}H_{12}O_3$ (240.26). mp 214~215°C. Source: YANG YE XIAO JIN *Thespesia populnea* [Syn. *Hibiscus populneus*]. Ref: 2069.

**13517 Mansonone G**

[7715-96-0] $C_{15}H_{16}O_3$ (244.29). mp 210~213°C. Source: LANG YU PI *Ulmus parvifolia*. Ref: 6, 660.

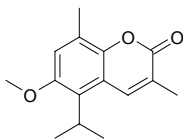
**13518 Mansonone H**

$C_{15}H_{14}O_4$ (258.28). Pharm: Anti-HIV (H9 lymphocytic cells, inhibits replication, IC_{50} (concentration that inhibits uninfected H9 cell growth by 50%) > 25 $\mu g/mL$, EC_{50} (concentration that inhibits viral replication by 50%) = 16.58 $\mu g/mL$, $TI(IC_{50}/EC_{50}) = 1.50$, control AZT $IC_{50} = 500 \mu g/mL$, $EC_{50} = 0.0007 \mu g/mL$, $TI = 740000$); cytotoxic (hmn, A549 $EC_{50} = 10.5 \mu g/mL$, MCF7 $EC_{50} = 10.7 \mu g/mL$). Source: TAI WAN FU RONG *Hibiscus taiwanensis*. Ref: 2529.

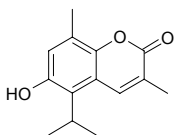


13519 Mansonrin A

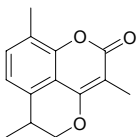
3,8-Dimethyl-5-isopropyl-6-methoxycoumarin C₁₅H₁₈O₃ (246.31). Pale yellow crystals, mp 135~137°C. Source: MAN SUO NI YA XIN CAI *Mansonia gagei*. Ref: 1969.

**13520 Mansonrin B**

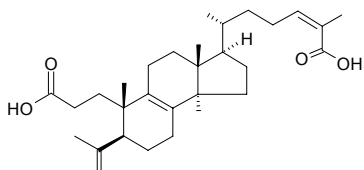
3,8-Dimethyl-5-isopropyl-6-hydroxycoumarin C₁₄H₁₆O₃ (232.28). Pale yellow crystals, mp 202~204°C. Source: MAN SUO NI YA XIN CAI *Mansonia gagei*. Ref: 1969.

**13521 Mansonrin C**

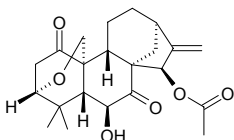
2,3-Dihydro-3,6,9-trimethyl naphtho[1,8-bc]pyran-7-oxa-8-one C₁₄H₁₄O₃ (230.27). White crystals, mp 150~151°C. Source: MAN SUO NI YA XIN CAI *Mansonia gagei*. Ref: 1969.

**13522 Manwuweizic acid**

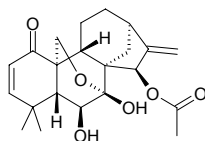
[116963-87-2] C₃₀H₄₆O₄ (470.70). Needles (MeOH), crystals (CHCl₃-petroleum ether), mp 182~184°C, mp 191~193°C, [α]_D¹⁷ = +62.7° (c = 0.08, CHCl₃), [α]_D¹⁵ = +54.3° (c = 0.291, CHCl₃). Pharm: Cytotoxic. Source: YI XING NAN WU WEI ZI *Kadsura heteroclita* [Syn. *Uvaria heteroclita*], ZHONG JIAN WU WEI ZI *Schisandra propinqua* var. *intermedia*. Ref: 1242, 1521.

**13523 Maoecrystal A**

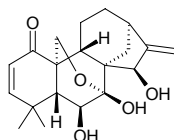
C₂₂H₂₈O₆ (388.46). mp 168~170°C, [α]_D¹⁵ = -68° (c = 1.0, C₅H₅N). Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*, SHU HUA MAO E XIANG CHA CAI *Isodon eriocalyx* var. *laxiflora* (leaf: yield = 0.046%dw). Ref: 4067, 4668.

**13524 Maoecrystal B**

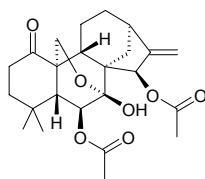
Rabdosianone II C₂₂H₂₈O₆ (388.46). mp 196~199°C, [α]_D¹⁵ = -94° (c = 1.0, C₅H₅N). Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13525 Maoecrystal C**

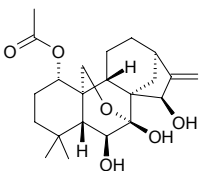
C₂₀H₂₆O₅ (346.43). mp 204~206°C, [α]_D¹⁵ = -95.5° (c = 1.0, C₅H₅N). Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13526 Maoecrystal D**

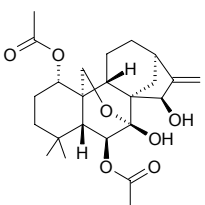
Rabdolongin B C₂₄H₃₂O₇ (432.52). mp 178~180°C, [α]_D¹⁵ = +13° (c = 1.0, C₅H₅N). Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 660, 1521, 4067.

**13527 Maoecrystal E**

C₂₂H₃₂O₆ (392.50). mp 236~238°C. Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

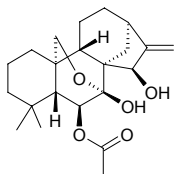
**13528 Maoecrystal F**

C₂₄H₃₄O₇ (434.53). mp 218~219°C. Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

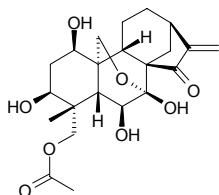


13529 Maoecrystal G

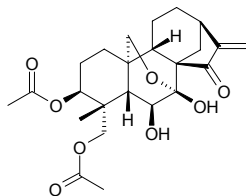
$C_{22}H_{32}O_5$ (376.50). mp 205~207°C. Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*, SHAN DI XIANG CHA CAI *Isodon oresbia* (aerial parts). Ref: 3808, 4067.

**13530 Maoecrystal I**

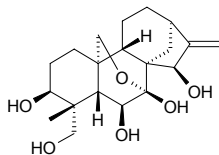
$C_{22}H_{30}O_8$ (422.48). mp 205~206°C. Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13531 Maoecrystal J**

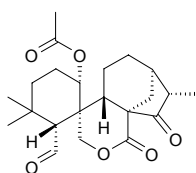
$C_{24}H_{32}O_8$ (448.52). mp 249~250°C, $[\alpha]_D = -49.2^\circ$ ($c = 1.0$, MeOH). Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13532 Maoecrystal K**

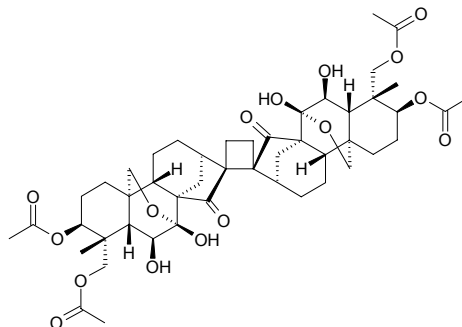
$C_{20}H_{30}O_6$ (366.46). mp 191.5~193°C, $[\alpha]_D^{26.5} = -1.3^\circ$ ($c = 1.0$, MeOH). Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13533 Maoecrystal L**

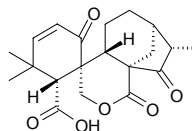
$C_{22}H_{30}O_6$ (390.48). mp 217°C. Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13534 Maoecrystal M**

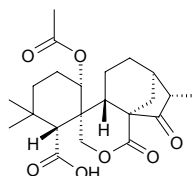
[156250-60-1] $C_{48}H_{64}O_{16}$ (897.04). mp > 300°C, $[\alpha]_D^{22} = +44^\circ$ ($c = 0.2$, C_5H_5N). Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13535 Maoecrystal N**

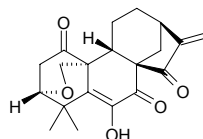
$C_{20}H_{24}O_6$ (360.41). mp 290~292°C, $[\alpha]_D^{25} = +167.83^\circ$ ($c = 0.36$, C_5H_5N). Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13536 Maoecrystal O**

$C_{22}H_{30}O_7$ (406.48). mp 268.5~270°C, $[\alpha]_D^{25} = -3.66^\circ$ ($c = 0.41$, $CHCl_3$). Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13537 Maoecrystal P**

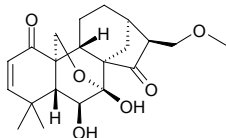
$C_{20}H_{22}O_5$ (342.4). mp 234~236°C, $[\alpha]_D^{25} = -141.7^\circ$ ($c = 0.30$, $CHCl_3$). Pharm: Cytotoxic (*in vitro*, K562, $IC_{50} = 0.132\mu g/mL$; A549, $IC_{50} = 69.5\mu g/mL$; T24, $IC_{50} = 0.051\mu g/mL$; control *cis*-Platin: K562, $IC_{50} = 2.02\mu g/mL$; A549, $IC_{50} = 11.94\mu g/mL$; T24, $IC_{50} = 1.16\mu g/mL$)^[4668]. Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*, SHU HUA MAO E XIANG CHA CAI *Isodon eriocalyx* var. *laxiflora* (leaf: yield = 0.00040%dw). Ref: 4067, 4668.



13538 Maocrystal Q

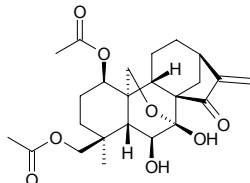
$C_{21}H_{28}O_6$ (376.45). mp 180.0~182.5°C, $[\alpha]_D^{25} = -117.5^\circ$ ($c = 0.283$, $CHCl_3$).

Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13539 Maocrystal R**

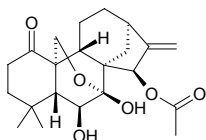
$C_{24}H_{32}O_8$ (448.52). mp 97.5~100°C, $[\alpha]_D^{25} = -22.3^\circ$ ($c = 0.382$, $CHCl_3$).

Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13540 Maocrystal S**

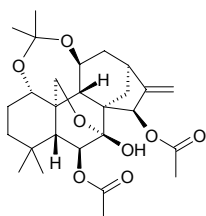
$C_{22}H_{30}O_6$ (390.48). mp 170.5~172.0°C, $[\alpha]_D^{25} = +43.5^\circ$ ($c = 0.506$, $CHCl_3$).

Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13541 Maocrystal T**

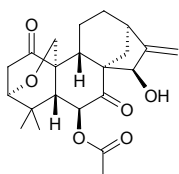
$C_{27}H_{38}O_8$ (490.60). mp 237.5~239°C, $[\alpha]_D^{25} = -129.3^\circ$ ($c = 0.379$, $CHCl_3$).

Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13542 Maocrystal U**

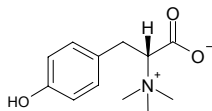
$C_{22}H_{28}O_6$ (388.46). mp 250~252.5°C, $[\alpha]_D^{18} = -112.9^\circ$ ($c = 0.62$, $CHCl_3$).

Source: MAO E XIANG CHA CAI *Rabdosia eriocalyx*. Ref: 4067.

**13543 Maokonine**

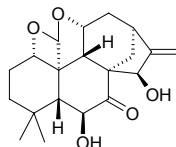
$C_{12}H_{17}NO_3$ (232.27). Colorless prismatic crystals (methanol), mp 257~259°C,

$[\alpha]_D = +68.2^\circ$ ($c = 0.44$, water). Pharm: Increases blood pressure (anesthetic rat). Source: MA HUANG *Ephedra sinica*. Ref: 661.

**13544 Maoyecrystal I**

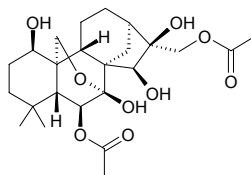
$C_{20}H_{26}O_5$ (346.43). White amorphous powder, $[\alpha]_D^{25.2} = -32.47^\circ$ ($c = 0.15$,

MeOH). Pharm: Cytotoxic (K562 cells, $IC_{50} = 7.30\mu g/mL$, positive control *cis*-Platinum, $IC_{50} = 1.14\mu g/mL$). Source: MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. Ref: 4998.

**13545 Maoyerabdosin**

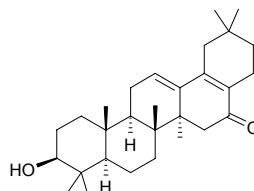
$C_{24}H_{36}O_9$ (468.55). mp 243~245°C, $[\alpha]_D^{22} = -30^\circ$ ($c = 0.1$, MeOH). Source:

MAO YE XIANG CHA CAI *Isodon japonica* [Syn. *Rabdosia japonica*]. Ref: 4067.

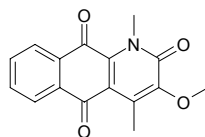
**13546 Maragenin II**

[71545-20-5] $C_{29}H_{44}O_2$ (424.67). Source: SHAN CHA *Camellia japonica*.

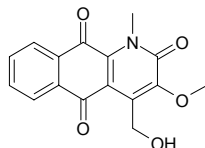
Ref: 1243.

**13547 Marcanine B**

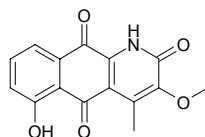
$C_{16}H_{13}NO_4$ (283.29). Source: *Goniothalamus* sp. Ref: 2447.

**13548 Marcanine C**

$C_{16}H_{13}NO_5$ (299.29). Source: *Goniothalamus* sp. Ref: 2447.

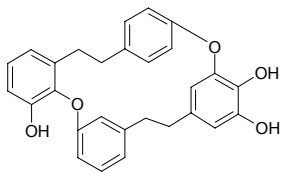
**13549 Marcanine D**

$C_{15}H_{11}NO_5$ (285.26). Source: *Goniothalamus* sp. Ref: 2447.

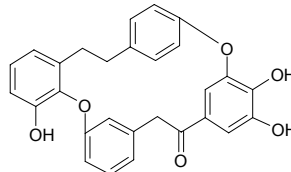


13550 Marchantin A

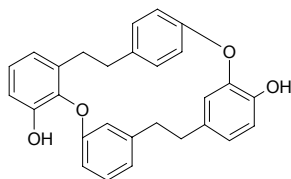
[88418-46-6] C₂₈H₂₄O₅ (440.50). [Source](#): DI SUO LUO *Marchantia polymorpha*. [Ref](#): 1244.

**13555 Marchantin G**

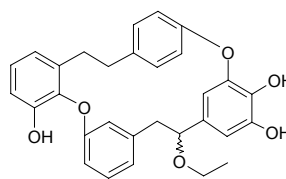
[98093-89-1] C₂₈H₂₂O₆ (454.48). [Source](#): DI SUO LUO *Marchantia polymorpha*. [Ref](#): 1244.

**13551 Marchantin B**

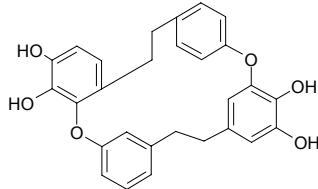
[88418-47-7] C₂₈H₂₄O₄ (424.50). [Source](#): DI SUO LUO *Marchantia polymorpha*. [Ref](#): 1244.

**13556 Marchantin J**

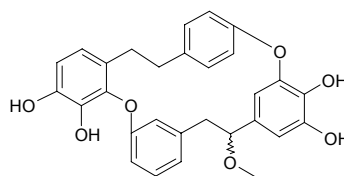
[107110-23-6] C₃₀H₂₈O₆ (484.55). [Source](#): DI SUO LUO *Marchantia polymorpha*. [Ref](#): 1244.

**13552 Marchantin C**

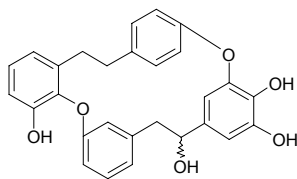
[88418-48-8] C₂₈H₂₄O₆ (456.50). [Source](#): DI SUO LUO *Marchantia polymorpha*. [Ref](#): 1244.

**13557 Marchantin K**

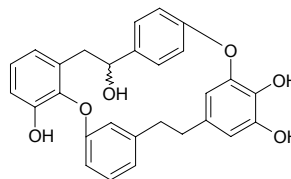
[107110-24-7] C₂₉H₂₆O₇ (486.53). [Source](#): DI SUO LUO *Marchantia polymorpha*. [Ref](#): 1244.

**13553 Marchantin D**

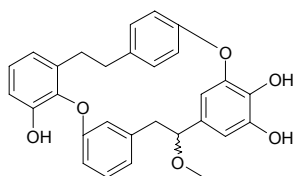
[98093-92-6] C₂₈H₂₄O₆ (456.50). [Source](#): DI SUO LUO *Marchantia polymorpha*. [Ref](#): 1244.

**13558 Marchantin L**

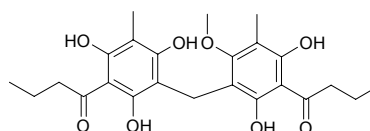
[107110-25-8] C₂₈H₂₄O₆ (456.50). [Source](#): DI SUO LUO *Marchantia polymorpha*. [Ref](#): 1244.

**13554 Marchantin E**

[98093-91-5] C₂₉H₂₆O₆ (470.53). [Source](#): DI SUO LUO *Marchantia polymorpha*. [Ref](#): 1244.

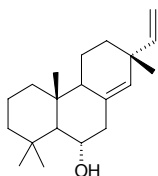
**13559 Margaspidin**

Margaspidin BB [1867-82-9] C₂₄H₃₀O₈ (446.50). Yellowish acicular crystals (ethanol), mp 189~191°C. [Pharm](#): Anthelmintic; anti-inflammatory (rat, tampon granuloma model, 50mg/kg orl); LD₅₀ (mus iv) = 11.8mg/kg. [Source](#): BIAN BAO LIN MAO JUE *Dryopteris marginalis*, BIAN YUAN LIN MAO JUE *Dryopteris marginata*, RI BEN LIN MAO JUE *Dryopteris sacrosancta*, TAI PING YANG LIN MAO JUE *Dryopteris pacifica*. [Ref](#): 661.

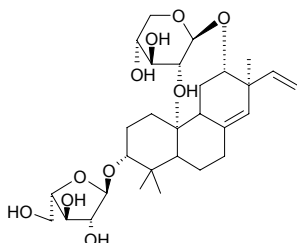


13560 Marginatol

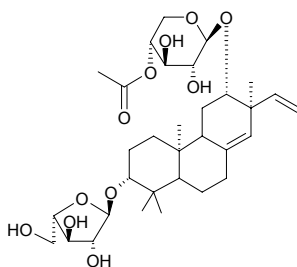
8(14),15-Isopimaradi-ene-6 α -ol C₂₀H₃₂O (288.48). Colorless massa crystals mp 77~78°C. Source: KU SHAN NAI *Kaempferia marginata*. Ref: 861.

**13561 Marginoside A**

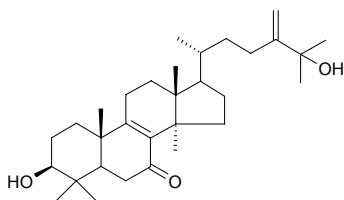
C₃₀H₄₈O₁₀ (568.71). Source: BIAN YUAN LIN GAI JUE *Microlepidia marginata*. Ref: 1245.

**13562 Marginoside B**

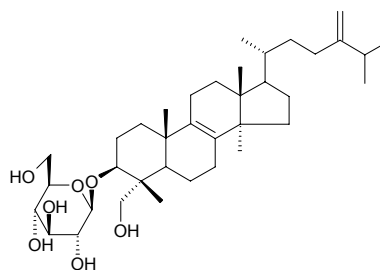
C₃₂H₅₀O₁₁ (610.75). Source: BIAN YUAN LIN GAI JUE *Microlepidia marginata*. Ref: 1245.

**13563 Marianine**

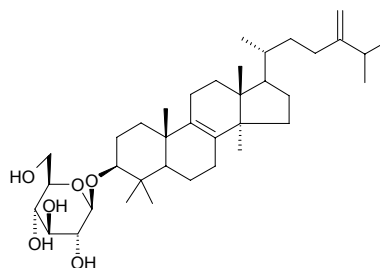
C₃₁H₅₀O₃ (470.74). Colorless crystals mp 160~161°C, $[\alpha]_D^{20} = 73^\circ$ ($c = 1.0$, CHCl₃). Pharm: Chymotrypsin inhibitor (*in vitro*, IC₅₀ = (9.4±0.02)μmol/L, control Chymostatin, IC₅₀ = (7.01±0.1)μmol/L). Source: SHUI FEI JI *Silybum marianum* (whole herb: yield = 0.0025%). Ref: 53.

**13564 Marianoside A**

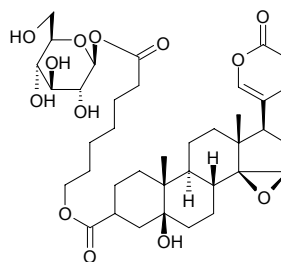
C₃₇H₆₂O₇ (618.90). White amorphous powder, mp 271~273°C, $[\alpha]_D^{25} = -28^\circ$ ($c = 1.0$, MeOH). Pharm: Chymotrypsin inhibitor (*in vitro*, IC₅₀ = (22.6±0.1)μmol/L, control Chymostatin, IC₅₀ = (7.01±0.1)μmol/L). Source: SHUI FEI JI *Silybum marianum* (whole herb: yield = 0.0029%). Ref: 53.

**13565 Marianoside B**

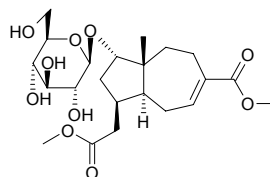
C₃₇H₆₂O₆ (602.90). Amorphous solid, mp 240~242°C, $[\alpha]_D^{25} = -45.5^\circ$ ($c = 0.1$, MeOH). Pharm: Chymotrypsin inhibitor (*in vitro*, IC₅₀ = (28.2±0.8)μmol/L, control Chymostatin, IC₅₀ = (7.01±0.1)μmol/L). Source: SHUI FEI JI *Silybum marianum* (whole herb: yield = 0.0037%). Ref: 53.

**13566 Marinobufagin 3-suberoyl-L-glutamine ester**

[75093-30-1] C₃₈H₅₄O₁₃ (718.85). mp 166~170°C. Source: CHAN SU *Bufo gargarizans*; *Bufo melanostictus*. Ref: 2.

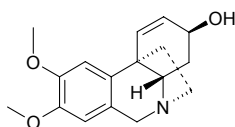
**13567 Marioside**

[146713-93-1] C₂₂H₃₄O₁₀ (458.51). Powder, $[\alpha]_D^{27} = +25.6^\circ$ ($c = 1.1$, CH₃OH). Source: HAI ZHOU GU SUI BU *Davallia mariesii*. Ref: 1246.

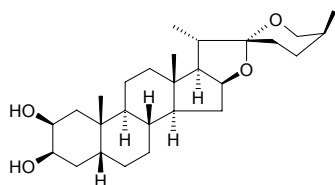


13568 Maritidine

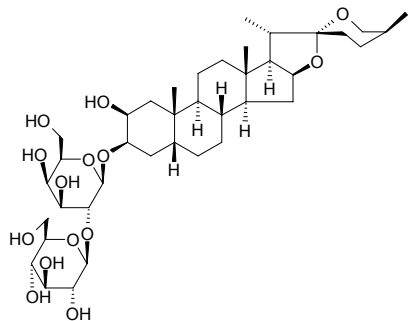
$C_{17}H_{21}NO_3$ (287.36). Source: *Cyrtanthus falcatus*. Ref: 4952.

**13569 Markogenin**

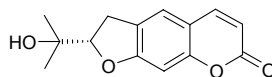
Texogenin; Neosamogenin [562-35-6] $C_{27}H_{44}O_4$ (432.65). Crystals (MeOH), mp 255–257°C, mp 171–172°C, $[\alpha]_D^{25} = -70.3^\circ$ (CHCl₃). Source: ZHI MU *Anemarrhena asphodeloides*. Ref: 2, 1521.

**13570 Markogenin3-O-β-D-glucopyranosyl-(1→2)-β-D-galactopyranoside**

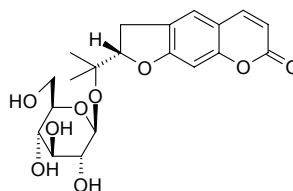
$C_{39}H_{64}O_{14}$ (756.94). Source: ZHI MU *Anemarrhena asphodeloides*. Ref: 2.

**13571 Marmesin**

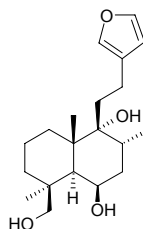
$C_{14}H_{14}O_4$ (246.27). Lamellar crystals (acetone, ethanol, benzene or ethyl acetate), mp 189.5°C, $[\alpha]_D = +26.8^\circ$ (chloroform); yellow amorphous powder, $[\alpha]_D = -15.8^\circ$ ($c = 0.1$, MeOH)^[3797]. Pharm: Antispasmodic (*in vitro*, rat, intestinal spasm caused by BaCl₂); antihypertensive (cat); antileishmanial (*Leishmania major* promastigote, 10 μmol/L, survival = (97.7±1.7)%, 1 μmol/L, survival = (96.5±1.1)%, control Amphotericin B, 10 μmol/L, survival = (0.2±0.04)%, 1 μmol/L, survival = (71.9±4.4)%)^[3797]; antifungal inactive (silica gel TLC, *Cladosporium cucumerinum*, control Nystatin, MIA = 0.2 μg)^[3797]; AChE inhibitor (*in vitro*, IC₅₀ = 67 μmol/L)^[3058]; aromatase inhibitor inactive (*in vitro*, IC₅₀ > 40 μmol/L; control Aminoglutethimide, IC₅₀ = 6.4 μmol/L)^[3090]. Source: A NUO TI HUA JIAO *Zanthoxylum arnotianum*, BAI YUN HUA *Heraclium rapula*, BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], DU HUI MAO DOU *Tephrosia toxicaria* (stem: yield = 0.00023% dw)^[4718], GOU SHU *Broussonetia papyrifera*^[3090], HOU GUO DANG GUI *Angelica pachycarpa*, JU MAO LEI A WEI *Ferulago capillaries* (root), MU⁽⁴⁾ JU *Aegle marmelos*, SHI FANG FENG *Peucedanum terebinthaceum*, BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*], QIANG HUO *Notopterygium incisum*, CHAO XIAN DANG GUI *Angelica gigas* (underground part)^[3058], YUN NAN QIANG HUO *Pleurospermum rivulorum*, YUN QIAN HU *Peucedanum rubricaula*, *Thamnosma rhodesica* (root)^[3797]. Ref: 2, 177, 551, 661, 1521, 3058, 3090, 3797, 3938, 4718.

**13572 Marmesinin**

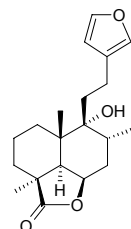
[495-30-7] $C_{20}H_{24}O_9$ (408.41). Amorphous powder, mp 259–260°C, $[\alpha]_D^{24} = -44^\circ$; mp 129°C. Pharm: Antioxidant (DPPH scavenger, EC₅₀ > 25 μg/mL, 25 μg/mL InRt = 24%, control Ascorbic acid, EC₅₀ = 1.6 μg/mL = 9.1 μmol/L)^[4154]. Source: BEI SHA SHEN *Glehnia littoralis* (underground part), CHOU CAO *Ruta graveolens*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 6, 344, 3525, 4154.

**13573 Marrubenol**

$C_{20}H_{32}O_4$ (336.48). Pharm: Vascular relaxant (inhibits 100 μmol/L KCl-induced contraction of rat aorta, IC₅₀ = (7.7±1.9) μmol/L, P<0.05). Source: OU XIA ZHI CAO *Marrubium vulgare*. Ref: 5355.

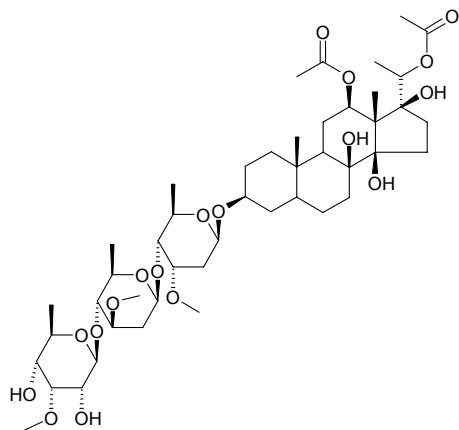
**13574 Marrubiin**

[465-92-9] $C_{20}H_{28}O_4$ (332.44). Crystals (EtOH), mp 160°C, $[\alpha]_D = +33.3^\circ$ ($c = 1$, CHCl₃). Pharm: Antitussive (dispels phlegm); vascular relaxant (inhibits 100 μmol/L KCl-induced contraction of rat aorta, IC₅₀ = (24±2) μmol/L, $p < 0.05$)^[5355]. Source: OU XIA ZHI CAO *Marrubium vulgare*. Ref: 658, 5355.

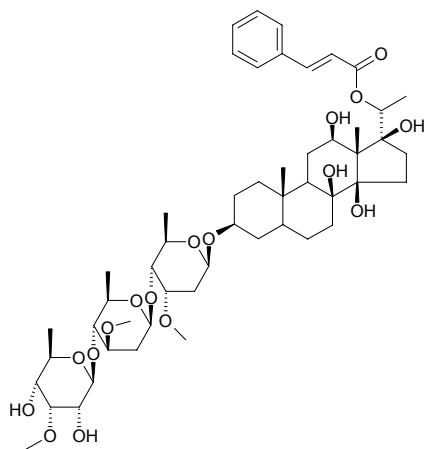


13575 Marsdekoiside C

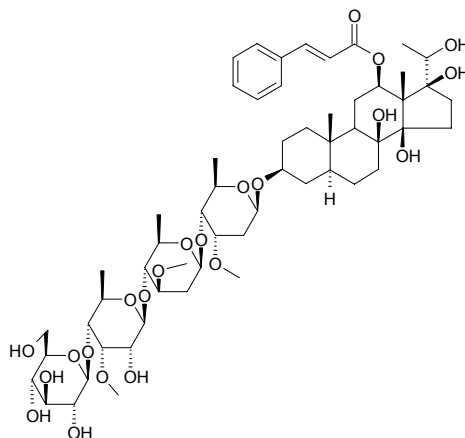
[139502-16-2] C₄₆H₇₆O₁₈ (917.11). White amorphous powder, mp 156~158°C, $[\alpha]_D^{19} = +25^\circ$ ($c = 0.20$, methanol). **Pharm:** Anti-fertility agent (female SD rat, without estrogen's action). **Source:** DA YE NIU NAI CAI *Marsdenia koi*. **Ref:** 200.

**13576 Marsdekoiside E**

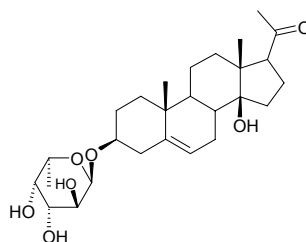
C₅₁H₇₈O₁₇ (963.18). White amorphous powder, mp 154~160°C. **Source:** DA YE NIU NAI CAI *Marsdenia koi*. **Ref:** 449.

**13577 Marsdeoreophiside B**

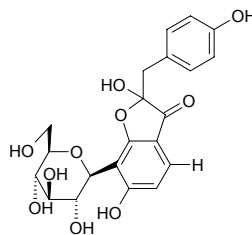
12-*O*-Cinnamylidihydrosarcostin-3-*O*-β-*D*-glucopyranosyl-(1→4)-*O*-3-*O*-methyl-6-deoxy-β-*D*-allopyranosyl-(1→4)-*O*-β-*D*-oleandropyranosyl-(1→4)-β-*D*-cymaropyranoside C₅₇H₈₈O₂₂ (1125.32). White amorphous powder, mp 183~184°C, $[\alpha]_D^{19} = +49.2^\circ$ ($c = 0.065$, methanol). **Source:** HUI ZHU NIU NAI CAI *Marsdenia oreophila*. **Ref:** 298.

**13578 Marsin**

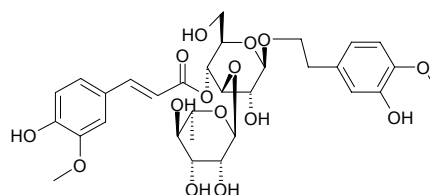
Ketocalogenin-3-*O*-α-*L*-fucopyranoside C₂₇H₄₇O₇ (478.63). White amorphous powder, mp 142°C, $[\alpha]_D = +6.70^\circ$ ($c = 0.03$, CHCl₃). **Source:** ROU LEI NIU NAI CAI *Marsdenia roylei* (aerial parts). **Ref:** 3490.

**13579 Marsuposide**

2-Hydroxy-2-*p*-hydroxybenzyl-3(2*H*)-6-hydroxybenzofuranone-7-*C*-β-*D*-glucopyranoside C₂₁H₂₂O₁₀ (434.40). Light yellow crystals, mp 156~158°C, $[\alpha]_D^{26} = +8.4^\circ$ ($c = 0.225$, MeOH). **Source:** NANG ZHUANG ZI TAN *Pterocarpus marsupium* (heartwood). **Ref:** 3789.

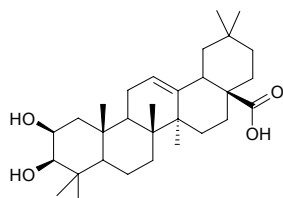
**13580 Martynoside**

[67884-12-2] C₃₁H₄₀O₁₅ (652.66). **Source:** CHANG YE CHE QIAN *Plantago lanceolata*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*], JIA MA CHI XIAN *Bacopa monniera* (whole herb: yield = 0.0010%fw)^[4664], MAO PAO TONG *Paulownia tomentosa*, SI CHI SI LENG CAO *Schnabelia tetradonta* (aerial parts: yield = 0.0016%dw)^[4665], ZI HUA GUAN MAO RUI HUA *Verbascum wiedemannianum*, *Sideritis ozurkii* (aerial parts). **Ref:** 2, 660, 3827, 4664, 4665, 5020, 5449.

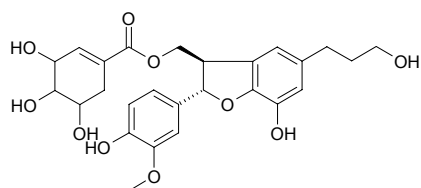


13581 (2 β ,3 β)-Maslinic acid

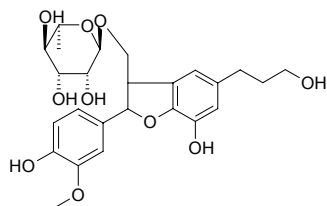
$C_{30}H_{48}O_4$ (472.71). **Pharm:** Antioxidant (anti-lipid peroxidation, effects on plasma oxidation in basal state and after incubation with Fe^{2+}/H_2O_2 : blank, lipid peroxidation(basal) = $(2.88 \pm 0.71) \mu\text{mol/L}$, lipid peroxidation(Fe^{2+}/H_2O_2) = $(22.23 \pm 2.41) \mu\text{mol/L}$; control(1mL/kg CCl_4 to generate CCl_3^*), lipid peroxidation(basal) = $(9.83 \pm 1.37) \mu\text{mol/L}$, lipid peroxidation(Fe^{2+}/H_2O_2) = $(34.09 \pm 8.36) \mu\text{mol/L}$; MA(100mg/kg)+ CCl_4 , lipid peroxidation(basal) = $(8.05 \pm 0.27) \mu\text{mol/L}$, lipid peroxidation(Fe^{2+}/H_2O_2) = $(27.51 \pm 2.10) \mu\text{mol/L}$; MA(50mg/kg)+ CCl_4 , lipid peroxidation(basal) = $(8.15 \pm 0.61) \mu\text{mol/L}$, lipid peroxidation(Fe^{2+}/H_2O_2) = $(31.86 \pm 1.81) \mu\text{mol/L}$; MA(100mg/kg), lipid peroxidation(basal) = $(2.47 \pm 0.30) \mu\text{mol/L}$, lipid peroxidation(Fe^{2+}/H_2O_2) = $(23.71 \pm 2.58) \mu\text{mol/L}$; MA(50mg/kg), lipid peroxidation(basal) = $(2.51 \pm 0.16) \mu\text{mol/L}$, lipid peroxidation(Fe^{2+}/H_2O_2) = $(22.91 \pm 1.89) \mu\text{mol/L}$; Silymarin(35mg/kg)+ CCl_4 , lipid peroxidation(basal) = $(6.46 \pm 0.95) \mu\text{mol/L}$, lipid peroxidation(Fe^{2+}/H_2O_2) = $(27.06 \pm 2.37) \mu\text{mol/L}$); antioxidant (anti-lipid peroxidation, effects on Fe^{+3} /ascorbate-induced lipid peroxidation in rat hepatocyte membrane: MA(10mg/mL), InRt = 51%; Silymarin(0.7mg/mL), InRt = 53%). **Source:** YOU GAN LAN *Ole^a europaea*. **Ref:** 5389.

**13582 Massonianoid A**

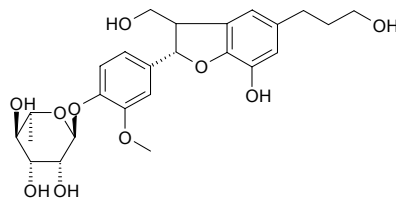
(7*S*,8*R*)-3',4,9-Trihydroxy-4-methoxy-9-*O*-shikimoyl-7,8-dihydrobenzofuran-1'-propylneolignan $C_{26}H_{30}O_{10}$ (502.52). Yellow-white cream, mp 124~144°C, $[\alpha]_D^{25} = -60.19^\circ$ ($c = 0.05$, MeOH). **Source:** MA WEI SONG YE *Pinus massoniana*. **Ref:** 2479.

**13583 Massonianoside A**

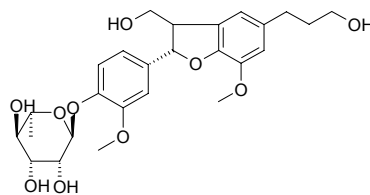
(7*S*,8*R*)-3,4,9'-Trihydroxyl-3-methoxyl-7,8-dihydrobenzofuran-1'-propanolne oligan-9-*O*- α -*L*-rhamnopyranoside $C_{25}H_{32}O_{10}$ (492.53). White-liked amorphous powder, mp 130~131°C, $[\alpha]_D = -14.8^\circ$ ($c = 3.29$, CH_3OH). **Source:** MA WEI SONG YE *Pinus massoniana*. **Ref:** 2236.

**13584 Massonianoside B**

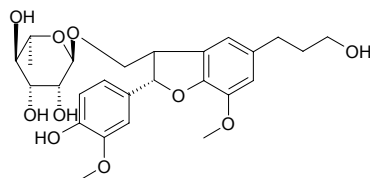
(7*S*,8*R*)-3,9,9'-Trihydroxyl-3-methoxyl-7,8-dihydrobenzofuran-1'-propanolne oligan-4-*O*- α -*L*-rhamnopyranoside $C_{25}H_{32}O_{10}$ (492.53). White-like amorphous powder, mp 127~128°C, $[\alpha]_D = -26.4^\circ$. **Source:** MA WEI SONG YE *Pinus massoniana*. **Ref:** 2131.

**13585 Massonianoside C**

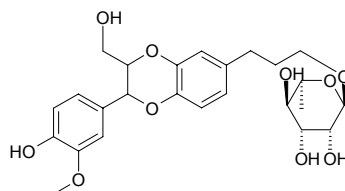
(7*S*,8*R*)-9,9'-Dihydroxyl-3,3'-dimethoxyl-7,8-dihydrobenzofuran-1'-propanolne oligan-4-*O*- α -*L*-rhamnopyranoside $C_{26}H_{34}O_{10}$ (506.55). White-liked amorphous powder, mp 97~99°C, $[\alpha]_D = -24.5^\circ$ ($c = 4.80$, CH_3OH). **Source:** MA WEI SONG YE *Pinus massoniana*. **Ref:** 2236.

**13586 Massonianoside D**

(7*S*,8*R*)-4,9'-Dihydroxy-3,3'-dimethoxyl-7,8-dihydrobenzofuran-1'-propanolne oligan-9-*O*- α -*L*-rhamnopyranoside $C_{26}H_{34}O_{10}$ (506.55). White-like amorphous powder, soluble in water, methanol and acetone, $[\alpha]_D^{25} = -10.3^\circ$ ($c = 3.09$, MeOH). **Source:** MA WEI SONG YE *Pinus massoniana*. **Ref:** 2462.

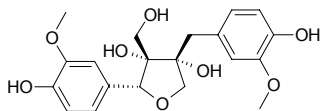
**13587 Massonianoside E**

3-Methoxyl-9'- α -*L*-rhamnopyranosyl-4':7,5':8-diepoxyneoligan-4,9-diol $C_{25}H_{32}O_{10}$ (492.53). White amorphous powder, mp 146~148°C, $[\alpha]_D^{25} = -41.95^\circ$ ($c = 0.18$, MeOH). **Source:** MA WEI SONG YE *Pinus massoniana*. **Ref:** 4833.

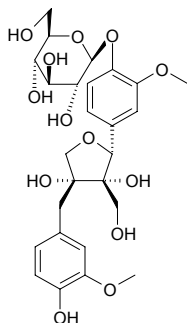


13588 Massoniresinol

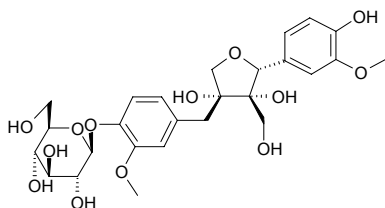
Vladinol A [96087-10-4] C₂₀H₂₄O₈ (392.41). Amorphous, $[\alpha]_D^{25} = -31.4^\circ$ ($c = 0.79$, MeOH). **Source:** CHUAN MU XIANG *Vladimiria souliei* [Syn. *Jurinea souliei*], MA WEI SONG YE *Pinus massoniana*. **Ref:** 1248, 1521.

**13589 (-)-Massoniresinol 4'-O-β-D-glucopyranoside**

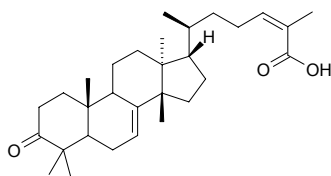
C₂₆H₃₄O₁₃ (554.55). Amorphous powder, $[\alpha]_D^{26} = -63.8^\circ$ ($c = 0.19$, MeOH). **Source:** LAN SHAI PIAO *Sambucus sieboldiana* (leaf). **Ref:** 4192.

**13590 (-)-Massoniresinol 4''-O-β-D-glucopyranoside**

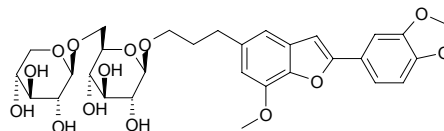
C₂₆H₃₄O₁₃ (554.55). Amorphous powder, $[\alpha]_D^{26} = -70.0^\circ$ ($c = 0.20$, MeOH). **Source:** LAN SHAI PIAO *Sambucus sieboldiana* (leaf), XIE CAO *Valeriana officinalis* (root; yield = 0.012%dw). **Ref:** 4192, 4656.

**13591 Masticadienonic acid**

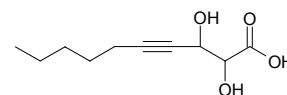
[514-49-8] C₃₀H₄₆O₃ (454.70). **Pharm:** Cytotoxic (leukemia cells L₁₂₁₀, IC₅₀ = 20 μg/mL)^[3786], Anti-inflammatory (*in vivo*, prevents ear oedema formation caused by PMA and synthesis of LOX products, especially LTC₄ and COX metabolites derived from arachidonic acid)^[4415]. **Source:** RU DU XIANG *Pistacia terebinthus*, *Juliania adstringens* (bark). **Ref:** 3786, 4415.

**13592 Masutakeside I**

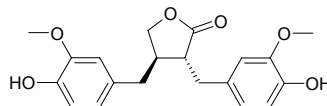
C₃₀H₃₆O₁₄ (620.61). Amorphous powder, $[\alpha]_D^{25} = -19.9^\circ$ ($c = 2.6$, MeOH); white amorphous powder, $[\alpha]_D^{22} = -41.3^\circ$ ($c = 0.1$, MeOH). **Pharm:** Anticomplement activity (IC₅₀ = 166 μmol/L, control Rosmarinic acid IC₅₀ = 182 μmol/L)^[4096]. **Source:** RI BEN AN XI XIANG JING PI *Styrax japonica*, ZHU HONG LIU HUANG SE XUN KONG JUN *Laetiporus sulphureus* var. *miniatus*. **Ref:** 3515, 4096.

**13593 Masutakic acid A**

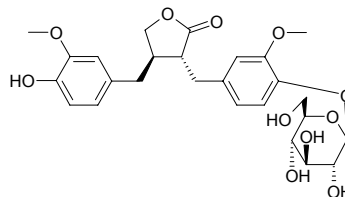
C₁₀H₁₆O₄ (200.24). Amorphous powder, $[\alpha]_D^{25} = -13.2^\circ$ ($c = 0.7$, MeOH). **Source:** ZHU HONG LIU HUANG SE XUN KONG JUN *Laetiporus sulphureus* var. *miniatus*. **Ref:** 3515.

**13594 Matairesinol**

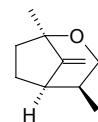
[580-72-3] C₂₀H₂₂O₆ (358.39). Colorless amorphous powder. **Pharm:** cAMP phosphodiesterase inhibitor; synergist of pesticides. **Source:** SUI HUA LUO HAN SONG *Podocarpus spicatus*, YI YE TIE SHAN *Tsuga heterophylla* (sapwood), *Abies* sp., *Picea* sp., *Heliopsis* sp. **Ref:** 658, 3965.

**13595 Matairesinoside**

[23202-85-9] C₂₆H₃₂O₁₁ (520.54). Crystals (EtOAc), mp 93°C, $[\alpha]_D^{12} = -46^\circ$ (EtOH); White powder, mp mp 93~96°C (dec), $[\alpha]_D^{25} = -46^\circ$ ($c = 0.68$, alcohol). **Source:** JIN ZHONG HUA *Forsythia viridissima*, LIAN QIAO *Forsythia suspensa*, RI BEN AN XI XIANG JING PI *Styrax japonica*. **Ref:** 2, 1521, 2546.

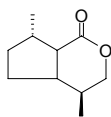
**13596 Matatabiether**

1,4-Dimethyl-8-methylene-2-oxabicyclo[3.2.1]octane [21700-60-7] C₁₀H₁₆O (152.24). Oil, bp 67°C/16mmHg, $[\alpha]_D^{23} = -147.3^\circ$ ($c = 1.03$, CHCl₃). **Source:** MU TIAN LIAO *Actinidia polygama*. **Ref:** 1249, 1521.

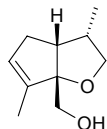


13597 Matatabilactone

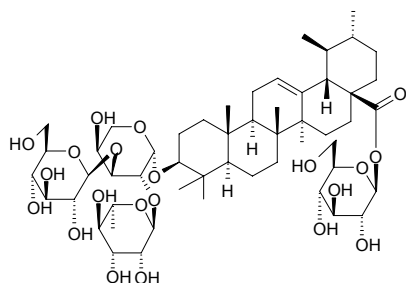
$C_{10}H_{16}O_2$ (168.24). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 1250.

**13598 Matatabiol**

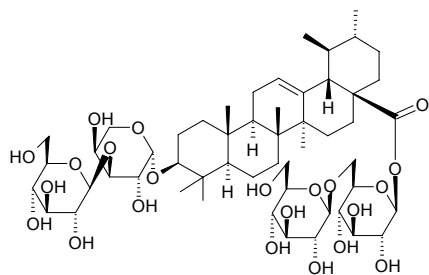
$C_{10}H_{16}O_2$ (168.24). Source: MU TIAN LIAO *Actinidia polygama*. Ref: 1251.

**13599 Matesaponin 2**

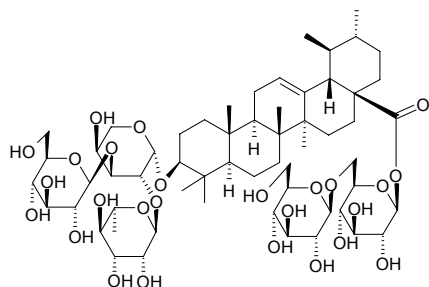
$C_{53}H_{86}O_{21}$ (1059.26). Source: BA LA GUI CHA *Ilex paraguariensis*. Ref: 2160.

**13600 Matesaponin 3**

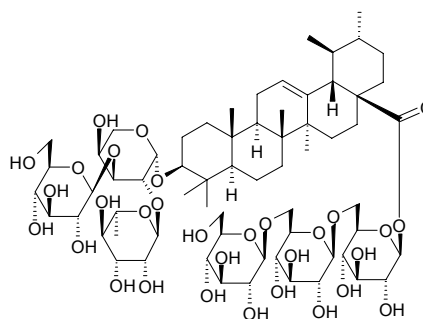
$C_{53}H_{86}O_{22}$ (1075.26). Source: BA LA GUI CHA *Ilex paraguariensis*. Ref: 2160.

**13601 Matesaponin 4**

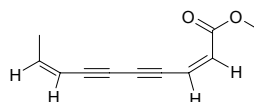
$C_{59}H_{96}O_{26}$ (1221.41). Source: BA LA GUI CHA *Ilex paraguariensis*. Ref: 2160.

**13602 Matesaponin 5**

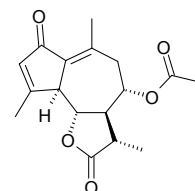
$C_{65}H_{106}O_{31}$ (1383.55). Source: BA LA GUI CHA *Ilex paraguariensis*. Ref: 2160.

**13603 Matricaria ester**

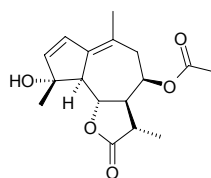
Methyl(2Z,8Z)-decadien-4,6-dienoate [928-36-9] $C_{11}H_{10}O_2$ (174.20). mp 37°C. Source: QI ZHOU YI ZHI HAO *Conyza canadensis* [Syn. *Erigeron canadensis*], YI ZHI HUANG HUA *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*]. Ref: 6, 1281.

**13604 Matricarin**

Artesin A [5989-43-5] $C_{17}H_{20}O_5$ (304.35). mp 193–195°C. Source: MU⁽³⁾ JU *Matricaria chamomilla* [Syn. *Matricaria recutita*]. Ref: 6.

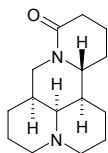
**13605 Matricin**

Prochamazulene [29041-35-8] $C_{17}H_{22}O_5$ (306.36). mp 158–160°C. Pharm: Precursor to biosynthesis of chamazulene. Source: MU⁽³⁾ JU *Matricaria chamomilla* [Syn. *Matricaria recutita*], KA SI HAO *Artemisia caruthii*, *Achillea* sp. Ref: 6, 658.

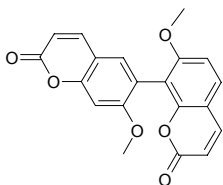


13606 Matrine

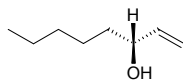
cis-Matrine; lupanidine; Sophocarpidine [519-02-8] C₁₅H₂₄N₂O (248.37). mp (α) 76°C, (β) 87°C, (δ) 84°C, bp (γ) 223°C/6mmHg, [α]_D = +38° (β, ethanol), soluble in water, benzene, chloroform, ether, CS₂, slightly soluble in petroleum spirit.^[5507] **Pharm:** Analgesic (mus, chemical and heat stimulation models); antibacterial (15 strains of dysentery); antineoplastic (mus EAC *in vitro* and *in vivo*, mus Lewis lung cancer, S₁₈₀); used in treatment of bacillary dysentery (cure rate = (64–95)%); LD₅₀ (mus ip) = 150mg/kg, (rat ip) = 125mg/kg. **Source:** BAI CI HUA *Sophora viciifolia*, HUANG YE HUAI *Sophora chrysophylla*, KU DOU ZI *Sophora alopecuroides* (seed: content = 0.149%^[5508]), KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*] (dried root: content scope of 7 origins = trace–0.64%, mean content = 0.20%^[5508]), SHAN DOU GEN *Sophora subprostrata* [Syn. *Sophora tonkinensis*] (root and rhizome: mean content of 12 origins = 0.276%^[5508]), SI CHI HUAI *Sophora tetraptera*. **Ref:** 4, 546, 564, 593, 658, 5501, 5507, 5508.

**13607 Matsukaze lactone**

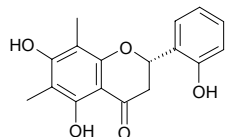
[3153-73-9] C₂₀H₁₄O₆ (350.33). Platelets (MeOH), mp 266.5–267.5°C. **Pharm:** Antibacterial (*Bacillus subtilis* ATCC1633 and *Staphylococcus aureus* 209P, EC = 1mg/mL). **Source:** RI BEN CHOU JIE CAO *Boenninghausenia japonica*, YAN JIAO CAO *Boenninghausenia albiflora*. **Ref:** 6, 1521, 1581.

**13608 Matsutake alcohol**

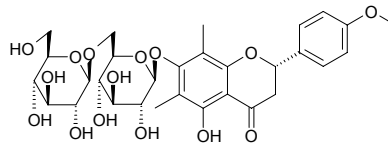
Matsutakeol; 1-Octen-3-ol [22658-80-6] C₈H₁₆O (128.22). **Source:** KUN BU *Laminaria japonica*, SHE TAI *Conocephalum conicum*, SHUANG BAO MO GU *Agaricus bisporus*, SONG XUN *Tricholoma matsutake* [Syn. *Armillaria matsutake*], XIANG XUN *Lentinus edodes*. **Ref:** 660, 1252, 1490, 1491, 1492.

**13609 Matteucin**

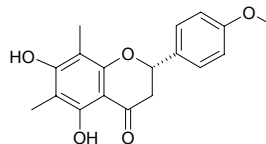
[77744-53-7] C₁₇H₁₆O₅ (300.31). mp 198–200°C. **Source:** DONG FANG JIA GUO JUE *Matteuccia orientalis*. **Ref:** 1253.

**13610 Matteucinin**

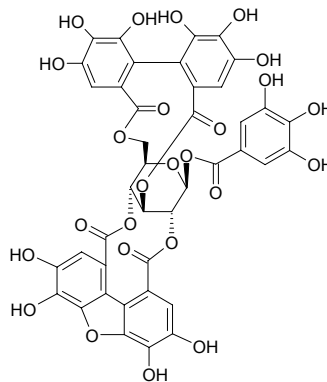
C₃₀H₃₈O₁₅ (638.63). Colorless or yellowish acicular crystals (methanol–water), mp 140–141°C, [α]_D¹³ = –29.4° (c = 0.32, acetone). **Pharm:** Antitussive (dispels phlegm); treatment of chronic bronchitis. **Source:** DU JUAN HUA YE *Rhododendron simsii*, DU JUAN HUA *Rhododendron simsii*. **Ref:** 6, 658.

**13611 Matteucinol**

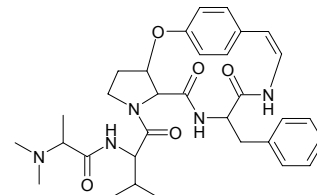
[489-38-3] C₁₈H₁₈O₅ (314.34). mp 173–174°C. **Pharm:** Antitussive (dispels phlegm); treatment of chronic bronchitis. **Source:** DONG FANG JIA GUO JUE *Matteuccia orientalis*, DU JUAN HUA *Rhododendron simsii*. **Ref:** 658, 1253.

**13612 Mauotusin**

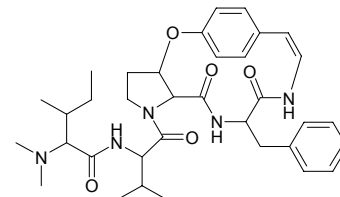
C₄₁H₂₆O₂₅ (918.65). **Source:** ZE QI *Euphorbia helioscopia*. **Ref:** 1254.

**13613 Mauritine A**

[38478-72-7] C₃₂H₄₁N₅O₅ (575.71). mp 104°C. **Source:** MIAN ZAO *Ziziphus mauritiana*. **Ref:** 6.

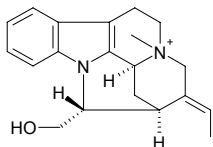
**13614 Mauritine B**

[38478-73-8] C₃₃H₄₇N₅O₅ (617.81). **Source:** MIAN ZAO *Ziziphus mauritiana*. **Ref:** 6.

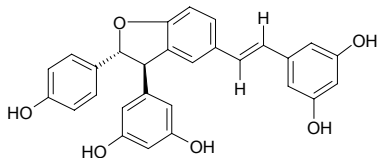


13615 Mavacurine

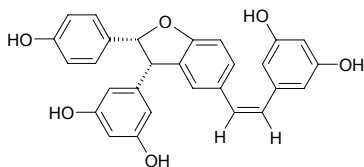
[6801-19-0] $C_{20}H_{25}N_2O^+$ (309.44). Source: DU MA QIAN *Strychnos toxifera*, FEN CHA MA QIAN ZI *Strychnos divaricans*, MA QIAN ZI *Strychnos nux-vomica*, MI SHI MA QIAN ZI *Strychnos mitschelinii*, YA MA XUN MA QIAN ZI *Strychnos amazonica*, *Strychnos guianensis* (stem cortex). Ref: 6, 1521.

**13616 Maximol A**

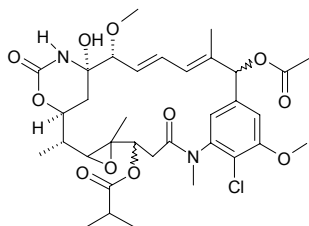
$C_{28}H_{22}O_6$ (454.48). Brown amorphous powder, $[\alpha]_D^{25} = -16.3^\circ$ ($c = 0.75$, MeOH). Source: MA SHI DA HUANG *Rheum maximowiczii* (root). Ref: 5136.

**13617 Maximol B**

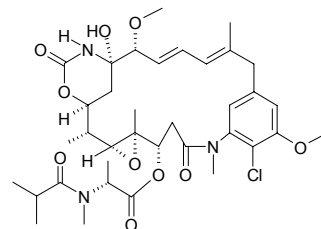
$C_{28}H_{22}O_6$ (454.48). Brown amorphous powder, $[\alpha]_D^{25} = +99.4^\circ$ ($c = 0.34$, MeOH). Source: MA SHI DA HUANG *Rheum maximowiczii* (root). Ref: 5136.

**13618 Maytanbutacine**

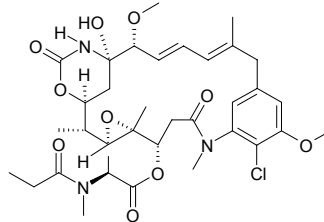
[62414-95-3] $C_{34}H_{45}ClN_2O_{11}$ (693.20). Crystals (dichloromethane-ether), mp 253–255°C, $[\alpha]_D^{33} = -90^\circ$ ($c = 0.055$, ethanol). Pharm: Antineoplastic (mus P_{388} , optimum dose 12.5 µg/kg, biotic prolonged rate = 79%); cytotoxic (KB, $ED_{50} = 0.0015$ ng/mL). Source: CHI YE MEI DENG MU *Maytenus serrata*. Ref: 661.

**13619 Maytanbutine**

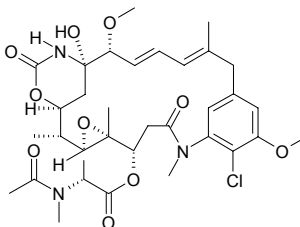
[38997-10-3] $C_{36}H_{50}ClN_3O_{10}$ (720.27). mp 170–171°C, $[\alpha]_D^{30} = -122$ ($c = 0.0492$, chloroform). Pharm: Antineoplastic (mus P_{388} , optimum dose 0.8 mg/kg, biotic prolonged rate = 90%); cytotoxic (KB, $ED_{50} = 0.0036$ ng/mL). Source: CHI YE MEI DENG MU *Maytenus serrata*, LUAN YE MEI DENG MU *Maytenus ovatus*, BU CHANG NAN MEI DENG MU *Maytenus buchananii*. Ref: 661.

**13620 Maytanprine**

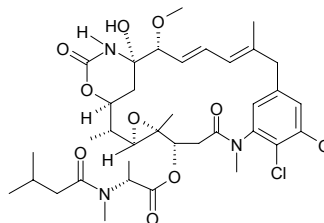
[38997-09-0] $C_{35}H_{48}ClN_3O_{10}$ (706.24). mp 178°C. Pharm: Antineoplastic (mus, P_{388} , optimum dose 1.6 µg/kg *in vivo*, biotic prolonged rate = 54%); cytotoxic (KB *in vitro*, $ED_{50} = 0.00014$ ng/mL). Source: MI HUA MEI DENG MU *Maytenus confertiflorus*, BU CHANG NAN MEI DENG MU *Maytenus buchananii*, YUN NAN MEI DENG MU *Maytenus hookeri*. Ref: 5, 658.

**13621 Maytansine**

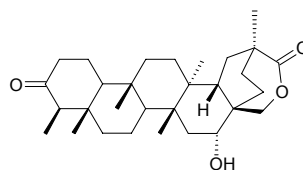
[35846-53-8] $C_{34}H_{46}ClN_3O_{10}$ (692.21). mp 182°C. Pharm: Antineoplastic (P_{388} $ED_{50} = 6.0$ µmol/L, KB $ED_{50} = 10^{-5}$ µg/mL, mus EAC, 0.01 mg/kg, biotic prolonged rate = 132%, S_{180} , Lewis lung cancer, B16 melanoma, and L_{1210} *in vitro* and *in vivo*); LD (dog) = 0.09–0.12 mg/(kg·d) for 3–4 days, leads to death, (monkey) = 0.18–0.24 mg/(kg·d) for 5–6 day, leads to death. Source: CHI YE MEI DENG MU *Maytenus serrata*, GUANG XI MEI DENG MU *Maytenus guangsiensis*, LUAN YE MEI DENG MU *Maytenus ovatus* (the compound was isolated from the plant by S.M.Kupchan et al. in 1972)^[5505], MI HUA MEI DENG MU *Maytenus confertiflorus*, BU CHANG NAN MEI DENG MU *Maytenus buchananii*, YUN NAN MEI DENG MU *Maytenus hookeri*. Ref: 4, 658, 5505.

**13622 Maytanvaline**

[52978-27-5] $C_{37}H_{52}ClN_3O_{10}$ (734.29). mp 175.0–176.5°C, $[\alpha]_D^{26} = -135^\circ$ ($c = 0.950$, chloroform). Pharm: Antineoplastic (mus P_{388} , optimum dose 12.5 mg/kg, biotic prolonged rate = 87%); cytotoxic (KB, $ED_{50} = 0.00023$ ng/mL). Source: BU CHANG NAN MEI DENG MU *Maytenus buchananii*. Ref: 661.

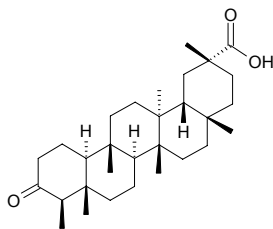
**13623 Maytenfolone A**

$C_{30}H_{46}O_4$ (470.70). Source: NAN SHE TENG GEN *Celastrus orbiculatus* [Syn. *Celastrus articulatus*]. Ref: 2511.

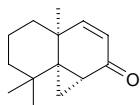


13624 Maytenoic acid

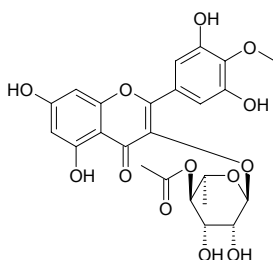
$C_{30}H_{48}O_3$ (456.72). **Pharm:** DPPH scavenger inactive (for $40\mu\text{mol/L}$ DPPH radical, $SC_{50} > 40\mu\text{mol/L}$). **Source:** SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). **Ref:** 4378.

**13625 Mayurone**

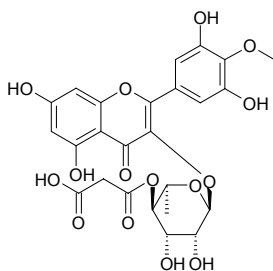
[4677-90-1] $C_{14}H_{20}O$ (204.31). mp $69.5\text{--}70.0^\circ\text{C}$. **Source:** CE BAI ZHI JIE *Thuja orientalis* [Syn. *Platycladus orientalis*; *Biota orientalis*]. **Ref:** 6.

**13626 Mearnsetin 3-O-(4''-O-acetyl)- α -L-¹C_r-rhamnopyranoside**

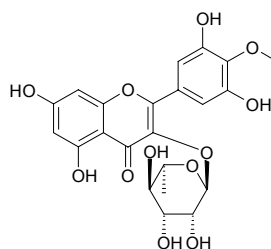
$C_{24}H_{24}O_{13}$ (520.45). Yellow amorphous powder. **Source:** WU MO *Eugenia jambolana* [Syn. *Syzygium cumini*; *Myrtus cumini*] (leaf). **Ref:** 5237.

**13627 Mearnsetin 3-O-(4''-O-malonyl)- α -L-rhamnopyranoside**

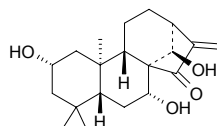
$C_{25}H_{24}O_{15}$ (564.46). **Source:** GAO SHAN CHA BIAO *Ribes alpinum* (leaf). **Ref:** 3541.

**13628 Mearnsitrin**

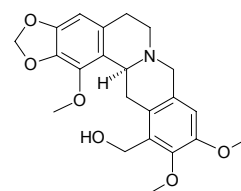
Mearnsetin-3-O- α -rhamnopyranoside; Myricetin-4'-O-methyl ether-3-O- α -L-rhamnopyranoside $C_{22}H_{22}O_{12}$ (478.41). Amorphous solid, $[\alpha]_D^{23.2} = -76.8^\circ$ ($c = 0.69$, MeOH). **Source:** WU MO *Eugenia jambolana* [Syn. *Syzygium cumini*; *Myrtus cumini*] (leaf), YANG PU TAO YE *Syzygium samarangense*, *Goniothalamus thwaitesii* (aerial parts). **Ref:** 4100, 5096, 5237.

**13629 Mebadonin**

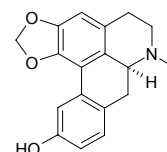
$C_{20}H_{30}O_4$ (334.46). mp $271\text{--}273^\circ\text{C}$ (dec), $[\alpha]_D = -158^\circ$ ($c = 1.0$, dioxane). **Source:** YIN DI KUAN YE XIANG CHA CAI *Isodon umbrosa* var. *latifolia*. **Ref:** 4067.

**13630 Mecambridine**

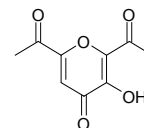
[31098-60-9] $C_{22}H_{25}NO_6$ (399.45). mp $179\text{--}180^\circ\text{C}$. **Pharm:** Analgesic (mus); CNS depressant (mus). **Source:** HONG HUA LV RONG HAO *Meconopsis punicea*, WEI ER SHI LV RONG HAO *Meconopsis cambrica*. **Ref:** 1255, 1521.

**13631 L-Mecambroline**

$C_{18}H_{17}NO_3$ (295.34). **Pharm:** Antihypertensive (order *Rodentia*). **Source:** CHE SHI NAN *Phoebe chemensii*, WEI ER SHI LV RONG HAO *Meconopsis cambrica*, YI XIAN YING SU *Papaver fugax*. **Ref:** 658.

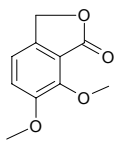
**13632 Meconic acid**

3-Hydroxy-4-oxo-4H-pyran-2,6-dicarboxylic acid [497-59-6] $C_9H_8O_5$ (196.16). mp 120°C (dec). **Source:** LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*]. **Ref:** 6.

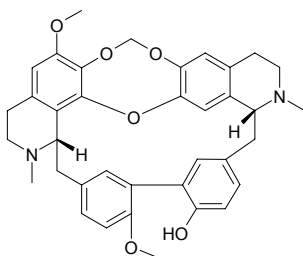


13633 Meconine

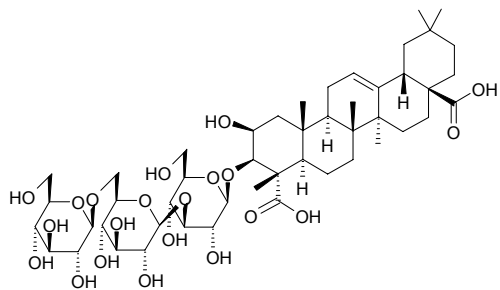
[569-31-3] C₁₀H₁₀O₄ (194.19). mp 102.5°C. Source: YA PIAN *Papaver somniferum*. Ref: 6.

**13634 (-)-Medelline**

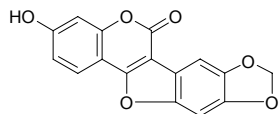
C₃₇H₃₈N₂O₆ (606.73). Pharm: Mitochondrial respiratory chain complex I inhibitor (IC₅₀ = (2.01±0.29)μmol/L, Rolliniastatin-1, IC₅₀ = (0.6±0.04)nmol/L, Rotenone, IC₅₀ = (5.10±0.90)nmol/L). Source: GE LUN BI YA MU BAN SHU *Xylopia columbiana* (fruit). Ref: 4954.

**13635 Medicagenic acid 3-O-triglucoside**

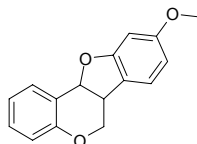
C₄₈H₇₆O₂₁ (989.13). Powder, mp 257~258°C, [α]_D²³ = +24° (c = 0.02, EtOH). Pharm: Hemolytic; inhibits production of *Trichoderma viride*. Source: MU XU *Medicago sativa*. Ref: 658.

**13636 Medicagol**

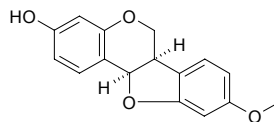
[1983-72-8] C₁₆H₈O₆ (296.24). mp 324~325°C. Source: HUI HUI DOU *Cicer arietinum*. Ref: 6.

**13637 Medicarpan**

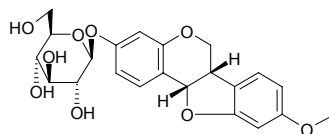
3-Hydroxy-9-methoxypterocarpan C₁₆H₁₄O₃ (254.29). Pharm: Antibacterial (*Escherichia coli*, inactive, control Chloramphenicol, MIA = 0.001μg; *Bacillus subtilis*, MIA = 100.0μg, Chloramphenicol, MIA = 0.001μg; *Staphylococcus aureus*, MIA = 10.0μg, Chloramphenicol, MIA = 0.001μg); antifungal (*Candida mycoderma*, MIA = 1.00μg, Miconazole MIA = 0.0001μg); antioxidant (DPPH scavenger, TLC detection limit = 1.0μg, IC₅₀ = 1100μg/mL; control Quercetin, TLC detection limit < 0.05μg, IC₅₀ = 7μg/mL; Gallic acid, TLC detection limit < 0.05μg, IC₅₀ = 4μg/mL; Ascorbic acid, TLC detection limit < 0.10μg, IC₅₀ = 18μg/mL). Source: *Bolusanthus speciosus* (root wood). Ref: 3785.

**13638 (-)-Medicarpin**

L-3-Hydroxy-9-methoxypterocarpan [32383-76-9] C₁₆H₁₄O₄ (270.29). Colorless columnar crystals (benzene), mp 131~132°C, [α]_D²⁹ = -220° (c = 1.4, chloroform), mp 127.5~128.5°C, [α]_D²² = -226° (chloroform). Pharm: Antibacterial (*Mycobacterium tuberculosis* H37Rv *in vitro*, MIC = 10μg/mL, other testing strains, MIC ≥ 50μg/mL); antifungal (*Trichophyton mentagrophytes in vitro*, MIC = 30μg/mL); hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by D-galactosamine (GalN), 100μmol/L, InRt = (7.9±0.8)%, inactive, control Silybin, 100μmol/L, InRt = (77.0±5.5%)^[4095]). Source: HONG CHE ZHOU CAO *Trifolium pratense*, HUANG QI *Astragalus membranaceus*, MA DAO SI WO CI DOU *Swartzia madagascariensis*, MENG GU HUANG QI *Astragalus mongholicus*, SI TE WEN HUANG TAN *Dalbergia stevensonii*, WU CI KE YA SHU *Andira inermis*, YI BIAN HUANG TAN *Dalbergia variabilis*, GUANG BU DING GONG TENG *Erycibe expansa*, *Lathyrus* sp., *Medicago* sp., *Trigonella* sp. Ref: 2, 660, 661, 1521, 4095.

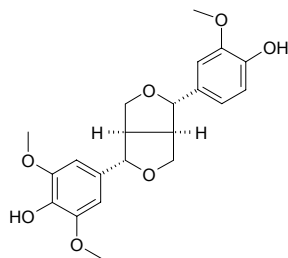
**13639 Medicarpin-3-O-glucoside**

C₂₂H₂₄O₉ (432.43). Source: HUANG GAN CAO *Glycyrrhiza kansuensis*. Ref: 1256.

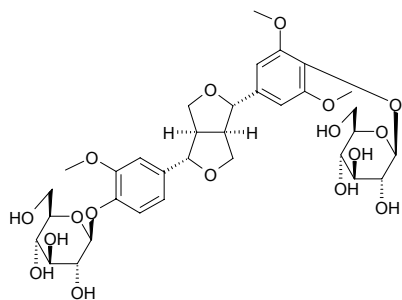


13640 (+)-Medioresinol

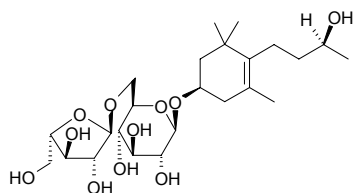
Medioresinol [40957-99-1] $C_{21}H_{24}O_7$ (388.42). Colorless granular crystals (CH₃OH), mp 169~171°C, $[\alpha]_D^{24} = +11.30$ ($c = 0.3$, CHCl₃). **Pharm:** CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4, IC₅₀ = 13.7 μmol/L; CYP2D6, IC₅₀ > 100 μmol/L; control Ketoconazole, CYP3A4, IC₅₀ = 0.72 μmol/L; control Quinidine, CYP2D6, IC₅₀ = 0.082 μmol/L)^[4797]; plant growth stimulatory or inhibitory activity (radicle length: *Lactuca sativa*, 1 μmol/L, StRt = (30~60)%, 10 μmol/L, StRt > 61%, 100 μmol/L, StRt > 61%, 1 mmol/L, StRt > 61%; *Raphanus sativus*, 1 μmol/L, StRt = (10~30)%, 10 μmol/L, StRt = (30~60)%, 100 μmol/L, StRt = (30~60)%, 1 mmol/L, StRt = (10~30)%; *Allium cepa*, 1 μmol/L, InRt = (10~30)%, 10 μmol/L, StRt or InRt < 10%, 100 μmol/L, StRt or InRt < 10%, 1 mmol/L, InRt = (10~30)%)^[5217]. **Source:** BI CHENG QIE *Piper cubeba* (fruit: yield = 0.000056%dw)^[4797], DU ZHONG *Eucommia ulmoides*, GUANG JING QIAN CAO *Rubia wallichiana* (stem), LEI GONG TENG *Tripterygium wilfordii*, XI YANG JIE GU MU *Sambucus nigra*. **Ref:** 683, 1209, 4369, 4797, 5217.

**13641 (+)-Medioresinol di-O-β-D-glucopyranoside**

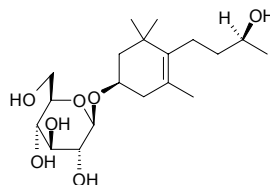
$C_{33}H_{44}O_{17}$ (712.71). **Source:** DU ZHONG *Eucommia ulmoides*, CI WU JIA *Acanthopanax senticosus* [Syn. *Eleutherococcus senticosus*]. **Ref:** 2.

**13642 (3R,9S)-Megastigman-5-en-3,9-diol-3-O-[α-L-arabinofuranosyl-(1→6)]-β-D-glucopyranoside**

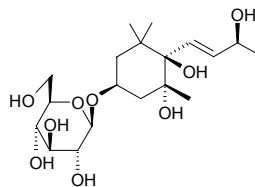
$C_{24}H_{42}O_{11}$ (506.60). White powder, $[\alpha]_D = -47.1^\circ$ ($c = 0.23$, MeOH). **Source:** OU ZHOU CI BAI BIAN ZHONG *Juniperus communis* var. *depressa* (twig with leaf). **Ref:** 4477.

**13643 (3R,9S)-Megastigman-5-en-3,9-diol-3-O-β-D-glucopyranoside**

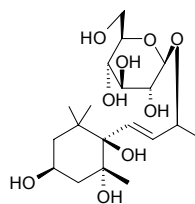
$C_{19}H_{34}O_7$ (374.48). White powder, $[\alpha]_D = -48.5^\circ$ ($c = 1.05$, MeOH). **Pharm:** Antibacterial (*Helicobacter pylori* NCTC11637, MIC = 50 μg/mL, NCTC11916, MIC = 50 μg/mL, OCO1, MIC = 50 μg/mL, Hinokitiol (Nat. or Syn.), MIC = 100 μg/mL, 100 μg/mL, 50 μg/mL, respectively). **Source:** OU ZHOU CI BAI BIAN ZHONG *Juniperus communis* var. *depressa* (twig with leaf). **Ref:** 4477.

**13644 (3S,5R,6R,7E,9S)-Megastigman-7-ene-3,5,6,9-tetrol-3-O-β-D-glucopyranoside**

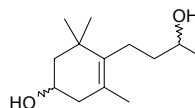
$C_{19}H_{34}O_9$ (406.48). Amorphous powder, $[\alpha]_D^{24} = -38.0^\circ$ ($c = 1.00$, MeOH). **Source:** CHUI ZHU SUAN PAN ZI *Glochidion zeylanicum*, JIAN PU ZHAI GU KE *Erythroxylum cambodianum* (aerial parts), *Alangium premnifolium*. **Ref:** 2046, 4461.

**13645 (3S,5R,6R,7E,9S)-Megastigman-7-ene-3,5,6,9-tetrol-9-O-β-D-glucopyranoside**

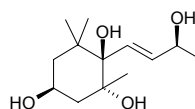
$C_{19}H_{34}O_9$ (406.48). Amorphous powder, $[\alpha]_D^{24} = -56.3^\circ$ ($c = 0.65$, MeOH). **Source:** CHUI ZHU SUAN PAN ZI *Glochidion zeylanicum*, SHENG GU YOU *Staphylea bumalda* (leaf), *Alangium premnifolium*. **Ref:** 2046, 4478.

**13646 Megastigm-5-ene-3,9-diol**

$C_{13}H_{24}O_2$ (212.34). Oil, $[\alpha]_D^{25} = -33.8^\circ$ ($c = 0.5$, CHCl₃). **Source:** HONG GUI *Chamaecyparis formosensis*. **Ref:** 2315.

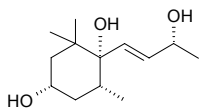
**13647 Megastigmenetetrol**

$C_{13}H_{24}O_4$ (244.33). Colorless needles, mp 183~185°C, $[\alpha]_D^{26} = -25.7^\circ$. **Source:** YI MU CAO *Leonurus heterophyllus* [Syn. *Leonurus artemisia*]. **Ref:** 2522.

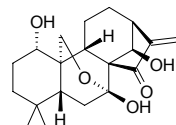


13648 7-Megastigmene-3,6,9-triol

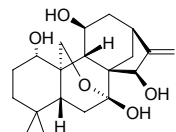
$C_{13}H_{24}O_3$ (228.33). Colorless oil. Source: XIAO YE HONG GUANG SHU *Knema globularia*. Ref: 2209.

**13649 Megathyrin A**

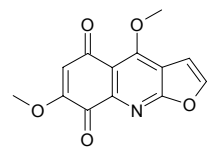
$C_{20}H_{28}O_5$ (348.44). $[\alpha]_D^{20} = -21.5^\circ$ ($c = 0.10$, MeOH); mp 180–182°C. $[\alpha]_D = -22.5^\circ$ ($c = 0.082$, MeOH). Source: ZI MAO XIANG CHA CAI *Isodon enanderianus* (aerial parts), DA ZHUI XIANG CHA CAI *Isodon megathyrus*. Ref: 4067, 5475.

**13650 Megathyrin B**

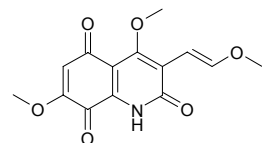
$C_{20}H_{30}O_5$ (350.46). mp 224–226°C, $[\alpha]_D = -36^\circ$ ($c = 0.05$, MeOH); $[\alpha]_D^{20} = -35.2^\circ$ ($c = 0.06$, MeOH). Source: DA ZHUI XIANG CHA CAI *Isodon megathyrus*, ZI MAO XIANG CHA CAI *Isodon enanderianus* (aerial parts). Ref: 4067, 5475.

**13651 Megistoquinone I**

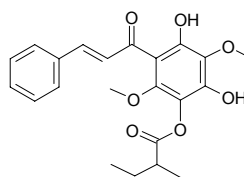
$C_{13}H_9NO_5$ (259.22). Pharm: Antibacterial (*Staphylococcus aureus* MIC = 2.35mg/mL, control Amoxysillin, MIC = 2.0μg/mL; *Staphylococcus epidermidis* MIC = 2.77mg/mL; *Pseudomonas aeruginosa* MIC = 3.24mg/mL; *Enterobacter cloacae* MIC = 3.12mg/mL; *Klebsiella pneumoniae* MIC = 5.25mg/mL; *Escherichia coli* MIC = 4.75mg/mL). Source: *Sarcomelicope megistophylla* (bark). Ref: 4172.

**13652 Megistoquinone II**

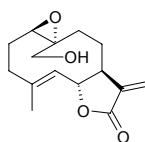
$C_{14}H_{13}NO_6$ (291.26). Pharm: Antibacterial (*Staphylococcus aureus* MIC = 0.75mg/mL, control Amoxysillin, MIC = 2.0μg/mL; *Staphylococcus epidermidis* MIC = 0.73mg/mL; *Pseudomonas aeruginosa* MIC = 0.97mg/mL; *Enterobacter cloacae* MIC = 0.89mg/mL; *Klebsiella pneumoniae* MIC = 1.23mg/mL; *Escherichia coli* MIC = 1.02mg/mL). Source: *Sarcomelicope megistophylla* (bark). Ref: 4172.

**13653 Melafolone**

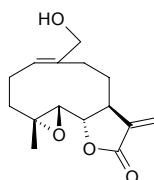
[129724-42-1] $C_{22}H_{24}O_7$ (400.43). Gum. Source: YU LIAO *Polygonum lapathifolium*. Ref: 1257.

**13654 Melampomagnolide A**

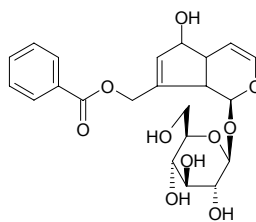
[93930-16-6] $C_{15}H_{20}O_4$ (264.32). Crystals (Et₂O), mp 177–178°C. $[\alpha]_D = -19^\circ$ ($c = 0.12$, CHCl₃). Source: HE HUA YU LAN *Magnolia grandiflora*. Ref: 1258, 1521.

**13655 Melampomagnolide B**

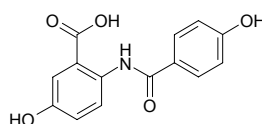
[93930-15-5] $C_{15}H_{20}O_4$ (264.32). Crystals (Et₂O), mp 174–175°C. $[\alpha]_D = -40^\circ$ ($c = 0.18$, CHCl₃). Source: HE HUA YU LAN *Magnolia grandiflora*. Ref: 1258, 1521.

**13656 Melampyroside**

[55785-60-9] $C_{22}H_{26}O_{10}$ (450.45). Source: DA CHE QIAN *Plantago major*. Ref: 1259.

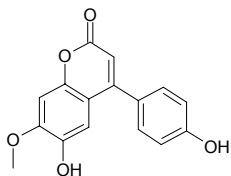
**13657 Melandrin**

N-p-Hydroxybenzoyl-5-hydroxy anthranilic acid $C_{14}H_{11}NO_5$ (273.25). Source: YING YE NV LOU CAI *Silene firma*. Ref: 1260.

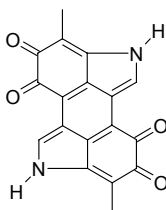


13658 Melanettin

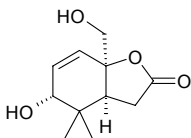
[58115-08-5] C₁₆H₁₂O₅ (284.27). Source: FEI ZHOU HUANG TAN *Dalbergia melanoxylon*, JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 716, 1521.

**13659 Melanin**

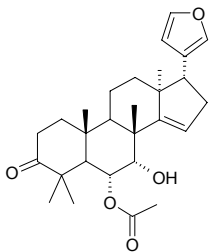
C₁₈H₁₀N₂O₄ (318.29). Source: SI GUA ZI *Luffa cylindrica*, WANG BU LIU XING *Vaccaria segetalis* [Syn. *Vaccaria pyramidata*], XUE YU *Homo sapiens*, YANG PI *Capra hircus*; *Ovis aries*. Ref: 6.

**13660 Melazolid A**

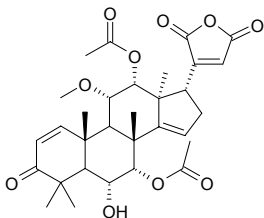
(-)-(3a*S*,5*R*,7a*R*)-4,4-Dimethyl-7a-hydroxymethyl-5-hydroxy-2,3,3a,4,5,7a-hexahydrobenzo[*b*]furan-2-one C₁₁H₁₆O₄ (212.25). [α]_D²⁰ = -94° (c = 0.033, EtOH). Source: KU LIAN PI *Melia azedarach*. Ref: 1962.

**13661 Meldenin**

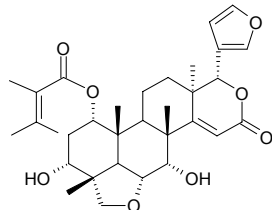
[19865-83-9] C₂₈H₃₈O₅ (454.61). Crystals, mp 240~244°C. Source: KU LIAN PI *Melia azedarach*, *Melia azadirachta*. Ref: 1261.

**13662 Meliacinanhydride**

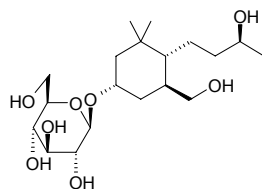
[24,25,26,27-Tetranorapotirucalla-(apoeupha)-6α-hydroxy,11α-methoxy-7α,12α-diacetoxyl,1,14,20(22)-trien-3-one] C₃₁H₃₈O₁₀ (570.64). Crystalline, mp 114~115°C, [α]_D²⁷ = -30.0° (c = 0.02, CHCl₃). Source: YIN DU LIAN *Azadiractica indica* (leaf). Ref: 3844.

**13663 Meliacinol**

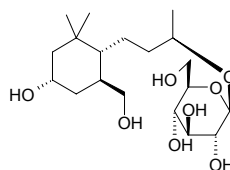
24,25,26,27-Tetranorapotirucalla-(apoeupha)-1α-trimethylacryloxy-21,23-6α,28-diepoxy-16-oxo-17-oxa-14,20,22-trien-3α,7α-diol C₃₂H₄₂O₈ (554.69). Fine needles, mp 178~179°C, [α]_D²⁷ = +7.78° (c = 0.18, CHCl₃). Pharm: Insecticidal inactive (*Aedes aegypti*, LC₅₀ > 100mg/L). Source: YIN DU LIAN *Azadiractica indica* (fresh leaf). Ref: 3914.

**13664 Meliaionoside A**

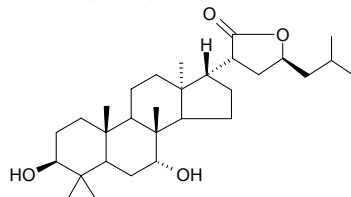
[128533-20-2] C₁₉H₃₆O₈ (392.49). Powder (C₆H₆/MeOH), [α]_D²⁰ = -35.1° (c = 0.43, pyridine). Source: KU LIAN PI *Melia azedarach*, CHUAN LIAN PI *Melia toosendan*. Ref: 1262.

**13665 Meliaionoside B**

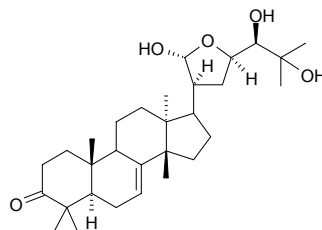
[128533-21-1] C₁₉H₃₆O₈ (392.49). Powder (C₆H₆/MeOH), [α]_D²⁰ = -9.0° (c = 0.15, pyridine). Source: KU LIAN PI *Melia azedarach*, CHUAN LIAN PI *Melia toosendan*. Ref: 1263.

**13666 Melialactone**

C₃₀H₅₀O₄ (474.73). Source: KU LIAN PI *Melia azedarach*. Ref: 1264.

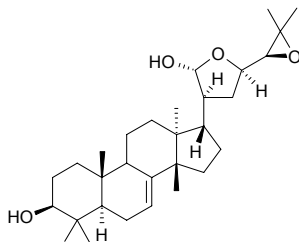
**13667 Melianodiol**

[32764-64-0] C₃₀H₄₈O₅ (488.71). mp 219~220°C. Source: KU LIAN PI *Melia azedarach*. Ref: 648.

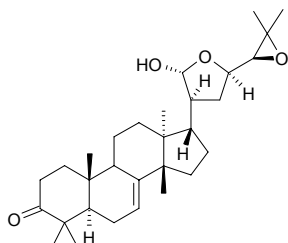


13668 Melianol

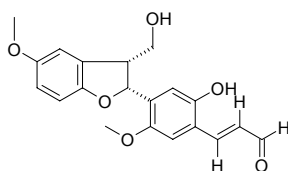
[16838-01-0] $C_{30}H_{48}O_4$ (472.71). Crystals (Me₂CO–pentane), mp 194–195°C, $[\alpha]_D = -38^\circ$ ($c = 1$, CHCl₃). Source: KU LIAN PI *Melia azedarach*. Ref: 6, 648.

**13669 Melianone**

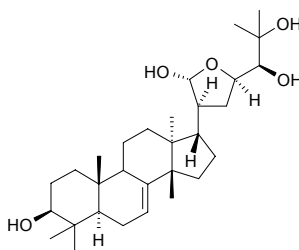
[6553-27-1] $C_{30}H_{46}O_4$ (470.70). mp 223–224°C (acetone–pentane), 232–233°C (chloroform–pentane). Source: CHANG YE KUAN MU *Eurycoma longifolia*, KU LIAN PI *Melia azedarach*, RI BEN KU LIAN *Melia azedarach* var. *japonica*. Ref: 6, 648, 660.

**13670 Melianoninol**

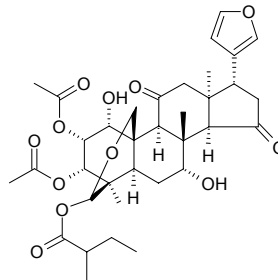
[136880-81-4] $C_{20}H_{20}O_6$ (356.38). Yellowish prismatic crystals, mp 150–152°C, $[\alpha]_D^{18} = -4.28^\circ$ ($c = 0.46$, methanol). Pharm: Insect antifeedant (green vegetable worm). Source: KU LIAN PI *Melia azedarach*. Ref: 648.

**13671 Melianotriol**

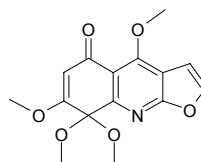
$C_{30}H_{50}O_5$ (490.73). mp 176–178°C. Source: KU LIAN PI *Melia azedarach*. Ref: 6.

**13672 Meliatoxin B₁**

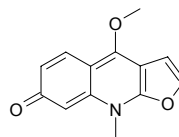
$C_{35}H_{46}O_{12}$ (658.75). Pharm: Cytotoxic (inhibits KB cell's growth, IC₅₀ > 10 μg/mL, control Adriamycin, IC₅₀ = 0.066 μg/mL). Source: CHUAN LIAN PI *Melia toosendan*. Ref: 2314.

**13673 Melicarpine**

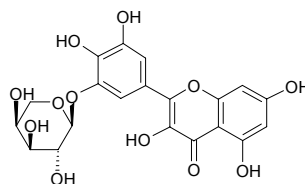
$C_{15}H_{15}NO_6$ (305.29). Colorless needles (MeOH), mp 211–213°C. Pharm: Cytotoxic (P₃₈₈ cell line, ED₅₀ = 8.1 μg/mL, control Mithramycin, ED₅₀ = 0.06 μg/mL; HT29, ED₅₀ = 11.2 μg/mL, Mithramycin, ED₅₀ = 0.07 μg/mL; A549, ED₅₀ = 2.5 μg/mL, Mithramycin, ED₅₀ = 0.08 μg/mL). Source: SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*. Ref: 5405.

**13674 Melicarpinone**

$C_{13}H_{11}NO_3$ (229.24). Pharm: Cytotoxic (P₃₈₈ cell line, ED₅₀ = 20.6 μg/mL, control Mithramycin, ED₅₀ = 0.06 μg/mL; HT29, ED₅₀ > 50 μg/mL, Mithramycin, ED₅₀ = 0.07 μg/mL; A549, ED₅₀ = 30.5 μg/mL, Mithramycin, ED₅₀ = 0.08 μg/mL). Source: SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*. Ref: 5405.

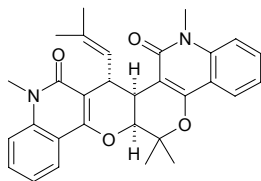
**13675 Melicitrin**

[38888-63-0] $C_{20}H_{18}O_{12}$ (450.36). Source: LIAN HUA *Melia azedarach*. Ref: 6.

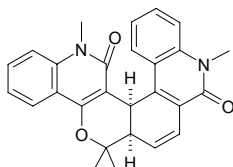


13676 Melicobisquinolinone A

$C_{30}H_{30}N_2O_4$ (482.58). Amorphous. Source: *Melicope ptelefolia*. Ref: 1886.

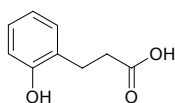
**13677 Melicobisquinolinone B**

$C_{27}H_{24}N_2O_3$ (424.50). Amorphous. Source: *Melicope ptelefolia*. Ref: 1886.

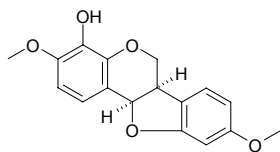
**13678 Melilotic acid**

Hydrocoumaric acid; 3-(2-Hydroxyphenyl)propanoic acid [495-78-3]

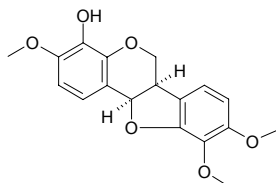
$C_9H_{10}O_3$ (166.18). Colorless lamellar crystals (benzene), mp 87–89°C; mp 82–83°C. Pharm: Antiulcerative; inhibits gastric ulcer (rat orl, ip or iv, 40µg/kg, Increases blood flow in stomach). Source: ROU GUI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], GUI ZHI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*], PI HAN CAO *Melilotus suaveolens*, SI ZI TAN *Pterocarpus santalinus*. Ref: 2, 6, 658, 940, 1155.

**13679 Melilotocarpin A**

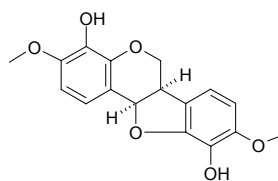
4-Homopterocarpinol; 4-Hydroxyhomopterocarpin; Melilotocarpin A [61135-95-3] $C_{17}H_{16}O_5$ (300.31). Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 716.

**13680 Melilotocarpin C**

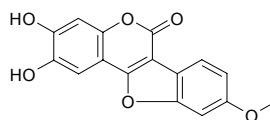
[83013-82-5] $C_{18}H_{18}O_6$ (330.34). Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 1266.

**13681 Melilotocarpin D**

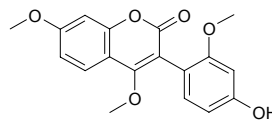
[83013-81-4] $C_{17}H_{16}O_6$ (316.31). Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 1266.

**13682 Melimessanol A**

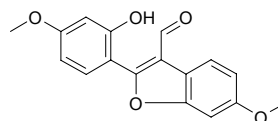
$C_{10}H_{16}O_6$ (298.25). White amorphous solid. Source: XI XI LI CAO MU XI *Melilotus messanensis*. Ref: 1852.

**13683 Melimessanol B**

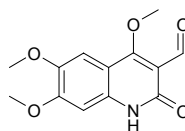
$C_{18}H_{16}O_6$ (328.32). White amorphous solid. Source: XI XI LI CAO MU XI *Melilotus messanensis*. Ref: 1852.

**13684 Melimessanol C**

$C_{17}H_{14}O_5$ (298.32). White amorphous solid. Source: XI XI LI CAO MU XI *Melilotus messanensis*. Ref: 1852.

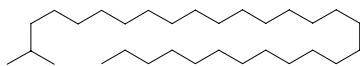
**13685 Melisemine**

$C_{13}H_{13}NO_5$ (263.25). Pharm: Cytotoxic (P₃₈₈ cell line, ED₅₀ = 13.2µg/mL, control Mithramycin, ED₅₀ = 0.06µg/mL; HT29, ED₅₀ = 46.0µg/mL, Mithramycin, ED₅₀ = 0.07µg/mL; A549, ED₅₀ = 4.0µg/mL, Mithramycin, ED₅₀ = 0.08µg/mL). Source: SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*. Ref: 5405.

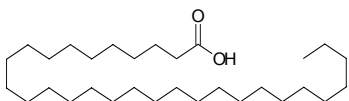


13686 Melissane

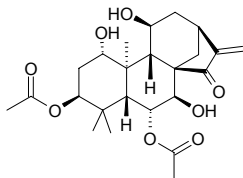
C₃₀H₆₂ (422.83). mp 73~74°C, bp 222°C/0.3mmHg. Source: TU DING GUI *Evolvulus alsinoides*. Ref: 6.

**13687 Melissic acid**

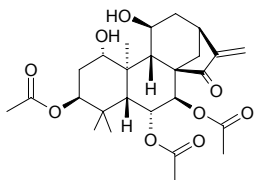
n-Triacontanoic acid [506-50-3] C₃₀H₆₀O₂ (452.81). Colorless crystals powder (ethanol), mp 82~83°C; mp 93°C. Source: HUA DONG LAN CI TOU *Echinops grijssii*, SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], XIAO HUA SUAN TENG ZI *Embelia parviflora*, YAO YONG PU GONG YING *Taraxacum officinale*, YUN QIAN HU *Peucedanum rubricaula*. Ref: 2, 177, 437, 660.

**13688 Melissoidesin A**

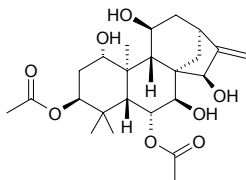
C₂₄H₃₄O₈ (450.53). mp 245~246°C, [α]_D²² = -24.4° (*c* = 0.44, CHCl₃). Source: BAO YE XIANG CHA CAI *Isodon melissoides*. Ref: 4067.

**13689 Melissoidesin B**

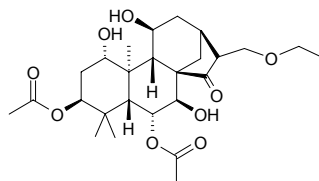
C₂₆H₃₆O₉ (492.57). mp 231~232°C, [α]_D²² = -11.9° (*c* = 0.13, CHCl₃). Source: BAO YE XIANG CHA CAI *Isodon melissoides*. Ref: 4067.

**13690 Melissoidesin C**

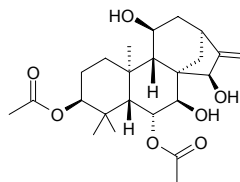
C₂₄H₃₆O₈ (452.55). mp 235~236°C, [α]_D²² = +16.36° (*c* = 0.38, MeOH). Source: BAO YE XIANG CHA CAI *Isodon melissoides*. Ref: 4067.

**13691 Melissoidesin D**

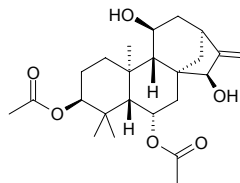
C₂₆H₄₀O₉ (496.60). mp 215~216°C, [α]_D²² = -4.20° (*c* = 0.50, MeOH). Source: BAO YE XIANG CHA CAI *Isodon melissoides*. Ref: 4067.

**13692 Melissoidesin E**

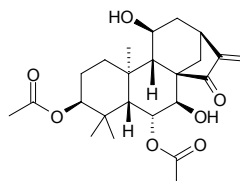
C₂₄H₃₆O₇ (436.55). Amorphous powder, [α]_D²² = +19.3° (*c* = 0.46, CHCl₃). Source: BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.00066%dw). Ref: 4067, 4760.

**13693 Melissoidesin F**

C₂₄H₃₆O₆ (420.55). Amorphous powder, [α]_D²² = +17.7° (*c* = 0.47, CHCl₃). Pharm: Cytotoxic inactive (*in vitro*, BGC823 hmn tumor cells, control VCR, IC₅₀ = 0.066μg/mL)^[4760]. Source: BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.0022%dw). Ref: 4067, 4760.

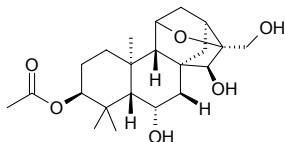
**13694 Melissoidesin G**

C₂₄H₃₄O₇ (434.53). Amorphous powder, [α]_D²² = -35.3° (*c* = 0.52, CHCl₃); [α]_D^{25.6} = -32.6° (*c* = 0.369, MeOH). Pharm: Cytotoxic (*in vitro*, BGC823 hmn tumor cells, IC₅₀ = 6.62μg/mL, control VCR, IC₅₀ = 0.066μg/mL)^[4760]; cytotoxic (hmn tumor K562 cells, IC₅₀ = 0.3μg/mL, control *cis*-Platin IC₅₀ = 1.1μg/mL)^[4955]. Source: BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.00066%dw), DONG LING CAO *Rabdosia rubescens* (leaf). Ref: 4067, 4299, 4955, 4760.

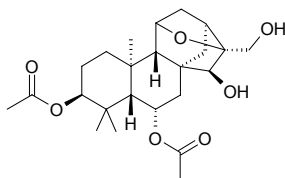


13695 Melissoidesin I

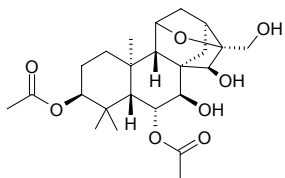
3 β -Acetoxy-6 α ,15 β ,17-trihydroxy-11 β ,16 β -epoxy-*ent*-kaurane C₂₂H₃₄O₆ (394.51). Colorless crystals, mp 124–126°C, [α]_D²⁰ = +27.27° (*c* = 0.11, MeOH). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts). **Ref:** 4355.

**13696 Melissoidesin J**

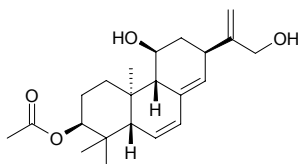
3 β ,6 α -Diacetoxy-15 β ,17-dihydroxy-11 β ,16 β -epoxy-*ent*-kaurane C₂₄H₃₆O₇ (436.55). Colorless crystals, mp 130–132°C, [α]_D²⁰ = +38.39° (*c* = 0.25, MeOH). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts). **Ref:** 4355.

**13697 Melissoidesin K**

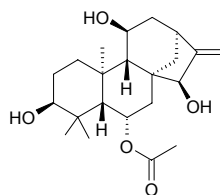
3 β ,6 α -Diacetoxy-7 β ,15 β ,17-trihydroxy-11 β ,16 β -epoxy-*ent*-kaurane C₂₄H₃₆O₈ (452.55). Colorless crystals, mp 185–187°C, [α]_D²⁰ = +45.45° (*c* = 0.09, MeOH). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts). **Ref:** 4355.

**13698 Melissoidesin L**

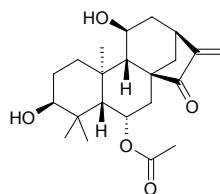
3 β -Acetoxy-11 β ,17-dihydroxy-*ent*-abieta-6(7),8(14),15(16)-triene C₂₂H₃₂O₄ (360.50). Colorless crystals, mp 90–92°C, [α]_D²⁰ = –14.71° (*c* = 0.11, MeOH). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts). **Ref:** 4355.

**13699 Melissoidesin M**

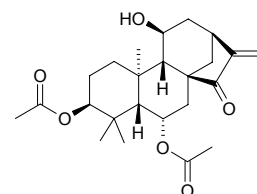
3 β ,11 β ,15 β -Trihydroxy-6 α -acetoxy-*ent*-kaur-16-ene C₂₂H₃₄O₅ (378.51). Colorless needles (acetone), mp²¹ 0–214°C, [α]_D²⁰ = +9.6° (*c* = 0.05, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, BGC823 hmn tumor cells, control VCR, IC₅₀ = 0.066 μ g/mL). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.00078%dw). **Ref:** 4760.

**13700 Melissoidesin N**

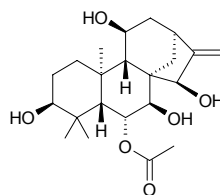
3 β ,11 β -Dihydroxy-6 α -acetoxy-*ent*-kaur-16-en-15-one C₂₂H₃₂O₅ (376.5). Colorless crystals (acetone), mp 248–250°C, [α]_D²⁰ = –68.18° (*c* = 0.07, MeOH). **Pharm:** Cytotoxic (*in vitro*, BGC823 hmn tumor cells, IC₅₀ = 0.036 μ g/mL, control VCR, IC₅₀ = 0.066 μ g/mL). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.00056%dw). **Ref:** 4760.

**13701 Melissoidesin O**

11 β -Hydroxy-3 β ,6 α -diacetoxy-*ent*-kaur-16-en-15-one C₂₄H₃₄O₆ (418.53). Colorless crystals (acetone), mp 226–228°C, [α]_D²⁰ = –51.52° (*c* = 0.30, MeOH). **Pharm:** Cytotoxic (*in vitro*, BGC823 hmn tumor cells, IC₅₀ = 7.83 μ g/mL, control VCR, IC₅₀ = 0.066 μ g/mL). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.0013%dw). **Ref:** 4760.

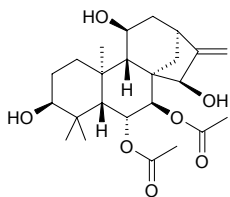
**13702 Melissoidesin P**

3 β ,7 β ,11 β ,15 β -Tetrahydroxy-6 α -acetoxy-*ent*-kaur-16-ene C₂₂H₃₄O₆ (394.51). Colorless crystals, mp 232–234°C, [α]_D²⁰ = –8.42° (*c* = 0.21, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, BGC823 hmn tumor cells, control VCR, IC₅₀ = 0.066 μ g/mL). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.0016%dw). **Ref:** 4760.

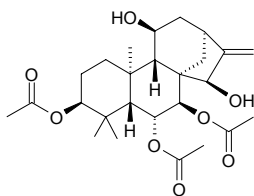


13703 MelissoidesinQ

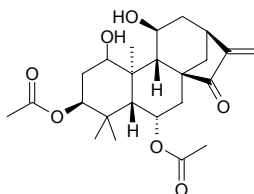
3 β ,11 β ,15 β -Trihydroxy-6 α ,7 β -diacetoxy-*ent*-kaur-16-ene C₂₄H₃₇O₇ (436.55). Colorless crystals (acetone), mp 115–118°C, [α]_D²⁰ = –52.17° (*c* = 0.12, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, BGC823 hmn tumor cells, control VCR, IC₅₀ = 0.066 μ g/mL). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.012%dw). **Ref:** 4760.

**13704 Melissoidesin R**

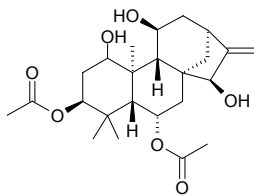
11 β ,15 β -Dihydroxy-3 β ,6 α ,7 β -triacetoxy-*ent*-kaur-16-ene C₂₆H₃₈O₈ (478.59). Colorless crystals (acetone), mp 234–235°C, [α]_D²⁰ = –20.62° (*c* = 0.09, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, BGC823 hmn tumor cells, control VCR, IC₅₀ = 0.066 μ g/mL). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.00056%dw). **Ref:** 4760.

**13705 MelissoidesinS**

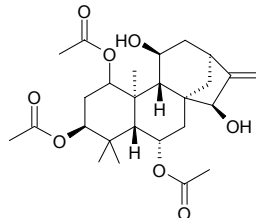
1 α ,11 β -Dihydroxy-3 β ,6 α -diacetoxy-*ent*-kaur-16-en-15-one C₂₄H₃₄O₇ (434.53). Colorless crystals (acetone), mp 238–240°C, [α]_D²⁰ = –53.4° (*c* = 0.21, MeOH). **Pharm:** Cytotoxic (*in vitro*, BGC823 hmn tumor cells, IC₅₀ = 7.71 μ g/mL, control VCR, IC₅₀ = 0.066 μ g/mL). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.031%dw). **Ref:** 4760.

**13706 MelissoidesinT**

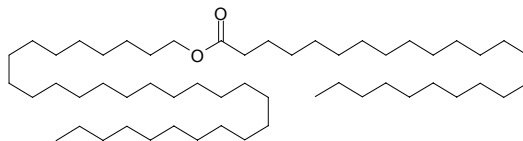
1 α ,11 β ,15 β -Trihydroxy-3 β ,6 α -diacetoxy-*ent*-kaur-16-ene C₂₄H₃₆O₇ (436.55). Colorless crystals (acetone), mp 246–248°C, [α]_D²⁰ = +19.9° (*c* = 0.23, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, BGC823 hmn tumor cells, control VCR, IC₅₀ = 0.066 μ g/mL). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.00038%dw). **Ref:** 4760.

**13707 Melissoidesin U**

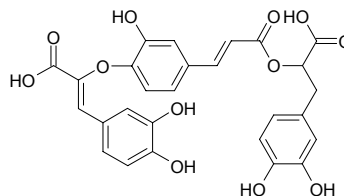
11 β ,15 β -Dihydroxy-1 α ,3 β ,6 α -triacetoxy-*ent*-kaur-16-ene C₂₆H₃₈O₈ (478.59). Colorless crystals, mp 96–98°C, [α]_D²⁰ = +20.1° (*c* = 0.50, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, BGC823 hmn tumor cells, control VCR, IC₅₀ = 0.066 μ g/mL). **Source:** BAO YE XIANG CHA CAI *Isodon melissoides* (aerial parts: yield = 0.0072%dw). **Ref:** 4760.

**13708 Melissyl lignocerate**

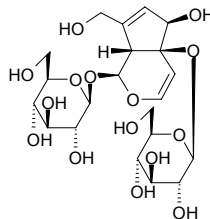
C₅₄H₁₀₈O₂ (789.46). **Source:** CHONG BAI LA *Ericerus pela*. **Ref:** 6.

**13709 Melitric acid A**

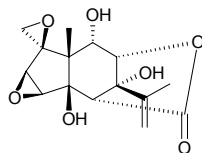
C₂₇H₂₂O₁₂ (538.47). Freeze-dried light-brown powder, [α]_D²⁰ = +41° (*c* = 0.2, MeOH). **Source:** YAO YONG DAN SHEN *Salvia officinalis*. **Ref:** 2388.

**13710 Melittoside**

[19467-03-9] C₂₁H₃₂O₁₅ (524.48). **Source:** GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*], LONG TU ZHU *Clerodendrum thomsonae*. **Ref:** 2, 660.

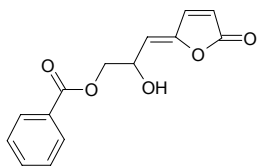
**13711 Mellitoxin**

C₁₅H₁₈O₇ (310.31). **Pharm:** Causes excitation to the peripheral nervous system; toxin. **Source:** CAI SHI MU MA SANG *Coriaria arborea*. **Ref:** 658.

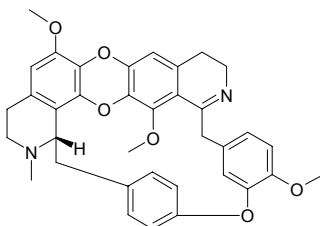


13712 Melodorinol

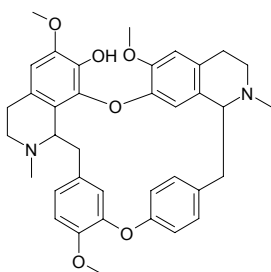
$C_{14}H_{12}O_5$ (260.25). Source: *Melodorum fruticosum* (flower). Ref: 5245.

**13713 Menisarine**

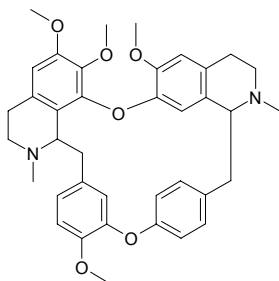
$C_{36}H_{34}N_2O_6$ (590.68). Source: MU FANG JI *Cocculus trilobus* [Syn. *Cocculus sarmentosus*]. Ref: 660.

**13714 Menisidine**

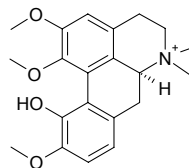
$C_{37}H_{40}N_2O_6$ (608.74). Source: FANG JI *Stephania tetrandra*. Ref: 2.

**13715 Menisine**

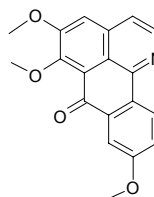
(+)-Isotetrandrine $C_{38}H_{42}N_2O_6$ (622.77). Pharm: Mitochondrial respiratory chain complex I inhibitor ($IC_{50} > 10 \mu\text{mol/L}$, Rolliniastatin-1, $IC_{50} = (0.6 \pm 0.04) \text{nmol/L}$, Rotenone, $IC_{50} = (5.10 \pm 0.90) \text{nmol/L}$)^[4954]. Source: FANG JI *Stephania tetrandra*, GE LUN BI YA MU BAN SHU *Xylopi colombiana* (fruit). Ref: 2, 4954.

**13716 Menisperine**

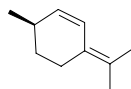
$C_{21}H_{26}NO_4^+$ (356.45). mp 233°C. Pharm: Ganglionic blocker (curariform action, particularly for submandibular ganglions); antihypertensive (dog, cat and rbt); muscle relaxant (rat and rbt). Source: BIAN FU GE GEN *Menispermum dauricum* (rhizome: mean content of 12 origins = 0.658%^[5508]), HU JIAO HUA JIAO *Zanthoxylum piperitum*, HUANG BAI *Phellodendron amurense*, NAN TIAN ZHU ZI *Nandina domestica*, TU CHUANG HUA *Dicranostigma franchetianum* [Syn. *Dicranostigma leptopodum*], XIA TIAN WU *Corydalis decumbens* [Syn. *Corydalis amabilis*]. Ref: 2, 512, 658, 5508.

**13717 Menisporphine**

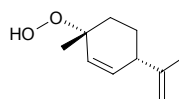
Menisporphine [83287-02-9] $C_{19}H_{15}NO_4$ (321.34). Source: BIAN FU GE GEN *Menispermum dauricum*. Ref: 1267.

**13718 2,4(8)-p-Menthadiene**

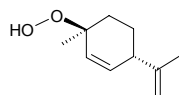
[586-63-0] $C_{10}H_{16}$ (136.24). Source: AI YE *Artemisia argyi*. Ref: 1268.

**13719 (-)-(1R,4S)-p-Mentha-2,8-dien-1-hydroperoxide**

$C_{10}H_{16}O_2$ (168.24). Colorless oil, $[\alpha]_D^{20} = -49.6^\circ$ ($c = 0.9$, CHCl_3). Pharm: Antitrypanosomal (*in vitro*, epimastigotes of *Trypanosoma cruzi*, MLC = $3.1 \mu\text{mol/L}$; HeLa cell infection assay, at $1 \mu\text{g/mL}$, InRt of infection of HeLa cells by the trypomastigotes = 88%). Source: TU JING JIE *Chenopodium ambrosioides* (fresh aerial part including immature seed: yield = 0.00085%fw). Ref: 4619.

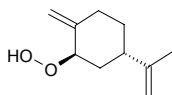
**13720 (-)-(1S,4S)-p-Mentha-2,8-dien-1-hydroperoxide**

$C_{10}H_{16}O_2$ (168.24). Colorless oil, $[\alpha]_D^{20} = -164.2^\circ$ ($c = 1.0$, CHCl_3). Pharm: Antitrypanosomal (*in vitro*, epimastigotes of *Trypanosoma cruzi*, MLC = $3.1 \mu\text{mol/L}$; HeLa cell infection assay, at $1 \mu\text{g/mL}$, InRt of infection of HeLa cells by the trypomastigotes = 100%). Source: TU JING JIE *Chenopodium ambrosioides* (fresh aerial part including immature seed: yield = 0.00067%fw). Ref: 4619.

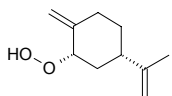


13721 (-)-(2*R*,4*S*)-*p*-Mentha-1(7),8-dien-2-hydroperoxide

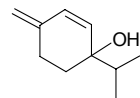
C₁₀H₁₆O₂ (168.24). Colorless oil, $[\alpha]_D^{20} = -78.1^\circ$ ($c = 2.5$, CHCl₃). **Pharm:** Antitrypanosomal (*in vitro*, epimastigotes of *Trypanosoma cruzi*, MLC = 1.6 μmol/L; HeLa cell infection assay, at 1 μg/mL, InRt of infection of HeLa cells by the trypomastigotes = 63%). **Source:** TU JING JIE *Chenopodium ambrosioides* (fresh aerial part including immature seed: yield = 0.0015%fw). **Ref:** 4619.

**13722 (-)-(2*S*,4*S*)-*p*-Mentha-1(7),8-dien-2-hydroperoxide**

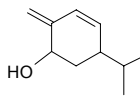
C₁₀H₁₆O₂ (168.24). Colorless oil, $[\alpha]_D^{20} = -18.7^\circ$ ($c = 4.7$, CHCl₃). **Pharm:** Antitrypanosomal (*in vitro*, epimastigotes of *Trypanosoma cruzi*, MLC = 1.2 μmol/L). **Source:** TU JING JIE *Chenopodium ambrosioides* (fresh aerial part including immature seed: yield = 0.00064%fw). **Ref:** 4619.

**13723 1(7),2-*p*-Menthadien-4-ol**

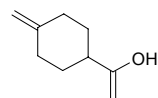
C₁₀H₁₆O (152.24). **Source:** HU JIAO *Piper nigrum*. **Ref:** 1521.

**13724 1(7),2-*p*-Menthadien-6-ol**

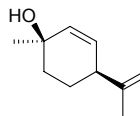
C₁₀H₁₆O (152.24). **Source:** HU JIAO *Piper nigrum*. **Ref:** 1269.

**13725 1(7),8(10)-*p*-Menthadien-9-ol**

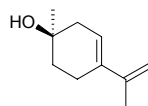
C₉H₁₄O (138.21). **Source:** SHE CHUANG ZI *Cnidium monnieri*. **Ref:** 1270.

**13726 *cis-p*-2,8-Menthadien-1-ol**

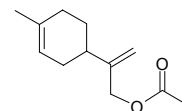
C₁₀H₁₆O (152.24). **Source:** HU JIAO *Piper nigrum*. **Ref:** 6.

**13727 3,8(9)-*p*-Menthadien-1-ol**

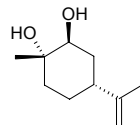
p-3,8(9)-Menthadien-1-ol C₁₀H₁₆O (152.24). **Source:** HU JIAO *Piper nigrum*. **Ref:** 1269.

**13728 1,8-Menthadien-10-ol acetate**

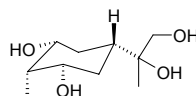
C₁₂H₁₈O₂ (194.28). **Source:** JU PI *Citrus reticulata*. **Ref:** 6.

**13729 *p*-Mentha-8-en-1,2-diol**

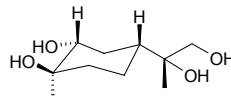
C₁₀H₁₈O₂ (170.25). Amorphous powder, $[\alpha]_D^{21} = +34^\circ$. **Pharm:** Antitrypanosomal inactive (epimastigotes of *Trypanosoma cruzi*, 400 μmol/L)^[2579]. **Source:** GE LU ZI *Carum carvi* (fruit), YI LANG QING LAN *Dracocephalum kotschyi*. **Ref:** 2579, 4153.

**13730 4β*H*-*cis-p*-Menthane-2α,6α,8,9-tetrol**

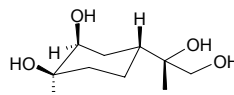
C₁₀H₂₀O₄ (204.27). Amorphous powder, $[\alpha]_D^{21} = +4^\circ$ ($c = 1.6$, MeOH). **Source:** GE LU ZI *Carum carvi* (fruit). **Ref:** 4153.

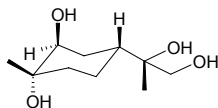
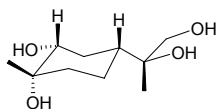
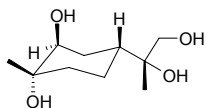
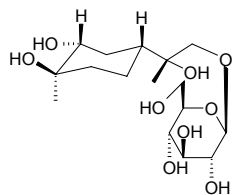
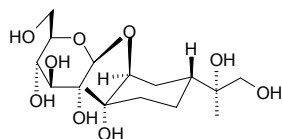
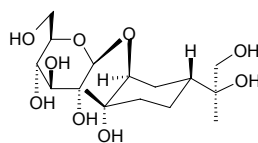
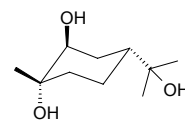
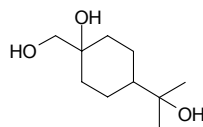
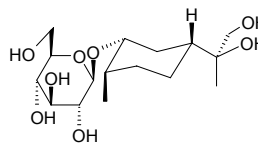
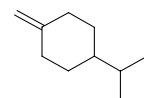
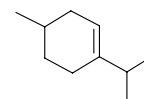
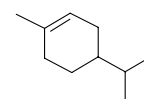
**13731 *rel*-(1*R*,2*R*,4*R*,8*S*)-*p*-Menthane-1,2,8,9-tetrol**

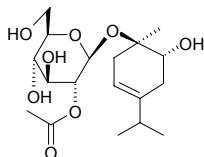
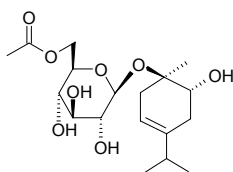
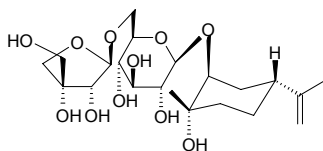
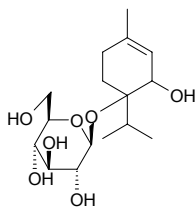
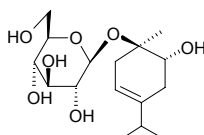
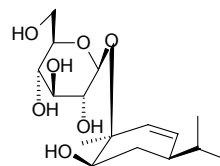
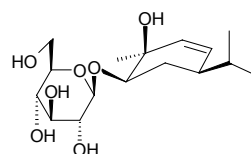
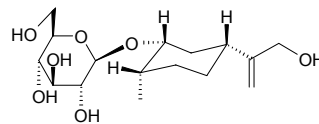
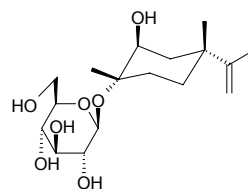
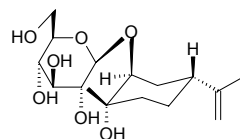
C₁₀H₂₀O₄ (204.27). Amorphous powder, $[\alpha]_D^{21} = -3^\circ$ ($c = 0.2$, MeOH). **Source:** GE LU ZI *Carum carvi* (fruit). **Ref:** 4153.

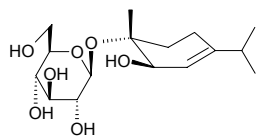
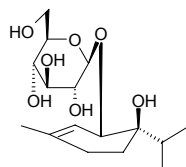
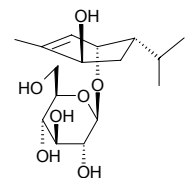
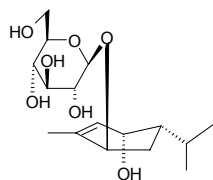
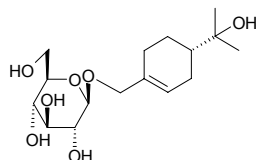
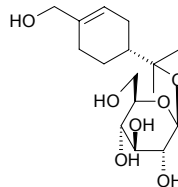
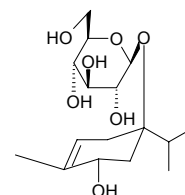
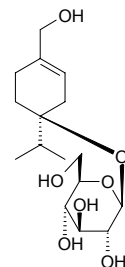
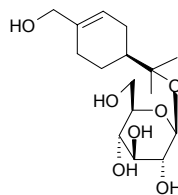
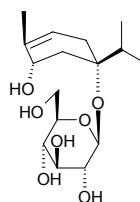
**13732 (1*R*,2*S*,4*R*,8*R*)-*p*-Menthane-1,2,8,9-tetrol**

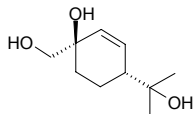
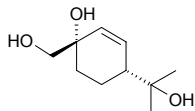
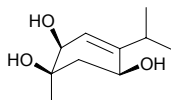
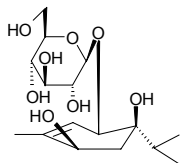
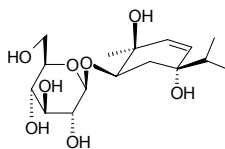
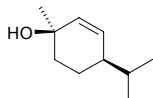
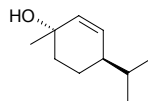
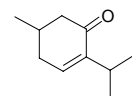
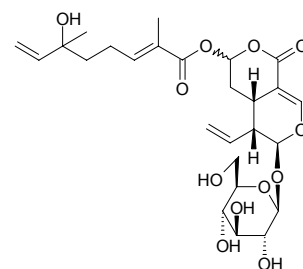
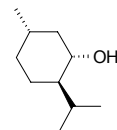
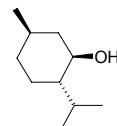
C₁₀H₂₀O₄ (204.27). Amorphous powder, $[\alpha]_D^{22} = +27^\circ$ ($c = 0.8$, MeOH). **Source:** GE LU ZI *Carum carvi* (fruit). **Ref:** 4153.



13733 *rel*-(1*S*,2*R*,4*R*,8*R*)-*p*-Menthane-1,2,8,9-tetrolC₁₀H₂₀O₄ (204.27). Amorphous powder, [α]_D²³ = +26° (*c* = 0.1, MeOH).Source: GE LU ZI *Carum carvi* (fruit). Ref: 4153.**13734** *rel*-(1*S*,2*R*,4*R*,8*S*)-*p*-Menthane-1,2,8,9-tetrolC₁₀H₂₀O₄ (204.27). Amorphous powder, [α]_D²³ = +11° (*c* = 0.1, MeOH).Source: GE LU ZI *Carum carvi* (fruit). Ref: 4153.**13735** (1*S*,2*S*,4*R*,8*S*)-*p*-Menthane-1,2,8,9-tetrolC₁₀H₂₀O₄ (204.27). Amorphous powder, [α]_D²² = +30° (*c* = 0.4, MeOH).Source: GE LU ZI *Carum carvi* (fruit). Ref: 4153.**13736** *rel*-(1*R*,2*R*,4*R*,8*S*)-*p*-Menthane-1,2,8,9-tetrol 9-*O*- β -*D*-glucopyranosideC₁₆H₃₀O₉ (366.41). Amorphous powder, [α]_D²³ = -15° (*c* = 0.2, MeOH).Source: GE LU ZI *Carum carvi* (fruit). Ref: 4153.**13737** (1*S*,2*S*,4*R*,8*R*)-*p*-Menthane-1,2,8,9-tetrol 2-*O*- β -*D*-glucopyranosideC₁₆H₃₀O₉ (366.41). Amorphous powder, [α]_D²⁴ = +17° (*c* = 0.7, MeOH).Source: GE LU ZI *Carum carvi* (fruit). Ref: 4153.**13738** (1*S*,2*S*,4*R*,8*S*)-*p*-Menthane-1,2,8,9-tetrol 2-*O*- β -*D*-glucopyranosideC₁₆H₃₀O₉ (366.41). Colorless needles(MeOH), mp 137~138°C, [α]_D²⁴ = +22°*c* = 1.3, MeOH). Source: GE LU ZI *Carum carvi* (fruit). Ref: 4153.**13739** *trans*-*p*-Menthane-1 α ,2 β ,8-triolC₁₀H₂₀O₃ (188.27). Amorphous powder, [α]_D²⁵ = +21° (*c* = 0.1, MeOH).Source: BEI SHA SHEN *Glehnia littoralis* (fruit). Ref: 3525.**13740** 4-*p*-Menthane-1,7,8-triolC₁₀H₂₀O₃ (188.27). Colorless prismatic crystals (chloroform), mp 149~151°C.Source: HUA BEI BAI QIAN *Cynanchum hancockianum*. Ref: 244.**13741** (1*S*,2*R*,4*R*,8*S*)-*p*-Menthane-2,8,9-triol 2-*O*- β -*D*-glucopyranosideC₁₆H₃₀O₈ (350.41). Source: SHI LUO ZI *Anethum graveolens* (fruit). Ref: 4177.**13742** Δ ¹⁽⁷⁾-MentheneC₁₀H₁₈ (138.26). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.**13743** Δ ³-Menthene[500-00-5] C₁₀H₁₈ (138.26). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.**13744** *p*-1-MentheneC₁₀H₁₈ (138.25). mp (+) 175~177°C. Source: MEI GUI HUA *Rosa rugosa*. Ref: 6.

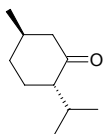
13745 (1*R*,2*R*)-*p*-Menth-4(5)-ene-1,2-diol 1-*O*- β -*D*-(2-*O*-acetyl)glucopyranosideC₁₈H₃₀O₈ (374.44). Amorphous powder, $[\alpha]_D^{22} = -32^\circ$ ($c = 0.4$, MeOH).Source: SHE XIANG CAO *Thymus vulgaris* (leaf). Ref: 3895.**13746 (1*R*,2*R*)-*p*-Menth-4(5)-ene-1,2-diol 1-*O*- β -*D*-(6-*O*-acetyl)glucopyranoside**C₁₈H₃₀O₈ (374.44). Amorphous powder, $[\alpha]_D^{24} = -38^\circ$ ($c = 0.4$, MeOH).Source: SHE XIANG CAO *Thymus vulgaris* (leaf). Ref: 3895.**13747 (1*S*,2*S*,4*R*)-*p*-Menth-8-ene-1,2-diol 2-*O*- β -*D*-apiofuranosyl-(1 \rightarrow 6)- β -*D*-glucopyranoside**C₂₁H₃₆O₁₁ (464.51). Amorphous powder, $[\alpha]_D^{22} = -33^\circ$ ($c = 0.8$, MeOH).Source: SHI LUO ZI *Anethum graveolens* (fruit). Ref: 4177.**13748 *p*-Menth-1-ene-3,4-diol 4-*O*- β -glucopyranoside**C₁₆H₂₈O₇ (332.40). $[\alpha]_D^{25} = -18.9^\circ$ ($c = 1.50$, MeOH). Source: XU LI YA NIUZHI *Origanum syriacum* (aerial parts). Ref: 5223.**13749 (1*R*,2*R*)-*p*-Menth-4(5)-ene-1,2-diol 1-*O*- β -*D*-glucopyranoside**C₁₆H₂₈O₇ (332.40). Colorless needles (MeOH), mp 137~139°C, $[\alpha]_D^{24} = -42^\circ$ ($c = 2.0$, MeOH). Source: SHE XIANG CAO *Thymus vulgaris* (leaf).Ref: 3895.**13750 (1*S*,2*R*,4*R*)-*p*-Menth-5-ene-1,2-diol 1-*O*- β -*D*-glucopyranoside**C₁₆H₂₈O₇ (332.40). Amorphous powder, $[\alpha]_D^{21} = -23^\circ$ ($c = 0.6$, MeOH).Source: ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.**13751 (1*S*,2*R*,4*R*)-*p*-Menth-5-ene-1,2-diol 2-*O*- β -*D*-glucopyranoside**C₁₆H₂₈O₇ (332.40). Amorphous powder, $[\alpha]_D^{23} = +8^\circ$ ($c = 1.8$, MeOH). Source:ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.**13752 (1*S*,2*R*,4*R*)-*p*-Menth-8-ene-2,10-diol 2-*O*- β -*D*-glucopyranoside**C₁₆H₂₈O₇ (332.40). Amorphous powder, $[\alpha]_D^{25} = -26^\circ$ ($c = 0.9$, MeOH).Source: GE LU ZI *Carum carvi* (fruit). Ref: 4153.**13753 (1*S*,2*S*,4*R*)-*p*-Menth-8-ene-1,2-diol 1-*O*- β -*D*-glucopyranoside**C₁₆H₂₈O₇ (332.40). Amorphous powder, $[\alpha]_D^{24} = +7^\circ$ ($c = 0.3$, MeOH). Source:SHI LUO ZI *Anethum graveolens* (fruit). Ref: 4177.**13754 (1*S*,2*S*,4*R*)-*p*-Menth-8-ene-1,2-diol 2-*O*- β -*D*-glucopyranoside**C₁₆H₂₈O₇ (332.40). Colorless needles (MeOH), mp 154~156°C, $[\alpha]_D^{25} = +13^\circ$ ($c = 1.7$, MeOH). Source: GE LU ZI *Carum carvi* (fruit), SHI LUO ZI*Anethum graveolens* (fruit). Ref: 4153, 4177.

13755 (1R,2R)-p-Menth-3-ene-1,2-diol 2-O-β-D-glucopyranosideC₁₆H₂₈O₇ (332.40). Amorphous powder, [α]_D²² = -23° (c = 1.7, MeOH).Source: SHE XIANG CAO *Thymus vulgaris* (leaf). Ref: 3895.**13756 (3R,4R)-p-Menth-1-ene-3,4-diol 3-O-β-D-glucopyranoside**C₁₆H₂₈O₇ (332.40). Amorphous powder, [α]_D²¹ = -86° (c = 0.6, MeOH).Source: ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.**13757 (3R,4S,6R)-p-Menth-1-ene-3,6-diol 3-O-β-D-glucopyranoside**C₁₆H₂₈O₇ (332.40). Colorless needles, mp 215~217 °C, [α]_D²³ = +126° (c = 0.2,MeOH). Source: ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.**13758 (3R,4S,6R)-p-Menth-1-ene-3,6-diol 6-O-β-D-glucopyranoside**C₁₆H₂₈O₇ (332.40). Colorless needles, mp 215~217 °C, [α]_D²³ = +89° (c = 0.5,MeOH). Source: ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.**13759 (4R)-p-Menth-1-ene-7,8-diol 7-O-β-D-glucopyranoside**C₁₆H₂₈O₇ (332.40). Amorphous powder, [α]_D²⁴ = -6° (c = 0.3, MeOH). Source:ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.**13760 (4R)-p-Menth-1-ene-7,8-diol 8-O-β-D-glucopyranoside**C₁₆H₂₈O₇ (332.40). Amorphous powder, [α]_D²⁴ = +8°. Source: BEI SHASHEN *Glehnia littoralis* (fruit). Ref: 3525.**13761 (4R,6S)-p-Menth-1-ene-4,6-diol 4-O-β-D-glucopyranoside**C₁₆H₂₈O₇ (332.40). Amorphous powder, [α]_D²⁴ = -29° (c = 1.8, MeOH).Source: YIN DU ZANG HUI XIANG *Carum ajowan* (fruit). Ref: 3547.**13762 (4S)-p-Menth-1-ene-4,7-diol 4-O-β-D-glucopyranoside**C₁₆H₂₈O₇ (332.40). Amorphous powder, [α]_D²⁴ = -15° (c = 0.5, MeOH).Source: YIN DU ZANG HUI XIANG *Carum ajowan* (fruit). Ref: 3547.**13763 (4S)-p-Menth-1-ene-7,8-diol 8-O-β-D-glucopyranoside**C₁₆H₂₈O₇ (332.40). Amorphous powder, [α]_D²⁵ = -50°. Source: GE LU ZI*Carum carvi* (fruit). Ref: 4153.**13764 (4S,6S)-p-Menth-1-ene-4,6-diol 4-O-β-D-glucopyranoside**C₁₆H₂₈O₇ (332.40). Colorless needles, mp 78~81°C, [α]_D²¹ = -2° (c = 0.7,MeOH). Source: ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.

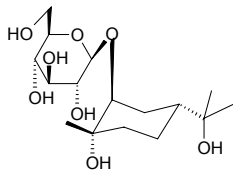
13765 cis-p-Menth-2-ene-1 α ,7,8-triolC₁₀H₁₈O₃ (186.25). Amorphous powder, [α]_D²⁴ = +26° (c = 0.1, MeOH).Source: BEI SHA SHEN *Glehnia littoralis* (fruit). Ref: 3525.**13766 trans-p-Menth-2-ene-1 α ,7,8-triol**C₁₀H₁₈O₃ (186.25). Amorphous powder, [α]_D²⁴ = +13° (c = 0.3, MeOH).Source: BEI SHA SHEN *Glehnia littoralis* (fruit). Ref: 3525.**13767 p-Menth-3-ene-1 β ,2 β ,5 β -triol**C₁₀H₁₈O₃ (186.25). Amorphous powder, [α]_D²³ = +2° (c = 0.2, MeOH). Source:YIN DU ZANG HUI XIANG *Carum ajowan* (fruit). Ref: 3547.**13768 (3R,4R,6R)-p-Menth-1-ene-3,4,6-triol 3-O- β -D-glucopyranoside**C₁₆H₂₈O₈ (348.40). Amorphous powder, [α]_D²² = -97° (c = 0.1, MeOH).Source: ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.**13769 (1S,2R,4S)-p-Menth-5-ene-1,2,4-triol 2-O- β -D-glucopyranoside**C₁₆H₂₈O₈ (348.40). Amorphous powder, [α]_D²³ = -60° (c = 1.1, MeOH).Source: ZI RAN QIN *Cuminum cyminum* (fruit). Ref: 4243.**13770 cis-p-2-Menthen-1-ol**C₁₀H₁₈O (154.25). bp (-) 110~115°C/25mmHg. Source: HU JIAO *Piper nigrum*. Ref: 6.**13771 trans-p-2-Menthen-1-ol**C₁₀H₁₈O (154.25). Source: BAI DOU KOU *Amomum kravanh* [Syn. *Amomum cardamomum*]. Ref: 6.**13772 p-Menth-4-en-3-one**C₁₀H₁₆O (152.24). Source: RU XIANG *Boswellia carterii*, DENG XIN CAO *Juncus effusus*. Ref: 1271, 1520.**13773 Menthiafolin**[19351-64-5] C₂₆H₃₆O₁₂ (540.57). mp 186°C. Source: SHUI CAI *Menyanthes trifoliata* (the compound was isolated from the plant by Battersby et al. in 1968)^[5505], SHUI CAI GEN *Menyanthes trifoliata*. Ref: 6, 5505.**13774 Menthol**C₁₀H₂₀O (156.27). mp (+) 42°C, (±) 35~36°C. Pharm: Analgesic; anesthetic; anti-inflammatory; relieves itching; used in treatment of headache, neuralgia, itching, respiratory tract inflammation, atrophic rhinitis and celostomia (alalia). Source: BO HE *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*] (dried aerial parts: content scope = 0.77%~0.87%)^[5501], HUI HUI SU GENG *Perilla frutescens* var. *crispa*, JIAN ZI SU *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], JIN XIAN CAO *Glechoma longituba*. Ref: 2, 4, 6, 658, 660, 5501.**13775 Menthol-b**C₁₀H₂₀O (156.27). mp (-) 43°C, (±) 35~36°C. Source: BO HE *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*], JIN XIAN CAO *Glechoma longituba*, ZI SU YE *Perilla frutescens* var. *arguta*, HUI HUI SU GENG *Perilla frutescens* var. *crispa*. Ref: 2, 4, 6, 660.

13776 Menthone

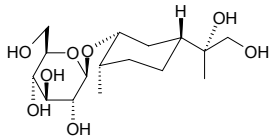
$C_{10}H_{18}O$ (154.25). bp (+) 204°C, (-) 207°C, (\pm) 205°C. **Pharm:** Analgesic ((+)Menthone shows strong action, as the effective component in *Schizonepeta tenuifolia* (JING JIE) to settle pain); inhibits intestinal movement (*in vitro* rabbit intestine). **Source:** BO HE *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*] (dried aerial parts: content scope = 0.08%–0.12%)^[5501], JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*], JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], HUA DONG LAN CI TOU *Echinops grijsii*, *Mentha* sp. **Ref:** 2, 658, 660, 5501.

**13777 (1S,2S,4R)-p-Menth-1,2,8-triol 2-O-β-D-glucopyranoside**

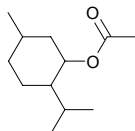
$C_{16}H_{30}O_8$ (350.41). Amorphous powder, $[\alpha]_D^{21} = +9^\circ$ ($c = 0.3$, MeOH). **Source:** SHI LUO ZI *Anethum graveolens* (fruit). **Ref:** 4177.

**13778 (1R,2R,4R,8R)-p-Menth-2,8,9-triol 2-O-β-D-glucopyranoside**

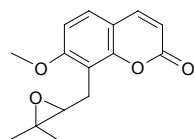
$C_{16}H_{30}O_8$ (350.41). Amorphous powder, $[\alpha]_D^{22} = -50^\circ$ ($c = 0.2$, MeOH). **Source:** SHI LUO ZI *Anethum graveolens* (fruit). **Ref:** 4177.

**13779 Menthyl acetate**

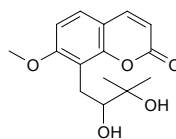
$C_{12}H_{22}O_2$ (198.31). bp 227°C. **Pharm:** Flavorant. **Source:** LA BO HE *Mentha piperita*, BO HE *Mentha haplocalyx* [Syn. *Mentha canadaensis*; *Mentha arvensis* var. *haplocalyx*; *Mentha arvensis*]. **Ref:** 2, 658.

**13780 Meranzin**

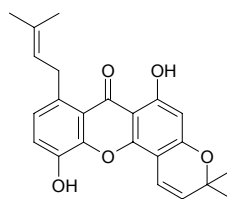
$C_{15}H_{16}O_4$ (260.29). **Source:** XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. **Ref:** 1272.

**13781 Meranzin hydrate**

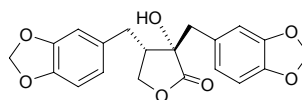
7-Methoxy-8-(2',3'-dihydroxy-3'-methylbutyl)coumarin $C_{15}H_{18}O_5$ (278.31). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. **Ref:** 11, 344, 1291.

**13782 Merguenone**

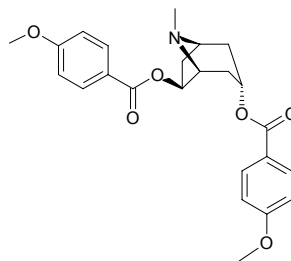
$C_{23}H_{22}O_5$ (378.43). **Source:** *Garcinia merguensis*. **Ref:** 3392.

**13783 Meridinol**

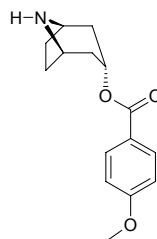
$C_{20}H_{18}O_7$ (370.36). **Source:** YUN NAN FEI SHU *Torreya yunnanensis* (leaf and twig: yield = 0.050%dw). **Ref:** 4707.

**13784 Merredissine**

3α,6β-Di-(4-methoxybenzoyloxy)tropane $C_{24}H_{27}NO_6$ (425.49). Oil, $[\alpha]_D^{20} = -8.6^\circ$ ($c = 0.2$, MeOH). **Source:** SHEN LIE YU HUANG CAO *Merremia dissecta* (ground root). **Ref:** 5292.

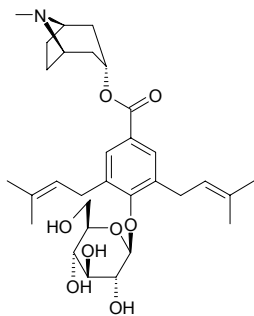
**13785 Merresectine A**

3α-(4-Methoxybenzoyloxy)nortropane $C_{15}H_{19}NO_3$ (261.32). Yellow solid. **Source:** SHEN LIE YU HUANG CAO *Merremia dissecta* (ground root). **Ref:** 5292.

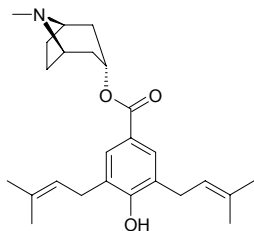


13786 Merresectine B

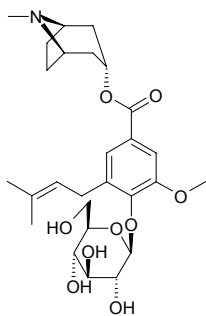
3 α -Kurameroyloxytropine C₃₁H₄₅NO₈ (559.71). Oil, [α]_D²⁰ = -10.2° (c = 0.1, MeOH). Source: SHEN LIE YU HUANG CAO *Merremia dissecta* (ground root). Ref: 5292.

**13787 Merresectine C**

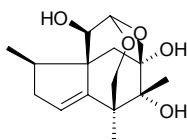
3 α -Nervogenoyloxytropine C₂₅H₃₅NO₃ (397.56). Oil. Source: SHEN LIE YU HUANG CAO *Merremia dissecta* (ground root). Ref: 5292.

**13788 Merresectine D β -D-glucoside**

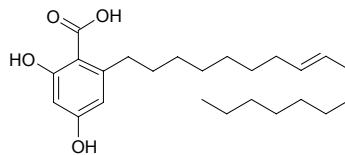
3 α -[4-(β -D-Glucopyranosyloxy)-3-methoxy-5-(3-methyl-2-butenyl)benzoyloxy]tropine C₂₇H₃₉NO₉ (521.61). Oil. Source: SHEN LIE YU HUANG CAO *Merremia dissecta* (ground root). Ref: 5292.

**13789 Merrillanone**

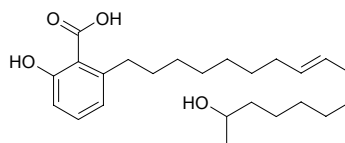
C₁₅H₂₂O₅ (282.34). Pharm: Neurotrophic bioassay inactive (primary culture of rat cortical neurons, 0.1-10 μ mol/L). Source: *Illicium merrillianum* (pericarp: yield = 0.00006% dw). Ref: 3046.

**13790 Merulinic acid A**

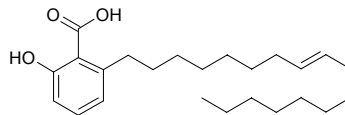
[69506-63-4] C₂₄H₃₈O₄ (390.57). Source: LIAN ZUO GE JUN *Thelephora vialis*. Ref: 660.

**13791 Merulinic acid B**

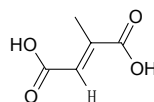
[69506-64-5] C₂₄H₃₈O₄ (390.57). Source: LIAN ZUO GE JUN *Thelephora vialis*. Ref: 660.

**13792 Merulinic acid C**

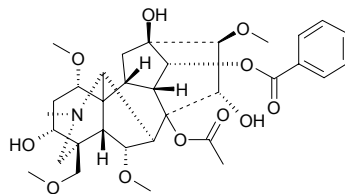
[69506-65-6] C₂₄H₃₈O₃ (374.57). Source: LIAN ZUO GE JUN *Thelephora vialis*. Ref: 660.

**13793 Mesaconic acid**

[498-24-8] C₅H₆O₄ (130.10). mp 240.5°C. Source: GAN ZHE *Saccharum sinensis*. Ref: 6.

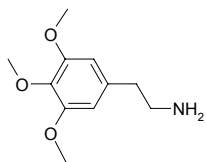
**13794 Mesaconitine**

[2752-64-9] C₃₃H₄₅NO₁₁ (631.73). White granular crystals, [α]_D²⁶ = +22.4° (c = 1.511, CHCl₃). Pharm: Analgesic (mouse, tail pressure test, ED₅₀ = 0.02mg/kg, LD₅₀/ED₅₀ = 19.0); acute toxicity (mouse, LD₅₀ = 0.38mg/kg)^[5451]; similar action with aconitine (weaker than that of aconitine). Source: BEI WU TOU *Aconitum kusnezoffii* (dried tuberoid: content = 0.11%)^[5508], FU ZI *Aconitum carmichaeli* (daughter root: content = 0.027%)^[5508], OU WU TOU *Aconitum napellus*, WU TOU *Aconitum carmichaeli* (dried tuberoid: content = 0.023%)^[5508]. Ref: 2, 460, 658, 5451, 5508.

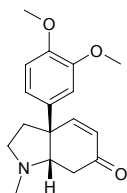


13795 Mescaline

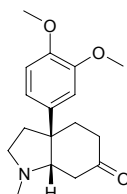
[54-04-6] C₁₁H₁₇NO₃ (211.26). **Pharm:** Causes mental illness; hallucinogen (high dose); CNS depressant. **Source:** AN LU LONG SHE LAN *Lophophora williamsii*. **Ref:** 658.

**13796 Mesembrenone**

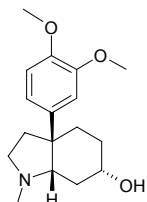
C₁₇H₂₁NO₃ (287.36). **Pharm:** Anesthetic; stimulant. **Source:** KUO ZHANG SONG YE JU *Mesembryanthemum expansum*, MING SONG YE JU *Mesembryanthemum anatomicum*, NIU QU SONG YE JU *Mesembryanthemum tortuosum*. **Ref:** 658.

**13797 Mesembrine**

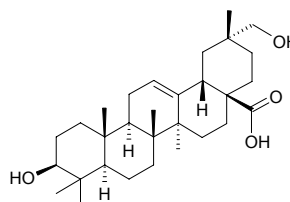
C₁₇H₂₃NO₃ (289.38). White or yellowish powder, mp 90, [α]_D¹⁷ = -54.0° (methanol). **Pharm:** Anesthetic; CNS stimulant. **Source:** KUO ZHANG SONG YE JU *Mesembryanthemum expansum*, MING SONG YE JU *Mesembryanthemum anatomicum*, NIU QU SONG YE JU *Mesembryanthemum tortuosum*. **Ref:** 661.

**13798 Mesembrinol**

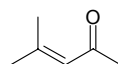
C₁₇H₂₅NO₃ (291.39). **Pharm:** Anesthetic; stimulant. **Source:** KUO ZHANG SONG YE JU *Mesembryanthemum expansum*, NIU QU SONG YE JU *Mesembryanthemum tortuosum*, MING SONG YE JU *Mesembryanthemum anatomicum*. **Ref:** 658.

**13799 Mesembryanthemoidigenic acid**

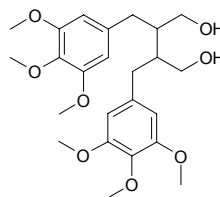
29-Hydroxy oleanic acid; 3 β ,29-Dihydroxyolean-12-en-28-oic acid [4871-87-8] C₃₀H₄₈O₄ (472.71). **Source:** MU TONG *Akebia quinata*, NA TENG *Stauntonia hexaphylla*. **Ref:** 1273, 1274.

**13800 Mesityl oxide**

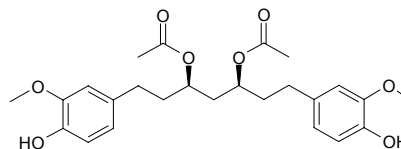
[141-79-7] C₆H₁₀O (98.15). bp 130~131°C. **Source:** YA ER QIN *Cryptotaenia japonica*. **Ref:** 6.

**13801 Meso-2,3-bis(3,4,5-trimethoxybenzyl)-1,4-butanediol**

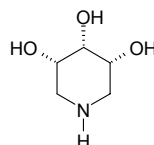
C₂₄H₃₄O₈ (450.53). **Pharm:** Antineoplastic; cathartic; sthenic; pesticide; ichthyotoxin; muscle relaxant. **Source:** *Zanthoxylum* sp. **Ref:** 2176.

**13802 Meso-3,5-diacetoxy-1,7-bis-(4-hydroxy-3-methoxyphenyl) heptane**

C₂₅H₃₂O₈ (460.53). **Source:** GAN JIANG *Zingiber officinale*, SHENG JIANG *Zingiber officinale*. **Ref:** 2.

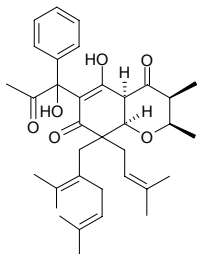
**13803 Mesotrihydroxypiperidine**

[172588-13-5] C₅H₁₁NO₃ (133.15). Colorless oil, [α]_D = ±0° (c = 0.3, methanol). **Pharm:** α -Glucosidase inhibitor (IC₅₀ = 3.70 μ mol/L); α -mannosidase inhibitor (IC₅₀ = 1.88 μ mol/L). **Source:** PEI LAN *Eupatorium fortunei*. **Ref:** 1192.

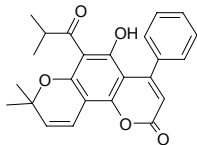


13804 Mesuaferrol

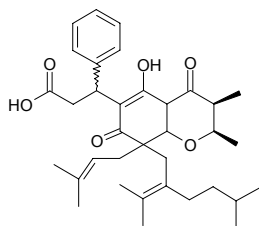
$C_{35}H_{46}O_6$ (562.75). Source: TIE LI MU *Mesua ferrea*. Ref: 1275.

**13805 Mesuagin**

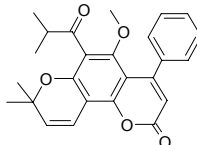
[21721-08-4] $C_{24}H_{22}O_5$ (390.44). Source: TIE LI MU *Mesua ferrea*. Ref: 1276.

**13806 Mesuanic acid**

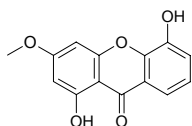
[55303-94-1] $C_{35}H_{48}O_6$ (564.77). Source: TIE LI MU *Mesua ferrea*. Ref: 1277.

**13807 Mesuarin**

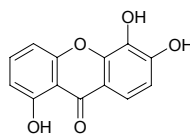
[21721-10-8] $C_{25}H_{24}O_5$ (404.47). Source: TIE LI MU *Mesua ferrea*. Ref: 1278.

**13808 Mesuaxanthone A**

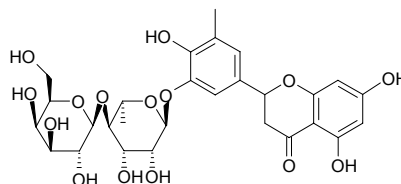
[3561-81-7] $C_{14}H_{10}O_5$ (258.23). Pharm: Anti-inflammatory; antifungal (*Aspergillus fumigatus* CBS113.26, $MIC_{80} = 31\mu\text{g/mL}$, control Amphotericin B, $MIC_{80} = 8\mu\text{g/mL}$; *Aspergillus flavus* IHEM37.19, $MIC_{80} = 31\mu\text{g/mL}$, Amphotericin B, $MIC_{80} = 8\mu\text{g/mL}$; *Aspergillus niger* IHEM2951, $MIC_{80} = 125\mu\text{g/mL}$, Amphotericin B, $MIC_{80} = 16\mu\text{g/mL}$; *Aspergillus terreus* 5029.2000, $MIC_{80} > 250\mu\text{g/mL}$; Amphotericin B, $MIC_{80} = 16\mu\text{g/mL}$; *Candida albicans* ATCC663.90, $MIC_{80} > 250\mu\text{g/mL}$; Amphotericin B, $MIC_{80} = 1\mu\text{g/mL}$)^[4995]; cytotoxic (P_{388} $ED_{50} = 2.76\mu\text{g/mL}$, control Mithramycin $ED_{50} = 0.06\mu\text{g/mL}$, HT29 $ED_{50} = 7.51\mu\text{g/mL}$, control Mithramycin $ED_{50} = 0.08\mu\text{g/mL}$)^[4094]. Source: DA YE TENG HUANG *Garcinia xanthochymus*, SU GE LAN HU TONG *Calophyllum caledonicum* (stem cortex), TIE LI MU *Mesua ferrea*, TAI WAN LV DAO TENG HUANG *Garcinia linii*, *Vismia* sp. Ref: 658, 4094, 4995.

**13809 Mesuaxanthone B**

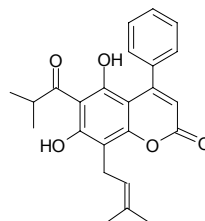
1,5,6-Trihydroxyxanthone $C_{13}H_8O_5$ (244.21). Pharm: Anti-inflammatory. Source: TIE LI MU *Mesua ferrea*, FEI ZHOU HUANG GUO MU *Mammea africana*, HAI TANG GUO *Calophyllum inophyllum*, *Garcinia* sp. Ref: 658, 660, 1210.

**13810 Mesuein**

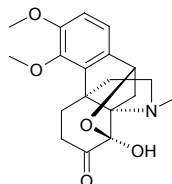
[111128-08-6] $C_{28}H_{34}O_{15}$ (610.57). Source: TIE LI MU *Mesua ferrea*. Ref: 1279.

**13811 Mesuol**

$C_{24}H_{24}O_5$ (392.46). Pharm: Antibacterial (*Enterococcus faecalis* 18292, $MIC = 16\mu\text{g/mL}$; *Enterococcus faecalis* 19250, $MIC = 16\mu\text{g/mL}$; *Enterococcus faecalis* 11268, $MIC = 16\mu\text{g/mL}$; *Enterococcus faecium* 5, $MIC = 16\mu\text{g/mL}$; *Streptococcus durans* 23, $MIC = 16\mu\text{g/mL}$)^[3870]; antibacterial (*Staphylococcus aureus* 17380, $MIC = 4\mu\text{g/mL}$; *Staphylococcus aureus* 17592, $MIC = 2\mu\text{g/mL}$; *Staphylococcus aureus* 18110, $MIC = 2\mu\text{g/mL}$; *Staphylococcus aureus* 17728, $MIC = 4\mu\text{g/mL}$; *Staphylococcus epidermidis* 3112, $MIC = 2\mu\text{g/mL}$; *Staphylococcus simulans* 214, $MIC = 2\mu\text{g/mL}$)^[3870]; antimalarial (*Plasmodium falciparum* D10 (CQ-S), $IC_{50} = (10.75 \pm 0.14)\mu\text{g/mL}$, control Chloroquine, $IC_{50} = (0.011 \pm 0.004)\mu\text{g/mL}$; W2 (CQ-R), $IC_{50} = (8.91 \pm 0.27)\mu\text{g/mL}$, control Chloroquine, $IC_{50} = (0.229 \pm 0.090)\mu\text{g/mL}$)^[3870]. Source: TIE LI MU *Mesua ferrea*. Ref: 1240, 3870.

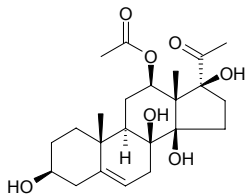
**13812 Metaphanine**

[1805-86-3] $C_{19}H_{23}NO_5$ (345.40). mp 233°C. Source: QIAN JIN TENG *Stephania japonica*. Ref: 6.

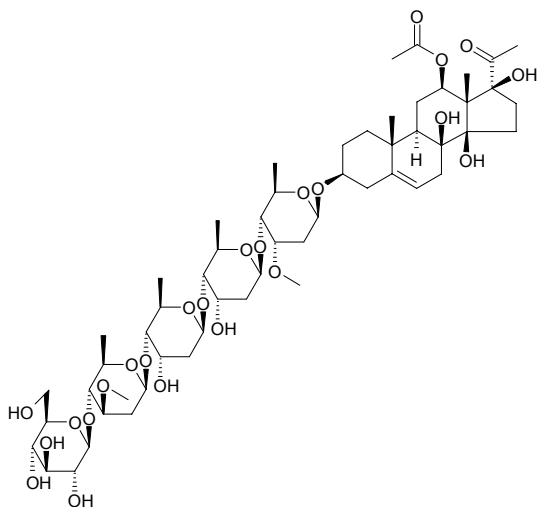


13813 Metaplexigenin

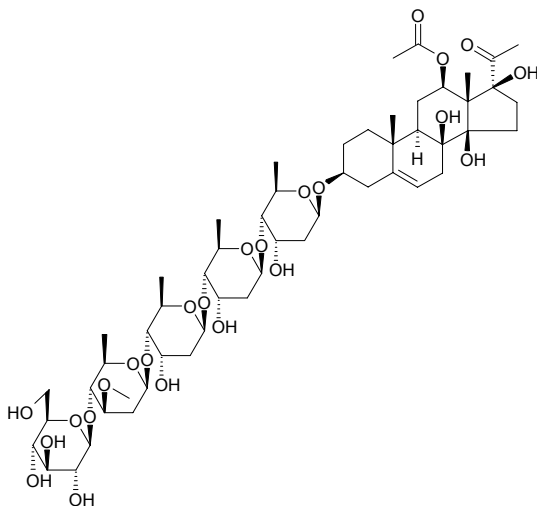
$C_{23}H_{34}O_7$ (422.52). mp 268~275°C. Source: LUO MO *Metaplexis japonica*, ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 6, 3925.

**13814 Metaplexigenin-3-O-β-D-glucopyranosyl-(1→4)-β-D-oleandropyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-cymaropyranoside**

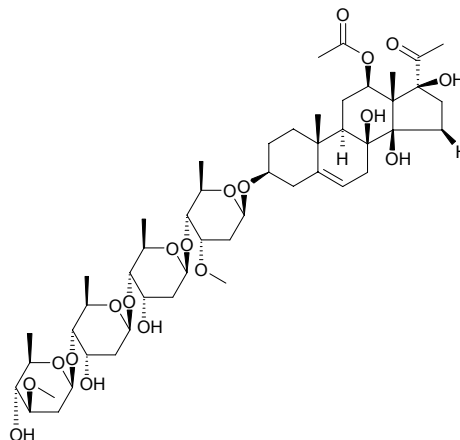
$C_{55}H_{88}O_{24}$ (1133.30). Amorphous powder, $[\alpha]_D^{27} = +1.3^\circ$ ($c = 0.65$, MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.

**13815 Metaplexigenin-3-O-β-D-glucopyranosyl-(1→4)-β-D-oleandropyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranoside**

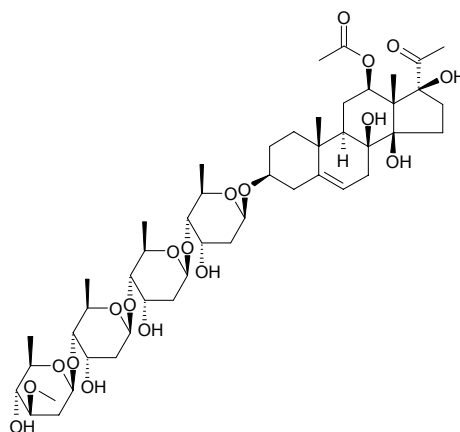
$C_{54}H_{86}O_{24}$ (1119.27). Amorphous powder, $[\alpha]_D^{27} = -0.83^\circ$ ($c = 1.03$, MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.

**13816 Metaplexigenin-3-O-β-D-oleandropyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-cymaropyranoside**

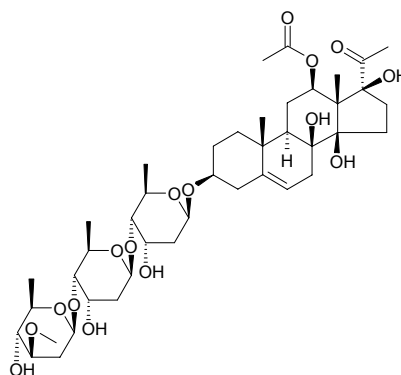
$C_{49}H_{78}O_{19}$ (971.16). Amorphous powder, $[\alpha]_D^{27} = +2.2^\circ$ ($c = 0.74$, MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.

**13817 Metaplexigenin-3-O-β-D-oleandropyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranoside**

$C_{48}H_{76}O_{19}$ (957.13). Amorphous powder, $[\alpha]_D^{24} = -4.5^\circ$ ($c = 1.04$, MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.

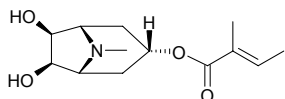
**13818 Metaplexigenin-3-O-β-D-oleandropyranosyl-(1→4)-β-D-digitoxopyranosyl-(1→4)-β-D-digitoxopyranoside**

$C_{42}H_{66}O_{16}$ (826.98). Amorphous powder, $[\alpha]_D^{23} = -9.7^\circ$ ($c = 1.02$, MeOH). Source: ROU HONG MA LI JIN *Asclepias incarnata* (aerial parts). Ref: 3925.

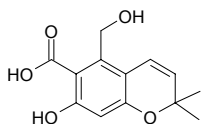


13819 Meteloidine

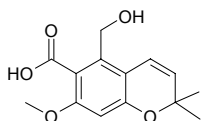
3-(3,6,7-Tropanetriol)triglate; 6,7-Dihydroxy-3-tiglyloxytropane [526-13-6] $C_{13}H_{21}NO_4$ (255.32). Acicular crystals (benzene), mp 141~142°C, easily soluble in ethanol, chloroform, acetone, slightly soluble in water, ether, benzene.^[5507] **Pharm:** Hallucinogen^[5507]; aphrodisiac^[5507]. **Source:** MAO MAN TUO LUO YE *Datura innoxia*, MAO MAN TUO LUO GEN *Datura innoxia*, MAO MAN TUO LUO ZI *Datura innoxia*, XIANG MAN TUO LUO *Datura metaloides*^[5509] (in 1908, isolated from the plant for the first time^[5507]). **Ref:** 6, 660, 5507, 5509.

**13820 5-Methanol-7-hydroxy-2,2-dimethyl-2H-1-chromene-6-carboxylic acid**

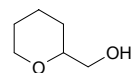
$C_{13}H_{14}O_5$ (250.25). Amorphous solid. **Pharm:** Antifungal (*Cladosporium sphaerospermum*, 100µg, weak activity; *Cladosporium cladosporioides*, 100µg, weak activity). **Source:** *Peperomia villipetiola* (stem). **Ref:** 5256.

**13821 5-Methanol-7-methoxy-2,2-dimethyl-2H-1-chromene-6-carboxylic acid**

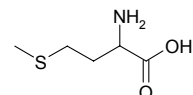
$C_{14}H_{16}O_5$ (264.28). Amorphous solid. **Pharm:** Antifungal (*Cladosporium sphaerospermum*, 100µg, moderate activity; *Cladosporium cladosporioides*, 100µg, strong activity). **Source:** *Peperomia villipetiola* (stem). **Ref:** 5256.

**13822 2-Methanol tetrahydropyran**

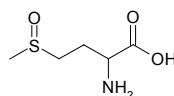
$C_6H_{12}O_2$ (116.16). **Source:** AI YE *Artemisia argyi*. **Ref:** 1280.

**13823 Methionine**

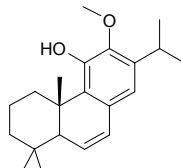
2-Amino-4-(methylthio)butanoic acid $C_5H_{11}NO_2S$ (149.21). **Pharm:** Acts against hepatic adipose infiltration; promotes biosynthesis of glutathione. **Source:** BAI GUO *Ginkgo biloba*, BAN XIA *Pinellia ternata* (dried tuber: content scope of 4 origins = 0.13%~0.99%, mean content = 0.44%)^[5521], CHUAN DANG SHEN *Codonopsis tangshen*, DANG SHEN *Codonopsis pilosula*, NING XIA GOU QI ZI *Lycium barbarum*, QIU HUA DANG SHEN *Codonopsis subglobosa*, SU HUA DANG SHEN *Codonopsis pilosula* var. *modesta* [Syn. *Codonopsis modesta*]. **Ref:** 2, 658, 660, 5521.

**13824 Methionine sulfoxide**

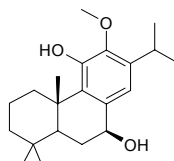
[62697-73-8] $C_5H_{11}NO_3S$ (165.21). mp 230~231°C (dec). **Source:** YUAN CAN ZI *Bombyx mori*. **Ref:** 6.

**13825 12-Methoxy-6,8,11,13-abietatraen-11-ol**

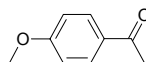
[34327-31-6] $C_{21}H_{30}O_2$ (314.47). **Source:** DU SONG SHI *Juniperus rigida*. **Ref:** 6.

**13826 12-Methoxy-8,11,13-abietatriene-7β,11-diol**

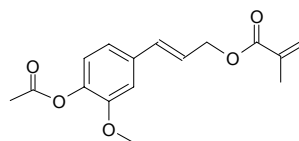
[34327-30-5] $C_{21}H_{32}O_3$ (332.49). **Source:** DU SONG SHI *Juniperus rigida*. **Ref:** 6.

**13827 4-Methoxyacetophenone**

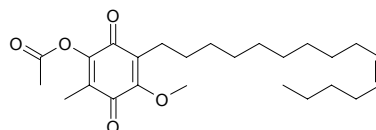
[100-06-1] $C_9H_{10}O_2$ (150.18). **Source:** DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. **Ref:** 2.

**13828 3-Methoxy-4-acetoxycinnamyl angelate**

$C_{17}H_{20}O_5$ (304.35). **Source:** YI ZHI HUANG HUA *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*]. **Ref:** 1281.

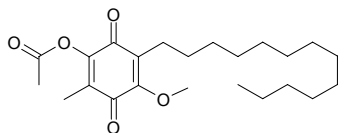
**13829 2-Methoxy-5-acetoxy-6-methyl-3-[(z)-10'-pentadecenyl]-1,4-benzoquinone**

$C_{25}H_{38}O_5$ (418.58). Yellow gum. **Source:** PI ZHEN DU JING SHAN *Maesa lanceolata*. **Ref:** 1860.

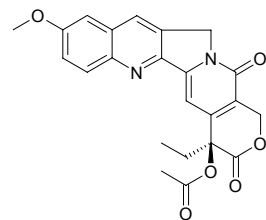


13830 2-Methoxy-5-acetoxy-6-methyl-3-tridecyl-1,4-benzoquinone

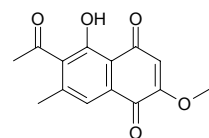
$C_{23}H_{36}O_5$ (392.54). Pale-yellow needles (hot *n*-hexane), mp 45~46°C. Source: PI ZHEN DU JING SHAN *Maesa lanceolata*. Ref: 1860.

**13831 10-Methoxy-20-O-acetylcamptothecin**

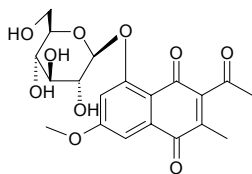
$C_{23}H_{20}N_2O_6$ (420.43). Source: XI SHU *Camptotheca acuminata*. Ref: 4097.

**13832 2-Methoxy-6-acetyl-7-methyljuglone**

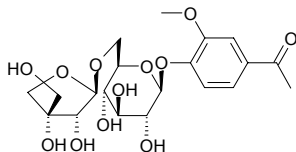
$C_{14}H_{12}O_5$ (260.25). Source: HU ZHANG *Polygonum cuspidatum*. Ref: 2.

**13833 6-Methoxy-2-acetyl-3-methyl-1,4-naphthoquinone-8-O-beta-D-glucopyranoside**

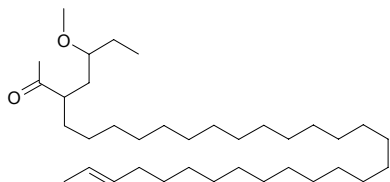
$C_{20}H_{22}O_{10}$ (422.39). Yellow acicular crystals mp 164~165°C. Source: HE SHOU WU *Polygonum multiflorum*. Ref: 847.

**13834 2-Methoxy-4-acetylphenyl-1-O-beta-D-apiofuranosyl-(1''->6')-beta-glucopyranoside**

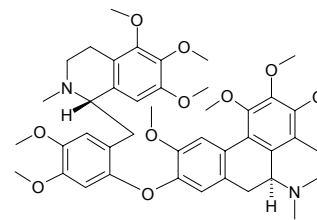
$C_{20}H_{28}O_{12}$ (460.44). Source: DA XUE TENG *Sargentodoxa cuneata* (stem). Ref: 5337.

**13835 3-Methoxy-5-acetyl-31-tritriacontene**

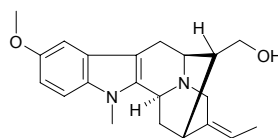
$C_{36}H_{70}O_2$ (534.96). Source: XIAN MAO *Curculigo orchoides*. Ref: 1282.

**13836 Methoxyadiantifoline**

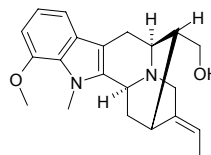
[115452-09-0] $C_{43}H_{52}N_2O_{10}$ (756.90). White acicular crystals (mineral ether), mp 153~155°C, $[\alpha]_D^{13} = +77^\circ$ ($c = 0.3$, methanol). Pharm: Antiarrhythmic (rat and gpg arrhythmia cordis caused by aconitine, 10mg/kg); calcium antagonist (ileal smooth muscle relaxant in gpg, $IC_{50} = 2.53\mu\text{mol/L}$); coronary vasodilator (gpg heart *in vitro*, enhances blood flow through coronary arteries); inhibits myocardial automatic rhythmicity and contractile power to prolong the effective refractory period. Source: XIANG TANG SONG CAO *Thalictrum foetidum*, E MEI TANG SONG CAO *Thalictrum omeiense*. Ref: 900, 1477.

**13837 10-Methoxyaffinisine**

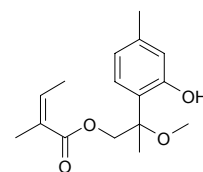
$C_{21}H_{26}N_2O_2$ (338.45). mp 205~206°C, $[\alpha]_D = +75^\circ$ ($c = 0.62$, CHCl_3). Source: DA YE TANG JIAO SHU *Alstonia macrophylla*. Ref: 2320.

**13838 12-Methoxyaffinisine**

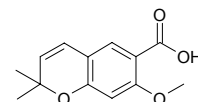
$C_{21}H_{26}N_2O_2$ (338.45). Yellow amorphous solid. Source: BA XI LUO FU MU *Rauvolfia bahiensis*. Ref: 1952.

**13839 8-Methoxy-9-O-angeloylthymol**

$C_{16}H_{22}O_4$ (278.35). $[\alpha]_D^{20} = 0^\circ$ ($c = 0.97$, CHCl_3). Source: PEI LAN *Eupatorium fortunei* (aerial parts). Ref: 3077.

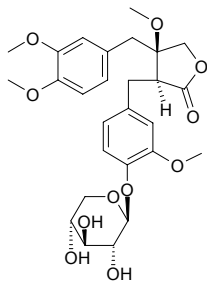
**13840 7-Methoxyanofinic acid**

7-Methoxy-2,2-dimethyl-2H-1-benzopyran-6-carboxylic acid [179457-70-6] $C_{13}H_{14}O_4$ (234.25). Source: QIN JIAO *Gentiana macrophylla*. Ref: 707.

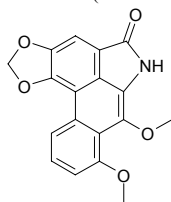


13841 3-Methoxyartemisinin-4''-O-β-D-xyloside

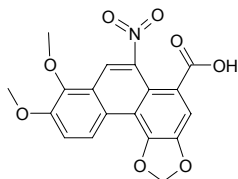
$C_{27}H_{34}O_{11}$ (534.57). Colorless lamellar crystals, mp 166–168°C. Source: NIU XI XI *Rumex patientia*. Ref: 2164.

**13842 9-Methoxyaristolactam I**

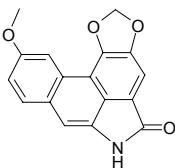
$C_{18}H_{13}NO_5$ (323.31). Source: GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.00071%)^[4706], MIAN MAO MA DOU LING *Aristolochia mollissima* (dried root and stem: yield = 0.00062%dw)^[3026]. Ref: 3026, 4706.

**13843 7-Methoxy-aristolochiac acid**

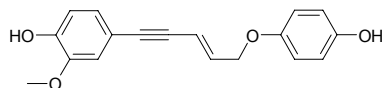
[79185-74-3] $C_{18}H_{13}NO_8$ (371.31). Source: QING MU XIANG *Aristolochia debilis* [Syn. *Aristolochia longa*]. Ref: 517.

**13844 6-Methoxy-aristolactam**

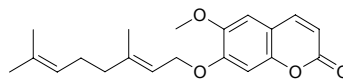
$C_{17}H_{11}NO_4$ (293.28). Source: MIAN MAO MA DOU LING *Aristolochia mollissima*. Ref: 1283.

**13845 3''-Methoxyasparenndiol**

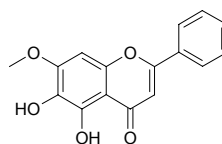
1-[4-Hydroxyphenoxy]-5-[3-methoxy-4-hydroxyphenyl]pent-2-en-3-yne $C_{18}H_{16}O_4$ (296.33). Yellowish powder. Pharm: Cytotoxic (*in vitro*, KB, IC_{50} = 12 μg/mL (40.5 μmol/L), Lu1, IC_{50} = 19.7 μg/mL (66.5 μmol/L), control Ellipticine: KB, IC_{50} = 0.04 μg/mL (0.16 μmol/L), Lu1, IC_{50} = 0.02 μg/mL (0.08 μmol/L), HOG.R5, IC_{50} = 0.02 μg/mL (0.08 μmol/L)), HOG.R5, IC_{50} < 5 μg/mL (< 17 μmol/L), cytotoxic inactive (Col2, LNCaP, HUVEC, IC_{50} > 20 μg/mL). Source: TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*] (dried root: yield = 0.00019%dw). Ref: 3009.

**13846 6-Methoxy auraptin**

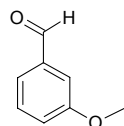
7-Geranyloxy-6-methoxycoumarin $C_{20}H_{24}O_4$ (328.41). Pharm: EBV-EA inhibitor (TPA-induced, IC_{50} = 312 Mol ratio/32 pmol TPA, control β-Carotene, IC_{50} = 400 Mol ratio/32 pmol TPA)^[5255]. Source: GOU JU HE *Poncirus trifoliata*, YUAN DONG JIU LI XIANG *Murraya siamensis* (leaf). Ref: 6, 5255.

**13847 7-Methoxybaicalein**

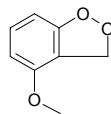
[29550-13-8] $C_{16}H_{12}O_5$ (284.27). Source: GUANG YE SHUI SU *Stachys palustris*, HUANG QIN *Scutellaria baicalensis*. Ref: 6, 660.

**13848 m-Methoxybenzaldehyde**

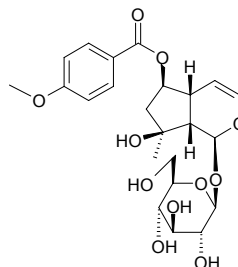
[591-31-1] $C_8H_8O_2$ (136.15). bp 230°C. Source: DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*]. Ref: 6.

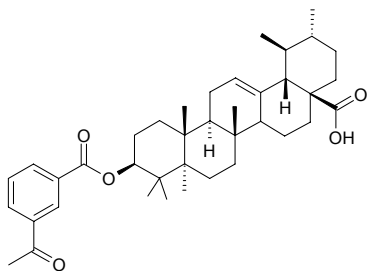
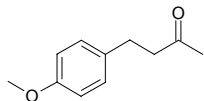
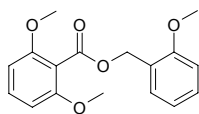
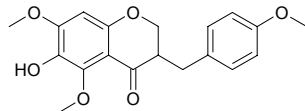
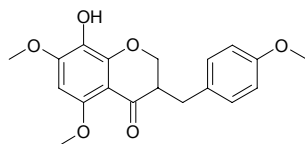
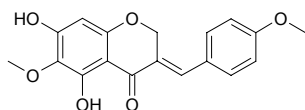
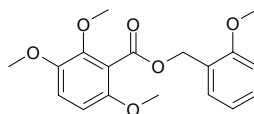
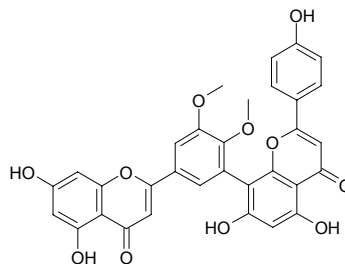
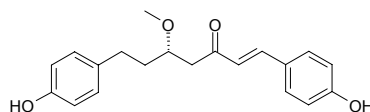
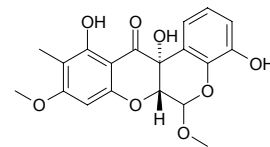
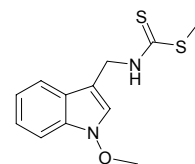
**13849 4-Methoxy-1,2-benzodioxole**

$C_8H_8O_3$ (152.15). Source: SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*]. Ref: 1284.

**13850 6-O-(4-Methoxybenzoyl)-ajugol**

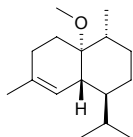
$C_{23}H_{30}O_{11}$ (482.49). Pharm: NO production inhibitor (LPS-activated macrophage-like J774.1 cells, IC_{50} = 13.8 μg/mL, control L-NMMA, IC_{50} = 27.4 μg/mL). Source: HE SE ZHONG HUA SHU *Tabebuia avellaneda* (inner bark). Ref: 4473.



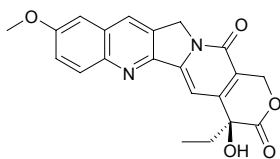
13851 3β-[(*m*-Methoxybenzoyl)oxyl]urs-12-en-28-oic acidC₃₉H₅₄O₅ (602.86). Source: *Morus* sp. Ref: 2513.**13852 *p*-Methoxybenzylacetone**[104-20-1] C₁₁H₁₄O₂ (178.23). bp 277°C. Source: BAI MU XIANG *Aquilaria sinensis*, CHEN XIANG *Aquilaria agallocha*. Ref: 6, 13.**13853 2-Methoxybenzyl-2,6-dimethoxybenzoate**C₁₇H₁₈O₅ (302.33). Source: YI ZHI HUANG HUA *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*]. Ref: 1281.**13854 3-(4-Methoxybenzyl)-6-hydroxy-5,7-dimethoxychroman-4-one**C₁₉H₂₀O₆ (344.37). Yellow oil, [α]_D²⁵ = -68.7° (c = 0.26, MeOH). Source: *Scilla nervosa* (bulb). Ref: 2381.**13855 3-(4-Methoxybenzyl)-8-hydroxy-5,7-dimethoxychroman-4-one**C₁₉H₂₀O₆ (344.37). Yellow oil, [α]_D²⁵ = -109.9° (c = 0.23, MeOH). Source: *Scilla nervosa* (bulb). Ref: 2381.**13856 3-(4-Methoxybenzylidene)-5,7-dihydroxy-6-methoxychroman-4-one**C₁₈H₁₆O₆ (328.32). Yellow gum. Source: *Scilla nervosa* (bulb). Ref: 2381.**13857 2-Methoxybenzyl-2,3,6-trimethoxybenzoate**C₁₈H₂₀O₆ (332.36). Source: YI ZHI HUANG HUA *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*]. Ref: 1281.**13858 5'-Methoxybilobetin**[77053-35-1] C₃₂H₂₂O₁₁ (582.53). Yellow crystals, mp 251°C. Source: BAI GUO *Ginkgo biloba*. Ref: 2.**13859 (3*S*)-Methoxy-1,7-bis(4-hydroxyphenyl)-6*E*-hepten-5-one**C₂₀H₂₂O₄ (326.4). Yellow amorphous solid, [α]_D²⁵ = +17.5° (c = 0.13, MeOH). Pharm: Cytotoxic (Colon26-L5, ED₅₀ = 5.2 μmol/L; HT1080, ED₅₀ = 10.1 μmol/L). Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed; yield = 0.00012%). Ref: 3042.**13860 6-Methoxyboeravinone C**C₁₉H₁₈O₈ (374.35). White amorphous powder. Pharm: Antifungal inactive (*Candida albicans* DSY1024, 200 μg/mL). Source: ZI MO LI GEN *Mirabilis jalapa* (Plant cell culture). Ref: 3043.**13861 Methoxybrassinin**[105748-59-2] C₁₂H₁₄N₂OS₂ (266.39). Pharm: Antifungal. Source: YUN TAI ZI *Brassica campestris* [Syn. *Brassica campestris* var. *oleifera*], OU ZHOU YOU CAI *Brassica napus*. Ref: 658.

13862 1-Methoxy-4-cadinene

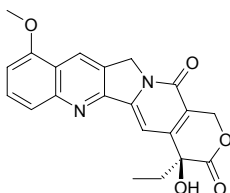
$C_{16}H_{28}O$ (236.40). Colorless oil, $[\alpha]_D^{25} = -65.2^\circ$ ($c = 0.11$, $CHCl_3$). Source: RI BEN LIU SHAN *Cryptomeria japonica* (black heartwood). Ref: 4279.

**13863 10-Methoxycamptothecin**

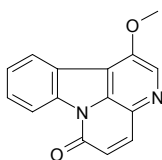
[19685-10-0] $C_{21}H_{18}N_2O_5$ (378.39). Yellow crystals (Me_2CO), mp 255~256°C (dec). Pharm: Antineoplastic (mus L_{1210} , 0.19mg/kg, biotic prolonged rate = 125%); antiviral (herpesvirus, 10 μ g/mL, InRt = 89%, 20 μ g/mL, InRt = 100%). Source: LIU QIU SHE GEN CAO *Ophiorrhiza liukuensis* (whole herb), SHE GEN CAO *Ophiorrhiza mungos*, XI SHU *Camptotheca acuminata*. Ref: 6, 658, 1521, 4527.

**13864 9-Methoxycamptothecin**

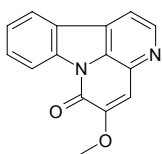
[39026-92-1] $C_{21}H_{18}N_2O_5$ (378.39). mp 254~255°C, mp 258~260°C. Pharm: Antineoplastic (mus P_{388} , 0.5mg/kg, biotic prolonged rate = 145%, cultured P_{388} , $ED_{50} = 0.0036\mu$ g/mL). Source: HAI SHI GOU YA HUA *Ervatamia heyneana*, LIU QIU SHE GEN CAO *Ophiorrhiza liukuensis* (whole herb), SHE GEN CAO *Ophiorrhiza mungos*, XI SHU *Camptotheca acuminata*. Ref: 5, 6, 658, 4527.

**13865 1-Methoxycanthin-6-one**

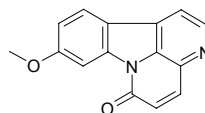
$C_{15}H_{10}N_2O_2$ (250.26). Pharm: Anti-HIV ($TI > 391$)^[4758]. Source: CHU BAI PI *Ailanthus altissima*, GAO CHU *Ailanthus excelsa*. Ref: 1521, 4758.

**13866 5-Methoxycanthin-6-one**

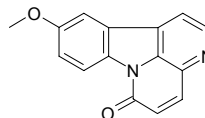
$C_{15}H_{10}N_2O_2$ (250.26). Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.00014%dw), *Eurycoma* sp. Ref: 4556, 4728.

**13867 9-Methoxycanthin-6-one**

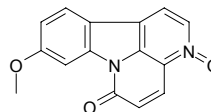
$C_{15}H_{10}N_2O_2$ (250.26). Pharm: Cytotoxic (*in vitro*, A549, $ED_{50} < 2.5\mu$ g/mL; MCF7, $ED_{50} = 4.5\mu$ g/mL; HIV, no significant effect)^[4728]; antimalarial inactive (*Plasmodium falciparum* clones W2, D6, and TM91C235)^[4728]. Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.0012%dw), *Eurycoma harmandiana* (root). Ref: 4728, 5137.

**13868 10-Methoxycanthin-6-one**

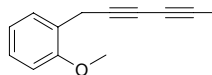
$C_{15}H_{10}N_2O_2$ (250.26). Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.00001%dw), *Eurycoma* sp. Ref: 4556, 4728.

**13869 9-Methoxycanthin-6-one 3-N-oxide**

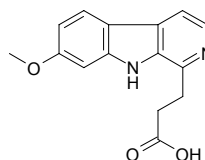
$C_{15}H_{10}N_2O_3$ (266.26). Pharm: Cytotoxic (*in vitro*, A549, $ED_{50} = 18.5\mu$ g/mL; MCF7, $ED_{50} = 18.9\mu$ g/mL; HIV, no significant effect)^[4728]; antimalarial inactive (*Plasmodium falciparum* clones W2, D6, and TM91C235)^[4728]. Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.0001%dw), *Eurycoma* sp. Ref: 4556, 4728.

**13870 Methoxycapillen**

$C_{13}H_{12}O$ (184.24). Source: YIN CHEN HAO *Artemisia capillaris*. Ref: 2.

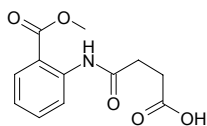
**13871 7-Methoxy- β -carboline-1-Propionic acid**

$C_{15}H_{14}N_2O_3$ (270.29). Pharm: Cytotoxic (*in vitro*, A549, $ED_{50} > 20\mu$ g/mL; MCF7, $ED_{50} > 20\mu$ g/mL; HIV, no significant effect)^[4728]; antimalarial inactive (*Plasmodium falciparum* clones W2, D6, and TM91C235)^[4728]. Source: CHANG YE KUAN MU *Eurycoma longifolia* (root: yield = 0.0001%dw), *Eurycoma harmandiana* (root), *Eurycoma* sp. Ref: 4556, 4728, 5137.

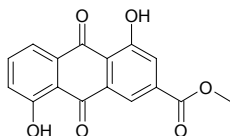


13872 4-[2-(Methoxycarbonyl)anilino]-4-oxobutanoic acid

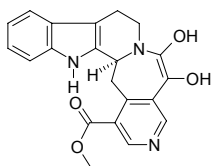
$C_{12}H_{13}NO_5$ (251.24). Amorphous powder. **Pharm:** Antioxidant (DPPH scavenger, 1 μ mol/L, ScRt = 13.4%; control 3-*t*-Butyl-4-hydroxyanisole, 1 μ mol/L, ScRt = 92.5%). **Source:** *Aconitum leave* (aerial parts). **Ref:** 5271.

**13873 3-Methoxycarbonyl-1,5-dihydroxyanthraquinone**

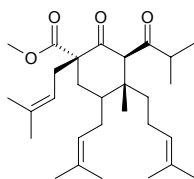
$C_{16}H_{10}O_6$ (298.25). Yellow needles (CH₂Cl₂-MeOH), mp 216–218°C. **Source:** HUANG QI II *Engelhardia roxburghiana* (root). **Ref:** 5059.

**13874 16-Methoxycarbonyl-18,19-dihydroxynaufoline**

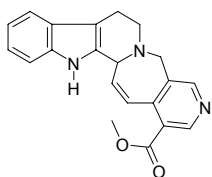
$C_{21}H_{19}N_3O_4$ (377.40). **Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial (*Leishmania* sp.); antifungal (*Aspergillus niger*). **Source:** KUAN YE WU TAN *Nauclea latifolia*. **Ref:** 2178, 1521.

**13875 (2R,3R,4S,6R)-6-Methoxycarbonyl-3-methyl-4,6-di(3-methyl-2-butenyl)-2-(2-methyl-1-oxopropyl)-3-(4-methyl-3-pentenyl)cyclohexanone**

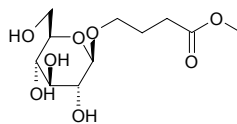
$C_{29}H_{46}O_4$ (458.69). Colorless viscous oil, $[\alpha]_D^{26} = +95.5^\circ$ ($c = 1.1$, CHCl₃). **Source:** GUAN YE LIAN QIAO *Hypericum perforatum* (aerial parts: yield = 0.00024%dw). **Ref:** 3032.

**13876 16-Methoxycarbonyl naufoline**

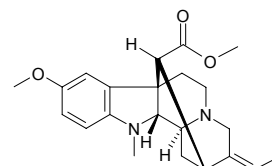
$C_{21}H_{19}N_3O_2$ (345.40). **Pharm:** Antibacterial (*in vitro*: *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus coli*, *Bacillus diphtheriae*, *Streptococcus* sp., *Streptobacillus* sp., *Salmonella* sp., *Bacillus proteus*, *Bacillus lactis*, *Klebsiella pneumoniae*); antileishmanial (*Leishmania* sp.); antifungal (*Aspergillus niger*). **Source:** KUAN YE WU TAN *Nauclea latifolia*. **Ref:** 2178.

**13877 3-(Methoxycarbonyl)propyl-β-D-glucopyranoside**

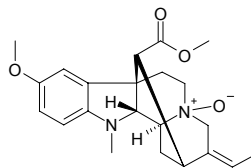
$C_{11}H_{20}O_8$ (280.28). Amorphous powder, $[\alpha]_D^{24} = -19^\circ$ ($c = 0.4$, MeOH). **Source:** SHI LUO ZI *Anethum graveolens* (fruit). **Ref:** 4177.

**13878 10-Methoxycathafoline**

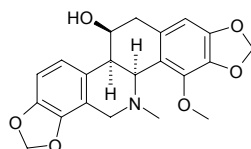
$C_{22}H_{28}N_2O_3$ (338.45). $[\alpha]_D = -57^\circ$ ($c = 0.08$, CHCl₃). **Source:** DA YE TANG JIAO SHU *Alstonia macrophylla*. **Ref:** 2320.

**13879 10-Methoxycathafoline N(4)-oxide**

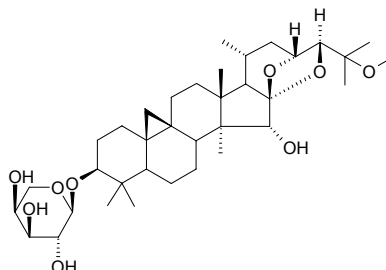
$C_{22}H_{28}N_2O_4$ (384.48). Light yellowish oil, $[\alpha]_D = -32^\circ$ ($c = 0.14$, CHCl₃). **Source:** XIA YE JI GU CHANG SHAN *Alstonia angustifolia* (leaf). **Ref:** 3780.

**13880 Methoxychelidonine**

[26446-58-2] $C_{21}H_{21}NO_6$ (383.40). Stout prisms, mp 221°C, $[\alpha]_D = +115.48^\circ$. **Source:** BAI QU CAI *Chelidonium majus*. **Ref:** 6.

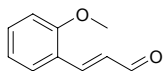
**13881 25-O-Methoxycimigenol 3-O-α-L-arabinopyranoside**

$C_{36}H_{58}O_9$ (634.86). **Pharm:** Cytotoxic (HSC-2 cells, IC₅₀ = 30 μ mol/L, control Etoposide, IC₅₀ = 24 μ mol/L; HGF cells, IC₅₀ = 54 μ mol/L). **Source:** ZONG ZHUANG SHENG MA *Cimicifuga racemosa* (rhizome). **Ref:** 4158.

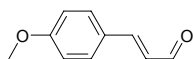


13882 2-Methoxycinnamaldehyde

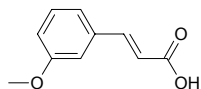
$C_{10}H_{10}O_2$ (162.19). **Pharm:** NF- κ B inhibitor (LPS-induced NF- κ B transcriptional activity, IC_{50} = 31 μ mol/L, positive control Caffeic acid phenethyl ester (CAPE), IC_{50} = 2 μ mol/L; NF- κ B is a transcription factor regulating expression of inflammatory and immune genes)^[5018]. **Source:** GUI ZHI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*] (stem cortex)^[5018], GUI ZHI *Cinnamomum cassia* [Syn. *Cinnamomum aromaticum*] (twig: content scope of 9 origins = 0.100%–0.175%, mean content = 0.142%)^[5508]. **Ref:** 5018, 5508.

**13883 p-Methoxycinnamaldehyde**

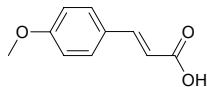
[1963-36-6] $C_{10}H_{10}O_2$ (162.19). Yellow needles (EtOH aq.), mp 58–59°C, bp 171°C/15mmHg; mp 134°C. **Pharm:** Herbicide, germination inhibitor of seed (*Abutilon avicennae*). **Source:** BA JIAO HUI XIANG *Illicium verum*, HUO XIANG *Agastache rugosus*, JIN QIAN PU *Acorus gramineus*, LUO LE *Ocimum basilicum*, RONG MAO DAI XING CAO *Sphaeranthus indicus*, SHUI HUI XIANG *Limnophila rugosa*, XIA YE QING HAO *Artemisia dracunculus*. **Ref:** 2, 658.

**13884 m-Methoxycinnamic acid**

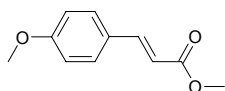
[6099-04-3] $C_{10}H_{10}O_3$ (178.19). **Source:** MU ZEI *Equisetum hiemale*. **Ref:** 2.

**13885 p-Methoxycinnamic acid**

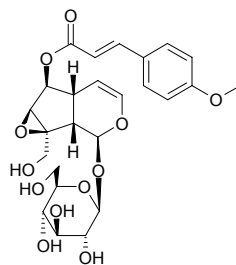
[830-09-1] $C_{10}H_{10}O_3$ (178.19). mp 170 (174)°C. **Pharm:** Neuroprotectant (primary cultures of rat cortical cells injured by glutamate, 0.1 μ mol/L, cell viability = (66.4±2.6)%, p <0.001, control MK-801, 0.1 μ mol/L, cell viability = (31.8±7.1)%, APV, 0.1 μ mol/L, cell viability = (5.7±1.9)%, XNQX, 0.1 μ mol/L, cell viability = (28.1±5.6)%)^[3967]. **Source:** BEI XUAN SHEN *Scrophularia buergeriana* (root), MU ZEI *Equisetum hiemale*. **Ref:** 2, 3967.

**13886 (E)-p-Methoxycinnamic acid methyl ester**

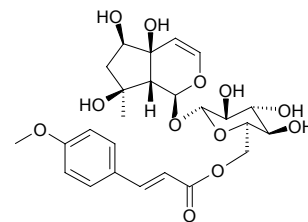
$C_{11}H_{12}O_3$ (192.22). **Pharm:** Neuroprotectant (primary cultures of rat cortical cells injured by glutamate, 0.1 μ mol/L, cell viability = (25.4±0.8)%, control MK-801, 0.1 μ mol/L, cell viability = (31.8±7.1)%, APV, 0.1 μ mol/L, cell viability = (5.7±1.9)%, XNQX, 0.1 μ mol/L, cell viability = (28.1±5.6)%). **Source:** BEI XUAN SHEN *Scrophularia buergeriana* (root). **Ref:** 3967.

**13887 6-p-Methoxycinnamoyl catalpol**

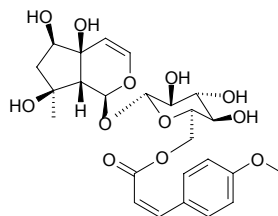
$C_{25}H_{30}O_{12}$ (522.51). **Source:** MI MENG HUA *Buddleja officinalis*. **Ref:** 1286.

**13888 6'-O-E-p-Methoxycinnamoylharpagide**

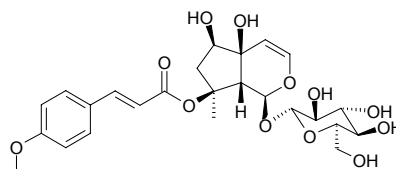
$C_{25}H_{32}O_{12}$ (524.53). Pale brown amorphous powder, $[\alpha]_D^{15}$ = -26.7° (c = 0.5, MeOH). **Pharm:** Neuroprotective (primary cultures of rat cortical cells injured by 50 μ mol/L glutamate, 0.1 μ mol/L, cell viability = 39.1%; control MK-801, cell viability = 31.8%; APV, cell viability = 5.7%; CNQX, cell viability = 28.1%). **Source:** BEI XUAN SHEN *Scrophularia buergeriana* (root: yield = 0.00003%). **Ref:** 4660.

**13889 6'-O-Z-p-Methoxycinnamoylharpagide**

$C_{25}H_{32}O_{12}$ (524.53). Pale brown amorphous powder, $[\alpha]_D^{15}$ = -29.09° (c = 0.5, MeOH). **Pharm:** Neuroprotective (primary cultures of rat cortical cells injured by 50 μ mol/L glutamate, 0.1 μ mol/L, cell viability = 33.3%; control MK-801, cell viability = 31.8%; APV, cell viability = 5.7%; CNQX, cell viability = 28.1%). **Source:** BEI XUAN SHEN *Scrophularia buergeriana* (root: yield = 0.00002%). **Ref:** 4660.

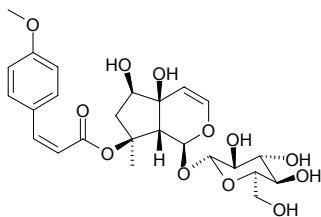
**13890 8-O-E-p-Methoxycinnamoylharpagide**

$C_{25}H_{32}O_{12}$ (524.53). Pale brown amorphous powder, $[\alpha]_D^{15}$ = -37.4° (c = 0.5, MeOH). **Pharm:** Neuroprotective (primary cultures of rat cortical cells injured by 50 μ mol/L glutamate, 0.1 μ mol/L, cell viability = 54.9%; control MK-801, cell viability = 31.8%; APV, cell viability = 5.7%; CNQX, cell viability = 28.1%). **Source:** BEI XUAN SHEN *Scrophularia buergeriana* (root: yield = 0.00060%). **Ref:** 4660.

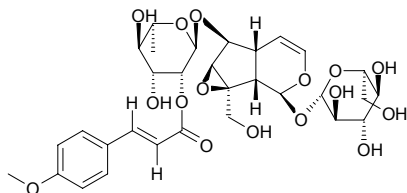


13891 8-O-Z-p-Methoxycinnamoylharpagide

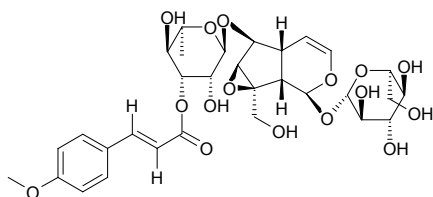
$C_{25}H_{32}O_{12}$ (524.53). Pale brown amorphous powder, $[\alpha]_D^{15} = -54.3^\circ$ ($c = 0.5$, MeOH). **Pharm:** Neuroprotective (primary cultures of rat cortical cells injured by $50\mu\text{mol/L}$ glutamate, $0.1\mu\text{mol/L}$, cell viability = 40.7%; control MK-801, cell viability = 31.8%; APV, cell viability = 5.7%; CNQX, cell viability = 28.1%). **Source:** BEI XUAN SHEN *Scrophularia buergeriana* (root: yield = 0.00042%). **Ref:** 4660.

**13892 6-O-α-L-(2''-O-trans-p-Methoxycinnamoyl)rhamnopyranosylcatalpol**

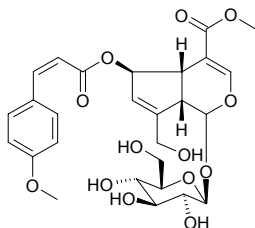
$C_{31}H_{40}O_{16}$ (668.65). **Source:** FEI LV BIN SHI ZI *Gmelina philippensis* (aerial parts). **Ref:** 3954.

**13893 6-O-α-L-(3''-O-trans-p-Methoxycinnamoyl)rhamnopyranosylcatalpol**

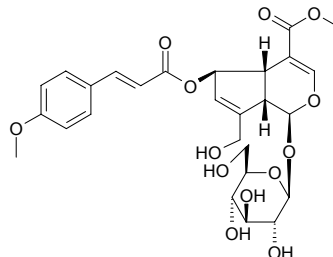
$C_{31}H_{40}O_{16}$ (668.65). **Source:** FEI LV BIN SHI ZI *Gmelina philippensis* (aerial parts). **Ref:** 3954.

**13894 6-O-Z-p-Methoxycinnamoyl scandoside methyl ester**

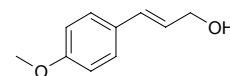
$C_{27}H_{32}O_{13}$ (564.55). **Pharm:** Neuroprotective (primary cultures of rat cortical cells, induced by L-glutamate, $0.1\mu\text{mol/L}$, cell viability = $(28.8\pm 4.6)\%$, $p < 0.05$, $1.0\mu\text{mol/L}$, cell viability = $(54.6\pm 2.9)\%$, $p < 0.01$, $10\mu\text{mol/L}$, cell viability = $(23.7\pm 4.4)\%$, $p < 0.05$). **Source:** BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] (whole herb: yield = 0.00096%). **Ref:** 3027.

**13895 5-O-p-Methoxy cinnamoyl scandoside methyl ester**

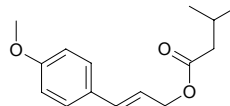
6-O-E-p-Methoxycinnamoyl scandoside methyl ester $C_{27}H_{32}O_{13}$ (564.55). **Pharm:** Neuroprotective (primary cultures of rat cortical cells, induced by L-glutamate, $0.1\mu\text{mol/L}$, cell viability = $(65.4\pm 4.1)\%$, $p < 0.001$, $1.0\mu\text{mol/L}$, cell viability = $(71.8\pm 2.8)\%$, $p < 0.001$, $10\mu\text{mol/L}$, cell viability = $(52.8\pm 3.9)\%$, $p < 0.01$)^[3027]. **Source:** BAI HUA SHE SHE CAO *Oldenlandia diffusa* [Syn. *Hedyotis diffusa*] (whole herb: yield = 0.00036%)^[3027]. **Ref:** 660, 3027.

**13896 trans-4-Methoxycinnamoyl alcohol**

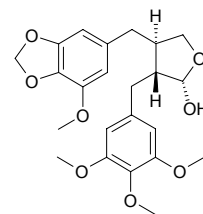
$C_{10}H_{12}O_2$ (164.21). **Source:** DA LIANG JIANG *Alpinia galanga*. **Ref:** 660, 1287.

**13897 4'-Methoxycinnamoyl isovalerate**

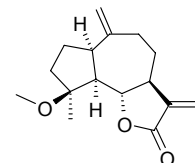
$C_{15}H_{20}O_3$ (248.32). Colorless oil. **Source:** FEI NI JI CI BAI *Juniperus phoenicea* (leaf), XIANG CI BAI FEI ZHOU BIAN ZHONG *Juniperus thurifera* var. *africana* (leaf). **Ref:** 3851.

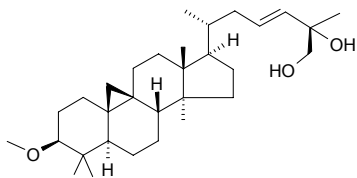
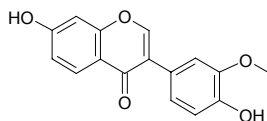
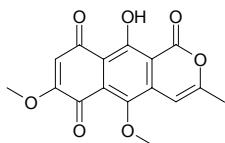
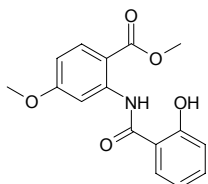
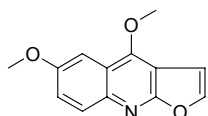
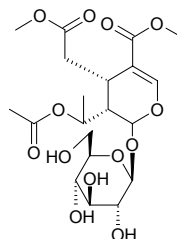
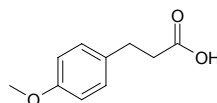
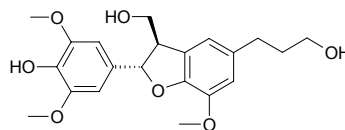
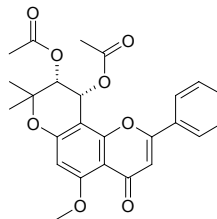
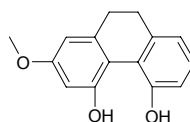
**13898 (8R,8'R,9'S)-5-Methoxyclusin**

$C_{23}H_{28}O_8$ (432.47). Pale yellow oil, $[\alpha]_D^{25} = -53.4^\circ$ ($c = 0.3$, CHCl_3). **Pharm:** CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4, $\text{IC}_{50} = 0.083\mu\text{mol/L}$; CYP2D6, $\text{IC}_{50} > 100\mu\text{mol/L}$; control Ketoconazole, CYP3A4, $\text{IC}_{50} = 0.72\mu\text{mol/L}$; control Quinidine, CYP2D6, $\text{IC}_{50} = 0.082\mu\text{mol/L}$). **Source:** BI CHENG QIE *Piper cubeba* (fruit: yield = 0.00013% dw). **Ref:** 4797.

**13899 4β-Methoxycostuslactone**

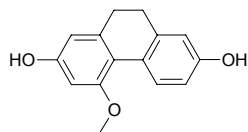
$C_{16}H_{22}O_3$ (262.35). **Source:** MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*]. **Ref:** 1387.



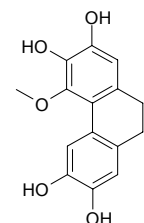
13900 3 β -Methoxy-9 β ,19-cyclolanost-23(E)-en-25,26-diolC₃₁H₅₂O₃ (472.76). [Source](#): AI YE *Artemisia argyi*. [Ref](#): 1288.**13901 3'-Methoxydaidzein**[21913-98-4] C₁₆H₁₂O₅ (284.27). mp 262°C. [Source](#): CHAO XIAN HUAI *Maackia amurensis*, JIANG ZHEN XIANG *Dalbergia odorifera*. [Ref](#): 1289.**13902 5-Methoxy-3,4-dehydroxanthomegnin**C₁₆H₁₂O₇ (316.27). Red powder, mp 141~144°C, (toluene:EtOAc = 9:1).[Pharm](#): Cytotoxic (*in vitro*, McCoy cells, CI₅₀ = 35.8 μg/mL, control *cis*-Platin CI₅₀ = 41.9 μg/mL). [Source](#): *Paepalanthus latipes*. [Ref](#): 2549.**13903 4-Methoxydianthramide B**C₁₆H₁₅NO₅ (301.3). White powder. [Pharm](#): Cytotoxic (*in vitro*, HepG2, IC₅₀ = 4.08 μg/mL; Hep3B, IC₅₀ = 16.02 μg/mL; MCF7, IC₅₀ > 20 μg/mL; A549, IC₅₀ > 20 μg/mL; MDA-MB-231, IC₅₀ > 20 μg/mL; control Doxorubicin, HepG2, IC₅₀ = 0.19 μg/mL; Hep3B, IC₅₀ = 0.31 μg/mL; MCF7, IC₅₀ = 1.21 μg/mL; A549, IC₅₀ = 0.19 μg/mL; MDA-MB-231, IC₅₀ = 0.73 μg/mL). [Source](#): QU MAI *Dianthus superbus* (aerial parts: yield = 0.0017%dw). [Ref](#): 4765.**13904 6-Methoxy dictamnine**[2221-41-2] C₁₃H₁₁NO₃ (229.24). mp 134~135°C. [Source](#): CHOU CAO *Ruta graveolens*, YU JU *Ptelea trifoliata*. [Ref](#): 6.**13905 7-Methoxydideroside**Dideroside methyl ester C₂₀H₃₀O₁₃ (478.45). Amorphous powder, [α]_D²⁵ = -36.0° (c = 1.4, MeOH). [Pharm](#): Antitrypanosomal (trypomastigotes of *Trypanosoma cruzi*, *in vitro*, IC₅₀ = 59.0 μg/mL, control Gentian violet, IC₅₀ = 7.5 μg/mL). [Source](#): *Cabycophyllum spruceanum*. [Ref](#): 3439.**13906 p-Methoxydihydrocinnamic acid**[25173-37-9] C₁₀H₁₂O₃ (180.21). mp 104~105°C. [Source](#): CHEN XIANG *Aquilaria agallocha*. [Ref](#): 6.**13907 5-Methoxy-trans-dihydrodehydroconiferyl alcohol**C₂₁H₂₆O₇ (390.44). [α]_D²⁰ = +4.7° (c = 0.34, MeOH). [Source](#): YUE NAN LIE LAN *Bursera tonkinensis* (root). [Ref](#): 5336.**13908 5-Methoxy-(3'',4''-dihydro-3'',4''-diacetoxy)-2'',2''-dimethylpyrano-(7,8:5'',6'')-flavone**C₂₅H₂₄O₈ (452.47). Yellowish gum, [α]_D = -26.0° (c = 0.1, MeOH). [Source](#): SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.00082%). [Ref](#): 4721, 4721b.**13909 2-Methoxy-9,10-dihydrophenanthrene-4,5-diol**C₁₅H₁₄O₃ (242.28). White powder. [Pharm](#): Antiallergic β-Hexosaminidase inhibitor (rat basophilic RBL-2H3 cells, inhibits release of β-hexosaminidase, 100 μmol/L, InRt = (-16.3 ± 3.8) μmol/L; 300 μmol/L control Ketotifen fumarate, InRt = (72.5 ± 0.9) μmol/L, p < 0.01). [Source](#): SHOU ZHANG SHEN *Gymnadenia conopsea* (tuber). [Ref](#): 5022.

13910 4-Methoxy-9,10-dihydrophenanthrene-2,7-diol

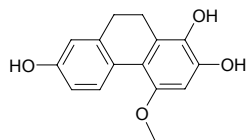
$C_{15}H_{14}O_3$ (242.28). Colorless needles. **Pharm:** Antiallergic β -Hexosaminidase inhibitor (rat basophilic RBL-2H3 cells, inhibits release of β -hexosaminidase, 100 μ mol/L, InRt = (80.4 \pm 3.3) μ mol/L, $p < 0.01$; 300 μ mol/L control Ketotifen fumarate, InRt = (72.5 \pm 0.9) μ mol/L, $p < 0.01$). **Source:** SHOU ZHANG SHEN *Gymnadenia conopsea* (tuber). **Ref:** 5022.

**13911 4-Methoxy-9,10-dihydrophenanthrene-2,3,6,7-tetrol**

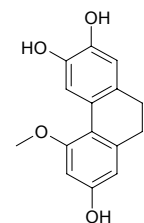
$C_{15}H_{14}O_5$ (274.28). Brown oil. **Source:** QIAO SHI DOU LAN *Bulbophyllum vaginatum*. **Ref:** 1870.

**13912 4-Methoxy-9,10-dihydrophenanthrene-1,2,7-triol**

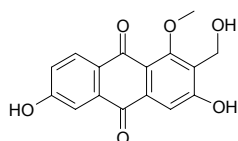
$C_{15}H_{14}O_4$ (258.28). Pale yellow amorphous powder. **Source:** LAN YU BAI JI *Bletilla formosana* (whole herb). **Ref:** 4500.

**13913 4-Methoxy-9,10-dihydrophenanthrene-2,3,7-triol**

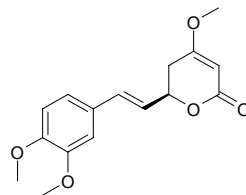
$C_{15}H_{14}O_4$ (258.28). Brown gum. **Source:** QIAO SHI DOU LAN *Bulbophyllum vaginatum*. **Ref:** 1870.

**13914 1-Methoxy-3,6-dihydroxy-2-hydroxymethyl-9,10-anthraquinone**

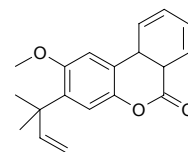
$C_{16}H_{12}O_6$ (300.27). Orange powder. **Source:** MA LAI BAN DAO RAN MU SHU *Saprosma scortechinii* (stem and leaf). **Ref:** 4219.

**13915 11-Methoxy-5,6-dihydroyangonin**

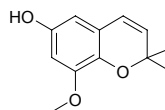
$C_{16}H_{18}O_5$ (290.32). Yellow semi-solid (0.01%), $[\alpha]_D^{25} = +70.0^\circ$ ($c = 0.025$, $CHCl_3$). **Source:** KA WA HU JIAO *Piper methysticum*. **Ref:** 1995.

**13916 Methoxy-3-(1,1'-dimethylallyl)-6a,10a-dihydrobenzo(1,2-c)chroman-6-one**

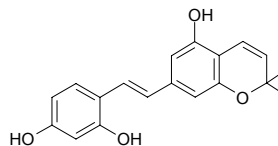
$C_{19}H_{20}O_3$ (296.37). mp 183–184°C, $[\alpha]_D^{18} = +58.0^\circ$ ($c = 0.5$, $CHCl_3$). **Pharm:** MAO-A inhibitor (rat brain mitochondrial enzyme, $IC_{50} > 100\mu$ g/mol/L); MAO-B inhibitor (rat brain mitochondrial enzyme, $IC_{50} = 2.9\mu$ g/mol/L). **Source:** HUANG LONG DAN *Gentiana lutea*. **Ref:** 3838.

**13917 8-Methoxy-2,2-dimethyl-2H-chromen-6-ol**

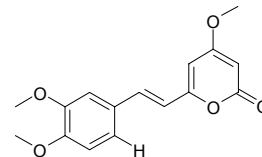
$C_{12}H_{14}O_3$ (206.24). **Source:** *Plagiochila rutilans*. **Ref:** 5144.

**13918 4-Methoxy-2,2-dimethyl-6-(2-(2,4-dihydroxy)phenyl-trans-ethenyl)chromene**

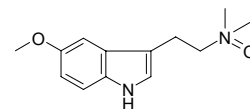
$C_{19}H_{18}O_4$ (310.35). **Pharm:** Antimalarial (*Plasmodium falciparum*, $EC_{50} = 9.4\mu$ g/mL, control Chloroquine diphosphate, $EC_{50} = 0.16\mu$ g/mL, $EC_{50} = 3.1\mu$ mol/L). **Source:** QUAN YUAN GUI MU *Artocarpus integra* (aerial parts). **Ref:** 3963.

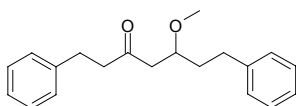
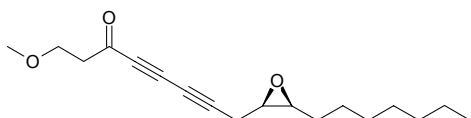
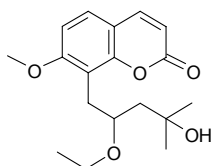
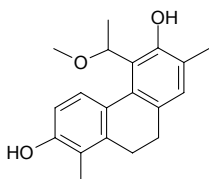
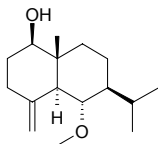
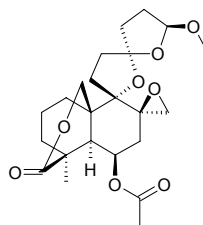
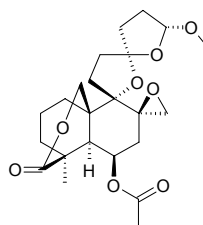
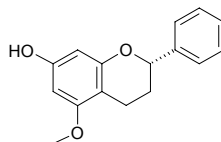
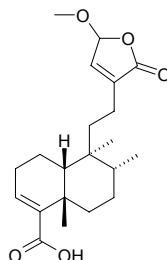
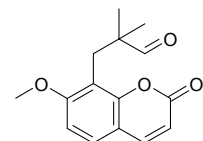
**13919 4-Methoxy-6-(11,12-dimethylstyryl)-2-pyrone**

$C_{16}H_{16}O_5$ (288.30). mp 147–149°C (EtOAc). **Source:** SHA DI YUAN ZHI *Polygala sabulosa*. **Ref:** 5110.

**13920 5-Methoxy-N,N-dimethyl-tryptamine N_b-oxide**

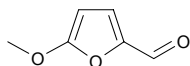
$C_{13}H_{18}N_2O_2$ (234.30). **Source:** HONG MU JI CAO *Desmodium gangeticum*, PAI QIAN CAO *Desmodium pulchellum* [Syn. *Phyllocladum pulchellum*]. **Ref:** 6.



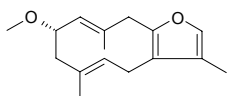
13921 5-Methoxy-1,7-diphenyl-3-heptanoneC₂₀H₂₄O₂ (296.41). Source: GAO LIANG JIANG *Alpinia officinarum*.Ref: 1403.**13922 1-Methoxy-(9R,10S)-epoxyheptadecan-4,6-diyne-3-one**C₁₈H₂₆O₃ (290.41). Light yellow oil, [α]_D²⁵ = -75.5° (c = 0.5, CHCl₃). Pharm:DGAT inhibitor (IC₅₀ = 32 μg/mL, control Evocarpine, IC₅₀ = 8.1 μg/mL).Source: REN SHEN *Panax ginseng* [Syn. *Panax schinseng*]. Ref: 4943.**13923 7-Methoxy-8-(2'-ethoxy-3'-hydroxy-3'-methylbutyl)coumarin**C₁₇H₂₂O₅ (306.36). Source: XIAO YE JIU LI XIANG *Murraya paniculata* var.*exotica*. Ref: 1292.**13924 5-(1-Methoxyethyl)-2,6-dihydroxy-1,7-dimethyl-9,10-dihydrophe-nanthrene**C₁₉H₂₂O₃ (298.39). Source: DENG XIN CAO *Juncus effusus*. Ref: 1516.**13925 6α-Methoxyeudesm-4(15)-en-1β-ol**C₁₆H₂₈O₂ (252.40). Source: YI NIAN PENG *Erigeron annuus* (aerial parts),SU MEN BAI JIU CAO *Erigeron sumatrensis* (aerial parts). Ref: 4338.**13926 15β-Methoxyfaciculatin**C₂₃H₃₂O₈ (436.51). Colorless plate, mp 230–232°C, [α]_D²¹ = -16.3° (c = 0.82, CHCl₃). Source: CU SHENG SHAN XIANG *Hyptis fasciculata* (aerial parts).Ref: 4539.**13927 15α-Methoxyfaciculatin B**C₂₃H₃₂O₈ (436.51). Colorless plate, mp 238–240°C, [α]_D²¹ = +72.9° (c = 1.31, CHCl₃). Source: CU SHENG SHAN XIANG *Hyptis fasciculata* (aerial parts).Ref: 4539.**13928 (2S)-5-Methoxy flavan-7-ol**C₁₆H₁₆O₃ (256.30). Source: JIAN YE LONG XUE SHU *Dracaena**cochinchinensis*. Ref: 1518.**13929 (+)-15-Methoxyfloridolide A**C₂₁H₃₀O₅ (362.47). [α]_D = +50.6° (c = 1.35, CHCl₃). Source: GE LUN BI YABA DOU *Croton schiedeanus* (aerial parts). Ref: 4447.**13930 7-Methoxy-8-(2'-formyl-2'-methylpropyl) coumarin**C₁₅H₁₆O₄ (260.29). Source: JIU LI XIANG *Murraya paniculata* [Syn.*Chalcas paniculata*]. Ref: 11, 1295.

13931 5-Methoxyfuraldehyde

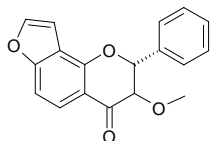
2-Formyl-5-methoxyfuran C₆H₆O₃ (126.11). Source: DANG SHEN
Condonopsis pilosula, ZANG HONG HUA *Crocus sativus* (stigma: yield =
0.00027%dw). Ref: 2, 4653.

**13932 8α-Methoxyfuranodiene**

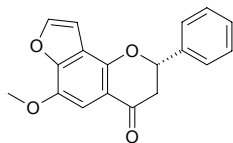
C₁₈H₂₂O₂ (246.35). Source: MO YAO *Commiphora myrrha* [Syn.
Commiphora molmol]. Ref: 1293.

**13933 3-Methoxy-(2'',3'':7,8)-furanoflavanone**

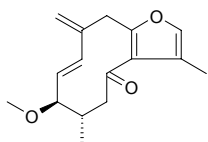
C₁₈H₁₄O₄ (294.31). Colorless amorphous powder. Source: *Lonchocarpus*
latifolius (root). Ref: 5108.

**13934 (-)-(2S)-6-Methoxy-[2'',3'':7,8]-furanoflavanone**

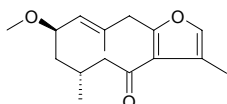
C₁₈H₁₄O₄ (294.31). Colorless needles, mp 190~192°C, [α]_D²⁸ = -55.8° (c = 0.1,
MeOH). Source: HONG E JI XUE TENG *Milletia erythrocalyx*. Ref: 1937.

**13935 rel-3R-Methoxy-4S-furanogermacra-1E,10(15)-dien-6-one**

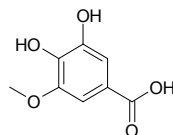
C₁₆H₂₀O₃ (260.34). Colorless oil, [α]_D = 74.4° (c = 0.80, CHCl₃). Pharm:
Cytotoxic inactive (*in vitro*, MCF7). Source: MO YAO *Commiphora myrrha*
[Syn. *Commiphora molmol*]. Ref: 3093.

**13936 rel-2R-Methoxy-4R-furanogermacra-1(10)E-en-6-one**

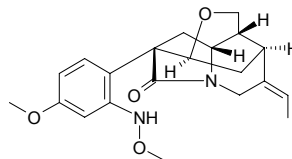
C₁₆H₂₂O₃ (262.35). Crystals (CHCl₃), [α]_D = -174.0° (c = 1.0, CHCl₃). Pharm:
Cytotoxic inactive (*in vitro*, MCF7). Source: MO YAO *Commiphora myrrha*
[Syn. *Commiphora molmol*]. Ref: 3093.

**13937 3-Methoxygallic acid**

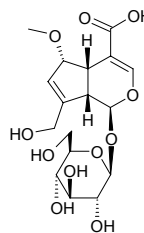
[3934-84-7] C₈H₈O₅ (184.15). mp 220(131~132)°C. Source: SHUI JIE GU
DAN *Epilobium hirsutum*. Ref: 6.

**13938 11-Methoxygelsemamide**

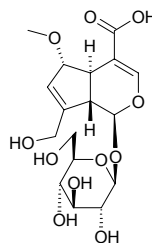
[122297-35-2] C₂₁H₂₆N₂O₄ (370.45). mp 140°C, [α]_D = +215.5°. Source: GOU
WEN *Gelsemium elegans*. Ref: 14.

**13939 6-Methoxygeniposidic acid**

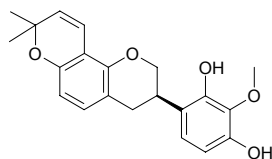
C₁₇H₂₄O₁₁ (404.37). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 1364.

**13940 6-Methoxyginiposidic acid**

C₁₇H₂₄O₁₁ (404.37). White powder. Source: QIAN CAO GEN *Rubia*
cordifolia. Ref: 8.

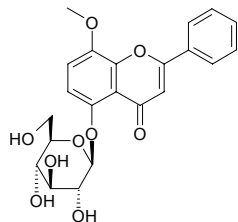
**13941 3'-Methoxyglabridin**

[74046-05-2] C₂₁H₂₂O₅ (354.41). mp 104~105°C. Pharm: Antibacterial
(*Staphylococcus aureus* ATCC13709, MIC = 50µg/mL). Source: OU YA
GAN CAO *Glycyrrhiza glabra* var. *typica*, GAN CAO *Glycyrrhiza*
uralensis. Ref: 2, 658.

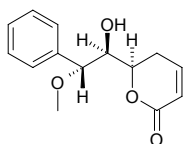


13942 8-Methoxy-5-O-glucoside flavone

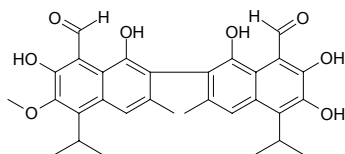
$C_{22}H_{22}O_9$ (430.42). Source: HUANG QIN *Scutellaria baicalensis*. Ref: 2.

**13943 (6R,7R,8R)-8-Methoxygoniodiol**

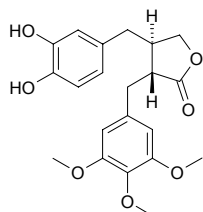
6*R*-(7*R*-Hydroxy-8*R*-methoxy-8-phenyl)-5,6-dihydro-2-pyrone $C_{14}H_{16}O_4$ (248.28). Colorless prism crystals, mp 99–101°C, $[\alpha]_D^{25} = +24.2^\circ$ ($c = 0.68$, $CHCl_3$). Pharm: Cytotoxic (*in vitro*, NUGC, $IC_{50} = 168\mu g/mL$; HONE-1, $IC_{50} = 240\mu g/mL$; control Actinomycin, NUGC, $IC_{50} = 6.61\mu g/mL$; HONE-1, $IC_{50} = 4.53\mu g/mL$)^[4686]; cytotoxic (HepG2, $IC_{50} = 4.63\mu g/mL$, control Doxorubicin, $IC_{50} = 0.38\mu g/mL$; Hep3B, $IC_{50} = 6.15\mu g/mL$, Doxorubicin, $IC_{50} = 0.36\mu g/mL$; MDA-MB-231, inactive; MCF7, inactive)^[5056]. Source: TAI WAN GE NA XIANG *Goniothalamus amuyon* (fresh leaf: yield = 0.00009%fw; stem: yield = 0.00040%fw). Ref: 4686, 5056.

**13944 6-Methoxygossypol**

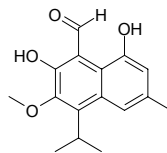
$C_{31}H_{32}O_8$ (532.60). mp 146–149°C. Source: MIAN HUA GEN *Gossypium herbaceum*, MIAN ZI YOU *Gossypium herbaceum*. Ref: 6, 1213.

**13945 (2R,3R)-5'-Methoxyguayarol**

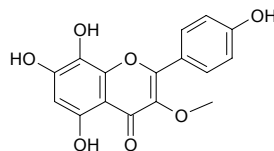
(2*R*,3*R*)-5'-Methoxyguayarol [(2*R*,3*R*)-3-(3,4-dihydroxybenzyl)-2-(3,4,5-trimethoxybenzyl)-butyrolactone] $C_{21}H_{24}O_7$ (388.42). Pale yellow solid, $[\alpha]_D^{20} = -63.8^\circ$ ($c = 0.5$, $CHCl_3$). Source: LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*] (seed). Ref: 5030.

**13946 6-Methoxyhemigossypol**

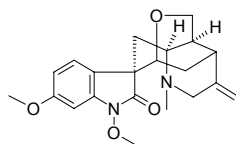
[50399-95-6] $C_{16}H_{18}O_4$ (274.32). Source: MIAN HUA GEN *Gossypium herbaceum*. Ref: 6.

**13947 3-Methoxyherbacetin**

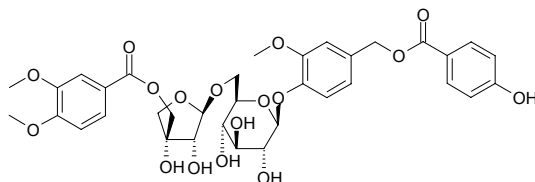
$C_{16}H_{12}O_7$ (316.27). Source: MA HUANG *Ephedra sinica*. Ref: 2.

**13948 11-Methoxyhumantenine**

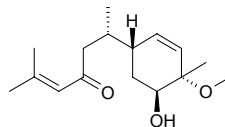
$C_{22}H_{28}N_2O_4$ (384.48). Powder, $[\alpha]_D = -146.5^\circ$. Source: GOU WEN *Gelsemium elegans*. Ref: 14.

**13949 2-Methoxy-4-[(4-hydroxybenzoyl)phenol] 1-O-β-D-[5-O-(3,4-dimethoxybenzoyl)]-apiofuranosyl-(1→6)-β-D-glucopyranoside**

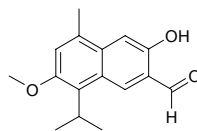
$C_{35}H_{40}O_{17}$ (732.70). Amorphous powder, $[\alpha]_D^{22} = -61^\circ$ ($c = 0.79$, MeOH). Source: BAN ZHEN ZHONG HUA SHU *Tabebuia impetiginosa* (bark). Ref: 3817.

**13950 4-Methoxy-5-hydroxybisabola-2,10-diene-9-one**

$C_{16}H_{26}O_3$ (266.38). Source: JIANG HUANG *Curcuma longa*. Ref: 1405.

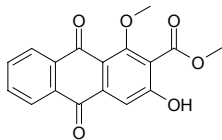
**13951 3-Methoxy-7-hydroxcadalenal**

$C_{16}H_{18}O_3$ (258.32). mp 137–139°C. Source: LANG YU PI *Ulmus parvifolia*. Ref: 6.

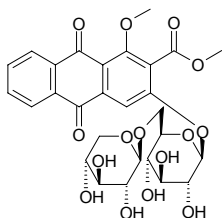


13952 1-Methoxy-3-hydroxy-2-carbomethoxy-9,10-anthraquinone

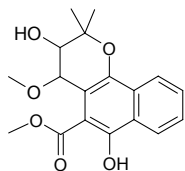
$C_{17}H_{12}O_6$ (312.28). Yellow powder. Source: MA LAI BAN DAO RAN MU SHU *Saprosma scortechinii* (stem and leaf). Ref: 4219.

**13953 1-Methoxy-3-hydroxy-2-carbomethoxy-9,10-anthraquinone 3-O-β-primeveroside**

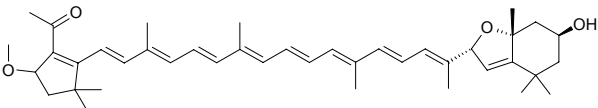
$C_{28}H_{30}O_{15}$ (606.54). Orange powder, $[\alpha]_D^{23} = -78.7^\circ$ ($c = 0.13$, MeOH). Source: MA LAI BAN DAO RAN MU SHU *Saprosma scortechinii* (stem and leaf). Ref: 4219.

**13954 1'-Methoxy-2'-hydroxydihydromollugin**

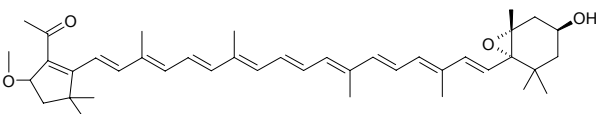
$C_{18}H_{20}O_6$ (332.36). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 1361.

**13955 3-Methoxy-3'-hydroxy-5',8'-epoxy-5',8'-dihydro-5,6-seco-4,6-cyclo-β,β-caroten-5-one**

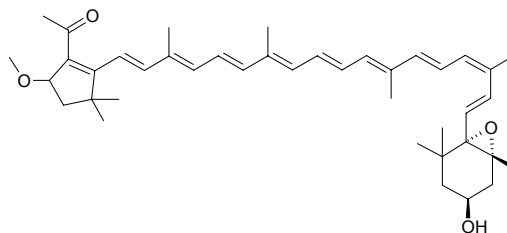
$C_{41}H_{56}O_4$ (612.90). Red amorphous powder. Source: HAI TONG *Pittosporum tobira* (seed). Ref: 4108.

**13956 (all-E)-3-Methoxy-3'-hydroxy-5',6'-epoxy-5',6'-dihydro-5,6-seco-4,6-cyclo-β,β-caroten-5-one**

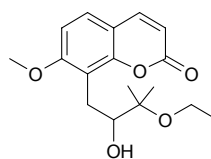
$C_{41}H_{56}O_4$ (612.90). Red amorphous powder. Source: HAI TONG *Pittosporum tobira* (seed). Ref: 4108.

**13957 (9'Z)-3-Methoxy-3'-hydroxy-5',6'-epoxy-5',6'-dihydro-5,6-seco-4,6-cyclo-β,β-caroten-5-one**

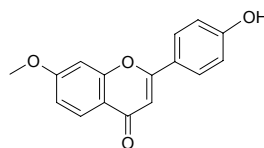
$C_{41}H_{56}O_4$ (612.90). Red amorphous powder. Source: HAI TONG *Pittosporum tobira* (seed). Ref: 4108.

**13958 7-Methoxy-8-(2'-hydroxy-3'-ethoxy-3'-methylbutyl)coumarin**

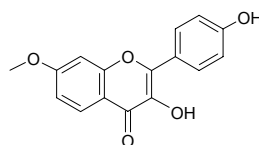
$C_{17}H_{22}O_5$ (306.36). Source: XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. Ref: 1294.

**13959 7-Methoxy-4'-hydroxyflavone**

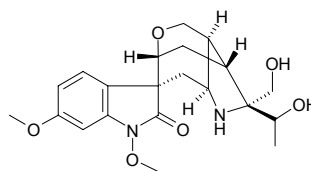
$C_{16}H_{12}O_4$ (268.27). Source: YUN NAN GAN CAO *Glycyrrhiza yunnanensis*. Ref: 1330.

**13960 7-Methoxy-4'-hydroxyflavonol**

$C_{16}H_{12}O_5$ (284.27). Source: YUN NAN GAN CAO *Glycyrrhiza yunnanensis*. Ref: 1330.

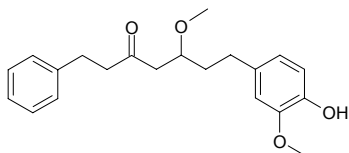
**13961 11-Methoxy-19-(R)-hydroxygelsegine**

$C_{21}H_{28}N_2O_6$ (404.47). mp 234–236°C, $[\alpha]_D = -110^\circ$. Source: GOU WEN *Gelsemium elegans*. Ref: 14.

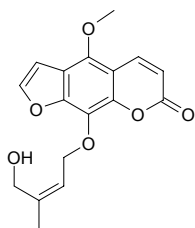


13962 5-methoxy-7-(4''-hydroxy-3''-methoxy phenyl)-1-phenyl-3-heptanone

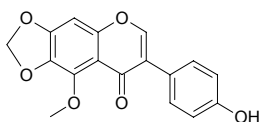
[83161-95-9] C₂₁H₂₆O₄ (328.41). Colorless oleaginous liquid, $[\alpha]_D^{20} = -11.6^\circ$ ($c = 0.43$, CHCl₃). **Pharm:** Anti-inflammatory; prostaglandin biosynthesis inhibitor (IC₅₀ = 2.3 μmol/L, IC₅₀ of indometacin control = 4.9 μmol/L). **Source:** GAO LIANG JIANG *Alpinia officinarum*. **Ref:** 435, 1814.

**13963 Methoxy-8-(3''-hydroxymethyl-but-2-enyloxy)-psoralen**

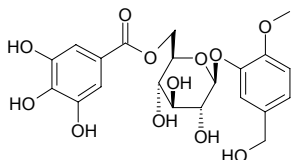
5-Methoxy-8-(3''-hydroxymethyl-but-2-enyloxy)-psoralen C₁₇H₁₆O₆ (316.31). Colorless amorphous solid. **Source:** SI JI XIANG ROU GUO *Casimiroa tetrameria* (leaf). **Ref:** 5262.

**13964 5-Methoxy-4'-hydroxy-6,7-methylenedioxyisoflavone**

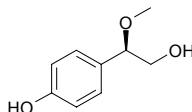
C₁₇H₁₂O₆ (312.28). **Source:** JUAN QIAO YUAN WEI *Iris potaninii* (underground part). **Ref:** 4235.

**13965 2-Methoxy-5-hydroxymethyl-phenyl-1-O-(6''-galloyl)-β-D-glucopyranoside**

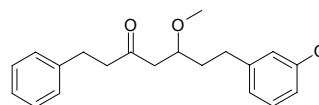
C₂₁H₂₄O₁₂ (468.42). Yellow powder, mp 125°C (dec), $[\alpha]_D^{25} = +14^\circ$ ($c = 0.10$, MeOH). **Pharm:** Antifungal (*Candida albicans* ATCC2091, MIC = 25 μg/mL, control Amphotericin B, MIC = 1 μg/mL; *Candida albicans* 32, MIC = 100 μg/mL, Amphotericin B, MIC = 4 μg/mL; *Candida albicans* 19, MIC = 50 μg/mL, Amphotericin B, MIC = 2 μg/mL); cytotoxic inactive (MIC > 200 μg/mL); antibacterial inactive. **Source:** *Baseonema acuminatum* (leaf). **Ref:** 5021.

**13966 2-Methoxy-2-(4'-hydroxyphenyl)ethanol**

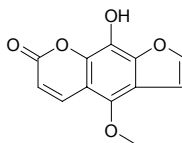
C₉H₁₂O₃ (168.19). Amorphous powder, $[\alpha]_D^{21} = -15^\circ$ ($c = 0.2$, MeOH). **Source:** GE LU ZI *Carum carvi*. **Ref:** 1926.

**13967 5-Methoxy-7-(4''-hydroxyphenyl)-1-phenyl-3-heptanone**

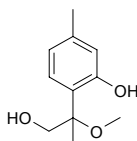
C₂₁H₂₆O₃ (326.44). **Source:** GAO LIANG JIANG *Alpinia officinarum*. **Ref:** 1403.

**13968 5-Methoxy-8-hydroxy-psoralen**

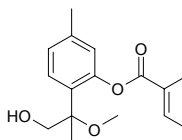
C₁₂H₈O₅ (232.19). **Source:** HANG BAI ZHI *Angelica taiwaniana*. **Ref:** 2, 660.

**13969 8-Methoxy-9-hydroxythymol**

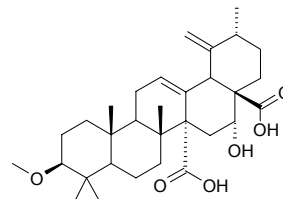
C₁₁H₁₆O₃ (196.25). $[\alpha]_D^{24} = 0^\circ$ ($c = 1.71$, CHCl₃). **Source:** PEI LAN *Eupatorium fortunei* (aerial parts). **Ref:** 3077.

**13970 8-Methoxy-9-hydroxythymol 3-O-tiglate**

C₁₆H₂₂O₄ (278.35). $[\alpha]_D^{20} = 0^\circ$ ($c = 1.1$, CHCl₃). **Source:** PEI LAN *Eupatorium fortunei* (aerial parts). **Ref:** 3077.

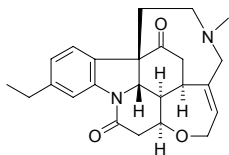
**13971 3β-Methoxy-16α-hydroxyursa-12,19(29)-dien-27,28-dioic acid**

C₃₁H₄₆O₆ (514.71). **Source:** BI LU GOU TENG *Uncaria tomentosa*. **Ref:** 5341.

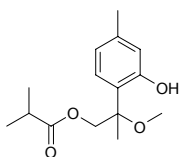


13972 3-Methoxycajine

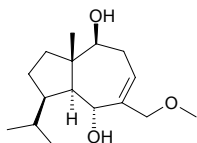
$C_{23}H_{26}N_2O_4$ (394.47). Source: MA QIAN ZI *Strychnos nux-vomica*. Ref: 2.

**13973 8-Methoxy-9-O-isobutyrylthymol**

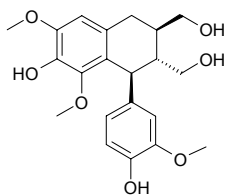
$C_{15}H_{22}O_4$ (266.34). $[\alpha]_D^{20} = 0^\circ$ ($c = 1.1$, $CHCl_3$). Source: PEI LAN *Eupatorium fortunei* (aerial parts). Ref: 3077.

**13974 15-Methoxysodauc-3-ene-1β,5α-diol**

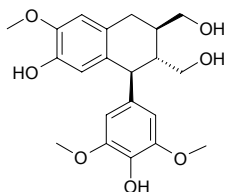
$C_{16}H_{28}O_3$ (268.40). Colorless amorphous solid, $[\alpha]_D^{27} = -57.2^\circ$ ($c = 0.3$, $CHCl_3$). Source: YI NIAN PENG *Erigeron annuus* (aerial parts), SU MEN BAI JIU CAO *Erigeron sumatrensis* (aerial parts). Ref: 4338.

**13975 (-)-8-Methoxysolariciresinol**

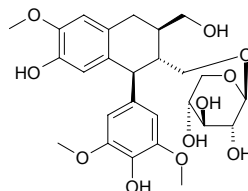
$C_{21}H_{26}O_7$ (390.44). Pharm: Antioxidant (DPPH scavenger, for 40 μmol/L DPPH radical, $SC_{50} = 15 \mu\text{mol/L}$). Source: SUO LA MU *Salacia prinoides* [Syn. *Salacia chinensis*] (stem). Ref: 4378.

**13976 (-)-5'-Methoxysolariciresinol**

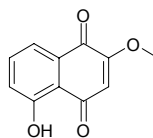
$C_{21}H_{26}O_7$ (390.44). White filariform solid, mp 129~130°C. Source: DIAN BAI ZHU SHU *Gaultheria yunnanensis*. Ref: 815.

**13977 (-)-5'-Methoxysolariciresinol-2α-O-β-D-xylopyranoside (D₂)**

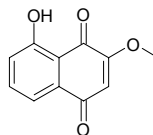
$C_{26}H_{34}O_{11}$ (522.55). White powder, mp 203~204°C. Source: BAI ZHU SHU *Gaultheria leucocarpa* var. *cumingiana* (root: content = 0.014%)^[5508], DIAN BAI ZHU SHU *Gaultheria yunnanensis* (root: content scope of 3 origins = 0.019%~0.065%, mean content = 0.042%)^[5508], FANG XIANG BAI ZHU *Gaultheria fragrantissima* (root: content = 0.020%)^[5508], SI LIE BAI ZHU *Gaultheria tetramera* (root: content = 0.023%)^[5508], WEI YE BAI ZHU *Gaultheria griffithiana* (root: content = 0.023%)^[5508]. Ref: 664, 5508.

**13978 2-Methoxyjuglone**

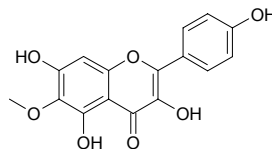
$C_{11}H_8O_4$ (204.18). Source: HUANG QI II *Engelhardia roxburghiana* (root). Ref: 5059.

**13979 3-Methoxyjuglone**

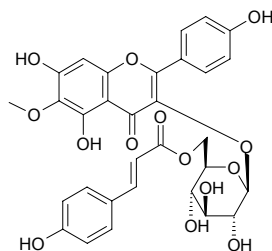
$C_{11}H_8O_4$ (204.18). Pharm: Antitubercular (*Mycobacterium tuberculosis* 90-221387, MIC = 6.25 μg/mL; *Mycobacterium tuberculosis* H37Rv, MIC = 4.0 μg/mL). Source: HUANG QI II *Engelhardia roxburghiana* (root). Ref: 5059.

**13980 6-Methoxykaempferol**

$C_{16}H_{12}O_7$ (316.27). Source: LAN YU BAI JI *Bletilla formosana* (whole herb). Ref: 4500.

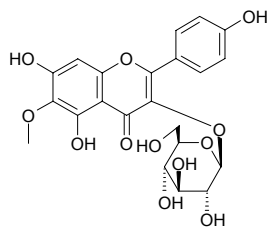
**13981 6-Methoxykaempferol-3-O-β-D-6''(p-coumaroyl)glucopyranoside**

$C_{31}H_{28}O_{14}$ (624.56). Source: *Paepalanthus polyanthus*, *Paepalanthus hilairei*, *Paepalanthus robustus*, *Paepalanthus ramosus*, *Paepalanthus denudatus*. Ref: 2291.

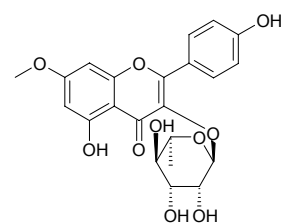


13982 6-Methoxykaempferol 3-O-glycoside

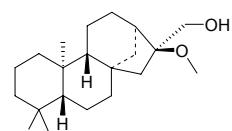
$C_{22}H_{22}O_{12}$ (478.41). Source: HUANG HUA HAO *Artemisia annua*. Ref: 2, 660.

**13983 7-Methoxykaempferol 3-O- α -L-rhamnopyranoside**

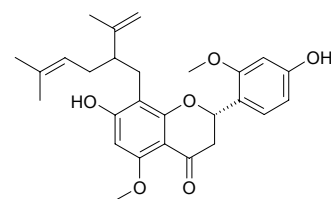
$C_{22}H_{22}O_{10}$ (446.41). Source: MENG GU FENG MAO JU *Saussurea mongolica*. Ref: 4958.

**13984 ent-16 α -Methoxy-kauran-17-ol**

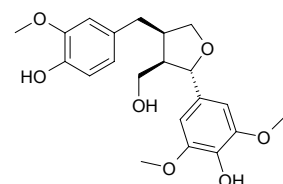
$C_{21}H_{36}O_2$ (320.52). Source: ZHE BEI MU *Fritillaria verticillata* var. *thunbergii* [Syn. *Fritillaria thunbergii*]. Ref: 1396, 2182.

**13985 2'-Methoxykurarinone**

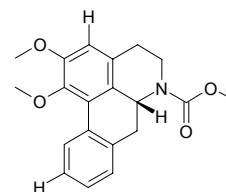
$C_{27}H_{32}O_6$ (452.55). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 4430.

**13986 5'-Methoxylaricresinol**

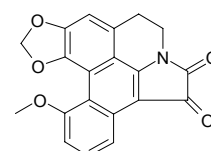
$C_{21}H_{26}O_7$ (390.44). Pharm: Anti-inflammatory (inhibits nitric oxide production, LPS-activated mouse peritoneal macrophages, 100 μ mol/L, InRt = (63.3 \pm 4.0)%, IC₅₀ = 78 μ mol/L, control L-NMMA, IC₅₀ = 57 μ mol/L); β -hexosaminidase release inhibitor (RBL-2H3 cells, 100 μ mol/L, InRt = (15.4 \pm 1.7)%, p <0.01). Source: XIAO HONG SHEN *Rubia yunnanensis* (root). Ref: 4347.

**13987 N-Methoxycarbonyl-nornuciferine**

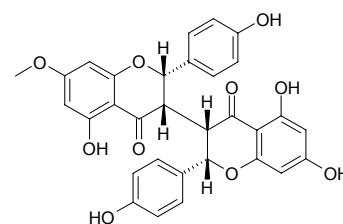
$C_{20}H_{21}NO_4$ (339.39). White amorphous powder, $[\alpha]_D^{25} = +165^\circ$ ($c = 0.05$, $CHCl_3$). Pharm: Platelet aggregation inhibitor (washed rabbit platelets, 100 μ g: 0.1 U/mL thrombin-induced, AggRt = (88.7 \pm 0.6)%, p <0.001; 10 μ mol/L AA-induced, AggRt = (58.3 \pm 6.1)%, p <0.001; 10 μ mol/L collagen-induced, AggRt = (56.5 \pm 13.9)%, p <0.05; 2 ng/mL PAF-induced, AggRt = (83.8 \pm 2.5)%, p <0.05). Source: NIAN ZHI LUO LIN *Rollinia mucosa* (stem). Ref: 5143.

**13988 11-Methoxylettowianthine**

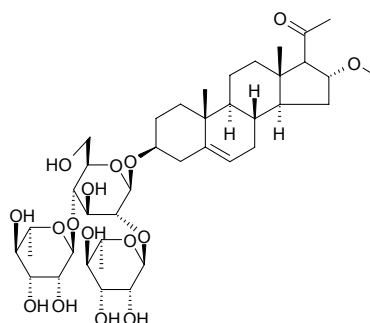
$C_{20}H_{13}NO_5$ (347.33). Dark red amorphous solid. Source: *Lettowianthus stellatus* (root cortex). Ref: 3944.

**13989 7-Methoxylneochaejasmin A**

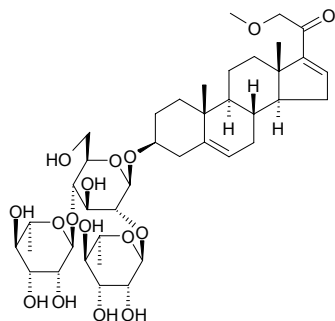
$C_{31}H_{24}O_{10}$ (556.53). Pale yellow amorphous powder, $[\alpha]_D^{26} = +153.2^\circ$ ($c = 0.3$, MeOH). Source: LANG DU *Stellera chamaejasme*. Ref: 4159.

**13990 16 α -Methoxyl-3 β -[(O- α -L-rhamnopyranosyl-(1 \rightarrow 2)-O-[α -L-rhamnopyranosyl-(1 \rightarrow 4)]- β -D-glucopyranosyl)oxy]pregn-5-en-20-one**

$C_{40}H_{64}O_{16}$ (800.95). Amorphous powder, $[\alpha]_D^{24} = -47.8^\circ$ ($c = 0.2$, pyridine). Pharm: Antifungal (plant pathogenic fungus *Pyricularia oryzae*, MMDC = 250 μ mol/L); osteoblastic proliferation stimulator (UMR106 cell line, 1 μ mol/L, increase in cell proliferation = 16.7%, 10 μ mol/L, 4.4%). Source: FU ZHOU SHU YU *Dioscorea futschauensis* (rhizome). Ref: 4381.

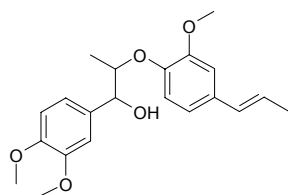


13991 21-Methoxyl-3 β -[(*O*- α -L-rhamnopyranosyl-(1 \rightarrow 2)-*O*-[α -L-rhamnopyranosyl-(1 \rightarrow 4)]- β -D-glucopyranosyl)oxy]pregn-5,16-en-20-one
 C₄₀H₆₂O₁₆ (798.93). Amorphous powder, $[\alpha]_D^{24} = -40.5^\circ$ ($c = 0.2$, pyridine).
Pharm: Antifungal (plant pathogenic fungus *Pyricularia oryzae*, MMDC = 265 μ mol/L); osteoblastic proliferation stimulator (UMR106 cell line, 1 μ mol/L, increase in cell proliferation = 9.9%, 10 μ mol/L, 34.4%, 100 μ mol/L, 17.6%).
Source: FU ZHOU SHU YU *Dioscorea futschauensis* (rhizome). **Ref:** 4381.



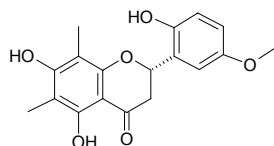
13992 4-Methoxymachilin D

C₂₁H₂₆O₅ (358.44). Colorless oil, $[\alpha]_D = -160^\circ$ ($c = 0.7$, CHCl₃). **Source:** SAN BAI CAO *Saururus chinensis* (underground part). **Ref:** 4122.



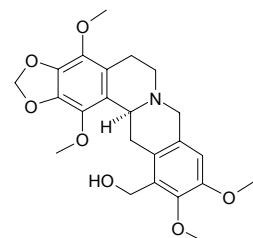
13993 Methoxymatteucin

C₁₈H₁₈O₆ (330.34). **Source:** DONG FANG JIA GUO JUE *Matteuccia orientalis*. **Ref:** 1253.



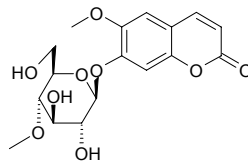
13994 Methoxymecamidrine

C₂₃H₂₇NO₇ (429.47). **Source:** HONG HUA LV RONG HAO *Meconopsis punicea*. **Ref:** 1255.



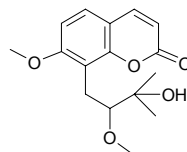
13995 6-Methoxy-7-O- β -D-(4'-methoxy) glucopyranosyl coumarin

C₁₇H₂₀O₉ (368.34). White needles (MeOH), mp 257~259°C. **Source:** JIANG CAN *Bombyx batryticatus*. **Ref:** 4591.



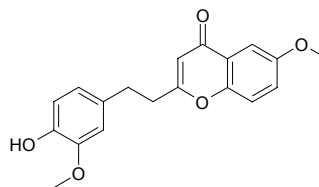
13996 7-Methoxy-8-(2'-Methoxy-3'-hydroxy-3'-methylbutyl)coumarin

C₁₆H₂₀O₅ (292.33). **Source:** XIAO YE JIU LI XIANG *Murraya paniculata var. exotica*. **Ref:** 1291.



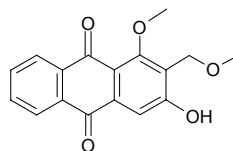
13997 6-Methoxy-2-[2-(3-methoxy-4-hydroxyphenyl)ethyl]chromone

C₁₉H₁₈O₅ (326.35). Colorless needles, mp 152~153°C (MeOH). **Source:** CHEN XIANG *Aquilaria agallocha*. **Ref:** 4173.



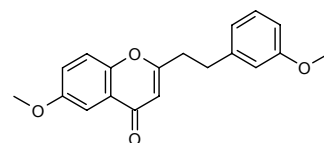
13998 1-Methoxy-2-methoxymethyl-3-hydroxyanthraquinone

C₁₇H₁₄O₅ (298.30). **Source:** QIAN CAO GEN *Rubia cordifolia*. **Ref:** 1362.



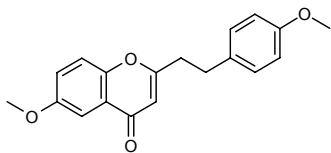
13999 6-Methoxy-2-[2-(3'-methoxyphenyl) ethyl] chromone

AH_{b1} C₁₉H₁₈O₄ (310.35). Colorless acicular crystals, mp 97~99°C. **Source:** BAI MU XIANG *Aquilaria sinensis*. **Ref:** 13, 660.

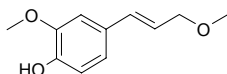


14000 6-Methoxy-2-[2-(4'-methoxyphenyl) ethyl] chromone

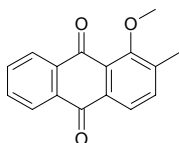
$C_{19}H_{18}O_4$ (310.35). Colorless fine acicular crystals, mp 84–85°C. Source: BAI MU XIANG *Aquilaria sinensis*. Ref: 13, 660.

**14001 2-Methoxy-4-(3-methoxy-1-propenyl)-phenol**

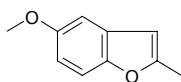
$C_{11}H_{14}O_3$ (194.23). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 1353.

**14002 1-Methoxy-2-methylanthraquinone**

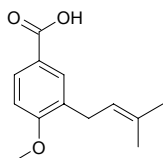
$C_{16}H_{12}O_3$ (252.27). mp 150–157°C. Source: YANG JIAO TENG *Morinda umbellata*. Ref: 6.

**14003 5-Methoxy-2-methylbenzofuran**

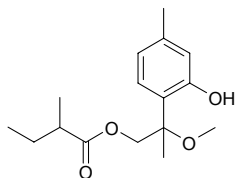
$C_{10}H_{10}O_2$ (162.19). Colorless liquid. Source: YANG HONG SHAN *Pimpinella thelungiana*. Ref: 780.

**14004 4-Methoxy-3-(3-methyl-2-butenyl)-benzoic acid**

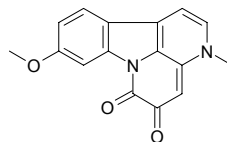
$C_{13}H_{16}O_3$ (220.27). Oil. Pharm: Anti-HIV-1 (binds to chemokine receptor CCR5, $IC_{50} = 26\mu\text{mol/L}$). Source: *Wigandia urens* (stem). Ref: 3474.

**14005 8-Methoxy-9-(2-methylbutyryloxy)thymol**

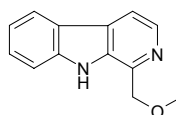
$C_{16}H_{24}O_4$ (280.37). $[\alpha]_D^{20} = 0^\circ$ ($c = 0.9$, CHCl_3). Source: PEI LAN *Eupatorium fortunei* (aerial parts). Ref: 3077.

**14006 9-Methoxy-3-methylcanthin-5,6-dione**

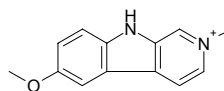
[8] $C_{16}H_{12}N_2O_3$ (280.29). Source: *Eurycoma* sp. Ref: 4556.

**14007 1-Methoxymethyl-β-carboline**

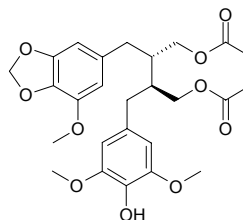
$C_{13}H_{12}N_2O$ (212.25). Source: *Eurycoma* sp. Ref: 4556.

**14008 6-Methoxy-2-methyl-β-carbolinium (cation)**

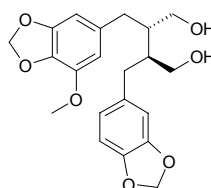
$C_{13}H_{13}N_2O^+$ (213.26). Source: HONG MU JI CAO *Desmodium gangeticum*. Ref: 6, 1214.

**14009 (2S,3S)-2-(5-Methoxy-3,4-methylenedioxybenzyl)-3-(4-hydroxy-3,5-dimethoxybenzyl)butane-1,4-diol diacetate**

$C_{26}H_{32}O_{10}$ (504.54). Colorless gum, $[\alpha]_D^{25} = +23.6^\circ$ ($c = 0.267$, CHCl_3). Source: MENG ZI CAO HU JIAO *Peperomia duclouxii* (whole herb: yield = 0.00024%). Ref: 4733.

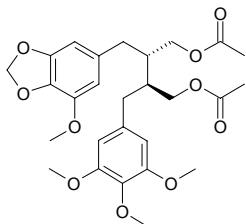
**14010 (2S,3S)-2-(5-Methoxy-3,4-methylenedioxybenzyl)-3-(3,4-methylenedioxybenzyl)butane-1,4-diol**

$C_{21}H_{24}O_7$ (388.42). Colorless gum, $[\alpha]_D^{25} = +19.0^\circ$ ($c = 0.127$, CHCl_3). Source: MENG ZI CAO HU JIAO *Peperomia duclouxii* (whole herb: yield = 0.00016%). Ref: 4733.



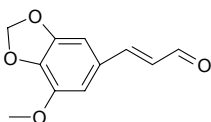
14011 (2*S*,3*S*)-2-(5-Methoxy-3,4-methylenedioxybenzyl)-3-(3,4,5-trimethoxybenzyl)butane-1,4-diol diacetate

$C_{27}H_{34}O_{10}$ (518.57). Colorless gum, $[\alpha]_D^{25} = +19.8^\circ$ ($c = 0.313$, $CHCl_3$).
Source: MENG ZI CAO HU JIAO *Peperomia duclouxii* (whole herb: yield = 0.00036%). **Ref:** 4733.



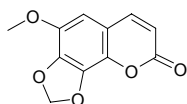
14012 (*E*)-3-Methoxy-4,5-methylenedioxcinnamaldehyde

[74683-19-5] $C_{11}H_{10}O_4$ (206.20). Yellowish rhombic crystals (hexane-ethyl acetate), mp 135~136°C. **Pharm:** Antihepatotoxin (mus, reduces amino transferase increased by CCl_4 and immunodamage of liver caused by *Propionibacterium*). **Source:** XIN JIANG GAO BEN *Conioselinum vaginatum*, GAO BEN *Ligusticum sinense*. **Ref:** 333, 1189.



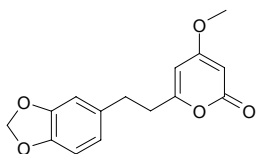
14013 6-Methoxy-7,8-methylenedioxcoumarin

$C_{11}H_8O_5$ (220.18). **Source:** BEI AI *Artemisia vulgaris*. **Ref:** 1383.



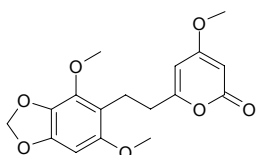
14014 4-Methoxy-6-(11,12-methylenedioxydihydrostyryl)-2-pyrone

$C_{15}H_{14}O_5$ (274.28). mp 138~140°C (Me_2CO). **Source:** SHA DI YUAN ZHI *Polygala sabulosa* **Ref:** 5110.



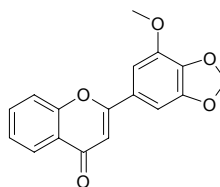
14015 4-Methoxy-6-(11,12-methylenedioxy-10,14-dimethoxydihydrostyryl)-2-pyrone

$C_{17}H_{18}O_7$ (334.33). mp 166~168°C (Me_2CO). **Source:** SHA DI YUAN ZHI *Polygala sabulosa* **Ref:** 5110.



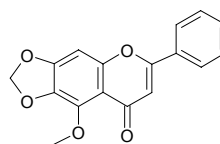
14016 3'-Methoxy-4',5'-methylenedioxyflavone

2-(3-Methoxy-4,5-methylenedioxyphenyl)-4*H*-1-benzopyran-4-one $C_{17}H_{12}O_5$ (296.28). White crystalline solid ($CHCl_3$). **Source:** HUANG HUA JIU LUN CAO *Primula veris* [Syn. *Primula officinalis*] (leaf). **Ref:** 5275.



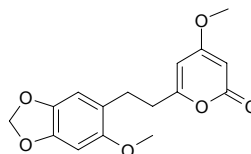
14017 5-Methoxy-6,7-methylenedioxyflavone

$C_{17}H_{12}O_5$ (296.28). **Source:** YU LIAO *Polygonum lapathifolium*. **Ref:** 1436.



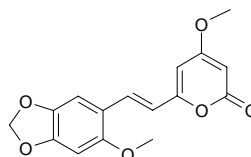
14018 4-Methoxy-6-(11,12-methylenedioxy-14-methoxydihydrostyryl)-2-pyrone

$C_{16}H_{16}O_6$ (304.30). mp 149~151°C (Me_2CO). **Source:** SHA DI YUAN ZHI *Polygala sabulosa* **Ref:** 5110.



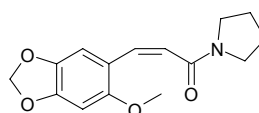
14019 4-Methoxy-6-(11,12-methylenedioxy-14-methoxystyryl)-2-pyrone

$C_{16}H_{14}O_6$ (302.29). mp 189~191°C (Me_2CO). **Source:** SHA DI YUAN ZHI *Polygala sabulosa* **Ref:** 5110.



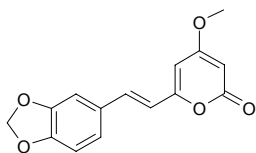
14020 *N*-[3-(6'-Methoxy-3',4'-methylenedioxyphenyl)-2(*Z*)-propenoyl]pyrrolidine

$C_{15}H_{17}NO_4$ (275.31). **Pharm:** Antifungal (*Cladosporium sphaerospermum*, MIA = 5.0μg, control Nystatin, MIA = 0.5μg). **Source:** YING MAO HU JIAO *Piper hispidum* (stem). **Ref:** 5102.

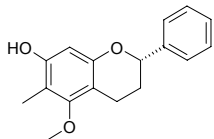


14021 4-Methoxy-6-(11,12-methylenedioxyethyl)-2-pyrone

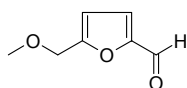
$C_{15}H_{12}O_5$ (272.26). mp 200–203°C (EtOAc). Source: SHA DI YUAN ZHI *Polygala sabulosa* Ref: 5110.

**14022 (2S)-5-Methoxy-6-methylflavan-7-ol**

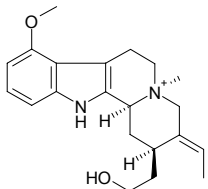
$C_{17}H_{18}O_3$ (270.33). Source: JIAN YE LONG XUE SHU *Dracaena cochinchinensis*. Ref: 1518.

**14023 5-Methoxymethyl furfural**

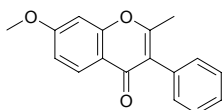
$C_7H_8O_3$ (140.14). bp 98°C/7mmHg. Source: TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*], DANG SHEN *Codonopsis pilosula*. Ref: 6, 1215, 1216.

**14024 9-Methoxy-N₆-methylgeissoschizol**

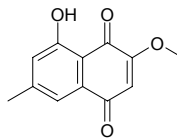
$C_{21}H_{29}N_2O_2$ (341.48). Pharm: Nicotinic acetylcholine receptor competitive inhibitor (6.298 μmol/L, endplate potential amplitude is reduced to 49%, 40.65 μmol/L, reduced this amplitude to 5%)^[3943]; toxic inactive (12mg/kg injection, did not seem toxic)^[3943]; neuromuscular toxicity (neuromuscular transmission inhibitor, IC₅₀ = 120 μmol/L; Venezuelan calabash curare, IC₅₀ = 6.5 μmol/L)^[5202]. Source: *Strychnos guianensis* (stem cortex). Ref: 3943, 5202.

**14025 7-Methoxy-2-methyl isoflavone**

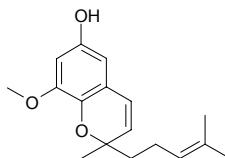
$C_{17}H_{14}O_3$ (266.30). Source: GUANG GUO GAN CAO *Glycyrrhiza glabra*. Ref: 1296.

**14026 3-Methoxy-7-methyljuglone**

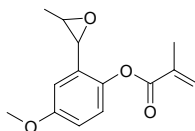
$C_{12}H_{10}O_4$ (218.21). Source: SHI GEN *Diospyros kaki*. Ref: 6.

**14027 8-Methoxy-2-methyl-2-(4-methyl-3-pentenyl)-2H-1-benzopyran-6-ol**

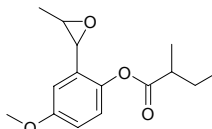
$C_{17}H_{22}O_3$ (274.36). Oil, $[\alpha]_D^{25} = -26^\circ$ ($c = 0.026$, EtOH). Pharm: Anti-HIV-1 (binds to chemokine receptor CCR5, IC₅₀ = 46 μmol/L). Source: *Wigandia urens* (stem). Ref: 3474.

**14028 (+)-4-Methoxy-2-(3-methyloxiranyl)-phenyl angelate**

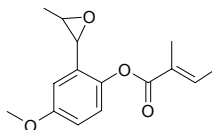
cis-Epoxy-pseudoisoeugenyl tiglate $C_{15}H_{18}O_4$ (262.31). Colorless oil, $[\alpha]_D^{25} = +22.0^\circ$ ($c = 0.5$, CHCl₃). Pharm: Antimycobacterial (*Mycobacterium intracellulare*, IC₅₀ = 2.5 μg/mL, control Ciprofloxacin, IC₅₀ = 0.25 μg/mL). Source: *Pimpinella isaurica*. Ref: 5465.

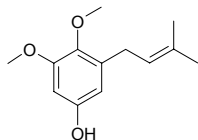
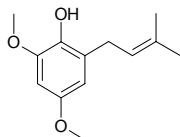
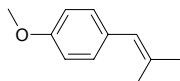
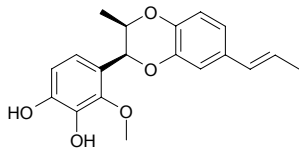
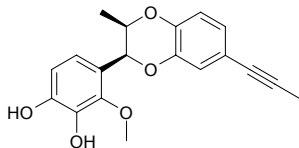
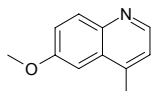
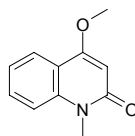
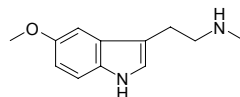
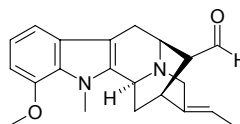
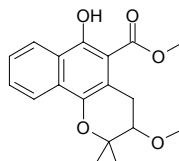
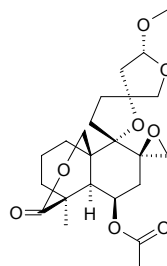
**14029 (+)-4-Methoxy-2-(3-methyloxiranyl)-phenyl-2-methylbutanoate**

Epoxy-pseudoisoeugenyl 2-methylbutyrate $C_{15}H_{20}O_4$ (264.32). Colorless oil, $[\alpha]_D^{25} = +26.0^\circ$ ($c = 1.0$, CHCl₃). Pharm: Antimycobacterial (*Mycobacterium intracellulare*, IC₅₀ = 1.5 μg/mL, control Ciprofloxacin, IC₅₀ = 0.25 μg/mL; *Mycobacterium fortuitum*, IC₅₀ = 3.0 μg/mL, Ciprofloxacin, IC₅₀ = 0.04 μg/mL; *Mycobacterium aurum*, IC₅₀ = 1.5 μg/mL, Ciprofloxacin, IC₅₀ = 0.03 μg/mL; *Mycobacterium phlei*, IC₅₀ = 0.85 μg/mL, Ciprofloxacin, IC₅₀ = 0.25 μg/mL); antifungal (*Aspergillus fumigatus*, active concentration = 50.0 μg/mL, control Amphotericin B, active concentration = 0.6 μg/mL); antimalarial (*Plasmodium falciparum* D6, IC₅₀ = 3.0 μg/mL, SI > 3.3, control Artemisinin, IC₅₀ = 0.006 μg/mL; *Plasmodium falciparum* W2, IC₅₀ = 1.3 μg/mL, SI > 7.6, control Artemisinin, IC₅₀ = 0.007 μg/mL). Source: *Pimpinella corymbosa*. Ref: 5465.

**14030 (+)-4-Methoxy-2-(3-methyloxiranyl)-phenyl tiglate**

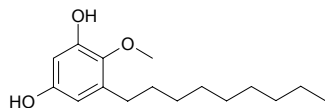
trans-Epoxy-pseudoisoeugenyl tiglate $C_{15}H_{18}O_4$ (262.31). Colorless oil $[\alpha]_D^{25} = +29.4^\circ$ ($c = 0.2$, CHCl₃). Source: *Pimpinella isaurica*. Ref: 5465.



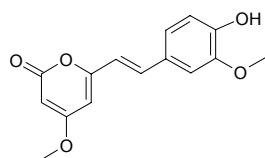
14031 2-Methoxy-1-O-methyl-6-prenylhydroquinoneC₁₃H₁₈O₃ (222.29). Source: *Plagiochila rutilans*. Ref: 5144.**14032 2-Methoxy-4-O-methyl-6-prenylhydroquinone**C₁₃H₁₈O₃ (222.29). Source: *Plagiochila rutilans*. Ref: 5144.**14033 1-Methoxy-4-(2-methylpropenyl)benzene**C₁₁H₁₄O (162.23). Colorless oil. Source: NING BIAN E TAI *Radula perrottetii* (essential oil). Ref: 5272.**14034 3-Methoxy-4-[(2S,3R)-3-methyl-7-(E)-1-propenyl]-2,3-dihydro-1,4-benzodioxin-2-yl]-1,2-benzenediol**C₁₉H₂₀O₅ (328.37). [α]_D²⁰ = +24.23° (c = 0.06, MeOH). Source: RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts). Ref: 2534.**14035 3-Methoxy-4-[(2S,3R)-3-methyl-7-(1-propynyl)-2,3-dihydro-1,4-benzodioxin-2-yl]-1,2-benzenediol**C₁₉H₁₈O₅ (326.35). [α]_D²⁰ = +48.3° (c = 0.08, MeOH). Source: RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts). Ref: 2534.**14036 6-Methoxy-4-methylquinoline**C₁₁H₁₁NO (173.22). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0001%). Ref: 3020.**14037 4-Methoxy-1-methyl-2-quinolone**C₁₁H₁₁NO₂ (189.22). Pharm: Platelet aggregation inhibitor (selectively inhibits platelet aggregation induced by AA). Source: YE HUA JIAO YE *Zanthoxylum simulans*. Ref: 2176.**14038 5-Methoxy-N-methyltryptamine**C₁₂H₁₆N₂O (204.27). bp 150°C/0.05mmHg. Source: LU ZHU GEN *Arundo donax*, PAI QIAN CAO *Desmodium pulchellum* [Syn. *Phyllodium pulchellum*]. Ref: 6.**14039 12-Methoxy-N_α-methyl-vellosimine**C₂₁H₂₄N₂O₂ (336.44). Yellow amorphous solid. Source: BA XI LUO FU MU *Rauvolfia bahiensis*. Ref: 1952.**14040 2'-Methoxymollugin**C₁₈H₂₀O₅ (316.36). Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 1361.**14041 Methoxynepetaefolin**C₂₃H₃₂O₈ (436.51). Source: CU SHENG SHAN XIANG *Hyptis fasciculata* (aerial parts). Ref: 4539.

14042 2-Methoxy-3-nonylresorcinol

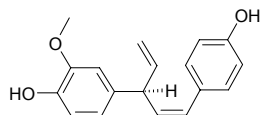
$C_{16}H_{26}O_3$ (266.38). White powder, mp > 300°C. **Pharm:** Cytotoxic inactive (*in vitro*, HL-60, IC_{50} > 100 μ g/mL; Bel7402, IC_{50} > 100 μ g/mL; HeLa, IC_{50} > 100 μ g/mL; U937, IC_{50} > 100 μ g/mL; control Colchicine, HL-60, IC_{50} = 1.6 μ g/mL; Bel7402, IC_{50} = 0.4 μ g/mL; HeLa, IC_{50} = 0.1 μ g/mL; U937, IC_{50} = 0.1 μ g/mL). **Source:** LA ZHU GUO *Aegiceras corniculatum* (stem and twig; yield = 0.000067%). **Ref:** 4746.

**14043 11-Methoxynoryangonin**

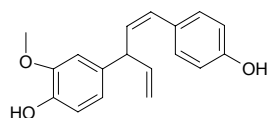
$C_{15}H_{14}O_5$ (274.28). **Source:** SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*]. **Ref:** 2, 660.

**14044 3'-Methoxynyasin**

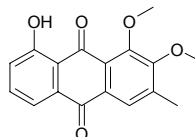
$C_{18}H_{18}O_3$ (282.34). Colorless gum, $[\alpha]_D^{21} = +55.8^\circ$ ($c = 4.80$, Me_2CO). **Pharm:** Cytotoxic (*in vitro*, HO-8910, $IC_{50} = (84.0 \pm 7.0)\mu$ mol/L, Vincristine, $IC_{50} = (25.1 \pm 1.9)\mu$ mol/L; Bel7405, $IC_{50} = (26.2 \pm 2.9)\mu$ mol/L, Vincristine, $IC_{50} = (31.4 \pm 3.4)\mu$ mol/L). **Source:** GE BI TIAN MEN *Asparagus gobicus* (root). **Ref:** 4975.

**14045 3''-Methoxynyasol**

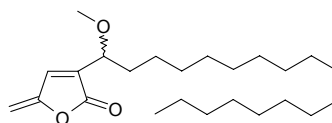
$C_{18}H_{18}O_3$ (282.34). **Pharm:** Cytotoxic (*in vitro*, Lu1, $IC_{50} = 4.5\mu$ g/mL (15.9 μ mol/L), LNCaP, $IC_{50} = 6.6\mu$ g/mL (23.4 μ mol/L), Col2, $IC_{50} = 6.3\mu$ g/mL (22.3 μ mol/L), HUVEC, $IC_{50} = 6.7\mu$ g/mL (23.7 μ mol/L), KB, $IC_{50} = 9\mu$ g/mL (31.9 μ mol/L), HOG.R5, $IC_{50} = 6.8\mu$ g/mL (24.1 μ mol/L), control Ellipticine: Lu1, $IC_{50} = 0.02\mu$ g/mL (0.08 μ mol/L), LNCaP, $IC_{50} = 0.8\mu$ g/mL (3.25 μ mol/L), Col2, $IC_{50} = 0.3\mu$ g/mL (1.22 μ mol/L), HUVEC, $IC_{50} = 0.09\mu$ g/mL (0.37 μ mol/L), KB, $IC_{50} = 0.04\mu$ g/mL (0.16 μ mol/L), HOG.R5, $IC_{50} = 0.02\mu$ g/mL (0.08 μ mol/L)). **Source:** TIAN MEN DONG *Asparagus cochinchinensis* [Syn. *Asparagus lucidus*] (dried root; yield = 0.00011%dw). **Ref:** 3009.

**14046 2-Methoxy-obtusifolin**

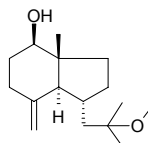
$C_{17}H_{14}O_5$ (298.30). **Source:** XUAN CAO GEN *Hemerocallis fulva*. **Ref:** 6.

**14047 3-(1-Methoxyoctadecyl)-5-methylene-5H-furan-2-one**

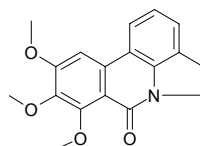
$C_{24}H_{42}O_3$ (378.60). Colorless oil, $[\alpha]_D^{25} = -13.7^\circ$ ($c = 0.0091$, $CHCl_3$). **Source:** TAI WAN RUI FANG RUN NAN *Machilus zuihoensis* (stem wood). **Ref:** 5287.

**14048 11-Methoxyopposit-4(15)-en-1β-ol**

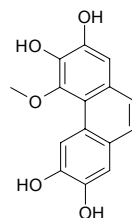
$C_{16}H_{28}O_2$ (252.40). Colorless amorphous solid, $[\alpha]_D^{26} = +48.8^\circ$ ($c = 0.04$, $CHCl_3$). **Source:** YI NIAN PENG *Erigeron annuus* (aerial parts). **Ref:** 4338.

**14049 7-Methoxyoxoasoinine**

$C_{18}H_{17}NO_4$ (311.34). White amorphous solid, mp 245~247°C. **Source:** YA MA XUN BAI HE *Eucharis amazonica* (dried bulb and leaf). **Ref:** 4325.

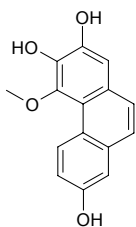
**14050 4-Methoxyphenanthrene-2,3,6,7-tetrol**

$C_{15}H_{12}O_5$ (272.26). Gum. **Source:** QIAO SHI DOU LAN *Bulbophyllum vaginatum*. **Ref:** 1870.

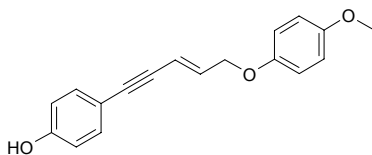


14051 4-Methoxyphenanthrene-2,3,7-triol

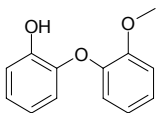
$C_{15}H_{12}O_4$ (256.26). mp 208~210°C (CHCl₃). Source: QIAO SHI DOU LAN *Bulbophyllum vaginatum*. Ref: 1870.

**14052 4-[5-(4-Methoxyphenoxy)-3-penten-1-ynyl]-phenol**

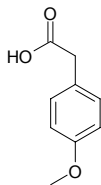
$C_{18}H_{16}O_3$ (280.33). $[\alpha]_D^{21} = -50.2^\circ$ ($c = 0.60$, CHCl₃). Source: GE BI TIAN MEN *Asparagus gobicus* (root). Ref: 4975.

**14053 *o*-(*o*-Methoxyphenoxy)phenol**

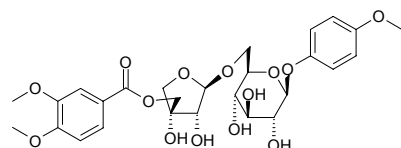
$C_{13}H_{12}O_3$ (216.24). Source: DANG SHEN *Codonopsis pilosula*. Ref: 1380.

**14054 4-Methoxyphenylacetic acid**

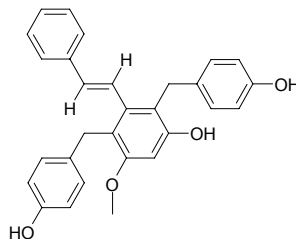
$C_9H_{10}O_3$ (166.18). Amorphous colorless solid, mp 80~83°C. Source: *Gloeophyllum odoratum*. Ref: 3972.

**14055 4-Methoxyphenyl 1-*O*- β -*D*-[5-*O*-(3,4-dimethoxybenzoyl)]-apio-furanosyl-(1 \rightarrow 6)- β -*D*-glucopyranoside**

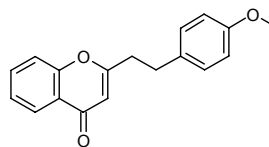
$C_{27}H_{34}O_{14}$ (582.56). Amorphous powder, $[\alpha]_D^{25} = -83^\circ$ ($c = 0.39$, MeOH). Source: BAN ZHEN ZHONG HUA SHU *Tabebuia impetiginosa* (bark). Ref: 3817.

**14056 5-Methoxy-3-(2-phenyl-*E*-ethenyl)-2,4-bis(4-hydroxybenzyl)phenol**

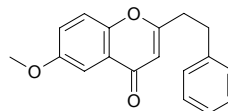
$C_{29}H_{26}O_4$ (438.53). White acicular crystals, mp 193~196°C. Source: SHAN HU LAN *Galeola faberi*. Ref: 280.

**14057 2-[2-(4'-Methoxyphenyl) ethyl] chromone**

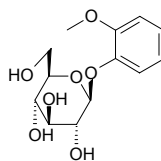
$C_{18}H_{16}O_3$ (280.33). Yellowish lamellar crystals, mp 60~61°C. Pharm: Aphrodisiac; diuretic; stimulant (the resin of the source plant CHEN XIANG is used). Source: CHEN XIANG *Aquilaria agallocha*, *Aquilaria* sp. Ref: 13, 658.

**14058 6-Methoxy-2-(2-phenylethyl) chromone**

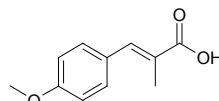
$C_{18}H_{16}O_3$ (280.33). Colorless acicular crystals, mp 68~70°C. Source: BAI MU XIANG *Aquilaria sinensis*, CHEN XIANG *Aquilaria agallocha*. Ref: 13.

**14059 2-Methoxyphenyl β -*D*-glucopyranoside**

$C_{13}H_{18}O_7$ (286.28). Colorless needles(MeOH), mp 65~68°C, $[\alpha]_D^{23} = -38^\circ$ ($c = 0.5$, MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 3402.

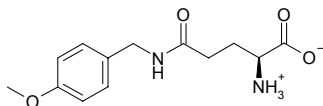
**14060 3-(4-Methoxyphenyl)-2-methyl-2-acrylic acid**

$C_{11}H_{12}O_3$ (192.22). Source: SHAN NAI *Kaempferia galanga*. Ref: 1344.

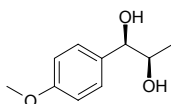


14061 *N*⁵-(4-Methoxyphenyl)methyl-*L*-glutamine

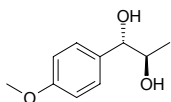
C₁₃H₁₈N₂O₄ (266.30). mp 214–215°C, [α]_D²² = +23° (c = 0.1, HCl). Source: NAN GUA *Cucurbita moschata* (root). Ref: 2293.

**14062** 1-(4'-Methoxyphenyl)-(1*R*,2*R*)-propanediol

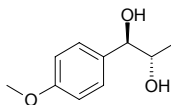
C₁₀H₁₄O₃ (182.22). Pharm: Anti-sepsis inactive (mouse, TNF-*α*/*D*-GalN-induced lethality, 50mg/kg, SuRt = 40%, control SuRt = 40%, Dexamethasone, 10mg/kg, SuRt = 100%). Source: BA JIAO HUI XIANG *Illicium verum*. Ref: 5446.

**14063** 1-(4'-Methoxyphenyl)-(1*R*,2*S*)-propanediol

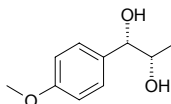
C₁₀H₁₄O₃ (182.22). Pharm: Anti-sepsis (with (1*S*,2*R*) isomer together, mouse, TNF-*α*/*D*-GalN-induced lethality, 50mg/kg, SuRt = 88.8%, control SuRt = 40%, Dexamethasone, 10mg/kg, SuRt = 100%). Source: BA JIAO HUI XIANG *Illicium verum*. Ref: 5446.

**14064** 1-(4'-Methoxyphenyl)-(1*S*,2*R*)-propanediol

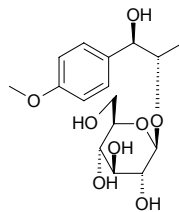
C₁₀H₁₄O₃ (182.22). Pharm: Anti-sepsis (with (1*R*,2*S*) isomer together, mouse, TNF-*α*/*D*-GalN-induced lethality, 50mg/kg, SuRt = 88.8%, control SuRt = 40%, Dexamethasone, 10mg/kg, SuRt = 100%). Source: BA JIAO HUI XIANG *Illicium verum*. Ref: 5446.

**14065** 1-(4'-Methoxyphenyl)-(1*S*,2*S*)-propanediol

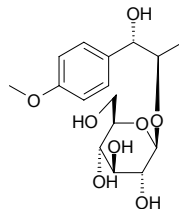
C₁₀H₁₄O₃ (182.22). Pharm: Anti-sepsis inactive (mouse, TNF-*α*/*D*-GalN-induced lethality, 50mg/kg, SuRt = 40%, control SuRt = 40%, Dexamethasone, 10mg/kg, SuRt = 100%). Source: BA JIAO HUI XIANG *Illicium verum*. Ref: 5446.

**14066** 1-(4'-Methoxyphenyl)-(1*R*,2*S*)-propan-1-ol 2-*O*-β-*D*-glucopyranoside

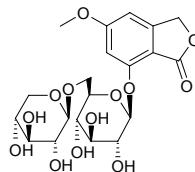
C₁₆H₂₄O₈ (344.36). Source: BA JIAO HUI XIANG *Illicium verum*. Ref: 5446.

**14067** 1-(4'-Methoxyphenyl)-(1*S*,2*R*)-propan-1-ol 2-*O*-β-*D*-glucopyranoside

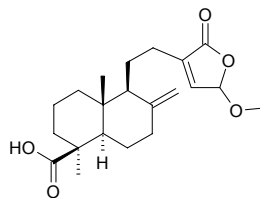
C₁₆H₂₄O₈ (344.36). Source: BA JIAO HUI XIANG *Illicium verum*. Ref: 5446.

**14068** 5-Methoxyphthalide 7-*O*-β-xylopyranosyl-(1→6)-β-glucopyranoside

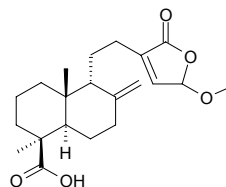
C₂₀H₂₆O₁₃ (474.42). Amorphous powder, [α]_D²⁰ = -51.5° (c = 0.51, MeOH). Source: NAO YANG HUA *Rhododendron molle*. Ref: 5396.

**14069** (10*R*)-15-Methoxypinusolidic acid

(10*R*)-15-Methoxy-8(17),13-labdadien-16,15-olide-19-oic acid C₂₁H₃₀O₅ (362.47). Yellow oil, [α]_D²⁴ = +39.0° (c = 0.4, CHCl₃). Source: TAI WAN CUI BAI *Calocedrus macrolepis* var. *formosana* (leaf). Ref: 4297.

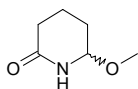
**14070** (10*S*)-15-Methoxypinusolidic acid

(10*S*)-15-Methoxy-8(17),13-labdadien-16,15-olide-19-oic acid C₂₁H₃₀O₅ (362.47). Yellowish oil, [α]_D²⁵ = +43° (c = 0.83, CHCl₃). Pharm: Neuroprotective (primary cultures of rat cortical cells, induced by glutamate, 0.1 μmol/L, cell viability = (35.3±3.5)%, *p*<0.05, 1.0 μmol/L, cell viability = (48.3±3.9)%, *p*<0.01, 10 μmol/L, cell viability = (72.7±4.7)%, *p*<0.001). Source: BAI ZI REN *Biota orientalis* [Syn. *Thuja orientalis*; *Platyclusus orientalis*] (leaf). Ref: 4203.

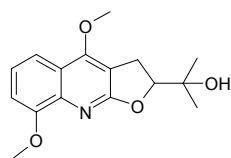


14071 6 ξ -Methoxypiperidin-2-one

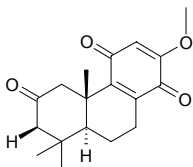
C₆H₁₁NO₂ (129.16). Colorless oil, [α]_D²⁵ = +0° (*c* = 0.5, CHCl₃). Source: BAI NIU XI *Cucubalus baccifer*. Ref: 2168.

**14072 (±)-8-Methoxyplatydesmine**

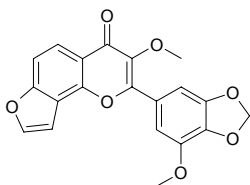
C₁₆H₁₉NO₄ (289.33). Colorless prisms (CHCl₃-Me₂CO), mp 166–168°C, [α]_D²⁴ = ±0 (*c* = 0.12, CHCl₃). Pharm: Cytotoxic (P₃₈₈ cell line, ED₅₀ = 27.5 μg/mL, control Mithramycin, ED₅₀ = 0.06 μg/mL; HT29, ED₅₀ > 50 μg/mL, Mithramycin, ED₅₀ = 0.07 μg/mL; A549, ED₅₀ > 50 μg/mL, Mithramycin, ED₅₀ = 0.08 μg/mL). Source: SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*. Ref: 5405.

**14073 13-Methoxy-8,12-podocarpadiene-2,11,14-trione**

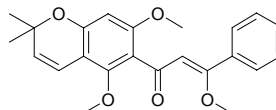
C₁₈H₂₂O₄ (302.37). Yellow powder, [α]_D²⁴ = +104.0° (*c* = 0.37, CHCl₃). Source: TAI WAN SHAN *Taiwania cryptomerioides* (bark). Ref: 4113.

**14074 3'-Methoxypongapin**

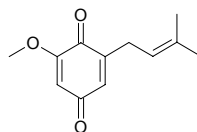
5'-Methoxypongapin; Anticancer Flavonoid PMV70P691-102 C₂₀H₁₄O₇ (366.33). Pharm: Cytotoxic (*in vitro*, Hepa1c1c7 mouse hepatoma cells, IC₅₀ = 18.9 μg/mL, CD = 1.1 μg/mL, CI = 17.2; control Sulforaphane, IC₅₀ = 2.1 μg/mL, CD = 0.087 μg/mL, CI = 24.1)^[4721]; cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells)^[5038]. Source: SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.00019%). Ref: 1521, 4721, 5038.

**14075 7-O-Methoxypraecansone B**

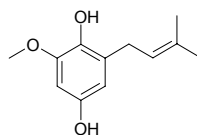
7,2',6'-Trimethoxy-6'',6''-dimethylpyrano-(3',4':2'',3'')-chalcone; Anticancer Flavonoid PMV70P691-023 C₂₃H₂₄O₅ (380.44). Yellow oil. Pharm: Cytotoxic (*in vitro*, Hepa1c1c7 mouse hepatoma cells, IC₅₀ = 9.6 μg/mL, CD = 1.2 μg/mL, CI = 8; control Sulforaphane, IC₅₀ = 2.1 μg/mL, CD = 0.087 μg/mL, CI = 24.1)^[4721]; cytotoxic (quinone reductase induction assay in cultured Hepa1c1c7 mouse hepatoma cells)^[5038]. Source: SHUI LIU DOU *Pongamia pinnata* (stem cortex: yield = 0.0012%). Ref: 4721, 5038.

**14076 2-Methoxy-6-prenyl-1,4-benzoquinone**

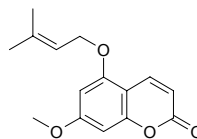
C₁₂H₁₄O₃ (206.24). Source: *Plagiochila rutilans*. Ref: 5144.

**14077 2-Methoxy-6-prenylhydroquinone**

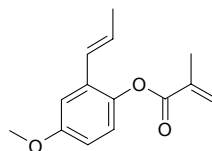
C₁₂H₁₆O₃ (208.26). Source: *Plagiochila rutilans*. Ref: 5144.

**14078 7-Methoxy-5-prenyloxycoumarin**

C₁₅H₁₆O₄ (260.29). Pharm: AChE inhibitor (*in vitro*, IC₅₀ = 240 μmol/L). Source: CHAO XIAN DANG GUI *Angelica gigas* (underground part). Ref: 3058.

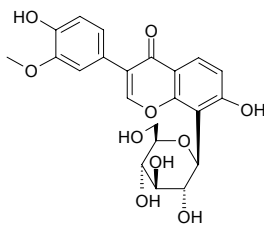
**14079 4-Methoxy-2-(1-propenyl)-phenyl angelate**

cis-Pseudoisoeugenyl angelate C₁₅H₁₈O₃ (246.31). Colorless oil. Source: *Pimpinella isaurica*. Ref: 5465.

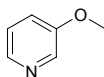


14080 3'-Methoxypuerarin

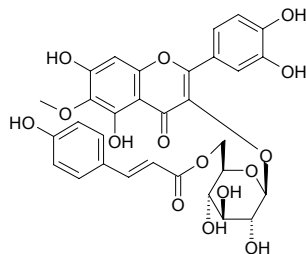
PG-3 C₂₂H₂₂O₁₀ (446.41). Source: GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*]. Ref: 1298.

**14081 3-Methoxypyridine**

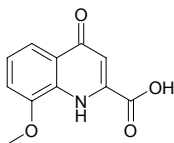
[7295-76-3] C₆H₇NO (109.13). Source: WEN JING *Equisetum arvense*. Ref: 6.

**14082 6-Methoxyquercetin-3-O-β-D-6''(p-coumaroyl)glucopyranoside**

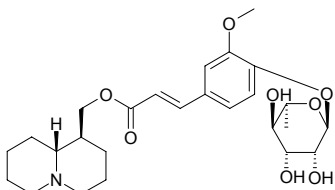
C₃₁H₂₈O₁₅ (640.56). Source: *Paepalanthus polyanthus*, *Paepalanthus hilairei*, *Paepalanthus robustus*, *Paepalanthus ramosus*, *Paepalanthus denudatus*. Ref: 2291.

**14083 8-Methoxy-4-quinolone-2-carboxylic acid**

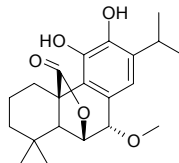
C₁₁H₉NO₄ (219.20). Yellowish powder. Pharm: Antibacterial (gram-positive bacteria, gram-negative bacteria). Source: DONG BEI HE SHI *Lappula echinata* (fruit). Ref: 4802.

**14084 (-)-(trans-3'-Methoxy-4'-α-L-rhamnosyloxy cinnamoyl)epilupinine**

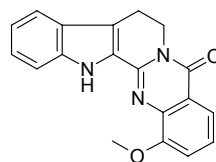
Epilupinyl rhamnosylferulate C₂₆H₃₇NO₈ (491.59). Amorphous solid, [α]_D²⁴ = -80° (c = 0.28, EtOH). Source: *Lupinus varius*. Ref: 2275.

**14085 7-Methoxyrosmanol**

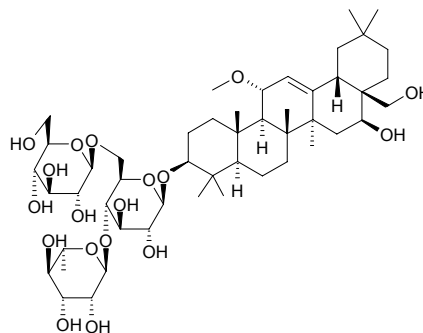
C₂₁H₂₈O₅ (360.45). Pharm: Binding activity to benzodiazepine receptor (IC₅₀ = (7.2±0.7) μmol/L, control Diazepam, IC₅₀ = (0.05±0.01) μmol/L). Source: YAO YONG DAN SHEN YE *Salvia officinalis*. Ref: 5366.

**14086 1-Methoxyrutaecarpine**

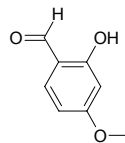
C₁₉H₁₅N₃O₂ (317.35). Pharm: Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. Source: *Zanthoxylum* sp. Ref: 2176.

**14087 11α-Methoxysaikosaponin f**

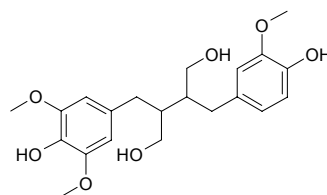
C₄₉H₈₂O₁₈ (959.19). Source: ZHU YE CHAI HU *Bupleurum marginatum*, ZHAI ZHU YE CHAI HU *Bupleurum marginatum* var. *stenophyllum*. Ref: 1348, 1349.

**14088 4-Methoxysalicylaldehyde**

[673-22-3] C₈H₈O₃ (152.15). mp 40–42°C. Source: SHENG TENG *Stelmatocrypton khasianum*, XIANG JIA PI *Periploca sepium* (dried root cortex: mean content of 4 origins = 0.637%^[5508]). Ref: 6, 5508.

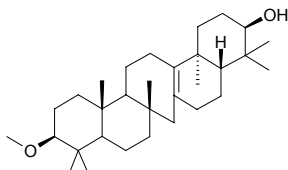
**14089 3'-Methoxysecoisolaricresinol**

C₂₁H₂₈O₇ (392.45). Source: YI ZHU QIAN MA *Urtica dioica*. Ref: 1432.

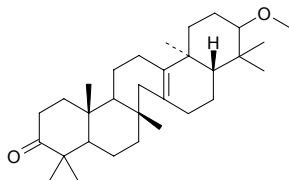


14090 3 β -Methoxyserrat-13-en-21 β -ol

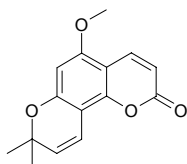
C₃₁H₅₂O₂ (456.76). Colorless prisms, mp 257~259°C, [α]_D^{23.5} = +59.1° (*c* = 0.28, CHCl₃). **Pharm:** Antineoplastic promoter (mouse skin carcinogenesis, TPA-induced EBV-EA activation assay, compound concentration (mol ratio/32 pmol TPA) = 500, EBV-EA viability = 20.3%, IC₅₀(mol ratio/32 pmol TPA) = 271; control Oleanolic acid, compound concentration (mol ratio/32 pmol TPA) = 500, EBV-EA viability = 30.0%, IC₅₀(mol ratio/32 pmol TPA) = 360). **Source:** YU LIN YUN SHAN *Picea jezoensis* var. *jezoensis* (stem cortex). **Ref:** 5477.

**14091 21 α -Methoxyserrat-13-en-3-one**

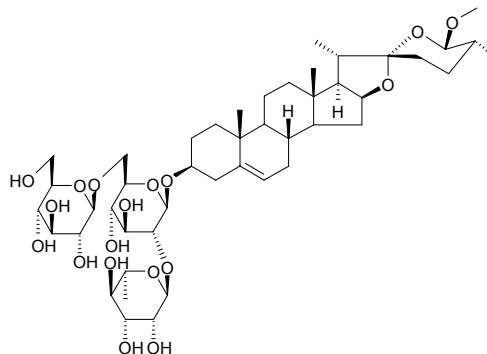
C₃₁H₅₀O₂ (454.74). **Source:** RI BEN YU LIN SONG *Picea jezoensis* (cuticle). **Ref:** 3076.

**14092 5-Methoxyseselin**

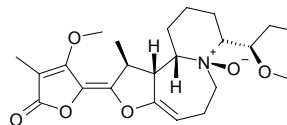
C₁₅H₁₄O₄ (258.28). **Pharm:** Antineoplastic (Raji cells, antitumor promoter, *in vivo*, inhibits TPA-induced EBV-EA activation, compound concentration = 500mol ratio/32 pmol TPA: EBV-EA-positive cells = (44.3±1.3)% (viability > 80%), β -Carotene, EBV-EA-positive cells = (34.3±1.1)% (viability >80%), Curcumin, EBV-EA-positive cells = (22.8±1.8)% (viability > 80%), compound IC₅₀ = 453mol ratio/32 pmol TPA, β -Carotene, IC₅₀ = 400mol ratio/32 pmol TPA, Curcumin, IC₅₀ = 341mol ratio/32 pmol TPA). **Source:** *Citrus tamurana*, *Citrus hassaku*. **Ref:** 5048.

**14093 (25R,26R)-26-Methoxyspirost-5-en-3 β -yl-O- α -L-rhamnopyranosyl-(1 \rightarrow 2)-O- β -D-glucopyranosyl-(1 \rightarrow 6)]-D-glucopyranoside**

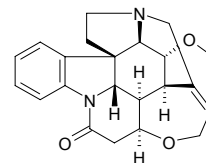
[244160-62-1] C₄₆H₇₄O₁₈ (915.09). Amorphous solid, [α]_D²⁷ = -47.1° (*c* = 0.14, MeOH:H₂O = 1:1). **Pharm:** Na⁺, K⁺-ATPase inhibitor (IC₅₀ = 47 μ mol/L, control Ouabain, IC₅₀ = 1.0 μ mol/L). **Source:** QING LIANG BAI HE *Lilium candidum*. **Ref:** 2303.

**14094 Methoxystemokerrin-N-oxide**

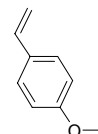
4-Methoxy-3-methyl-5-[(2Z,11aS)-8*t*-(1*R*)-1-methoxypropyl]-1*c*-methyl-(11*ar*,11*bc*)-1,2,5,6,8,9,10,11,11*a*,11*b*-decahydrofuro[3,2-*c*]pyrido[1,2-*a*]azepin-2-ylidene]-5*H*-furan-2-one-*N*-oxide C₂₃H₃₃NO₆ (419.52). Amorphous, [α]_D²⁰ = +255° (*c* = 0.2, MeOH). **Pharm:** Insecticidal (neonate larvae of *Spodoptera littoralis*, LC₅₀ > 100mg/L, EC₅₀ = 16.3mg/L). **Source:** DI TANG BAI BU *Stemona kerrii*. **Ref:** 3409.

**14095 16-Methoxystrychnine**

C₂₂H₂₄N₂O₃ (364.45). mp 214~218°C. **Source:** LV SONG GUO *Strychnos ignatii*. **Ref:** 6.

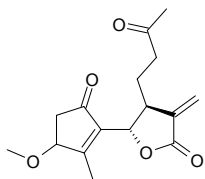
**14096 *p*-Methoxystyrene**

[637-69-4] C₉H₁₀O (134.18). bp 204~205°C/756mmHg. **Source:** SHAN NAI *Kaempferia galanga*. **Ref:** 6.

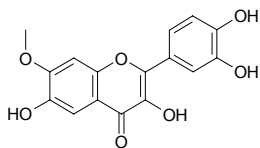


14097 3-Methoxytanapartholide

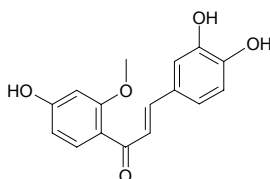
$C_{16}H_{20}O_5$ (292.33). Pharm: Anti-inflammatory (RAW264.7 cells, LPS-induced: NF- κ B inhibitor, IC_{50} = (5.89 \pm 0.14) μ mol/L, control PTN, IC_{50} = (3.42 \pm 0.08) μ mol/L; NO production inhibitor, IC_{50} = (5.68 \pm 0.16) μ mol/L, PTN, IC_{50} = (2.41 \pm 0.06) μ mol/L, AG, IC_{50} = (34.18 \pm 0.98) μ mol/L; TNF- α production inhibitor, IC_{50} = (15.78 \pm 0.56) μ mol/L, PTN, IC_{50} = (2.68 \pm 0.11) μ mol/L). Source: LIN DI HAO *Artemisia sylvatica* (aerial parts). Ref: 3837.

**14098 7-Methoxy-3,3',4',6-tetrahydroxyflavone**

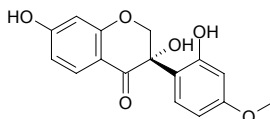
$C_{16}H_{12}O_7$ (316.27). Yellow crystals (water-methanol), mp 315~318°C. Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 716.

**14099 2'-Methoxy-3,4,4'-trihydroxychalcone**

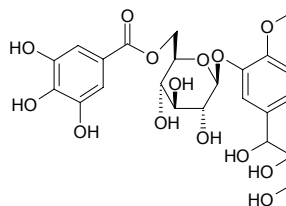
Sappanchalcone $C_{16}H_{14}O_5$ (286.29). Pharm: Xanthine oxidase inhibitor (competitive inhibitory activity in concentration-dependent manner, IC_{50} = 3.9 μ mol/L, K_i = 2.60 μ mol/L, control Allopurinol, IC_{50} = 2.5 μ mol/L, K_i = 1.80 μ mol/L)^[4494]. Source: SU MU *Caesalpinia sappan* (heartwood). Ref: 1299, 4494.

**14100 (3R)-4'-Methoxy-2',3,7-trihydroxyisoflavanone**

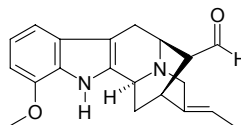
$C_{16}H_{14}O_6$ (302.29). White crystals (methanol), mp 145~147°C. Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 716.

**14101 2-Methoxy-5-(1',2',3'-trihydroxypropyl)-phenyl-1-O-(6''-galloyl)- β -D-glucopyranoside**

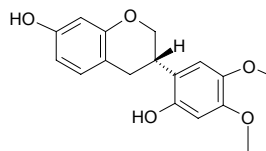
$C_{23}H_{28}O_{14}$ (528.47). Yellow powder, mp 174°C (dec), $[\alpha]_D^{25}$ = +22° (c = 0.10, MeOH). Pharm: Antifungal (*Candida albicans* ATCC2091, MIC = 50 μ g/mL, control Amphotericin B, MIC = 1 μ g/mL; *Candida albicans* 32, MIC = 100 μ g/mL, Amphotericin B, MIC = 4 μ g/mL; *Candida albicans* 19, MIC = 50 μ g/mL, Amphotericin B, MIC = 2 μ g/mL); cytotoxic inactive (MIC > 200 μ g/mL); antibacterial inactive. Source: *Baseonema acuminatum* (leaf). Ref: 5021.

**14102 12-Methoxyvellosimine**

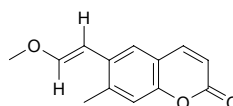
$C_{20}H_{22}N_2O_2$ (322.41). Yellow amorphous solid. Source: BA XI LUO FU MU *Rauvolfia bahiensis*. Ref: 1952.

**14103 (3R)-5'-Methoxyvestitol**

$C_{17}H_{18}O_5$ (302.33). Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 1289.

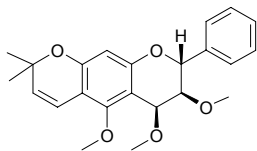
**14104 6-(2-methoxy-Z-vinyl)-7-methyl-pyranocoumarin**

$C_{13}H_{12}O_3$ (216.24). Yellow powder. Source: WU HUA GUO *Ficus carica*. Ref: 794.

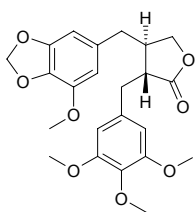


14105 3 β -Methoxyxuanlinin

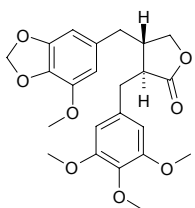
3 β ,4 β ,5-Trimethoxy-6",6"-dimethyl-2*H*-pyrano-(2",3":7,6)-flavan C₂₃H₂₆O₅ (382.46). Oil. Source: *Lonchocarpus xul* (stem cortex). Ref: 3973.

**14106 5'-Methoxyyatein**

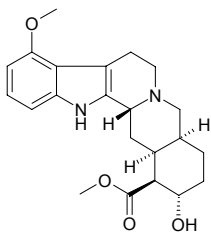
Anticancer Lignan PMV70P691-125 C₂₃H₂₆O₈ (430.46). Pharm: COX-2 inhibitor (weak but selective, IC₅₀ = 247 μmol/L, 100 μg/mL, InRt = 57%; control Resveratrol, IC₅₀ = 1.3 μmol/L)^[3869]; COX-1 inhibitor (100 μg/mL, InRt = 17%, control Resveratrol, IC₅₀ = 1.1 μmol/L)^[3869, 5038]. Source: *Macrocculus pomiferus* (stem). Ref: 3869, 5038.

**14107 (2*S*,3*S*)-(+)-5'-Methoxyyatein**

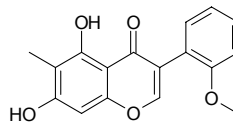
C₂₃H₂₆O₈ (430.46). Pale yellow gum, [α]_D²⁵ = +24.8° (*c* = 0.393, CHCl₃). Source: MENG ZI CAO HU JIAO *Peperomia duclouxii* (whole herb: yield = 0.0081%). Ref: 4733.

**14108 9-Methoxy-3-*epi*- α -yohimbine**

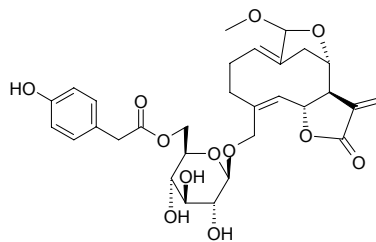
C₂₂H₂₈N₂O₄ (384.48). Colorless amorphous powder. Source: FEI ZHOU MAO ZHU MU *Mitragyna africana* (stem cortex). Ref: 4269.

**14109 2'-*O*-Methylabronisoflavone**

C₁₇H₁₄O₅ (298.3). Amorphous solid. Pharm: Antifungal (*Candida albicans* DSY1024, IC₅₀ = 25 μg/mL). Source: ZI MO LI GEN *Mirabilis jalapa* (Plant cell culture). Ref: 3043.

**14110 14-*O*-Methylacetal-15-*O*-[6'-(*p*-hydroxyphenylacetyl)]- β -*D*-glucopyranosylurospermal A**

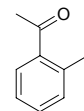
C₃₀H₃₆O₁₂ (588.61). Oil. Source: XU DUAN JU *Sonchus asper* [Syn. *Sonchus oleraceus* var. *asper*] (root). Ref: 3923.

**14111 Methylacetate**

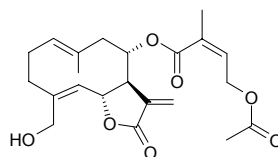
Acetic acid methyl ester [79-20-9] C₃H₆O₂ (74.08). Source: SHENG JIANG *Zingiber officinale*, GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*]. Ref: 2, 660.

**14112 *o*-Methylacetophenone**

C₉H₁₀O (134.18). Source: QING JIAO *Zanthoxylum schinifolium*, RU XIANG *Boswellia carterii*. Ref: 1271, 1297.

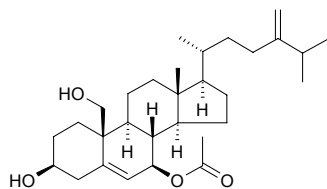
**14113 8 α -(*Z*-2-Methyl-4-acetoxybut-2-enoyloxy)-15-hydroxygermacra-1(10),*E*,4*Z*,11(13)-trien-12,6 α -olide**

C₂₂H₂₈O₇ (404.46). Colorless oil, [α]_D = +54° (*c* = 3.26, CHCl₃). Source: CU CAO SHI CHE JU *Centaurea aspera* ssp. *aspera* (aerial parts), XIA YE CU CAO SHI CHE JU *Centaurea aspera* subsp. *stenophylla* (aerial parts). Ref: 5300.

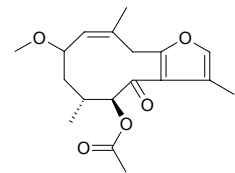


14114 24-Methyl-7 β -acetoxycholesta-5,24(28)-diene-3 β ,19-diol

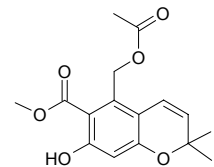
$C_{30}H_{48}O_4$ (472.71). **Pharm:** Cytotoxic inactive (hmn prostate cancer LNCaP cell line, $EC_{50} = 15.5\mu\text{g/mL}$). **Source:** *Nephthea chabroli*. **Ref:** 4375.

**14115 rel-2R-Methyl-5S-acetoxy-4R-furanogermacr-1(10)Z-en-6-one**

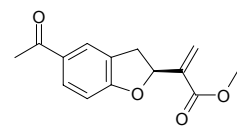
$C_{18}H_{24}O_5$ (320.39). Colorless oil, $[\alpha]_D^{20} = +113.6^\circ$ ($c = 2.3$, CHCl_3). **Pharm:** Cytotoxic inactive (*in vitro*, MCF7). **Source:** MO YAO *Commiphora myrrha* [Syn. *Commiphora molmol*]. **Ref:** 3093.

**14116 Methyl 5-acetoxymethanol-7-hydroxy-2,2-dimethyl-2H-1-chromene-6-carboxylate**

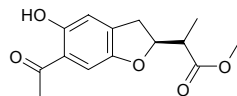
$C_{16}H_{18}O_6$ (306.32). Amorphous solid. **Pharm:** Antifungal (*Cladosporium sphaerospermum*, 100 μg , strong activity; *Cladosporium cladosporioides*, 100 μg , strong activity). **Source:** *Peperomia villipetiola* (stem). **Ref:** 5256.

**14117 Methyl-2-(5-acetyl-2,3-dihydrobenzofuran-2-yl)propenoate**

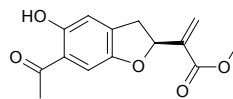
$C_{14}H_{14}O_4$ (246.27). Glassy amorphous solid, $[\alpha]_D^{20} = +8^\circ$ ($c = 0.36$, MeOH). **Source:** XIAO SHE JU GEN *Microglossa pyrifolia*. **Ref:** 5374.

**14118 Methyl-2-(6-acetyl-5-hydroxy-2,3-dihydrobenzofuran-2-yl)propanoate**

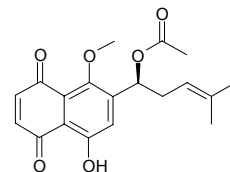
$C_{14}H_{16}O_5$ (264.28). Glassy amorphous solid. **Source:** XIAO SHE JU GEN *Microglossa pyrifolia*. **Ref:** 5374.

**14119 Methyl-2-(6-acetyl-5-hydroxy-2,3-dihydrobenzofuran-2-yl)propenoate**

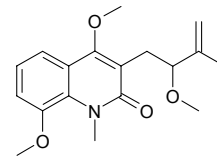
$C_{14}H_{14}O_5$ (262.26). Glassy amorphous solid, $[\alpha]_D^{20} = +15^\circ$ ($c = 0.98$, MeOH). **Source:** XIAO SHE JU GEN *Microglossa pyrifolia*, DUO ZHI KUO BAO JU *Baccharis ramosissima*. **Ref:** 5374.

**14120 1-Methyl-acetylshikonin**

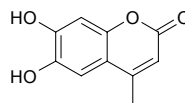
$C_{19}H_{20}O_6$ (344.37). **Source:** ZI CAO *Lithospermum erythrorhizon*, XIN ZANG JIA ZI CAO *Arnebia euchroma*. **Ref:** 2193.

**14121 O-Methylacutifolin**

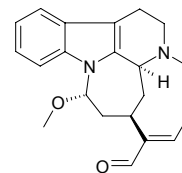
$C_{18}H_{23}NO_4$ (317.39). **Pharm:** Platelet aggregation inhibitor; DNA isomerase inhibitor; antibacterial; cytotoxic. **Source:** *Zanthoxylum* sp. **Ref:** 2176.

**14122 β -Methyalaesculetin**

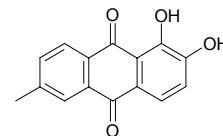
[529-84-0] $C_{10}H_8O_4$ (192.17). mp 272~274°C. **Source:** TIAN XUAN HUA *Convolvulus arvensis*. **Ref:** 6.

**14123 17-O-Methylakagerine**

[69241-17-4] $C_{21}H_{26}N_2O_2$ (338.45). **Source:** *Strychnos dale*, *Strychnos elaeocarpa*, *Strychnos vanprukii* (stem). **Ref:** 1521, 3471.

**14124 6-Methylalizarin**

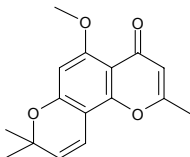
$C_{15}H_{10}O_4$ (254.24). mp 220°C. **Source:** TU LIAN QIAO *Hymenodictyon excelsum*. **Ref:** 6.



14125 5-O-Methylalloptaeroxylin

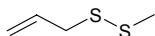
Perforatin A [35930-31-5] C₁₆H₁₆O₄ (272.30). Crystals (EtOAc–petroleum ether), mp 152.5–154°C; colorless prisms, mp 153–155°C. **Pharm:**

Antihypertensive (rat, 150mg/kg, lowers systolic pressure by 16.6% in average); Irritant (causes sneezing); stimulant. **Source:** A BI XI NI YA NIU JIN GUO *Harrisonia abyssinica*, NIU JIN GUO *Harrisonia perforata*, *Ptaeroxylon obliquum*. **Ref:** 658, 1521, 3604, 3605, 3606, 3607.

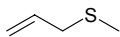
**14126 Methyl allyl disulfide**

[2179-58-0] C₄H₈S₂ (120.24). **Pharm:** Antineoplastic (mus, inhibits cardiac sinus cancer and pulmonary adenoma induced by carcinogens

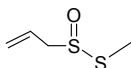
N-nitrosodiethylamine, NDEA or benzopyrene. **Source:** GE CONG *Allium victorialis*, JIU CAI *Allium tuberosum*, DA SUAN *Allium sativum*. **Ref:** 2, 6, 1684, 1844.

**14127 Methyl allyl sulfide**

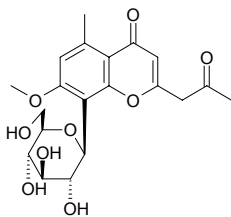
[10152-76-8] C₄H₈S (88.17). **Source:** DA SUAN *Allium sativum*, SHENG JIANG *Zingiber officinale*. **Ref:** 2, 6.

**14128 Methyl allyl thiosulfinate**

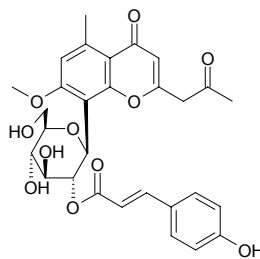
C₄H₈OS₂ (136.24). **Source:** DA SUAN *Allium sativum*. **Ref:** 1392.

**14129 7-O-Methylaloesin**

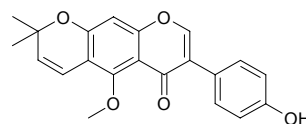
C₂₀H₂₄O₉ (408.41). **Source:** MA SHI LU HUI *Aloe marlothii*. **Ref:** 726.

**14130 7-O-Methylaloesin A**

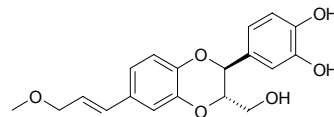
C₂₉H₃₀O₁₁ (554.56). **Source:** MA SHI LU HUI *Aloe marlothii*. **Ref:** 726.

**14131 5-O-Methylalpinumisoflavone**

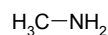
C₂₁H₁₈O₅ (350.37). White granules (petrol), mp 199–200°C. **Source:** *Millettia thonningii*. **Ref:** 2326.

**14132 9'-O-Methylamericanol A**

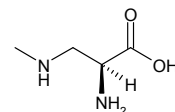
C₁₉H₂₀O₆ (344.37). [α]_D²⁰ = 0° (c = 0.12, MeOH). **Source:** MEI SHANG LU *Phytolacca americana* [Syn. *Phytolacca decandra*] (seed). **Ref:** 4407.

**14133 Methylamine**

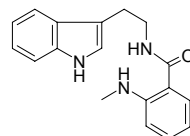
[74-89-5] CH₃N (31.06). mp –92.5°C, bp –6.5°C. **Source:** BAI QU CAI *Chelidonium majus*, HAI XIA *Penaeus orientalis*, MAI JIAO *Claviceps purpurea*. **Ref:** 6.

**14134 3-Methylamino-L-alanine**

C₄H₁₀N₂O₂ (118.14). **Pharm:** Growth retardant (rat, orl); toxin. **Source:** QUAN YE SU TIE *Cycas circinalis*. **Ref:** 658.

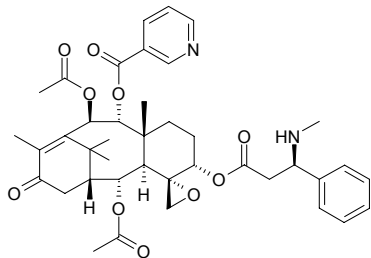
**14135 N-(2-Methylaminobenzoyl)tryptamine**

C₁₈H₁₉N₃O (293.37). **Source:** WU ZHU YU *Evodia rutaecarpa*. **Ref:** 1301.

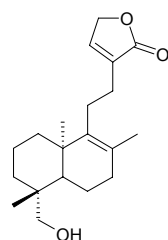


14136 5 α -O-(3'-Methylamino-3'-phenylpropionyl)nicotaxine

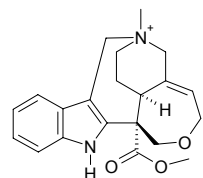
C₄₀H₄₈N₂O₁₀ (716.84). Source: AO DA LI YA HONG DOU SHAN *Austrotaxus spicata*. Ref: 662.

**14137 8-Methylandrograpanin**

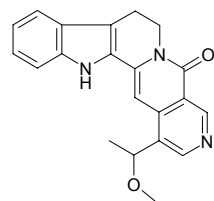
C₂₀H₃₀O₃ (318.46). Colorless crystals, mp 127~129°C. Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*] (leaf). Ref: 4913.

**14138 N4-Methyl angustilobine B**

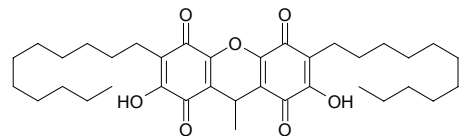
C₂₁H₂₅N₃O₃ (353.44). Source: XIANG PI MU *Alstonia scholaris* (leaf). Ref: 5283.

**14139 19-O-Methylangustoline**

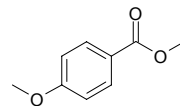
[132074-99-8] C₂₁H₁₉N₃O₂ (345.40). Yellowish crystals (acetone), mp 222~225°C, [α]_D²⁵ = -6.3° (*c* = 0.008, methanol). Pharm: Cytotoxic (P₃₈₈ *in vitro*, ED₅₀ = 2.32 μg/mL). Source: XI SHU *Camptotheca acuminata*. Ref: 1110, 1521.

**14140 Methylanhydrovilangin**

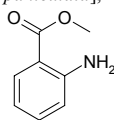
C₃₆H₅₂O₇ (596.81). Orange crystals (petroleum ether:dichloromethane = 9:1), mp 157~158°C, [α]_D²⁵ = +47° (*c* = 1.0, CH₂Cl₂). Source: TIE ZI *Myrsine africana* (fruit). Ref: 3464.

**14141 Methyl *p*-anisate**

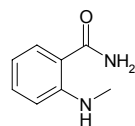
C₉H₁₀O₃ (166.18). Source: RI BEN HUANG BAI *Phellodendron japonicum* (leaf). Ref: 4502.

**14142 Methylanthranilate**

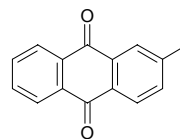
[134-20-3] C₈H₉NO₂ (151.17). mp 24~25°C. Source: DAI DAI HUA *Citrus aurantium* var. *amara*, JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], YOU⁽⁴⁾ *Citrus grandis*. Ref: 6, 11.

**14143 N-Methylanthranilylamide**

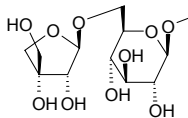
[7505-81-9] C₈H₁₀N₂O (150.18). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2, 347.

**14144 2-Methylanthraquinone**

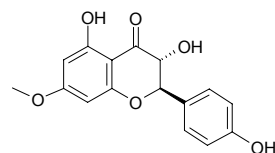
Tectoquinone [84-54-8] C₁₅H₁₀O₂ (222.25). Faint yellow needles, mp 175~176°C, mp 177~179°C. Pharm: Insecticidal (termites and other insects). Source: GUANG ZE BA JI *Morinda lucida*, MAN JIU JIE *Psychotria serpens*, QI YE HUANG PI *Clausena heptaphylla*, QIAN CAO GEN *Rubia cordifolia*, QU ZHOU HAI JIN SHA *Lygodium flexuosum* [Syn. *Lygodium pinnatifidum*; *Ophioglossum flexuosum*], YANG JIAO TENG *Morinda umbellata* (root and stem), YOU MU *Tectona grandis*, YUAN WEI *Iris tectorum*, *Diospyros sylvatica* (root). Ref: 6, 658, 660, 3811.

**14145 Methyl β -D-apiofuranosyl-(1 \rightarrow 6)- β -D-glucopyranoside**

C₁₂H₂₂O₁₀ (326.30). Colorless syrup, [α]_D²¹ = -81° (*c* = 0.4, MeOH). Source: ZI RAN QIN *Cuminum cuminum* (fruit). Ref: 3395.

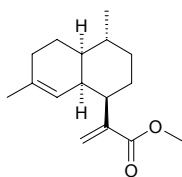
**14146 7-O-Methylaromadendrin**

C₁₆H₁₄O₆ (302.29). Source: HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*]. Ref: 1385.

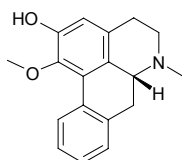


14147 Methylarteannuate

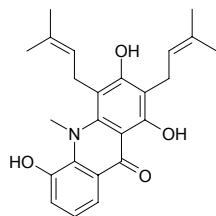
$C_{16}H_{24}O_2$ (248.37). Source: HUANG HUA HAO *Artemisia annua*. Ref: 2, 660.

**14148 N-Methylasimilobine**

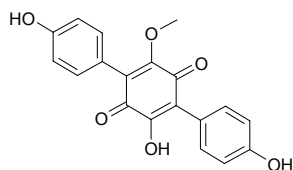
O-Normuciferine [3153-55-7] $C_{18}H_{19}NO_2$ (281.36). mp 195–196°C. Source: HE YE *Nelumbo nucifera*, HE GENG *Nelumbo nucifera*, HE YE DI *Nelumbo nucifera*, SUAN ZAO REN *Ziziphus jujuba* var. *spinosa*. Ref: 6, 1480, 1481, 1521.

**14149 N-Methylalaphylline**

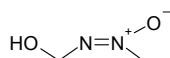
$C_{24}H_{27}NO_4$ (393.49). Source: DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex). Ref: 3075.

**14150 2-O-Methylatromentin**

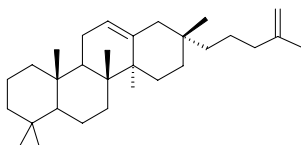
$C_{19}H_{14}O_6$ (338.32). Source: JIN HUANG GE JUN *Thelephora aurantiotincta*. Ref: 3423.

**14151 Methylazoxymethanol**

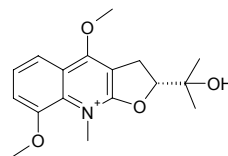
[590-96-5] $C_2H_6N_2O_2$ (90.08). Source: SU TIE SHU GUO *Cycas revoluta*. Ref: 1416.

**14152 21-Methyl bacchara-12,22(29)-diene**

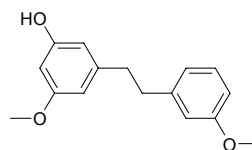
$C_{30}H_{50}$ (410.73). Source: XING JUE *Microsorium punctatum*. Ref: 1506.

**14153 O-Methylbalfourodinium (salt)**

$C_{17}H_{22}NO_4^+$ (304.37). Source: CHOU SHAN YANG *Orixa japonica*. Ref: 6.

**14154 3'-O-Methylbatatasin III**

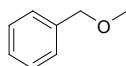
$C_{16}H_{18}O_3$ (258.32). White powder. Pharm: Antibacterial (*Streptococci* sp.); antiallergic β -Hexosaminidase inhibitor (rat basophilic RBL-2H3 cells, inhibits release of β -hexosaminidase, 100 μ mol/L, InRt = (70.0 \pm 2.1) μ mol/L, $p < 0.01$; 300 μ mol/L control Ketotifen fumarate, InRt = (72.5 \pm 0.9) μ mol/L, $p < 0.01$)^[5022]. Source: BAI JI *Bletilla striata*, SHOU ZHANG SHEN *Gymnadenia conopsea* (tuber). Ref: 658, 5022.

**14155 Methylbenzene**

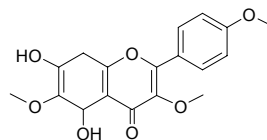
Toluene; Toluol [108-88-3] C_7H_8 (92.14). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

**14156 Methyl benzyl ether**

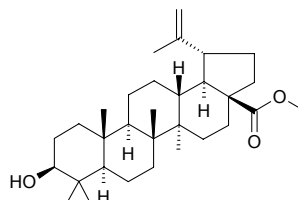
[538-86-3] $C_8H_{10}O$ (122.17). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.

**14157 3-Methyl betuletol**

3,6-Dimethoxy kaempferide $C_{18}H_{18}O_7$ (346.34). Source: YUE HUA *Betula ermanii*. Ref: 1507.

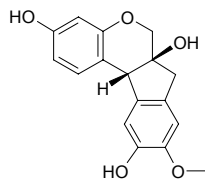
**14158 Methylbetulinat**

Methyl betulinat $C_{31}H_{50}O_3$ (470.74). Needles, mp 220–221°C, 223–224°C, $[\alpha]_D^{27} = +10.3^\circ$ ($c = 1.55$, CH_2Cl_2). Source: DAO GEN MEI *Rhizopus oryzae*, QIAO MU ZI ZHU *Callicarpa arborea*, QIU FENG MU *Bischofia javanica* [Syn. *Bischofia trifoliata*], XIA KU CAO *Prunella vulgaris*. Ref: 6, 2508, 3781.

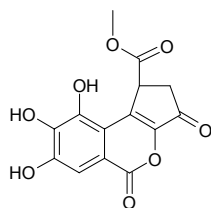


14159 3'-O-Methylbrazilin

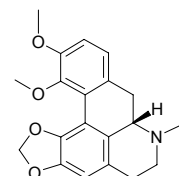
[111254-30-9] C₁₇H₁₆O₅ (300.31). [α]_D²⁵ = +113.2° (*c* = 0.21, MeOH). Source: SU MU *Caesalpinia sappan* (heartwood). Ref: 1302, 1521, 4494.

**14160 Methyl brevifolin carboxylate**

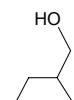
C₁₄H₁₀O₈ (306.23). Yellowish acicular crystals, mp 200°C. Source: YE XIA ZHU *Phyllanthus urinaria*. Ref: 283, 607.

**14161 O-Methylbulbocapnine**

[2490-83-7] C₂₀H₂₁NO₄ (339.39). mp 129~130°C, [α]_D = +248° (*c* = 0.67, CHCl₃). Source: HEI KE NAN *Lindera megaphylla*. Ref: 1508, 1521.

**14162 2-Methyl-1-butanol**

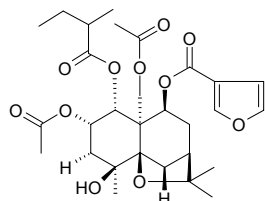
C₅H₁₂O (88.15). Source: JIN YIN HUA *Lonicera japonica*. Ref: 1378.

**14163 3-Methyl butanone**

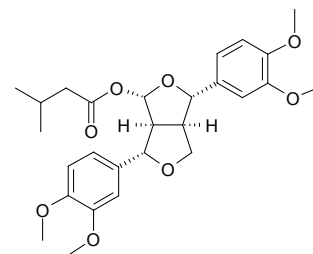
C₅H₁₀O (86.31). Source: YOU GAN LAN *Olea europaea*, FAN QIE *Lycopersicon esculentum*. Ref: 1455, 1456.

**14164 1 α -(α -Methyl)-butanoyl-2 α ,15-diacetoxy-4 β -hydroxy-9 β -(β -)furoxyloxy- β -dihydroagarofuran**

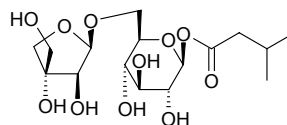
C₂₉H₄₀O₁₁ (564.64). Colorless gum, [α]_D²⁰ = +38° (*c* = 1.17, CHCl₃). Source: *Euonymus nanoides* (seed). Ref: 4962.

**14165 (+)-4-(3-Methylbutanoyl)-2,6-di(3,4-dimethoxy)phenyl-3,7-dioxabicyclo[3.3.0]octane**

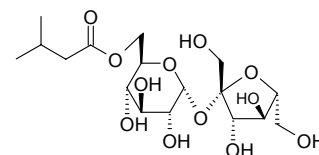
C₂₇H₃₄O₈ (486.57). White powder (MeOH), mp 94~95°C, [α]_D²² = +9.7° (*c* = 0.35, CHCl₃). Source: JU DA LAN CI TOU *Echinops giganteus* (root). Ref: 3828.

**14166 3-Methylbutanoyl-1-O- β -D-glucopyranosyl- β -D-apiofuranoside**

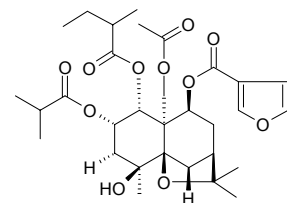
C₁₆H₂₈O₁₁ (396.39). Source: XIAO GUO KA FEI *Coffea arabica*. Ref: 1960.

**14167 3-Methylbutanoyl-6-O- α -D-glucopyranosyl- β -D-fructofuranoside and**

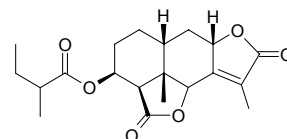
C₁₇H₃₀O₁₂ (426.42). Source: XIAO GUO KA FEI *Coffea arabica*. Ref: 1960.

**14168 1 α -(α -Methyl)-butanoyl-2 α -(α -methyl)-propynoyloxy-4 β -hydroxy-9 β -(β -)furoxyloxy-15-acetoxy- β -dihydroagarofuran**

C₃₁H₄₄O₁₁ (592.69). Colorless gum, [α]_D²⁰ = +38° (*c* = 1.03, CHCl₃). Pharm: Cytotoxic (*in vitro*, Bel7402 liver carcinoma, IC₅₀ = 27.71 μg/mL, control Etoposide, IC₅₀ = 7.00 μg/mL). Source: *Euonymus nanoides* (seed). Ref: 4962.

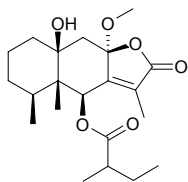
**14169 3 β -(2'-Methylbutanoyloxy)-8 β H-eremophil-7(11)-ene-12,8 α -(14,6 α)-diolide**

C₂₀H₂₆O₆ (362.43). Colorless plates, mp 190~191°C, [α]_D²⁰ = +125.5° (*c* = 0.40, CHCl₃). Source: DONG E LUO DU WU *Ligularia tongolensis* (root). Ref: 4523.

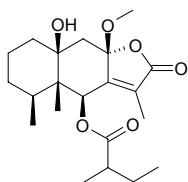


14170 6 β -(2'-Methylbutanoyloxy)-10 β -hydroxy-8 α -methoxyeremophil-7(11)-en-12,8 β -olide

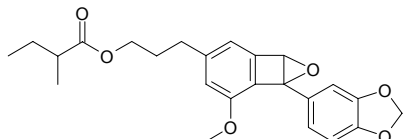
C₂₁H₃₂O₆ (380.49). Pale gel, $[\alpha]_D^{20} = -93^\circ$ ($c = 0.83$, Me₂CO). **Pharm:** Antibacterial (*Staphylococcus aureus*, antibacterial circle < 12mm; *Bacillus subtilis*, antibacterial circle = 13–16mm; *Escherichia coli*, antibacterial circle < 12mm). **Source:** JIAN YE TOU WU GEN *Ligularia sagitta*. **Ref:** 5382.

**14171 6 β -(2'-Methylbutanoyloxy)-10 β -hydroxy-8 β -methoxyeremophil-7(11)-en-12,8 α -olide**

C₂₁H₃₂O₆ (380.49). White gel, $[\alpha]_D^{20} = +34^\circ$ ($c = 0.21$, Me₂CO). **Source:** JIAN YE TOU WU GEN *Ligularia sagitta*. **Ref:** 5382.

**14172 4-[3''-(1c-Methylbutanoyloxy)propyl]-2-methoxy-(3',4'-methylenedioxyphenyl)-1a,5b-dihydrobenzo-[3,4]-cyclobutaoxirene**

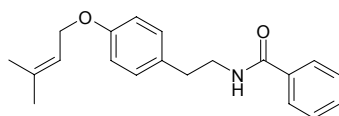
C₂₄H₂₆O₆ (410.47). **Source:** YAO YONG AN XI XIANG *Styrax officinalis*. **Ref:** 3426.

**14173 2-Methyl-2-butene**

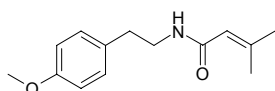
C₅H₁₀ (70.14). **Source:** MENG GU HAO *Artemisia mongolica*. **Ref:** 1384.

**14174 4-(3'-Methyl-but-2'-ene)oxy, N-benzoyl phenethyl amine**

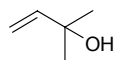
C₂₀H₂₃NO₂ (309.41). Yellow acicular crystals, mp 103.5–104.5°C. **Source:** DONG FENG JU YE *Atalantia buxifolia* [Syn. *Severinia buxifolia*]. **Ref:** 67.

**14175 3-Methyl-but-2-enoic acid-[2-(4-methoxy phenyl)-ethyl]-amide**

C₁₄H₁₉NO₂ (233.31). Oil. **Source:** YAN SHENG JIA MU ZEI *Anabasis salsa*, DUAN YE JIA MU ZEI *Anabasis brevifolia*. **Ref:** 4861.

**14176 2-Methylbut-3-en-2-ol**

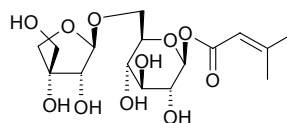
[115-18-4] C₅H₁₀O (86.13). **Source:** FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*], PI JIU HUA *Humulus lupulus*. **Ref:** 2, 1217.

**14177 3-Methyl-3-butenone**

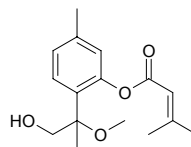
C₅H₈O (84.12). **Source:** GUANG HUO XIANG *Pogostemon cablin* [Syn. *Mentha cablin*]. **Ref:** 1367.

**14178 3-Methylbut-2-enoyl-1-O-β-D-glucopyranosyl-β-D-apiofuranoside**

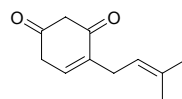
C₁₆H₂₆O₁₁ (394.38). **Source:** XIAO GUO KA FEI *Coffea arabica*. **Ref:** 1960.

**14179 3-O-(3-Methyl-2-butenoyl)-8-methoxy-9-hydroxythymol**

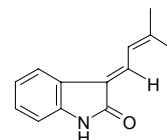
C₁₆H₂₂O₄ (278.35). $[\alpha]_D^{23} = +18.2^\circ$ ($c = 0.8$, CHCl₃). **Source:** PEI LAN *Eupatorium fortunei* (aerial parts). **Ref:** 3077.

**14180 4-(3-Methyl-2-butenyl)-4-cyclohexene-1,3-dione**

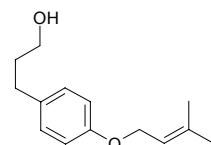
C₁₁H₁₄O₂ (178.23). **Source:** CHUAN XU DUAN *Dipsacus asperoides*. **Ref:** 1379.

**14181 (E)-3-(3'-Methyl-2'-butenylidene)-2-indolinone**

C₁₃H₁₃NO (199.25). **Source:** XING AN SHENG MA *Cimicifuga dahurica*. **Ref:** 1309, 1310.

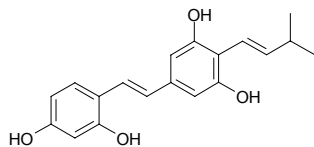
**14182 4'-(3''-Methylbut-2''-enyloxy)-3-phenylpropanol**

C₁₄H₂₀O₂ (220.31). **Pharm:** Antifungal (TLC-based assay, *Cladosporium cucumerinum*, MIQ = 0.1μg; control Miconazole, MIQ = 1μg). **Source:** *Fagara xanthoxyloides*. **Ref:** 5385.

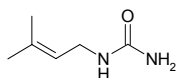


14183 trans-4-(3-Methyl-E-but-1-enyl)-3,5,2',4'-tetrahydroxystilbene

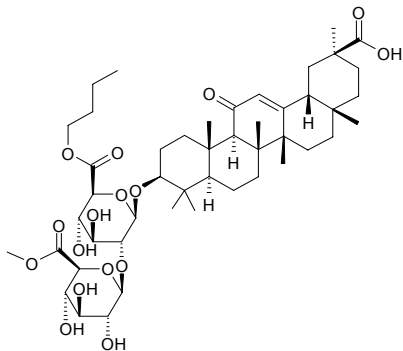
$C_{19}H_{20}O_4$ (312.37). Pale orange powder, mp 191~193°C. **Pharm:** Antimalarial (*Plasmodium falciparum*, $EC_{50} = 1.7\mu\text{g/mL}$, control Chloroquine diphosphate, $EC_{50} = 0.16\mu\text{g/mL}$, $EC_{50} = 3.1\mu\text{mol/L}$). **Source:** QUAN YUAN GUI MI *Artocarpus integra* (aerial parts). **Ref:** 3963.

**14184 N-3-methyl-2-butenyl urea**

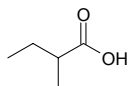
$C_6H_{12}N_2O$ (128.18). Colorless acicular crystals, mp 104~105°C. **Pharm:** Analgesic (*in vivo*, 10mg/kg); calcium antagonist (screening model of blood vessel strip, *in vitro*, 30 $\mu\text{g/mL}$); antihypertensive. **Source:** XUN DAO NIU *Biebersteinia heterostemon*. **Ref:** 324, 658.

**14185 Methyl-n-butyl-uralsaponin A esters**

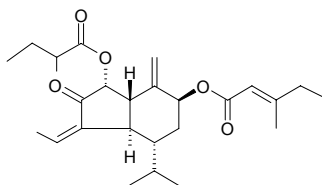
3 β -Hydroxy-11-oxo-olean-12-en-30-oic acid 3-O- β -D-(n-butyl)-glucuronopyranosyl ester)-(1 \rightarrow 2)- β -D-(methyl)-glucuronopyranosyl ester $C_{47}H_{72}O_{16}$ (893.09). Colorless powder, mp 257°C. **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 2148.

**14186 2-Methyl butyric acid**

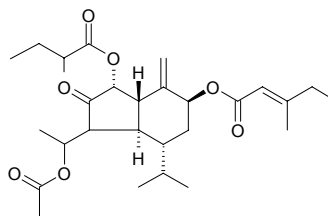
[116-53-0] $C_5H_{10}O_2$ (102.13). bp 177°C. **Source:** XING ZI *Prunus armeniaca*. **Ref:** 6.

**14187 Methyl butyric acid 3,14-dehydro-Z-tussilagin ester**

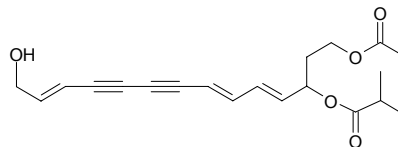
[80514-14-3] $C_{26}H_{38}O_5$ (430.59). Colorless jelly, $[\alpha]_{589\text{nm}}^{24} = -125^\circ$, $[\alpha]_{578\text{nm}}^{24} = -135^\circ$, $[\alpha]_{546\text{nm}}^{24} = -164^\circ$, $[\alpha]_{436\text{nm}}^{24} = -494^\circ$ ($c = 1.0$, chloroform). **Pharm:** Platelet aggregation inhibitor (due to PAF). **Source:** KUAN DONG HUA *Tussilago farfara*. **Ref:** 976, 1092, 1178.

**14188 Methyl butyric acid tussilagin ester**

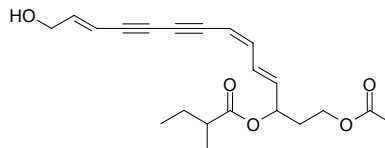
[80489-87-8] $C_{28}H_{42}O_7$ (490.46). Colorless jelly, $[\alpha]_{589\text{nm}}^{24} = -124^\circ$, $[\alpha]_{578\text{nm}}^{24} = -133^\circ$, $[\alpha]_{546\text{nm}}^{24} = -159^\circ$, $[\alpha]_{436\text{nm}}^{24} = -390^\circ$ ($c = 4.0$, chloroform). **Pharm:** Platelet aggregation inhibitor (due to PAF). **Source:** KUAN DONG HUA *Tussilago farfara*. **Ref:** 1086, 1178.

**14189 12-(α -Methyl butyryl)-14-acetyl-2E,8E,10E-atractylentriol**

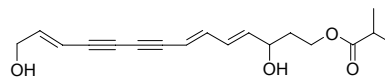
$C_{21}H_{26}O_5$ (358.44). **Source:** BAI ZHU *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*]. **Ref:** 1386.

**14190 12-(α -Methyl butyryl)-14-acetyl-2E,8Z,10E-atractylentriol**

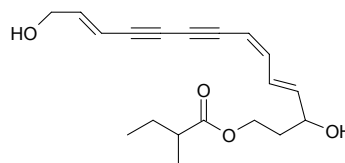
$C_{21}H_{26}O_5$ (358.44). **Source:** BAI ZHU *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*]. **Ref:** 1386.

**14191 14(α -Methyl butyryl)-2E,8E,10E-atractylentriol**

$C_{19}H_{24}O_4$ (316.40). **Source:** BAI ZHU *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*]. **Ref:** 1386.

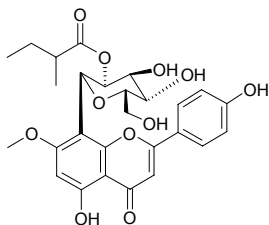
**14192 14(α -Methyl butyryl)-2E,8Z,10E-atractylentriol**

$C_{19}H_{24}O_4$ (316.40). **Source:** BAI ZHU *Atractylodes macrocephala* [Syn. *Atractylis macrocephala*]. **Ref:** 1386.

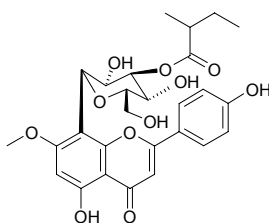


14193 2''-O-(2'''-Methylbutyryl)isowertisin

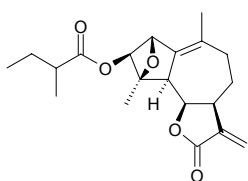
$C_{27}H_{30}O_{11}$ (530.53). Yellow powder, mp 155~157°C, $[\alpha]_D^{20} = -21.2^\circ$ ($c = 0.066$, CH_3OH). Source: DUAN BAN JIN LIAN HUA *Trollius ledebourii* (flower: yield = 0.014%dw). Ref: 4743.

**14194 3''-O-(2'''-Methylbutyryl)isowertisin**

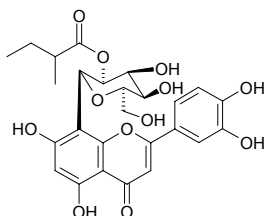
$C_{27}H_{30}O_{11}$ (530.53). Yellow powder, mp 231~233°C, $[\alpha]_D^{20} = -41.1^\circ$ ($c = 0.036$, CH_3OH). Source: DUAN BAN JIN LIAN HUA *Trollius ledebourii* (flower: yield = 0.00018%dw). Ref: 4743.

**14195 3β-O-(2-Methylbutyryl)moroccolide A**

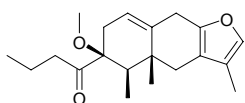
5*aH*-2β,4-Epoxy-3β-(2-methylbutyryloxy)guaia-1(10),-11(13)-dien-6β,12-olide $C_{20}H_{26}O_5$ (346.43). Colorless gum, $[\alpha]_D^{22} = +102^\circ$ ($c = 0.1$, EtOH). Pharm: Cytotoxic (*in vitro*, KB, $IC_{50} = 1\mu g/mL$). Source: *Warionia saharae* (leaf: yield = 0.0046%dw). Ref: 4620.

**14196 2''-O-(2'''-Methylbutyryl)orientin**

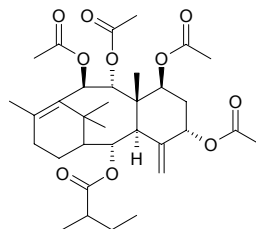
$C_{26}H_{28}O_{12}$ (532.51). Yellow powder, mp 185~187°C, $[\alpha]_D^{20} = -16.8^\circ$ ($c = 0.054$, CH_3OH). Source: DUAN BAN JIN LIAN HUA *Trollius ledebourii* (flower: yield = 0.00097%dw). Ref: 4743.

**14197 3-Methylbutyryloxyeurypsins**

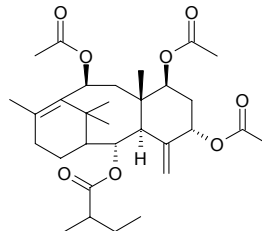
$C_{20}H_{28}O_3$ (316.44). $[\alpha]_D = -45.9^\circ$ ($c = 1$, $CHCl_3$). Source: HUANG SE QIAN LI GUANG *Senecio flavus*. Ref: 2409.

**14198 2α-(α-Methylbutyryl)-oxy-5α,7β,9α,10β-tetraacetoxy-4(20),11-taxadiene**

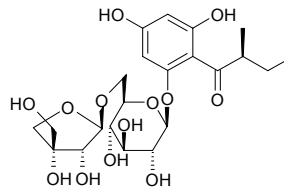
$C_{33}H_{48}O_{10}$ (604.74). mp 155~156°C, $[\alpha]_D = +56^\circ$. Source: JIANG GUO ZI SHAN *Taxus baccata*. Ref: 662.

**14199 2α-(α-Methylbutyryl)-oxy-5α,7β,10β-triacetoxy-4(20),11-taxadiene**

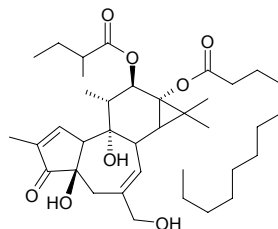
$C_{31}H_{46}O_8$ (546.71). mp 115°C, $[\alpha]_D = +45^\circ$. Source: JIANG GUO ZI SHAN *Taxus baccata*, MEI LI HONG DOU SHAN *Taxus mairei*. Ref: 662.

**14200 2-(2-Methylbutyryl)phloroglucinol 1-O-(6''-O-β-D-apiofuranosyl)-β-D-glucopyranoside**

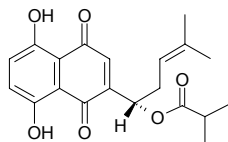
$C_{22}H_{32}O_{13}$ (504.49). Yellow amorphous powder, $[\alpha]_D^{18} = -60.3^\circ$ ($c = 0.30$, MeOH). Source: YOU GAN YE *Phyllanthus emblica* (leaf and branch). Ref: 4205.

**14201 12-O-(2-Methylbutyryl)phorbol-13-dodecanoate**

$C_{37}H_{58}O_8$ (630.87). Pharm: Anti-HIV-1 (MT-4 cells, HIV-1-induced cytopathic effect inhibitor, $IC_{100} = 15.76\mu g/mL$, $CC_0 = 62.5\mu g/mL$, control DS8000, $IC_{100} = 3.9\mu g/mL$, $CC_0 > 1000\mu g/mL$); PKC activator (10ng/mL, activity rate = 16%). Source: BA DOU *Croton tiglium*. Ref: 3921.

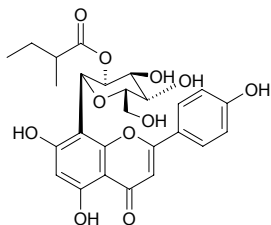
**14202 α-Methyl-n-butyrylshikonin**

$C_{21}H_{24}O_6$ (372.42). Source: ZI CAO *Lithospermum erythrorhizon*. Ref: 2.

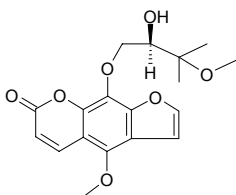


14203 2''-O-(2'''-Methylbutyryl)vitexin

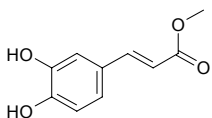
$C_{26}H_{28}O_{11}$ (516.51). Yellow powder, mp 179~181°C, $[\alpha]_D^{20} = -22.0^\circ$ ($c = 0.064$, CH_3OH). **Source:** DUAN BAN JIN LIAN HUA *Trollius ledebourii* (flower: yield = 0.00033%dw). **Ref:** 4743.

**14204 tert-O-Methyl byakangelicin**

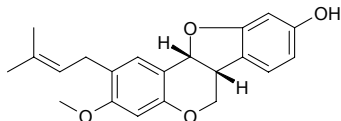
$C_{18}H_{20}O_7$ (348.36). Crystals, mp 95~96°C, $[\alpha]_D^{14} = -17.8^\circ$ (EtOH). **Source:** HOU GUO DANG GUI *Angelica pachycarpa*, QI BAI ZHI *Angelica dahurica* cv. *qibaizhi*. **Ref:** 1347.

**14205 Methyl caffeate**

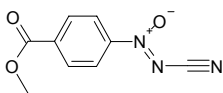
[3843-74-1] $C_{10}H_{10}O_4$ (194.19). **Pharm:** Antineoplastic (S_{180}). **Source:** QING HAO *Artemisia apiacea* [Syn. *Artemisia carvifolia*; *Artemisia caruifolia*], RI BEN HUANG BAI *Phellodendron japonicum* (leaf), TAI WAN FU RONG *Hibiscus taiwanensis*, TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00051%dw)^[4722], TIAN REN JU *Gaillardia pulchella*. **Ref:** 658, 2529, 4502, 4722.

**14206 3-O-Methylcalopocarpin**

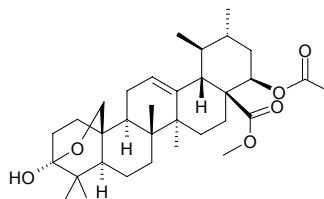
$C_{21}H_{22}O_4$ (338.41). **Pharm:** Anti-HIV (inhibits cell denaturalization affected by HIV). **Source:** HUI CI TONG *Erythrina glauca*. **Ref:** 2268.

**14207 Methyl calvatate**

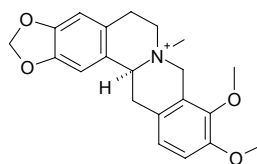
$C_9H_7N_3O_3$ (205.17). **Source:** LI XING MA BO *Lycoperdon pyriforme*. **Ref:** 1308.

**14208 Methylcamaralate**

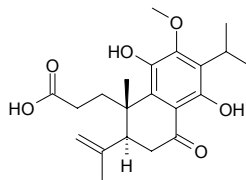
Methyl 22β-acetoxy-3,25-epoxy-3α-hydroxy-urs-12-en-28-oate $C_{33}H_{50}O_6$ (542.76). Amorphous powder, $[\alpha]_D = +171^\circ$ ($c = 0.12$, $CHCl_3$). **Source:** WU SE MEI *Lantana camara* (aerial parts). **Ref:** 4309.

**14209 N-Methyl canadine**

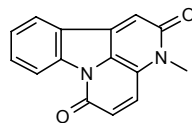
$C_{21}H_{24}NO_4$ (354.43). **Source:** DUAN CI HUA JIAO *Zanthoxylum brachycanthum*, DU HUA JIAO *Zanthoxylum veneficium*, ZHI LI JIAO HUI XIANG *Hypecoum erectum*. **Ref:** 1512, 1521.

**14210 12-O-Methylcandesalvone B**

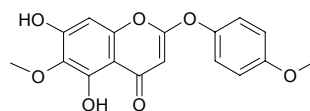
$C_{21}H_{28}O_6$ (376.45). Pale-yellow solid, $[\alpha]_D^{24.5} = +45^\circ$ ($c = 0.08$, $CHCl_3$). **Pharm:** Antioxidant (enzyme-independent lipid peroxidation, $IC_{50} = 13.40\mu mol/L$, Rosmarinic acid, $IC_{50} = 4.40\mu mol/L$; enzyme-dependent lipid peroxidation, $IC_{50} = 10.42\mu mol/L$, Rosmarinic acid, $IC_{50} = 0.39\mu mol/L$)^[5494]. **Source:** ZHU TAI SHU WEI CAO *Salvia candelabrum* (aerial parts). **Ref:** 5376, 5494.

**14211 3-Methyl-canthin-2,6-dione**

$C_{15}H_{10}N_2O_2$ (250.26). Orange-red needles, mp > 330°C. **Source:** KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. **Ref:** 12.

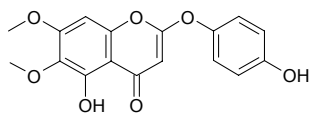
**14212 4'-Methylcapillarisin**

$C_{17}H_{14}O_7$ (330.30). **Source:** YIN CHEN HAO *Artemisia capillaris*. **Ref:** 2.

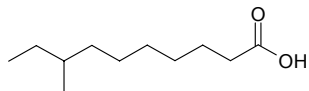


14213 7-Methylcapillarisin

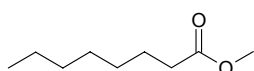
$C_{17}H_{14}O_7$ (330.30). Source: YIN CHEN HAO *Artemisia capillaris*. Ref: 2.

**14214 8-Methyl capric acid**

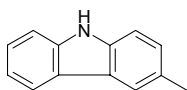
$C_{11}H_{22}O_2$ (186.30). Source: XI YANG SHEN *Panax quinquefolium*. Ref: 2.

**14215 Methyl caprylate**

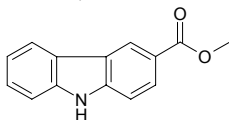
Octanoic acid methyl ester [111-11-5] $C_9H_{18}O_2$ (158.24). Source: DANG SHEN *Codonopsis pilosula*. Ref: 2.

**14216 3-Methylcarbazole**

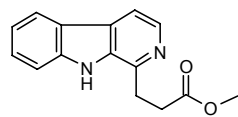
3-Methyl-9H-carbazole [4630-20-0] $C_{13}H_{11}N$ (181.24). Plates (CH_2Cl_2 /hexane), mp 206~208°C. Pharm: Anti-tuberculosis (MIC = $(14.3 \pm 0.9) \mu\text{g/mL}$, control Rifampine, MIC = $(0.040 \pm 0.017) \mu\text{g/mL}$; cytotoxic, Vero, $IC_{50} > 102 \mu\text{g/mL}$, Rifampine, $IC_{50} = 100 \mu\text{g/mL}$)^[5072]. Source: QI YE HUANG PI *Clausena heptaphylla*, SHAN HUANG PI *Clausena excavata*, YING MAO XIAO YUN MU *Micromelum hirsutum* (stem cortex). Ref: 703, 1521, 5072.

**14217 Methyl carbazole-3-carboxylate**

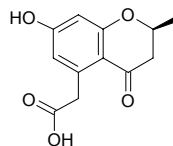
3-Methoxycarbonylcarbazole $C_{14}H_{11}NO_2$ (225.25). Pharm: Antitubercular (MIC $> 128 \mu\text{g/mL}$; control Rifampin, MIC = $(0.040 \pm 0.017) \mu\text{g/mL}$)^[5072]; cytotoxic (Vero, $IC_{50} > 102 \mu\text{g/mL}$; control Rifampin, $IC_{50} = 100 \mu\text{g/mL}$)^[5072]; antibacterial (*Mycobacterium tuberculosis*, MIC = $50 \mu\text{g/mL}$, control Isoniazide, MIC = $0.040\text{--}0.090 \mu\text{g/mL}$, kanamycin sulfate, MIC = $2.0\text{--}5.0 \mu\text{g/mL}$)^[5367]; antifungal (*Candida albicans*, $IC_{50} = 9.5 \mu\text{g/mL}$; control Amphotericin, $IC_{50} = 0.01 \mu\text{g/mL}$)^[5367]. Source: SHAN HUANG PI *Clausena excavata*, YING MAO XIAO YUN MU *Micromelum hirsutum* (stem cortex). Ref: 5072, 5367.

**14218 Methyl-3-(β-carboline-1-yl) propionate**

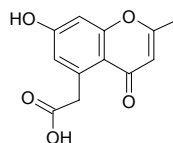
Infracine [91147-07-8] $C_{15}H_{14}N_2O_2$ (254.29). Crystals (toluene), mp 145~146°C. Source: KU SHU PI *Picrasma quassioides* [Syn. *Picrasma ailanthoides*]. Ref: 12, 1521.

**14219 2-Methyl-5-carboxymethyl-7-hydroxychromanone**

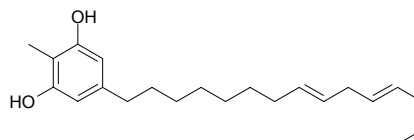
$C_{12}H_{12}O_5$ (236.23). Source: DA HUANG *Rheum officinale*. Ref: 1437.

**14220 2-Methyl-5-carboxymethyl-7-hydroxychromone**

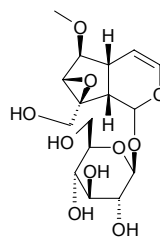
$C_{12}H_{10}O_5$ (234.21). Source: DA HUANG *Rheum officinale*. Ref: 1437.

**14221 2-Methylcardol**

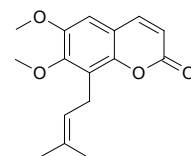
$C_{22}H_{34}O_2$ (330.52). Source: ZI JIN NIU *Ardisia japonica*. Ref: 1355.

**14222 6-O-Methyl catalpol**

$C_{16}H_{24}O_{10}$ (376.36). Crystals (H_2O), mp 236~238°C, $[\alpha]_D^{22.5} = -122^\circ$ ($c = 1.64$, 90% EtOH). Pharm: Antitrypanosomal (*Trypanosoma brucei rhodesiense*, $IC_{50} = 32.5 \mu\text{g/mL}$, control Melarsoprol, $IC_{50} = 0.0033 \mu\text{g/mL}$; *Trypanosoma cruzi*, $IC_{50} > 90 \mu\text{g/mL}$, control Benznidazole, $IC_{50} = 0.70 \mu\text{g/mL}$)^[5251]; antileishmanial (*Leishmania donovani*, $IC_{50} = 8.3 \mu\text{g/mL}$, control Miltefosine, $IC_{50} = 0.32 \mu\text{g/mL}$)^[5251]; antimalarial (*Plasmodium falciparum*, $IC_{50} > 50 \mu\text{g/mL}$, control Artemisinin, $IC_{50} = 0.002 \mu\text{g/mL}$)^[5251]; cytotoxic (L6 cells, $IC_{50} > 90 \mu\text{g/mL}$, control Podophyllotoxin, $IC_{50} = 0.0075 \mu\text{g/mL}$)^[5251]. Source: LIN PIAN XUAN SHEN *Scrophularia lepidota* (root), QIU HUA ZUI YU CAO *Buddleja globosa*, XUAN SHEN *Scrophularia ningpoensis*. Ref: 1376, 1521, 5251.

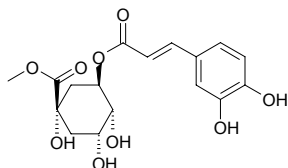
**14223 Methyl-O-cedrelopsin**

$C_{16}H_8O_4$ (274.32). Source: *Cedrelopsis grevei* (trunk bark). Ref: 5368.

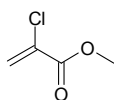


14224 Methyl chlorogenate

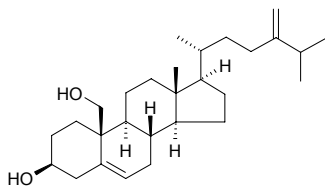
5-*O*-Caffeoylquinic acid methyl ester C₁₇H₂₀O₉ (368.34). **Pharm:** Aldose reductase inhibitor (IC₅₀ = 1.3 μmol/L, control Epalrestat, IC₅₀ = 0.072 μmol/L)^[4530]. **Source:** DU ZHONG *Eucommia ulmoides*, JI ZI MU *Sinoadina Racemosa* [Syn. *Adina racemosa*] (leaf, flower and twig: yield = 0.085% dw)^[4723], SHUI MU XUE LIAN HUA *Saussurea medusa* (whole herb). **Ref:** 1209, 4530, 4723.

**14225 Methyl 2-chloropropenoate**

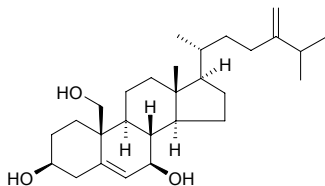
C₄H₅ClO₂ (120.54). **Source:** BAN XIA *Pinellia ternata*. **Ref:** 1401.

**14226 24-Methylcholesta-5,24(28)-diene-3β,19-diol**

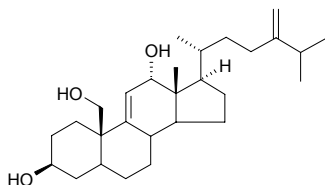
C₂₈H₄₆O₂ (414.68). **Pharm:** Cytotoxic inactive (hmn prostate cancer LNCaP cell line, EC₅₀ = 56.7 μg/mL). **Source:** *Nephthea chabroli*. **Ref:** 4375.

**14227 24-Methylcholesta-5,24(28)-diene-3β,7β,19-triol**

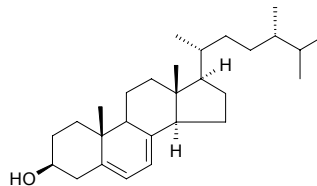
C₂₈H₄₆O₃ (430.68). **Pharm:** Cytotoxic inactive (hmn prostate cancer LNCaP cell line, EC₅₀ = 4.9 μg/mL). **Source:** *Nephthea chabroli*. **Ref:** 4375.

**14228 24-Methylcholesta-9(11),24(28)-diene-3β,12α,19-triol**

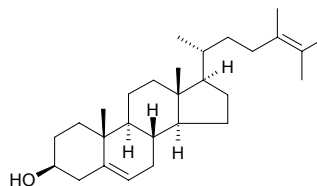
C₂₈H₄₆O₃ (430.68). Colorless solid, mp 163–164°C, [α]_D²⁵ = -141.9° (c = 0.031, MeOH). **Pharm:** Cytotoxic inactive (hmn prostate cancer LNCaP cell line, EC₅₀ = 23.4 μg/mL). **Source:** *Nephthea chabroli*. **Ref:** 4375.

**14229 24-Methylcholesta-5,7-dien-3β-ol‡**

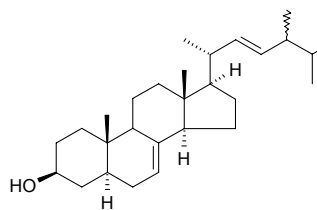
Ergosta-5,7-dien-3-ol; 22,23-Dihydroergosterol; Provitamin D₄ [516-79-0] C₂₈H₄₆O (398.68). Crystals + 1 H₂O (EtOAc/MeOH), mp 152–153°C, [α]_D = -128.7° (c = 0.4, CHCl₃). **Source:** CAO GU *Volvariella volvacea*, E CHANG CAI *Endarachne binghamiae*, PU⁽²⁾ TAO *Vitis vinifera* (seed oil). **Ref:** 1502, 1521. ‡Note: see compound 3039.

**14230 24-Methylcholesta-5,24-dien-3β-ol**

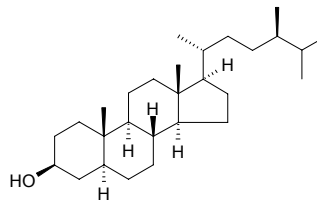
[20780-41-0] C₂₈H₄₆O (398.68). Crystals (MeOH), mp 141.5–142.5°C, [α]_D = -46.7° (CHCl₃). **Source:** CUI MIAN SHUI QIE *Withania somnifera*, GOU QI ZI *Lycium chinense*. **Ref:** 1371, 1521.

**14231 24-Methylcholesta-7,22-dien-3β-ol**

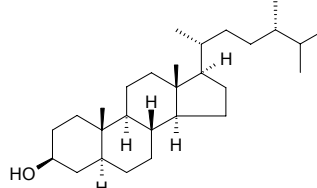
C₂₈H₄₆O (398.68). 24S: mp 173.5–174°C, 24R: mp 159.5–161°C. **Source:** LING ZHI *Ganoderma lucidum*, SHU SHE *Ganoderma applanatum*. **Ref:** 1407, 1521.

**14232 (24R)-Methyl cholestanol**

C₂₈H₅₀O (402.71). **Source:** SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*]. **Ref:** 1399.

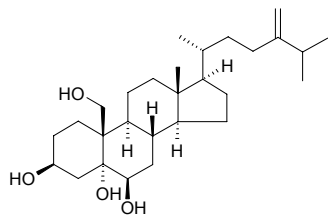
**14233 (24S)-Methyl cholestanol**

C₂₈H₅₀O (402.71). mp 144–145°C. **Source:** JIN ZHAN JU *Calendula officinalis*, SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*]. **Ref:** 1399, 1521.

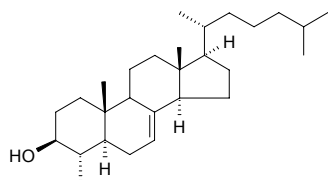


14234 24-Methylcholest-24(28)-ene-3 β ,5 α ,6 β ,19-tetraol

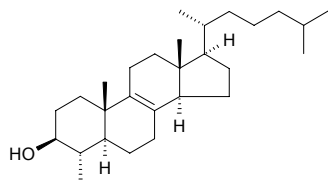
$C_{28}H_{48}O_4$ (448.69). **Pharm:** Cytotoxic (hmn prostate cancer LNCaP cell line, $EC_{50} = 7.4\mu\text{g/mL}$). **Source:** *Nephtea chabroli*. **Ref:** 4375.

**14235 4 α -Methyl-cholest-7-en-3 β -ol**

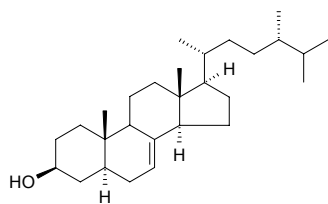
Lophenol [481-25-4] $C_{28}H_{48}O$ (400.69). mp 149~151°C, $[\alpha]_D = +5^\circ$ (CHCl_3). **Source:** AI QIE *Solanum demissum*, DUO ZU JUE *Polypodium vulgare*, JIAN YE LONG XUE SHU *Dracaena cochinchinensis*, MA LING SHU *Solanum tuberosum* (leaf). **Ref:** 616, 1415, 1521.

**14236 4 α -Methyl-cholest-8-en-3 β -ol**

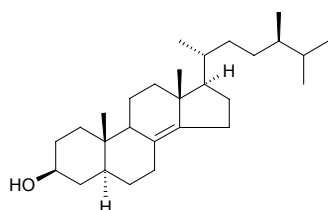
[5241-22-5] $C_{28}H_{48}O$ (400.69). **Source:** GOU QI ZI *Lycium chinense*. **Ref:** 1371, 1372, 1373, 1374.

**14237 (24S)-Methylcholest-7-en-3 β -ol**

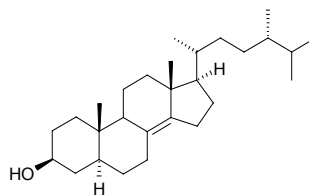
24-Methyl lathosterol [516-78-9] $C_{28}H_{48}O$ (400.69). **Source:** HUANG GUA *Cucumis sativus*, LING ZHI *Ganoderma lucidum*, CAO GU *Volvariella volvacea*. **Ref:** 1345, 1407, 1502.

**14238 (24R)-Methyl cholest-8(14)-enol**

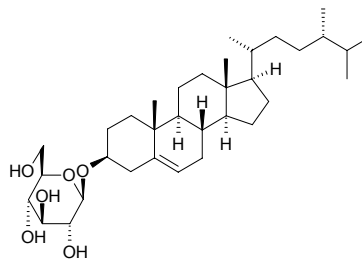
$C_{28}H_{48}O$ (400.69). **Source:** SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*]. **Ref:** 1399.

**14239 (24S)-Methyl cholest-8(14)-enol**

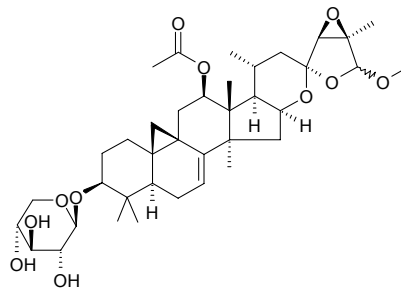
[632-32-6] $C_{28}H_{48}O$ (400.69). mp 130~131°C. **Source:** SHAN YAO *Dioscorea batatas* [Syn. *Dioscorea opposita*]. **Ref:** 1399.

**14240 24-Methylcholest-5-enyl-3 β -O-glucopyranoside**

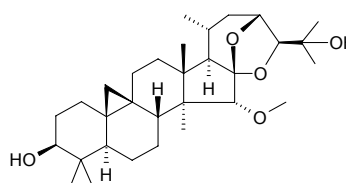
$C_{34}H_{58}O_6$ (562.84). **Source:** QIAN SHI GEN *Euryale ferox*. **Ref:** 1509.

**14241 Methylcimicifugoside**

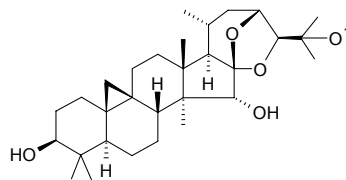
$C_{38}H_{56}O_{11}$ (688.86). **Source:** YE SHENG MA *Cimicifuga simplex*. **Ref:** 6.

**14242 15-O-Methylcimigenol**

[24399-56-2] $C_{31}H_{50}O_5$ (502.74). Crystals, mp 199.5~200.5°C, $[\alpha]_D = +38.9^\circ$ (CHCl_3). **Source:** SAN MIAN DAO *Cimicifuga acerina*. **Ref:** 6, 1521.

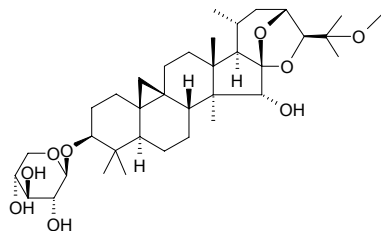
**14243 25-O-Methylcimigenol**

[20528-90-9] $C_{31}H_{50}O_5$ (502.74). Crystals, mp 218~219°C, $[\alpha]_D = +39.25^\circ$ (CHCl_3). **Source:** SAN MIAN DAO *Cimicifuga acerina*, YE SHENG MA *Cimicifuga simplex*. **Ref:** 1521, 2215.

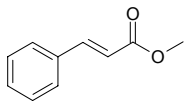


14244 25-O-Methylcimigenoside

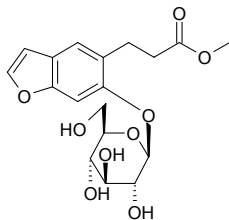
[27994-13-4] C₃₆H₅₈O₉ (634.86). Crystals, mp 268~270°C. Source: RI BEN SHENG MA *Cimicifuga japonica*, SAN MIAN DAO *Cimicifuga acerina*, YE SHENG MA *Cimicifuga simplex*. Ref: 6, 1521.

**14245 Methylcinnamate**

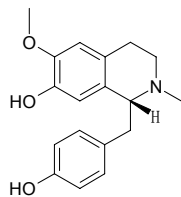
[103-26-4] C₁₀H₁₀O₂ (162.19). mp 36.5°C, bp 261°C/750mmHg. Source: DA CAO KOU *Alpinia speciosa*, DA LIANG JIANG *Alpinia galanga*, GAO LIANG JIANG *Alpinia officinarum*, LUO LE *Ocimum basilicum*, SONG XUN *Tricholoma matsutake* [Syn. *Armillaria matsutake*]. Ref: 6.

**14246 Methylnidioside A**

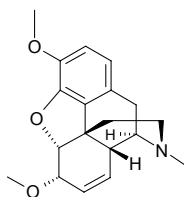
C₁₈H₂₂O₉ (382.37). Glassy powder, mp 146~147°C, [α]_D²⁵ = -46.87° (c = 0.32, MeOH). Source: CHOU CAO *Ruta graveolens* (dried aerial parts). Ref: 3073.

**14247 D-N-Methyl coclaurine**

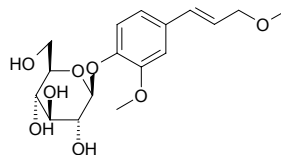
C₁₈H₂₁NO₃ (299.37). mp 94.5~95.0°C. Source: HE YE *Nelumbo nucifera*, HENG ZHOU WU YAO *Cocculus laurifolius*. Ref: 6.

**14248 6-Methylcodeine**

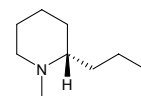
C₁₉H₂₃NO₃ (313.40). Source: YA PIAN *Papaver somniferum*. Ref: 6.

**14249 Methylconiferin**

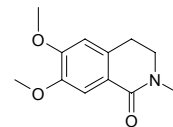
3'-O-Methylconiferin C₁₇H₂₄O₈ (356.38). White acicular crystals, mp 167~169°C, [α]_D²¹ = -69.5° (c = 0.1, H₂O). Source: TONG QIAO SHE GU *Balanophora involucrata*. Ref: 490.

**14250 (+)-N-Methylconiine**

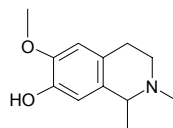
C₉H₁₉N (141.26). Pharm: Toxin. Source: DU SHEN *Conium maculatum*. Ref: 658.

**14251 N-Methylcorydaldine**

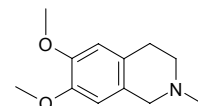
C₁₂H₁₃NO₃ (221.26). Source: BIAN FU GE GEN *Menispermum dauricum*, DA HONG YING SU *Papaver bracteatum*, FEN SHI TANG SONG CAO *Thalictrum fendleri*, LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*], *Papaver urbanianum*. Ref: 1521, 3792.

**14252 1-Methyl-corypalline**

1,2,3,4-Tetrahydro-6-methoxy-7-hydroxy-1,2-dimethylisoquinoline C₁₂H₁₇NO₂ (207.27). Source: LIAN ZI XIN *Nelumbo nucifera*, DONG BEI YAN HU SUO *Corydalis ambigua* var. *amurensis* [Syn. *Corydalis ambigua*]. Ref: 1478, 1479.

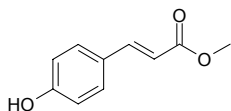
**14253 O-Methyl-corypalline**

1,2,3,4 Tetrahydro-6,7-dimethoxy-2-methylisoquinoline [16620-96-5] C₁₂H₁₇NO₂ (207.27). Source: LIAN ZI XIN *Nelumbo nucifera*. Ref: 6.

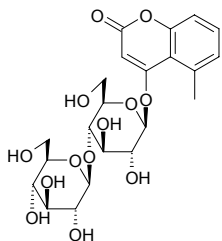


14254 trans-Methyl p-coumarate

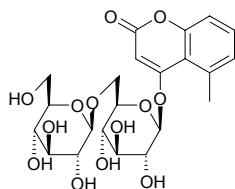
Methyl-*p*-hydroxycinnamate [3943-97-3] C₁₀H₁₀O₃ (178.19). Colorless acicular crystals, mp 216~220°C (Me₂CO). **Pharm:** Cytotoxic (P₃₈₈ cell line, ED₅₀ = 10.5 μg/mL, control Mithramycin, ED₅₀ = 0.06 μg/mL; HT29, ED₅₀ = 8.9 μg/mL, Mithramycin, ED₅₀ = 0.07 μg/mL; A549, ED₅₀ = 15.1 μg/mL, Mithramycin, ED₅₀ = 0.08 μg/mL)^[5405]; cytotoxic (Colon26-L5, ED₅₀ = 84.2 μmol/L; HT1080, ED₅₀ > 100 μmol/L)^[3042]; cytotoxic inactive (*in vitro*, HONE-1 and NUGC cancer cell lines, no significant activity)^[3069]; phytoalexin^[4727]. **Source:** HUANG GUA *Cucumis sativus* (leaf)^[4727], JIA BAI HE *Notholirion hyacinthinum* [Syn. *Notholirion bulbuliferum*], KAI KOU JIAN *Tupistra chinensis* (underground part)^[4676], RI BEN HUANG BAI *Phellodendron japonicum* (leaf), SHAN HUANG PI *Clausena excavata*, SI ROU TUO GUO YE MI ZHU YU *Melicope semecarpifolia*, TAI WAN FU RONG *Hibiscus taiwanensis*, TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.00017%dw)^[4722], YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00076%^[3042]), ZHONG GUO XIU QIU *Hydrangea chinensis* (root)^[3069]. **Ref:** 663, 703, 2529, 3042, 3069, 4502, 4676, 4722, 4727, 5405.

**14255 5-Methylcoumarin-4-cellobioside**

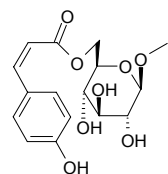
[109974-31-4] C₂₂H₂₈O₁₃ (500.46). Acicular crystals, mp 217~219°C, [α]_D²¹ = -94° (c = 0.515, methanol). **Pharm:** Antibacterial (*Bacillus coli* and *Staphylococcus aureus*, EC = 500 μg/mL). **Source:** DA DING CAO *Gerbera anandria* [Syn. *Leibnitzia anandria*]. **Ref:** 77, 921.

**14256 5-Methylcoumarin-4-gentiobioside**

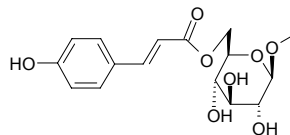
[109974-32-5] C₂₂H₂₈O₁₃ (500.46). Acicular crystals, mp 155~157°C, [α]_D²¹ = -80° (c = 0.902, methanol). **Pharm:** Antibacterial (*Staphylococcus aureus*, 500 μg/mL). **Source:** DA DING CAO *Gerbera anandria* [Syn. *Leibnitzia anandria*]. **Ref:** 77.

**14257 Methyl 6-O-p-cis-coumaroyl-β-D-glucopyranoside**

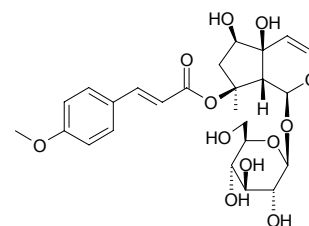
C₁₆H₂₀O₈ (340.33). **Source:** LV DOU *Onobrychis viciifolia* (leaf). **Ref:** 5084.

**14258 Methyl 6-O-p-trans-coumaroyl-β-D-glucopyranoside**

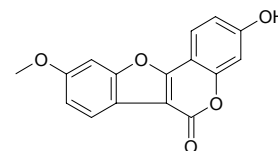
C₁₆H₂₀O₈ (340.33). **Source:** LV DOU *Onobrychis viciifolia* (leaf). **Ref:** 5084.

**14259 8-(O-Methyl-p-coumaroyl)harpagide**

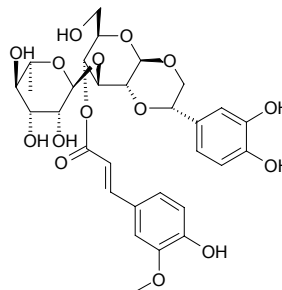
C₂₅H₃₂O₁₂ (524.53). **Source:** BEI XUAN SHEN *Scrophularia buergeriana*. **Ref:** 1377.

**14260 12-O-Methylcoumestrol**

C₁₆H₁₀O₅ (282.2). **Source:** HUI HUI DOU *Cicer arietinum*. **Ref:** 6.

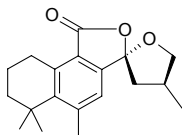
**14261 3'''-O-Methylcrenatoside**

3'-Methyl crenatoside; 1,2-*O*-[2*S*-(3,4-Dihydroxyphenyl)-1,2-ethanediyl]-3-*O*-*α*-*L*-rhamnopyranosyl-4-*O*-feruloyl-β-*D*-glucopyranoside C₃₀H₃₆O₁₅ (636.61). White amorphous powder, mp 224~226°C, [α]_D²⁰ = -53.2° (c = 0.37, MeOH); [α]_D²⁶ = -23° (c = 0.44, MeOH). **Pharm:** Antioxidant (relative potency = 1.4, compared with resveratrol, relative potency = 1)^[4920]; antiviral inactive (Vero cell lines infected with HSV-2 strain 333, 250 μg/mL)^[4752]; ACE inhibitor (1.0 mg/mL, InRt = 99.8%; 0.1 mg/mL, InRt = 67.5%; 0.01 mg/mL, InRt = 32.5%; control Captopril, 0.01 mg/mL, InRt = 97.7%)^[4752]. **Source:** LIE DANG *Orobanche coerulescens* (whole herb), NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.0014%dw). **Ref:** 4752, 4920.

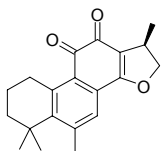


14262 6-Methylcryptoacetalide

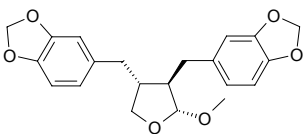
$C_{19}H_{24}O_3$ (300.40). Source: AI JI SHU WEI CAO *Salvia aegyptiaca*. Ref: 1919.

**14263 6-Methylcryptotanshinone**

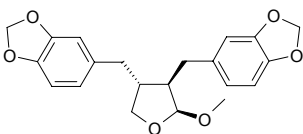
14,16-Epoxy-6-methyl-5(10),6,8,13-abietatetraene-11,12-dione $C_{20}H_{22}O_3$ (310.40). Source: AI JI SHU WEI CAO *Salvia aegyptiaca*. Ref: 1919.

**14264 α -O-Methylcubebin**

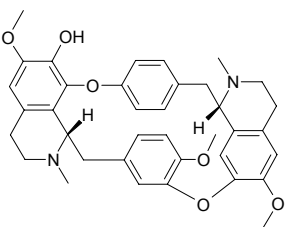
$C_{21}H_{22}O_6$ (370.41). Pharm: CYP3A4 inhibitor and CYP2D6 inhibitor (*in vitro*, CYP3A4, $IC_{50} = 7.7 \mu\text{mol/L}$; CYP2D6, $IC_{50} > 100 \mu\text{mol/L}$; control Ketoconazole, CYP3A4, $IC_{50} = 0.72 \mu\text{mol/L}$; control Quinidine, CYP2D6, $IC_{50} = 0.082 \mu\text{mol/L}$)^[4797]. Source: BI CHENG QIE *Piper cubeba* (fruit: yield = 0.00012%dw), QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.0001%dw). Ref: 4783, 4797.

**14265 β -O-Methylcubebin**

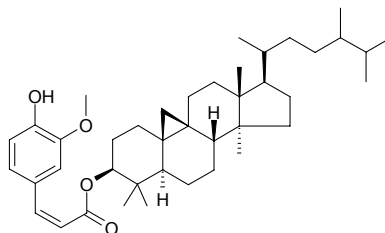
$C_{21}H_{22}O_6$ (370.41). Source: QIANG DAO YAO *Hypoestes purpurea* [Syn. *Justicia purpurea*; *Hypoestes sinica*] (aerial parts: yield = 0.000055%dw). Ref: 4783.

**14266 (+)-4''-O-Methylcurine**

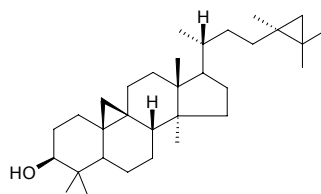
$C_{37}H_{40}N_2O_6$ (608.74). mp 164°C. Source: XI SHENG TENG *Cissampelos pareira*. Ref: 6.

**14267 24-Methylcycloartanol ferulate**

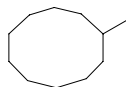
$C_{41}H_{62}O_4$ (618.95). Source: MI PI KANG *Oryza sativa*. Ref: 6.

**14268 (24S)-24-Methyl-25,32-cyclo-cycloartane-3 β -ol**

$C_{32}H_{54}O$ (454.79). Amorphous powder, $[\alpha]_D^{20} = +38.8^\circ$ ($c = 0.54$, CHCl_3). Source: *Pandanus boninensis* (leaf). Ref: 5333.

**14269 Methyl cyclodecane**

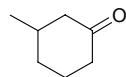
$C_{11}H_{22}$ (154.30). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. Ref: 2.

**14270 Methylcyclohexane**

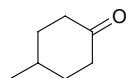
Hexahydrodoluene [108-87-2] C_7H_{14} (98.19). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

**14271 3-Methylcyclohexanone**

[591-24-2] $C_7H_{12}O$ (112.17). Source: JING JIE *Schizonepeta tenuifolia* [Syn. *Nepeta tenuifolia*]. Ref: 2.

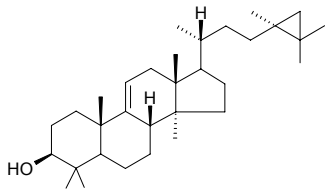
**14272 4-Methylcyclohexanone**

[589-92-4] $C_7H_{12}O$ (112.17). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 2.

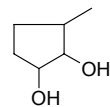


14273 (24S)-24-Methyl-25,32-cyclo-5 α -lanosta-9(11)-en-3 β -ol

C₃₂H₅₄O (454.79). Colorless fine crystals, mp 211~212°C (MeOH), [α]_D²⁰ = +69.6° (c = 1.00, CHCl₃). Source: *Pandanus boninensis* (leaf). Ref: 5333.

**14274 3-Methyl-1,2-cyclopentenediol**

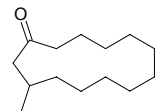
[27583-37-5] C₆H₁₂O₂ (116.16). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

**14275 2-Methylcyclopentanone**

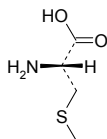
[1120-72-5] C₆H₁₀O (98.15). Source: CHAI HU *Bupleurum chinense*. Ref: 2.

**14276 3-Methylcyclotridecan-1-one**

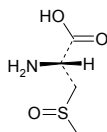
C₁₄H₂₆O (210.36). Source: SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. Ref: 2.

**14277 S-Methyl cysteine**

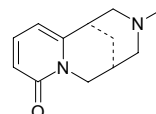
C₄H₉NO₂S (135.19). Source: YANG CONG *Allium cepa*. Ref: 1469.

**14278 S-Methyl-L-cysteine sulfoxide**

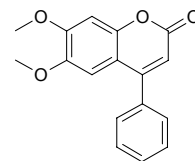
C₄H₉NO₃S (151.19). mp (+) 164°C (dec). Source: DA SUAN *Allium sativum*, YANG CONG *Allium cepa*. Ref: 6, 1470.

**14279 N-Methylcytisine**

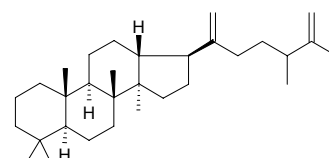
(-)-N-Methylcytisine; Caulophyllin; (1R)-1,2,3,4,5,6-Hexahydro-3-methyl-1,5-methano-8H-pyrido[1,2-a][1,5]diazocin-8-one [486-86-2] C₁₂H₁₆N₂O (204.27). mp (-) 137°C. Pharm: Molluscicide (toxic to snails). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*], LIAN HUA JIN QUE *Cytisus laburnum*, YING ZHAO DOU *Spartium junceum*. Ref: 2, 658.

**14280 O-Methylalbergin**

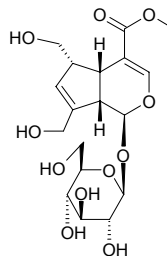
C₁₇H₁₄O₄ (282.30). mp 145~146°C. Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 6.

**14281 21-Methyldammara-18(28),22(29)-diene**

C₃₁H₅₂ (424.76). Source: XING JUE *Microsorium punctatum*. Ref: 1506.

**14282 6-O-Methyldeacetylasperulosidic acid methyl ester**

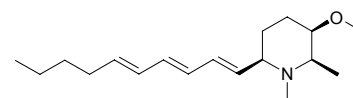
C₁₈H₂₆O₁₁ (418.40). Amorphous powder, [α]_D²⁵ = +49.0° (c = 1.09, MeOH), artifact. Source: ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*] (leaf). Ref: 4408.

**14283 Methyl(2E,8Z)-decadien-4,6-dienoate**

C₁₁H₁₆O₂ (174.20). Source: YI ZHI HUANG HUA *Solidago virgaurea* var. *leiocarpa* [Syn. *Solidago decurrens*]. Ref: 1281.

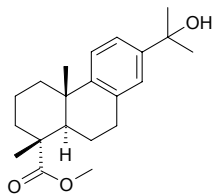
**14284 N-Methyl-6 β -(deca-1',3',5'-trienyl)-3 β -methoxy-2 β -methylpiperidine**

C₁₈H₃₁NO (277.45). mp 52~53°C, [α]_D²² = +29.2°. Pharm: Insecticidal (*Aedes aegypti* second instar larvae, MC₅₀ = 1.0mg/L, LC₅₀ = 2.1mg/L at 24h). Source: PO BU YE *Microcos paniculata* [Syn. *Grewia microcos*] (stem cortex). Ref: 3948.

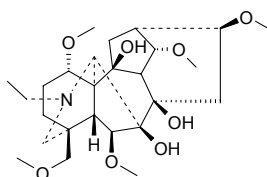


14285 Methyl dehydro-15-hydroxy-abietan-18-oate

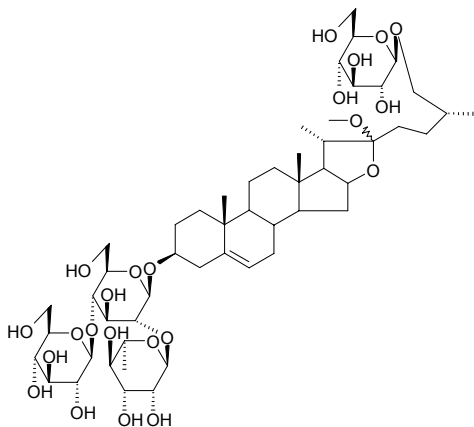
$C_{21}H_{30}O_3$ (330.47). Source: HAI SONG ZI *Pinus koraiensis*. Ref: 6.

**14286 18-O-Methyldeleterine**

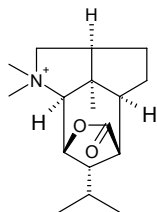
$C_{26}H_{43}NO_8$ (497.63). Source: GAO DA CUI QUE HUA *Delphinium excelsum*. Ref: 2055.

**14287 Methyl deltoside**

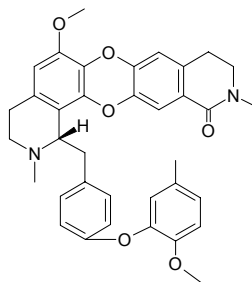
$C_{52}H_{86}O_{23}$ (1079.25). White powder, mp 220~224°C, $[\alpha]_D^{26.6} = -64.44^\circ$ ($c = 0.225$, pyridine). Source: XIAO HUA DUN YE SHU YU *Dioscorea parviflora* (fresh rhizome). Ref: 4858.

**14288 N-Methyl dendrobium**

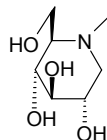
N-Methyl dendrobine $C_{17}H_{28}NO_2^+$ (278.42). Source: SHI HU⁽⁴⁾ *Dendrobium nobile*, SHI SUAN *Lycoris radiata* [Syn. *Amaryllis radiata*]. Ref: 6, 1521.

**14289 O-Methyldeoxopunjabine**

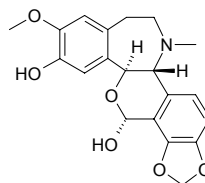
[89503-80-8] $C_{36}H_{36}N_2O_6$ (592.70). Source: TAI WAN QIAN JIN TENG *Stephania sasakii*. Ref: 1314.

**14290 N-Methyl-1-deoxynojirimycin**

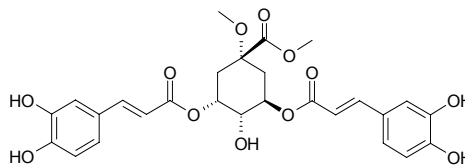
[69567-10-8] $C_7H_{15}NO_4$ (177.20). Pharm: Hypoglycemic (mus diabetes mellitus induced by SIZ, distinct effect). Source: SANG ZHI *Morus alba*. Ref: 2170.

**14291 N-Methyl-14-O-desmethyl-epiporphyroxine**

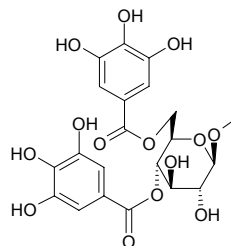
$C_{20}H_{21}NO_6$ (371.39). Source: YA PIAN *Papaver somniferum*. Ref: 6.

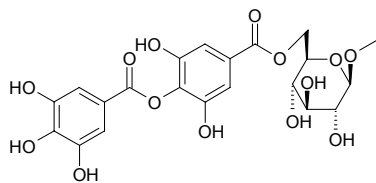
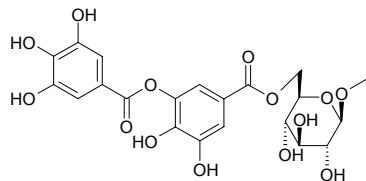
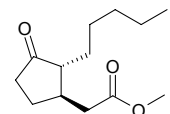
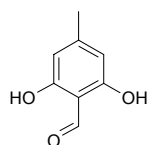
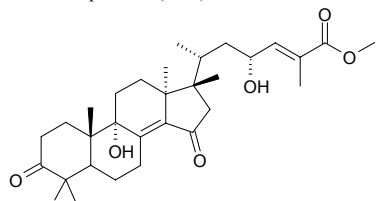
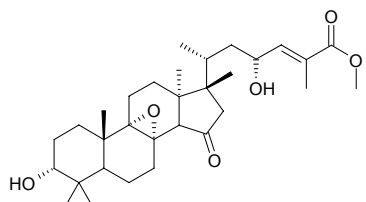
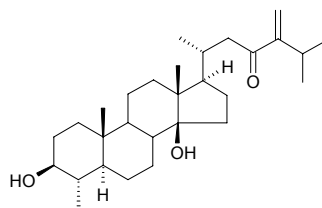
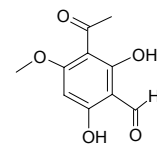
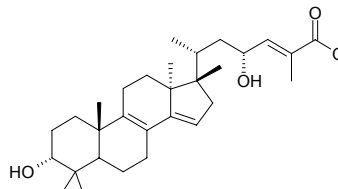
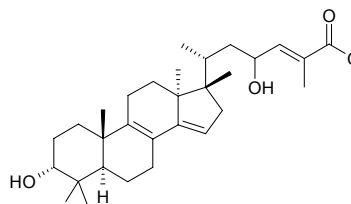
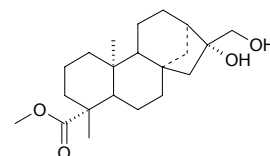
**14292 1-O-Methyl-3,5-O-dicaffeoyl quinic acid methyl ester**

$C_{27}H_{28}O_{12}$ (544.52). Yellowish powder, mp 132~134°C, $[\alpha]_D^{20} = -34.7^\circ$ (MeOH). Source: DENG ZHAN XI XIN *Erigeron breviscapus*. Ref: 875, 2083.

**14293 Methyl 4,6-di-O-galloyl-β-D-glucopyranoside**

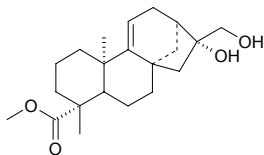
$C_{21}H_{22}O_{14}$ (498.40). Source: DI YU *Sanguisorba officinalis*. Ref: 1327.



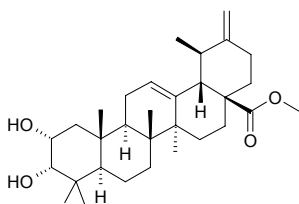
14294 Methyl 6-*O*-digalloyl- β -D-glucopyranoside IC₂₁H₂₂O₁₄ (498.40). Source: DI YU *Sanguisorba officinalis*. Ref: 1327.**14295 Methyl 6-*O*-digalloyl- β -D-glucopyranoside II**C₂₁H₂₂O₁₄ (498.40). Source: DI YU *Sanguisorba officinalis*. Ref: 1327.**14296 Methyl dihydrojasmonate**[2630-39-9] C₁₃H₂₂O₃ (226.32). Source: ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*]. Ref: 1360.**14297 4-Methyl-2,6-dihydroxy-benzaldehyde**C₈H₈O₃ (152.15). Yellow needles. Source: JIN SI SHUA *Lethariella cladonioides*. Ref: 4582.**14298 Methyl (24*E*)-9 α ,23 α -dihydroxy-3,15-dioxo-17,15-friedo-lanostan-8(14),24-dien-26-oate**C₃₁H₄₆O₆ (514.71). Yellowish gum. Source: MEI LI TENG HUANG *Garcinia speciosa* (bark). Ref: 4790.**14299 Methyl (24*E*)-3 α ,23 α -dihydroxy-8 α ,9 α -epoxy-15-oxo-17,14-friedo-lanostan-24-en-26-oate**C₃₁H₄₈O₆ (516.72). Gum, [α]_D²⁵ = -3° (*c* = 0.018, CHCl₃). Source: MEI LI TENG HUANG *Garcinia speciosa* (bark). Ref: 3762.**14300 4 α -Methyl-3 β ,14 β -dihydroxy-5 α -ergost-24(28)-en-23-one**C₂₉H₄₈O₃ (444.70). White solid, mp 150~151°C, [α]_D²⁵ = +66.2° (*c* = 0.09, MeOH). Pharm: Cytotoxic inactive (hmn prostate cancer LNCaP cell line, EC₅₀ = 38.4 μ g/mL). Source: *Nephthea chabroli*. Ref: 4375.**14301 Methyl(2,4-dihydroxy-3-formyl-6-methoxy)phenylketone**C₁₀H₁₀O₅ (210.19). Source: GAN SUI *Euphorbia kansui*. Ref: 1303.**14302 Methyl (24*E*)-3 α ,23 α (=*R*)-dihydroxy-17,14-friedo-lanostan-8,14,24-trien-26-oate**C₃₁H₄₈O₄ (484.73). Source: MEI LI TENG HUANG *Garcinia speciosa* (bark). Ref: 3762.**14303 Methyl (24*E*)-3 α ,23-dihydroxy-17,14-friedolanstan-8,14,24-trien-26-oate**C₃₁H₄₈O₄ (484.73). White powder, mp 112~113°C, [α]_D²⁹ = -35° (*c* = 0.28, MeOH). Source: SHAN FENG GUO *Garcinia hombroniana* (pericarp). Ref: 5085.**14304 Methyl 16 α ,17-dihydroxy-*ent*-kauran-19-oate**C₂₁H₃₄O₄ (350.50). Pharm: Antiproliferative and cytotoxic (*in vitro*, L-929, GI₅₀ = 39.5 μ g/mL; K562, GI₅₀ = 27.7 μ g/mL; HeLa, CC₅₀ = 40.5 μ g/mL; control Paclitaxel, L-929, GI₅₀ = 0.1 μ g/mL; K562, GI₅₀ = 0.01 μ g/mL; HeLa, CC₅₀ = 0.01 μ g/mL). Source: MU LAN⁽³⁾ *Bruguiera gymnorrhiza* (stem: yield = 0.00019%). Ref: 4770.

14305 Methyl 16 α ,17-dihydroxy-ent-9(11)-kauren-19-oate

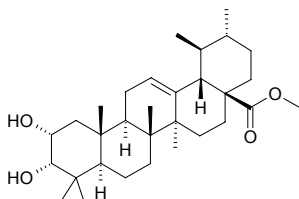
$C_{21}H_{32}O_4$ (348.49). **Pharm:** Antiproliferative and cytotoxic (*in vitro*, L-929, $GI_{50} = 41.9 \mu\text{g/mL}$; K562, $GI_{50} = 26.7 \mu\text{g/mL}$; HeLa, $CC_{50} = 38.7 \mu\text{g/mL}$; control Paclitaxel, L-929, $GI_{50} = 0.1 \mu\text{g/mL}$; K562, $GI_{50} = 0.01 \mu\text{g/mL}$; HeLa, $CC_{50} = 0.01 \mu\text{g/mL}$). **Source:** MU LAN⁽³⁾ *Bruguiera gymnorrhiza* (stem; yield = 0.00046%). **Ref:** 4770.

**14306 Methyl 2 α ,3 α -dihydroxyursa-12,20(30)-dien-28-oate**

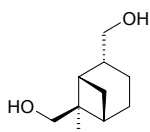
$C_{31}H_{48}O_4$ (484.73). **Source:** XIA KU CAO *Prunella vulgaris*. **Ref:** 2508.

**14307 Methyl 2 α ,3 α -dihydroxyursa-12-en-28-oate**

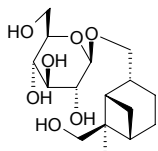
$C_{31}H_{50}O_4$ (486.74). **Source:** XIA KU CAO *Prunella vulgaris*. **Ref:** 2508.

**14308 6 α -Methyl-2 α ,6 β -dihydroxymethylbicyclo[3.1.1]heptane**

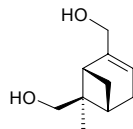
$C_{10}H_{18}O_2$ (170.25). **Source:** YI ZHU QIAN MA *Urtica dioica*. **Ref:** 1433.

**14309 6 α -Methyl-2 α ,6 β -dihydroxymethylbicyclo[3.1.1]heptane-2 α -O-glucoside**

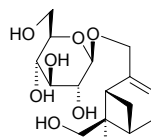
$C_{16}H_{28}O_7$ (332.40). **Source:** YI ZHU QIAN MA *Urtica dioica*. **Ref:** 1433.

**14310 6 α -Methyl-2,6 β -dihydroxymethylbicyclo[3.1.1]hept-2-ene**

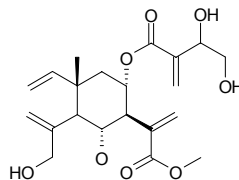
$C_{10}H_{16}O_2$ (168.24). **Source:** YI ZHU QIAN MA *Urtica dioica*. **Ref:** 1433.

**14311 6 α -Methyl-2,6 β -dihydroxymethylbicyclo[3.1.1]hept-2-ene-2 β -O-glucoside**

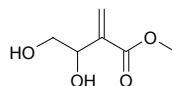
$C_{16}H_{26}O_7$ (330.38). **Source:** YI ZHU QIAN MA *Urtica dioica*. **Ref:** 1433.

**14312 Methyl 8 α -(3,4-dihydroxy-2-methylene-butanoyloxy)-6 α ,15-dihydroxyelema-1,3,11(13)-trien-12-oate**

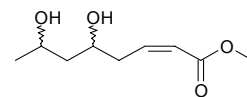
$C_{21}H_{30}O_8$ (410.47). **Source:** *Centaurea thessala* ssp. *drakiensis* (aerial parts), *Centaurea attica* ssp. *attica* (aerial parts). **Ref:** 5115.

**14313 Methyl β , γ -dihydroxy- α -methylene butylate**

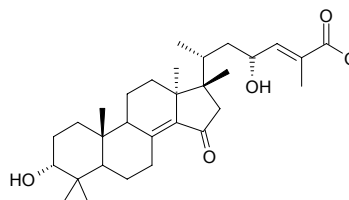
$C_6H_{10}O_4$ (146.14). **Source:** XIAO YE HUA *Spiraea prunifolia*. **Ref:** 6.

**14314 Methyl-5,7-dihydroxy-2(Z)-octenoate**

$C_9H_{16}O_4$ (188.23). **Source:** YE YA CHUN *Euscaphis japonica*. **Ref:** 2204.

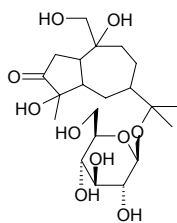
**14315 Methyl (24E)-3 α ,23 α -dihydroxy-15-oxo-17,14-friedo-lanostan-8(14),24-dien-26-oate**

$C_{31}H_{48}O_5$ (500.73). Gum, $[\alpha]_D^{28} = -34^\circ$ ($c = 0.021$, CHCl_3). **Source:** MEI LI TENG HUANG *Garcinia speciosa* (bark). **Ref:** 3762.



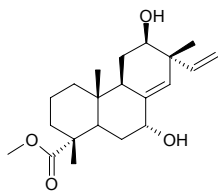
14316 2-(8-Methyl-2,8-dihydroxy-9-oxo-2-hydroxymethylbicyclo[5.3.0]decan-7-yl)isopropanol glucoside

$C_{21}H_{36}O_{10}$ (448.52). Source: CANG ZHU *Atractylodes lancea*. Ref: 660.



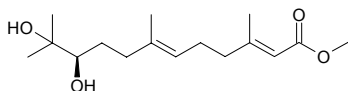
14317 Methyl 7 α ,12 β -dihydroxysandaracopimarate

$C_{21}H_{32}O_4$ (348.49). Colorless oil, $[\alpha]_D = +14.3^\circ$ ($c = 1.2$, $CHCl_3$). Source: FEI NI JI CI BAI *Juniperus phoenicea* (leaf), XIANG CI BAI FEI ZHOU BIAN ZHONG *Juniperus thurifera* var. *africana* (leaf). Ref: 3851.



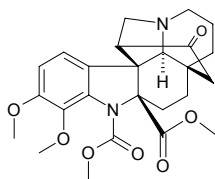
14318 Methyl (2E,6E,10R)-10,11-dihydroxy-3,7,11-trimethyl-2,6-dodecadienoate

$C_{16}H_{28}O_4$ (284.40). Colorless oil, $[\alpha]_D = +8^\circ$ ($c = 1.3$), $[\alpha]_D = +18.9^\circ$ ($c = 0.1$, MeOH). Source: *Lettowianthus stellatus* (root cortex). Ref: 3944.



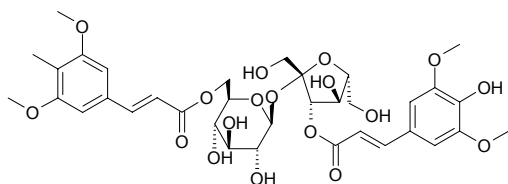
14319 Methyl 11,12-dimethoxychanofrucosinate

$C_{25}H_{30}N_2O_7$ (470.53). Source: HUANG HONG SE RUI MU *Kopsia flavida* (leaf). Ref: 5157.



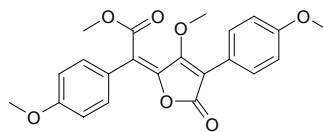
14320 α -D-(6-O-4-Methyl-3,5-dimethoxycinnamoyl)-glucopyranosyl-(1 \rightarrow 2)- β -D-(3-O-sinapoyl)-fructofuranose

$C_{35}H_{44}O_{18}$ (752.73). Yellowish amorphous powder (MeOH). Source: YUAN ZHI *Polygala tenuifolia* (root). Ref: 4896.



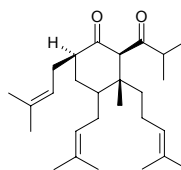
14321 Methyl 4,4'-dimethoxyvulpinate

$C_{22}H_{20}O_7$ (396.40). mp 172~173°C. Pharm: Anti-HSV-1 inactive; cytotoxic inactive (Hmn lung cancer cells NCI-H187). Source: HUANG YING PI MA BO *Scleroderma citrinum*. Ref: 5406.



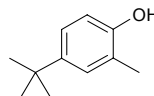
14322 (2R,3R,4S,6S)-3-Methyl-4,6-di(3-methyl-2-butenyl)-2-(2-methyl-1-oxopropyl)-3-(4-methyl-3-pentenyl)-cyclohexanone

$C_{27}H_{44}O_2$ (400.65). Colorless viscous oil, $[\alpha]_D^{22} = +18.3^\circ$ ($c = 1.8$, $CHCl_3$). Source: GUAN YE LIAN QIAO *Hypericum perforatum* (aerial parts: yield = 0.00020%dw). Ref: 3032.



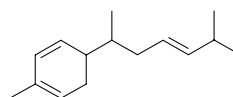
14323 2-Methyl-4-(1,1-dimethylethyl) phenol

[98-27-1] $C_{11}H_{16}O$ (164.25). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 2.



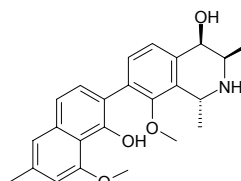
14324 2-Methyl-5-(1,5-dimethyl-3-hexenyl)-1,3-cyclohexadiene

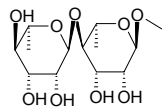
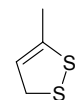
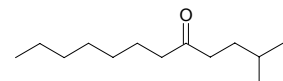
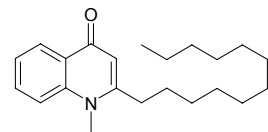
$C_{15}H_{24}$ (204.36). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 2.



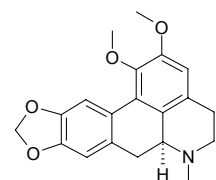
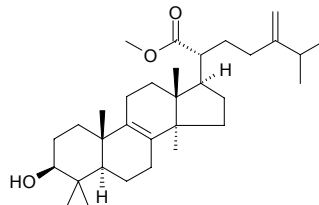
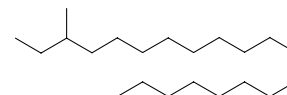
14325 8-O-Methylidioncophyllinol B

$C_{24}H_{27}NO_4$ (393.49). Yellow solid, $[\alpha]_D^{25} = -12.8^\circ$ ($c = 0.7$, $CHCl_3$). Pharm: Antimalarial (*Plasmodium falciparum* K1, $IC_{50} = 654$ ng/mL, NF54, $IC_{50} = 245$ ng/mL, MIC = 90 μ g/mL). Source: SAN YE MU *Triphyophyllum peltatum* (leaf). Ref: 3962.

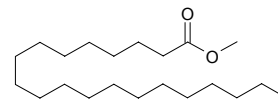


14326 Methyl di- α -L-rhamnosideC₁₃H₂₄O₉ (324.33). Source: LI CAI *Ulva conglobata*. Ref: 1497.**14327 3-Methyl-1,2-dithia-3-cyclopentene**C₄H₆S₂ (118.22). Source: DA SUAN *Allium sativum*. Ref: 1394.**14328 4-Methyl-1,2-dithio-3-cyclopentene**C₄H₆S₂ (118.22). Source: DA SUAN *Allium sativum*. Ref: 2.**14329 5-Methyl-1,2-dithio-3-cyclopentene**C₄H₆S₂ (118.22). Source: DA SUAN *Allium sativum*. Ref: 2.**14330 2-Methyl-dodecane-5-one**C₁₃H₂₆O (198.35). Source: DANG GUI *Angelica sinensis*. Ref: 2.**14331 1-Methyl-2-dodecyl-4(1H)-quinolone**C₂₂H₃₃NO (327.51). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 877, 2085.**14332 O-Methyl domesticine**

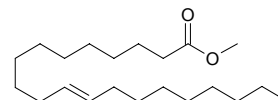
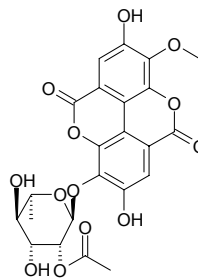
(+)-Nantenine [2565-01-7] C₂₀H₂₁NO₄ (339.39). mp (+) 138~139°C, mp 139~141°C, [α]_D = +93° (c = 0.17, CHCl₃). Source: NAN TIAN ZHU ZI *Nandina domestica*, NAN TIAN ZHU GEN *Nandina domestica*, NAN TIAN ZHU GENG *Nandina domestica*. Ref: 6, 1521, 2780.

**14333 Methyl eburicoate**C₃₂H₅₂O₃ (484.77). Source: BAO PI GU *Lentinus lepideus*. Ref: 1501.**14334 3-Methyl eicosane**C₂₁H₄₄ (296.58). Source: BAN XIA *Pinellia ternata*. Ref: 1401.**14335 Methyl eicosanoate**

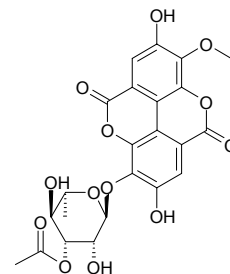
C₂₁H₄₂O₂ (326.57). Source: LIAO DONG CONG MU *Aralia elata*, QIANG HUO *Notopterygium incisum*, ZHI ZHU XIANG *Valeriana jatamansii* [Syn. *Valeriana wallichii*]. Ref: 1450, 1354, 1451, 1452.

**14336 Methyl 11-eicosenoate**

Methyl eicos-11-enoate C₂₁H₄₀O₂ (324.55). Source: QIANG HUO *Notopterygium incisum*, WU JING GAN LAN *Brassica napus* var. *napobrassica*, XI MING ZI *Thlaspi arvense*. Ref: 1484, 1354.

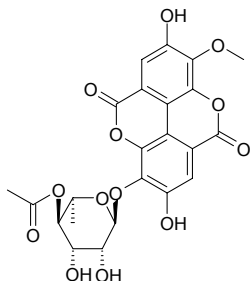
**14337 3-O-Methylellagic acid 3'-O- α -2''-O-acetylramnopyranoside**C₂₃H₂₀O₁₃ (504.41). Yellow powder. Source: AN YE *Eucalyptus globulus*. Ref: 737.**14338 3-O-Methylellagic acid 3'-O- α -3''-O-acetylramnopyranoside**

C₂₃H₂₀O₁₃ (504.41). Yellow powder. Source: AN YE *Eucalyptus globulus*. Ref: 737.

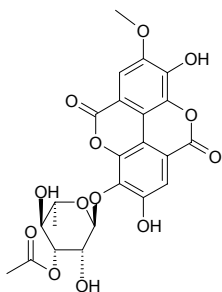


14339 3-O-Methylellagic acid 3'-O-4''-O-acetyl-rhamnopyranoside

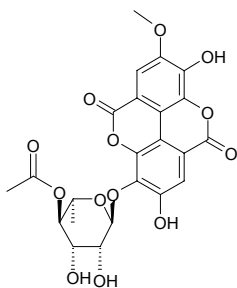
$C_{23}H_{20}O_{13}$ (504.41). Yellow powder. Source: AN YE *Eucalyptus globulus*. Ref: 737.

**14340 4-O-Methylellagic acid 3'-(3''-O-acetyl)- α -rhamnoside**

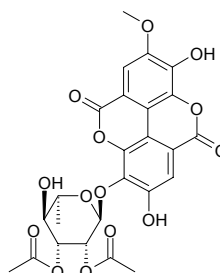
$C_{23}H_{20}O_{13}$ (504.41). Yellow amorphous solid, $[\alpha]_D^{25} = -57.9^\circ$ ($c = 0.011$, MeOH). Pharm: Antibacterial (*in vitro*, *Babesia gibsoni*, $IC_{50} = 52.1 \mu\text{g/mL}$; control Diminazene aceturate, $IC_{50} = 0.60 \mu\text{g/mL}$). Source: XIAO YE DU YING *Elaeocarpus parvifolius* (bark). Ref: 5324.

**14341 4-O-Methylellagic acid 3'-(4''-O-acetyl)- α -rhamnoside**

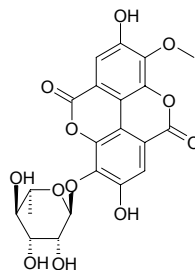
$C_{23}H_{20}O_{13}$ (504.41). Yellow amorphous solid, $[\alpha]_D^{25} = -20.7^\circ$ ($c = 0.19$, MeOH). Pharm: Antibacterial (*in vitro*, *Babesia gibsoni*, $IC_{50} > 180 \mu\text{g/mL}$; control Diminazene aceturate, $IC_{50} = 0.60 \mu\text{g/mL}$). Source: XIAO YE DU YING *Elaeocarpus parvifolius* (bark). Ref: 5324.

**14342 4'-O-Methylellagic acid 3-(2'',3''-di-O-acetyl)- α -L-rhamnoside**

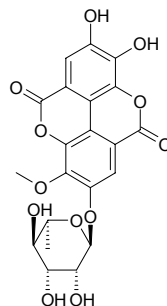
4-O-Methylellagic acid 3'-(2'',3''-di-O-acetyl)-3'- α -rhamnoside $C_{25}H_{22}O_{14}$ (546.45). Needles (MeOH), mp 217~218°C, $[\alpha]_D = -24.0^\circ$ ($c = 0.1$, MeOH); yellow amorphous solid, $[\alpha]_D^{25} = -25.9^\circ$ ($c = 0.32$, MeOH). Pharm: Cytotoxic ($ED_{50} > 5 \text{mg/mL}$, inactive according to the protocols established by Likitwitayawuid et al., 1993 and Seo et al., 2001); antibacterial (*in vitro*, *Babesia gibsoni*, $IC_{50} = 28.5 \mu\text{g/mL}$; control Diminazene aceturate, $IC_{50} = 0.60 \mu\text{g/mL}$)^[5324]. Source: MA SI TE SI DU YING *Elaeocarpus mastersii*, XIAO YE DU YING *Elaeocarpus parvifolius* (bark). Ref: 2020, 5324.

**14343 3-O-methylellagic acid 3'-O- α -L-rhamnopyranoside**

$C_{21}H_{18}O_{12}$ (462.34). Yellow powder. Source: AN YE *Eucalyptus globulus*. Ref: 737.

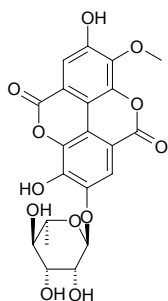
**14344 3-O-Methylellagic acid 4-O- α -L-rhamnopyranoside**

$C_{21}H_{18}O_{12}$ (462.37). $[\alpha]_D = -30^\circ$ ($c = 0.1$, MeOH). Source: SHI LIU XIN CAI *Punica granatum*. Ref: 5415.

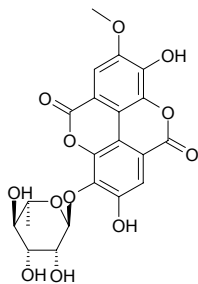


14345 3-O-Methylelagic acid 4'-O- α -L-rhamnopyranoside

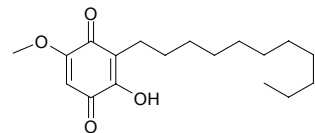
$C_{21}H_{18}O_{12}$ (462.37). Source: YOU GAN YE *Phyllanthus emblica* (leaf and branch). Ref: 4205.

**14346 4-O-Methylelagic acid 3'- α -rhamnoside**

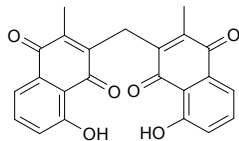
$C_{21}H_{18}O_{12}$ (462.32). Pale yellow needle-shaped crystals, $[\alpha]_D^{25} = -30.8^\circ$ ($c = 0.036$, MeOH). Pharm: Antibacterial (*in vitro*, *Babesia gibsoni*, $IC_{50} > 180 \mu\text{g/mL}$; control Diminazene aceturate, $IC_{50} = 0.60 \mu\text{g/mL}$). Source: XIAO YE DU YING *Elaeocarpus parvifolius* (bark). Ref: 5324.

**14347 5-O-Methylembelin**

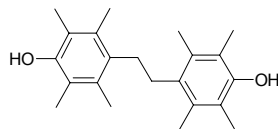
$C_{18}H_{28}O_4$ (308.42). Pharm: Cytotoxic (*in vitro*, HL-60, $IC_{50} = 3 \mu\text{g/mL}$; Bel7402, $IC_{50} = 3.6 \mu\text{g/mL}$; HeLa, $IC_{50} = 9 \mu\text{g/mL}$; U937, $IC_{50} = 1.5 \mu\text{g/mL}$; control Colchicine, HL-60, $IC_{50} = 1.6 \mu\text{g/mL}$; Bel7402, $IC_{50} = 0.4 \mu\text{g/mL}$; HeLa, $IC_{50} = 0.1 \mu\text{g/mL}$; U937, $IC_{50} = 0.1 \mu\text{g/mL}$)^[4746]; antifungal (*Pythium ultimum*); fish toxin. Source: LA ZHU GUO *Aegiceras corniculatum*, LA ZHU GUO *Aegiceras corniculatum* (stem and twig: yield = 0.0017%)^[4746]. Ref: 658, 4746.

**14348 Methylene-3,3'-biplumbagin**

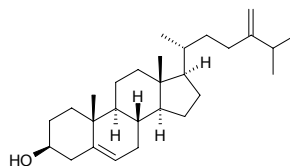
$C_{23}H_{16}O_6$ (388.88). Orange needles (C_6H_6), mp 230–233°C, 208–210°C. Pharm: Ichthyotoxin (MLC > 10mg/L, control Juglone, MLC = 0.2mg/L). Source: HAI SHI *Diospyros maritima* (fruit). Ref: 4185.

**14349 4,4'-Methylene bis[2,3,5,6-tetramethyl phenol]**

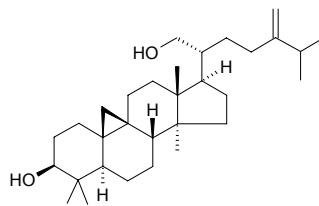
$C_{22}H_{30}O_2$ (326.48). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 2.

**14350 24-Methylene cholesterol**

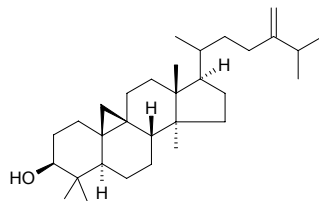
$C_{28}H_{46}O$ (398.68). mp 142°C. Source: GOU QI ZI *Lycium chinense*, LUO HUA SHENG *Arachis hypogaea*, ZHI XIE MU PI *Holarrhena antidysenterica*. Ref: 6, 660.

**14351 24-Methylene cycloartan-3 β ,21-diol**

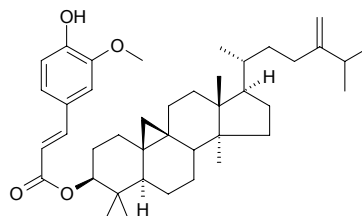
$C_{31}H_{52}O_2$ (456.76). mp 105–108°C. Source: DUO SUI SHI KE YE *Lithocarpus polystachyus*. Ref: 6.

**14352 24-Methylene cycloartan-3 β -ol**

$C_{31}H_{52}O$ (440.76). mp 122.0–122.5°C. Pharm: Intermediate in phytosterol biosynthesis. Source: GOU QI ZI *Lycium chinense*, JI CHANG LANG DU *Euphorbia esula*, SHI CHUN *Ulva lactuca*, XI YE DA JI *Euphorbia esula* var. *cyparissoides*, *Ammocharis coranica* (bulb). Ref: 6, 658, 660, 3952.

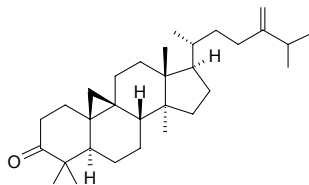
**14353 24-Methylene cycloartanol ferulate**

$C_{41}H_{60}O_4$ (616.93). mp 162–164°C; 193–194°C. Source: MI PI KANG *Oryza sativa*. Ref: 6.

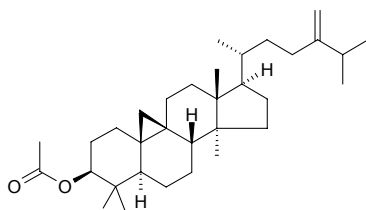


14354 24-Methylene cycloartanone

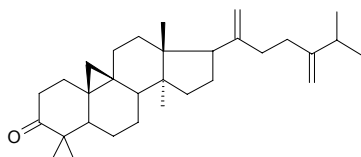
$C_{33}H_{50}O$ (438.74). Source: AI YE *Artemisia argyi*. Ref: 1288.

**14355 24-Methylenecycloartanyl acetate**

$C_{31}H_{48}O_2$ (482.80). Source: SHUI LONG GU *Polypodium niponicum*. Ref: 1413.

**14356 24-Methylenecycloartenone**

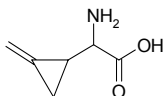
$C_{31}H_{48}O$ (436.73). Pharm: Antineoplastic; anti-HIV. Source: LENG FAN TUAN *Kadsura coccinea* [syn. *Kadsura chenensis*; *Kadsura hainanensis*]. Ref: 2523.

**14357 Methylene cyclopentane**

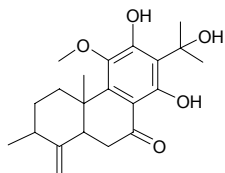
C_6H_{10} (82.15). Source: MENG GU HAO *Artemisia mongolica*. Ref: 1384.

**14358 α -(Methylenecyclopropyl) glycine**

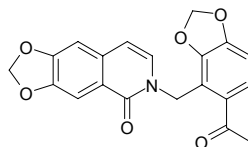
$C_6H_9NO_2$ (127.14). mp 202°C (dec). Pharm: Causes hypoglycemia; toxin (similar toxicity to *L*-hypoglucin). Source: OU YA QI *Acer pseudoplatanus*, LI ZHI HE *Litchi chinensis*. Ref: 6, 658.

**14359 1-Methylene-2,4a-dimethyl-6,8-dihydroxy-5-methoxy-7-(1,1-dimethyl hydroxy methyl)-1,2,3,4,9,10,10a-heptahydro-9-phenanthrone**

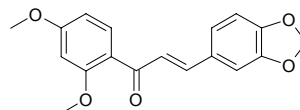
$C_{21}H_{28}O_5$ (360.45). Source: HUO XIANG *Agastache rugosus*. Ref: 1365.

**14360 6,7-Methylenedioxy-2-(6-acetyl-2,3-methylenedioxybenzyl)-1(2H)-isoquinolinone**

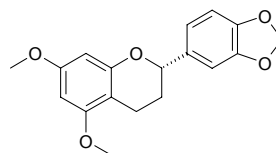
$C_{20}H_{15}NO_6$ (365.35). White crystals (MeOH). Source: KU DI DING *Corydalis bungeana* (whole herb). Ref: 3880.

**14361 3,4-Methylenedioxy-2',4'-dimethoxychalcone**

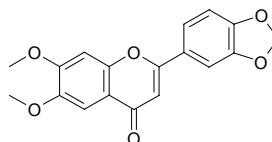
$C_{18}H_{16}O_5$ (312.33). Yellow powder, mp 123~125°C. Source: HONG E JI XUE TENG *Millettia erythrocalyx*. Ref: 1937.

**14362 (2S)-3',4'-Methylenedioxy-5,7-dimethoxyflavane**

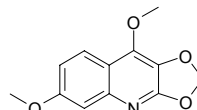
$C_{18}H_{18}O_5$ (314.34). Pale yellow oil, $[\alpha]_D^{25} = -7.4^\circ$ ($c = 0.5$, $CDCl_3$). Source: GU JING CAO *Eriocaulon buergerianum*. Ref: 1923.

**14363 3',4'-Methylenedioxy-6,7-dimethoxyflavone**

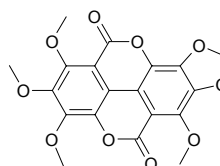
6,7-Dimethoxy-3',4'-methylenedioxyflavone $C_{18}H_{14}O_6$ (326.31). Source: HONG E JI XUE TENG *Millettia erythrocalyx* (stem cortex: yield = 0.0016%dw). Ref: 4624.

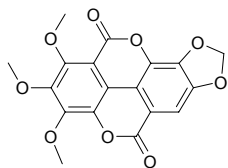
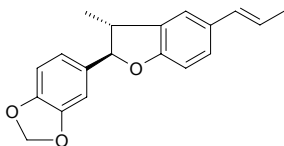
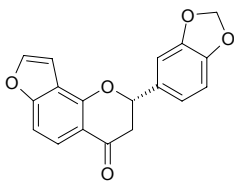
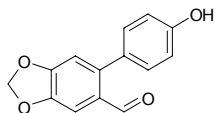
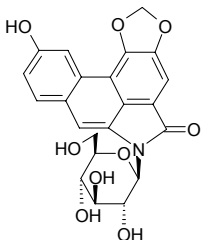
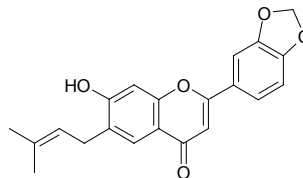
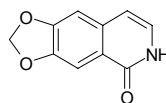
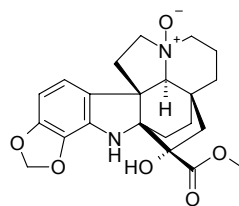
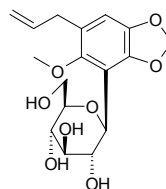
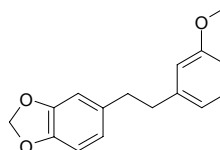
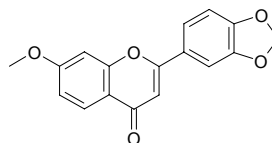
**14364 2,3-Methylenedioxy-4,7-dimethoxyquinoline**

$C_{12}H_{11}NO_4$ (233.23). Plates, mp 176~178°C. Source: YUE GUI YE SHAN YOU GAN *Acronychia laurifolia*. Ref: 2348.

**14365 3,4-Methylenedioxy-3',4'-O-dimethyl-5,5'-dimethoxyellagic acid**

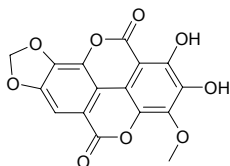
$C_{19}H_{14}O_{10}$ (402.32). Source: XI SHU *Camptotheca acuminata*. Ref: 4097.



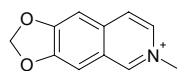
14366 3,4-Methylenedioxy-3',4'-O-dimethyl-5'-methoxyellagic acidC₁₈H₁₂O₉ (372.29). Source: XI SHU *Camptotheca acuminata*. Ref: 4097.**14367 (7R,8R)-3,4-Methylenedioxy-4',7-epoxy-8,3'-neolignan-7'E-ene**C₁₉H₁₈O₃ (294.35). White amorphous, [α]_D²¹ = +85.5° (c = 0.06, MeOH).Source: *Piper regnellii* (root). Ref: 2358.**14368 3',4'-Methylenedioxy-(2'',3''':7,8)-furanoflavanone**C₁₈H₁₂O₅ (308.29). Viscous yellowish oil. Source: *Lonchocarpus latifolius* (root). Ref: 5108.**14369 4,5-Methylenedioxy-4'-hydroxy-2-aldehyde[1,1'-biphenyl]**C₁₄H₁₀O₄ (242.23). Amorphous powder. Source: LIN JING ZHONG ZI WEN SHU LAN *Crinum bulbispermum* (bulb). Ref: 3997.**14370 3,4-Methylenedioxy-10-hydroxy aristolactam-N-β-D-glucoside**C₂₂H₁₉NO₉ (441.40). Source: KUI JING MA DOU LING *Aristolochia tuberosa*. Ref: 1317, 1318.**14371 3',4'-Methylenedioxy-7-hydroxy-6-isopentenyl flavone**C₂₁H₁₈O₅ (350.37). Source: TIAN QIAO MAI GEN *Fagopyrum cymosum* [Syn. *Polygonum cymosum*]. Ref: 1435.**14372 6,7-Methylenedioxy-1(2H)-isoquinolinone**C₁₀H₇NO₃ (189.17). Brown crystals (CHCl₃-MeOH). Source: KU DI DING *Corydalis bungeana* (whole herb). Ref: 3880.**14373 11,12-Methylenedioxykopsinaline N(4)-oxide**C₂₂H₂₆N₂O₆ (414.46). [α]_D = -16° (c = 0.19, CHCl₃). Source: MA LAI XI YA RUI MU *Kopsia griffithii*. Ref: 1854.**14374 1,2-Methylenedioxy-4-methoxy-5-allyl-phen-3-yl β-D-glucopyranoside**C₁₇H₂₂O₈ (345.36). Source: ZI SU YE *Perilla frutescens* var. *arguta*. Ref: 1366.**14375 3,4-Methylenedioxy-3'-methoxybibenzil**3,4-Methylenedioxy-3'-methoxybibenzyl C₁₆H₁₆O₃ (256.30). Source: YE TAI *Trocholejeunea sandvicensis*. Ref: 3909.**14376 3',4'-Methylenedioxy-7-methoxyflavone**7-Methoxy-3',4'-methylenedioxyflavone C₁₇H₁₂O₅ (296.28). Source: HONG E JI XUE TENG *Millettia erythrocalyx* (stem cortex; yield = 0.00019%dw). Ref: 4624.

14377 3,4-Methylenedioxy-3'-O-methyl-5'-hydroxyellagic acid

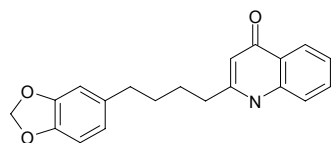
$C_{16}H_8O_9$ (344.24). Source: XI SHU *Camptotheca acuminata*. Ref: 4097.

**14378 6,7-Methylenedioxy-N-methylisoquinoline**

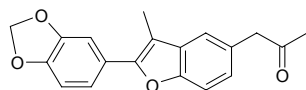
$C_{11}H_{10}NO_2^+$ (188.21). Yellow syrup. Source: HOU KE GUI *Cryptocarya chinensis* (stem cortex). Ref: 4160.

**14379 2-[4(3,4-Methylenedioxyphenyl)butyl]-4-quinolone**

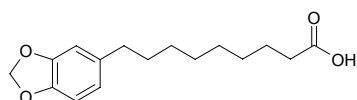
$C_{20}H_{19}NO_3$ (321.38). mp 224°C. Source: CHOU CAO *Ruta graveolens*. Ref: 6.

**14380 2-(3,4-Methylenedioxyphenyl)-3-methyl-5-(2-oxopropyl)benzofuran**

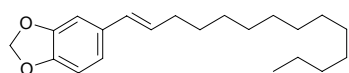
$C_{19}H_{16}O_4$ (308.34). Colorless viscous oil. Source: TE LI NI DA HU JIAO *Piper aequale*. Ref: 1910.

**14381 9'-(3,4-Methylenedioxy-phenyl)-nonanoic acid**

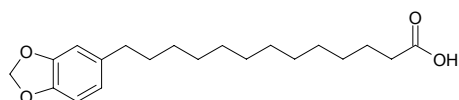
$C_{16}H_{22}O_4$ (278.35). Viscous oil. Source: SU LI NAN ROU DOU KOU *Virola surinamensis* [Syn. *Myristica surinamensis*]. Ref: 2580.

**14382 1-(3,4-Methylenedioxyphenyl)-1E-tetradecene**

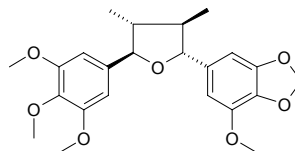
$C_{21}H_{32}O_2$ (316.49). Source: JIA JU ZI *Piper sarmentosum*. Ref: 1510.

**14383 13'-(3,4-Methylene-dioxyphenyl)-tridecanoic acid**

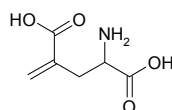
$C_{20}H_{30}O_4$ (334.46). Viscous oil. Source: SU LI NAN ROU DOU KOU *Virola surinamensis* [Syn. *Myristica surinamensis*]. Ref: 2580.

**14384 rel-(7R,8R,7'R,8'R)-3',4'-Methylenedioxy-3,4,5,5'-tetramethoxy-7,7'-epoxyginnan**

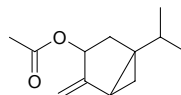
$C_{23}H_{28}O_7$ (416.48). Pale yellow oil, $[\alpha]_D^{21} = -4.5^\circ$ ($c = 0.01$, MeOH). Pharm: Antitrypanosomal (trypomastigote form of *Trypanosoma cruzi* (Y strain), $IC_{50} = 17.6\mu\text{g/mL}$). Source: *Piper solmsianum*. Ref: 3450.

**14385 γ-Methylene glutamic acid**

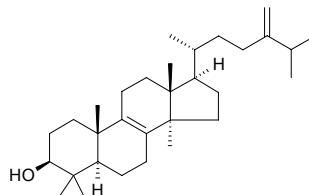
[7150-74-5] $C_6H_9NO_4$ (159.14). mp (*dl*) 203~210°C (dec). Source: LUO HUA SHENG *Arachis hypogaea*. Ref: 6.

**14386 4-Methylene-1-isopropyl-bicyclo[3.1.0]-hexan-3-ol acetate**

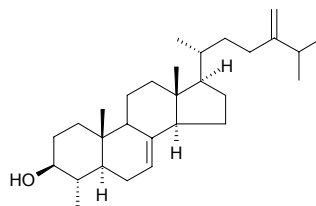
$C_{12}H_{18}O_2$ (194.28). Source: KUI HAO *Artemisia princeps*. Ref: 1268.

**14387 24-Methylene lanost-8-enol**

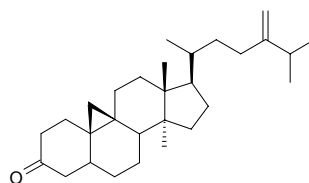
$C_{31}H_{52}O$ (440.76). Source: GOU QI ZI *Lycium chinense*. Ref: 1371, 1372, 1373, 1374.

**14388 24-Methylenelophenol**

$C_{29}H_{48}O$ (412.71). mp 172~173°C. Source: GAN ZHE *Saccharum sinensis*. Ref: 6.

**14389 24-Methylenepollinastanone**

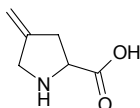
$C_{29}H_{46}O$ (410.69). White crystals, mp 76~77°C. Source: *Ammocharis coranica* (bulb). Ref: 3952.



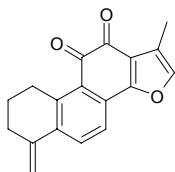
14390 4-Methylene-DL-proline

$C_6H_9NO_2$ (127.14). mp 225°C (dec). Source: PI PA HE *Eriobotrya japonica*.

Ref: 6.

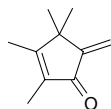
**14391 Methylene tanshinquinone**

[67656-29-5] $C_{18}H_{14}O_3$ (278.31). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]^[2], DAN SHEN *Salvia miltiorrhiza* (dried root: content = 0.086%)^[5508], GAN XI SHU WEI CAO *Salvia przewalskii* (dried root: content = 0.074%)^[5508], HONG GEN CAO *Salvia prionitis* (dried root: content = 0.019%)^[5508], HUANG HUA SHU WEI CAO *Salvia flava* (dried root: content = trace)^[5508], JI YE SHU WEI CAO *Salvia bulleyana* (dried root: content = trace)^[5508], LI SE SHU WEI CAO *Salvia castanea* (dried root: content = 0.010%)^[5508], MAO DI HUANG SHU WEI CAO *Salvia digitaloides* (dried root: content = 0.006%)^[5508], NAN DAN SHEN *Salvia bowleyana* (dried root: content = 0.042%)^[5508], NI DAN SHEN *Salvia sinica* (dried root: content = 0.007%)^[5508], SAN YE SHU WEI CAO *Salvia trijuga* (dried root: content = 0.126%)^[5508], YUN NAN SHU WEI CAO *Salvia yunnanensis* (dried root: content = 0.065%)^[5508], ZI DAN SHEN *Salvia przewalskii* var. *mandarinorum* (dried root: content = %) ^[5508]. Ref: 2, 5508.

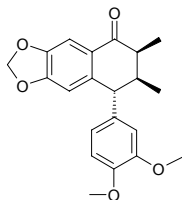
**14392 5-Methylene-2,3,4,4-tetramethylcyclopent-2-enone**

$C_{10}H_{14}O$ (150.22). Colorless oil. Source: *Lavandula luisieri* (essential oil).

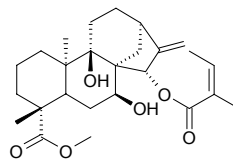
Ref: 5301.

**14393 (-)-4'-O-Methylshicine**

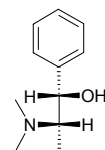
(7'R,8S,8'S)-8,8'-Dimethyl-3',4'-dimethoxy-4,5-methylenedioxy-2,7'-cycloign an-7-one $C_{21}H_{22}O_5$ (354.41). Amorphous yellow solid, $[\alpha]_D^{25} = -47.1^\circ$ ($c = 1.00$, $CHCl_3$). Source: *Holostylis reniformis* (root). Ref: 3784.

**14394 Methyl ent-7a,9a-dihydroxy-15β-[(2Z)-2-methyl-but-2-enoyloxy] kaur-16-en-19-oate**

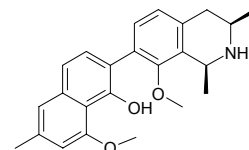
$C_{26}H_{38}O_6$ (446.59). Colorless needles, mp 108°C, $[\alpha]_D^{20} = -1.67^\circ$, ($c = 2.271$, MeOH). Pharm: Leukotriene biosynthesis Inhibitor (*in vitro*, $IC_{50} = 10.4\mu\text{mol/L}$, $p < 0.05$, control Zileuton, $IC_{50} = 10.4\mu\text{mol/L}$, $p < 0.05$). Source: GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root). Ref: 5037.

**14395 N-Methylephedrine**

[51018-28-1] $C_{11}H_{17}NO$ (179.26). mp (-) 87~88°C. Pharm: Antiasthmatic (bronchial smooth muscle relaxant); used in treatment of asthmatic bronchitis; CNS stimulant. Source: DAN ZI MA HUANG *Ephedra monosperma* (herbaceous twigs: content = 0.042%)^[5508], LI JIANG MA HUANG *Ephedra likiangensis* (herbaceous twigs: mean content of 3 origins = 0.027%)^[5508], MA HUANG *Ephedra sinica* (herbaceous twigs: mean content of 5 origins = 0.079%)^[5508], MO GUO MA HUANG *Ephedra przewalskii* (herbaceous twigs: mean content = 0.006%)^[5508], MU ZEI MA HUANG *Ephedra equisetina* (herbaceous twigs: mean content of 2 origins = 0.040%)^[5508], SHAN LING MA HUANG *Ephedra gerardiana* (herbaceous twigs: content = 0.043%)^[5508], SHUANG SUI MA HUANG *Ephedra distachya*, XI ZANG ZHONG MA HUANG *Ephedra intermedia* var. *tibetica* (herbaceous twigs: content = 0.158%)^[5508], YI ZHU AI MA HUANG *Ephedra minuta* var. *dioeca* (herbaceous twigs: mean content of 2 origins = 0.041%)^[5508], ZANG MA HUANG *Ephedra saxatilis* (herbaceous twigs: content = 0.056%)^[5508], ZHONG MA HUANG *Ephedra intermedia* (herbaceous twigs: mean content of 3 origins = 0.006%)^[5508]. Ref: 2, 658, 660, 5508.

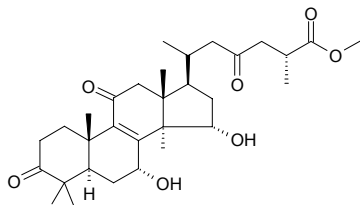
**14396 8-O-Methyl-1-epi-dioncophylline B**

$C_{24}H_{27}NO_3$ (377.49). Pharm: Antimalarial (*Plasmodium falciparum* K1, $IC_{50} = 402\text{ng/mL}$, NF54, $IC_{50} = 1007\text{ng/mL}$, MIC = 33μg/mL). Source: SAN YE MU *Triphyophyllum peltatum* (leaf). Ref: 3962.

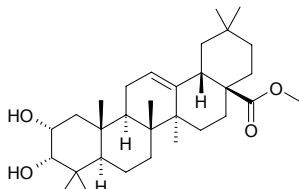


14397 Methyl-7-epiganoderate

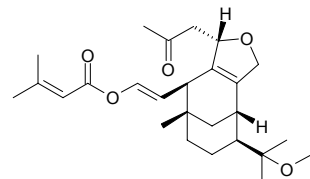
$C_{31}H_{46}O_7$ (530.71). Source: SHU SHE *Ganoderma applanatum*. Ref: 1500.

**14398 Methyl 3-epimaslinat**

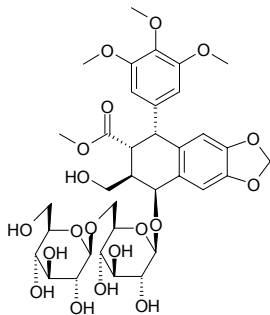
$C_{31}H_{50}O_4$ (486.74). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.

**14399 15-O-Methyl-14-epi-neovibsanin F**

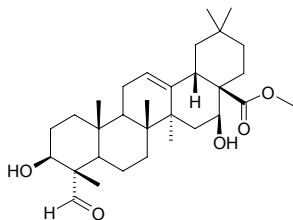
$C_{26}H_{38}O_5$ (430.59). Colorless paste, $[\alpha]_D^{23} = +65.9^\circ$ ($c = 0.14$, $CHCl_3$). Source: RI BEN JIA MI *Viburnum awabuki*. Ref: 2530.

**14400 Methyl epipodophyllate 7'-O-β-D-Glucopyranosyl-(1→6)-β-D-glucopyranoside**

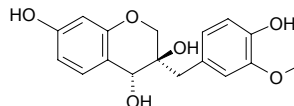
$C_{35}H_{46}O_{19}$ (770.75). White powder, $[\alpha]_D^{15} = -120^\circ$ ($c = 0.34$). Source: TAO ER QI *Podophyllum emodii* [Syn. *Podophyllum emodii* var. *chinense*; *Podophyllum sikkimensis*; *Sinopodophyllum emodii*] (root and rhizome). Ref: 4142.

**14401 Methyl 16-epiquillate**

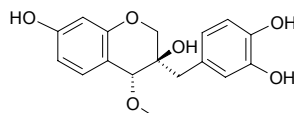
$C_{31}H_{48}O_5$ (500.73). Source: JIN TIE SUO *Psammosilene tunicoides*. Ref: 1442.

**14402 3'-O-Methyl episappanol**

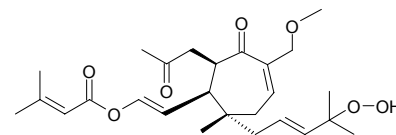
[111254-22-9] $C_{17}H_{18}O_6$ (318.33). Source: SU MU *Caesalpinia sappan*. Ref: 1302.

**14403 4-O-Methyl episappanol**

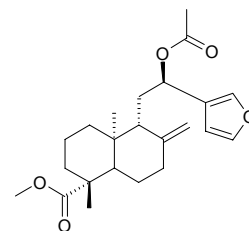
[112529-37-0] $C_{17}H_{18}O_6$ (318.33). Source: SU MU *Caesalpinia sappan*. Ref: 1304, 4494.

**14404 18-O-Methyl-5-epi-vibsanin K**

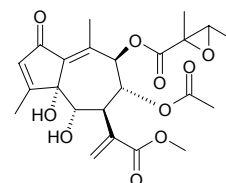
$C_{26}H_{38}O_7$ (462.59). $[\alpha]_D^{21} = +11.9^\circ$ ($c = 0.12$, $CHCl_3$). Source: RI BEN JIA MI *Viburnum awabuki* (leaf). Ref: 4168.

**14405 Methyl-15,16-epoxy-12(R)-acetoxo-8(17),13(16),14-ent-labdatrien-19-oate**

$C_{23}H_{32}O_5$ (388.51). White gum, $[\alpha]_D^{25} = -18.0^\circ$ ($c = 0.60$, $CHCl_3$). Pharm: Anticidal (inhibits growth of alga *Raphidocelis subcapitata*, 72h $IC_{50} = 18.2 \mu\text{mol/L}$). Source: BI CHI YAN ZI CAI *Potamogeton pectinatus* (whole herb). Ref: 3488.

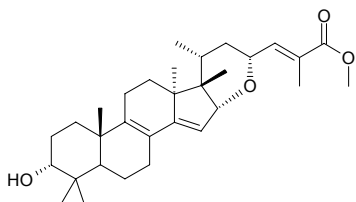
**14406 Methyl-9β-(epoxyangeloyloxy)-5α,6α-dihydroxy-2-oxo-3,4-dehydro-δ-guaien-12-oate**

$C_{23}H_{28}O_{10}$ (464.47). White oil, $[\alpha]_D^{22} = 16.72^\circ$ ($c = 0.14$, $CHCl_3$). Source: *Balsamorhiza sagittata* (aerial parts), *Balsamorhiza macrophylla* (aerial parts). Ref: 991.



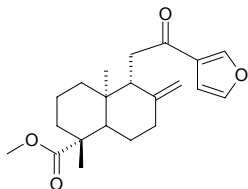
14407 Methyl (24E)-3 α ,16 α ,23 α (=16R,23R)-trihydroxy-epoxy-17,14-friedolan-8,14,24-trien-26-oate

C₃₁H₄₆O₄ (482.71). Gum, [α]_D²⁵ = +7.5° (c = 0.064, CHCl₃). Source: MEI LI TENG HUANG *Garcinia speciosa* (bark). Ref: 3762.



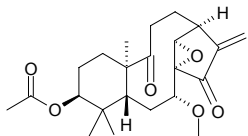
14408 Methyl 15,16-epoxy-12-oxo-8(17),13(16),14-ent-labdatrien-19-oate

C₂₁H₂₈O₄ (344.45). Pharm: Angicidal (inhibits growth of alga *Raphidocelis subcapitata*, 72h IC₅₀ = 6.1 μmol/L). Source: BI CHI YAN ZI CAI *Potamogeton pectinatus* (whole herb), HAI SHENG CHUN MAN ZAO *Ruppia maritima*. Ref: 3488.



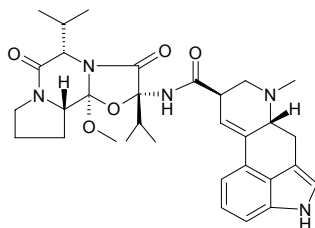
14409 o-Methylepoxyshikoccin

C₂₃H₃₂O₆ (404.51). mp 142–144°C, [α]_D²⁵ = +24.2° (c = 0.60, MeOH). Source: XI SI GUO XIANG CHA CAI *Isodon shikokiana* var. *occidentalis*. Ref: 4067.



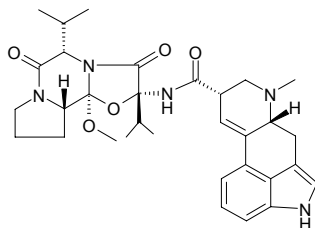
14410 O-12'-Methyl ergocornine

C₃₂H₄₁N₅O₅ (575.71). Source: MAI JIAO *Claviceps purpurea*. Ref: 1306.



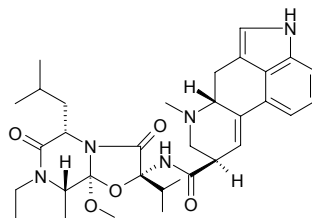
14411 O-12'-Methyl ergocorninine

C₃₂H₄₁N₅O₅ (575.71). Source: MAI JIAO *Claviceps purpurea*. Ref: 1306, 1307.



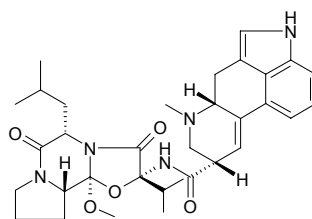
14412 O-12'-Methyl- α -ergokryptine

C₃₃H₄₃N₅O₅ (589.74). Source: MAI JIAO *Claviceps purpurea*. Ref: 1306.



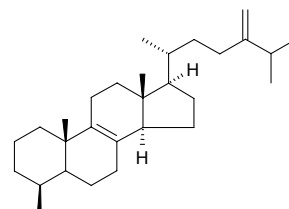
14413 O-12'-Methyl- α -ergokryptinine

C₃₃H₄₃N₅O₅ (589.74). Source: MAI JIAO *Claviceps purpurea*. Ref: 1306, 1307.



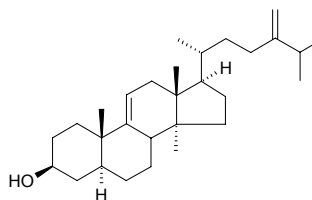
14414 4-Methyl-7-ergosta-8,24(28)-diene

C₂₉H₄₈ (396.71). Source: YU MI HEI MEI *Ustilago maydis*. Ref: 1499.



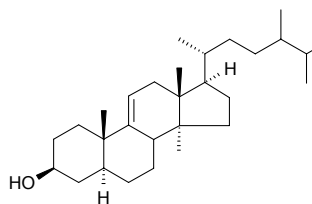
14415 14 α -Methyl-5 α -ergosta-9(11),24(28)-dien-3 β -ol

C₂₉H₄₈O (412.71). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.



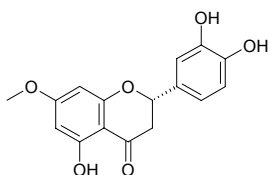
14416 14 α -Methyl-5 α -ergosta-9(11)-en-3 β -ol

C₂₉H₅₀O (414.72). Source: JIAO GU LAN *Gynostemma pentaphyllum*. Ref: 2.

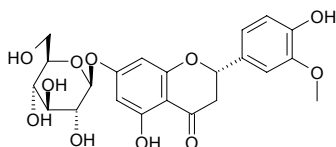


14417 7-O-Methyleriodictyol

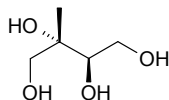
$C_{16}H_{14}O_6$ (302.29). **Pharm:** Cytotoxic (HeLa, IC_{50} = 18.6 μ g/mL, control Mitomycin C, IC_{50} = 1.7 μ g/mL). **Source:** TUAN JI AI NA XIANG *Blumea glomerata*. **Ref:** 4092.

**14418 3'-Methyl eriodictyol-7-O- β -D-glucoside**

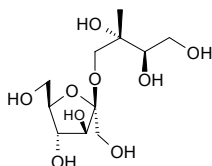
$C_{22}H_{24}O_{11}$ (464.43). **Source:** HU JI SHENG *Viscum coloratum*. **Ref:** 1434.

**14419 2-C-Methyl-D-erythritol**

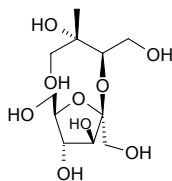
$C_5H_{12}O_4$ (136.15). **Source:** SHI LUO ZI *Anethum graveolens* (fruit). **Ref:** 4177.

**14420 2-C-Methyl-D-erythritol 1-O- β -D-fructofuranoside**

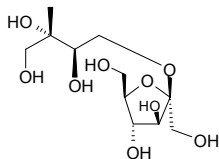
$C_{11}H_{22}O_9$ (298.29). Colorless syrup, $[\alpha]_D^{22}$ = -28° (c = 1.4, MeOH). **Source:** HUI QIN *Pimpinella anisum*. **Ref:** 2065.

**14421 2-C-Methyl-D-erythritol 3-O- β -D-fructofuranoside**

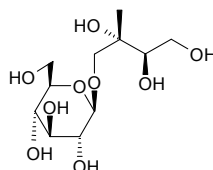
$C_{11}H_{22}O_9$ (298.29). Colorless syrup, $[\alpha]_D^{22}$ = -15° (c = 0.7, MeOH). **Source:** HUI QIN *Pimpinella anisum*. **Ref:** 2065.

**14422 2-C-Methyl-D-erythritol 4-O- β -D-fructofuranoside**

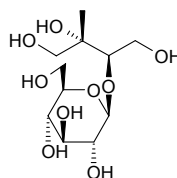
$C_{11}H_{22}O_9$ (298.29). Colorless syrup, $[\alpha]_D^{22}$ = -19° (c = 1.2, MeOH). **Source:** HUI QIN *Pimpinella anisum*. **Ref:** 2065.

**14423 2-C-Methyl-D-erythritol 1-O- β -D-glucopyranoside**

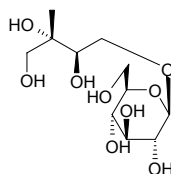
$C_{11}H_{22}O_9$ (298.29). colorless syrup, $[\alpha]_D^{21}$ = -15° (c = 1.2, MeOH). **Source:** HUI QIN *Pimpinella anisum*, HU SUI ZI *Coriandrum sativum*, ZI RAN QIN *Cuminum cyminum*. **Ref:** 2065.

**14424 2-C-Methyl-D-erythritol 3-O- β -D-glucopyranoside**

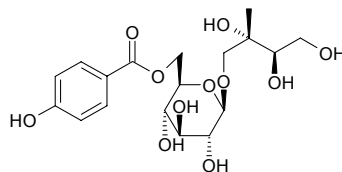
$C_{11}H_{22}O_9$ (298.29). Colorless syrup, $[\alpha]_D^{21}$ = -13° (c = 1.6, MeOH). **Source:** HUI QIN *Pimpinella anisum*, ZI RAN QIN *Cuminum cyminum*. **Ref:** 2065.

**14425 2-C-Methyl-D-erythritol 4-O- β -D-glucopyranoside**

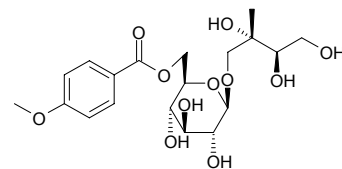
$C_{11}H_{22}O_9$ (298.29). Colorless syrup, $[\alpha]_D^{21}$ = -8° (c = 0.9, MeOH). **Source:** HUI QIN *Pimpinella anisum*, HU SUI ZI *Coriandrum sativum*, ZI RAN QIN *Cuminum cyminum*. **Ref:** 2065.

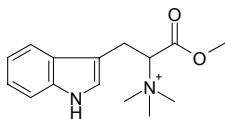
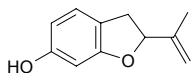
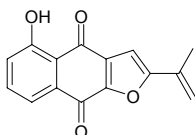
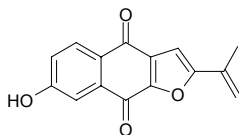
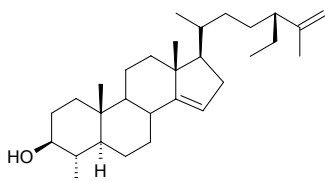
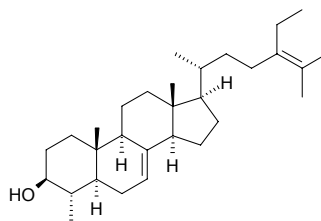
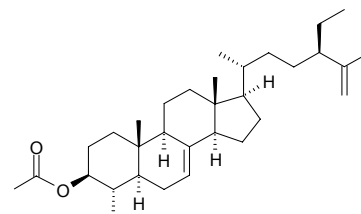
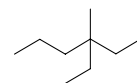
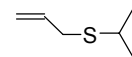
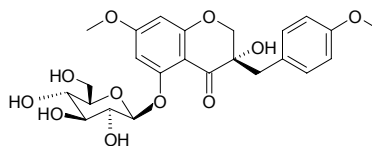
**14426 2-C-Methyl-D-erythritol 1-O- β -D-(6-O-4-hydroxybenzoyl)glucopyranoside**

$C_{18}H_{26}O_{11}$ (418.40). Amorphous powder, $[\alpha]_D^{22}$ = -12° (c = 1.6, MeOH). **Source:** HUI QIN *Pimpinella anisum*. **Ref:** 2065.

**14427 2-C-Methyl-D-erythritol 1-O- β -D-(6-O-4-methoxybenzoyl)glucopyranoside**

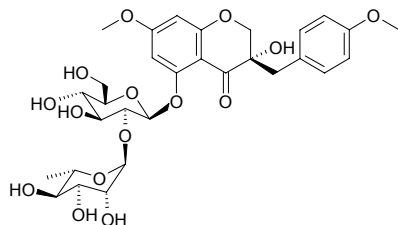
$C_{19}H_{28}O_{11}$ (432.43). Amorphous powder, $[\alpha]_D^{22}$ = -13° (c = 0.3, MeOH). **Source:** HUI QIN *Pimpinella anisum*. **Ref:** 2065.



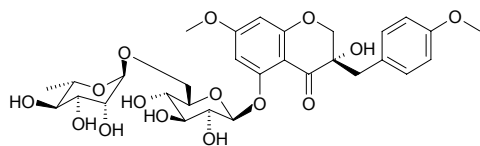
14428 Methyl ester of *N,N*-dimethyl-tryptophan methocationC₁₅H₂₁N₂O₂ (261.35). Source: XIANG SI ZI *Abrus precatorius*. Ref: 6.**14429 2-(1'-Methylethenyl)-6-hydroxy-2,3-dihydrobenzo[*b*]furan**C₁₁H₁₂O₂ (176.22). Amorphous material. Source: FEI ZHOU ZI WEI *Newbouldia laevis* (stem cortex). Ref: 3442.**14430 2-(1'-Methylethenyl)-5-hydroxynaphtho[2,3-*b*]furan-4,9-dione**C₁₅H₁₀O₄ (254.24). Yellow solid. Source: FEI ZHOU ZI WEI *Newbouldia laevis* (stem cortex). Ref: 3442.**14431 2-(1'-Methylethenyl)-7-hydroxynaphtho[2,3-*b*]furan-4,9-dione**C₁₅H₁₀O₄ (254.24). Orange material. Source: FEI ZHOU ZI WEI *Newbouldia laevis* (stem cortex). Ref: 3442.**14432 4 α -Methyl-24 β -ethyl-5 α -cholesta-14,25-dien-3 β -ol**C₃₀H₅₀O (426.73). Crystalline solid, mp 170~172°C, [α]_D = +77° (CHCl₃). Source: KU LANG SHU *Clerodendrum inerme*. Ref: 3382.**14433 4 α -Methyl-24-ethylcholesta-7,24-dienol**C₃₀H₅₀O (426.73). Source: GOU QI ZI *Lycium chinense*. Ref: 1371, 1372, 1373, 1374.**14434 (2*R*)-4 α -Methyl-24-ethylcholesta-7,25-dien-3 β -yl acetate**C₃₂H₅₂O₂ (428.77). Source: SHUI LONG GU *Polypodium niponicum*. Ref: 1413.**14435 3-Methyl-3-ethylhexane**[3074-76-8] C₉H₂₀ (128.26). Source: ROU CONG RONG *Cistanche deserticola*. Ref: 2.**14436 3-[(1-Methylethyl)thio]-1-propene**C₆H₁₂S (116.23). Source: XIE BAI *Allium macrostemon*. Ref: 1391.**14437 (-)-7-*O*-Methyleucomol 5-*O*- β -D-glucopyranoside**C₂₄H₂₈O₁₁ (482.48). White needles (MeOH), mp 198~199°C, [α]_D²⁴ = -18.8° (c = 0.01, MeOH). Pharm: Cytotoxic inactive (*in vitro*, P₃₈₈ and A549). Source: HU YAN WAN NIAN QING *Ornithogalum caudatum* (bulb: yield = 0.00044%dw). Ref: 4608.

14438 (-)-7-O-Methyleucomol 5-O-β-neohesperidoside

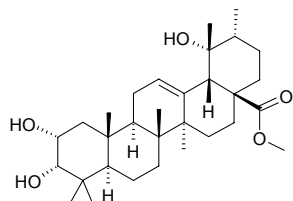
$C_{30}H_{38}O_{15}$ (638.63). White needles (MeOH), mp 212~213°C, $[\alpha]_D^{24} = -17.2^\circ$ ($c = 0.01$, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, P₃₈₈ and A549). **Source:** HU YAN WAN NIAN QING *Ornithogalum caudatum* (bulb: yield = 0.00026%dw). **Ref:** 4608.

**14439 (-)-7-O-Methyleucomol 5-O-β-rutinoside**

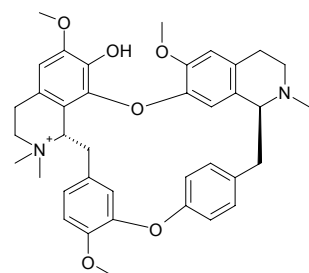
$C_{30}H_{38}O_{15}$ (638.63). White needles (MeOH), mp 207~208°C, $[\alpha]_D^{24} = -15.5^\circ$ ($c = 0.01$, MeOH). **Pharm:** Cytotoxic inactive (*in vitro*, P₃₈₈ and A549). **Source:** HU YAN WAN NIAN QING *Ornithogalum caudatum* (bulb: yield = 0.00033%dw). **Ref:** 4608.

**14440 Methyl euscaphate**

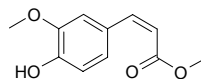
$C_{31}H_{50}O_5$ (502.74). **Source:** JIN YING ZI *Rosa laevigata*. **Ref:** 1326.

**14441 (+)-2-N-Methylfangchinoline**

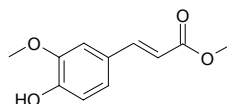
$C_{38}H_{43}N_2O_6$ (623.77). **Source:** FANG JI *Stephania tetrandra*. **Ref:** 2.

**14442 Methyl cis-ferulate**

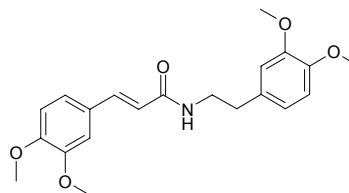
$C_{11}H_{12}O_4$ (208.22). **Source:** TAI WAN FU RONG *Hibiscus taiwanensis*. **Ref:** 2529.

**14443 Methyl trans-ferulate**

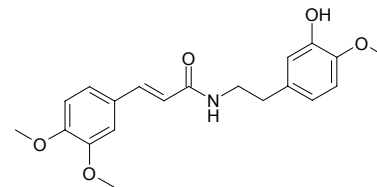
$C_{11}H_{12}O_4$ (208.22). **Source:** DONG FENG JU GEN *Atalantia buxifolia* [Syn. *Severinia buxifolia*] (root cortex), TAI WAN FU RONG *Hibiscus taiwanensis*, TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf: yield = 0.0001%dw)^[4722], TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root). **Ref:** 2529, 3075, 4488, 4722.

**14444 N-trans-4-O-Methylferuloyl 3',4'-O-dimethyldopamine**

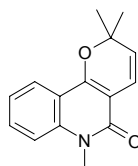
$C_{21}H_{25}NO_5$ (371.44). Colorless oil. **Pharm:** Germination/growth inhibitor/stimulator (dicotyledon *Lactuca sativa* lettuce, *Lycopersicon esculentum* tomato, monocotyledon *Allium cepa* onion, 0.0001~0.1mmol/L). **Source:** HONG HUA JIAO *Zanthoxylum rubescens*, LI *Chenopodium album* (aerial parts). **Ref:** 3499.

**14445 N-trans-4-O-Methylferuloyl 4'-O-methyldopamine**

$C_{20}H_{23}NO_5$ (357.41). Colorless oil. **Pharm:** Germination/growth inhibitor/stimulator (dicotyledon *Lactuca sativa* lettuce, *Lycopersicon esculentum* tomato, monocotyledon *Allium cepa* onion, 0.0001~0.1mmol/L). **Source:** LI *Chenopodium album* (aerial parts). **Ref:** 3499.

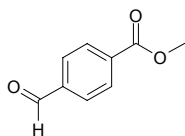
**14446 N-Methylflindersine**

[50333-13-6] $C_{15}H_{15}NO_2$ (241.29). **Pharm:** Antifungal (*Candida albicans*); insect antifeedant (beetle). **Source:** CHOU SHAN YANG *Orixa japonica* (stem: yield = 0.0061%dw)^[4774], YU JU *Ptelea trifoliata*. **Ref:** 658, 4774.

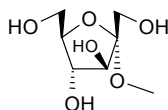


14447 Methyl-*p*-formylbenzoate

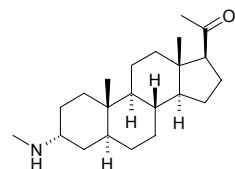
$C_9H_8O_3$ (164.16). Source: TAI WAN FU RONG *Hibiscus taiwanensis*. Ref: 2529.

**14448 Methyl- α -D-fructofuranoside**

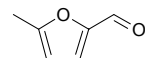
$C_7H_{14}O_6$ (194.19). Source: TAO REN *Prunus persica*. Ref: 1324.

**14449 N-Methylfuntumine**

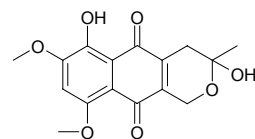
$C_{22}H_{37}NO$ (331.55). Yellowish crystals ($CHCl_3$), mp 123~124°C, $[\alpha]_D^{25} = +81^\circ$ ($c = 0.074$, $CHCl_3$). Pharm: BChE inhibitor (horse serum BChE, $IC_{50} = (12.69 \pm 0.13) \mu mol/L$, control Eserine, $IC_{50} = (0.857 \pm 0.008) \mu mol/L$); AChE inhibitor (electric eel AChE, $IC_{50} = (97.61 \pm 1.73) \mu mol/L$, control Eserine $IC_{50} = (0.041 \pm 0.001) \mu mol/L$). Source: YUN NAN YE SHAN HUA *Sarcococca coriacea* [Syn. *Sarcococca wallichii*] (leaf). Ref: 4241.

**14450 α -Methylfurfural**

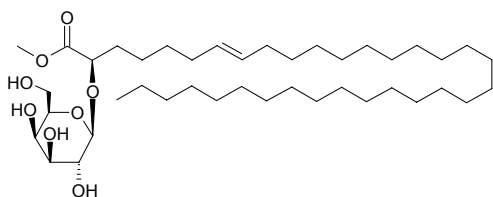
[620-02-0] $C_6H_6O_2$ (110.11). bp 187°C. Source: SHUI SONG *Codium fragile*. Ref: 6.

**14451 8-O-Methyl-fusarubin**

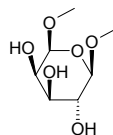
$C_{16}H_{16}O_7$ (320.30). Source: *Fusarium acutatum*. Ref: 5296.

**14452 Methyl-2 β (2*S*)-O- β -D-galactopyranosyl-7(*E*)-tetratriacontenoate**

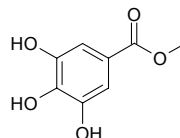
$C_{41}H_{78}O_8$ (699.07). Colorless powder. $[\alpha]_D^{25} = -45^\circ$ ($c = 0.04$, CD_3OD). Pharm: Tyrosinase inhibitor ($IC_{50} = (11.68 \pm 0.44) \mu mol/L$, control Kojic acid, $IC_{50} = (16.67 \pm 0.52) \mu mol/L$, *L*-Mimosine $IC_{50} = (3.68 \pm 0.02) \mu mol/L$). Source: FEN ZHI PO JU *Amberboa ramosa*. Ref: 2531.

**14453 Methyl D-galactoside**

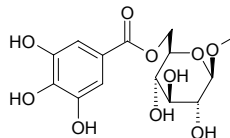
$C_7H_{14}O_6$ (194.19). mp (α) 125.5°C, (β) 178~180°C. Source: LU JIAO CAI *Gloiopeltis furcata*. Ref: 6.

**14454 Methyl gallate**

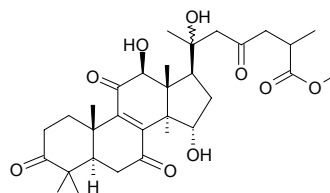
[99-24-1] $C_8H_8O_5$ (184.15). mp 197~198°C. Pharm: Antibacterial (acid-fast bacteria, gram-negative bacteria and gram-positive bacteria, EC = 0.5~5.0mg/mL; *Diplococcus pneumoniae*, EC = 5mg/mL, 15min; *Bacillus pneumoniae*, effective pH 5~6, 30min); antifungal; cytotoxic (antioxidant assay)^[5038]. Source: DUO HUA SHAO YAO *Paeonia emodi* (fruit), HUANG LU *Cotinus coggygria*, LUAN HUA *Koelreuteria paniculata*, MU MA HUANG *Casuarina equisetifolia*, NAN DA JI *Euphorbia jolkini*, QIANG WEI GEN *Rosa multiflora*, YAN FU YE *Rhus chinensis* [Syn. *Rhus semialata*], YAN FU ZI *Rhus chinensis* [Syn. *Rhus semialata*], ZI WEI HUA *Lagerstroemia indica*. Ref: 4, 6, 3802, 5038.

**14455 Methyl-6-O-galloyl- β -D-glucopyranoside**

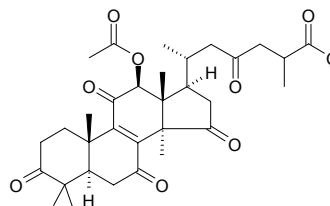
$C_{14}H_{18}O_{10}$ (346.29). Source: GOU TENG *Uncaria rhynchophylla* [Syn. *Nauclea rhynchophylla*]. Ref: 660.

**14456 Methyl ganoderate AP**

$C_{31}H_{44}O_9$ (560.69). Source: SHU SHE *Ganoderma applanatum*. Ref: 1500.

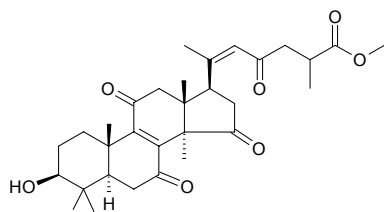
**14457 Methyl ganoderate F**

$C_{33}H_{44}O_9$ (584.71). Pharm: EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced, $IC_{50} = 289$ mol ratio/32pmol TPA, control β -Carotene, $IC_{50} = 400$ mol ratio/32pmol TPA). Source: LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.0019%dw). Ref: 4737.

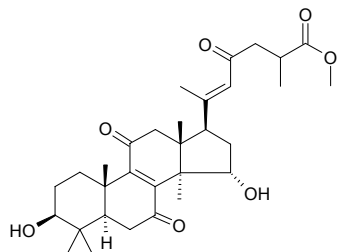


14458 Methyl ganoderate H

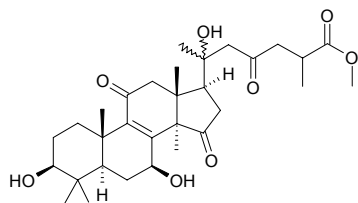
$C_{31}H_{42}O_7$ (526.68). Source: SHU SHE *Ganoderma applanatum*. Ref: 1500.

**14459 Methyl ganoderate I**

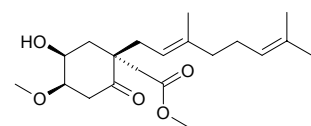
$C_{31}H_{44}O_7$ (528.69). Source: SHU SHE *Ganoderma applanatum*. Ref: 1500.

**14460 Methyl ganoderate J**

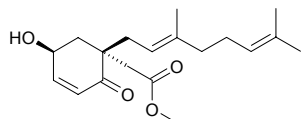
$C_{31}H_{46}O_8$ (546.71). Source: LING ZHI *Ganoderma lucidum* (dried sporocarp; yield = 0.00025%). Ref: 4603.

**14461 Methyl 2-(1'-β-geranyl-5'-β-hydroxy-4'-β-methoxy-2'-oxocyclohexyl)acetate**

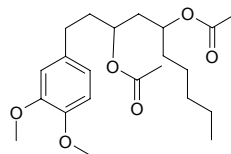
$C_{20}H_{32}O_5$ (352.48). Colorless oil, $[\alpha]_D^{22} = -59^\circ$ ($c = 0.103$, $CHCl_3$). Source: *Glossocalyx brevipes* (leaf). Ref: 4973.

**14462 Methyl 2-(1'-β-geranyl-5'-β-hydroxy-2'-oxocyclohex-3'-enyl)acetate**

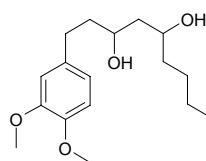
$C_{19}H_{28}O_4$ (320.43). Colorless oil, $[\alpha]_D^{22} = -2.9^\circ$ ($c = 0.1$, $CHCl_3$). Pharm: Antiplasmodial (*in vitro* *Plasmodium falciparum*: D6, $IC_{50} = 702.59$ ng/mL, control Mefloquine, $IC_{50} = 11.67$ ng/mL; W2, $IC_{50} = 2125.78$ ng/mL, control Mefloquine, $IC_{50} = 4.78$ ng/mL). Source: *Glossocalyx brevipes* (leaf). Ref: 4973.

**14463 6-Methylgingediacetate**

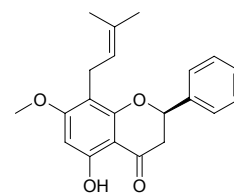
$C_{22}H_{34}O_6$ (394.51). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.

**14464 6-Methylgingediol**

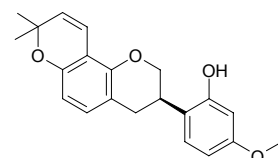
$C_{18}H_{30}O_4$ (310.44). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.

**14465 7-O-Methylglabranin**

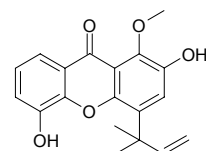
$C_{21}H_{22}O_4$ (338.41). Colorless needles ($CHCl_3$), mp 124–125°C, $[\alpha]_D^{25} = -20.9^\circ$ ($c = 0.25$, MeOH). Source: MEI LI YE HUI MAO DOU *Tephrosia calophylla* (whole herb). Ref: 4312.

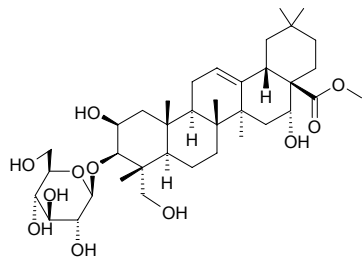
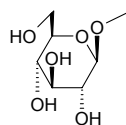
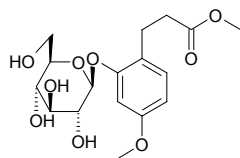
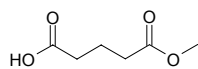
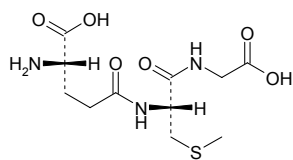
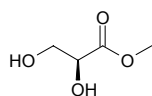
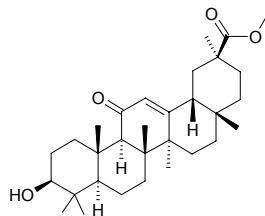
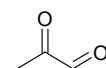
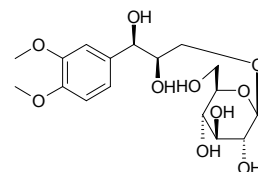
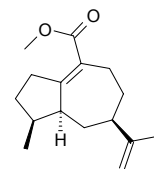
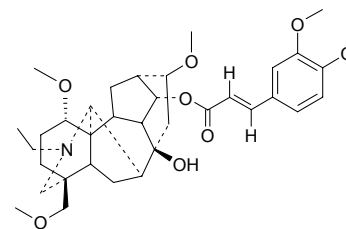
**14466 4'-O-Methylglabridin**

$C_{21}H_{22}O_4$ (338.41). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2.

**14467 1-O-Methylglobuxanthone**

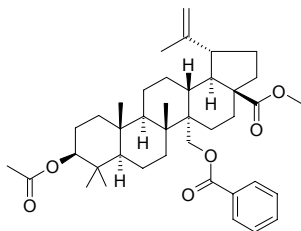
$C_{19}H_{18}O_5$ (326.35). Pale yellow needles, mp 145–146°C (acetone-hexane). Source: *Garcinia vilsersiana* (bark). Ref: 3902.



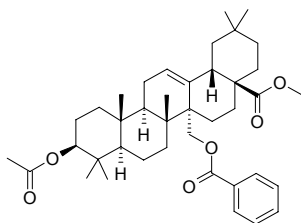
14468 Methyl-3-O-β-D-glucopyranosyl polygalcateC₃₇H₆₀O₁₁ (680.88). Source: JIE GENG *Platycodon grandiflorum*. Ref: 1381.**14469 β-Methyl-D-glucoside**C₇H₁₄O₆ (194.19). Source: MU XU *Medicago sativa*. Ref: 6.**14470 Methyl 2-O-β-D-glucosyloxy-4-methoxybenzenepropanoate**C₁₇H₂₄O₉ (372.38). [α]_D²² = -85° (c = 0.9380, MeOH). Source: DUO TOU GE NI DI MU *Gnidia polycephala* (stem). Ref: 3502.**14471 Methyl glutarate**[1501-27-5] C₆H₁₀O₄ (146.14). Source: MU ZEI *Equisetum hiemale*. Ref: 2.**14472 S-Methylglutathione**C₁₁H₁₉N₃O₆S (321.35). Source: NIU FEI *Bos taurus domesticus*; *Bubalus bubalis*. Ref: 6.**14473 Methyl (S)-glycerate**C₄H₉O₄ (120.11). Colorless oil; [α]_D = -8.4° (c = 0.44, MeOH). Source: NAN TOU QIU HAI TANG *Begonia nantoensis* (rhizome). Ref: 4267.**14474 Methylglycyrrhetate**C₃₁H₄₈O₄ (484.73). Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 2.**14475 Methylglyoxal**[78-98-8] C₃H₄O₂ (72.06). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.**14476 (1'R,2'R)-4-O-Methylguaiaicyl glycerol 3'-O-β-D-glucopyranoside**C₁₇H₂₆O₁₀ (390.39). Amorphous powder, [α]_D²² = -15° (c = 1.2, MeOH). Source: HUI QIN *Pimpinella anisum* (fruit). Ref: 4242.**14477 Methyl guaia-1(10),11-dien-15-carboxylate**C₁₆H₂₄O₂ (248.37). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.**14478 Methyl gymnaconitine**C₃₅H₄₉NO₈ (611.78). Amorphous powder, [α]_D^{20.5} = +33.2°. Source: LU RUI WU TOU *Aconitum gymnaandrum*. Ref: 52.

14479 Methyl helicterate

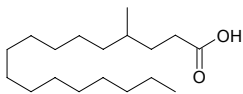
$C_{40}H_{56}O_6$ (632.89). Colorless lamellar crystals, mp 196~197°C, $[\alpha]_D^{20} = -12.3^\circ$ ($c = 8.0$, chloroform) Source: SHAN ZHI MA *Helicteres angustifolia*. Ref: 40.

**14480 Methyl helicterilate**

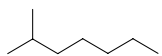
$C_{40}H_{56}O_6$ (632.89). Colorless acicular crystals, mp 152~153°C, $[\alpha]_D^{20} = +118.8^\circ$ ($c = 5.9$, chloroform). Source: SHAN ZHI MA *Helicteres angustifolia*. Ref: 40.

**14481 4-Methyl heptadecanoic acid**

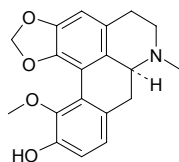
$C_{18}H_{36}O_2$ (284.49). Source: XIAN MAO *Curculigo orchoides*. Ref: 1398.

**14482 2-Methylheptane**

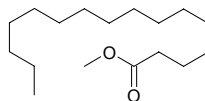
[592-27-8] C_8H_{18} (114.23). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

**14483 N-Methylhernangerine**

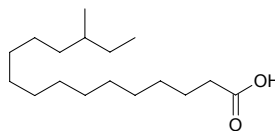
N-Methyl nandigerine [5544-68-3] $C_{19}H_{19}NO_4$ (325.37). mp 169~170°C, $[\alpha]_D^{32} = +300^\circ$ ($c = 1$, $CHCl_3$). Pharm: Anti-HIV-1 inactive (HIV-1 IN inhibitor, $IC_{50} > 100\mu\text{mol/L}$, positive control Suramin, $IC_{50} = 2.4\mu\text{mol/L}$)^[4224]. Source: DING HU DIAO ZHANG *Lindera chunii* (root), HEI KE NAN *Lindera megaphylla*, LIAN YE TONG *Hernandia Sonora* [Syn. *Hernandia ovigera*]. Ref: 1508, 1521, 4224.

**14484 Methyl hexadecanate**

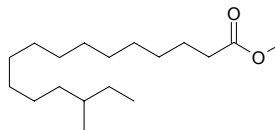
Methyl palmitate; Methyl hexadecanoate [112-39-0] $C_{17}H_{34}O_2$ (270.46). mp 30.5°C, 29.5°C, bp 415~418°C/747mmHg. Pharm: Cytotoxic (P_{388} , $ED_{50} > 50\mu\text{g/mL}$, control Mithramycin, $ED_{50} = 0.58\mu\text{g/mL}$; A549, $ED_{50} > 50\mu\text{g/mL}$, Mithramycin, $ED_{50} = 0.073\mu\text{g/mL}$; HT29, $ED_{50} > 50\mu\text{g/mL}$, Mithramycin, $ED_{50} = 0.076\mu\text{g/mL}$)^[5421]. Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], DANG SHEN *Codonopsis pilosula*, JIAN YE TANG SONG CAO *Thalictrum acutifolium*, QING FENG TENG *Sinomenium acutum*, SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*], MO ZHI JIAO GU CUI *Casearia membranacea* (stem). Ref: 2, 6, 1476, 5421.

**14485 14-Methyl hexadecanoic acid**

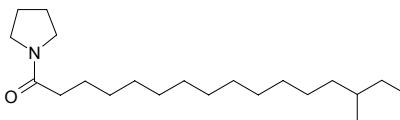
[5918-29-6] $C_{17}H_{34}O_2$ (270.46). Source: QIANG HUO *Notopterygium incisum*. Ref: 2.

**14486 14-Methyl hexadecanoic acid methyl ester**

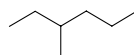
$C_{18}H_{36}O_2$ (284.49). Source: QIANG HUO *Notopterygium incisum*. Ref: 1354.

**14487 1-(14-Methylhexadecanoyl)pyrrolidine**

$C_{21}H_{41}NO$ (323.57). $[\alpha]_D^{20} = +5^\circ$ ($c = 0.4$, $CHCl_3$). Source: WENG CAI *Ipomoea aquatica* [Syn. *Convolvulus repens*; *Ipomoea reptans*], WU YE YU HUANG CAO *Merremia quinquefolia*. Ref: 2403.

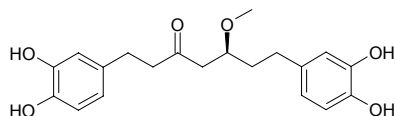
**14488 3-Methylhexane**

[589-34-4] C_7H_{16} (100.21). Source: SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

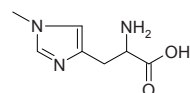


14489 5-O-Methylhirsutanonol

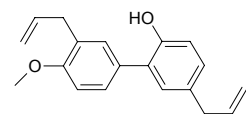
1,7-Bis-(3,4-dihydroxyphenyl)-5-methoxy-3-heptanone C₂₀H₂₄O₆ (360.41). Colorless viscous liquid, $[\alpha]_D = +3.8^\circ$ ($c = 0.07$, MeOH). **Pharm:** Antioxidant (superoxide radical scavenger, IC₅₀ = 2.8 μmol/L; DPPH scavenger, IC₅₀ = 2.9 μmol/L). **Source:** CHI YANG *Alnus japonica* (leaf). **Ref:** 4535.

**14490 3-Methylhistidine**

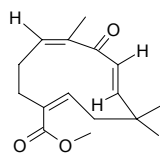
C₇H₁₁N₃O₂ (169.18). mp (L) 248~250°C (dec). **Source:** JI ROU *Gallus gallus domesticus*, WU LI *Ophiocephalus argus*. **Ref:** 6.

**14491 6'-O-Methylhonokiol**

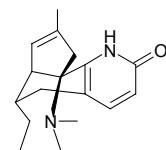
C₁₉H₂₀O₂ (280.37). **Source:** HOU PO *Magnolia officinalis*. **Ref:** 2.

**14492 Methyl 8-α-humula-6Z,9E-dien-12-oate**

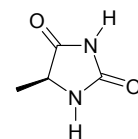
C₁₆H₂₂O₃ (262.35). **Pharm:** Phytotoxin (6mg/mL: *S. acutus*, mortality = 21%, *L. paucicostata*, mortality = 89%); cytotoxic (P₃₈₈, IC₅₀ = 10 μmol/L, control *cis*-Platin, IC₅₀ = 8 μmol/L; A549, IC₅₀ = 10 μmol/L, *cis*-Platin, IC₅₀ = 8 μmol/L; HT29, IC₅₀ = 20 μmol/L, *cis*-Platin, IC₅₀ = 16 μmol/L; MEL-28, IC₅₀ = 10 μmol/L, *cis*-Platin, IC₅₀ = 8 μmol/L). **Source:** *Asteriscus vogelii* (aerial parts). **Ref:** 5123.

**14493 N-Methyl huperzine B**

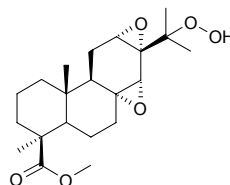
C₁₇H₂₂N₂O (270.38). **Source:** QIAN CENG TA *Huperzia serrata* [Syn. *Lycopodium serratum*]. **Ref:** 108.

**14494 5-Methyl hydantoin**

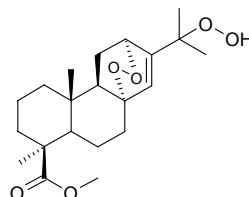
[40856-73-3] C₄H₆N₂O₂ (114.10). Crystals (H₂O). $[\alpha]_D^{28} = -48^\circ$ (EtOH), $[\alpha]_D = -58^\circ$ (H₂O). **Source:** GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*]. **Ref:** 1332, 1521.

**14495 Methyl 15-hydroperoxy-8α,14α,12α,13α-diepoxiabietan-13-en-19-oate**

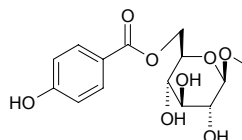
C₂₁H₃₂O₆ (380.49). White powder, $[\alpha]_D = +0.25^\circ$ ($c = 0.40$, CHCl₃). **Pharm:** Cytotoxic (A549, IC₅₀ > 5 μg/mL, control Cycloheximide, IC₅₀ = 0.1 μg/mL; H116, IC₅₀ > 5 μg/mL, Cycloheximide, IC₅₀ = 0.1 μg/mL; PSN1, IC₅₀ > 5 μg/mL, Cycloheximide, IC₅₀ = 0.01 μg/mL; T98G, IC₅₀ > 5 μg/mL, Cycloheximide, IC₅₀ = 2.5 μg/mL; SKBR3, IC₅₀ > 5 μg/mL, Cycloheximide, IC₅₀ = 0.05 μg/mL). **Source:** FEI NI JI CI BAI *Juniperus phoenicea* (leaf), XIANG CI BAI FEI ZHOU BIAN ZHONG *Juniperus thurifera* var. *africana* (leaf). **Ref:** 3851.

**14496 Methyl 15-hydroperoxy-8α,12α-epidioxiabiet-13-en-19-oate**

C₂₁H₃₂O₆ (380.49). White powder, $[\alpha]_D = +9.7^\circ$ ($c = 1.03$, CHCl₃). **Pharm:** Cytotoxic (A549, IC₅₀ = 5 μg/mL, control Cycloheximide, IC₅₀ = 0.1 μg/mL; H116, IC₅₀ = 2.5 μg/mL, Cycloheximide, IC₅₀ = 0.1 μg/mL; PSN1, IC₅₀ = 5 μg/mL, Cycloheximide, IC₅₀ = 0.01 μg/mL; T98G, IC₅₀ > 5 μg/mL, Cycloheximide, IC₅₀ = 2.5 μg/mL; SKBR3, IC₅₀ > 5 μg/mL, Cycloheximide, IC₅₀ = 0.05 μg/mL). **Source:** FEI NI JI CI BAI *Juniperus phoenicea* (leaf), XIANG CI BAI FEI ZHOU BIAN ZHONG *Juniperus thurifera* var. *africana* (leaf). **Ref:** 3851.

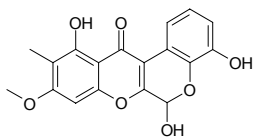
**14497 methyl (6-O-p-Hydroxybenzoyl)-β-D-glucopyranoside**

C₁₄H₁₈O₈ (314.29). **Source:** ZI YE *Catalpa ovata* (fallen leaf). **Ref:** 4290.

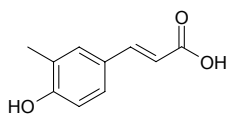


14498 9-O-Methyl-4-hydroxyboeravinone

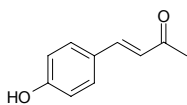
$C_{18}H_{14}O_7$ (342.31). White amorphous powder. **Pharm:** Antifungal (*Candida albicans* DSY1024, $IC_{50} = 48\mu\text{g/mL}$). **Source:** ZI MO LI GEN *Mirabilis jalapa* (Plant cell culture). **Ref:** 3043.

**14499 m-Methyl-p-hydroxy-cinnamic acid**

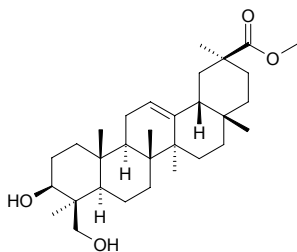
$C_{10}H_{10}O_3$ (178.19). Colorless acicular crystals, mp 170~174°C (Me₂CO). **Source:** JIA BAI HE *Notholirion hyacinthinum* [Syn. *Notholirion bulbiferum*]. **Ref:** 663.

**14500 Methyl p-hydroxycinnamoyl ketone**

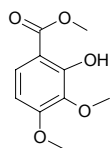
$C_{10}H_{10}O_2$ (162.19). **Pharm:** Cytotoxic inactive (Colon26-L5, HT1080, 100μmol/L). **Source:** YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.00032%). **Ref:** 3042.

**14501 Methyl-24-hydroxy-11-deoxoglycyrrhetate**

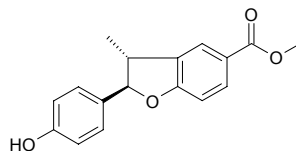
$C_{31}H_{50}O_4$ (486.74). mp 263~264°C. **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 6.

**14502 Methyl 2-hydroxy-3,4-dimethoxy benzoate**

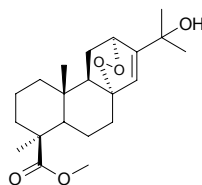
$C_{10}H_{12}O_5$ (212.20). **Source:** JIANG ZHEN XIANG *Dalbergia odorifera*. **Ref:** 1266.

**14503 Methyl-(7R,8R)-4-hydroxy-8',9'-dinor-4',7-epoxy-8,3'-neolignan-7'-ate**

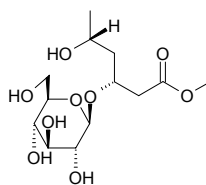
$C_{17}H_{16}O_4$ (284.31). Yellow oil, $[\alpha]_D^{21} = +30.1^\circ$ ($c = 0.08$, MeOH). **Source:** *Piper regnellii* (root). **Ref:** 2358.

**14504 Methyl 15-hydroxy-8α,12α-epidioxiabiet-13-en-19-oate**

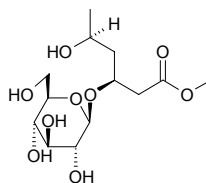
$C_{21}H_{32}O_5$ (364.49). Colorless oil, $[\alpha]_D = +72.4^\circ$ ($c = 0.46$, CHCl₃). **Pharm:** Cytotoxic (A549, $IC_{50} > 5\mu\text{g/mL}$, control Cycloheximide, $IC_{50} = 0.1\mu\text{g/mL}$; H116, $IC_{50} > 5\mu\text{g/mL}$, Cycloheximide, $IC_{50} = 0.1\mu\text{g/mL}$; PSN1, $IC_{50} > 5\mu\text{g/mL}$, Cycloheximide, $IC_{50} = 0.01\mu\text{g/mL}$; T98G, $IC_{50} > 5\mu\text{g/mL}$, Cycloheximide, $IC_{50} = 2.5\mu\text{g/mL}$; SKBR3, $IC_{50} > 5\mu\text{g/mL}$, Cycloheximide, $IC_{50} = 0.05\mu\text{g/mL}$). **Source:** FEI NI JI CI BAI *Juniperus phoenicea* (leaf), XIANG CI BAI FEI ZHOU BIAN ZHONG *Juniperus thurifera* var. *africana* (leaf). **Ref:** 3851.

**14505 Methyl-(3R,5R)-5-hydroxy-3-(β-D-glucopyranosyloxy)-hexanoate**

$C_{13}H_{24}O_9$ (324.33). Oil, $[\alpha]_D^{24} = -27.8^\circ$ ($c = 1.15$, MeOH). **Source:** MO JUE *Hymenophyllum barbatum*. **Ref:** 4178.

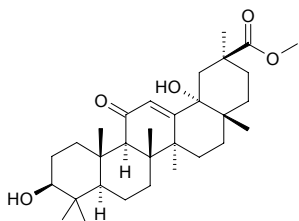
**14506 Methyl-(3S,5S)-5-hydroxy-3-(β-D-glucopyranosyloxy) hexanoate**

$C_{13}H_{24}O_9$ (324.33). **Source:** ZI QI *Osmunda japonica*. **Ref:** 660.

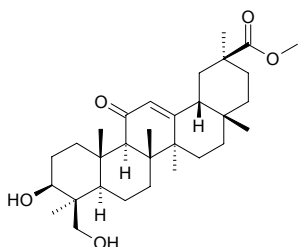


14507 Methyl 18 α -hydroxyglycyrrhetate

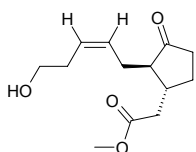
C₃₁H₄₈O₅ (500.73). White acicular crystals (95%ethanol), mp 302~303°C, 284~290°C. Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 6, 82, 660.

**14508 Methyl-24-hydroxyglycyrrhetate**

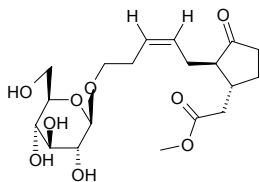
C₃₁H₄₈O₅ (500.73). mp 247~248°C. Source: GAN CAO *Glycyrrhiza uralensis*. Ref: 6.

**14509 (1R,2R)-Methyl-5'-hydroxyjasmonate**

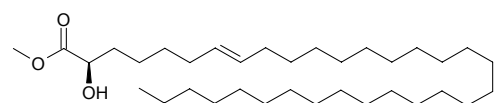
C₁₃H₂₀O₄ (240.30). Amorphous powder, [α]_D²¹ = -49°. Source: SHE XIANG CAO *Thymus vulgaris*. Ref: 2592.

**14510 (1R,2R)-Methyl-5'-hydroxyjasmonate 5'-O-β-D-glucopyranoside**

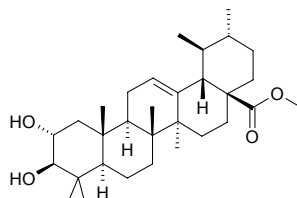
C₁₉H₃₀O₉ (402.45). Amorphous powder, [α]_D²¹ = -55°. Source: SHE XIANG CAO *Thymus vulgaris*, JU YU *Helianthus tuberosus*. Ref: 2592.

**14511 Methyl-2β(2S)-hydroxyl-7(E)-tritriacontenoate**

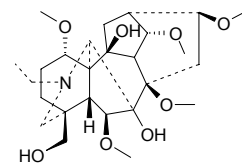
C₃₄H₆₆O₃ (522.90). Colorless powder. [α]_D²⁵ = -120° (c = 0.01, CDCl₃). Pharm: Tyrosinase inhibitor (IC₅₀ = (1.36±0.12)μmol/L, control Kojic acid IC₅₀ = (16.67±0.52)μmol/L, L-Mimosine IC₅₀ = (3.68±0.02)μmol/L). Source: FEN ZHI PO JU *Amberboa ramosa*. Ref: 2531.

**14512 Methyl 2 α -hydroxyursa-28-oate**

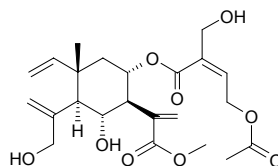
C₃₁H₅₀O₄ (486.74). Source: JIN YING ZI *Rosa laevigata*, XIA KU CAO *Prunella vulgaris*. Ref: 1326, 2508.

**14513 8-Methyl-10-hydroxylycoctonine**

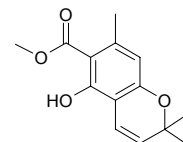
C₂₆H₄₃NO₈ (497.63). Colorless powder. Source: ZI HUA GAO WU TOU *Aconitum excelsum*. Ref: 689.

**14514 Methyl 8 α -(Z-2-hydroxymethyl-4-acetoxybut-2-enyloxy)-6 α ,15-dihydroxyelema-1,3,11(13)-trien-12-oate**

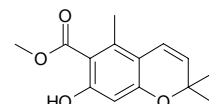
C₂₃H₃₂O₉ (452.51). Colorless oil, [α]_D = +11.5° (c = 1.2, CHCl₃). Source: CU CAO SHI CHE JU *Centaurea aspera* ssp. *aspera* (aerial parts), XIA YE CU CAO SHI CHE JU *Centaurea aspera* subsp. *stenophylla* (aerial parts). Ref: 5300.

**14515 Methyl 5-hydroxy-7-methyl-2,2-dimethyl-2H-1-chromene-6-carboxylate**

C₁₄H₁₆O₄ (248.28). Amorphous solid. Pharm: Antifungal (*Cladosporium sphaerospermum*, 100μg, weak activity; *Cladosporium cladosporioides*, 100μg, weak activity). Source: *Peperomia villipetiola* (stem). Ref: 5256.

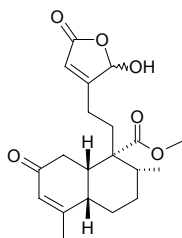
**14516 Methyl 7-hydroxy-5-methyl-2,2-dimethyl-2H-1-chromene-6-carboxylate**

C₁₄H₁₆O₄ (248.28). Amorphous solid. Pharm: Antifungal inactive (*Cladosporium sphaerospermum*, 100μg; *Cladosporium cladosporioides*, 100μg). Source: *Peperomia villipetiola* (stem). Ref: 5256.



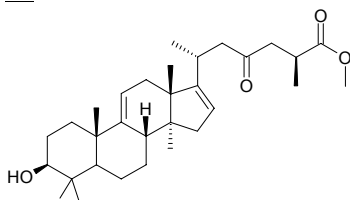
14517 (-)-Methyl 16-hydroxy-19-nor-2-oxo-cis-cleroda-3,13-dien-15,16-olide-20-oate

$C_{20}H_{26}O_6$ (362.43). $[\alpha]_D = -8.1^\circ$ ($c = 0.3$, $CHCl_3$). Source: GE LUN BI YA BA DOU *Croton schiedeanus* (aerial parts). Ref: 4447.



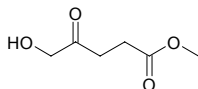
14518 Methyl (25R)-3β-hydroxy-23-oxo-9,16-lanostadien-26-oate

$C_{31}H_{48}O_4$ (484.73). White powder, mp 180~182°C, $[\alpha]_D^{25} = -124.2^\circ$ ($c = 0.0054$, $CHCl_3$). Source: MEI LI TENG HUANG *Garcinia speciosa* (bark). Ref: 3762.



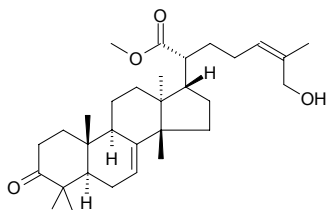
14519 Methyl 5-hydroxy-4-oxopentanoate

$C_6H_{10}O_4$ (146.14). Source: ER RUI HE LIAN DOU *Drymaria diandra* [Syn. *Drymaria cordata* ssp. *diandra*] (whole herb: yield = 0.00021%dw). Ref: 4758.



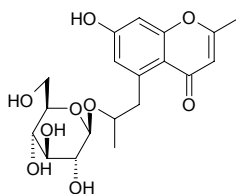
14520 Methyl(24Z)-26-hydroxy-3-oxo-7,24-tirucalladienoate

Methyl(24Z)-26-hydroxy-3-oxo-7,24-euphadienoate [121063-68-1] $C_{31}H_{48}O_4$ (484.73). Source: KU SHU PI *Picrasma quassoides* [Syn. *Picrasma ailanthoides*]. Ref: 12.



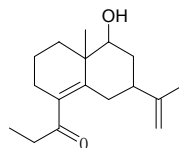
14521 2-Methyl-5-(2'-hydroxypropyl)-7-hydroxy-chromone-2'-O-β-D-glucopyranoside

$C_{19}H_{24}O_9$ (396.40). White powder, mp 232~233°C. Source: TIE DAO MU *Cassia siamea*. Ref: 2459.



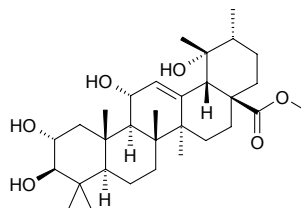
14522 Methyl 9-hydroxyselina-4,11-dien-14-oate

$C_{17}H_{26}O_2$ (262.40). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.



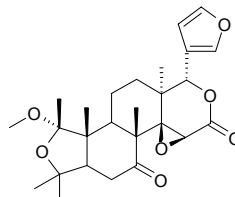
14523 Methyl 11α-hydroxytormentate

$C_{31}H_{50}O_6$ (518.74). Source: JIN YING ZI *Rosa laevigata*. Ref: 1326.



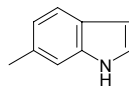
14524 1-O-Methylchangsensin

$C_{26}H_{34}O_7$ (458.56). Colorless needles, $[\alpha]_D^{25} = +20.0^\circ$ ($c = 1.2$, MeOH). Source: SU DA QI GAN JU *Citrus sudachii* (seed). Ref: 3532.



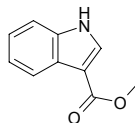
14525 6-Methyl indole

[3420-02-8] C_9H_9N (131.18). Source: ROU CONG RONG *Cistanche deserticola*. Ref: 2.



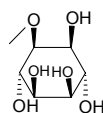
14526 Methyl indole-3-carboxylate

$C_{10}H_9NO_2$ (175.19). Source: TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root). Ref: 4488.



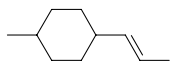
14527 D-1-O-Methyl-muco-inositol

$C_7H_{14}O_6$ (194.19). Source: SAN JIAN SHAN *Cephalotaxus fortunei*. Ref: 1418.

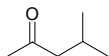


14528 1-Methyl-4-isoallyl-cyclohexane

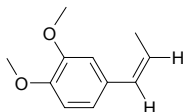
$C_{10}H_{18}$ (138.25). Source: SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. Ref: 2.

**14529 Methyl isobutyl ketone**

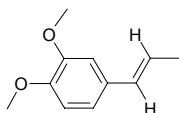
[108-10-1] $C_6H_{12}O$ (100.16). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.

**14530 cis-Methyl isoeugenol**

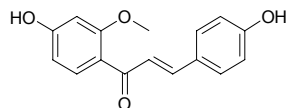
1,2-Dimethoxy-4-(1-*cis*-propenyl)-benzene $C_{11}H_{14}O_2$ (178.23). White oil, bp 138~140°C/12mmHg. Pharm: Inhibitory activity against NFAT Transcription ($IC_{50} > 100\mu\text{mol/L}$, positive control Cyclosporin A, $IC_{50} = (0.29\pm 0.01)\mu\text{mol/L}$). Source: BAI CHANG *Acorus calamus*, HUA CHA BIAO *Ribes fasciculatum* var. *chinense*. Ref: 6, 2536.

**14531 trans-Methyl isoeugenol**

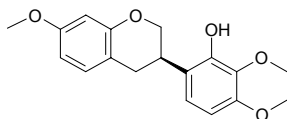
[6379-72-2] $C_{11}H_{14}O_2$ (178.23). mp 16~17°C, bp 143~144°C/11mmHg. Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 0.4mg/mL; *Diplococcus pneumoniae*, MIC = 0.6mg/mL); antihistamine; antispasmodic; antitussive (dispels phlegm); sedative; hypnotic. Source: BAI CHANG *Acorus calamus*, JIN QIAN PU *Acorus gramineus*, NAN HE SHI *Daucus carota*, OU XI XIN *Asarum europaeum*, ROU DOU KOU *Myristica fragrans*, YE XIANG MAO *Cymbopogon goeringii*. Ref: 6, 658.

**14532 2'-O-Methyl isoliquiritigenin**

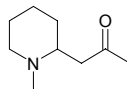
$C_{16}H_{14}O_4$ (270.29). Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 1289.

**14533 7-O-Methyl isomucronulatol**

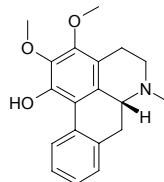
[137217-83-5] $C_{18}H_{20}O_5$ (316.36). Source: MENG GU HUANG QI *Astragalus mongholicus*. Ref: 1328.

**14534 Methyl isopelletierine**

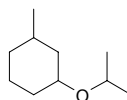
$C_9H_{17}NO$ (155.24). bp (\pm) 96~98°C/13mmHg. Source: HENG GEN FEI CAI *Sedum kamtschaticum*, SHI LIU GEN *Punica granatum*, SHI LIU PI *Punica granatum*, SHI ZHI JIA *Sedum sarmentosum*. Ref: 6, 1218, 1219, 1220, 1221.

**14535 (-)-N-Methylisopiline**

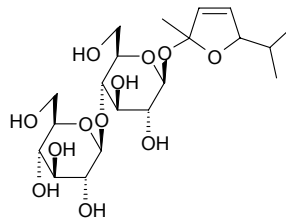
$C_{19}H_{21}NO_3$ (311.38). Source: YOU GOU YING ZHAO *Artabotrys uncinatus* (stem). Ref: 3083.

**14536 1-Methyl-3-isopropoxy cyclohexane**

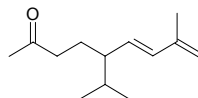
$C_{10}H_{20}O$ (156.27). Source: YI ZHI REN *Alpinia oxyphylla*. Ref: 1404.

**14537 1α-O-[2'-(2'-Methyl-5'-isopropyl,3'-en-bihydrofuryl)]-β-D-lactose**

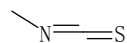
$C_{20}H_{34}O_{12}$ (466.49). White amorphous powder. Source: WU HUA GUO *Ficus carica*. Ref: 814.

**14538 8-Methyl-5-isopropyl-6,8-nonadiene-2-one**

$C_{12}H_{22}O$ (194.32). Source: HUA JIAO *Zanthoxylum bungeanum*. Ref: 1340.

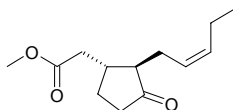
**14539 Methyl isothiocyanate**

[556-61-6] C_2H_3NS (73.12). mp 35.93°C, bp 119°C/758mmHg. Source: JIE ZI *Brassica juncea*. Ref: 6.

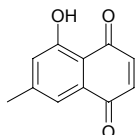


14540 cis-Methyl jasmonate

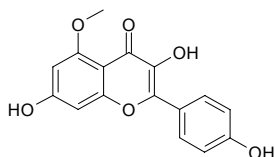
[20073-13-6] C₁₃H₂₀O₃ (224.30). Source: MO LI HUA *Jasminum sambac*.
Ref: 1483.

**14541 7-Methyl juglone**

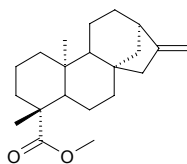
[14787-38-3] C₁₁H₈O₃ (188.18). Pharm: Antifungal (*Cladosporium cucumerinum*); molluscicide (kills shellfish). Source: JUN QIAN ZI *Diospyros lotus*, *Drosera* sp. Ref: 6, 658.

**14542 5-Methyl kaempferol**

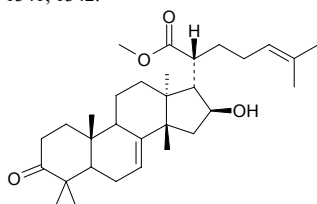
C₁₆H₁₂O₆ (300.27). Source: YING SHAN HONG *Rhododendron mucronulatum*. Ref: 6.

**14543 (-)-Methyl kaur-16-en-19-oate**

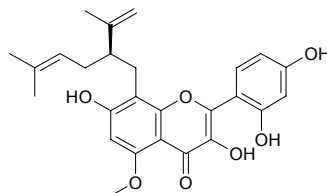
C₂₁H₃₂O₂ (316.49). Transparent oil, [α]_D²⁰ = -91.9° (c = 1.0, CHCl₃). Pharm: Na⁺,K⁺-ATP inhibitor (crude enzyme Na⁺,K⁺-ATPase from rat brain, IC₅₀ = 550 μmol/L). Source: GUANG YE BA DOU *Croton oblongifolius* [Syn. *Croton laevigatus*] (semi-synthetic derivative). Ref: 5404.

**14544 Methyl kulonate**

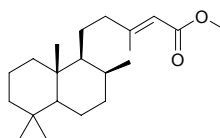
[22611-37-6] C₃₁H₄₈O₄ (484.73). Source: KU LIAN PI *Melia azedarach*. Ref: 1341, 1342.

**14545 5-O-Methyl kushenol C**

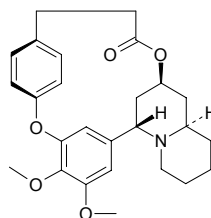
C₂₆H₂₈O₇ (452.51). Source: KU SHEN *Sophora flavescens* [Syn. *Sophora angustifolia*]. Ref: 1333.

**14546 Methyl labd-13E-en-15-oate**

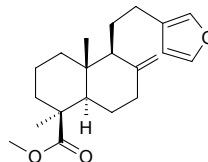
C₂₁H₃₀O₂ (320.52). Colorless gum. Source: *Colophospermum mopane* (bark and seed). Ref: 5147.

**14547 Methyl lagerine**

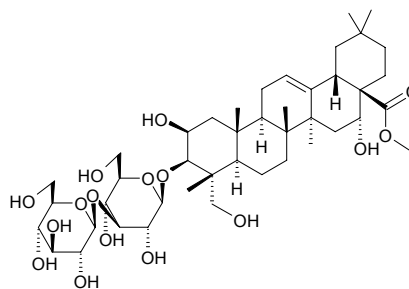
[33033-88-4] C₂₆H₃₁NO₅ (437.54). Source: ZI WEI HUA *Lagerstroemia indica*. Ref: 6.

**14548 Methyl lambertianate**

C₂₁H₃₀O₃ (330.47). Source: HAI SONG ZI *Pinus koraiensis*. Ref: 6.

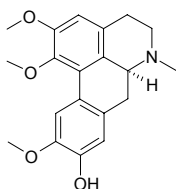
**14549 Methyl 3-O-β-laminaribiosyl polygalcate**

C₄₃H₇₀O₁₆ (843.03). Source: JIE GENG *Platycodon grandiflorum*. Ref: 1381.

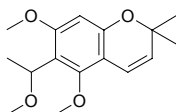


14550 (+)-N-Methyl laurotetanine

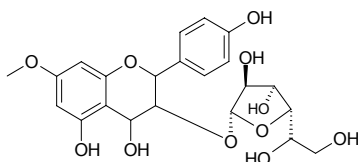
$C_{20}H_{23}NO_4$ (341.41). Source: YAN HU SUO *Corydalis yanhusuo* [Syn. *Corydalis turtschaninovii* f. *Yanhusuo*]. Ref: 2.

**14551 Methyl leptol B**

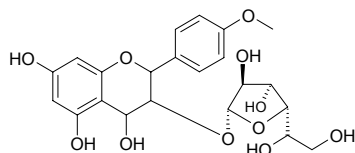
$C_{16}H_{22}O_4$ (278.35). Colorless columnar crystals (acetone), $[\alpha]_D^{18} = +24.3^\circ$ ($c = 0.339$, Me_2CO). Source: SAN CHA KU *Evodia leptia* [Syn. *Ilex leptia*]. Ref: 393.

**14552 7-O-Methyl leucopelargonidin-3-mono-glucufuranoside**

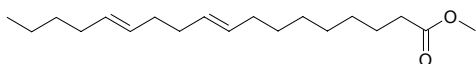
$C_{22}H_{26}O_{11}$ (466.45). Source: SHAN FAN YE *Symplocos caudata*. Ref: 6.

**14553 4'-O-Methyl leucopelargonidin-3-mono-glucufuranoside**

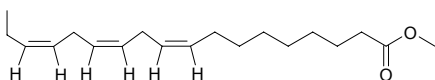
$C_{22}H_{26}O_{11}$ (466.45). Source: SHAN FAN YE *Symplocos caudata*. Ref: 6.

**14554 Methyl linoleate**

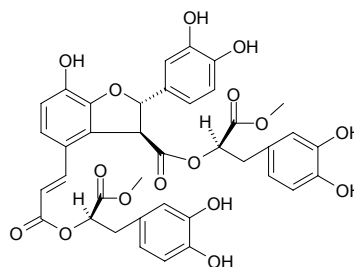
$C_{19}H_{34}O_2$ (294.48). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], JIN YIN HUA *Lonicera japonica*. Ref: 2, 660.

**14555 Methyl linolenate**

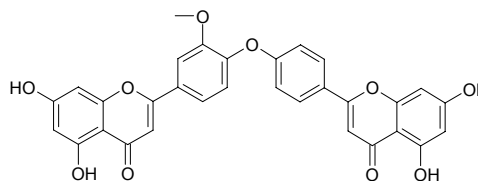
(*Z,Z,Z*)-9,12,15-Octadecatrienoic acid methyl ester; Linolenic acid methyl ester [301-00-8] $C_{19}H_{32}O_2$ (292.47). bp 177~180°C/3.5mmHg. Source: KUN BU *Laminaria japonica*. Ref: 6.

**14556 Methyl lithospermate B**

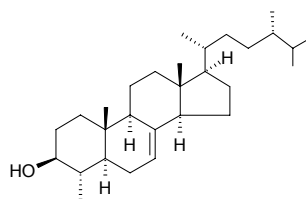
$C_{38}H_{34}O_{16}$ (746.69). Pharm: Antioxidant (DPPH scavenger, $IC_{50} = 0.0506$ mmol/L, control Propyl gallate, $IC_{50} = 0.03$ mol/L; superoxide radical inhibitor, $IC_{50} = 0.113$ mmol/L, control Propyl gallate, $IC_{50} = 0.106$ mmol/L; iron chelating assay, $IC_{50} = 0.053$ mmol/L, control Propyl gallate, $IC_{50} = 0.064$ mmol/L). Source: MING XIAN HUA ZHU CHANG ZHU LIU LI CAO *Lindlofia stylosa* (aerial part). Ref: 4533.

**14557 3'-O-Methyl loniflavone**

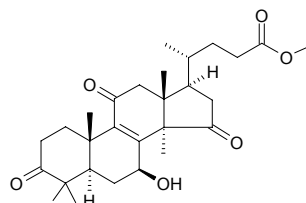
5,5',7,7''-Tetrahydroxy 3'-methoxy 4',4''-biflavonyl ether $C_{31}H_{20}O_{10}$ (552.50). Yellowish powder, mp 242~244°C. Source: JIN YIN HUA *Lonicera japonica* (leaf). Ref: 5335.

**14558 24-Methyllophenol**

4,24-Dimethyl cholest-7-en-3-ol [33903-17-2] $C_{29}H_{50}O$ (414.72). Source: GOU QI ZI *Lycium chinense*. Ref: 1371, 1372, 1373, 1374.

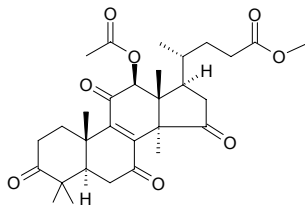
**14559 Methyl lucidenate A**

$C_{28}H_{40}O_6$ (472.63). Pharm: EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced, $IC_{50} = 287$ mol ratio/32pmol TPA, control β -Carotene, $IC_{50} = 400$ mol ratio/32pmol TPA). Source: LING ZHI *Ganoderma lucidum* (dried sporocarp; yield = 0.019%dw) Ref: 4737.

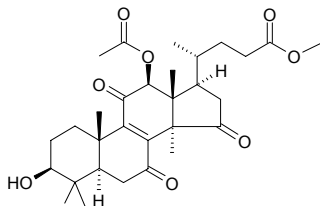


14560 Methyl lucidenate D₂

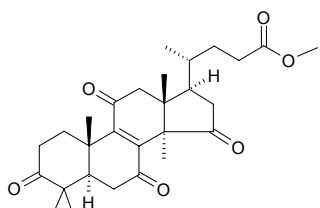
C₃₀H₄₀O₈ (528.65). **Pharm:** EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced, IC₅₀ = 290mol ratio/32pmol TPA, control β-Carotene, IC₅₀ = 400mol ratio/32pmol TPA). **Source:** LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.0022%dw). **Ref:** 4737.

**14561 Methyl lucidenate E₂**

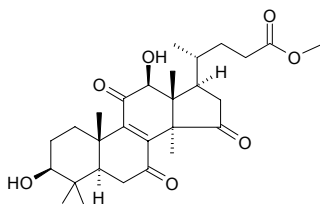
C₃₀H₄₂O₈ (530.66). **Pharm:** EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced, IC₅₀ = 288mol ratio/32pmol TPA, control β-Carotene, IC₅₀ = 400mol ratio/32pmol TPA). **Source:** LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.0092%dw). **Ref:** 4737.

**14562 Methyl lucidenate F**

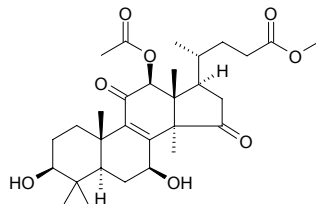
C₂₈H₃₈O₆ (470.61). Pale yellow needles (MeOH), mp 205–207°C, [α]_D = +120.0° (c = 0.05, CHCl₃). **Pharm:** EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced, IC₅₀ = 285mol ratio/32pmol TPA, control β-Carotene, IC₅₀ = 400mol ratio/32pmol TPA)^[4737]. **Source:** LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.0069%dw)^[4737]. **Ref:** 3081, 4737.

**14563 Methyl lucidenate L**

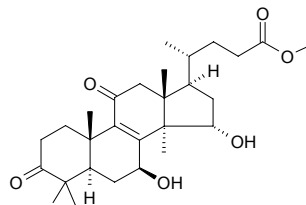
C₂₈H₄₀O₇ (488.63). **Pharm:** EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced, IC₅₀ = 275mol ratio/32pmol TPA, control β-Carotene, IC₅₀ = 400mol ratio/32pmol TPA). **Source:** LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.0011%dw). **Ref:** 4737.

**14564 Methyl lucidenate P**

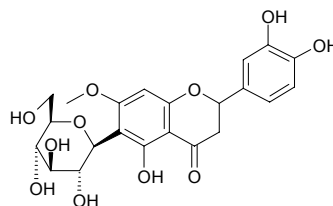
C₃₀H₄₄O₈ (532.68). Colorless needles (acetone–MeOH), mp 83–85°C, [α]_D²⁵ = +77.6° (c = 0.41, CHCl₃). **Pharm:** EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced, IC₅₀ = 293mol ratio/32pmol TPA, control β-Carotene, IC₅₀ = 400mol ratio/32pmol TPA). **Source:** LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.015%dw). **Ref:** 4737.

**14565 Methyl lucidenate Q**

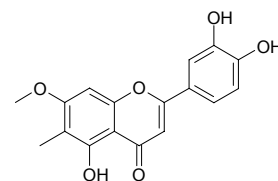
C₂₈H₄₂O₆ (474.64). Colorless needles (acetone–MeOH), mp 130–131°C, [α]_D²⁵ = +58.5° (c = 0.13, CHCl₃). **Pharm:** EBV-EA activation inhibitor (Raji cells *in vitro*, TPA-induced, IC₅₀ = 283mol ratio/32pmol TPA, control β-Carotene, IC₅₀ = 400mol ratio/32pmol TPA). **Source:** LING ZHI *Ganoderma lucidum* (dried sporocarp: yield = 0.066%dw). **Ref:** 4737.

**14566 7-O-Methyl luteolin-6-C-β-D-glucoside**

C₂₂H₂₄O₁₁ (464.43). **Source:** QING YE DAN *Swertia mileensis*. **Ref:** 1358.

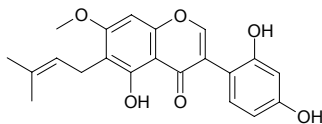
**14567 6-C-Methyl luteolin 7-methyl ether**

C₁₇H₁₄O₆ (314.30). Yellow needle crystals (CHCl₃–MeOH), mp 297–298°C. **Pharm:** Antibacterial (oral pathogens: *Streptococcus mutans*, MIC = 250μg/mL, control Chlorhexidine gluconate, MIC = 1.25μg/mL; *Fusobacterium nucleatum*, MIC = 375μg/mL, Chlorhexidine gluconate, MIC = 2.5μg/mL). **Source:** BAI MAO GEN⁽⁴⁾ *Hydrastis canadensis* (root). **Ref:** 5418.

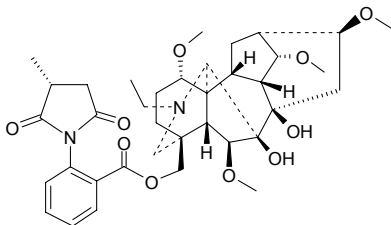


14568 7-O-Methyluteone

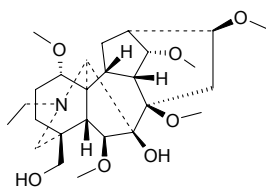
5,2',4'-Trihydroxy-7-methoxy-6-(3-methylbut-2-enyl)isoflavone C₂₁H₂₀O₆ (368.39). Amorphous solid. Source: KEN NI YA CI TONG *Erythrina burttii* (stem cortex). Ref: 3387.

**14569 Methyllycaconitine**

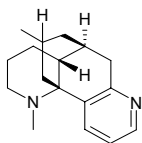
[21019-30-7] C₃₇H₅₀N₂O₁₀ (682.82). mp 128°C. Pharm: Neuromuscular blocker. Source: E MEI CUI QUE HUA *Delphinium omeiense*, GAO FEI YAN CAO *Delphinium elatum*, CUI QUE HUA *Delphinium grandiflorum*. Ref: 6, 658, 2190.

**14570 8-Methyllycoctonine**

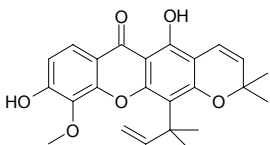
C₂₆H₄₃NO₇ (481.64). Colorless powder, mp 120~123°C Source: ZI HUA GAO WU TOU *Aconitum excelsum*. Ref: 689.

**14571 N-Methyllycodine**

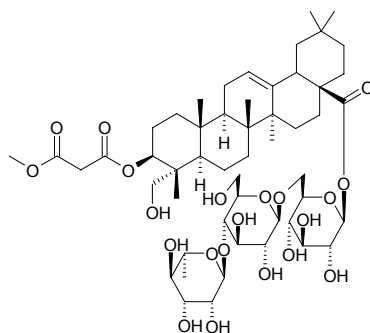
C₁₇H₂₄N₂ (256.39). Source: GUO JIANG LONG *Lycopodium complanatum*. Ref: 1410.

**14572 10-O-Methylmacluraxanthone**

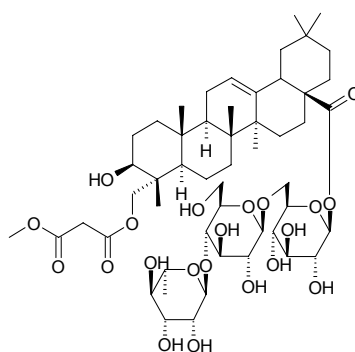
C₂₄H₂₄O₆ (408.46). Pharm: Cytotoxic (P₃₈₈ ED₅₀ = 3.49µg/mL, control Mithramycin, ED₅₀ = 0.06µg/mL, HT29 ED₅₀ = 5.25µg/mL, control Mithramycin, ED₅₀ = 0.08µg/mL). Source: TAI WAN LV DAO TENG HUANG *Garcinia limii*. Ref: 4094.

**14573 3-O-methyl malonylhederagenin 28-O-α-L-rhamnopyranosyl-(1→4)-β-D-glucopyranosyl-(1→6)-β-D-glucopyranoside**

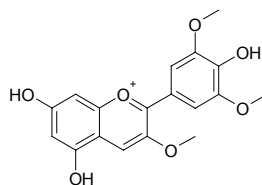
C₅₂H₈₂O₂₁ (1043.22). White powder, mp 168~170°C. Source: LUAN YE YIN LIAN HUA *Anemone begoniifolia*. Ref: 862.

**14574 23-O-Methyl malonylhederagenin 28-O-α-L-rhamnopyranosyl-(1→4)-β-D-glucopyranosyl-(1→6)-β-D-glucopyranoside**

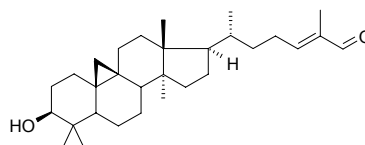
C₅₂H₈₂O₂₁ (1043.22). White powder, mp 175~178°C. Source: LUAN YE YIN LIAN HUA *Anemone begoniifolia*. Ref: 862.

**14575 3-O-Methyl malvidin**

C₁₈H₁₇O₇⁺ (345.33). Source: *Vaccinium ashei* (fruit). Ref: 4240.

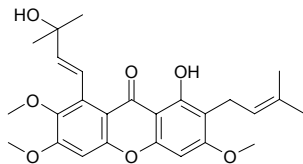
**14576 14-Methylmangiferolic aldehyde**

C₃₀H₄₈O₂ (440.72). mp 66~70°C. Source: MANG GUO SHU PI *Mangifera indica*. Ref: 6.

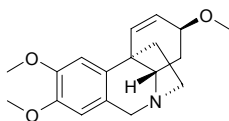


14577 6-O-Methylmangostanin

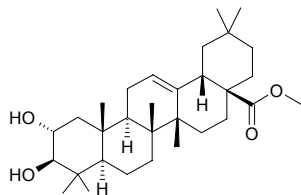
$C_{26}H_{30}O_7$ (454.52). Pale yellow gum, $[\alpha]_D = +14.0^\circ$ ($c = 0.43$, $CHCl_3$). Source: DAO NIAN ZI *Garcinia mangostana*. Ref: 1964.

**14578 O-Methylmaritidine**

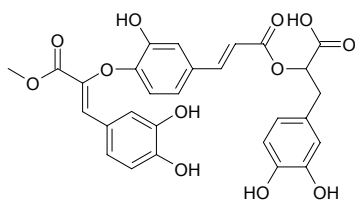
$C_{18}H_{23}NO_3$ (301.39). Source: *Cyrtanthus falcatus*. Ref: 4952.

**14579 Methyl maslinate**

$C_{31}H_{50}O_4$ (486.74). Source: PI PA YE *Eriobotrya japonica*. Ref: 1325.

**14580 Methyl melitrate A**

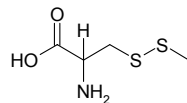
$C_{28}H_{24}O_{12}$ (552.50). Freeze-dried light-brown powder, $[\alpha]_D^{20} = +40.5^\circ$ ($c = 0.2$, MeOH). Source: YAO YONG DAN SHEN *Salvia officinalis*. Ref: 2388.

**14581 Methyl mercaptan**

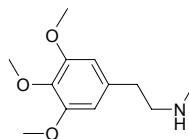
[74-93-1] CH_4S (48.11). mp $-123^\circ C$, bp $5.8-6.2^\circ C$. Pharm: Antifungal; Insecticidal. Source: LAI FU ZI *Raphanus sativus*, XIANG YE *Pelargonium graveolens*, LAI FU *Raphanus sativus*. Ref: 6, 658.

**14582 S-Methyl mercapto-L-cysteine**

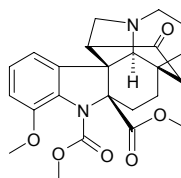
$C_4H_9NO_2S_2$ (167.25). Source: DA SUAN *Allium sativum*. Ref: 1393.

**14583 N-Methylmescaline**

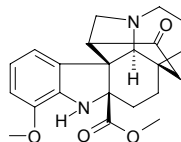
$C_{12}H_{19}NO_3$ (225.29). Pharm: Causes mental illness; similar action with mescaline. Source: AN LU LONG SHE LAN *Lophophora williamsii*, LUO TUO CI *Alhagi pseudalhagi*. Ref: 658.

**14584 Methyl 12-methoxychanofrucosinate**

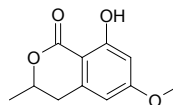
$C_{24}H_{28}N_2O_6$ (440.50). Source: HUANG HONG SE RUI MU *Kopsia flavida* (leaf). Ref: 5157.

**14585 Methyl 12-methoxy-N7-decarbomethoxychanofrucosinate**

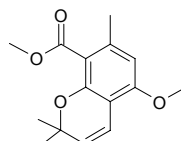
$C_{22}H_{26}N_2O_4$ (382.46). Source: HUANG HONG SE RUI MU *Kopsia flavida* (leaf). Ref: 5157.

**14586 3-Methyl-6-methoxy-8-hydroxy-3,4-dihydroisocoumarin**

$C_{11}H_{12}O_4$ (208.22). mp $75-76^\circ C$. Source: HU LUO BO *Daucus carota* var. *sativa*. Ref: 6.

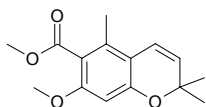
**14587 Methyl 5-methoxy-7-methyl-2,2-dimethyl-2H-1-chromene-8-carboxylate**

$C_{15}H_{18}O_4$ (262.31). Oil. Pharm: Antifungal (*Cladosporium sphaerospermum*, 100µg, weak activity; *Cladosporium cladosporioides*, 100µg, weak activity). Source: *Peperomia villipetiola* (stem). Ref: 5256.

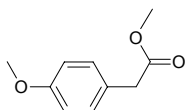


14588 Methyl 7-methoxy-5-methyl-2,2-dimethyl-2H-1-chromene-6-carboxylate

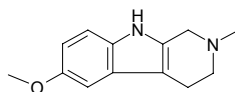
$C_{15}H_{18}O_4$ (262.31). Oil. **Pharm:** Antifungal (*Cladosporium sphaerospermum*, 100 μ g, weak activity; *Cladosporium cladosporioides*, 100 μ g, weak activity). **Source:** *Peperomia villipetiola* (stem). **Ref:** 5256.

**14589 Methyl 4-methoxyphenylacetate**

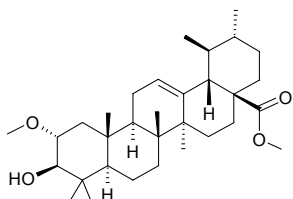
$C_{10}H_{12}O_3$ (180.21). Colorless liquid. **Source:** *Gloeophyllum odoratum*. **Ref:** 3972.

**14590 2-Methyl-6-methoxy-1,2,3,4-tetrahydro- β -carboline**

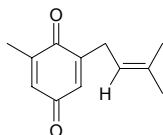
$C_{13}H_{16}N_2O$ (216.29). **Source:** NI BO ER LV RONG HAO *Meconopsis nepaulensis*. **Ref:** 1513.

**14591 Methyl 2 α -methoxyursolate**

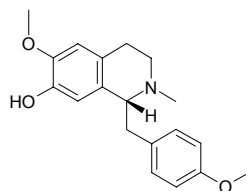
$C_{32}H_{52}O_4$ (500.77). **Source:** JIN YING ZI *Rosa laevigata*. **Ref:** 1326.

**14592 2-Methyl-6-(3-methyl-2-butenyl)benzo-1,4-quinone**

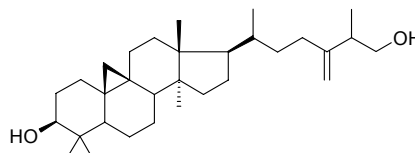
$C_{12}H_{14}O_2$ (190.24). **Pharm:** Antibacterial (*Escherichia coli* ATCC 11775, MIC > 6250 μ g/mL, control Ciproflaxin, MIC = 0.63 μ g/mL; *Klebsiella pneumoniae* NCTC 9633, MIC > 6250 μ g/mL, Ciproflaxin, MIC = 0.20 μ g/mL; *Enterococcus faecalis* ATCC 29212, MIC = 39 μ g/mL, Ciproflaxin, MIC = 6.25 μ g/mL; *Staphylococcus aureus* ATCC 6538, MIC = 39 μ g/mL, Ciproflaxin, MIC = 0.31 μ g/mL; *Bacillus cereus* ATCC 11778, MIC = 18 μ g/mL, Ciproflaxin, MIC = 2.5 μ g/mL; *Staphylococcus epidermidis* ATCC 2223, MIC = 9.8 μ g/mL, Ciproflaxin, MIC = 1.25 μ g/mL; *Cryptococcus neoformans* ATCC 90112, MIC = 70 μ g/mL, Ciproflaxin, MIC = 2.5 μ g/mL); antifungal (*Candida albicans* ATCC10231, MIC = 130 μ g/mL; control Amphotericin B, MIC = 1.25 μ g/mL). **Source:** XUAN CHUI GEN NAI LA CAO *Gunnera perpensa* (leaf and stem). **Ref:** 5314.

**14593 4'-Methyl-N-methylcoclaurine**

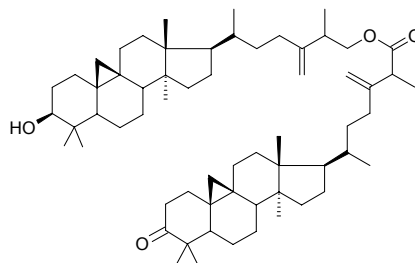
$C_{19}H_{23}NO_3$ (313.40). **Source:** LIAN ZI XIN *Nelumbo nucifera*. **Ref:** 1315.

**14594 14-Methyl-24-methylene-dihydromangiferodiol**

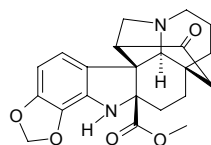
$C_{31}H_{52}O_2$ (456.76). **Source:** MANG GUO SHU PI *Mangifera indica*. **Ref:** 6.

**14595 (14-Methyl-24-methylene-dihydroman-giferodiol)-14-methyl-24-methylene dihydromangiferonate**

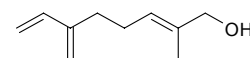
$C_{62}H_{98}O_4$ (907.47). **Source:** MANG GUO SHU PI *Mangifera indica*. **Ref:** 6.

**14596 Methyl 11,12-methylenedioxy-N₁-decarbomethoxychanofrucosinate**

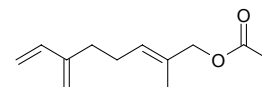
$C_{22}H_{24}N_2O_5$ (396.45). **Source:** HUANG HONG SE RUI MU *Kopsia flavida* (leaf). **Ref:** 5157.

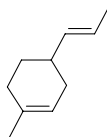
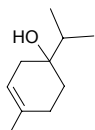
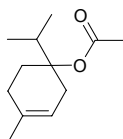
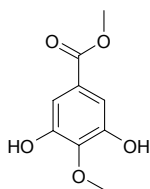
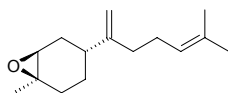
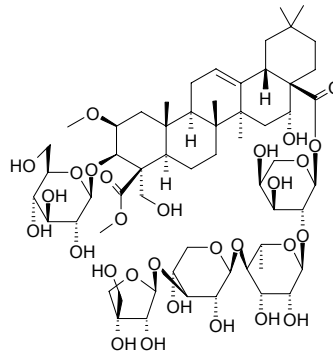
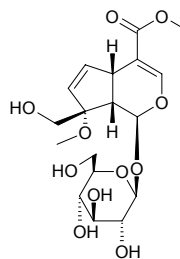
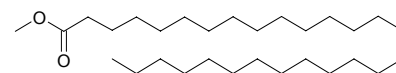
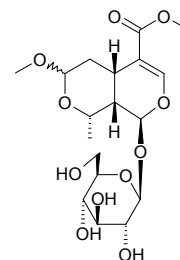
**14597 2-Methyl-6-methylene-2,7-octadienol**

$C_{10}H_{16}O$ (152.24). **Source:** SHE XIANG CAO *Thymus vulgaris*. **Ref:** 6.

**14598 2-Methyl-6-methylene-2,7-octadienol acetate**

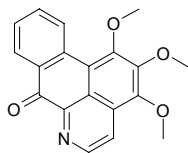
$C_{12}H_{18}O_2$ (194.28). **Source:** SHE XIANG CAO *Thymus vulgaris*. **Ref:** 6.



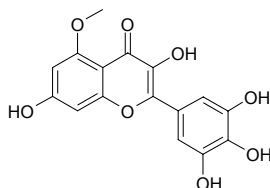
14599 1-Methyl-4-methylethenylcyclohexeneC₁₀H₁₆ (136.24). Source: WU WEI ZI *Schisandra chinensis*. Ref: 2.**14600 4-Methyl-1-(1-methylethyl)-3-cyclohexene-1-ol**C₁₀H₁₈O (154.25). Source: CHUAN XU DUAN *Dipsacus asperoides*. Ref: 1379.**14601 4-Methyl-1-(1-methylethyl)-3-cyclohexen-1-ol-acetate**C₁₂H₂₀O₂ (196.29). Source: SHENG JIANG *Zingiber officinale*. Ref: 2.**14602 Methyl-4-O-methylgallate**[24093-81-0] C₉H₁₀O₅ (198.17). Colorless rhombic crystals (benzene), mp 136°C. Pharm: Cytotoxic (KB, ED₅₀ = 8.62µg/mL). Source: JIN QIAN KU YE CAO *Chrysosplenium grayanum*, WAN SHOU JU *Tagetes erecta*. Ref: 900.**14603 1-Methyl-4-(5-methyl-1-methylenehex-4-enyl)-7-oxabicyclo [4.1.0]heptane**C₁₅H₂₄O (220.36). Colorless oil, [α]_D²⁵ = +43.5° (c = 2.7, CHCl₃). Pharm: Antimycobacterial (*Mycobacterium intracellulare*, IC₅₀ = 10.0µg/mL, control Ciprofloxacin, IC₅₀ = 0.25µg/mL). Source: *Pimpinella aurea*. Ref: 5465.**14604 Methyl 2-O-methyl platycogenate A**C₅₉H₉₄O₂₉ (1267.39). Source: JIE GENG *Platycodon grandiflorum*. Ref: 1382.**14605 8-O-Methylmonotropein methyl ester**C₁₈H₂₆O₁₁ (418.40). Amorphous powder, [α]_D²⁵ = -114.1° (c = 0.377, MeOH), artifact. Source: ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*] (leaf). Ref: 4408.**14606 Methyl montanate**C₂₉H₅₈O₂ (438.78). Source: QIN JIAO *Gentiana macrophylla*. Ref: 1357.**14607 7-O-Methyl morroniside**C₁₈H₂₈O₁₁ (420.42). Source: SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpum officinale*]. Ref: 1346.

14608 O-Methylmoschatoline

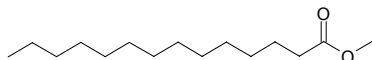
$C_{19}H_{15}NO_4$ (321.34). Source: YOU GOU YING ZHAO *Artabotrys uncinatus* (root, stem). Ref: 3083.

**14609 5-Methylmyricetin**

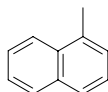
Myricetin-5-methyl ether $C_{16}H_{12}O_8$ (332.27). Source: YING SHAN HONG *Rhododendron mucronulatum*, DU JUAN HUA *Rhododendron simsii*. Ref: 6.

**14610 Methyl myristate**

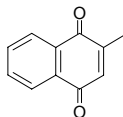
Methyl tetradecanoate [124-10-7] $C_{15}H_{30}O_2$ (242.41). Source: DANG SHEN *Codonopsis pilosula*, QIANG HUO *Notopterygium incisum*. Ref: 2, 1354.

**14611 1-Methyl naphthalene**

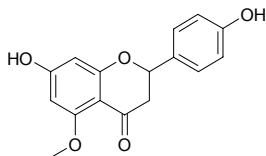
$C_{11}H_{10}$ (142.20). Source: XIA YE XIANG PU *Typha angustifolia*. Ref: 1402.

**14612 2-Methyl-1,4-naphthoquinone**

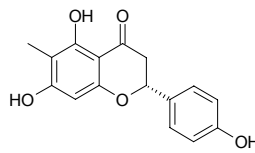
$C_{11}H_8O_2$ (172.19). Source: HU TAO REN *Juglans regia*. Ref: 1423.

**14613 5-O-Methylnaringenin**

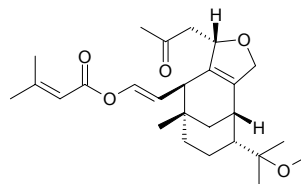
$C_{16}H_{14}O_5$ (286.29). Pharm: Cytotoxic inactive (Colon26-L5, HT1080, 100 μ mol/L). Source: YUN NAN CAO KOU *Alpinia blepharocalyx* (seed: yield = 0.0216%). Ref: 3042.

**14614 6-C-Methylnaringenin**

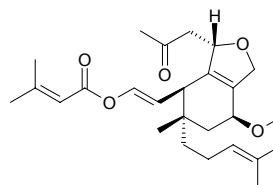
$C_{16}H_{14}O_5$ (286.29). Source: TAI WAN CU FEI *Cephalotaxus wilsoniana* (twig). Ref: 4253.

**14615 15-O-Methylnovibsanin F**

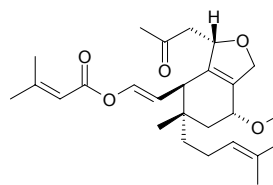
$C_{26}H_{38}O_5$ (430.59). Colorless paste, $[\alpha]_D^{23} = +75.5^\circ$ ($c = 0.12$, $CHCl_3$). Source: RI BEN JIA MI *Viburnum awabuki*. Ref: 2530.

**14616 2-O-Methylnovibsanin H**

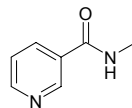
$C_{26}H_{38}O_5$ (430.59). Colorless oil, $[\alpha]_D^{23} = +320.0^\circ$ ($c = 0.22$, alcohol). Source: RI BEN JIA MI *Viburnum awabuki*. Ref: 2530.

**14617 2-O-Methylnovibsanin I**

$C_{26}H_{38}O_5$ (430.59). Colorless paste, $[\alpha]_D^{23} = +51.5^\circ$ ($c = 0.28$, $CHCl_3$). Source: RI BEN JIA MI *Viburnum awabuki*. Ref: 2530.

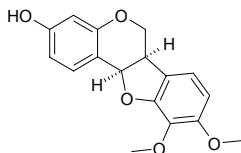
**14618 N'-Methyl nicotineamide**

$C_7H_8N_2O$ (136.15). Source: QUN DAI CAI *Undaria pinnatifida*. Ref: 1305.

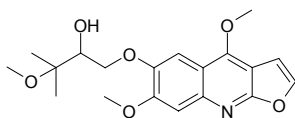


14619 Methylnisoslin

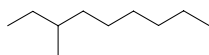
(-)-Methylnisoslin [73340-41-7] $C_{17}H_{16}O_5$ (300.31). Colorless acicular crystals (hexane-ethyl acetate), mp 180–181°C, $[\alpha]_D^{25} = -219^\circ$ ($c = 0.465$, chloroform). **Pharm:** Platelet aggregation inhibitor (due to arachidonic acid, 170 $\mu\text{mol/L}$). **Source:** JIANG ZHEN XIANG *Dalbergia odorifera*, MU XU *Medicago sativa*. **Ref:** 900, 1266.

**14620 Methylkolbisine**

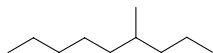
$C_{19}H_{23}NO_6$ (361.40). Needles, mp 168–169°C, $[\alpha]_D = -2.8^\circ$ ($c = 0.04$, MeOH). **Source:** GAO GUI YOU MU YUN XIANG *Teclea nobilis* (aerial parts). **Ref:** 3503.

**14621 3-Methylnonane**

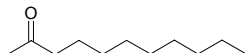
[5911-04-6] $C_{10}H_{22}$ (142.29). **Source:** DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. **Ref:** 2.

**14622 4-Methylnonane**

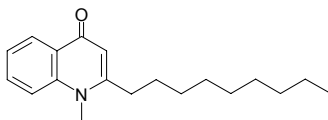
[17301-94-9] $C_{10}H_{22}$ (142.29). **Source:** SHAN ZHA *Crataegus pinnatifida*. **Ref:** 2.

**14623 Methyl-n-nonylketone**

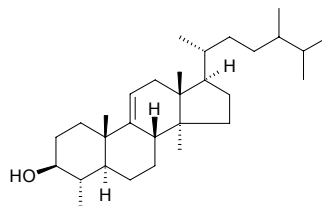
[112-12-9] $C_{11}H_{22}O$ (170.30). bp 228°C. **Source:** YU XING CAO *Houttuynia cordata* (dried aerial parts: content = 0.0052%^[5508]). **Ref:** 2, 5508.

**14624 1-Methyl-2-nonyl-4(1H)-quinolone**

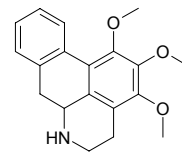
$C_{19}H_{27}NO$ (285.43). **Pharm:** Leukotriene biosynthesis inhibitor (hmn polymorphonuclear granulocytes, $IC_{50} = 12.1 \mu\text{mol/L}$, control Zileuton, $IC_{50} = 10.4 \mu\text{mol/L}$ ^[5031]). **Source:** WU ZHU YU *Evodia rutaecarpa*. **Ref:** 1334, 5031.

**14625 24-Methyl-31-norlanost-9(11)-enol**

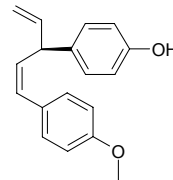
$C_{30}H_{52}O$ (428.75). **Source:** GOU QI ZI *Lycium chinense*. **Ref:** 1371, 1372, 1373, 1374.

**14626 (-)-O-Methyl-N-norlirinine**

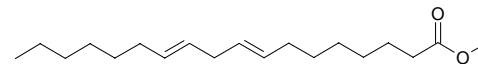
$C_{19}H_{21}NO_3$ (311.38). **Source:** YOU GOU YING ZHAO *Artabotrys uncinatus* (stem). **Ref:** 3083.

**14627 (-)-4'-O-Methyl-nyasol**

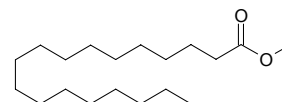
$C_{18}H_{18}O_2$ (266.34). Colorless gum, $[\alpha]_D^{25} = -42.2^\circ$ ($c = 0.64$, $CHCl_3$). **Source:** KUAI GEN CHUI TOU JU *Cremanthodium ellisii*. **Ref:** 773.

**14628 Methyl octadeca-8,11-dienoate**

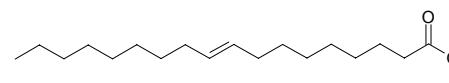
$C_{19}H_{34}O_2$ (294.48). **Source:** XIA YE XIANG PU *Typha angustifolia*. **Ref:** 1402.

**14629 Methyl octadecanoate**

Methyl octadecanoate [112-61-8] $C_{19}H_{38}O_2$ (298.51). **Source:** DANG SHEN *Codonopsis pilosula*, LIAO DONG CONG MU *Aralia elata*, MU ZEI MA HUANG *Ephedra equisetina*, QIANG HUO *Notopterygium incisum*. **Ref:** 2, 660, 1450, 1354.

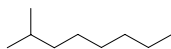
**14630 Methyl 9-octadecenoate**

Methyl oleate $C_{19}H_{36}O_2$ (296.50). **Source:** HUA DONG LAN CI TOU *Echinops grijssii*. **Ref:** 1389.

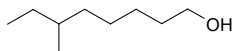


14631 2-Methyl octane

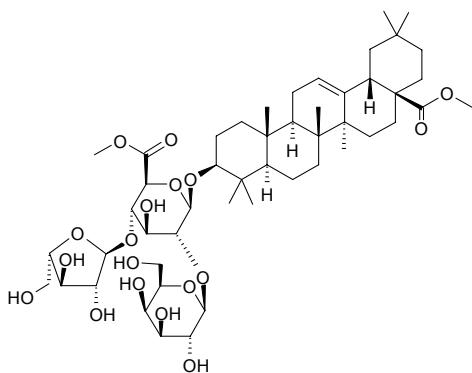
[3221-61-2] C₉H₂₀ (128.26). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], SHAN ZHA *Crataegus pinnatifida*. Ref: 2.

**14632 6-Methyl-1-octanol**

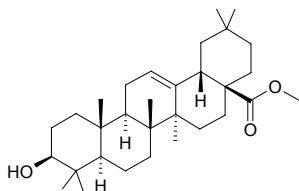
C₉H₂₀O (144.26). Source: LA MEI HUA *Chimonanthus fragrans* [Syn. *Chimonanthus praecox*]. Ref: 1474.

**14633 Methyl oleanate-(3)-[α-L-arabinofuranosyl-(1→4)]-[(β-D-galactopyranosyl-(1→2))-methyl-(β-D-glucopyranoside) uronate]**

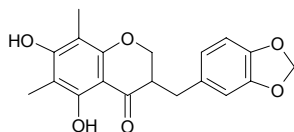
C₄₇H₇₂O₁₈ (925.09). Source: TONG HUA GEN *Tetrapanax papyriferus*. Ref: 1514.

**14634 Methyl oleanolate**

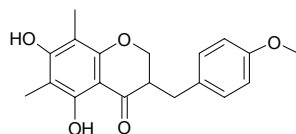
C₃₁H₅₀O₃ (470.74). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.

**14635 Methyl ophiopogonanone A**

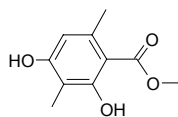
[74805-92-8] C₁₉H₁₈O₆ (342.35). Needles (CCl₄), mp 166–167°C, [α]_D¹⁹ = –72° (c = 1, CHCl₃). Source: MAI DONG *Ophiopogon japonicus*. Ref: 1397.

**14636 Methyl ophiopogonanone B**

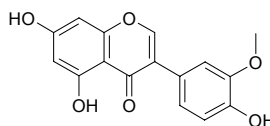
[74805-91-7] C₁₉H₂₀O₅ (328.37). Needles (CCl₄), mp 159–160°C, [α]_D¹⁷ = –53° (c = 1, Dioxane). Source: MAI DONG *Ophiopogon japonicus*. Ref: 1397.

**14637 Methyl-β-oricinol carboxylate**

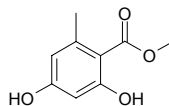
C₁₀H₁₂O₄ (196.20). Source: HONG SHI ER *Umbilicaria hypococeinea*, JIN SI SHUA *Lethariella cladonioides*, JIN YAO DAI *Lethariella zahlbruckneri*. Ref: 660, 1503.

**14638 3'-O-Methylorobol**

5,7,4'-Trihydroxy-3'-methoxyisoflavone C₁₆H₁₂O₆ (300.27). Pharm: Cytotoxic (HSC-2 cells, CC₅₀ = 0.16mmol/L; HGF, CC₅₀ > 0.67mmol/L)^[3025]; hepatoprotective (mus primary cultured hepatocytes, antihepatotoxin induced by *D*-galactosamine (GalN), IC₅₀ = 55μmol/L, control Silybin IC₅₀ = 41μmol/L)^[4095]. Source: JIN QUE ER *Cytisus scoparius* [Syn. *Spartium scoparium*], GOU JI *Cudrania cochinchinensis* (root: yield = 0.000046%dw)^[3025], GUANG BU DING GONG TENG *Erycibe expansa*. Ref: 1487, 3025, 4095.

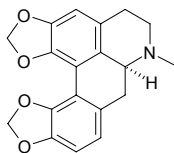
**14639 Methyl orsellinate**

C₉H₁₀O₄ (182.18). Pharm: Phytotoxin (inhibits radicle growth, *Amaranthus hypochondriacus*, IC₅₀ = 920μmol/L, control 2,4-D, IC₅₀ = 180μmol/L; *Echinochloa crusgalli*, IC₅₀ = 310μmol/L, control 2,4-D, IC₅₀ = 230μmol/L)^[3433]; CaM interactor (cAMP phosphodiesterase inhibitor, IC₅₀ = 8.1μmol/L, control Chlorpromazine, IC₅₀ = 10.2μmol/L, interacted with bovine-brain calmodulin and inhibited the activation of the calmodulin-dependent enzyme cAMP phosphodiesterase)^[3433]. Source: FU CHUI FE LAO JU *Flourensia cernua*, HONG SHI ER *Umbilicaria hypococeinea*, SHAN MAO ER *Dianella ensifolia*. Ref: 660, 1489, 3433.

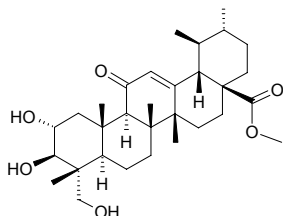


14640 N-Methyl ovigerine

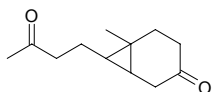
N-Methyl hernovine [13087-94-0] C₁₉H₁₇NO₄ (323.35). Source: HEI KE NAN *Lindera megaphylla*. Ref: 1508.

**14641 Methyl 11-oxoasiatate**

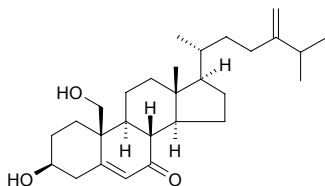
C₃₁H₄₈O₆ (516.72). Source: LONG NAO GAO XIANG *Dryobalanops aromatica*. Ref: 1511.

**14642 6-Methyl-7-(3-oxobutyl)-bicyclo[4.1.0]heptan-3-one**

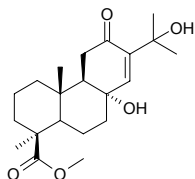
C₁₂H₁₈O₂ (194.28). Colorless oil. Source: JIANG HUANG *Curcuma longa*. Ref: 2497.

**14643 24-Methyl-7-oxocholesta-5,24(28)-diene-3β,19-diol**

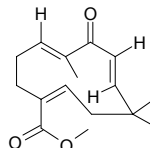
C₂₈H₄₄O₃ (428.66). Pharm: Cytotoxic inactive (hmn prostate cancer LNCaP cell line, EC₅₀ = 29.5 μg/mL). Source: *Nephthea chabroli*. Ref: 4375.

**14644 Methyl 12-oxo-8α,15-dihydroxyabiet-13-en-19-oate**

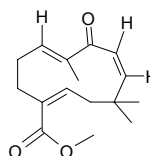
C₂₁H₃₂O₅ (364.49). Colorless oil, [α]_D = +20.1° (c = 0.66, CH₂Cl₂). Pharm: Cytotoxic (A549, IC₅₀ > 5 μg/mL, control Cycloheximide, IC₅₀ = 0.1 μg/mL; H116, IC₅₀ = 2.5 μg/mL, Cycloheximide, IC₅₀ = 0.1 μg/mL; PSN1, IC₅₀ = 5 μg/mL, Cycloheximide, IC₅₀ = 0.01 μg/mL; T98G, IC₅₀ = 5 μg/mL, Cycloheximide, IC₅₀ = 2.5 μg/mL; SKBR3, IC₅₀ > 5 μg/mL, Cycloheximide, IC₅₀ = 0.05 μg/mL). Source: FEI NI JI CI BAI *Juniperus phoenicea* (leaf), XIANG CI BAI FEI ZHOU BIAN ZHONG *Juniperus thurifera* var. *africana* (leaf). Ref: 3851.

**14645 Methyl 8-oxo-α-humul-6E,9E-dien-12-oate**

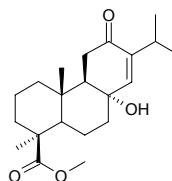
C₁₆H₂₂O₃ (262.35). Colorless oil. Pharm: Phytotoxin (6mg/mL: *S. acutus*, mortality = 11%, *L. paucicostata*, mortality = 61%); cytotoxic (P₃₈₈, IC₅₀ = 40 μmol/L, control *cis*-Platin, IC₅₀ = 8 μmol/L; A549, IC₅₀ = 40 μmol/L, *cis*-Platin, IC₅₀ = 8 μmol/L; HT29, IC₅₀ > 40 μmol/L, *cis*-Platin, IC₅₀ = 16 μmol/L; MEL-28, IC₅₀ > 40 μmol/L, *cis*-Platin, IC₅₀ = 8 μmol/L). Source: *Asteriscus vogelii* (aerial parts). Ref: 5123.

**14646 Methyl 8-oxo-α-humul-6E,9Z-dien-12-oate**

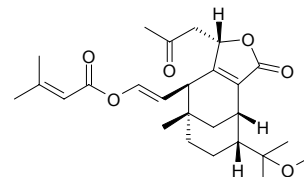
C₁₆H₂₂O₃ (262.35). Pharm: Phytotoxin (6mg/mL: *S. acutus*, mortality = 25%, *L. paucicostata*, mortality = 41%); cytotoxic (P₃₈₈, IC₅₀ = 20 μmol/L, control *cis*-Platin, IC₅₀ = 8 μmol/L; A549, IC₅₀ = 20 μmol/L, *cis*-Platin, IC₅₀ = 8 μmol/L; HT29, IC₅₀ > 40 μmol/L, *cis*-Platin, IC₅₀ = 16 μmol/L; MEL-28, IC₅₀ = 20 μmol/L, *cis*-Platin, IC₅₀ = 8 μmol/L). Source: *Asteriscus vogelii* (aerial parts). Ref: 5123.

**14647 Methyl 12-oxo-8α-hydroxyabiet-13-en-19-oate**

C₂₁H₃₂O₄ (348.49). Colorless oil, [α]_D = +18.3° (c = 0.91, CH₂Cl₂). Pharm: Cytotoxic (A549, IC₅₀ > 5 μg/mL, control Cycloheximide, IC₅₀ = 0.1 μg/mL; H116, IC₅₀ = 2.5 μg/mL, Cycloheximide, IC₅₀ = 0.1 μg/mL; PSN1, IC₅₀ > 5 μg/mL, Cycloheximide, IC₅₀ = 0.01 μg/mL; T98G, IC₅₀ > 5 μg/mL, Cycloheximide, IC₅₀ = 2.5 μg/mL; SKBR3, IC₅₀ > 5 μg/mL, Cycloheximide, IC₅₀ = 0.05 μg/mL). Source: FEI NI JI CI BAI *Juniperus phoenicea* (leaf), XIANG CI BAI FEI ZHOU BIAN ZHONG *Juniperus thurifera* var. *africana* (leaf). Ref: 3851.

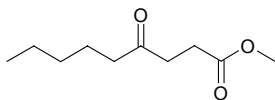
**14648 15-O-Methyl-18-oxoneovibsanin F**

C₂₆H₃₆O₆ (444.57). Colorless paste, [α]_D²³ = +155.9° (c = 0.08, alcohol). Source: RI BEN JIA MI *Viburnum awabuki*. Ref: 2530.

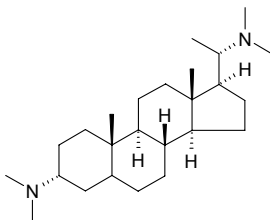


14649 Methyl 4-oxononanoate

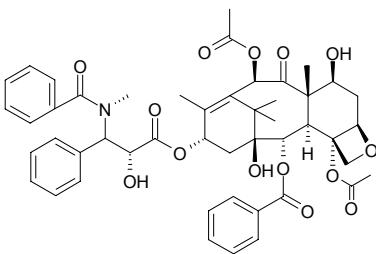
$C_{10}H_{18}O_3$ (186.25). Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*].
Ref: 660.

**14650 N-Methyl pachysamine A**

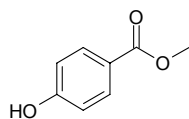
$C_{25}H_{46}N_2$ (374.66). mp 165.5~167.0°C. Source: XUE SHAN LIN
Pachysandra terminalis. Ref: 6.

**14651 N-Methylpaclitaxel**

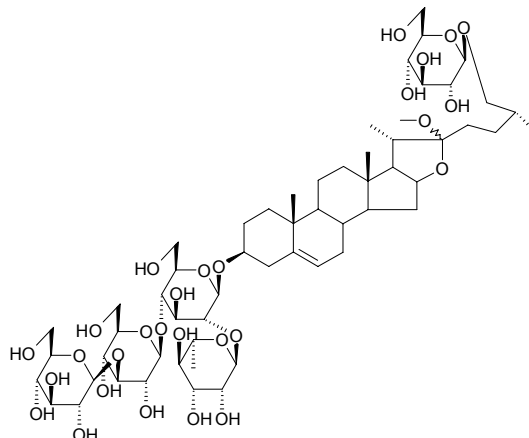
N-Methyltaxol; Taxuspinnanane I $C_{48}H_{53}NO_{14}$ (867.96). $[\alpha]_D = -71^\circ$ (CHCl₃).
Source: ZI SHAN *Taxus cuspidata*. Ref: 662.

**14652 Methylparaben**

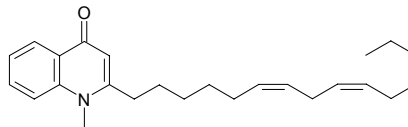
4-Hydroxybenzoic acid methyl ester $C_8H_8O_3$ (152.15). Source: KAI KOU JIAN
Tupistra chinensis (underground part)^[4676], RI BEN HUANG BAI
Phellodendron japonicum (leaf), TAI WAN HUANG BO *Phellodendron*
amurense var. *wilsonii* (leaf: yield = 0.00017%dw)^[4722], TAI WAN PU GONG
YING *Taraxacum formosanum* (fresh root), ZANG HONG HUA *Crocus sativus*
(stigma: yield = 0.00022%dw). Ref: 4233, 4488, 4502, 4653, 4676, 4722.

**14653 Methyl parvifloside**

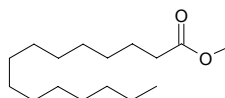
$C_{58}H_{96}O_{28}$ (1241.40). White powder, mp 234°C (dec), $[\alpha]_D^{19.9} = -64.29^\circ$ ($c = 0.267$, pyridine). Source: XIAO HUA DUN YE SHU YU *Dioscorea parviflora* (fresh rhizome). Ref: 4858.

**14654 1-Methyl-2-[(6Z,9Z)-6,9-pentadecadienyl]-4(1H)-quinolone**

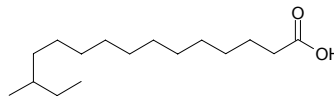
$C_{25}H_{35}NO$ (365.56). Pharm: Leukotriene biosynthesis inhibitor (hmn polymorphonuclear granulocytes, IC₅₀ = 12.3 μmol/L, zileuton, IC₅₀ = 10.4 μmol/L). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2, 877, 5031.

**14655 Methyl pentadecanoate**

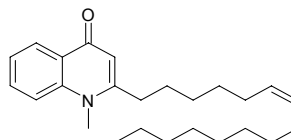
Pentadecanoic acid methyl ester [7132-64-1] $C_{16}H_{32}O_2$ (256.43). Source:
CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*], DANG
SHEN *Codonopsis pilosula*. Ref: 2.

**14656 13-Methyl pentadecanoic acid**

[20121-96-4] $C_{16}H_{32}O_2$ (256.43). Source: BAI ZHI *Angelica dahurica* [Syn.
Angelica porphyrocaulis]. Ref: 2.

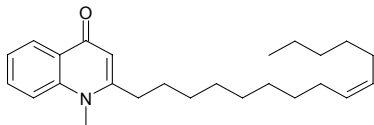
**14657 1-Methyl-2-[(Z)-6-pentadecenyl]-4(1H)-quinolone**

$C_{25}H_{37}NO$ (367.58). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2, 877.

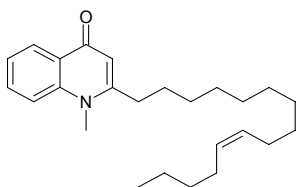


14658 1-Methyl-2-[(Z)-9-pentadecenyl]-4(1H)-quinolone

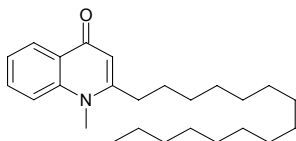
$C_{25}H_{37}NO$ (367.58). Colorless oil. Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 9, 877.

**14659 1-Methyl-2-[(Z)-10-pentadecenyl]-4(1H)-quinolone**

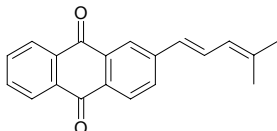
$C_{25}H_{37}NO$ (367.58). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2, 877.

**14660 1-Methyl-2-pentadecyl-4(1H)-quinolone**

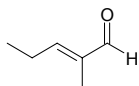
$C_{25}H_{39}NO$ (369.60). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2.

**14661 (E)-2-(4-Methylpenta-1,3-dienyl)anthraquinone**

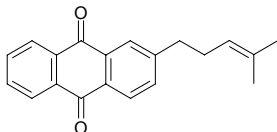
$C_{20}H_{16}O_2$ (288.35). Source: HU MA GEN *Sesamum indicum*. Ref: 3465.

**14662 2-Methyl-2-pentenal**

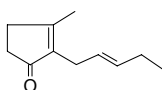
1-Methyl-3-ethylacrolein [623-36-9] $C_6H_{10}O$ (98.15). Source: XI XIANG CONG *Allium schoenoprasum*. Ref: 6.

**14663 2-(4-Methylpent-3-enyl)anthraquinone**

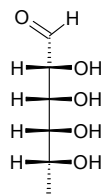
$C_{20}H_{18}O_2$ (290.37). Source: HU MA GEN *Sesamum indicum*. Ref: 3465.

**14664 3-Methyl-2-(2-pentenyl)-2-cyclopenten-1-one**

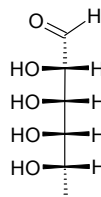
$C_{11}H_{16}O$ (164.25). Source: JIN YIN HUA *Lonicera japonica*. Ref: 1378.

**14665 Methyl pentose I**

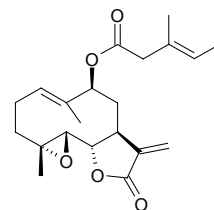
$C_6H_{12}O_5$ (164.16). Source: MU LI ROU *Ostrea rivularis*; *Ostrea talienwhanensis*; *Ostrea gigas*. Ref: 6.

**14666 Methyl pentose II**

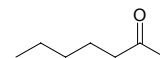
$C_6H_{12}O_5$ (164.16). Source: MU LI ROU *Ostrea rivularis*; *Ostrea talienwhanensis*; *Ostrea gigas*. Ref: 6.

**14667 9β-(3-Methyl-pentoyl-3-ene)-parthenolide**

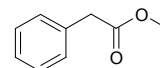
$C_{21}H_{28}O_5$ (360.45). White powder, $[\alpha]_D^{25} = -32.0^\circ$. Source: MAO RUI HUA YE TU MU XIANG *Inula verbascifolia*. Ref: 2041.

**14668 Methyl-n-pentyl ketone**

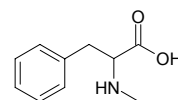
[110-43-0] $C_7H_{14}O$ (114.19). bp 151.45°C. Source: DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*]. Ref: 6.

**14669 Methyl phenylacetate**

[101-41-7] $C_9H_{10}O_2$ (150.18). Source: CHUAN XIONG *Ligusticum chuanxiong* [Syn. *Ligusticum wallichii*]. Ref: 2.

**14670 N-Methylphenylalanine**

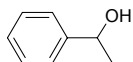
$C_{10}H_{13}NO_2$ (179.22). Colorless acicular crystals. Source: HUANG YING PI MA BO *Scleroderma citrinum*. Ref: 2180.



14671 Methyl phenyl carbinol

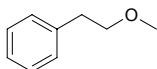
[98-85-1] C₈H₁₀O (122.17). bp (+) 98–99°C/20mmHg, (–) 93°C/14mmHg, (±) 100°C/18mmHg. Source: CHA YE *Camellia sinensis* [Syn. *Thea sinensis*].

Ref: 6.

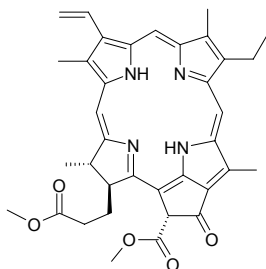
**14672 Methyl (phenyl ethyl) ether**

[3558-60-9] C₉H₁₂O (136.20). Source: LU DOU LE HUA *Pandanus tectorius*.

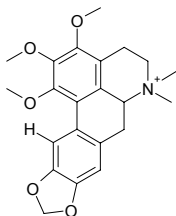
Ref: 6.

**14673 Methyl pheophorbide a**

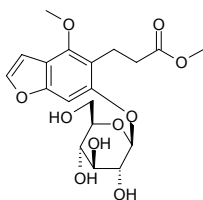
C₃₆H₃₈N₄O₅ (606.73). Source: TAI WAN HUANG BO *Phellodendron amurense* var. *wilsonii* (leaf). Ref: 4722.

**14674 N-Methylphoebine**

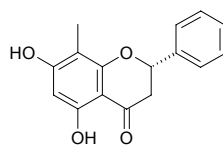
C₂₂H₂₆NO₅⁺ (384.46). Colorless amorphous powder, [α]_D²² = +37.1° (c = 0.70, MeOH). Source: XIAO HUA MU BAN SHU *Xylopiya parviflora* (bark and root). Ref: 3794.

**14675 Methylpicraquassioside A**

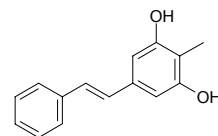
C₁₉H₂₄O₁₀ (412.40). Glassy powder, mp 67–69°C, [α]_D²⁵ = –58.82° (c = 0.34, MeOH). Source: CHOU CAO *Ruta graveolens* (dried aerial parts). Ref: 3073.

**14676 8-Methylpinocembrin**

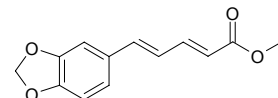
C₁₆H₁₄O₄ (270.29). [α]_D²⁵ = –46.2° (c = 0.42, acetone). Source: YANG PU TAO YE *Syzygium samarangense*. Ref: 4100.

**14677 4'-Methylpinosylvin**

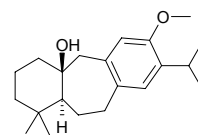
C₁₅H₁₄O₂ (226.28). Source: *Stemona* cf. *pieirei* (underground part). Ref: 3751.

**14678 Methyl piperate**

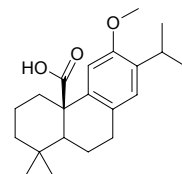
C₁₃H₁₂O₄ (232.24). Colorless crystals. Pharm: Protective gastric lesions (rat, ethanol-induced, 25mg/kg orl, length = (54.1±7.4)mm, control, length = (118.6±16.2)mm, InRt = 54.4%; indomethacin-induced in rats, dose, 25mg/kg orl, length = (84.9±9.4)mm, control, length = (89.5±9.8)mm, InRt = 5.1%). Source: *Piper chaba* (fruit). Ref: 4935.

**14679 12-O-Methylpisiferanol**

C₂₁H₃₂O₂ (316.49). Oil, [α]_D²⁶ = +28° (c = 2.5, MeOH). Source: HONG GUI *Chamaecyparis formosensis*. Ref: 2315.

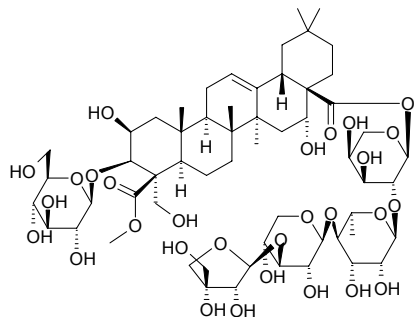
**14680 O-Methylpisiferic acid**

C₂₁H₃₃O₃ (330.47). Pharm: Antibacterial (*Staphylococcus aureus*, MIC = 12.5µg/mL; *Bacillus subtilis*, MIC = 12.5µg/mL). Source: RI BEN HUA BAI *Chamaecyparis pisifera* (leaf). Ref: 4144.

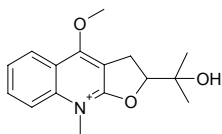


14681 Methyl platyconate A

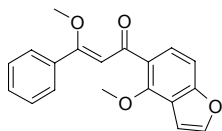
$C_{58}H_{92}O_{29}$ (1253.36). Source: JIE GENG *Platycodon grandiflorum*. Ref: 1382.

**14682 N-Methylplatydesmin**

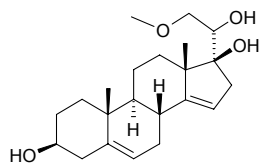
$C_{16}H_{20}NO_3^+$ (274.34). Source: CHOU CAO *Ruta graveolens*. Ref: 6.

**14683 O-Methylpongamol**

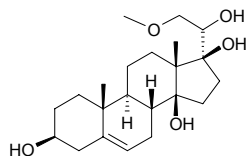
[80158-88-9] $C_{19}H_{16}O_4$ (308.33). Yellowish oil. Pharm: Nematocide (0.1mg/mL cultured with *Toxocara canis* larvae, after 6h RM = 70, after 24h RM = 33). Source: HUI YE GEN *Tephrosia purpurea*. Ref: 1040, 1188.

**14684 21-O-Methyl-5,14-pregnadiene-3β,14β,17β,21-tetrol**

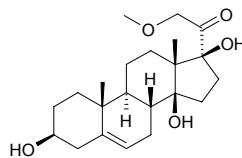
$C_{22}H_{34}O_5$ (378.51). Source: XIANG JIA PI *Periploca sepium*. Ref: 1359.

**14685 21-O-Methyl-5-pregnene-3β,14β,17β,20,21-pentol**

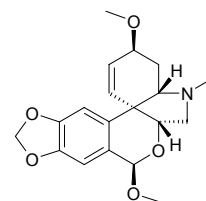
$C_{22}H_{36}O_5$ (380.53). Source: XIANG JIA PI *Periploca sepium*. Ref: 1359.

**14686 21-O-Methyl-5-pregnene-3β,17β,21-tetrol-20-one**

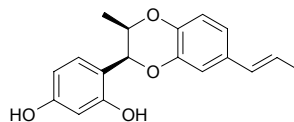
$C_{22}H_{34}O_5$ (362.51). Source: XIANG JIA PI *Periploca sepium*. Ref: 1359.

**14687 6-O-Methylpretazettine**

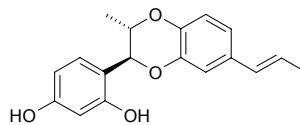
$C_{19}H_{23}NO_5$ (345.40). Colorless amorphous solid, mp 199–201°C. Source: YA MA XUN BAI HE *Eucharis amazonica* (dried bulb and leaf). Ref: 4325.

**14688 4-[(2S,3R)-3-Methyl-7-((E)-1-propenyl)-2,3-dihydro-1,4-benzodioxin-2-yl]-1,3-benzenediol**

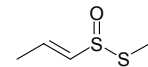
$C_{18}H_{18}O_4$ (298.34). Source: RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts). Ref: 2534.

**14689 4-[(2S,3S)-3-Methyl-7-((E)-1-propenyl)-2,3-dihydro-1,4-benzodioxin-2-yl]-1,3-benzenediol**

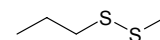
$C_{18}H_{18}O_4$ (298.34). Source: RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts). Ref: 2534.

**14690 Methyl-1-propenyl thiosulfinate**

1-Propenyl methyl thiosulfinate $C_4H_8OS_2$ (136.24). Source: DA SUAN *Allium sativum*, JIU CAI *Allium tuberosum*, YANG CONG *Allium cepa*. Ref: 1392, 2975, 2978.

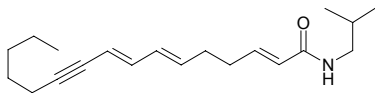
**14691 Methyl propyl disulfide**

[2179-60-4] $C_4H_{10}S_2$ (122.25). Source: DA SUAN *Allium sativum*, XI XIANG CONG *Allium schoenoprasum*, ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*]. Ref: 6.

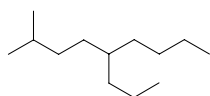


14692 (E,E,E)-N-(2-Methylpropyl)-hexadeca-2,6,8-trien-10-ynamide

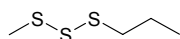
$C_{20}H_{31}NO$ (301.48). **Pharm:** Pesticide. **Source:** XI LA SHI CAO *Achillea ageratifolia*. **Ref:** 658.

**14693 2-Methyl-5-propyl nonane**

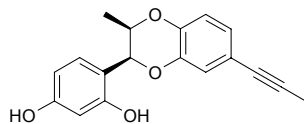
$C_{13}H_{28}$ (184.37). **Source:** ROU CONG RONG *Cistanche deserticola*. **Ref:** 2.

**14694 Methyl propyl trisulfide**

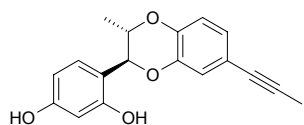
[17619-36-2] $C_4H_{10}S_3$ (154.32). **Source:** DA SUAN *Allium sativum*. **Ref:** 2.

**14695 4-[(2S,3R)-3-Methyl-7-(1-propynyl)-2,3-dihydro-1,4-benzodioxin-2-yl]-1,3-benzenediol**

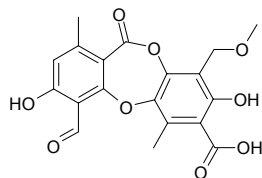
$C_{18}H_{16}O_4$ (296.33). **Source:** RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts). **Ref:** 2534.

**14696 4-[(2S,3S)-3-Methyl-7-(1-propynyl)-2,3-dihydro-1,4-benzodioxin-2-yl]-1,3-benzenediol**

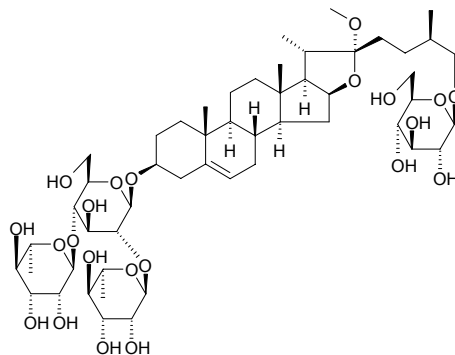
$C_{18}H_{16}O_4$ (296.33). **Source:** RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts). **Ref:** 2534.

**14697 9'-(O-Methyl)protocetraric acid**

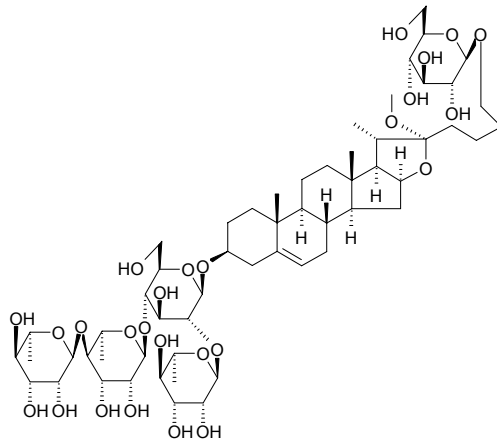
$C_{19}H_{16}O_9$ (388.33). Yellow amorphous powder. **Pharm:** Cytotoxic (L1210, $IC_{50} > 100 \mu\text{g/mL}$, control Etoposide, $IC_{50} = (0.3 \pm 0.2) \mu\text{g/mL}$; 3LL, $IC_{50} > 100 \mu\text{g/mL}$, Etoposide, $IC_{50} = (2.6 \pm 0.8) \mu\text{g/mL}$; DU145, $IC_{50} > 100 \mu\text{g/mL}$, Etoposide, $IC_{50} = (0.9 \pm 0.2) \mu\text{g/mL}$; MCF7, $IC_{50} > 100 \mu\text{g/mL}$, Etoposide, $IC_{50} = (12.2 \pm 0.5) \mu\text{g/mL}$; K562, $IC_{50} > 100 \mu\text{g/mL}$, Etoposide, $IC_{50} = (2.1 \pm 1.3) \mu\text{g/mL}$; U251, $IC_{50} > 100 \mu\text{g/mL}$, Etoposide, $IC_{50} = (0.28 \pm 0.06) \mu\text{g/mL}$). **Source:** ZONG JUAN SHI RUI *Cladonia convoluta*. **Ref:** 5027.

**14698 22-O-Methylprotodioscin**

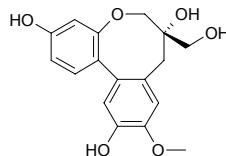
$C_{52}H_{86}O_{22}$ (1063.25). **Pharm:** Cytotoxic (hmn, leukemia cell HL-60, inhibits biosynthesis of DNA, RNA and protein and cellular growth); bone resorption inhibitor (PTH-induced in a bone organ culture system)^[4692]; antifungal inactive (*Candida albicans*, *Candida glabrata*, *Candida tropicalis*, $MIC > 200 \mu\text{g/mL}$, inactive)^[2560]. **Source:** HAI JIN BI XIE *Dioscorea spongiosa* (Rhizome: yield = 0.036%)^[4692], LONG XUE SHU *Dracaena draco* (stem cortex)^[4696], SHI DIAO BAI *Asparagus officinalis*, TIAN QIE ZI *Solanum indicum*, YUAN SHU YU *Dioscorea rotundata* [Syn. *Dioscorea cayenensis*]. **Ref:** 660, 1462, 2165, 2560, 4692, 4696, 4946.

**14699 Methyl protodiosgenin tetraglycoside**

26-O-β-D-Glucopyranosyl-22-methoxy-3β,26-dihydroxy-25(R)-furost-5-en-3-O-α-L-rhamnopyranosyl-(1→4)-α-L-rhamnopyranosyl-(1→4)-[α-L-rhamnopyranosyl-(1→2)]-β-D-glucopyranoside $C_{58}H_{96}O_{26}$ (1209.40). White amorphous powder, $[\alpha]_D^{20} = -100^\circ$ ($c = 0.05$, MeOH). **Pharm:** Antifungal inactive (hmn pathogenic yeasts *Candida albicans*, *Candida glabrata* and *Candida tropicalis*, $MIC > 200 \mu\text{g/mL}$)^[4931]. **Source:** ZONG LV PI *Trachycarpus fortunei*, *Dioscorea cayenensis* (rhizome). **Ref:** 1519, 4931.

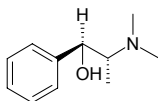
**14700 10-O-Methyl protosappanin B**

$C_{17}H_{18}O_6$ (318.33). **Source:** SU MU *Caesalpinia sappan*. **Ref:** 1329.

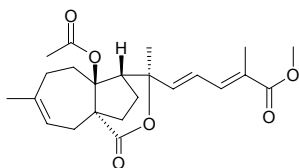


14701 D-N-Methyl-pseudoephedrine

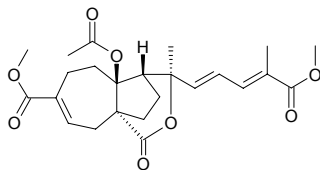
$C_{11}H_{17}NO$ (179.26). **Source:** LI JIANG MA HUANG *Ephedra likiangensis* (herbaceous twigs: mean content of 2 origins = 0.010%)^[5508], MA HUANG *Ephedra sinica* (herbaceous twigs: mean content of 4 origins = 0.007%)^[5508], MU ZEI MA HUANG *Ephedra equisetina* (herbaceous twigs: mean content of 2 origins = trace)^[5508], SHAN LING MA HUANG *Ephedra gerardiana* (herbaceous twigs: content = 0.015%)^[5508], XI ZANG ZHONG MA HUANG *Ephedra intermedia* var. *tibetica* (herbaceous twigs: content = trace)^[5508], YI ZHU AI MA HUANG *Ephedra minuta* var. *dioeca* (herbaceous twigs: mean content = trace)^[5508], ZANG MA HUANG *Ephedra saxatilis* (herbaceous twigs: content = trace)^[5508], ZHONG MA HUANG *Ephedra intermedia* (herbaceous twigs: mean content of 3 origins = trace)^[5508]. **Ref:** 2, 660, 5508.

**14702 Methyl pseudolarate A**

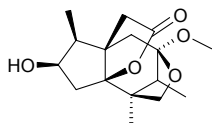
$C_{23}H_{30}O_6$ (402.49). **Source:** TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*] (root cortex: yield = 0.00010%dw). **Ref:** 4637.

**14703 Methyl pseudolarate B**

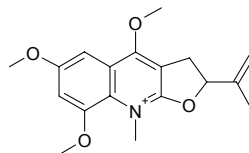
$C_{24}H_{30}O_8$ (446.50). **Source:** TU JING PI *Pseudolarix amabilis* [Syn. *Larix amabilis*; *Pseudolarix kaempferi*] (root cortex: yield = 0.0069%dw). **Ref:** 4637.

**14704 7-O-Methylpseudomajucin**

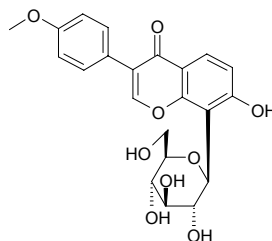
$C_{16}H_{24}O_5$ (296.37). $[\alpha]_D^{23} = -35.6^\circ$ ($c = 1.08$, MeOH). **Source:** MIN WAN BA JIAO *Illicium minwanense* (pericarp: yield = 0.00021%dw). **Ref:** 4697.

**14705 O-Methylptelefolonium**

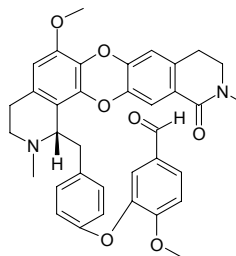
$C_{18}H_{22}NO_4^+$ (316.38). **Pharm:** Antibacterial; antifungal; cytotoxic (animal tumor and plant tumor); plant growth inhibitor. **Source:** YU JU *Ptelea trifoliata*. **Ref:** 658.

**14706 4'-O-Methylpuerarin**

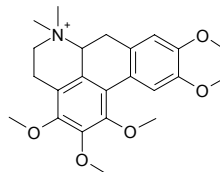
$C_{22}H_{22}O_9$ (430.42). **Source:** GE GEN *Pueraria lobata* [Syn. *Pueraria thunbergiana*; *Pueraria pseudohirsuta*] (root: mean content of 6 origins = 1.12%)^[5508], GAN GE TENG GEN *Pueraria thomsonii* (root: content = 0.359%)^[5508]. **Ref:** 2, 660, 5508.

**14707 O-Methyl punjabin**

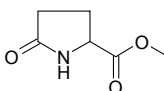
[58194-22-2] $C_{32}H_{34}N_2O_7$ (606.68). **Source:** TAI WAN QIAN JIN TENG *Stephania sasakii*. **Ref:** 1314.

**14708 N-Methylpurpurine**

1,2,3,9,10-Substituted aporphine alkaloid $C_{23}H_{30}NO_5^+$ (400.50). Colorless crystals, mp 187.5~190.0°C, $[\alpha]_D^{22} = +25.1^\circ$ ($c = 0.51$, MeOH). **Source:** XIAO HUA MU BAN SHU *Xylopiya parviflora* (bark and root). **Ref:** 3794.

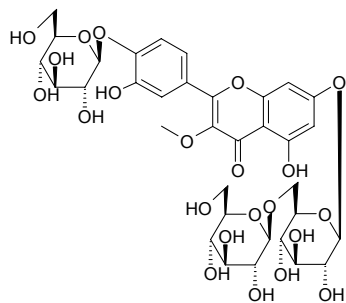
**14709 Methyl pyroglutamate**

$C_6H_9NO_3$ (143.14). **Source:** SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 2487.

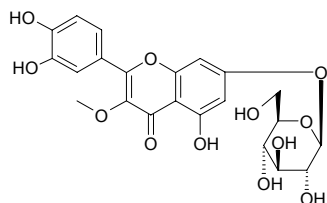


14710 3-O-Methylquercetin-7-O-diglucoside-4'-O-glucoside

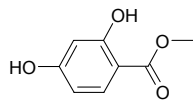
$C_{34}H_{42}O_{22}$ (802.70). Source: PING ER XIAO CAO *Ophioglossum vulgatum*. Ref: 6.

**14711 3-O-Methyl quercetin 7-O-β-D-glucopyranoside**

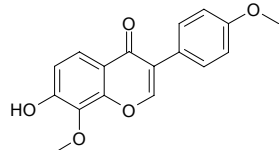
$C_{22}H_{22}O_{12}$ (478.41). Pharm: DPPH scavenger ($SC_{50} = 6.1 \mu\text{mol/L}$); antioxidant (superoxide anion radical scavenger, superoxide dismutase method, IC_{50} for Formazan formation activity = $3.9 \mu\text{mol/L}$). Source: XIAN REN ZHANG *Opuntia dillenii* (fresh stem: yield = 0.00015%). Ref: 4247.

**14712 Methyl-β-resorcylate**

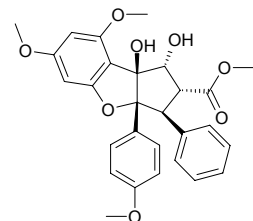
Methyl-2,4-dihydroxy-benzoate [2150-47-2] $C_8H_8O_4$ (168.15). mp 118–119°C. Source: CI HUAI HUA *Robinia pseudoacacia*. Ref: 6.

**14713 8-o-Methylreyusi**

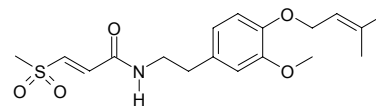
$C_{17}H_{14}O_5$ (298.30). Colorless needles, mp 221°C. Source: KUN MING JI XUE TENG *Milletia dielsiana*. Ref: 2205.

**14714 Methyl rocaglate**

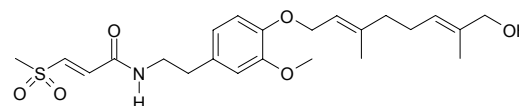
Aglafolin; Anticancer cyclopenta[b] benzofuran PMV70P691-71 $C_{28}H_{28}O_8$ (492.53). Pharm: Insecticidal (neonate larvae of *Spodoptera littoralis*, $EC_{50} = 0.18 \text{mg/L}$, $LC_{50} = 1.3 \text{mg/L}$, control Azadirachtin, $EC_{50} = 0.06 \text{mg/L}$, $LC_{50} = 0.7 \text{mg/L}$)^[3978], cytotoxic (Ishikawa anti-E2 bioassay)^[5038]. Source: MI ZI LAN *Aglaiia odorata*, *Aglaiia spectabilis* (bark), *Aglaiia duperreana*, *Aglaiia ponapensis*. Ref: 1521, 3978, 4047, 5038.

**14715 O-Methylsakambullin**

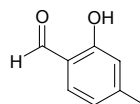
(E)-3-(Methylsulfonyl)-propenoic acid 4-(3-methyl-2-butenyloxy)-3-methoxyphenethyl amide $C_{18}H_{25}NO_5S$ (367.47). Colorless crystals (Et_2O), mp 136–138°C. Source: LV ZI SHAN XIAO JU *Glycosmis chlorosperma* (leaf). Ref: 3956.

**14716 O-Methylsakerinol A**

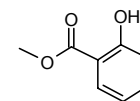
(E)-3-(Methylsulfonyl)-propenoic acid (2E,6E)-4-(8-hydroxy-3,7-dimethyl-2,6-octadienyloxy)-3-methoxyphenethyl amide $C_{23}H_{33}NO_6S$ (451.59). Colorless crystals (Et_2O), mp 125–127°C. Source: LV ZI SHAN XIAO JU *Glycosmis chlorosperma* (leaf). Ref: 3956.

**14717 4-Methyl salicylaldehyde**

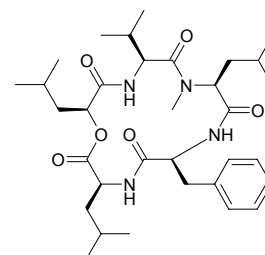
[698-27-1] $C_8H_8O_2$ (136.15). mp 60–61°C. Source: WU JIA PI *Acanthopanax gracilistylus*. Ref: 6.

**14718 Methyl salicylate**

[119-36-8] $C_8H_8O_3$ (152.15). bp 223°C. Source: DING XIANG *Syzygium aromaticum* [Syn. *Eugenia caryophyllata*], JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], QING MING HUA *Beaumontia grandiflora*, QU MAI *Dianthus superbus*, SANG YE *Morus alba*, JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 6, 11.

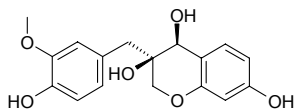
**14719 N-Methylsansalvamide**

$C_{33}H_{52}N_4O_6$ (600.81). Colorless oil, $[\alpha]_D = -132^\circ$ ($c = 0.415$, CH_2Cl_2). Pharm: Cytotoxic (in vitro, NCI hm tumor cell line screen, mean $GI_{50} = 8.3 \mu\text{mol/L}$). Source: *Fusarium* sp. Ref: 5087.

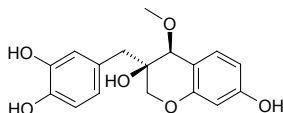


14720 3'-O-Methyl sappanol

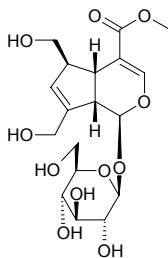
[111254-21-8] C₁₇H₁₈O₆ (318.33). Source: SU MU *Caesalpinia sappan*. Ref: 1302.

**14721 4-O-Methyl sappanol**

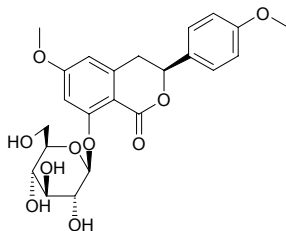
[104778-16-7] C₁₇H₁₈O₆ (318.33). Source: SU MU *Caesalpinia sappan*. Ref: 1304, 4494.

**14722 6-O-Methylscandoside methyl ester**

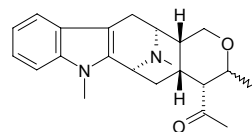
C₁₈H₂₆O₁₁ (418.40). Amorphous powder, [α]_D²⁵ = -83.0° (c = 0.532, MeOH), artifact. Source: ZHI ZI *Gardenia jasminoides* [Syn. *Gardenia florida*] (leaf). Ref: 4408.

**14723 6-O-Methylscorzocreticoside I**

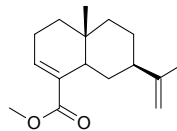
C₂₃H₂₆O₁₀ (462.46). Colorless needles, >206°C (dec), [α]_D²⁰ = -12° (c = 0.0685, MeOH). Pharm: Antioxidant inactive (DPPH scavenger, IC₅₀ > 200 μg/mL; control Ascorbic acid, IC₅₀ = (2.49±0.32) μg/mL; Caffeic acid, IC₅₀ = (1.78±0.03) μg/mL; Chlorogenic acid, IC₅₀ = (1.28±0.38) μg/mL). Source: SUAN YE PO LUO MEN SHEN *Tragopogon porrifolius* (subaerial parts). Ref: 5307.

**14724 N(4)-Methyl-N(4),21-seco-talpinine**

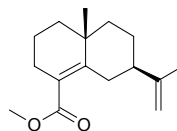
C₂₂H₂₈N₂O₂ (352.48). Source: DA YE TANG JIAO SHU *Alstonia macrophylla* (leaf: yield = 0.0033%). Ref: 3020.

**14725 (-)-Methyl selina-3,11-dien-14-oate**

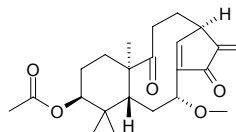
C₁₆H₂₄O₂ (248.37). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

**14726 (+)-Methyl selina-4,11-dien-14-oate**

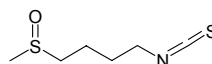
C₁₆H₂₄O₂ (248.37). Source: CHEN XIANG *Aquilaria agallocha*. Ref: 13.

**14727 o-Methylshikoccin**

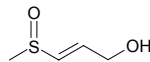
C₂₃H₃₂O₅ (388.51). mp 168-171°C, [α]_D²⁵ = -4.5° (c = 0.40, MeOH). Source: XI SI GUO XIANG CHA CAI *Isodon shikokiana* var. *occidentalis*. Ref: 4067.

**14728 4-Methylsulfinyl butyl isothiocyanate**

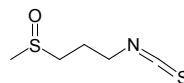
Sulforaphane. [4478-93-7] C₆H₁₁NOS₂ (177.29). Pharm: Antibacterial (gram-negative and gram-positive bacteria); antineoplastic (EAC); antifungal; anthelmintic (wileworm, 1mg/mL, 99% killed in 48h; trichomonad and amoeba); antitrypanosomal (2.5 μg/mL); antiviral (Mengo virus, coxsackie-B virus, pseudolyssa virus and poxvirus *in vitro*, 200 μg/mL). Source: GAN LAN *Brassica oleracea* var. *capitata*, QUN XIN CAI *Cardaria draba*, MAO DU XING CAI *Lepidium draba*. Ref: 661, 1322.

**14729 trans-3-Methylsulfinyl-2-propenol**

C₄H₈O₂S (120.17). Pale yellow oil, [α]_D²⁵ = +22° (c = 0.69, MeOH). Pharm: Antitubercular inactive (*Mycobacterium tuberculosis* H37Ra); antimalarial inactive (*Plasmodium falciparum*, EC₅₀ > 20 μg/mL). Source: TAI GUO NIU XU HUA *Clinacanthus siamensis* (leaf). Ref: 4410.

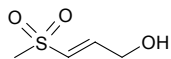
**14730 3-Methylsulfinyl propyl isothiocyanate**

C₅H₉NOS₂ (163.26). Source: GAN LAN *Brassica oleracea* var. *capitata*. Ref: 1322.

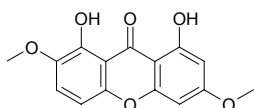


14731 trans-3-Methylsulfonyl-2-propenol

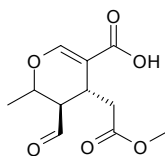
$C_4H_8O_3S$ (136.17). Pale yellow needles (MeOH), mp 57–60°C. **Pharm:** Antitubercular inactive (*Mycobacterium tuberculosis* H37Ra); antimalarial inactive (*Plasmodium falciparum*, $EC_{50} > 20\mu\text{g/mL}$). **Source:** TAI GUO NIU XU HUA *Clinacanthus siamensis* (leaf). **Ref:** 4410.

**14732 2-O-Methylswertianin**

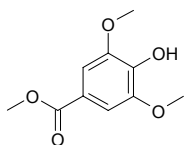
Swertiaperennin $C_{15}H_{12}O_6$ (288.26). **Pharm:** Antihepatotoxin (animal model); vasodilator inactive^[5434]. **Source:** KU HE LONG DAN *Gentiana kochiana*, RI BEN ZHANG YA CAI *Swertia japonica*. **Ref:** 658, 5434.

**14733 Methyl syramuraldehyde**

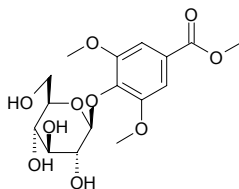
$C_{11}H_{14}O_6$ (242.23). Colorless oleaginous, $[\alpha]_D^{22} = -87.4^\circ$ ($c = 2$, chloroform). **Source:** BAO MA ZI *Syringa amurensis* [Syn. *Syringa reticulata* var. *amurensis*]. **Ref:** 70.

**14734 Methyl syringate**

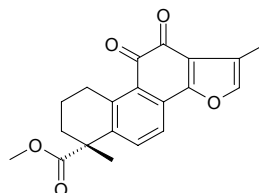
$C_{10}H_{12}O_5$ (212.20). **Source:** TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root). **Ref:** 4488.

**14735 Methyl syringate 4-O-β-D-glucopyranoside**

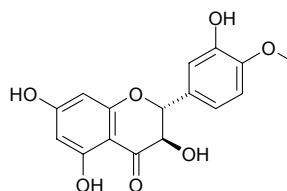
$C_{16}H_{22}O_{10}$ (374.35). Colorless needles (MeOH), mp 91–93°C, $[\alpha]_D^{24} = -20^\circ$ ($c = 0.9$, MeOH). **Source:** HUI QIN *Pimpinella anisum* (fruit). **Ref:** 3402.

**14736 Methyl tanshinonate**

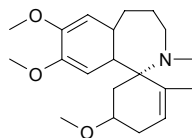
[135355-72-5] $C_{20}H_{18}O_5$ (338.36). mp 175–176°C. **Source:** DAN SHEN *Salvia miltiorrhiza* (dried root: content = 0.014%^[5508]), GAN XI SHU WEI CAO *Salvia przewalskii* (dried root: content = 0.048%^[5508]), HONG GEN CAO *Salvia prionitis* (dried root: content = 0.015%^[5508]), HUANG HUA SHU WEI CAO *Salvia flava* (dried root: content = trace)^[5508], JI YE SHU WEI CAO *Salvia bulleyana* (dried root: content = 0.005%^[5508]), LI SE SHU WEI CAO *Salvia castanea* (dried root: content = 0.003%^[5508]), MAO DI HUANG SHU WEI CAO *Salvia digitaloides* (dried root: content = 0.001%^[5508]), NAN DAN SHEN *Salvia bowleyana* (dried root: content = 0.099%^[5508]), NI DAN SHEN *Salvia sinica* (dried root: content = trace)^[5508], SAN YE SHU WEI CAO *Salvia trijuga* (dried root: content = 0.034%^[5508]), YUN NAN SHU WEI CAO *Salvia yunnanensis* (dried root: content = 0.012%^[5508]), ZI DAN SHEN *Salvia przewalskii* var. *mandarinorum* (dried root: content = %)^[5508]. **Ref:** 2, 5508.

**14737 4'-O-Methyltaxifolin**

$C_{16}H_{14}O_7$ (318.29). **Pharm:** Cytotoxic (HeLa, $IC_{50} = 32.5\mu\text{g/mL}$, control Mitomycin C, $IC_{50} = 1.7\mu\text{g/mL}$). **Source:** TUAN JI AI NA XIANG *Blumea glomerata*. **Ref:** 4092.

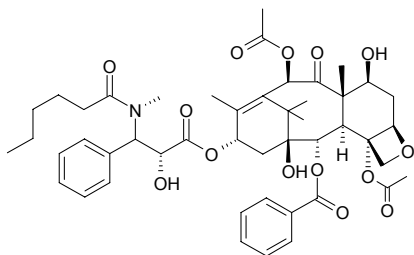
**14738 O-Methyltaxodine**

$C_{20}H_{29}NO_3$ (331.46). **Source:** SAN JIAN SHAN *Cephalotaxus fortunei*. **Ref:** 2.

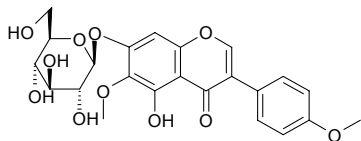


14739 N-Methyltaxol C

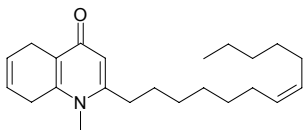
[153083-53-5] $C_{47}H_{59}NO_{14}$ (861.99). $[\alpha]_D = -52.7^\circ$ ($CHCl_3$), mp 225~228°C, $[\alpha]_D = -52.7^\circ$ (MeOH), mp 134°C. **Pharm:** Antineoplastic (ox brain, tubulin assay, concentration of tubulin 1.0mg/mL, activity closes to that of taxol, $ED_{50} = 1.91\mu\text{mol/L}$, control taxol, $ED_{50} = 1.15\mu\text{mol/L}$). **Source:** JIANG GUO ZI SHAN *Taxus baccata*, ZA JIAO JIE ZHI HONG DOU SHAN *Taxus x media*. **Ref:** 662, 1649.

**14740 4'-Methyltectorigenin 7-glucoside**

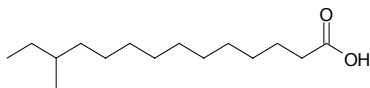
$C_{23}H_{24}O_{11}$ (476.44). Yellow amorphous powder. **Source:** AI JI ZHONG ZHI YUAN WEI *Iris carthaliniae*. **Ref:** 1880.

**14741 1-Methyl-2-[(Z)-7-tridecenyl]-4(1H)-quinolone**

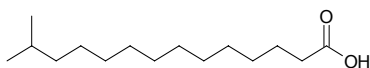
$C_{23}H_{33}NO$ (339.53). Colorless oil. **Source:** WU ZHU YU *Evodia rutaecarpa*. **Ref:** 9, 877, 2085.

**14742 12-Methyl tetradecanoic acid**

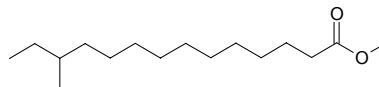
[5502-94-3] $C_{15}H_{30}O_2$ (242.41). **Source:** QIANG HUO *Notopterygium incisum*. **Ref:** 2.

**14743 13-Methyl tetradecanoic acid**

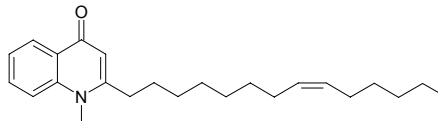
[2485-71-4] $C_{15}H_{30}O_2$ (242.41). **Source:** BAI SHAO *Paeonia albiflora* [Syn. *Paeonia lactiflora*]. **Ref:** 6.

**14744 12-Methyl tetradecanoic acid methyl ester**

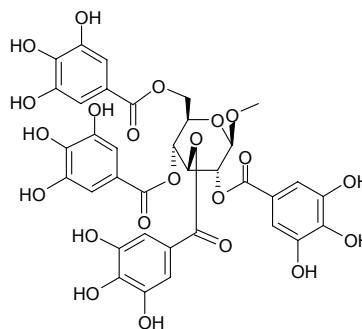
$C_{16}H_{32}O_2$ (256.43). **Source:** QIANG HUO *Notopterygium incisum*. **Ref:** 1354.

**14745 1-Methyl-2-(Z)-8-tetradecenyl-4(1H)-quinolone**

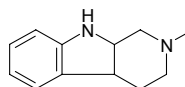
$C_{24}H_{35}NO$ (353.55). Colorless oil. **Source:** WU ZHU YU *Evodia rutaecarpa*. **Ref:** 9.

**14746 Methyl 2,3,4,6-tetra-O-galloyl-beta-D-glucopyranoside**

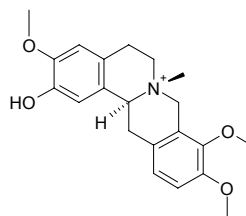
$C_{35}H_{30}O_{22}$ (802.62). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 1327.

**14747 2-Methyl-1,2,3,4-tetrahydro-beta-carboline**

$C_{12}H_{16}N_2$ (188.27). mp 216~218°C. **Source:** SHA ZAO SHU PI *Elaeagnus angustifolia*. **Ref:** 6.

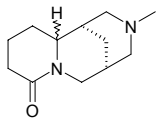
**14748 (S)-trans-N-Methyltetrahydrocolumbamine**

$C_{21}H_{26}NO_4$ (356.45). Yellow columnar crystals (as iodine salt), mp 202~203°C, $[\alpha]_D^{24} = -103.4^\circ$ ($c = 1.2$, $CHCl_3$). **Source:** HAI NAN QING NIU DAN *Tinospora hainanensis*. **Ref:** 687.

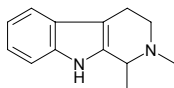


14749 N-Methyltetrahydrocytisine

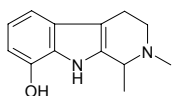
$C_{12}H_{20}N_2O$ (208.31). Source: HONG DOU *Ormosia hosiei*. Ref: 6, 1521.

**14750 N₆-Methyltetrahydroharman**

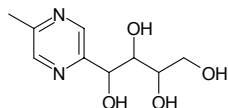
$C_{13}H_{16}N_2$ (200.29). mp 112°C. Source: HONG MU JI CAO *Desmodium gangeticum*. Ref: 6.

**14751 N₆-Methyltetrahydroharmol**

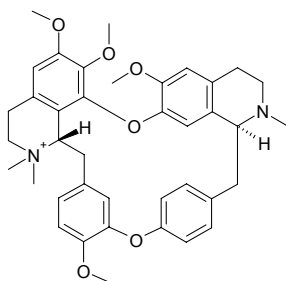
$C_{13}H_{16}N_2O$ (216.29). mp 268~270°C. Source: SHA ZAO SHU PI *Elaeagnus angustifolia*. Ref: 6.

**14752 2-Methyl-5-(1',2',3',4'-tetrahydroxybutyl)pyrazine**

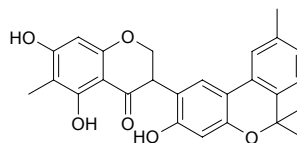
Pedatisectine E $C_9H_{14}N_2O_4$ (214.22). White granular crystals, mp 202~203°C, $[\alpha]_D^{17} = -87.8^\circ$ ($c = 0.165$, DMSO). Source: ZHANG YE BAN XIA *Pinellia pedatisecta*. Ref: 477.

**14753 (+)-2-N-Methyltetrandrine**

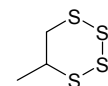
$C_{39}H_{45}N_2O_6^+$ (637.80). Source: FANG JI *Stephania tetrandra*. Ref: 2.

**14754 6-Methyltetrapterol A**

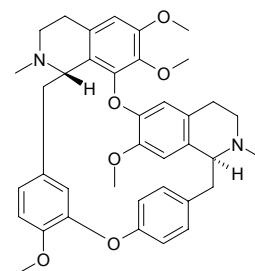
2,3-Dihydro-5,7-dihydroxy-6-methyl-3-(3-hydroxy-6,6,9-trimethyl-6H-dibenz[*b,d*]pyran-2-yl) 4*H*-1-benzopyran-4-one $C_{26}H_{24}O_6$ (432.48). Source: DAN HUI BAI SHAN MA HUANG *Desmodium canum*. Ref: 3444.

**14755 5-Methyl-1,2,3,4-tetrathiane**

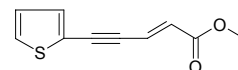
$C_3H_6S_4$ (170.34). Source: XIE BAI *Allium macrostemon*. Ref: 1391.

**14756 (+)-O-Methylthalicberine**

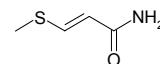
[5096-71-9] $C_{38}H_{42}N_2O_6$ (622.77). mp 186~187°C, $[\alpha]_D^{19} = +244.6^\circ$. Pharm: Anti-inflammatory; antihypertensive (rbt, *in vivo*). Source: XIAO TANG SONG CAO *Thalictrum minus*, YAN GUO CAO *Thalictrum thunbergii*, YUE GUI XIAO BO *Berberis laurina*. Ref: 6, 658, 1521, 1648.

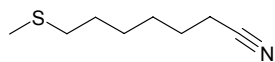
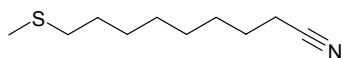
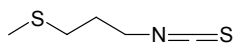
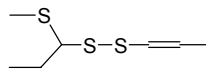
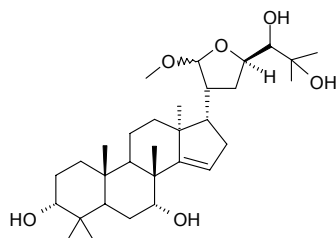
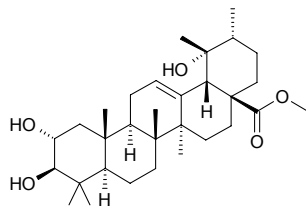
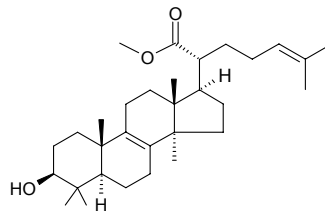
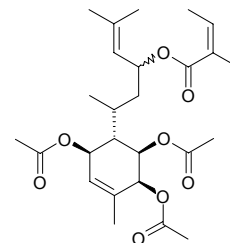
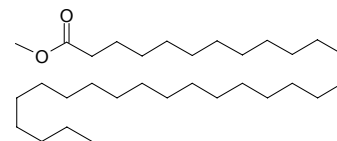
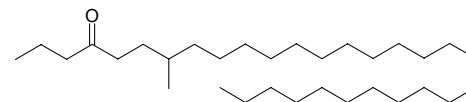
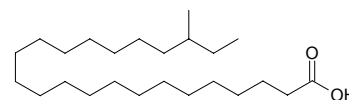
**14757 Methyl trans-5-(2-thienyl)-2-penten-4-yn-1-oate**

$C_{10}H_8O_2S$ (192.24). mp 67°C. Source: YANG SHI CAO *Achillea millefolium*. Ref: 6.

**14758 trans-3-Methylthioacrylamide**

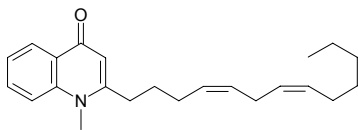
C_4H_7NOS (117.17). Pale yellow solid, mp 116~118°C Pharm: Antitubercular (*Mycobacterium tuberculosis* H37Ra, Microplate Alamar Blue Assay, MIC = 200µg/mL, control Isoniazide, MIC = 0.040~0.090µg/mL, Kanamycin sulfate, MIC = 2.0~5.0µg/mL); antimalarial inactive (*Plasmodium falciparum*, EC₅₀ > 20µg/mL). Source: TAI GUO NIU XU HUA *Clinacanthus siamensis* (leaf). Ref: 4410.



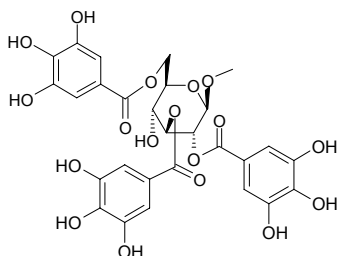
14759 6-Methyl-1-thio-2,4-cyclohexadieneC₆H₈S (112.19). [Source](#): DA SUAN *Allium sativum*. [Ref](#): 2.**14760 7-Methylthioheptanenitrile**C₈H₁₅NS (157.28). [Source](#): DOU BAN CAI *Nasturtium officinale*. [Ref](#): 1323.**14761 9-Methylthiononanenitrile**C₁₀H₁₉NS (185.33). [Source](#): DOU BAN CAI *Nasturtium officinale*. [Ref](#): 1323.**14762 3-Methylthiopropyl isothiocyanate**[505-79-3] C₅H₉NS₂ (147.26). bp 120.5–122.0°C/12mmHg. [Source](#): JIE ZI *Brassica juncea*. [Ref](#): 6.**14763 1-(1-Methyl thiopropyl)-1-propenyl disulfide**C₇H₁₄S₃ (194.38). [Source](#): A WEI *Ferula assafoetida*. [Ref](#): 1351, 1352.**14764 21-O-Methyl toosendanpentol**C₃₁H₅₂O₆ (520.76). Needles (Me₂CO–hexane), mp 106–108°C, [α]_D = –52.1° (c = 0.36, MeOH). [Source](#): CHUAN LIAN ZI *Melia toosendan*. [Ref](#): 1343, 1521.**14765 Methyl tormentate**C₃₁H₅₀O₅ (502.74). [Source](#): JIN YING ZI *Rosa laevigata*. [Ref](#): 1326.**14766 Methyl trametenolate**C₃₁H₅₀O₃ (470.74). [Source](#): BAO PI GU *Lentinus lepideus*. [Ref](#): 1501.**14767 3-Methyl-1-{2-[(1R*,2S*,5R*,6R*)-2,5,6-tri(acetyloxy)-4-methyl-3-cyclohexenyl]-propyl}-2-butenyl (Z)-2-methyl-2-butenoate**C₂₆H₃₈O₈ (478.59). [Pharm](#): Anti-Inflammatory (anti-oedema, control oedema = (7.8±0.3)mg, 100µg/cm² mixture with 3b, oedema = (4.6±0.5)mg, p<0.05, reduction = 41%, Indomethacin oedema = (3.4±0.3)mg, p<0.05, reduction = 56%); effect on leukocytes infiltration (control E.A. at 6h = (24.6±1.6)U/mL/min, 100µg/cm² mixture with 3b, E.A. at 6h = (18.2±0.5)U/mL/min, Reduce = 26%, p<0.05). [Source](#): GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root). [Ref](#): 4985.**14768 Methyl triacontanate**[629-83-4] C₃₁H₆₂O₂ (466.84). mp 71.5°C. [Source](#): SHAN TAO JING BAI PI *Prunus davidiana*, TAO JING BAI PI *Prunus persica*. [Ref](#): 6, 660.**14769 7-Methyl-4-triacontanone**C₃₁H₆₂O (450.84). [Source](#): XIA YE XIANG PU *Typha angustifolia*. [Ref](#): 2, 660.**14770 21-Methyl tricosanoic acid**C₂₄H₄₈O₂ (368.65). [Source](#): XIE BAI *Allium macrostemon*. [Ref](#): 1390.

14771 1-Methyl-2-(4Z,7Z)-4,7-tridecadienyl-4(1H)-quinolinone

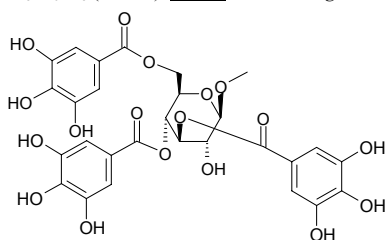
$C_{23}H_{31}NO$ (337.51). **Pharm:** Leukotriene biosynthesis inhibitor (hmn polymorphonuclear granulocytes, $IC_{50} = 10.1 \mu\text{mol/L}$, zileuton, $IC_{50} = 10.4 \mu\text{mol/L}$)^[5031]. **Source:** WU ZHU YU *Evodia rutaecarpa* (fruit). **Ref:** 2, 877, 5031.

**14772 Methyl 2,3,6-tri-O-galloyl-β-D-glucopyranoside**

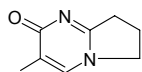
$C_{28}H_{26}O_{18}$ (650.51). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 1327.

**14773 Methyl 3,4,6-tri-O-galloyl-β-D-glucopyranoside**

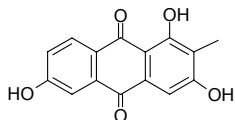
$C_{28}H_{26}O_{18}$ (650.51). **Source:** DI YU *Sanguisorba officinalis*. **Ref:** 1327.

**14774 3-Methyl-6,7,8-trihdropyrrolo[1,2-a]pyrimidin-2-one**

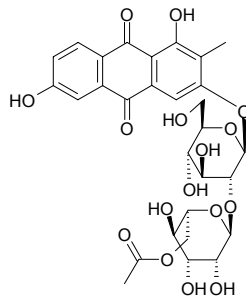
$C_8H_{10}N_2O$ (150.18). **Source:** GAN CAO *Glycyrrhiza uralensis*. **Ref:** 1331.

**14775 2-Methyl-1,3,6-trihydroxyanthraquinone**

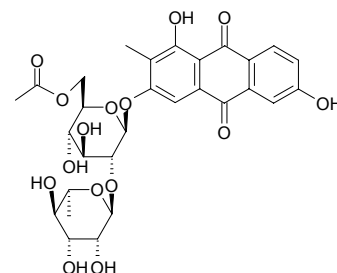
$C_{15}H_{10}O_5$ (270.24). **Pharm:** β-Hexosaminidase release inhibitor (RBL-2H3 cells, $100 \mu\text{mol/L}$, $\text{InRt} = (82.3 \pm 0.7)\%$, $p < 0.01$)^[4347]; cytotoxic (KB, $ED_{50} > 25 \mu\text{g/mL}$, control Doxorubicin, $ED_{50} = 0.12 \mu\text{g/mL}$; Hep3B, $ED_{50} = 1.7 \mu\text{g/mL}$, control Doxorubicin, $ED_{50} = 0.14 \mu\text{g/mL}$; Colon205, $ED_{50} = 1.16 \mu\text{g/mL}$, control Doxorubicin, $ED_{50} = 0.10 \mu\text{g/mL}$; HeLa, $ED_{50} = 12.3 \mu\text{g/mL}$, control Doxorubicin, $ED_{50} = 0.11 \mu\text{g/mL}$)^[4369]; NO production inhibitor (*in vitro*, LPS-activated mouse peritoneal macrophages, $3 \mu\text{mol/L}$, $10 \mu\text{mol/L}$, $30 \mu\text{mol/L}$, $100 \mu\text{mol/L}$, $\text{InRt} = 7.9\%$, 37.5% , 99.5% , 99.6% , respectively; control *L*-NMMA, $3 \mu\text{mol/L}$, $10 \mu\text{mol/L}$, $30 \mu\text{mol/L}$, $100 \mu\text{mol/L}$, $\text{InRt} = 10.3\%$, 15% , 34.1% , 63.1% , respectively)^[4691]. **Source:** GUANG JING QIAN CAO *Rubia wallichiana* (stem), QIAN CAO GEN *Rubia cordifolia*, XIAO HONG SHEN *Rubia yunnanensis* (root: yield = 0.025% dw)^[4691]. **Ref:** 1363, 4347, 4369, 4691.

**14776 2-Methyl-1,3,6-trihydroxyanthraquinone 3-O-(6'-O-acetyl)-α-L-rhamnosyl-(1→2)-β-D-glucoside**

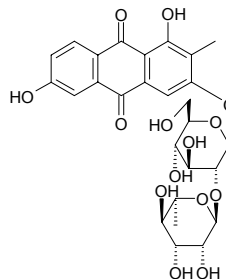
$C_{29}H_{32}O_{16}$ (636.57). **Pharm:** Cytotoxic (KB, $ED_{50} > 25 \mu\text{g/mL}$, control Doxorubicin, $ED_{50} = 0.12 \mu\text{g/mL}$; Hep3B, $ED_{50} > 25 \mu\text{g/mL}$, Doxorubicin, $ED_{50} = 0.14 \mu\text{g/mL}$; Colon205, $ED_{50} > 25 \mu\text{g/mL}$, Doxorubicin, $ED_{50} = 0.10 \mu\text{g/mL}$; HeLa, $ED_{50} > 25 \mu\text{g/mL}$, Doxorubicin, $ED_{50} = 0.11 \mu\text{g/mL}$). **Source:** GUANG JING QIAN CAO *Rubia wallichiana* (stem). **Ref:** 4369.

**14777 2-Methyl-1,3,6-trihydroxy-9,10-anthraquinone 3-O-(α-L-rhamno-pyranosyl-(1→2)(6'-acetyl)-β-D-glucopyranoside)**

$C_{29}H_{32}O_{15}$ (620.57). **Pharm:** Anti-inflammatory inactive (inhibits nitric oxide production, LPS-activated mouse peritoneal macrophages, $100 \mu\text{mol/L}$, $\text{InRt} = (7.2 \pm 4.1)\%$, control *L*-NMMA, $IC_{50} = 57 \mu\text{mol/L}$)^[4347]; β-Hexosaminidase inhibitor inactive (RBL-2H3 cells, inhibits release of β-hexosaminidase, $100 \mu\text{mol/L}$, $\text{InRt} = (-9.9 \pm 1.6)\%$)^[4347]. **Source:** XIAO HONG SHEN *Rubia yunnanensis* (root), QIAN CAO GEN *Rubia cordifolia*. **Ref:** 660, 4347.

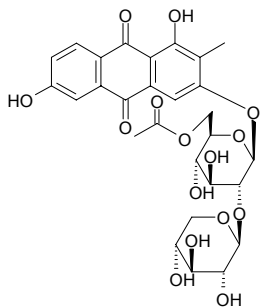
**14778 2-Methyl-1,3,6-trihydroxyanthraquinone 3-O-α-L-rhamnosyl-(1→2)-β-D-glucoside**

$C_{27}H_{30}O_{14}$ (578.53). **Source:** GUANG JING QIAN CAO *Rubia wallichiana* (stem), QIAN CAO GEN *Rubia cordifolia*. **Ref:** 660, 4369.



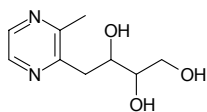
14779 2-Methyl-1,3,6-trihydroxy-9,10-anthraquinone-3-O- β -D-xylosyl-(1 \rightarrow 2)- β -D-(6'-O-acetyl) glucoside

C₂₈H₃₀O₁₅ (606.54). Yellow acicular crystals, mp 284~286°C. Source: QIAN CAO GEN *Rubia cordifolia*. Ref: 242, 660.



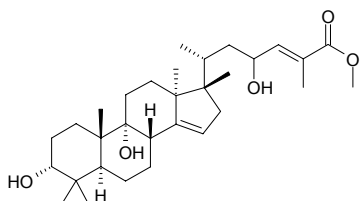
14780 2-Methyl-3-(2',3',4'-trihydroxybutyl)pyrazine

Pedatisectine D C₉H₁₄N₂O₃ (198.22). White granular crystals, mp 110~112°C. Source: ZHANG YE BAN XIA *Pinellia pedatisecta*. Ref: 477.



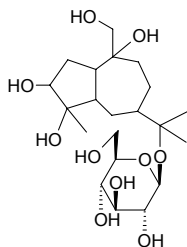
14781 Methyl (24E)-3 α ,9,23-trihydroxy-17,14-friedo-lanostan-14,24-dien-26-oate

C₃₁H₅₀O₅ (502.74). White solid, mp 128~130°C, [α]_D²⁹ = -48° (c = 0.42, MeOH). Source: SHAN FENG GUO *Garcinia hombroniana* (pericarp). Ref: 5085.



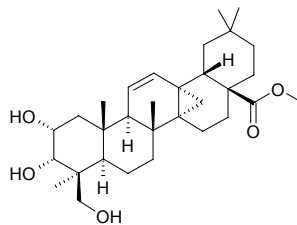
14782 2-(8-Methyl-2,8,9-trihydroxy-2-hydroxymethylbicyclo[5.3.0]decan-7-yl)isopropanol glucoside

C₂₁H₃₈O₁₀ (450.53). Source: CANG ZHU *Atractylodes lancea*. Ref: 660.



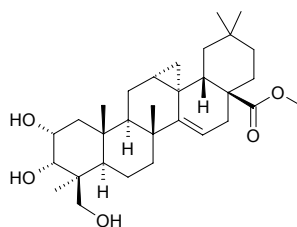
14783 Methyl (13S,14R)2 α ,3 α ,24-trihydroxy-13,14-cyclo-oleana-11-en-28-oate

C₃₁H₄₈O₅ (500.73). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.



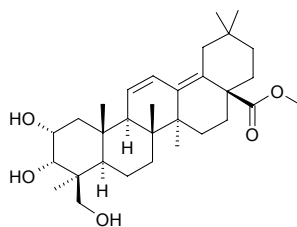
14784 Methyl (12R,13S)2 α ,3 α ,24-trihydroxy-12,13-cyclo-taraxer-14-en-28-oate

C₃₁H₄₈O₅ (500.73). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.



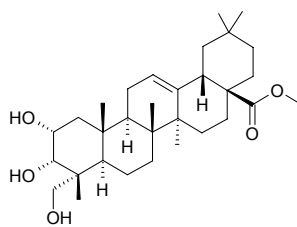
14785 Methyl 2 α ,3 α ,24-trihydroxyoleana-11,13(18)-dien-28-oate

C₃₁H₄₈O₅ (500.73). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.



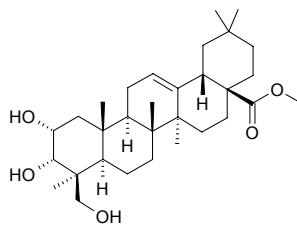
14786 Methyl 2 α ,3 α ,23-trihydroxyolean-12-en-28-oate

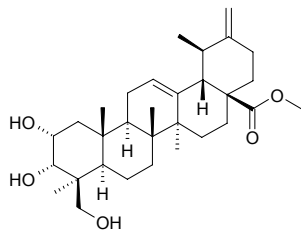
C₃₁H₅₀O₅ (502.74). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.



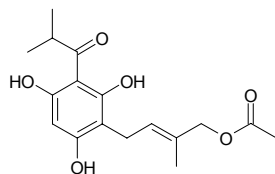
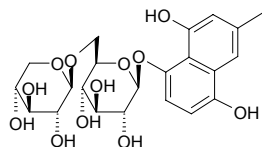
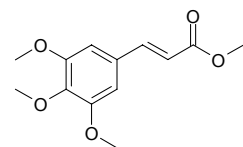
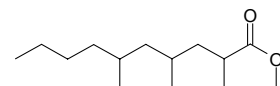
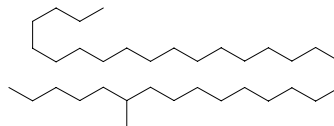
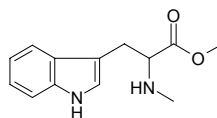
14787 Methyl 2 α ,3 α ,24-trihydroxyolean-12-en-28-oate

C₃₁H₅₀O₅ (502.74). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.

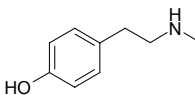
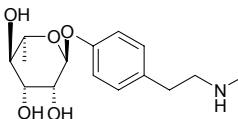


14788 Methyl 2 α ,3 α ,24-trihydroxyursa-12,20(30)-dien-28-oateC₃₁H₄₈O₅ (500.73). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.**14789 2-Methyl-4-[2',4',6'-trihydroxy-3'-(2-methylpropanoyl)phenyl]but-2-enyl acetate**

C₁₇H₂₂O₆ (322.36). mp 140°C. Pharm: Antibacterial (gram-positive bacteria: *Bacillus cereus*, *Bacillus pumilus*, *Bacillus subtilis*, *Micrococcus kristinae*, *Staphylococcus aureus*, all MIC = 0.5 μg/mL; gram-negative bacteria: *Enterobacter cloacae*, *Escherichia coli*, *Klebsiella pneumoniae*, *Pseudomonas aeruginosa*, *Serratia marcescens*, all inactive); antifungal (*Aspergillus flavus*, MIC = 1.0 μg/mL; *Aspergillus niger*, MIC = 1.0 μg/mL; *Cladosporium cladosporioides*, MIC = 5.0 μg/mL; *Cladosporium cucumerinum*, MIC = 0.5 μg/mL; *Cladosporium sphaerospermum*, MIC = 0.5 μg/mL; *Phytophthora capsici*, MIC = 1.0 μg/mL). Source: NAN FEI CONG SHENG LA JU *Helichrysum caespitium* (shoot). Ref: 3899.

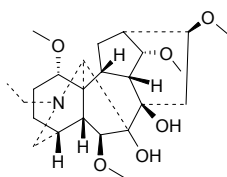
**14790 7-Methyl-1,4,5-trihydroxy-naphthalene-4-O-(6'-O-β-xylopyranosyl)-β-glucopyranoside**C₂₂H₂₈O₁₂ (484.46). Off-white amorphous powder, [α]_D¹⁷ = -128.5° (c = 0.4, DMSO). Source: SHI DI *Diospyros kaki*. Ref: 2321.**14791 Methyl 3,4,5-trimethoxycinnamate**C₁₃H₁₆O₅ (252.27). Source: BI BA GEN *Piper longum*. Ref: 1482.**14792 Methyl-2,4,6-trimethyl-decanoate**C₁₄H₂₈O₂ (228.38). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 2.**14793 4-Methyl-1,2,3-trithiane**C₄H₈S₃ (152.30). Source: XIE BAI *Allium macrostemon*. Ref: 1391.**14794 6-Methyl tritriacontane**C₃₄H₇₀ (478.94). Source: BAN BIAN SU *Elsholtzia ciliata*. Ref: 1457.**14795 (+)-N_b-Methyl tryptophan methyl ester (S)**C₁₃H₁₆N₂O₂ (232.28). Source: HUANG HUA ZI *Sida cordifolia*. Ref: 6.**14796 N-Methyltyramine**

C₉H₁₃NO (151.21). mp 130–131°C, bp 183–185°C/9mmHg. Pharm: Diuretic; increases blood flow through kidney (0.2mg/(kg·min), renal blood flow increases 75% and amount of urine increases 100%); increases blood pressure (anesthetic dog, 0.02–0.5mg/kg iv); increases coronary flow; induces myocardial rhythm; reduces consumption of oxygen in myocardium; LD₅₀ (iv chloride) = 33.9mg/kg. Source: GAN PI *Citrus chachiensis* (dried ripe pericarp: content = 0.096%)^[5508], GOU JU ZHI SHI *Poncirus trifoliata*, HONG MU JI CAO *Desmodium gangeticum*, XIANG YUAN ZHI SHI *Citrus wilsonii*, XIAO GUO YIN MAO QIU *Mammillaria microcarpa*, ZHI KE *Citrus aurantium*, ZHI SHI *Citrus aurantium* (young fruit: content scope = 0.19%–0.83%)^[5501]. Ref: 4, 658, 660, 5501, 5508.

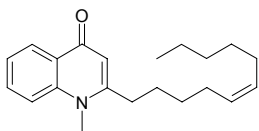
**14797 N-Methyl tyramine-O-α-L-rhamnopyranoside**C₁₅H₂₃NO₅ (297.35). Source: DA YE CAI *Selaginella doederleinii*. Ref: 1411.

14798 6-Methylumbrofine

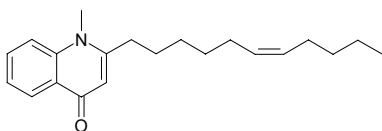
$C_{24}H_{39}NO_6$ (437.58). Colorless powder, mp 145–148°C. Source: ZI HUA GAO WU TOU *Aconitum excelsum*. Ref: 689.

**14799 1-Methyl-2-[(Z)-5-undecenyl]-4(1H)-quinolone**

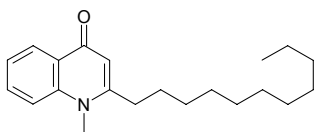
$C_{21}H_{29}NO$ (311.47). Colorless oil. Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 9, 877.

**14800 1-Methyl-2-[(Z)-6-undecenyl]-4(1H)-quinolone**

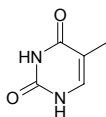
$C_{21}H_{29}NO$ (311.47). Pharm: Leukotriene biosynthesis inhibitor (hmn polymorphonuclear granulocytes, $IC_{50} = 10.0\mu\text{mol/L}$, zileuton, $IC_{50} = 10.4\mu\text{mol/L}$)^[5031]. Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2, 877, 5031.

**14801 1-Methyl-2-undecyl-4(1H)-quinolone**

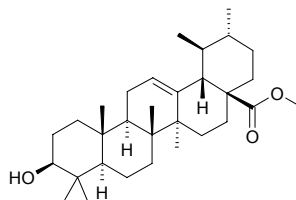
$C_{21}H_{31}NO$ (313.49). Source: WU ZHU YU *Evodia rutaecarpa*. Ref: 2.

**14802 5-Methyluracil**

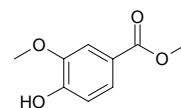
Thymine [65-71-4] $C_5H_6N_2O_2$ (126.12). mp 326°C. Pharm: Nitrogen-containing base occurring in DNA and RNA; tyrosinase inhibitor ($333.3\mu\text{mol/L}$, InRt = 7.8%; control Kojic acid, $333.3\mu\text{mol/L}$, InRt = 59.8%)^[4233]. Source: MU ZEI *Equisetum hiemale*, ZANG HONG HUA *Crocus sativus* (pollen), ZHANG YE BAN XIA *Pinellia pedatisecta*. Ref: 2, 658, 660, 4233.

**14803 Methyl ursolate**

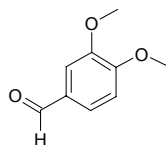
[32208-45-0] $C_{31}H_{50}O_3$ (470.74). Source: XIA KU CAO *Prunella vulgaris*. Ref: 2508.

**14804 Methyl vanillate**

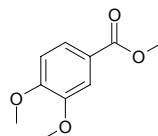
$C_9H_{10}O_4$ (182.18). Source: GUAN MU TONG *Aristolochia manshuriensis* (stem: yield = 0.00049%)^[4706], TAI WAN FU RONG *Hibiscus taiwanensis*, TAI WAN PU GONG YING *Taraxacum formosanum* (fresh root). Ref: 2529, 4488, 4706.

**14805 Methylvanillin**

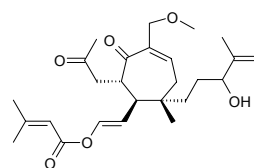
[120-14-9] $C_9H_{10}O_3$ (166.18). mp 44°C, 58°C. Source: PENG ZI CAI *Galium verum*, SHOU ZHANG SHEN *Gymnadenia conopsea*. Ref: 6.

**14806 Methyl veratrate**

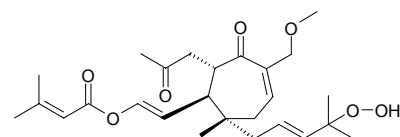
$C_{10}H_{12}O_4$ (196.20). Source: JIN FA XIAN *Polytrichum commune*. Ref: 1504.

**14807 18-O-Methylvibsanin G**

$C_{26}H_{38}O_6$ (446.59). Colorless amorphous solid, $[\alpha]_D^{26} = +38.1^\circ$ ($c = 0.4$, $CHCl_3$). Source: XIANG QI JIA MI *Viburnum odoratissimum* (leaf and flower: yield = 0.00002%dw). Ref: 3004.

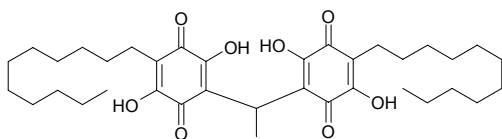
**14808 18-O-Methylvibsanin K**

$C_{26}H_{38}O_7$ (462.59). Source: RI BEN JIA MI *Viburnum awabuki* (leaf). Ref: 4168.

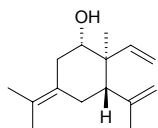


14809 Methylvilangin

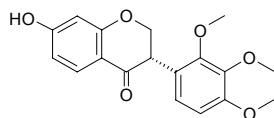
$C_{36}H_{54}O_8$ (614.83). Orange crystals (methanol), mp 129–130°C, $[\alpha]_D^{25} = +180^\circ$ ($c = 1.0$, CH_2Cl_2). Source: TIE ZI *Myrsine africana* (fruit). Ref: 3464.

**14810 2-Methyl-2-vinyl-3-isopropenyl-5-isopropylidene cyclohexanol**

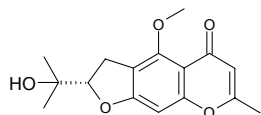
$C_{15}H_{24}O$ (220.36). bp 46–47°C. Source: XI XIN *Asarum sieboldii*. Ref: 6.

**14811 3'-O-Methylviolanone**

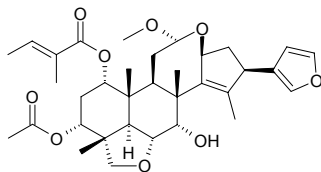
[56973-42-3] $C_{18}H_{18}O_6$ (330.34). Source: JIANG ZHEN XIANG *Dalbergia odorifera*. Ref: 716.

**14812 5-O-Methylvisaminol**

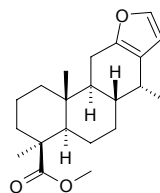
$C_{16}H_{18}O_5$ (290.32). Pharm: Antihypertensive (animal model). Source: FANG FENG *Saposhnikovia divaricata* [Syn. *Ledebouriella seseloides*]. Ref: 2, 658.

**14813 12-O-Methylvolkensin**

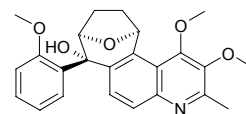
[244179-69-9] $C_{34}H_{46}O_9$ (598.74). Colorless needles, mp = 236.5–238.0°C, $[\alpha]_D^{18} = -52.0^\circ$ ($c = 0.1$, MeOH). Pharm: Cytotoxic (inhibits KB cell's growth, $IC_{50} = 8.72\mu g/mL$, control Adriamycin, $IC_{50} = 0.066\mu g/mL$). Source: CHUAN LIAN PI *Melia toosendan*. Ref: 2314.

**14814 (+)-Methyl vouacapenate**

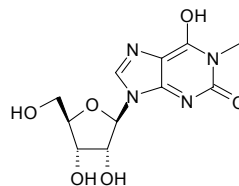
$C_{21}H_{30}O_3$ (330.47). Source: MEI GUO KE YA SHU *Vouacoupa Americana* (wood). Ref: 4315.

**14815 O-Methyl-waltherione A**

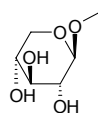
$C_{24}H_{25}NO_5$ (407.47). White solid, mp 188.0–189.0°C, $[\alpha]_D^{25} = -21.5^\circ$ ($c = 0.016$, $CHCl_3$). Pharm: Antibacterial (TLC bioassay, *Staphylococcus aureus*, detection limit = 25.0 μg ; *Streptococcus epidermidis*, detection limit = 3.5 μg ; *Micrococcus luteus*, detection limit = 6.5 μg ; *Klebsiella pneumoniae*, detection limit = 12.5 μg ; *Salmonella setubal*, detection limit = 12.5 μg and *Escherichia coli*, detection limit = 6.5 μg). Source: *Waltheria douradinha* (root cortex). Ref: 5284.

**14816 1-Methylxanthosine**

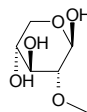
$C_{11}H_{14}N_4O_6$ (298.26). White solid. Source: LV HAI KUI *Anthopleura stell*. Ref: 2111.

**14817 1-O-Methyl-D-xyloside**

$C_6H_{12}O_5$ (164.16). mp (α) 90–92°C, (β) 157°C. Source: LU JIAO CAI *Gloiopeltis furcata*. Ref: 6.

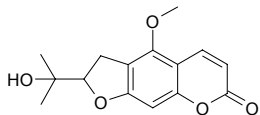
**14818 2-O-Methyl-D-xyloside**

$C_6H_{12}O_5$ (164.16). mp β -D (+) 137–138°C. Source: HAI DAI *Zostera marina*. Ref: 6.

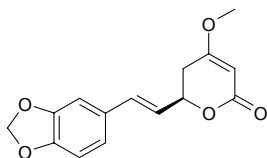


14819 5-Methoxymarmesin

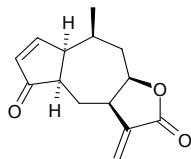
$C_{15}H_{16}O_5$ (276.29). Oil. Source: RU DI JIN NIU *Zanthoxylum nitidum* (root). Ref: 4555.

**14820 Methysticin**

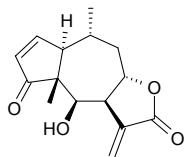
[495-85-2] $C_{15}H_{14}O_5$ (274.28). Pharm: Antispasmodic. Source: KA WA HU JIAO *Piper methysticum*. Ref: 658.

**14821 Mexicanin E**

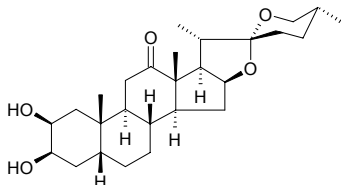
[5945-40-4] $C_{14}H_{16}O_3$ (232.28). Pharm: Antineoplastic; cytotoxic; supertoxic agent (mammal). Source: MO XI GE DUI XIN JU *Helenium mexicanum*. Ref: 658, 1521.

**14822 Mexicanin I**

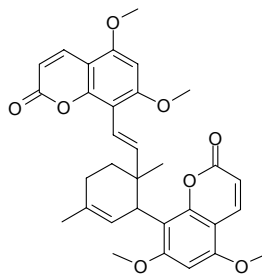
[5945-41-5] $C_{15}H_{18}O_4$ (262.31). Pharm: Antineoplastic; cytotoxic. Source: DUI XIN JU *Helenium autumnale*. Ref: 658.

**14823 Mexogenin**

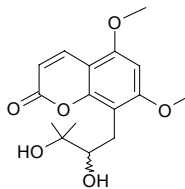
$C_{27}H_{42}O_5$ (446.63). mp 246°C. Source: JI JIAN LONG SHE LAN *Agave rigidissima*. Ref: 2503.

**14824 Mexolide**

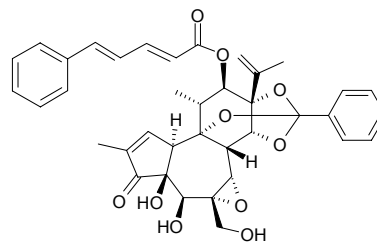
Toddasin [75775-35-8] $C_{32}H_{32}O_8$ (544.61). Crystals ($CH_2Cl_2-Et_2O$), mp 241°C. Source: FEI LONG ZHANG XUE *Toddalia asiatica* [Syn. *Toddalia aculeata*; *Paullinia asiatica*], XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*, ZHONG HUA JIU LI XIANG *Murraya exotica*. Ref: 1335, 1521.

**14825 Mexoticin**

5,7-Dimethoxy-8-(2,3-dihydroxyisopentyl) coumarin; *L*-Isomexoticin [18196-00-4] $C_{16}H_{20}O_6$ (308.33). mp 185°C; $[\alpha]_D^{24} = -123.7^\circ$ ($c = 0.3$, MeOH). Pharm: Platelet aggregation inhibitor (washed rabbit platelets, induced by thrombin, AA, collagen and PAF, 100µg/mL: thrombin = 0.1U/mL, AggRt = (84.0±0.8)%, $p < 0.05$, control, AggRt = (80.0±1.1)%; AA = 100µmol/L, AggRt = (71.3±6.1)%, control, AggRt = (77.0±1.5)%; collagen = 10µg/mL, AggRt = (69.7±4.0)%, $p < 0.05$, control, AggRt = (78.3±1.3)%; PAF = 1ng/mL, AggRt = (82.0±2.9)%, control, AggRt = (82.5±1.5)%)^[5417]. Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], QI GUO QIAN LI XIANG *Murraya paniculata* var. *omphalocarpa* (leaf), YUN QIAN HU *Peucedanum rubricaula*, ZHONG HUA JIU LI XIANG *Murraya exotica*. Ref: 6, 11, 177, 5417.

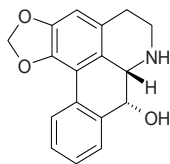
**14826 Mezerein**

[34807-41-5] $C_{38}H_{38}O_{10}$ (654.72). Crystals, mp 265–269°C (dec), $[\alpha]_D^{25} = +117.5^\circ$ (chloroform); colorless columnar crystals (dichloromethane-ether), mp 258–262°C, $[\alpha]_D^{27} = +125^\circ$ (chloroform). Pharm: Antineoplastic (mus P₃₈₈ and L₁₂₁₀, 50µg/kg); hemostatic (rbt, 0.01µmol/L, promotes platelet aggregation). Source: OU YA RUI XIANG *Daphne mezereum*. Ref: 661.

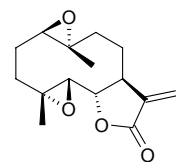


14827 Michelalbine

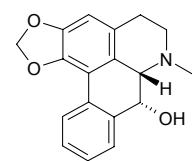
(-)-Norushinsunine [3175-84-6] $C_{17}H_{15}NO_3$ (281.31). mp 205~207°C. Source: BAI LAN HUA *Michelia alba*, HOU PO *Magnolia officinalis*, QING FENG TENG *Sinomenium acutum*, YOU GOU YING ZHAO *Artabotrys uncinatus* (root). Ref: 6, 625, 1521, 3083.

**14828 Michelenolide**

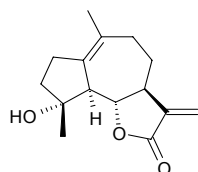
[66392-96-9] $C_{15}H_{20}O_4$ (264.32). Pharm: Antineoplastic; cytotoxic (*in vitro*, SMMC-7721, IC_{50} = 2.32 $\mu\text{g/mL}$; HO-8910, IC_{50} = 1.37 $\mu\text{g/mL}$; control Vincristine, SMMC-7721, IC_{50} = 30.35 $\mu\text{g/mL}$; HO-8910, IC_{50} = 20.74 $\mu\text{g/mL}$)^[4736]. Source: CHANG YE TIAN MING JING *Carpesium longifolium* (aerial parts: yield = 0.001%dw)^[4736], WU XIN SHI *Michelia compressa* var. *formosana*. Ref: 658, 4736.

**14829 Micheline A**

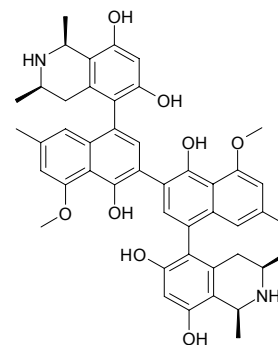
Ushinsunine [3175-89-1] $C_{18}H_{17}NO_3$ (295.34). mp (-) 180~181°C. Pharm: Antibacterial (*Staphylococcus* sp., *Salmonella* sp., *Bacillus mycoides* and *Bacillus subtilis*). Source: HUANG MIAN GUI *Michelia champaca*, WU XIN SHI *Michelia compressa* var. *formosana*, BAI LAN HUA *Michelia alba*. Ref: 6, 658.

**14830 Micheliolide**

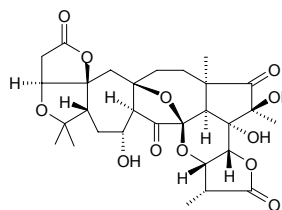
[68370-47-8] $C_{15}H_{20}O_3$ (248.32). Pharm: Antineoplastic; cytotoxic. Source: WU XIN SHI *Michelia compressa* var. *formosana*. Ref: 658.

**14831 Michellamine B**

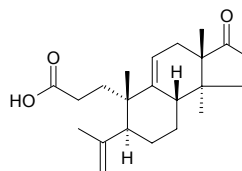
$C_{46}H_{48}N_2O_8$ (756.90). Pharm: Anti-HIV (inhibits HIV in early stage of its life cycle, inhibits the cell fusion and formation of plasmodia). Source: GOU ZHI TENG *Ancistrocladus korupensis*. Ref: 2268.

**14832 Micrandilactone A**

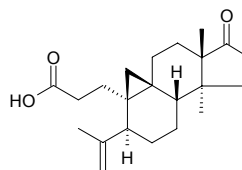
$C_{29}H_{36}O_{12}$ (576.60). Source: XIAO HUA WU WEI ZI *Schisandra micrantha*. Ref: 3006.

**14833 Micranoic acid A**

$C_{22}H_{32}O_3$ (344.50). Colorless needles (acetone), mp 87~88°C, $[\alpha]_D^{23} = +69.11^\circ$ ($c = 0.25$, MeOH). Source: XIAO HUA WU WEI ZI *Schisandra micrantha* (leaf and stem). Ref: 4389.

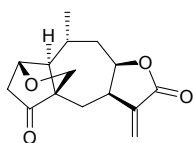
**14834 Micranoic acid B**

$C_{22}H_{32}O_3$ (344.50). Colorless prisms (acetone), mp 80~81°C, $[\alpha]_D^{24} = +121.74^\circ$ ($c = 0.23$, MeOH). Source: XIAO HUA WU WEI ZI *Schisandra micrantha* (leaf and stem). Ref: 4389.

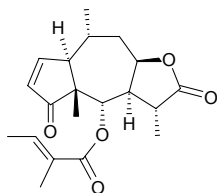


14835 Microhelenin A

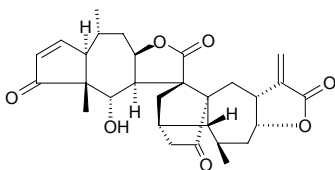
[61490-63-9] C₁₅H₁₈O₄ (262.31). mp 140~141°C. Pharm: Antineoplastic; cytotoxic. Source: XIAO TOU DUI XIN JU *Helenium microcephalum*. Ref: 5.

**14836 Microhelenin C**

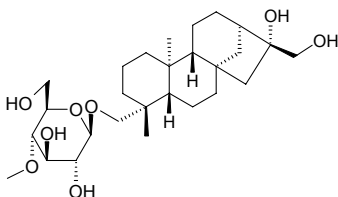
[63569-07-3] C₂₀H₂₆O₅ (346.43). Pharm: Antineoplastic; cytotoxic. Source: XIAO TOU DUI XIN JU *Helenium microcephalum*. Ref: 658.

**14837 Microlenin**

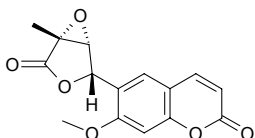
[60622-41-5] C₂₉H₃₄O₇ (494.59). mp 280°C (dec). Pharm: Antineoplastic (rat W₂₅₆, 2.5mg/(kg·d) *in vivo*, biotic prolonged rate = 73%). Source: XIAO TOU DUI XIN JU *Helenium microcephalum*. Ref: 5, 658.

**14838 Microlepin**

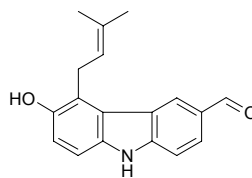
[61667-46-7] C₂₇H₄₆O₈ (498.66). Source: BIAN YUAN LIN GAI JUE *Microlepis marginata*. Ref: 1412.

**14839 Micromelin**

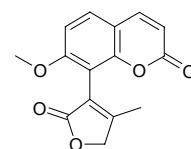
[15085-71-9] C₁₅H₁₂O₆ (288.26). Pharm: Antineoplastic. Source: XIAO YUN MU *Micromelum integerrimum*. Ref: 658.

**14840 Micromeline**

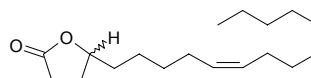
C₁₈H₁₇NO₂ (279.34). Yellow microcrystalline powder. Pharm: Antitubercular (MIC = (1.5±0.4)μg/mL, control Rifampin, MIC = (0.040±0.017)μg/mL); cytotoxic (Vero, IC₅₀ = 95μg/mL, Rifampin, IC₅₀ = 100μg/mL). Source: YING MAO XIAO YUN MU *Micromelum hirsutum* (stem cortex). Ref: 5072.

**14841 Microminutin**

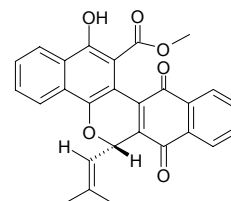
[84041-46-3] C₁₅H₁₂O₅ (272.26). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 1336.

**14842 Micromolide**

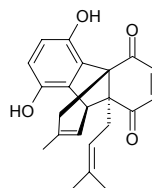
(-)-Z-9-Octadecene-4-olide C₁₈H₃₂O₂ (280.45). Colorless oil. Pharm: Antitubercular (MIC = (15.6±0.2)μg/mL, control Rifampin, MIC = (0.040±0.017)μg/mL); cytotoxic Vero, IC₅₀ > 102μg/mL, Rifampin, IC₅₀ = 100μg/mL. Source: YING MAO XIAO YUN MU *Micromelum hirsutum* (stem cortex). Ref: 5072.

**14843 Microphyllaquinone**

C₂₇H₂₀O₆ (440.46). Source: QIU ZHUANG PO BU MU *Cordia globosa* (root). Ref: 5043.

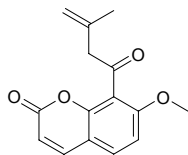
**14844 Microphyllone**

C₂₂H₂₂O₄ (350.42). Bright yellow needles, mp 167~168°C. Source: *Diospyros sylvatica* (root). Ref: 3811.

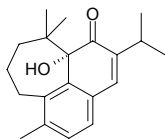


14845 Micropubescin

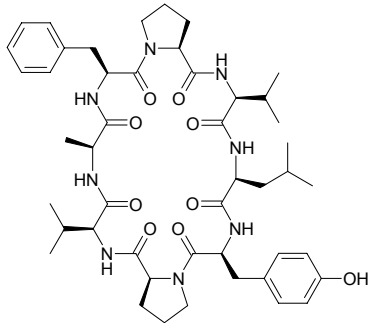
$C_{15}H_{14}O_4$ (258.28). mp 118~119°C. Source: YAN JIAO CAO *Boeninghausenia albiflora*. Ref: 2495.

**14846 Microstegiol**

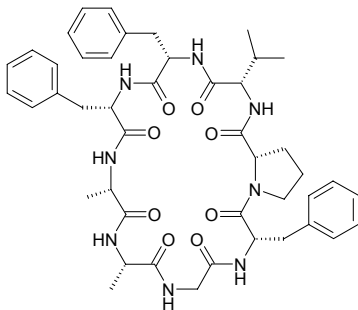
$C_{20}H_{26}O_2$ (298.43). mp 70°C, $[\alpha]_D^{25} = +415^\circ$ ($c = 0.1$, $CHCl_3$). Pharm: Cytotoxic (Col2, $IC_{50} = 17.4\mu g/mL$, control Ellipticine, $IC_{50} = 0.3\mu g/mL$; LNCaP, $IC_{50} > 20\mu g/mL$; P₃₈₈, $IC_{50} = 3.0\mu g/mL$, Ellipticine, $IC_{50} = 0.1\mu g/mL$; KB, $IC_{50} > 20\mu g/mL$; LU1, $IC_{50} > 20\mu g/mL$). Source: XIONG RUI ZHUANG SHU WEI CAO *Salvia staminea*. Ref: 5400.

**14847 Microtoenin A**

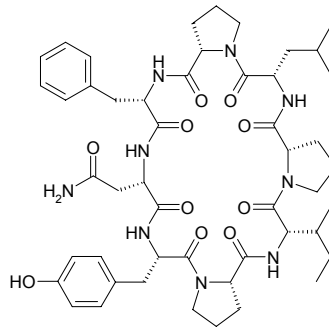
$C_{47}H_{66}N_8O_9$ (887.1). White amorphous powder, mp 280~282°C, $[\alpha]_D^{20} = -104.8^\circ$ ($c = 0.23$, MeOH). Pharm: Cytotoxic inactive (Bre04, Lu04, N04, $GI_{50} > 100\mu g/mL$); antiviral inactive (Vero cell lines infected with HSV-2 strain 333, $250\mu g/mL$). Source: NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.00026%dw). Ref: 4752.

**14848 Microtoenin B**

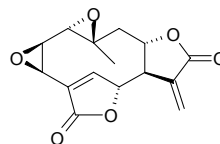
$C_{45}H_{56}N_8O_8$ (837.00). White amorphous powder, mp 288~290°C, $[\alpha]_D^{20} = -68.3^\circ$ ($c = 0.12$, MeOH). Pharm: Cytotoxic inactive (Bre04, Lu04, N04, $GI_{50} > 100\mu g/mL$); antiviral inactive (Vero cell lines infected with HSV-2 strain 333, $250\mu g/mL$). Source: NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.00014%dw). Ref: 4752.

**14849 Microtoenin C**

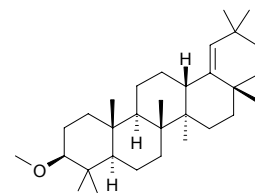
$C_{49}H_{67}N_9O_{10}$ (942.13). White amorphous powder, mp 256~258°C, $[\alpha]_D^{20} = -93.8^\circ$ ($c = 0.13$, MeOH). Pharm: Cytotoxic inactive (Bre04, Lu04, N04, $GI_{50} > 100\mu g/mL$); antiviral inactive (Vero cell lines infected with HSV-2 strain 333, $250\mu g/mL$). Source: NAN CHUAN GUAN CHUN HUA *Microtoena prainiana* (stem: yield = 0.00026%dw). Ref: 4752.

**14850 Mikanolide**

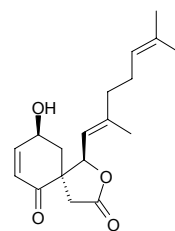
[17928-61-9] $C_{15}H_{14}O_6$ (290.28). Pharm: Antibacterial; antifungal. Source: WEI GAN JU *Mikania scandens*, JIA ZE LAN *Mikania cordata*. Ref: 658.

**14851 Miliacin**

[5945-45-9] $C_{31}H_{52}O$ (440.76). mp 282~283°C. Source: SHU MI *Panicum miliaceum*. Ref: 6.

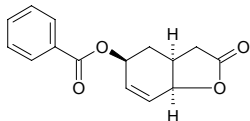
**14852 Miliusol**

(1'E)-(1R*,5R*,9S*)-9-Hydroxy-1-(2,6-dimethylhepta-1,5-dienyl)-3,6-dioxo-2-oxa-spiro[4.5]dec-7-ene $C_{18}H_{24}O_4$ (304.39). Colorless oil, $[\alpha]_D^{23} = +38^\circ$ ($c = 0.5$, $CHCl_3$). Source: *Milisia balansae* (branch and leaf: yield = 0.0013%dw). Ref: 3016.

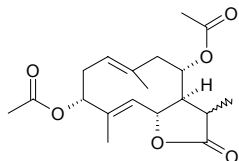


14853 Miliosolide

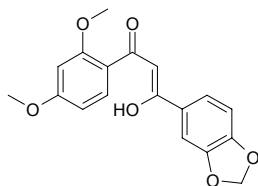
$C_{15}H_{14}O_4$ (258.28). Colorless crystals, mp 120–121°C (EtOAc). Source: *Milisia balansae* (branch and leaf: yield = 0.00065%dw). Ref: 3016.

**14854 Millefin**

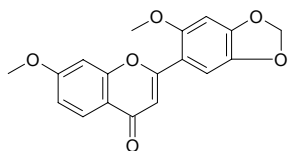
[39262-27-6] $C_{19}H_{26}O_6$ (350.42). mp 209–210°C. Source: YANG SHI CAO *Achillea millefolium*. Ref: 6.

**14855 Milletenone**

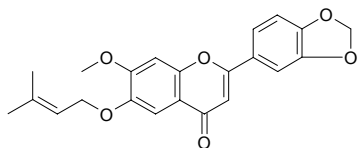
$C_{18}H_{16}O_6$ (328.32). Source: HONG E JI XUE TENG *Millettia erythrocalyx* (stem cortex: yield = 0.00020%dw). Ref: 4624.

**14856 Millettocalyxin A**

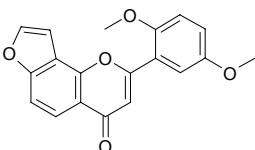
$C_{18}H_{14}O_6$ (326.31). Yellow powder. Source: HONG E JI XUE TENG *Millettia erythrocalyx* (stem cortex: yield = 0.0004%dw). Ref: 4624.

**14857 Millettocalyxin B**

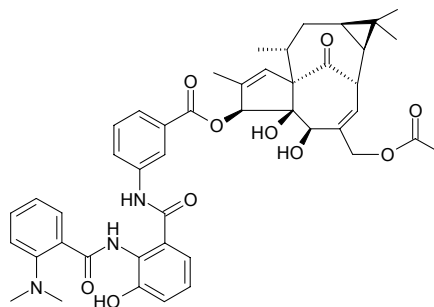
$C_{22}H_{20}O_6$ (380.4). Yellow powder. Source: HONG E JI XUE TENG *Millettia erythrocalyx* (stem cortex: yield = 0.00095%dw). Ref: 4624.

**14858 Millettocalyxin C**

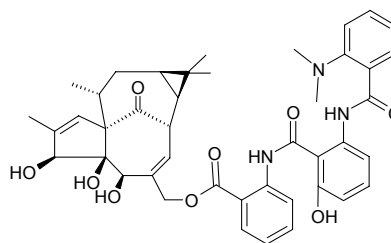
$C_{19}H_{14}O_5$ (322.32). Yellow powder. Source: HONG E JI XUE TENG *Millettia erythrocalyx* (stem cortex: yield = 0.0017%dw). Ref: 4624.

**14859 Milliamine A**

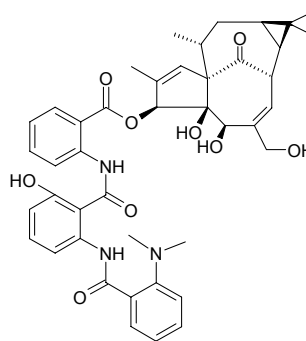
[34391-10-1] $C_{45}H_{49}N_3O_{10}$ (791.91). Source: TIE HAI TANG *Euphorbia milii* (the compound was isolated from the plant by D.Uemura et al. in 1973)^[5505]. Ref: 6, 5505.

**14860 Milliamine B**

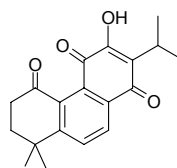
$C_{43}H_{47}N_3O_9$ (749.87). Source: TIE HAI TANG *Euphorbia milii*. Ref: 6.

**14861 Milliamine C**

[49620-09-9] $C_{43}H_{47}N_3O_9$ (749.87). Source: TIE HAI TANG *Euphorbia milii*. Ref: 6.

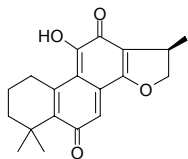
**14862 Millionone I**

[125675-06-1] $C_{19}H_{20}O_4$ (312.37). Yellow powder, mp 151–153°C. Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 1368, 1521.

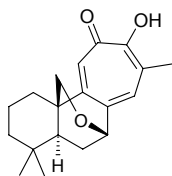


14863 Miltionone II

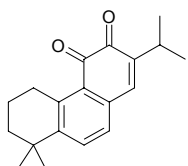
[125675-07-2] C₁₉H₂₀O₄ (312.37). Needles, mp 184–185°C, [α]_D²³ = +114.8° (c = 0.12, CHCl₃). Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 1368, 1521.

**14864 Miltipolone**

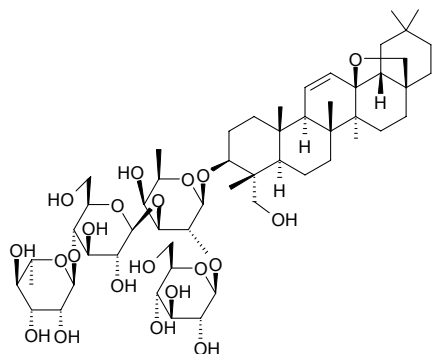
[131086-61-8] C₁₉H₂₄O₃ (300.40). Crystals, mp 132°C, [α]_D²⁵ = -77.8° (c = 0.2, CHCl₃). Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 1369, 1521.

**14865 Miltirone**

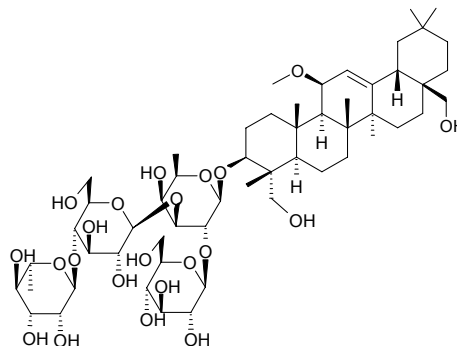
[27210-57-7] C₁₉H₂₂O₂ (282.39). mp 100°C. Pharm: Platelet aggregation inhibitor (induced by collagen IC₅₀ = 5.76 μmol/L); CNS depressant; benzodiazepine receptor agonist. Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 2, 1708, 1709.

**14866 Mimengoside A**

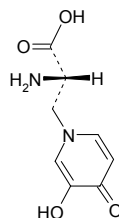
C₅₄H₈₈O₂₁ (1073.29). Source: MI MENG HUA *Buddleja officinalis*. Ref: 1356.

**14867 Mimengoside B**

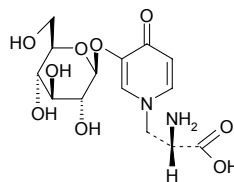
C₅₅H₉₂O₂₂ (1105.33). Source: MI MENG HUA *Buddleja officinalis*. Ref: 1356.

**14868 Mimosine**

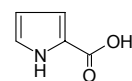
Leucaenol [500-44-7] C₈H₁₀N₂O₄ (198.18). Crystals (H₂O), mp 235–236°C, mp 226–227°C, [α]_D²² = -20° (H₂O). Pharm: Depilatory (horse, sheep and pig); leads to struma (heifer); teratogen (rat); Tyrosinase Inhibitor (IC₅₀ = 3.68±0.02) μmol/L). Source: HAN XIU CAO *Mimosa pudica*, YIN HE HUAN *Leucaena glauca* [Syn. *Leucaena leucocephala*]. Ref: 6, 658, 1521, 2544.

**14869 Mimosine-O-β-D-glucoside**

Mimoside [36518-12-4] C₁₄H₂₀N₂O₉ (360.32). mp 178–179°C, [α]_D²⁶ = -60.9° (c = 0.46, H₂O). Source: HAN XIU CAO *Mimosa pudica*, YIN HE HUAN *Leucaena glauca* [Syn. *Leucaena leucocephala*]. Ref: 6, 1521.

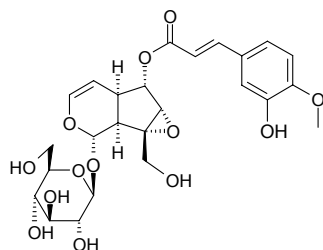
**14870 2-Minaline**

[634-97-9] C₅H₅NO₂ (111.10). Source: YI YE JIA FAN LV *Pseudostellaria heterophylla*. Ref: 1443.

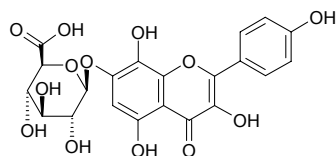


14871 Minecoside

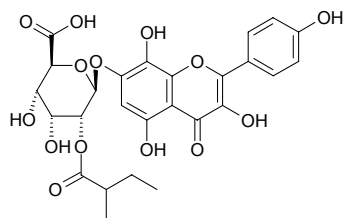
$C_{25}H_{30}O_{13}$ (538.51). Source: HU HUANG LIAN *Picrorhiza kurrooa*, ZHAN LONG JIAN *Veronicastrum sibiricum*, CAI DOU SHU *Radermachera sinica*. Ref: 1463, 1464, 1465.

**14872 Mingjinianurone A**

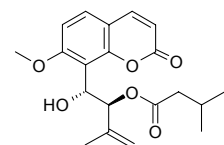
3,5,7,8,4'-Pentahydroxyflavone-7-O- β -D-glucuronopyranoside $C_{21}H_{18}O_{13}$ (478.37). Yellow powder, mp 230°C, soluble in methanol, ethanol acetone and dimethyl sulfoxide. Source: ZI HUA JING TIAN *Hylotelephium mingjinianum*. Ref: 308.

**14873 Mingjinianurone B**

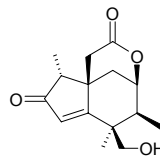
3,5,7,8,4'-Pentahydroxyflavone-8-O- β -D-2''-O-(2-methylbutanoyl) glucuronide $C_{26}H_{26}O_{14}$ (562.49). Yellow powder, mp 206~207°C, soluble in methanol, ethanol acetone and dimethyl sulfoxide; insoluble in chloroform and water. Source: ZI HUA JING TIAN *Hylotelephium mingjinianum*. Ref: 308.

**14874 Minumicrolin**

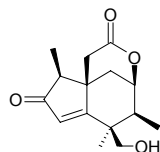
Minumicrolin $C_{20}H_{24}O_6$ (360.41). Oil, $[\alpha]_D = 40.9^\circ$ ($c = 0.086$, $CHCl_3$). Source: XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. Ref: 1272, 1521.

**14875 (1R*)-Minwanenone**

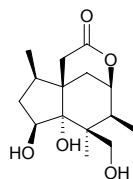
$C_{15}H_{20}O_5$ (264.32). $[\alpha]_D^{21} = -17.9^\circ$ ($c = 1.50$, EtOH). Source: MIN WAN BA JIAO *Illicium minwanense* (pericarp: yield = 0.00025%dw). Ref: 4697.

**14876 (1S*)-Minwanenone**

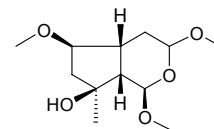
$C_{15}H_{20}O_5$ (264.32). $[\alpha]_D^{19} = -19.9^\circ$ ($c = 1.25$, MeOH). Source: MIN WAN BA JIAO *Illicium minwanense* (pericarp: yield = 0.00021%dw). Ref: 4697.

**14877 Minwanensin**

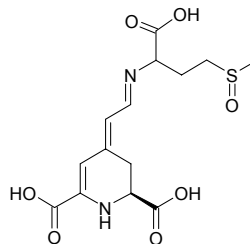
$C_{15}H_{24}O_5$ (284.36). Colorless acicular crystals, mp 171~173°C, $[\alpha]_D^{14} = -87.4^\circ$ ($c = 0.1075$, methanol). Source: MIN WAN BA JIAO *Illicium minwanense*, MIN WAN BA JIAO *Illicium minwanense* (pericarp: yield = 0.00088%dw)⁴⁶⁹⁷. Ref: 315, 4697.

**14878 Mioporosidegenin**

$C_{12}H_{22}O_5$ (246.31). Source: GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*]. Ref: 1375.

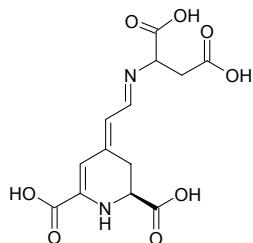
**14879 Miraxanthin I**

[5296-79-7] $C_{14}H_{18}N_2O_7S$ (358.37). Pharm: Yellow pigment. Source: ZI MO LI GEN *Mirabilis jalapa*, ZI JIN NIU GEN *Ardisia japonica*. Ref: 6, 658.

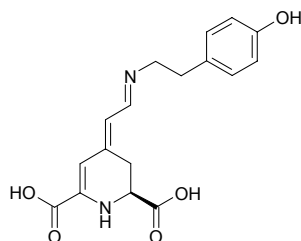


14880 Miraxanthin II

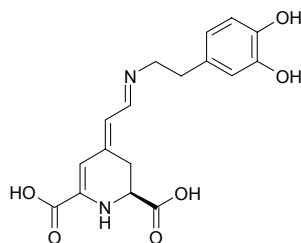
[53750-63-3] C₁₃H₁₄N₂O₈ (326.27). Pharm: Yellow pigment. Source: ZI MO LI GEN *Mirabilis jalapa*, ZI JIN NIU GEN *Ardisia japonica*. Ref: 6, 658.

**14881 Miraxanthin III**

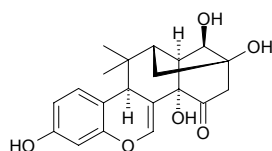
[5589-85-5] C₁₇H₁₈N₂O₅ (330.34). Pharm: Yellow pigment. Source: ZI MO LI GEN *Mirabilis jalapa*, ZI JIN NIU GEN *Ardisia japonica*. Ref: 6, 658.

**14882 Miraxanthin V**

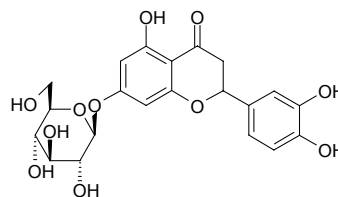
[5375-64-4] C₁₇H₁₈N₂O₆ (346.34). Pharm: Yellow pigment. Source: ZI MO LI GEN *Mirabilis jalapa*, ZI JIN NIU GEN *Ardisia japonica*. Ref: 6, 658.

**14883 Miroestrol**

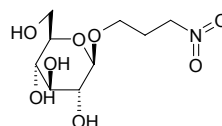
C₂₀H₂₂O₆ (358.39). mp 268–270°C (dec). Pharm: Estrogenic activity. Source: GUO YE GE *Pueraria mirifica*. Ref: 4, 658.

**14884 Miscanthoside**

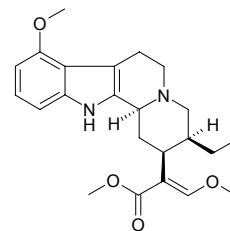
C₂₁H₂₂O₁₁ (450.40). mp 158–163°C. Source: MANG JING *Miscanthus sinensis*. Ref: 6.

**14885 Miserotoxin**

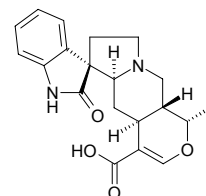
[24502-76-9] C₉H₁₇NO₈ (267.24). Pharm: Toxin (causes methaemoglobin disease in cattles). Source: CHI GUO HUANG QI *Astragalus pterocarpus*, JU YUAN YE HUANG QI *Astragalus miser* var. *oblongifolia*, ROU MAO HUANG QI *Astragalus atropubescens*, SI CHI HUANG QI *Astragalus tetraplerus*. Ref: 658.

**14886 Mitragynine**

C₂₃H₃₀N₂O₄ (398.51). Pharm: Opioid agonist (gpg ileum, pEC₅₀ = 6.91±0.04, control Morphine, pEC₅₀ = 7.15±0.05). Source: MEI LI MAO ZHU MU *Mitragyna speciosa* (leaf). Ref: 5069.

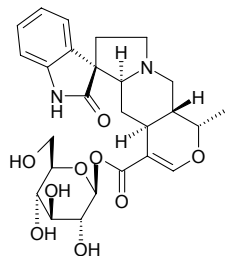
**14887 Mitraphyllic acid**

[10126-00-8] C₂₀H₂₂N₂O₄ (354.41). Source: HUA GOU TENG *Uncaria sinensis*. Ref: 287, 910, 5341.

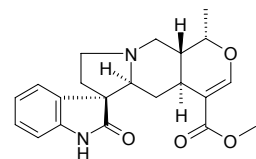


14888 Mitraphyllic acid (16→1)-β-D-gluco-pyranosyl ester

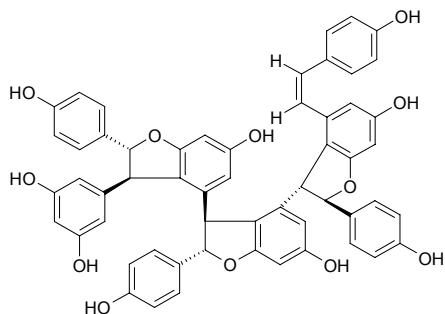
$C_{26}H_{32}N_2O_9$ (516.55). White amorphous powder crystals, $[\alpha]_D = -48.8^\circ$ (MeOH). Source: HUA GOU TENG *Uncaria sinensis*. Ref: 287.

**14889 Mitraphylline**

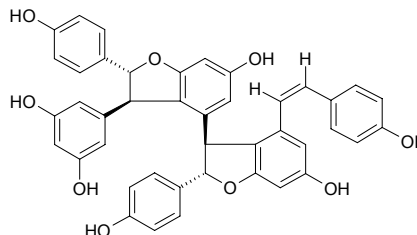
[509-80-8] $C_{21}H_{24}N_2O_4$ (368.44). Pharm: Antihypertensive^[658], immunostimulant (maybe by increasing phagocytosis of hmn granulocytes and macrophages and blocking proliferation of myeloid cell lines)^[5341]. Source: BAI GOU TENG *Uncaria sessilifructus* [Syn. *Nauclea sessilifructus*], BEI YUE GOU TENG *Uncaria homomalla* [Syn. *Uruparia homomalla*; *Uruparia tonkinensis*; *Uruparia lanosa* var. *parviflora*], BI LU GOU TENG *Uncaria tomentosa*, CHANG CHUN HUA *Catharanthus roseus* [Syn. *Vinca rosea*; *Lochera rosea*], CHANG HUA GOU TENG *Uncaria longiflora*, CHUAN SHANG LONG MI GOU TENG *Uncaria kawakamii*, DA YE MAO ZHU MU *Mitragyna macrophylla*, DONG FANG GOU TENG *Uncaria orientalis*, DUAN RONG MAO GOU TENG *Uncaria velutina*, ER CHA GOU TENG *Uncaria gambir*, FEI ZHOU GOU TENG *Uncaria africana*, GUI YA NA GOU TENG *Uncaria guianensis*, HOU YE GOU TENG *Uncaria callophylla*, MAO GOU TENG *Uncaria hirsuta*, MIAN MAO GOU TENG *Uncaria lanosa*, PAN ZHI GOU TENG *Uncaria scandens* [Syn. *Nauclea pilosa*; *Uruparia pilosa*; *Uncaria pilosa*], PI ZHEN YE GOU TENG *Uncaria lancifolia*, PING HUA FA LIANG GOU TENG *Uncaria laevigata*, TUO YUAN GOU TENG *Uncaria elliptica*, XIA GOU TENG *Uncaria attenuata*, *Uncaria bernaysii*, *Uncaria perrottetii*, *Uncaria sterrophylla*, occurs in many plants. Ref: 2, 658, 5341.

**14890 cis-Miyabenol A**

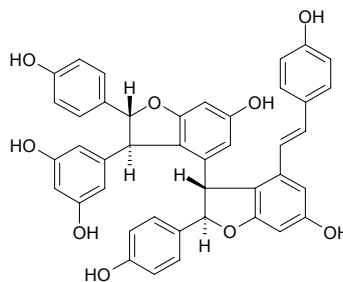
$C_{56}H_{42}O_{12}$ (906.95). White amorphous. Pharm: Ecdysteroid antagonist (*Drosophila melanogaster* B₁₁ cell line, $IC_{50} = 31\mu\text{mol/L}$). Source: XIA CHUI TAI CAO *Carex pendula* (seed). Ref: 5141.

**14891 cis-Miyabenol C**

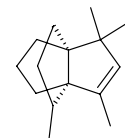
$C_{42}H_{32}O_9$ (680.72). White amorphous. Pharm: Ecdysteroid antagonist (*Drosophila melanogaster* B₁₁ cell line, $IC_{50} = 19\mu\text{mol/L}$). Source: XIA CHUI TAI CAO *Carex pendula* (seed). Ref: 5141.

**14892 Miyabenol C**

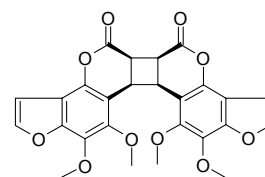
[109605-83-6] $C_{42}H_{32}O_9$ (680.72). Pharm: PKC inhibitor ($IC_{50} = 52.5\mu\text{mol/L}$). Source: BAI CI HUA *Sophora viciifolia*, SHE PU TAO *Ampelopsis brevipedunculata*, XIA YE JIN JI ER *Caragana stenophylla* (root), *Carex fedia* var. *miyabei*. Ref: 2233, 2234, 2557, 2558.

**14893 Modhephene**

$C_{15}H_{24}$ (204.36). Pharm: Anti-Inflammatory (anti-oedema, control oedema = $(7.8 \pm 0.3)\text{mg}$, $100\mu\text{g}/\text{cm}^2$ mixture with silphinene and isocomene, oedema = $(4.9 \pm 0.4)\text{mg}$, $p < 0.05$, reduction = 37%, Indomethacin oedema = $(3.4 \pm 0.3)\text{mg}$, $p < 0.05$, reduction = 56%). Source: GAO SHAN HUO RONG CAO *Leontopodium alpinum* (root). Ref: 4985.

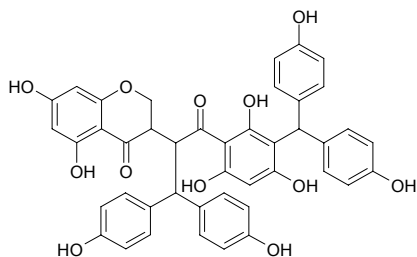
**14894 Moellendorffine**

$C_{26}H_{20}O_{10}$ (492.44). Yellowish columnar crystals, mp 244–246°C. Source: LI JIANG QIAN HU *Peucedanum govanianum* var. *bicolor*, ZOU MA QIN *Heracleum moellendorffii* var. *paucivittatum*. Ref: 61, 557.

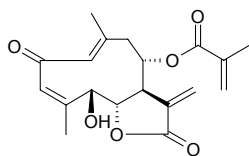


14895 Mohsenone

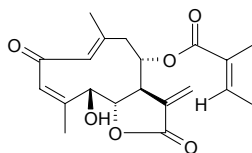
3-[1-[[3-Di(4-hydroxyphenyl)methyl]2,4,6-trihydroxyphenyl]3-di(4-hydroxyphenyl)1-propanone-2-yl]5,7-dihydroxy-4*H*-1-benzopyran-4-one C₄₃H₃₃O₁₂ (742.74). Brown amorphous powder. Source: LANG DU *Stellera chamaejasme*. Ref: 1911.

**14896 Molephantin**

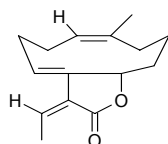
[50656-66-1] C₁₉H₂₂O₆ (346.38). mp 214~216°C. Pharm: Analgesic (mus, ip, 20mg/kg, inhibits writhing motion due to acetic acid); antineoplastic (W₂₅₆ and EAC); anti-inflammatory (rat, swollen foot model caused by carrageenan and experimental chronic arthritis, 2.5mg/kg ip); cytotoxic (cultural hmn throat epicytoma cells *in vitro*, EC = 0.333μg/mL). Source: ROU MAO DI DAN CAO *Elephantopus mollis*. Ref: 4, 658.

**14897 Molephantinin**

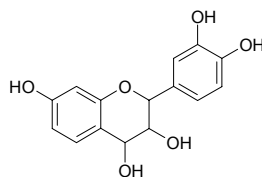
[56221-98-8] C₂₀H₂₄O₆ (360.41). mp 223~225°C. Pharm: Analgesic (mus, acetic acid-induced writhing model, 20mg/kg ip); antineoplastic (W₂₅₆, biotic prolonged rate = 297%, P₃₈₈, biotic prolonged rate = 46%, EAC, InRt = 88%); anti-inflammatory (rat, swollen foot model caused by carrageenan, 2.5mg/kg ip). Source: ROU MAO DI DAN CAO *Elephantopus mollis*. Ref: 4, 661.

**14898 Molli lactone**

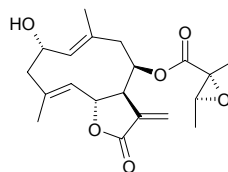
Mollis lactone C₁₅H₂₀O₂ (232.33). Source: MIAN MAO MA DOU LING *Aristolochia mollissima*. Ref: 660.

**14899 Mollisacacidin**

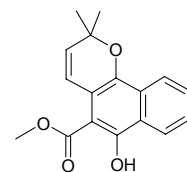
C₁₅H₁₄O₆ (290.28). mp 124~125°C. Source: ROU JIN HE HUAN *Acacia mollissima* (the compound was isolated from the plant by H.H.Kepler in 1957). Ref: 5505.

**14900 Mollisorin B**

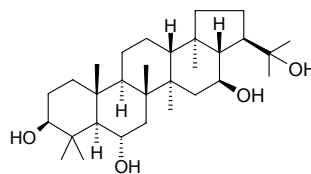
C₂₀H₂₆O₆ (362.43). Source: HUA ZE LAN *Eupatorium chinense* (whole herb: yield = 0.0073%). Ref: 4739.

**14901 Mollugin**

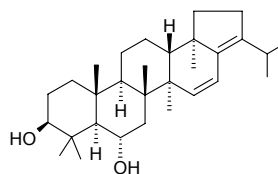
[55481-88-4] C₁₇H₁₆O₄ (284.31). Yellowish lamellar crystals, mp 128~130°C (recrystallization in alcohol), mp 132~134°C, easily soluble in chloroform, benzene and acetic acid; soluble in ether, methanol and acetone; slightly soluble in ethanol; insoluble in water, but soluble in a water solution of sodium hydroxide or potassium hydroxide. Pharm: Cytotoxic (hmn colon cancer assay, antiproliferative)^[5038]. Source: DA YE QIAN CAO *Rubia schumannina*, QIAN CAO GEN *Rubia cordifolia*, SU ZHU YANG YANG *Galium mollugo*. Ref: 22, 1363, 5038.

**14902 Mollugogenol A**

[22550-76-1] C₃₀H₅₂O₄ (476.75). Source: SU MI CAO *Mollugo pentaphylla*. Ref: 1440.

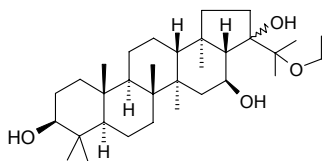
**14903 Mollugogenol B**

[22554-64-9] C₃₀H₄₈O₂ (440.72). Source: SU MI CAO *Mollugo pentaphylla*. Ref: 1440.

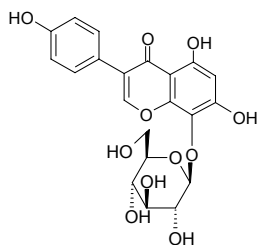


14904 Mollugogenol D

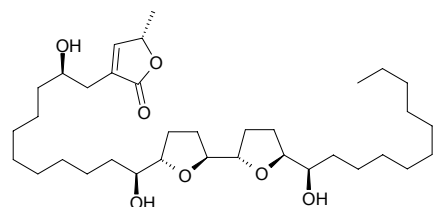
[59553-44-5] C₃₂H₅₆O₄ (504.80). Source: SU MI CAO *Mollugo pentaphylla*.
Ref: 1440.

**14905 Mollupentin**

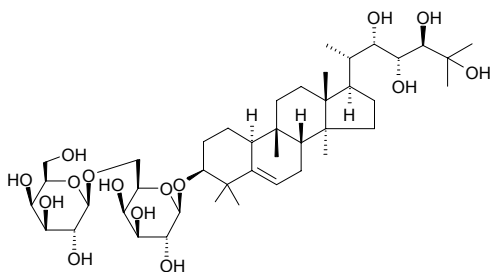
C₂₁H₂₀O₁₁ (448.39). Source: SU MI CAO *Mollugo pentaphylla*. Ref: 1441.

**14906 Molvizarin**

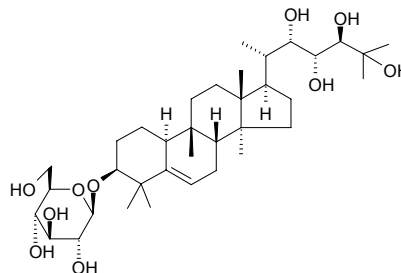
[138551-26-5] C₃₅H₆₂O₇ (594.88). Amorphism, mp 36–38°C, [α]_D = -9.7° (c = 0.13, methanol). Pharm: Antiprotozoal; cytotoxic (A549, HT29, A498, PC3 and PACA-2, ED₅₀ = 0.00000709-0.0000447ng/mL, BST, LC₅₀ = 0.0526μg/mL, KB); NADH ubiquinone reductase inhibitor (mitochondria, IC₅₀ = 1.7nmol/L); mitochondrial complex I selective inhibitor (NADH oxidase IC₅₀ = (1.55±0.17)nmol/L, p<0.001, control Rotenone, IC₅₀ = (5.10±0.09)nmol/L)^[5024]. Source: FAN LI ZHI *Annona squamosa*, MAO YE FAN LI ZHI *Annona cherimolia* (seed), NIU XIN FAN LI ZHI *Annona reticulata*. Ref: 1045, 1546, 1547, 1548, 5024.

**14907 Momorcharaside A**

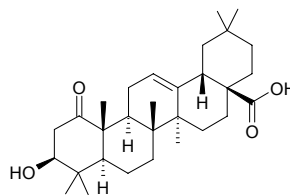
[135126-59-9] C₄₂H₇₂O₁₅ (817.03). Colorless prismatic crystals, mp 170–172°C, [α]_D¹⁹ = +0.80° (c = 1.80, methanol). Pharm: Antineoplastic (S₁₈₀, 100μg/mL, inhibits DNA synthesize, InRt = 58%, inhibits RNA synthesize, InRt = 55%). Source: KU GUA *Momordica charantia*. Ref: 176.

**14908 Momorcharaside B**

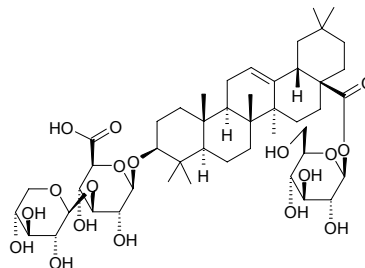
C₃₆H₆₂O₁₀ (654.89). Colorless acicular crystals, mp 186–189°C. Source: KU GUA *Momordica charantia*. Ref: 176.

**14909 Momordic acid**

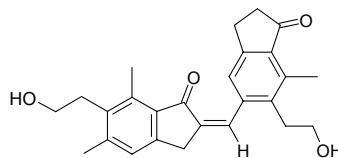
[14356-51-5] C₃₀H₄₆O₄ (470.70). mp 274–276°C. Source: MU BIE ZI *Momordica cochinchinensis*. Ref: 6.

**14910 Momordin IIc**

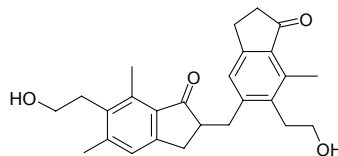
C₄₇H₇₄O₁₈ (927.10). Source: LUO KUI HUA *Basella rubra* (aerial parts). Ref: 3544.

**14911 Monachosorin A**

[100217-75-2] C₂₆H₂₈O₄ (404.51). Source: WEI YE XI ZI JUE *Monachosorum flagellare*, XI ZI JUE *Monachosorum henryi*. Ref: 1505.

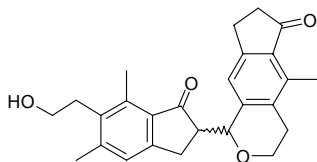
**14912 Monachosorin B**

[100217-76-3] C₂₆H₃₀O₄ (406.53). Source: WEI YE XI ZI JUE *Monachosorum flagellare*, XI ZI JUE *Monachosorum henryi*. Ref: 1505.

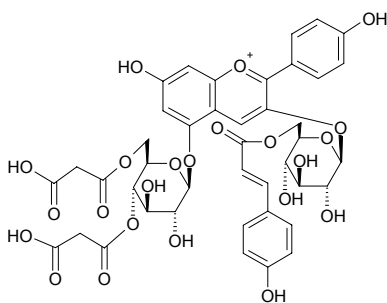


14913 Monachosorin C

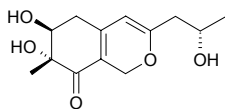
[100217-77-4] C₂₆H₂₈O₄ (404.51). Source: WEI YE XI ZI JUE *Monachosorum flagellare*, XI ZI JUE *Monachosorum henryi*. Ref: 1505.

**14914 Monardaecin**

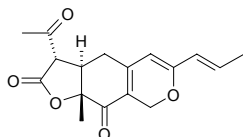
Monardein C₄₂H₄₁O₂₃⁺ (913.78). Source: MEI GUO BO HE *Monarda didyma*, XI YANG HONG *Salvia splendens*. Ref: 658.

**14915 Monascusone A**

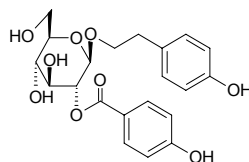
6,7-Dihydroxy-3-(2-hydroxy-propyl)-7-methyl-1,5,6,7-tetrahydro-isochromen-8-one C₁₃H₁₈O₅ (254.29). Yellow viscous liquid, [α]_D³⁰ = +71.95° (c = 0.93, CHCl₃). Pharm: Antimalarial inactive (*Plasmodium falciparum* K1, control Dihydroartemisinin, IC₅₀ = (1.2±0.02)μg/mL); antitubercular inactive (*Mycobacterium tuberculosis* H37Ra, control Isoniazid, MIC = 0.040~0.090μg/mL; Kanamycin sulfate, MIC = 2.0~5.0μg/mL); antifungal inactive (*Candida albicans*, control Amphotericin B, IC₅₀ = (0.04±0.01)μg/mL); cytotoxic inactive (BC, control Ellipticine, IC₅₀ = 0.3μg/mL; KB, Ellipticine, IC₅₀ = 0.3μg/mL). Source: GAO LIANG HONG QU *Monascus kaoliang* (fungal). Ref: 3858.

**14916 Monascusone B**

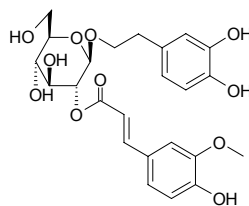
C₁₇H₁₈O₅ (302.33). Yellow viscous liquid, [α]_D³⁰ = +205.47° (c = 0.28, CHCl₃). Source: GAO LIANG HONG QU *Monascus kaoliang*. Ref: 3858.

**14917 Monnieraside I**

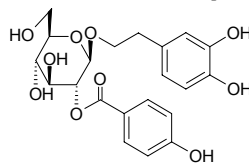
α-O-[2-O-(4-Hydroxybenzoyl)-β-D-glucopyranosyl]-4-hydroxyphenylethanol C₂₁H₂₄O₉ (420.42). Amorphous, [α]_D²³ = -14° (c = 0.8, MeOH). Source: JIA MA CHI XIAN *Bacopa monniera* (aerial parts). Ref: 4254.

**14918 Monnieraside II**

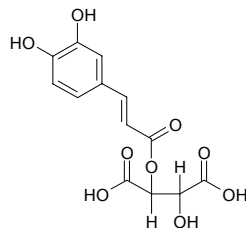
α-O-[2-O-(3-Methoxy-4-hydroxycinnamoyl)-β-D-glucopyranosyl]-3,4-dihydroxyphenylethanol C₂₄H₂₈O₁₁ (492.48). Amorphous, [α]_D²³ = -8° (c = 0.7, MeOH). Source: JIA MA CHI XIAN *Bacopa monniera* (aerial parts). Ref: 4254.

**14919 Monnieraside III**

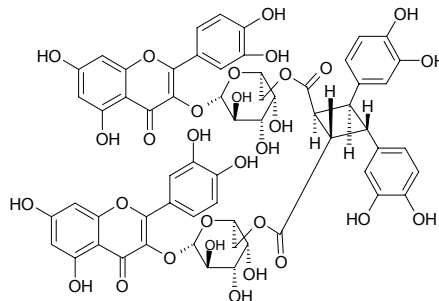
α-O-[2-O-(4-Hydroxybenzoyl)-β-D-glucopyranosyl]-3,4-dihydroxyphenylethanol C₂₁H₂₄O₁₀ (436.42). Amorphous, [α]_D²³ = -3° (c = 0.3, MeOH). Source: JIA MA CHI XIAN *Bacopa monniera* (aerial parts). Ref: 4254.

**14920 Monocaffeoyltartaric acid**

C₁₃H₁₂O₉ (312.24). mp 146~147°C. Source: JU QU *Cichorium intybus*. Ref: 6.

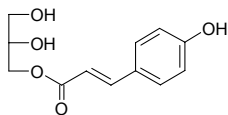
**14921 Monochaetin**

C₆₀H₅₂O₃₀ (1253.07). White amorphous powder, [α]_D = +25.0° (c = 1.0, MeOH). Source: *Monochaetum multiflorum* (leaf). Ref: 5185.

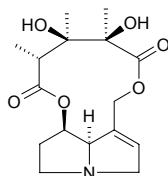


14922 Mono-*p*-coumaroyl glyceride

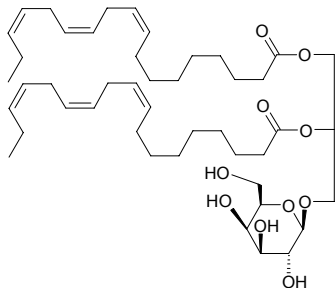
$C_{12}H_{14}O_5$ (238.24). Source: DENG XIN CAO *Juncus effusus*. Ref: 1517.

**14923 Monocrotaline**

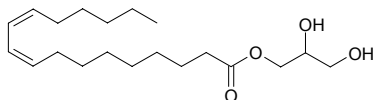
Crotaline; Retronecine† [315-22-0] $C_{16}H_{23}NO_6$ (325.36). White acicular crystals, mp 197~198°C (dec), $[\alpha]_D^{26} = -54.7^\circ$ (chloroform), soluble in absolute ethanol, chloroform, slightly soluble in water, ether, acetone, insoluble in petroleum ether.^[5507] Pharm: Antineoplastic (in local use only, squamous carcinoma in skin, basal cell carcinoma); carcinogen, causes hepatic cancer; antispasmodic; mutagen; antihypertensive (dog); LD₅₀ (mus, ip) = 296mg/kg, (rat, sc) = 134mg/kg. Source: AO ZHU SHI DOU *Crotalaria retusa*, MEI LI ZHU SHI DOU *Crotalaria spectabilis*, TUO YE ZHU SHI DOU *Crotalaria stipularia*, WU YE ZHU SHI DOU *Crotalaria quinquefolia*, XIAO ZHU SHI DOU *Crotalaria nana*, YE BAI HE *Crotalaria sessiliflora*, ZI XIAO RONG ZI *Crotalaria assamica*, ZOU BO ZHUANG ZHU SHI DOU *Crotalaria crispata*. Ref: 4, 658, 5507.

**14924 Monogalactosyldiglyceride**

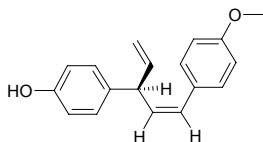
Ubiquitous 1,2-dilinolenoyl-3-galactopyranosylglycerol $C_{45}H_{74}O_{10}$ (775.09). Source: *Trichilia pruriaria* (leaf). Ref: 3994.

**14925 1-Monolinolein**

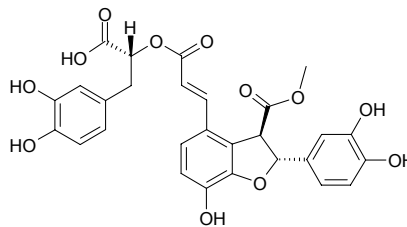
$C_{20}H_{36}O_4$ (340.51). Source: BAI ZHI *Angelica dahurica* [Syn. *Angelica porphyrocaulis*]. Ref: 2.

**14926 Monomethyl-*cis*-hinokiresinol**

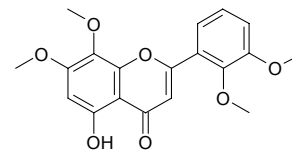
$C_{18}H_{18}O_2$ (266.34). Source: ZHI MU *Anemarrhena asphodeloides*. Ref: 1395.

**14927 Monomethyl lithospermate**

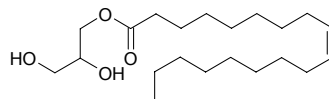
$C_{28}H_{24}O_{12}$ (552.50). Source: DAN SHEN *Salvia miltiorrhiza*. Ref: 1370.

**14928 Mono-*O*-methylwightin**

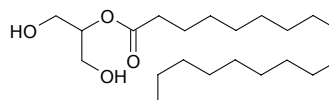
$C_{19}H_{18}O_7$ (358.35). mp 150°C. Source: CHUAN XIN LIAN *Andrographis paniculata* [Syn. *Justicia paniculata*]. Ref: 2.

**14929 α -Monoolein**

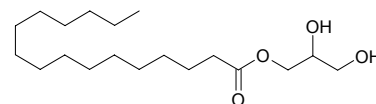
[111-03-5] $C_{21}H_{40}O_4$ (356.55). mp 35°C Source: MANG GUO HE *Mangifera indica*. Ref: 6.

**14930 β -Monoolein**

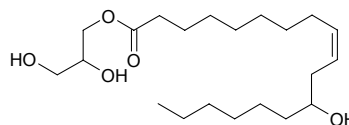
[3443-84-3] $C_{21}H_{40}O_4$ (356.55). mp 26°C. Source: MANG GUO HE *Mangifera indica*. Ref: 6.

**14931 *L*-(-)- α -Monopalmitin**

(2*S*)-1-*O*-Palmitoyl glycerol [19670-51-0] $C_{19}H_{38}O_4$ (330.51). Pharm: Cytotoxic (cyclooxygenase-1 inhibitor)^[5038], cytotoxic (cyclooxygenase-2 inhibitor)^[5038]. Source: SHI DIAO BAI *Asparagus officinalis*, SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], XI NANG MA WEI ZAO *Sargassum parvivesiculosum*. Ref: 2, 660, 2591, 5038.

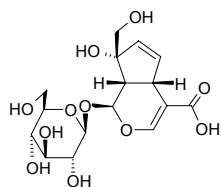
**14932 Monoricinolein**

$C_{21}H_{40}O_5$ (372.55). Source: BI MA YOU *Ricinus communis*. Ref: 6.

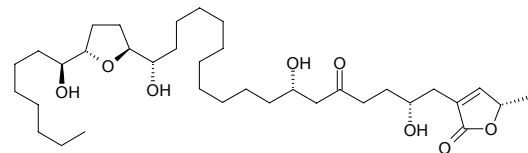


14933 Monotropein

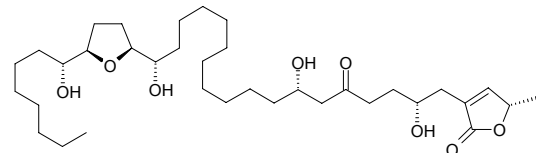
$C_{16}H_{22}O_{11}$ (290.35). mp 175°C (dec) **Pharm:** Antidiarrheal (mus, $ED_{50} > 0.5\text{g/kg}$). **Source:** AI LAI MU *Cornus suecica*, BA JI TIAN *Morinda officinalis*, FEN LU ZHU YANG YANG *Galium glaucum*, HUANG SHUI JING LAN *Monotropa hypopitys*, RI BEN LU TI CAO *Pyrola japonica*, SHUI JING LAN *Monotropa uniflora*, XIONG GUO *Arctostaphylos uva-ursi*. **Ref:** 6, 658, 5501.

**14934 Montacin**

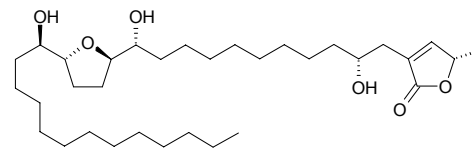
$C_{35}H_{62}O_8$ (610.88). Colorless waxy solid, $[\alpha]_D^{25} = +4.7^\circ$ ($c = 0.38$, $CHCl_3$). **Pharm:** Cytotoxic (*in vitro*: A549, $ED_{50} = 12.9\mu\text{g/mL}$; MCF7, $ED_{50} = 10\mu\text{g/mL}$; HCT8, $ED_{50} = 16.5\mu\text{g/mL}$; SK-MEL-2, $ED_{50} = 11.2\mu\text{g/mL}$; KB, $ED_{50} = 16.6\mu\text{g/mL}$; KB-VIN, $ED_{50} > 20\mu\text{g/mL}$; U-87-MG, $ED_{50} > 20\mu\text{g/mL}$; CAKI, $ED_{50} > 20\mu\text{g/mL}$; PC3, $ED_{50} > 20\mu\text{g/mL}$; 1A9 (3 day), $ED_{50} > 10\mu\text{g/mL}$; PTX10 (3 day), $ED_{50} > 10\mu\text{g/mL}$; 1A9 (6 day), $ED_{50} = 6.7\mu\text{g/mL}$; PTX10 (6 day), $ED_{50} = 7.9\mu\text{g/mL}$; control Ca^{2+} : A549, $ED_{50} > 20\mu\text{g/mL}$; MCF7, $ED_{50} > 20\mu\text{g/mL}$; HCT8, $ED_{50} > 20\mu\text{g/mL}$; KB, $ED_{50} > 20\mu\text{g/mL}$; PC3, $ED_{50} > 20\mu\text{g/mL}$; 1A9 (3 day), $ED_{50} > 20\mu\text{g/mL}$; PTX10 (3 day), $ED_{50} > 20\mu\text{g/mL}$; PTX10 (6 day), $ED_{50} > 20\mu\text{g/mL}$); cytotoxic (This compound + Ca^{2+} from $CaCl_2$, *in vitro*: A549, $ED_{50} = 7.4\mu\text{g/mL}$; MCF7, $ED_{50} = 5.5\mu\text{g/mL}$; HCT8, $ED_{50} = 12.3\mu\text{g/mL}$; SK-MEL-2, $ED_{50} = 13.3\mu\text{g/mL}$; KB, $ED_{50} = 9.1\mu\text{g/mL}$; KB-VIN, $ED_{50} = 13.9\mu\text{g/mL}$; U-87-MG, $ED_{50} = 14.2\mu\text{g/mL}$; CAKI, $ED_{50} = 14.2\mu\text{g/mL}$; PC3, $ED_{50} = 14.2\mu\text{g/mL}$; 1A9 (3 day), $ED_{50} = 6.7\mu\text{g/mL}$; PTX10 (3 day), $ED_{50} = 7.5\mu\text{g/mL}$; 1A9 (6 day), $ED_{50} = 4.5\mu\text{g/mL}$; PTX10 (6 day), $ED_{50} = 2.8\mu\text{g/mL}$). **Source:** SHAN FAN LI ZHI *Annona montana* (seed: yield = 0.0015%). **Ref:** 4775.

**14935 cis-Montacin**

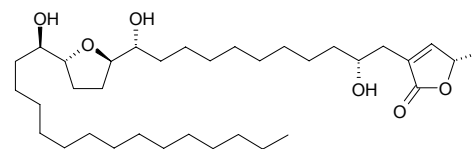
$C_{35}H_{62}O_8$ (610.88). White waxy solid, $[\alpha]_D^{25} = +9.4^\circ$ ($c = 0.17$, $CHCl_3$). **Pharm:** Cytotoxic (*in vitro*: A549, $ED_{50} = 6\mu\text{g/mL}$; MCF7, $ED_{50} = 6.7\mu\text{g/mL}$; HCT8, $ED_{50} = 12.9\mu\text{g/mL}$; KB, $ED_{50} = 7.7\mu\text{g/mL}$; KB-VIN, $ED_{50} = 13.4\mu\text{g/mL}$; U-87-MG, $ED_{50} = 15\mu\text{g/mL}$; PC3, $ED_{50} = 11.9\mu\text{g/mL}$; 1A9 (3d), $ED_{50} = 3.6\mu\text{g/mL}$; PTX10 (3d), $ED_{50} = 5.9\mu\text{g/mL}$; 1A9 (6d), $ED_{50} = 0.54\mu\text{g/mL}$; PTX10 (6d), $ED_{50} = 1.8\mu\text{g/mL}$; control Ca^{2+} : A549, $ED_{50} > 20\mu\text{g/mL}$; MCF7, $ED_{50} > 20\mu\text{g/mL}$; HCT8, $ED_{50} > 20\mu\text{g/mL}$; KB, $ED_{50} > 20\mu\text{g/mL}$; PC3, $ED_{50} > 20\mu\text{g/mL}$; 1A9 (3d), $ED_{50} > 20\mu\text{g/mL}$; PTX10 (3d), $ED_{50} > 20\mu\text{g/mL}$; PTX10 (6d), $ED_{50} > 20\mu\text{g/mL}$); cytotoxic (This compound + Ca^{2+} from $CaCl_2$, *in vitro*: A549, $ED_{50} = 5.5\mu\text{g/mL}$; MCF7, $ED_{50} = 6.5\mu\text{g/mL}$; HCT8, $ED_{50} = 111.7\mu\text{g/mL}$; KB, $ED_{50} = 8.2\mu\text{g/mL}$; KB-VIN, $ED_{50} = 13.8\mu\text{g/mL}$; U-87-MG, $ED_{50} = 14.3\mu\text{g/mL}$; PC3, $ED_{50} = 12.1\mu\text{g/mL}$; 1A9 (3d), $ED_{50} = 2\mu\text{g/mL}$; PTX10 (3d), $ED_{50} = 5.3\mu\text{g/mL}$; 1A9 (6d), $ED_{50} = 0.13\mu\text{g/mL}$; PTX10 (6d), $ED_{50} = 0.11\mu\text{g/mL}$). **Source:** SHAN FAN LI ZHI *Annona montana* (seed: yield = 0.00075%). **Ref:** 4775.

**14936 Montalicin A**

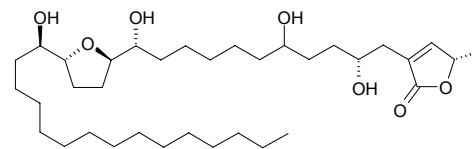
$C_{33}H_{60}O_6$ (552.84). Colorless waxy solid, $[\alpha]_D^{25} = +17.0^\circ$ ($c = 0.34$, $CHCl_3$). **Pharm:** Cytotoxic (*in vitro* HepG2, $EC_{50} < 0.01\mu\text{g/mL}$, Hep3B, $EC_{50} = 2.81\mu\text{g/mL}$; control Doxorubicin, HepG2, $EC_{50} = 0.38\mu\text{g/mL}$, Hep3B, $EC_{50} = 0.36\mu\text{g/mL}$). **Source:** SHAN FAN LI ZHI *Annona montana* (seed). **Ref:** 5035.

**14937 Montalicin B**

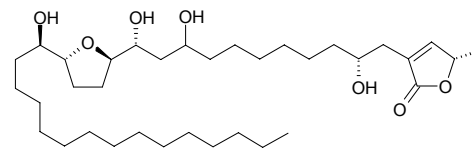
$C_{35}H_{64}O_6$ (580.90). Colorless waxy solid, $[\alpha]_D^{25} = +13.1^\circ$ ($c = 0.60$, $CHCl_3$). **Pharm:** Cytotoxic (*in vitro* HepG2, $EC_{50} = 0.53\mu\text{g/mL}$, Hep3B, $EC_{50} = 8.97\mu\text{g/mL}$; control Doxorubicin, HepG2, $EC_{50} = 0.38\mu\text{g/mL}$, Hep3B, $EC_{50} = 0.36\mu\text{g/mL}$). **Source:** SHAN FAN LI ZHI *Annona montana* (seed). **Ref:** 5035.

**14938 Montalicin C**

$C_{35}H_{64}O_7$ (596.90). Colorless waxy solid, $[\alpha]_D^{25} = +16.7^\circ$ ($c = 0.34$, $CHCl_3$). **Pharm:** Cytotoxic (*in vitro* HepG2, $EC_{50} = 0.022\mu\text{g/mL}$, Hep3B, $EC_{50} = 0.82\mu\text{g/mL}$; control Doxorubicin, HepG2, $EC_{50} = 0.38\mu\text{g/mL}$, Hep3B, $EC_{50} = 0.36\mu\text{g/mL}$). **Source:** SHAN FAN LI ZHI *Annona montana* (seed). **Ref:** 5035.

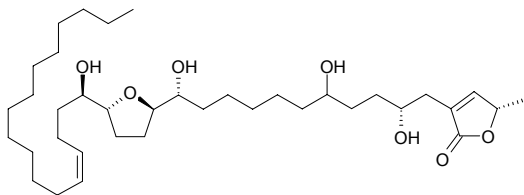
**14939 Montalicin D**

$C_{35}H_{64}O_7$ (596.90). Colorless waxy solid, $[\alpha]_D^{25} = -3.5^\circ$ ($c = 0.43$, $CHCl_3$). **Pharm:** Cytotoxic (*in vitro* HepG2, $EC_{50} = 1.99\mu\text{g/mL}$; control Doxorubicin, HepG2, $EC_{50} = 0.38\mu\text{g/mL}$, Hep3B). **Source:** SHAN FAN LI ZHI *Annona montana* (seed). **Ref:** 5035.

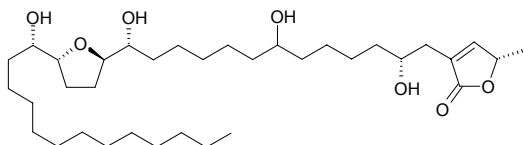


14940 Montalicin E

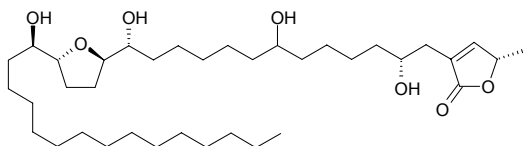
$C_{37}H_{66}O_7$ (622.93). Colorless waxy solid, $[\alpha]_D^{25} = +16.5^\circ$ ($c = 0.23$, $CHCl_3$).
Pharm: Cytotoxic (*in vitro* HepG2, $EC_{50} = 0.13\mu\text{g/mL}$, Hep3B, inactive; control Doxorubicin, HepG2, $EC_{50} = 0.38\mu\text{g/mL}$, Hep3B, $EC_{50} = 0.36\mu\text{g/mL}$).
Source: SHAN FAN LI ZHI *Annona montana* (seed). **Ref:** 5035.

**14941 Montalicin F**

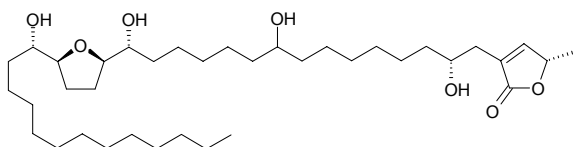
$C_{35}H_{64}O_7$ (596.90). Colorless waxy solid, $[\alpha]_D^{25} = +19.5^\circ$ ($c = 0.15$, $CHCl_3$).
Pharm: Cytotoxic (*in vitro* HepG2, $EC_{50} < 0.01\mu\text{g/mL}$; control Doxorubicin, HepG2, $EC_{50} = 0.38\mu\text{g/mL}$, Hep3B). **Source:** SHAN FAN LI ZHI *Annona montana* (seed). **Ref:** 5035.

**14942 Montalicin I**

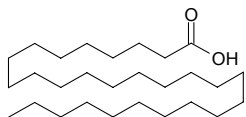
$C_{37}H_{68}O_7$ (624.95). Colorless waxy solid, $[\alpha]_D^{25} = +16.7^\circ$ ($c = 0.34$, $CHCl_3$).
Pharm: Cytotoxic (*in vitro* HepG2, $EC_{50} = 0.11\mu\text{g/mL}$, Hep3B, inactive; control Doxorubicin, HepG2, $EC_{50} = 0.38\mu\text{g/mL}$, Hep3B, $EC_{50} = 0.36\mu\text{g/mL}$).
Source: SHAN FAN LI ZHI *Annona montana* (seed). **Ref:** 5035.

**14943 Montalicin J**

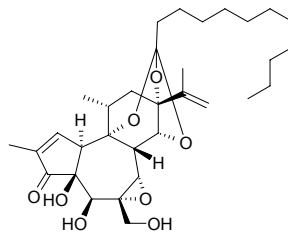
$C_{37}H_{68}O_7$ (624.95). Colorless waxy solid, $[\alpha]_D^{25} = +7.3^\circ$ ($c = 1.39$, $CHCl_3$).
Pharm: Cytotoxic (*in vitro* HepG2, $EC_{50} < 0.01\mu\text{g/mL}$, Hep3B, $EC_{50} = 2.38\mu\text{g/mL}$; control Doxorubicin, HepG2, $EC_{50} = 0.38\mu\text{g/mL}$, Hep3B, $EC_{50} = 0.36\mu\text{g/mL}$). **Source:** SHAN FAN LI ZHI *Annona montana* (seed). **Ref:** 5035.

**14944 Montanic acid**

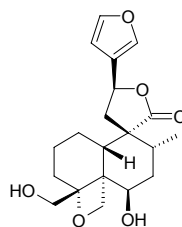
Octacosanic acid [506-48-9] $C_{28}H_{56}O_2$ (424.76). **Source:** HUI BAO HAO *Artemisia roxburgiana*, SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*]. **Ref:** 2, 503, 660.

**14945 Montanin**

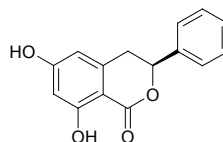
[66583-55-9] $C_{32}H_{48}O_8$ (560.73). **Pharm:** Cytotoxic (leukemia). **Source:** BAN ZI MU *Baliospermum montanum*. **Ref:** 658.

**14946 Montanin D**

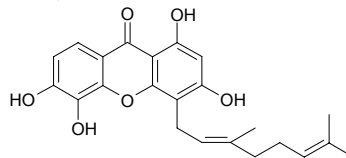
$C_{20}H_{26}O_6$ (362.43). **Pharm:** Insect antifeedant (*Spodoptera litura*, $10\mu\text{g/cm}^2$, antifeedant activity = $(73\pm 3)\%$, control Azadirachtin A, $0.5\mu\text{g/cm}^2$, antifeedant activity = $(79\pm 2)\%$; *Plutella xylostella*, $10\mu\text{g/cm}^2$, antifeedant activity = $(70\pm 2)\%$, control Azadirachtin A, $0.5\mu\text{g/cm}^2$, antifeedant activity = $(71\pm 2)\%$)^[3478]. **Source:** RONG MAO XIANG KE KE *Teucrium tomentosum* (aerial parts), SHAN XIANG KE KE *Teucrium montanum*. **Ref:** 1521, 3478.

**14947 Montroumarin**

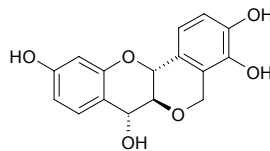
$C_{15}H_{12}O_4$ (256.26). Colorless oil, $[\alpha]_D = +68^\circ$ ($c = 0.057$, $CHCl_3$). **Source:** *Montrouzieria sphaeroidea* (stem cortex). **Ref:** 3941.

**14948 Montrouxanthone**

$C_{23}H_{24}O_6$ (396.44). Yellow oil. **Source:** *Montrouzieria sphaeroidea* (stem cortex). **Ref:** 3941.

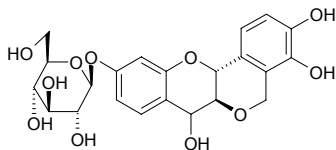
**14949 (+)-Mopanol**

$C_{16}H_{14}O_6$ (302.29). Yellow needles, mp $185\sim 187^\circ\text{C}$; $[\alpha]_D^{20} = +45.2^\circ$ ($c = 0.02$, CH_3OH). **Pharm:** Vasodilator (rat aortic rings, inhibits Phenylephrine (Phe)-induced vasoconstriction in the presences of Indomethacin and N^{10} -L-nitroarginine (L-NA) at $10\mu\text{mol/L}$ Ach, $10\mu\text{mol/L}$, relaxation = $(85\pm 2)\%$, control Sodium nitroprusside, relaxation = $(109\pm 5)\%$). **Source:** YI HUA *Lysidice rhodostegia* (root). **Ref:** 4086.

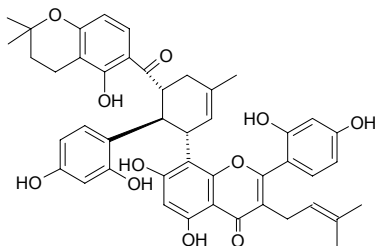


14950 Mopanolside

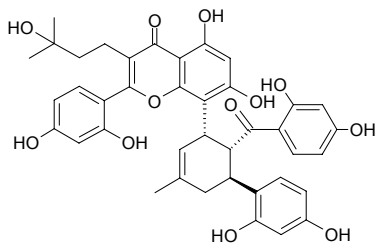
$C_{22}H_{24}O_{11}$ (464.43). Yellow needles, mp 273~275°C; $[\alpha]_D^{20} = +103.0^\circ$ ($c = 0.2$, CH_3OH). **Pharm:** Vasodilator (rat aortic rings, inhibits Phenylephrine (Phe)-induced vasoconstriction in the presences of Indomethacin and N^{10} -*L*-nitroarginine (*L*-NA) at 10 μ mol/L Ach, 10 μ mol/L, relaxation = (53 \pm 5)%, control Sodium nitroprusside, relaxation = (109 \pm 5)%). **Source:** YI HUA *Lysidice rhodostegia* (root). **Ref:** 4086.

**14951 Moracenin C**

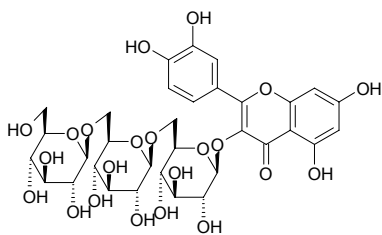
[76069-36-8] $C_{45}H_{44}O_{11}$ (760.85). **Pharm:** Antihypertensive (strong action). **Source:** SANG BAI PI *Morus alba*. **Ref:** 1425.

**14952 Moracenin D**

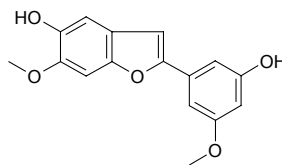
[78277-79-9] $C_{40}H_{38}O_{12}$ (710.74). **Pharm:** Antihypertensive (strong action). **Source:** SANG BAI PI *Morus alba*. **Ref:** 1426, 1635.

**14953 Moracetin**

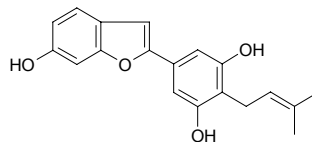
$C_{33}H_{40}O_{22}$ (788.67). mp 211~214°C. **Source:** SANG YE *Morus alba*. **Ref:** 6.

**14954 Moracin B**

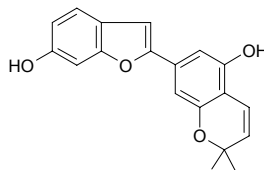
$C_{16}H_{14}O_5$ (286.29). mp 184~185°C. **Pharm:** Antifungal (*Diaporthe nomurai*, MIC = 12~25 μ g/mL, *Stigmima mori*, MIC = 49 μ g/mL, *Bipolaris leersiaca*). **Source:** SANG YE *Morus alba*. **Ref:** 661, 658.

**14955 Moracin C**

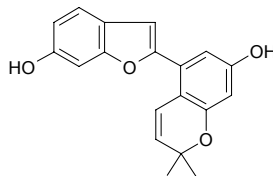
$C_{19}H_{18}O_4$ (310.35). mp 198~199°C. **Pharm:** Antifungal. **Source:** SANG YE *Morus alba*. **Ref:** 661.

**14956 Moracin D**

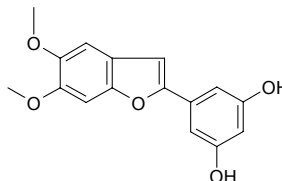
$C_{19}H_{16}O_4$ (308.34). mp 130~131°C. **Pharm:** Antifungal; aromatase inhibitor inactive (*in vitro*, $IC_{50} > 40\mu$ mol/L; control Aminoglutethimide, $IC_{50} = 6.4\mu$ mol/L)^[3090]. **Source:** GOU SHU *Broussonetia papyrifera*^[3090], SANG YE *Morus alba*. **Ref:** 661, 3090.

**14957 Moracin E**

$C_{19}H_{16}O_4$ (308.34). mp 184~185°C. **Pharm:** Antifungal (*Diaporthe nomurai*, CIMC = 15 μ g/mL, *Stigmima mori*, CIMC = 200 μ g/mL, *Sclerotinia*, CIMC = 50 μ g/mL). **Source:** SANG YE *Morus alba*. **Ref:** 661.

**14958 Moracin F**

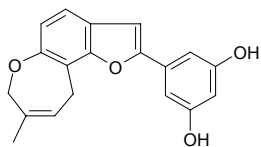
$C_{16}H_{14}O_5$ (286.29). mp 188~189°C. **Pharm:** Antifungal (*Diaporthe nomurai*, CIMC = 1000 μ g/mL, *Stigmima mori* and *Sclerotinia*, CIMC = 50 μ g/mL). **Source:** SANG YE *Morus alba*. **Ref:** 661.



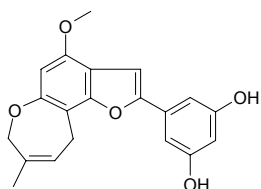
14959 Moracin G

$C_{19}H_{16}O_4$ (308.34). mp 198~199°C. **Pharm:** Antifungal (*Diaporthe nomurai* and *Stigmima mori*, CIMC = 50 μ g/mL, *Sclerotinia*, CIMC = 500 μ g/mL).

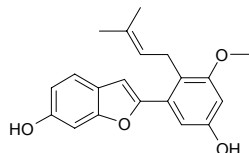
Source: SANG YE *Morus alba*. **Ref:** 661.

**14960 Moracin H**

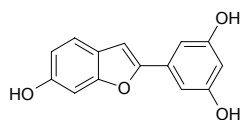
$C_{20}H_{18}O_5$ (338.36). mp 191~192°C. **Pharm:** Antifungal (*Diaporthe nomurai*, CIMC = 15 μ g/mL, *Stigmima mori*, CIMC = 100 μ g/mL). **Source:** SANG YE *Morus alba*. **Ref:** 661.

**14961 Moracin I**

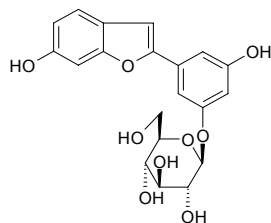
Anticancer Benzofuran PMV70P691-65 $C_{20}H_{20}O_4$ (324.38). **Pharm:** Cytotoxic (estrogen α receptor-binding assay)^[5038], cytotoxic (estrogen β receptor-binding assay)^[5038], cytotoxic (hmn breast cancer cells, antiproliferative)^[5038], cytotoxic (cyclooxygenase-1 inhibitor)^[5038], aromatase inhibitor inactive (*in vitro*, IC_{50} > 40 μ mol/L; control Aminoglutethimide, IC_{50} = 6.4 μ mol/L)^[3090]. **Source:** GOU SHU *Broussonetia papyrifera*. **Ref:** 3090, 5038.

**14962 Moracin M**

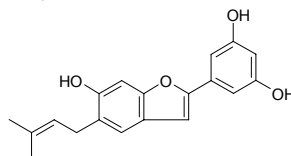
Anticancer Benzofuran PMV70P691-66 $C_{14}H_{10}O_4$ (242.23). **Pharm:** Cytotoxic (cyclooxygenase-1 inhibitor)^[5038], Aromatase inhibitor inactive (*in vitro*, IC_{50} > 40 μ mol/L; control Aminoglutethimide, IC_{50} = 6.4 μ mol/L)^[3090]. **Source:** DA DA HE MIAN BAO GUO *Artocarpus dadah*, GOU SHU *Broussonetia papyrifera*. **Ref:** 3090, 5038.

**14963 Moracin M 3'-O- β -D-glucopyranoside**

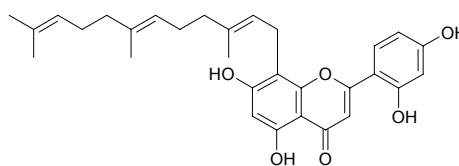
$C_{20}H_{20}O_9$ (404.38). **Source:** WEI JING BAI HE *Schoenocaulon officinale* (rhizome). **Ref:** 4210.

**14964 Moracin N**

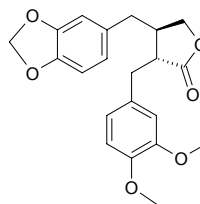
Anticancer Benzofuran PMV70P691-67 $C_{19}H_{18}O_4$ (310.35). **Pharm:** Aromatase inhibitor (*in vitro*, IC_{50} = 31 μ mol/L; control Aminoglutethimide, IC_{50} = 6.4 μ mol/L). **Source:** GOU SHU *Broussonetia papyrifera*. **Ref:** 3090, 5038.

**14965 Moralbanone**

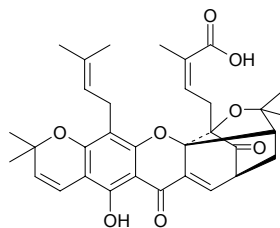
$C_{30}H_{34}O_6$ (490.60). Yellow powder. **Pharm:** Antiviral; cytotoxic (Vero celllines). **Source:** SANG BAI PI *Morus alba*. **Ref:** 2032.

**14966 Morelensin**

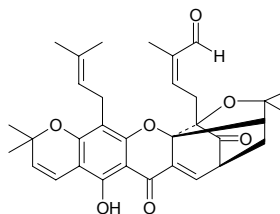
$C_{21}H_{22}O_6$ (370.41). **Source:** E SHEN *Anthriscus sylvestris*. **Ref:** 5499.

**14967 Morellic acid**

α_2 -Guttiferin [173792-68-2] $C_{33}H_{36}O_8$ (560.65). **Pharm:** Cytotoxic (HeLa, MIC = 3.13 μ g/mL, hmn embryonic lung fibrocyte HEL, MIC = 3.13 μ g/mL); antibacterial (methicillin-resistant *Staphylococcus aureus*, MIC = 25 μ g/mL)^[4487]. **Source:** TENG HUANG *Garcinia morella*, TENG HUANG SHU *Garcinia hanburyi* (fresh fruit). **Ref:** 6, 1099, 4487.

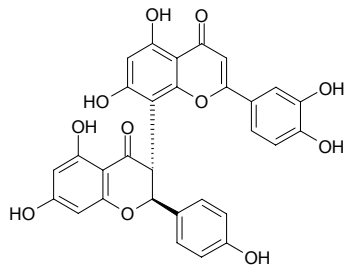
**14968 Morellin**

[1183-12-6] $C_{33}H_{36}O_7$ (544.65). mp 157~159°C. **Pharm:** Antibiotic. **Source:** TENG HUANG *Garcinia morella*, TENG HUANG SHU *Garcinia hanburyi* (fresh fruit). **Ref:** 6, 658, 4487.

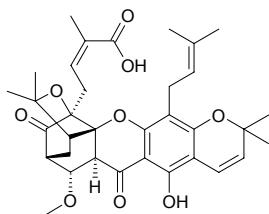


14969 Morelloflavone

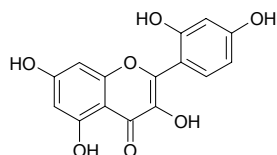
$C_{30}H_{20}O_{11}$ (556.49). mp (+) 244–245°C (dec), (±) 298°C (dec). **Pharm:** Antioxidant (DPPH scavenger, 10 μmol/L, ScRt = 51%, control BHT, 10 μmol/L, ScRt = 43%)^[5319]; antibacterial (*Staphylococcus aureus* ATCC 25923, MIC > 128 μg/mL, control Vancomycin, MIC = 2 μg/mL; *Staphylococcus aureus* MRSA SK1, MIC > 128 μg/mL, Vancomycin, MIC = 2 μg/mL)^[5319]. **Source:** SHAN ZHU ZI *Garcinia multiflora*, TENG HUANG *Garcinia morella*, TIAN SHAN ZHU ZI *Garcinia dulcis* (flower), TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit). **Ref:** 6, 4422, 5319.

**14970 Morellic acid**

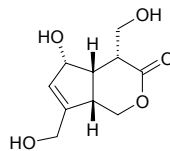
$C_{34}H_{40}O_9$ (592.69). **Pharm:** Antibacterial (methicillin-resistant *Staphylococcus aureus*, MIC = 25 μg/mL). **Source:** TENG HUANG SHU *Garcinia hanburyi* (fresh fruit). **Ref:** 4487.

**14971 Morin**

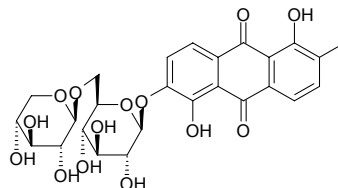
3,5,7,2',4'-Pentahydroxyflavone; Osage orange [480-16-0] $C_{15}H_{10}O_7$ (302.24). mp 303–304°C; 285–290°C (dec). **Pharm:** Allergen; antibacterial (*Staphylococcus aureus*, *Bacillus dysenteriae*, *B. typhosus*); antineoplastic (glandular carcinoma 755, L1210, P388, S180, all *in vivo*); antispasmodic (gpg ileum, cholinesterase inhibitor, ED₅₀ of anti-angiotensin = 600 μg/mL and ED₅₀ of anti-eledoisin = 107 μg/mL); antiviral (herpes virus, EC = 50 μg/mL; potato virus); diuretic (rbt, 25 mg/kg); aldose reductase inhibitor (rat eye lens *in vivo*, CIC = 100 μmol/L); Δ⁵-lipoxygenase inhibitor; iodine-induced thyronine deiodinase inhibitor; mutagen (*Salmonella aertrycke*); phagostimulant (silkworm); anti-inflammatory (modulator of cytokine network; leukocyte elastase MMP-2/9 inhibitor)^[4416]; anti-inflammatory (COX-2 inhibitor, rat renal medulla, and macrophages, moderate activity)^[4415]; LD (rbt, sc) = 8–10 g/kg. **Source:** JU CHI SANG *Morus serrata*, QUAN YUAN YE BO LUO MI *Artocarpus integrifolia*, RAN SE SANG *Morus tinctoria*, SANG BAI PI *Morus alba*, SANG YE *Morus alba*, SANG ZHI *Morus alba*. **Ref:** 4, 658, 4415, 4416, 5501.

**14972 Morindacin**

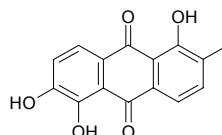
$C_{10}H_{14}O_5$ (214.22). Colorless syrup, $[\alpha]_D^{26} = +2.0^\circ$ ($c = 0.2$, MeOH). **Source:** HAI BA JI *Morinda citrifolia* (fruit). **Ref:** 4542.

**14973 Morindin**

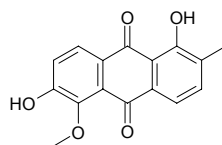
[60450-21-7] $C_{26}H_{28}O_{14}$ (564.50). mp 264.5°C (dec). **Source:** BA JI TIAN *Morinda officinalis*. **Ref:** 6, 1521.

**14974 Morindone**

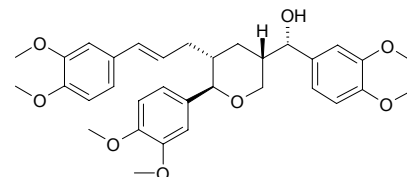
$C_{15}H_{10}O_5$ (270.24). mp 282°C. **Pharm:** Nacarat pigment. **Source:** HAI BA JI *Morinda citrifolia*, RAN SE JI YAN TENG *Morinda tinctoria*, TU LIAN QIAO *Hymenodictyon excelsum*. **Ref:** 6, 658.

**14975 Morindone-5-methylether**

$C_{16}H_{12}O_5$ (284.27). **Source:** HAI BA JI *Morinda citrifolia* (fruit). **Ref:** 4542.

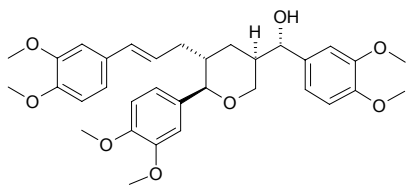
**14976 Morinol A**

$C_{33}H_{40}O_8$ (564.68). **Pharm:** Anti-inflammatory (modulator of cytokine network; inhibits cytokines formation, including TNF-α, IL-4, IL-2 and IFN-γ in hmn peripheral blood mononuclear cells). **Source:** YUAN E CI XU DUAN *Morinda chinensis*. **Ref:** 4416.

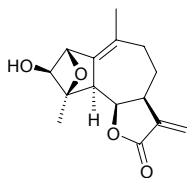


14977 Morinol B

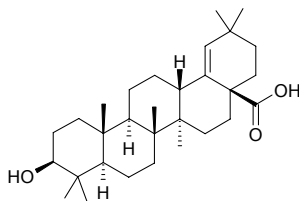
$C_{33}H_{40}O_8$ (564.68). **Pharm:** Anti-inflammatory (modulator of cytokine network: inhibits cytokines formation, including TNF- α , IL-4, IL-2 and IFN- γ in hmn peripheral blood mononuclear cells, $IC_{50} > 10\mu\text{g/mL}$). **Source:** YUAN E CI XU DUAN *Morina chinensis*. **Ref:** 4416.

**14978 Moroccolide A**

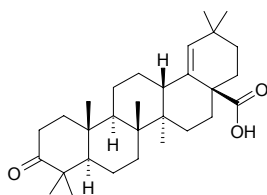
5 α H-2 β ,4-Epoxy-3 β -hydroxyguaia-1(10),11(13)-dien-6 β ,12-olide $C_{15}H_{18}O_4$ (262.31). Colorless gum, $[\alpha]_D^{22} = +62^\circ$ ($c = 0.1$, EtOH). **Pharm:** Cytotoxic (*in vitro*, KB, $IC_{50} = 4.5\mu\text{g/mL}$). **Source:** *Warionia saharae* (leaf: yield = 0.0020%dw). **Ref:** 4620.

**14979 Morolic acid**

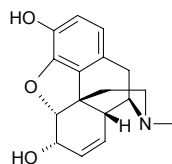
[559-68-2] $C_{30}H_{48}O_3$ (456.72). mp 273°C (dec). **Pharm:** Anti-inflammatory (*in vivo*, prevents ear oedema formation caused by PMA and synthesis of LOX products, especially LTC₄ and COX metabolites derived from arachidonic acid). **Source:** SHUI TUAN HUA *Adina pilulifera* [Syn. *Cephalanthus pilulifera*], RU DU XIANG *Pistacia terebinthus*. **Ref:** 6, 4415.

**14980 Moronic acid**

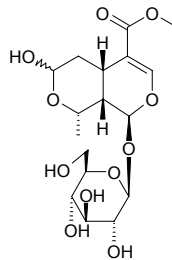
[6713-27-5] $C_{30}H_{46}O_3$ (454.70). **Source:** JIN ZHAN JU *Calendula officinalis* (flower). **Ref:** 3551.

**14981 Morphine**

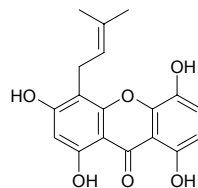
Morphia; Morphina [57-27-2] $C_{17}H_{19}NO_3$ (285.35). Colorless columnar crystals, mp 254°C, $[\alpha]_D^{20} = -132^\circ$ (CH₃OH), very slightly soluble in boiling water, slightly soluble in alcohol^[5507]. **Pharm:** Opioid agonist (gpg ileum, $pD_2 = (7.15 \pm 0.05)(-\log\text{mol/L})$ ^[5069]; anesthetic; analgesic (only used in treatment of pain due to wounds, operations or burns, myocardial infarction, and cardiac asthma because it is addictive); LD₅₀ (mus, sc) = 500mg/kg. **Source:** BAI YAO ZI *Stephania cepharantha*, CHAN SU *Bufo bufo gargarizans*; *Bufo melanostictus*, LI CHUN HUA *Papaver commutatum* [Syn. *Papaver rhoeas*], YA PIAN *Papaver somniferum* (latex from unripe capsules: mean content = 99.3%^[5508]), YING SU KE *Papaver somniferum* (capsule: content = 0.099%^[5508]), YING SU *Papaver somniferum* (seed: content $\approx 10\%$ ^[5507]). **Ref:** 2, 4, 658, 5069, 5507, 5508.

**14982 Morroniside**

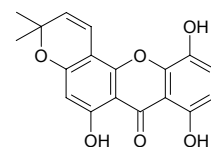
$C_{17}H_{26}O_{11}$ (406.39). Amorphous, $[\alpha]_D = -72^\circ$ ($c = 1$, EtOH), mp 103–105°C, $[\alpha]_D^{27} = -89.9^\circ$ ($c = 1.39$, MeOH). **Pharm:** Stomachic. **Source:** BAI JIANG *Patrinia villosa*, MO LUO SHI REN DONG *Lonicera morrowii*, RI BEN SHUANG HU DIE *Tripterospermum japonicum*, SHAN ZHU YU *Cornus officinalis* [Syn. *Macrocarpium officinale*], WU FU HUA *Adoxa moschatellina*, ZAN SHI LONG DAN *Gentiana thunbergii*. **Ref:** 2, 658, 3533.

**14983 Morusignin A**

$C_{18}H_{16}O_6$ (328.32). **Source:** *Morus* sp. **Ref:** 2513.

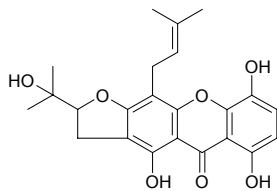
**14984 Morusignin C**

$C_{18}H_{14}O_6$ (326.31). **Source:** *Morus insignis*. **Ref:** 2513.

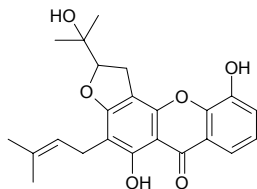


14985 Morusignin E

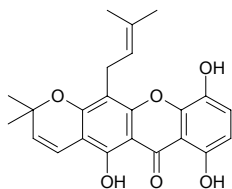
$C_{23}H_{24}O_7$ (412.44). Source: *Morus insignis*. Ref: 2513.

**14986 Morusignin H**

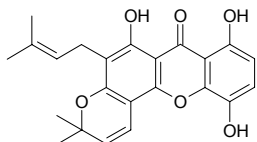
$C_{23}H_{24}O_6$ (396.44). Source: *Morus insignis*. Ref: 2513.

**14987 Morusignin I**

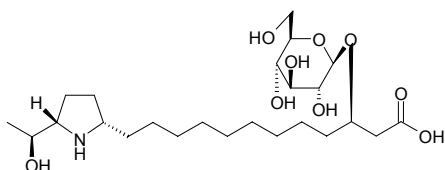
$C_{23}H_{22}O_6$ (394.43). Source: *Morus insignis*. Ref: 2513.

**14988 Morusignin J**

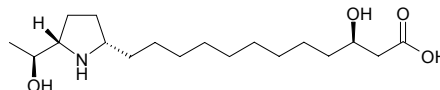
$C_{23}H_{22}O_6$ (394.43). Pharm: Antioxidant (DPPH scavenger, 10 μ mol/L, ScRt = 11%, control BHT, 10 μ mol/L, ScRt = 43%)^[5319]. Source: TIAN SHAN ZHU ZI *Garcinia dulcis* (fruit), TIAN SHAN ZHU ZI *Garcinia dulcis* (flower), *Morus insignis*. Ref: 1521, 4422, 5319.

**14989 Morusimic acid A**

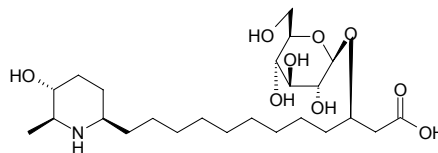
(3*R*)-3-Hydroxy-12-[(1*S*,4*S*)-4-[(1*S*)-1-hydroxyethyl]-pyrrolidin-1-yl]-dodecanoic acid-3-*O*- β -*D*-glucopyranoside $C_{24}H_{45}NO_9$ (507.63). Colorless powder, $[\alpha]_D = +15.3^\circ$ ($c = 0.18$, H_2O). Pharm: α -Glucosidase inhibitor inactive (control 1-Deoxynojirimucin, $IC_{50} = 0.98$ mmol/L, Fagoming, $IC_{50} = 15$ mmol/L). Source: SANG SHI *Morus alba*. Ref: 4161.

**14990 Morusimic acid B**

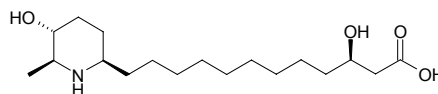
(3*R*)-3-Hydroxy-12-[(1*S*,4*S*)-4-[(1*S*)-1-hydroxyethyl]-pyrrolidin-1-yl]-dodecanoic acid $C_{18}H_{35}NO_4$ (329.48). Colorless powder, $[\alpha]_D = +8.8^\circ$ ($c = 0.42$, H_2O). Pharm: α -Glucosidase inhibitor inactive (control 1-Deoxynojirimucin, $IC_{50} = 0.98$ mmol/L, Fagoming, $IC_{50} = 15$ mmol/L). Source: SANG SHI *Morus alba*. Ref: 4161.

**14991 Morusimic acid C**

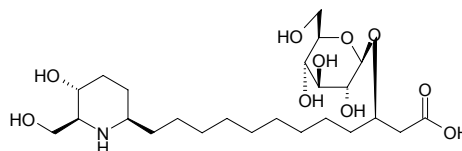
(3*R*)-3-Hydroxy-12-[(1*R*,4*R*,5*S*)-4-hydroxy-5-methyl-piperidin-1-yl]-dodecanoic acid-3-*O*- β -*D*-glucopyranoside $C_{24}H_{45}NO_9$ (491.63). Colorless powder, $[\alpha]_D = -20.3^\circ$ ($c = 0.24$, H_2O). Pharm: α -Glucosidase inhibitor inactive (control 1-Deoxynojirimucin, $IC_{50} = 0.98$ mmol/L, Fagoming, $IC_{50} = 15$ mmol/L). Source: SANG SHI *Morus alba*. Ref: 4161.

**14992 Morusimic acid D**

(3*R*)-3-Hydroxy-12-[(1*R*,4*R*,5*S*)-4-hydroxy-5-methyl-piperidin-1-yl]-dodecanoic acid $C_{18}H_{35}NO_4$ (329.48). Colorless powder, $[\alpha]_D = -14.6^\circ$ ($c = 0.25$, H_2O). Pharm: α -Glucosidase inhibitor inactive (control 1-Deoxynojirimucin, $IC_{50} = 0.98$ mmol/L, Fagoming, $IC_{50} = 15$ mmol/L). Source: SANG SHI *Morus alba*. Ref: 4161.

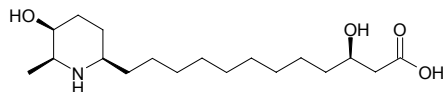
**14993 Morusimic acid E**

(3*R*)-3-Hydroxy-12-[(1*R*,4*R*,5*S*)-4-hydroxy-5-hydroxymethyl-piperidin-1-yl]-dodecanoic acid-3-*O*- β -*D*-glucopyranoside $C_{24}H_{45}NO_{10}$ (507.63). Colorless powder, $[\alpha]_D = -17.2^\circ$ ($c = 0.61$, H_2O). Pharm: α -Glucosidase inhibitor inactive (control 1-Deoxynojirimucin, $IC_{50} = 0.98$ mmol/L, Fagoming, $IC_{50} = 15$ mmol/L). Source: SANG SHI *Morus alba*. Ref: 4161.

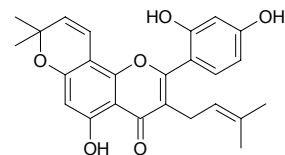


14994 Morusinic acid F

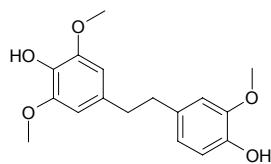
(3*R*)-3-Hydroxy-12-[(1*R*,4*S*,5*S*)-4-hydroxy-5-methyl-piperidin-1-yl]-dodecanoic acid C₁₈H₃₅NO₄ (329.48). Colorless powder, [α]_D = +6.4° (*c* = 0.28, H₂O). **Pharm:** α-Glucosidase inhibitor inactive (control 1-Deoxynojirimucin, IC₅₀ = 0.98mmol/L, Fagoming, IC₅₀ = 15mmol/L). **Source:** SANG SHI *Morus alba*. **Ref:** 4161.

**14995 Morusin**

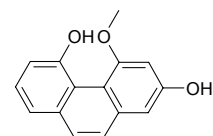
Mulberrochromene [62596-29-6] C₂₅H₂₄O₆ (420.47). Yellowish rhombic crystals (hexane–diethyl ether), mp 214–216°C; yellow crystals (hexane–dichloromethane), mp 168–169°C; mp 232–235°C. **Pharm:** Antiallergic; anti-inflammatory (NO production inhibitor)^[4415]; cytotoxic (hmn lymphocyte, IC₅₀ = 8.18μg/mL); anti-HIV (*in vitro* hmn HIV, EC₅₀ = 2.91μg/mL); Na⁺, K⁺-ATP inhibitor; arachidonic acid oxidase inhibitor (mammal, IC₅₀ = 1.6–3.4μmol/L); cytotoxic (brine shrimp *Artemia salina* assay, LC₅₀ = 67.8μg/mL)^[3460]. **Source:** MENG SANG *Morus mongolica* (root cortex: yield = 0.00055%semi-dw)^[3034], SANG BAI PI *Morus alba*, SANG YE *Morus alba*, SANG ZHI *Morus alba*, *Artocarpus fretessi* (bark). **Ref:** 6, 900, 1521, 3034, 3460, 4415.

**14996 Moscatilin**

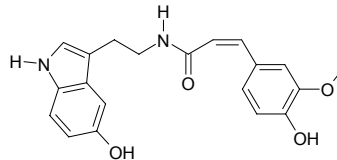
C₁₇H₂₀O₅ (304.35). **Pharm:** Platelet aggregation inhibitor (50μmol/L, InRt = 29%; 100μmol/L, InRt = 36%). **Source:** MI HUA SHI HU *Dendrobium densiflorum* (stem). **Ref:** 5171.

**14997 Moscatin**

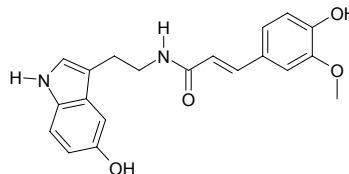
[108335-06-4] C₁₅H₁₂O₃ (240.26). Colorless crystals, mp 163–164°C. **Pharm:** Antioxidant (stronger than BHA); platelet aggregation inhibitor (strongly, due to collagen, arachidonic acid and PAF). **Source:** MEI HUA SHI HU *Dendrobium loddigesii*. **Ref:** 900.

**14998 cis-Moschamine**

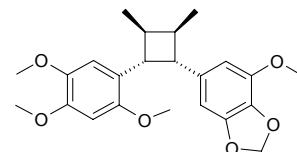
(*Z*)-*N*-(3-Methoxy-4-hydroxycinnamoyl)-5-hydroxytryptamine C₂₀H₂₀N₂O₄ (352.39). Amorphous. **Source:** SHI CHE JU *Centaurea cyanus* (seed). **Ref:** 5174.

**14999 trans-Moschamine**

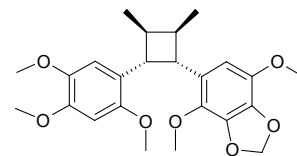
(*E*)-*N*-(3-Methoxy-4-hydroxycinnamoyl)-5-hydroxytryptamine C₂₀H₂₀N₂O₄ (352.39). Amorphous. **Source:** SHI CHE JU *Centaurea cyanus* (seed). **Ref:** 5174.

**15000 Moslolignan A**

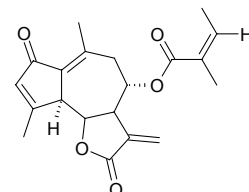
1β*,2β*,3α*,4α*-1,2-dimethyl-3-(3-methoxy-4,5-methylene-dioxyphenyl)-4-(2,4,5-trimethoxyphenyl)-cyclobutane C₂₃H₂₈O₆ (400.48). Colorless gum, [α]_D = −0.15° (*c* = 1.63, MeOH). **Source:** SHI JI NING *Mosla scabra* [Syn. *Mosla punctata*]. **Ref:** 740.

**15001 Moslolignan B**

1β*,2β*,3α*,4α*-1,2-dimethyl-3-(2,5-dimethoxy-3,4-methylenedioxyphenyl)-4-(2,4,5-trimethoxyphenyl)cyclobutane C₂₄H₃₀O₇ (430.5). Colorless gum, [α]_D = −0.43° (*c* = 1.38, MeOH). **Source:** SHI JI NING *Mosla scabra* [Syn. *Mosla punctata*]. **Ref:** 740.

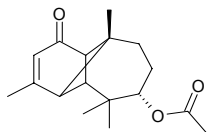
**15002 Moxartenolide**

[182267-25-0] C₂₀H₂₂O₅ (342.40). White powder, [α]_D²⁸ = +119.9° (*c* = 1.1, chloroform). **Pharm:** Vasodilator (rat chest main artery *in vitro*, contraction caused by KCl, arterenol and 5-HT, 30μmol/L, InRt = 24.2%, 27.5% and 19.1%, 100μmol/L, 77.1%, 84.1% and 61.4% respectively); anti-inflammatory (RAW264.7 cells, LPS-induced: NF-κB inhibitor, IC₅₀ = (1.20±0.05)μmol/L, control PTN, IC₅₀ = (3.42±0.08)μmol/L; NO production inhibitor, IC₅₀ = (4.82±0.16)μmol/L, PTN, IC₅₀ = (2.41±0.06)μmol/L, AG, IC₅₀ = (34.18±0.98)μmol/L; TNF-α production inhibitor, IC₅₀ = (8.26±0.26)μmol/L, PTN, IC₅₀ = (2.68±0.11)μmol/L)^[3837]. **Source:** AI YE *Artemisia argyi*, LIN DI HAO *Artemisia sylvatica* (aerial parts). **Ref:** 989, 3837.

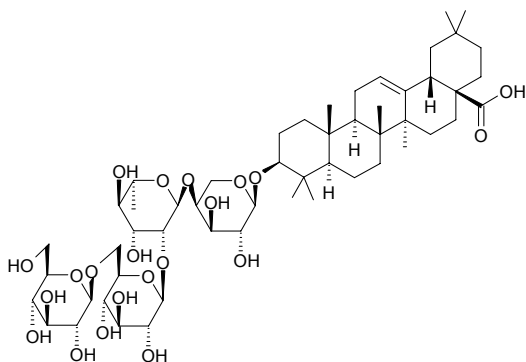


15003 Moxarteneone

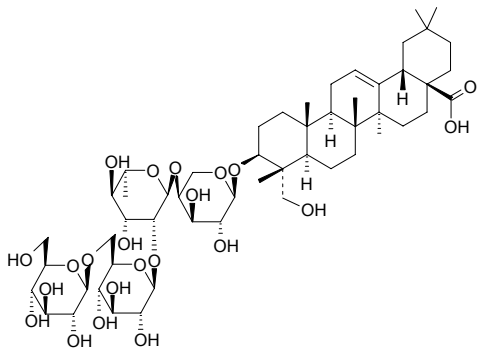
[182162-13-6] C₁₇H₂₄O₃ (276.38). White powder, $[\alpha]_D^{28} = +51.6^\circ$ ($c = 0.4$, methanol). **Pharm:** Vasodilator (rat chest main artery *in vitro*, contraction caused by KCl, arterenol and 5-HT, 100 μmol/L, InRt = 77.1%, 84.1% and 61.4% respectively). **Source:** AI YE *Artemisia argyi*. **Ref:** 989.

**15004 Mubenin A**

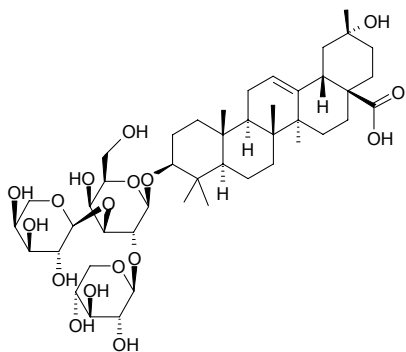
C₅₃H₈₆O₂₁ (1059.26). mp 255–259°C (dec). **Source:** NA TENG GUO *Stauntonia hexaphylla*. **Ref:** 1312.

**15005 Mubenin C**

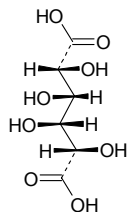
C₅₃H₈₆O₂₂ (1075.26). **Source:** NA TENG GUO *Stauntonia hexaphylla*. **Ref:** 1312.

**15006 Mubenoside A**

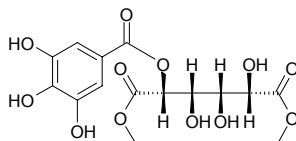
C₄₅H₇₂O₁₇ (885.07). **Source:** NA TENG GUO *Stauntonia hexaphylla*. **Ref:** 1313.

**15007 Mucic acid**

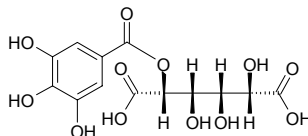
Galactaric acid [526-99-8] C₆H₁₀O₈ (210.14). mp 255°C. **Source:** AN MO LE *Phyllanthus emblica*. **Ref:** 6.

**15008 Mucic acid dimethyl ester 2-O-gallate**

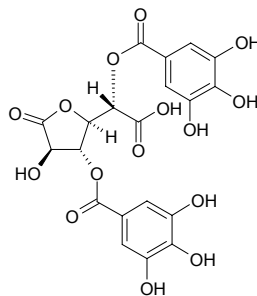
C₁₅H₁₈O₁₂ (390.30). White amorphous powder, $[\alpha]_D^{22} = -51.0^\circ$ ($c = 0.41$, MeOH). **Source:** AN MO LE *Phyllanthus emblica* (fruit juice). **Ref:** 3521.

**15009 Mucic acid 2-O-gallate**

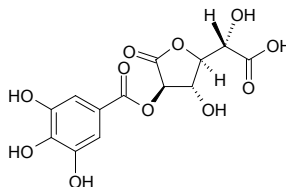
C₁₃H₁₄O₁₂ (362.25). Off-white amorphous powder, $[\alpha]_D^{22} = -25.3^\circ$ ($c = 0.28$, H₂O). **Source:** AN MO LE *Phyllanthus emblica* (fruit juice). **Ref:** 3521.

**15010 Mucic acid 1,4-lactone 3,5-di-O-gallate**

C₂₀H₁₆O₁₅ (496.34). White amorphous powder, $[\alpha]_D^{22} = -96.5^\circ$ ($c = 0.20$, MeOH). **Source:** AN MO LE *Phyllanthus emblica* (fruit juice). **Ref:** 3521.

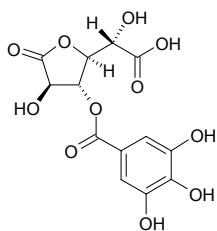
**15011 Mucic acid 1,4-lactone 2-O-gallate**

C₁₃H₁₂O₁₁ (344.23). White amorphous powder, $[\alpha]_D^{22} = -9.5^\circ$ ($c = 0.26$, MeOH). **Source:** AN MO LE *Phyllanthus emblica* (fruit juice). **Ref:** 3521.

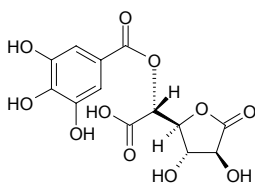


15012 Mucic acid 1,4-lactone 3-O-gallate

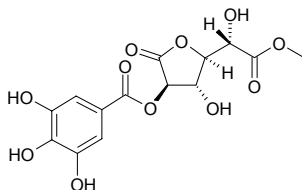
$C_{13}H_{12}O_{11}$ (344.23). White amorphous powder, $[\alpha]_D^{22} = -30.3^\circ$ ($c = 0.16$, MeOH). Source: AN MO LE *Phyllanthus emblica* (fruit juice). Ref: 3521.

**15013 Mucic acid 1,4-lactone 5-O-gallate**

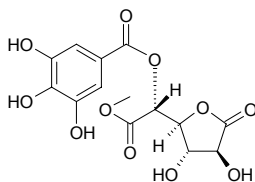
$C_{13}H_{12}O_{11}$ (344.23). White amorphous powder, $[\alpha]_D^{22} = -29.3^\circ$ ($c = 0.33$, MeOH). Source: AN MO LE *Phyllanthus emblica* (fruit juice). Ref: 3521.

**15014 Mucic acid 1,4-lactone methyl ester 2-O-gallate**

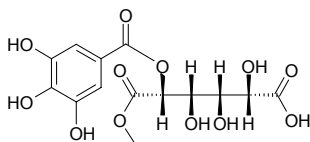
$C_{14}H_{14}O_{11}$ (358.26). White amorphous powder, $[\alpha]_D^{22} = -13.0^\circ$ ($c = 0.19$, MeOH). Source: AN MO LE *Phyllanthus emblica* (fruit juice). Ref: 3521.

**15015 Mucic acid 1,4-lactone methyl ester 5-O-gallate**

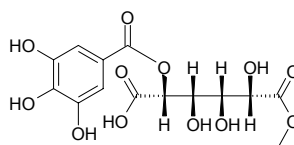
$C_{14}H_{14}O_{11}$ (358.26). White amorphous powder, $[\alpha]_D^{22} = -30.9^\circ$ ($c = 0.58$, MeOH). Source: AN MO LE *Phyllanthus emblica* (fruit juice). Ref: 3521.

**15016 Mucic acid 1-methyl ester 2-O-gallate**

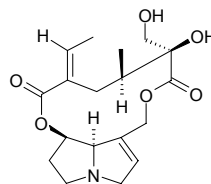
$C_{14}H_{16}O_{12}$ (376.28). White amorphous powder, $[\alpha]_D^{22} = -38.1^\circ$ ($c = 0.22$, MeOH). Source: AN MO LE *Phyllanthus emblica* (fruit juice). Ref: 3521.

**15017 Mucic acid 6-methyl ester 2-O-gallate**

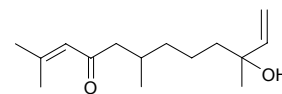
$C_{14}H_{16}O_{12}$ (376.28). White amorphous powder, $[\alpha]_D^{22} = -43.9^\circ$ ($c = 0.28$, MeOH). Source: AN MO LE *Phyllanthus emblica* (fruit juice). Ref: 3521.

**15018 Mucronatinine**

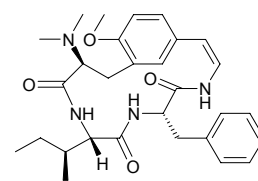
Usaramine $C_{18}H_{25}NO_6$ (351.40). mp 161~163°C. Source: XIANG LING CAO *Crotalaria ferruginea*, ZHU SHI DOU *Crotalaria mucronata*. Ref: 6, 660.

**15019 Mucronatone**

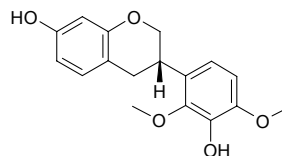
3-Hydroxy-3,7,11-trimethyl-9-oxododeca-1,10-diene $C_{15}H_{26}O_2$ (238.37). Colorless viscous oil, $[\alpha]_D^{27} = -16.66^\circ$ ($c = 0.04$, $CHCl_3$). Source: HONG QIE DONG GUO *Rhizophora mucronata* (fruit). Ref: 4058.

**15020 Mucronine A**

[38840-25-4] $C_{29}H_{38}N_4O_4$ (506.65). Pharm: Antifungal. Source: JIAN YE ZAO *Zizyphus mucronata*, AI SAI E BI YA ZAO *Zizyphus abyssinica*. Ref: 658.

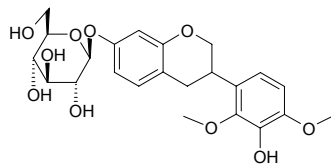
**15021 Mucronulatol**

$C_{17}H_{18}O_5$ (302.33). Pharm: Antifungal. Source: YI BIAN HUANG TAN *Dalbergia variabilis*. Ref: 658.

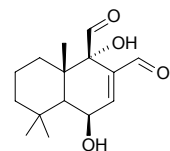


15022 3S(-)-Mucronulatol-7-D-glucopyranoside

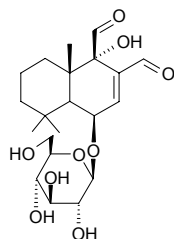
$C_{23}H_{28}O_{10}$ (464.47). White acicular crystals, mp 167~169°C. Source: MENG GU HUANG QI *Astragalus mongholicus*. Ref: 167.

**15023 Mukaadial**

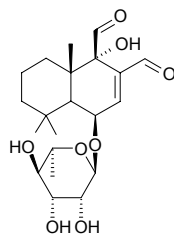
$C_{15}H_{22}O_4$ (266.34). Needle-like crystals (*n*-hexane- CH_2Cl_2), mp 245~246°C, $[\alpha]_D^{25} = -25^\circ$ ($c = 1.0$, MeOH). Source: *Warburgia stuhlmannii* (leaf). Ref: 3398.

**15024 Mukaadial 6-O-β-D-glucopyranoside**

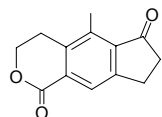
$C_{21}H_{32}O_9$ (428.48). Colorless crystals, mp 180~183°C. Source: *Warburgia stuhlmannii* (leaf). Ref: 3398.

**15025 Mukaadial 6-O-α-L-rhamnopyranoside**

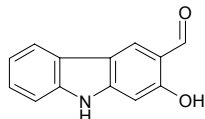
$C_{21}H_{32}O_8$ (412.48). Colorless crystals, mp>250°C. Source: *Warburgia stuhlmannii* (leaf). Ref: 3398.

**15026 Mukagolactone**

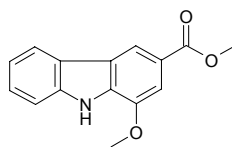
$C_{13}H_{12}O_3$ (216.24). Source: WEI YE XI ZI JUE *Monachosorum flagellare*, XI ZI JUE *Monachosorum henryi*. Ref: 1505.

**15027 Mukonal**

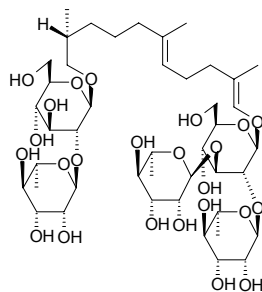
2-Hydroxy-3-formylcarbazole [20323-67-5] $C_{13}H_9NO_2$ (211.22). Pharm: Antibacterial (*Mycobacterium tuberculosis*, MIC = 200μg/mL, control Isoniazide, MIC = 0.040~0.090μg/mL, kanamycin sulfate, MIC = 2.0~5.0μg/mL)^[5367]; antifungal (*Candida albicans*, IC₅₀ = 29.3μg/mL; control Amphotericin, IC₅₀ = 0.01μg/mL)^[5367]. Source: SHAN HUANG PI *Clausena excavata*. Ref: 703, 5367.

**15028 Mukonine**

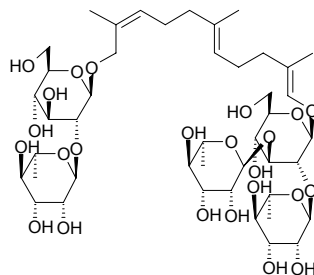
[23523-94-6] $C_{15}H_{13}NO_3$ (255.28). Source: SHAN HUANG PI *Clausena excavata*. Ref: 703.

**15029 Mukurozioside Ia**

$C_{44}H_{76}O_{24}$ (989.08). Source: WU HUAN ZI *Sapindus mukorossi*, WU HUAN ZI PI *Sapindus mukorossi*. Ref: 1448.

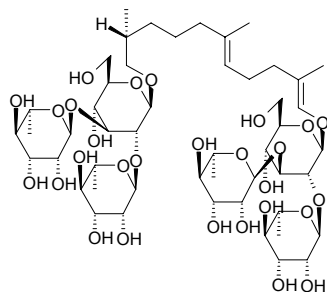
**15030 Mukurozioside Ib**

$C_{44}H_{74}O_{24}$ (987.07). Source: WU HUAN ZI *Sapindus mukorossi*, WU HUAN ZI PI *Sapindus mukorossi*. Ref: 1448.

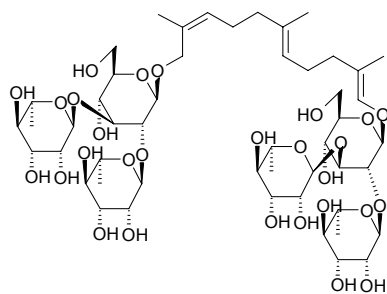


15031 Mukurozioside II_a

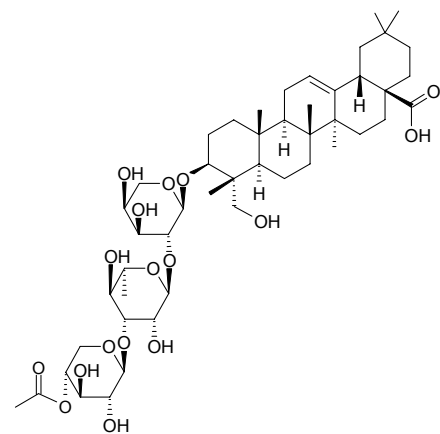
$C_{50}H_{86}O_{28}$ (1135.23). Source: WU HUAN ZI *Sapindus mukorossi*, WU HUAN ZI PI *Sapindus mukorossi*. Ref: 1448.

**15032 Mukurozioside II_b**

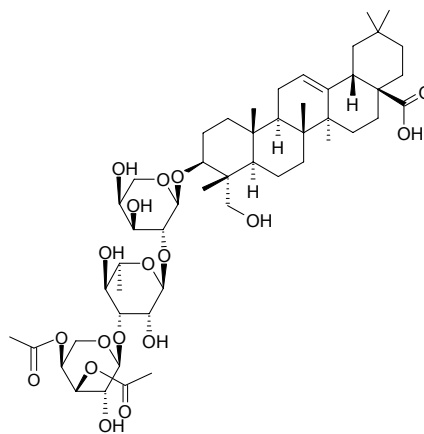
$C_{50}H_{84}O_{28}$ (1133.21). Source: WU HUAN ZI *Sapindus mukorossi*, WU HUAN ZI PI *Sapindus mukorossi*. Ref: 1448.

**15033 Mukuroziosaponin E₁**

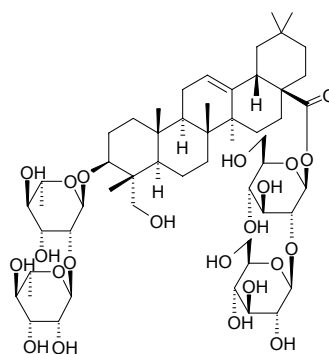
$C_{48}H_{76}O_{17}$ (925.13). Source: WU HUAN ZI *Sapindus mukorossi*, WU HUAN ZI PI *Sapindus mukorossi*. Ref: 1449.

**15034 Mukuroziosaponin G**

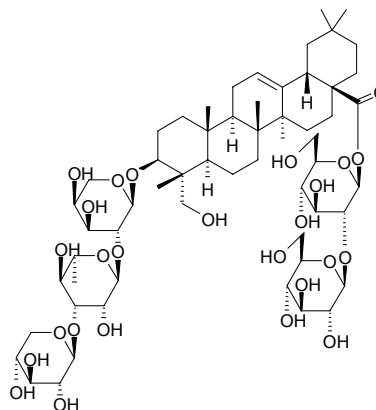
$C_{50}H_{78}O_{18}$ (967.17). Source: WU HUAN ZI *Sapindus mukorossi*, WU HUAN ZI PI *Sapindus mukorossi*. Ref: 1449.

**15035 Mukuroziosaponin X**

$C_{53}H_{86}O_{22}$ (1075.26). Source: WU HUAN ZI *Sapindus mukorossi*, WU HUAN ZI PI *Sapindus mukorossi*. Ref: 1449.

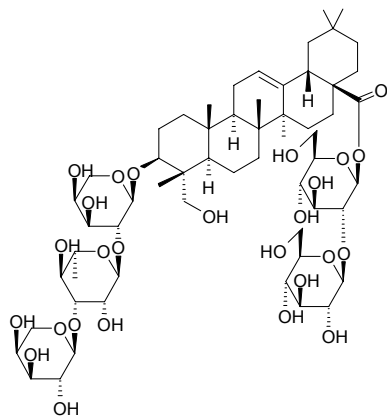
**15036 Mukuroziosaponin Y₁**

$C_{58}H_{94}O_{26}$ (1207.38). Source: WU HUAN ZI *Sapindus mukorossi*, WU HUAN ZI PI *Sapindus mukorossi*. Ref: 1449.

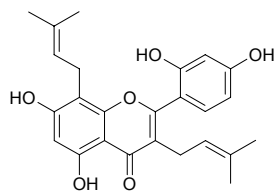


15037 Mukurozisonin Y₂

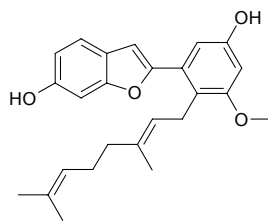
C₅₈H₉₄O₂₆ (1207.38). **Source:** WU HUAN ZI *Sapindus mukorossi*, WU HUAN ZI PI *Sapindus mukorossi*. **Ref:** 1449.

**15038 Mulberrin**

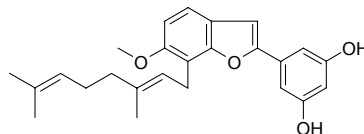
Kuwanon C [62949-79-5] C₂₅H₂₆O₆ (422.48). mp 153–156°C. **Pharm:** cAMP phosphodiesterase inhibitor (IC₅₀ = 38 μmol/L); anti-inflammatory (inhibits metabolism of arachidonic acid); Na⁺, K⁺-ATP inhibitor (used in treatment of heart failure and auricular arrhythmia); aldose reductase inhibitor (100 μmol/L InRt = 77.3%); anti-inflammatory (NO production inhibitor)^[4415]; cytotoxic (brine shrimp *Artemia salina* assay, LC₅₀ = 77.4 μg/mL)^[3460]. **Source:** AO DA LI YA SANG *Morus australis*, MENG SANG *Morus mongolica* (root cortex: yield = 0.00055%semi-dw), SANG ZHI *Morus alba*, SANG BAI PI *Morus alba*, *Artocarpus fretessi* (tree bark). **Ref:** 6, 660, 1657, 1658, 1659, 1660, 3034, 3460, 4415.

**15039 Mulberrofuran A**

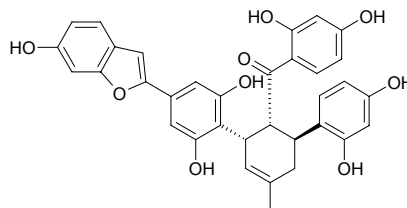
C₂₅H₂₈O₄ (392.50). Colorless lamellar crystals, mp 100–103°C. **Pharm:** Antibacterial (*Staphylococcus aureus*, MIC = 6.25 μg/mL; *Streptococcus faecalis*, MIC = 3.12 μg/mL; *Bacillus subtilis*, MIC = 3.12 μg/mL; *Bacillus mycoides*, MIC = 1.56 μg/mL; gram-positive bacteria). **Source:** SANG BAI PI *Morus alba*, SANG YE *Morus alba*. **Ref:** 661, 5501.

**15040 Mulberrofuran B**

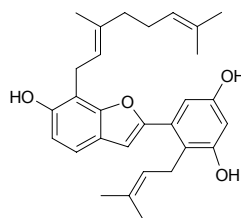
[79295-49-1] C₂₅H₂₈O₄ (392.50). **Pharm:** Cytotoxic (HSC-2, CC₅₀ = 59 μmol/L, 23 μg/mL; HSG, CC₅₀ = 59 μmol/L, 23 μg/mL; HGF, CC₅₀ = 71 μmol/L, 28 μg/mL). **Source:** MENG SANG *Morus mongolica* (root cortex: yield = 0.00009%semi-dw), SANG BAI PI *Morus alba*. **Ref:** 1427, 3034.

**15041 Mulberrofuran C**

C₃₄H₂₈O₉ (580.60). **Pharm:** Antihypertensive (animal model). **Source:** CAN SANG *Morus bombycis*. **Ref:** 658.

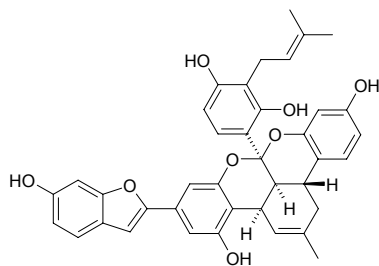
**15042 Mulberrofuran D**

C₂₉H₃₄O₄ (446.59). **Pharm:** Cytotoxic (HSC-2, CC₅₀ = 83 μmol/L, 37 μg/mL; HSG, CC₅₀ = 74 μmol/L, 33 μg/mL; HGF, CC₅₀ = 81 μmol/L, 36 μg/mL)^[3034]; antibacterial (*Enterococcus faecalis* JCM7783 (VSE) (= ATCC19434), MIC = 3.13 μg/mL, control Linezolid, MIC = 1.56 μg/mL; *Enterococcus faecalis* JU1856 (VRE, VanA), MIC = 3.13 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Enterococcus faecalis* JU1782 (VRE, VanB), MIC = 3.13 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Enterococcus faecium* JCM5804 (VSE) (= ATCC 29212), MIC = 3.13 μg/mL, Linezolid, MIC = 1.56 μg/mL; *Enterococcus faecium* JU1858 (VRE, VanA), MIC = 3.13 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Enterococcus faecium* JU1777 (VRE, VanB), MIC = 3.13 μg/mL, Linezolid, MIC = 1.56 μg/mL; *Enterococcus gallinarum* JU2786 (VRE, VanC), MIC = 3.13 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Staphylococcus aureus* JCM2874 (MSSA) (= ATCC29213), MIC = 6.25 μg/mL, Linezolid, MIC = 1.56 μg/mL; *Staphylococcus aureus* (MRSA, 10 strains), MIC = 3.13–6.25 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Staphylococcus aureus* (MRSA, 8 strains), mean MIC₈₀ = 6.25 μg/mL, Linezolid, mean MIC₈₀ = 0.78 μg/mL)^[5007]. **Source:** MENG SANG *Morus mongolica* (root cortex: yield = 0.014%semi-dw). **Ref:** 3034, 5007.

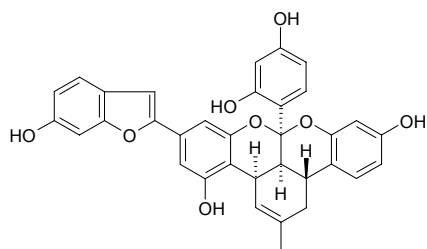


15043 Mulberrofuran F

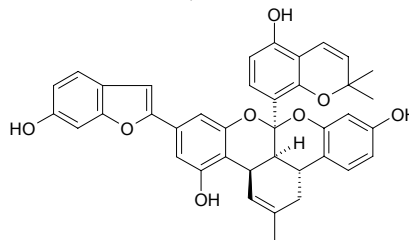
$C_{39}H_{34}O_8$ (630.70). **Pharm:** Antibacterial (*Enterococcus faecalis* JCM7783 (VSE) (= ATCC19434), MIC = 6.25 μ g/mL, control Linezolid, MIC = 1.56 μ g/mL; *Enterococcus faecalis* JU1856(VRE, VanA), MIC = 3.13 μ g/mL, Linezolid, MIC = 0.78 μ g/mL; *Enterococcus faecalis* JU1782(VRE, VanB), MIC = 3.13 μ g/mL, Linezolid, MIC = 0.78 μ g/mL; *Enterococcus faecium* JCM5804 (VSE) (= ATCC 29212), MIC = 6.25 μ g/mL, Linezolid, MIC = 1.56 μ g/mL; *Enterococcus faecium* JU1858 (VRE, VanA), MIC = 6.25 μ g/mL, Linezolid, MIC = 0.78 μ g/mL; *Enterococcus faecium* JU1777 (VRE, VanB), MIC = 3.13 μ g/mL, Linezolid, MIC = 1.56 μ g/mL; *Enterococcus gallinarum* JU2786 (VRE, VanC), MIC = 3.13 μ g/mL, Linezolid, MIC = 0.78 μ g/mL; *Staphylococcus aureus* JCM2874 (MSSA) (=ATCC29213), MIC = 6.25 μ g/mL, Linezolid, MIC = 1.56 μ g/mL; *Staphylococcus aureus* (MRSA, 10 strains), MIC = 3.13–6.25 μ g/mL, Linezolid, MIC = 0.78 μ g/mL; *Staphylococcus aureus* (MRSA, 8 strains), mean MIC₈₀ = 6.25 μ g/mL, Linezolid, mean MIC₈₀ = 0.78 μ g/mL)^[5007]. **Source:** *Morus lhou*. **Ref:** 2513, 5007.

**15044 Mulberrofuran G**

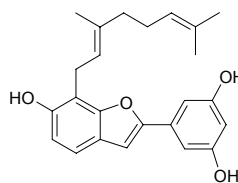
Albanol $C_{34}H_{26}O_8$ (562.58). **Pharm:** Antibacterial (*Enterococcus faecalis* JCM7783 (VSE) (= ATCC19434), MIC = 6.25 μ g/mL, control Linezolid, MIC = 1.56 μ g/mL; *Enterococcus faecalis* JU1856(VRE, VanA), MIC = 3.13 μ g/mL, Linezolid, MIC = 0.78 μ g/mL; *Enterococcus faecalis* JU1782(VRE, VanB), MIC = 3.13 μ g/mL, Linezolid, MIC = 0.78 μ g/mL; *Enterococcus faecium* JCM5804 (VSE) (= ATCC 29212), MIC = 6.25 μ g/mL, Linezolid, MIC = 1.56 μ g/mL; *Enterococcus faecium* JU1858 (VRE, VanA), MIC = 3.13 μ g/mL, Linezolid, MIC = 0.78 μ g/mL; *Enterococcus faecium* JU1777 (VRE, VanB), MIC = 3.13 μ g/mL, Linezolid, MIC = 1.56 μ g/mL; *Enterococcus gallinarum* JU2786 (VRE, VanC), MIC = 6.25 μ g/mL, Linezolid, MIC = 0.78 μ g/mL; *Staphylococcus aureus* JCM2874 (MSSA) (=ATCC29213), MIC = 6.25 μ g/mL, Linezolid, MIC = 1.56 μ g/mL; *Staphylococcus aureus* (MRSA, 10 strains), MIC = 3.13–6.25 μ g/mL, Linezolid, MIC = 0.78 μ g/mL; *Staphylococcus aureus* (MRSA, 8 strains), mean MIC₈₀ = 6.25 μ g/mL, Linezolid, mean MIC₈₀ = 0.78 μ g/mL)^[5007]. **Source:** NAI SANG *Morus macrourea*, *Morus lhou*. **Ref:** 2570, 5007.

**15045 Mulberrofuran K**

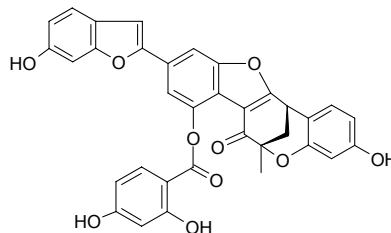
$C_{39}H_{32}O_8$ (628.69). **Source:** NAI SANG *Morus macrourea*, SANG BAI PI *Morus alba*. **Ref:** 1428, 2570.

**15046 Mulberrofuran L**

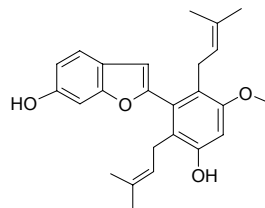
$C_{24}H_{26}O_4$ (378.47). **Pharm:** Cytotoxic (HSC-2, CC₅₀ = 190 μ mol/L, 70 μ g/mL; HSG, CC₅₀ = 160 μ mol/L, 61 μ g/mL; HGF, CC₅₀ = 190 μ mol/L, 71 μ g/mL). **Source:** MENG SANG *Morus mongolica* (root cortex: yield = 0.00045%semi-dw). **Ref:** 3034.

**15047 Mulberrofuran M**

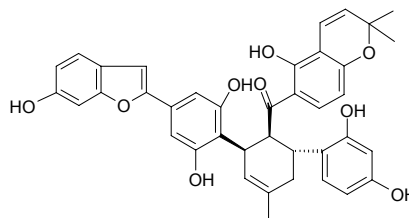
[101365-03-1] $C_{34}H_{22}O_{10}$ (590.55). **Source:** SANG BAI PI *Morus alba*. **Ref:** 1429.

**15048 Mulberrofuran N**

[101899-56-3] $C_{25}H_{28}O_4$ (392.50). **Source:** SANG BAI PI *Morus alba*. **Ref:** 1428.

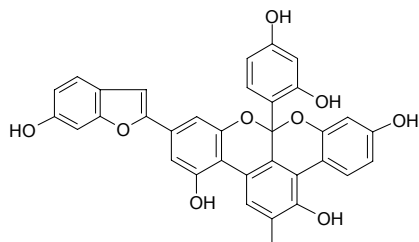
**15049 Mulberrofuran O**

[94617-38-6] $C_{39}H_{34}O_9$ (646.70). **Source:** SANG BAI PI *Morus alba*. **Ref:** 1428.

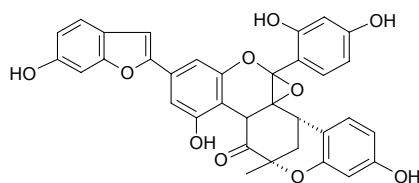


15050 Mulberrofuran P

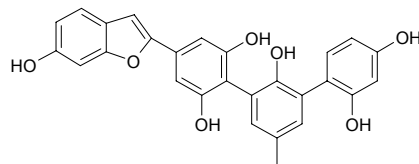
[101365-02-0] C₃₄H₂₂O₉ (574.55). Source: SANG BAI PI *Morus alba*. Ref: 1430.

**15051 Mulberrofuran Q**

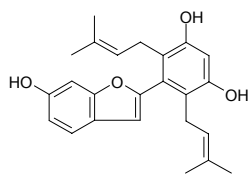
[101385-35-1] C₃₄H₂₄O₁₀ (592.56). Source: SANG BAI PI *Morus alba*. Ref: 1431.

**15052 Mulberrofuran R**

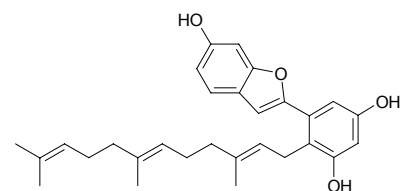
C₂₇H₂₀O₇ (456.46). Source: *Morus thou*. Ref: 2513.

**15053 Mulberrofuran V**

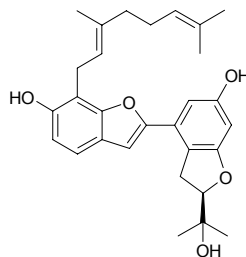
C₂₄H₂₆O₄ (378.47). Source: HUA SANG *Morus cathayana* (root cortex). Ref: 3034.

**15054 Mulberrofuran W**

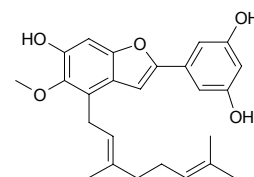
C₂₉H₃₄O₄ (446.59). Pale yellow amorphous solid. Pharm: Cytotoxic (HSC-2, CC₅₀ = 70 μmol/L, 31 μg/mL; HSG, CC₅₀ = 70 μmol/L, 31 μg/mL; HGF, CC₅₀ = 90 μmol/L, 40 μg/mL). Source: MENG SANG *Morus mongolica* (root cortex: yield = 0.00041%semi-dw). Ref: 3034.

**15055 Mulberrofuran X**

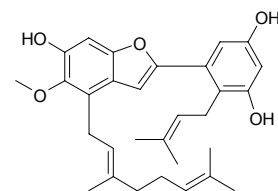
C₂₉H₃₄O₅ (462.59). Pale yellow amorphous solid, [α]_D²⁰ = -18° (c = 0.1, MeOH). Pharm: Cytotoxic (HSC-2, CC₅₀ = 290 μmol/L, 135 μg/mL; HSG, CC₅₀ = 260 μmol/L, 120 μg/mL; HGF, CC₅₀ = 350 μmol/L, 162 μg/mL). Source: MENG SANG *Morus mongolica* (root cortex: yield = 0.00027%semi-dw). Ref: 3034.

**15056 Mulberrofuran Y**

C₂₅H₂₈O₅ (408.5). Pale yellow amorphous solid. Pharm: Cytotoxic (HSC-2, CC₅₀ = 110 μmol/L, 46 μg/mL; HSG, CC₅₀ = 140 μmol/L, 55 μg/mL; HGF, CC₅₀ = 190 μmol/L, 78 μg/mL)^[3034]; antibacterial (*Enterococcus faecalis* JCM7783 (VSE) (= ATCC19434), MIC = 6.25 μg/mL, control Linezolid, MIC = 1.56 μg/mL; *Enterococcus faecalis* JU1856(VRE, VanA), MIC = 6.25 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Enterococcus faecalis* JU1782(VRE, VanB), MIC = 6.25 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Enterococcus faecium* JCM5804 (VSE) (= ATCC 29212), MIC = 6.25 μg/mL, Linezolid, MIC = 1.56 μg/mL; *Enterococcus faecium* JU1858 (VRE, VanA), MIC = 6.25 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Enterococcus faecium* JU1777 (VRE, VanB), MIC = 6.25 μg/mL, Linezolid, MIC = 1.56 μg/mL; *Enterococcus gallinarum* JU2786 (VRE, VanC), MIC = 6.25 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Staphylococcus aureus* JCM2874 (MSSA) (=ATCC29213), MIC = 6.25 μg/mL, Linezolid, MIC = 1.56 μg/mL; *Staphylococcus aureus* (MRSA, 10 strains), MIC = 6.25 μg/mL, Linezolid, MIC = 0.78 μg/mL; *Staphylococcus aureus* (MRSA, 8 strains), mean MIC₈₀ = 6.25 μg/mL, Linezolid, mean MIC₈₀ = 0.78 μg/mL)^[5007]. Source: MENG SANG *Morus mongolica* (root cortex: yield = 0.0036%semi-dw). Ref: 3034, 5007.

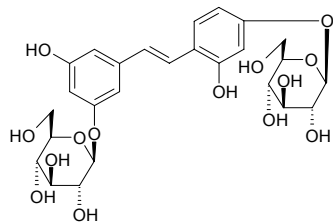
**15057 Mulberrofuran Z**

C₃₀H₃₆O₅ (476.62). Pale yellow amorphous solid. Pharm: Cytotoxic (HSC-2, CC₅₀ = 190 μmol/L, 89 μg/mL). Source: MENG SANG *Morus mongolica* (root cortex: yield = 0.00023%semi-dw). Ref: 3034.

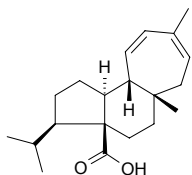


15058 Mulberroside A

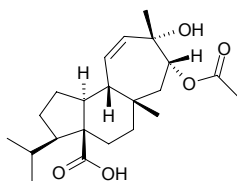
$C_{26}H_{32}O_{14}$ (568.54). Source: WEI JING BAI HE *Schoenocaulon officinale* (rhizome), *Morus lhou*. Ref: 2513, 4210.

**15059 Mulin-11,13-dien-20-oic acid**

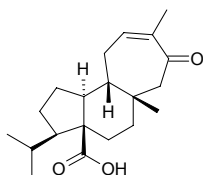
$C_{20}H_{30}O_2$ (302.46). Source: *Azorella yareta* (aerial parts). Ref: 5125.

**15060 Mulin-11-ene-13 α ,14 α -dihydroxy-20-oic acid**

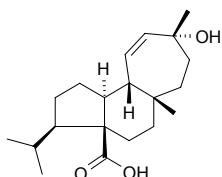
$C_{22}H_{34}O_5$ (378.51). Amber oil, $[\alpha]_D^{20} = -82.4^\circ$ ($c = 0.26$, Me_2CO). Source: DUO CI LUO CAO *Mulinum spinosum*. Ref: 3417.

**15061 Mulin-12-ene-14-one-20-oic acid**

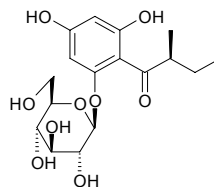
$C_{20}H_{30}O_3$ (318.46). White solid, mp 218–220°C, $[\alpha]_D^{20} = -46.1^\circ$ ($c = 0.36$, Me_2CO). Source: DUO CI LUO CAO *Mulinum spinosum*. Ref: 3417.

**15062 Mulinolic acid**

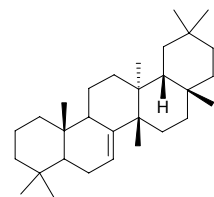
13-Hydroxymulin-11-en-20-oic acid $C_{20}H_{32}O_3$ (320.48). Pharm: Antimalarial (*in vivo Plasmodium berghei* NK65 on infected mouse, intraperitoneal 10mg/(kg·d), growth InRt on parasite erythrocytic life cycle = 25%; control Chloroquine, $IC_{50} = 2.5mg/(kg·d)$)^[3815]. Source: MI XIAO YING QIN *Azorella compacta* (aerial parts), *Azorella yareta* (aerial parts). Ref: 3815, 5125.

**15063 Multifidol glucoside**

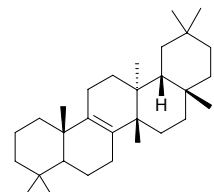
2-(2-Methylbutyryl)-phloroglucinol 1-*O*- β -D-glucopyranoside $C_{17}H_{24}O_9$ (372.38). Source: YOU GAN YE *Phyllanthus emblica* (leaf and branch). Ref: 4205.

**15064 Multiflor-7-ene**

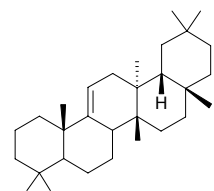
D: *C*-Friedolean-7-ene [72247-03-1] $C_{30}H_{50}$ (410.73). mp 146–147°C. Source: SHUI LONG GU *Polypodium niponicum*, *Polypodium* spp. Ref: 1414, 4048.

**15065 Multiflor-8-ene**

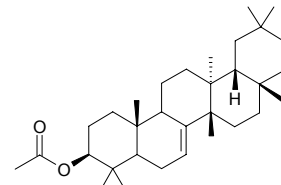
[65343-59-9] $C_{30}H_{50}$ (410.73). Source: SHUI LONG GU *Polypodium niponicum*. Ref: 1414.

**15066 Multiflor-9(11)-ene**

[88206-86-4] $C_{30}H_{50}$ (410.73). Source: SHUI LONG GU *Polypodium niponicum*. Ref: 1414.

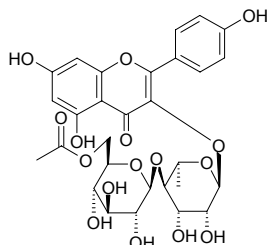
**15067 Multiflor-7-ene-3 β -yl acetate**

$C_{32}H_{52}O_2$ (468.77). Source: SHUI LONG GU *Polypodium niponicum*. Ref: 1414.

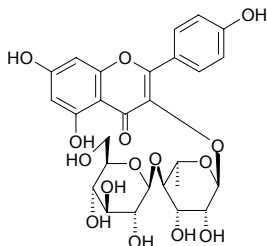


15068 Multiflorin A

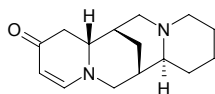
Prunuside A $C_{29}H_{32}O_{16}$ (636.57). **Pharm:** Laxative (mus, $ED_{50} = 30\text{mg/kg}$, a large intestine laxative agent similar to sennoside A). **Source:** FENG WEI PA SHAN HU *Arthromeris mairei* [Syn. *Polypodium mairei*], QIANG WEI GEN *Rosa multiflora*, TAO *Prunus persica*, YU LI REN *Prunus japonica* [Syn. *Cerasus japonica*] (ripe seed: content = 0.29%^[5501]). **Ref:** 533, 660, 5501.

**15069 Multiflorin B**

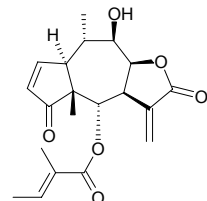
Prunuside B $C_{27}H_{30}O_{15}$ (594.53). Yellow powder, mp 188–189°C (water-ethanol), $[\alpha]_D^{30} = -38^\circ$ (pyridine); mp 190–200°C, 205–210°C, $[\alpha]_D^{16} = -92.7^\circ$ ($c = 0.63$, methanol). **Pharm:** Laxative (mus, $ED_{50} = 222\text{mg/kg}$). **Source:** CHANG GENG YU LI REN *Prunus japonica* var. *nakaii*, MU MIAN HUA *Bombax malabaricum* [Syn. *Gossampinus malabarica*], OU LI REN *Prunus humilis* [Syn. *Cerasus humilis*], QIANG WEI GEN *Rosa multiflora*, TAO *Prunus persica*, TAO HUA *Prunus persica*, YU LI REN *Prunus japonica* [Syn. *Cerasus japonica*] (ripe seed: content = 0.70%^[5501]). **Ref:** 661, 1444, 5501.

**15070 Multiflorine**

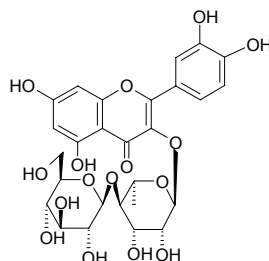
[529-80-6] $C_{15}H_{22}N_2O$ (246.36). **Pharm:** CNS depressant. **Source:** BAI YU SHAN DOU *Lupinus albus*. **Ref:** 658.

**15071 Multigilin**

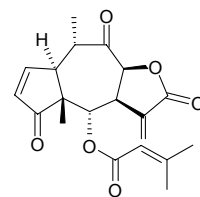
[64937-25-3] $C_{20}H_{24}O_6$ (360.41). Colorless crystals (acetone–heptane), mp 226–230°C (dec). **Pharm:** Antineoplastic (mus P_{388} , 12.2mg/kg, biotic prolonged rate = 64%). **Source:** BAI LAI SHI JU *Baileya multiradiata*. **Ref:** 5, 661.

**15072 Multinoside A**

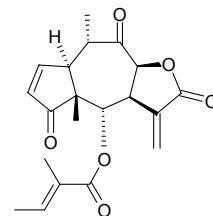
[59262-54-3] $C_{27}H_{30}O_{16}$ (610.53). **Source:** CHANG GENG YU LI REN *Prunus japonica* var. *nakaii*, OU LI REN *Prunus humilis* [Syn. *Cerasus humilis*], YU LI REN *Prunus japonica* [Syn. *Cerasus japonica*]. **Ref:** 1444.

**15073 Multiradiatin**

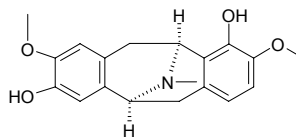
[58262-52-5] $C_{20}H_{22}O_6$ (358.39). mp 226–230°C (dec). **Pharm:** Antineoplastic (mus P_{388} *in vitro*, $ED_{50} = 0.02\mu\text{g/mL}$, KB, EC = 0.12 $\mu\text{g/mL}$, L_{1210} , EC = 0.028 $\mu\text{g/mL}$). **Source:** BAI LAI SHI JU *Baileya multiradiata*. **Ref:** 5, 658.

**15074 Multisatin**

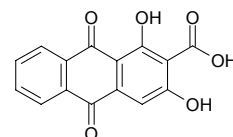
[64937-26-4] $C_{20}H_{22}O_6$ (358.39). mp 257–260°C. **Pharm:** Antineoplastic (mus P_{388} *in vitro*, $ED_{50} = 0.37\mu\text{g/mL}$, *in vivo* 32mg/kg, biotic prolonged rate = 31%). **Source:** BAI LAI SHI JU *Baileya multiradiata*. **Ref:** 5, 658, 1521.

**15075 (–)-Munitagine**

$C_{19}H_{21}NO_4$ (327.38). **Source:** HOU KE GUI *Cryptocarya chinensis* (leaf). **Ref:** 4129.

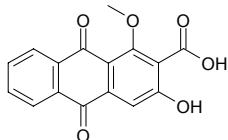
**15076 Munjistin**

[478-06-8] $C_{15}H_8O_6$ (284.23). mp 229–230°C. **Source:** QIAN CAO GEN *Rubia cordifolia*, YANG JIAO TENG *Morinda umbellata*. **Ref:** 6.

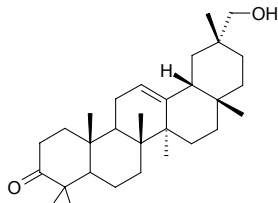


15077 Munjistin methyl ether

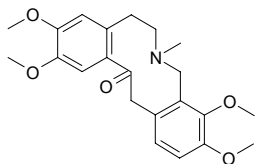
$C_{16}H_{10}O_6$ (298.25). Source: GUANG JING QIAN CAO *Rubia wallichiana* (stem), MAO XIAN ZHU JU TAI *Rhynchosychem vestitum*. Ref: 1521, 4369.

**15078 Mupinensione**

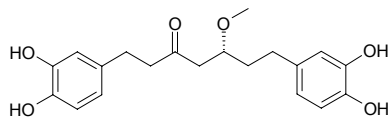
$C_{30}H_{48}O_2$ (440.72). Colorless acicular crystals (methanol), mp 230~231°C. Source: BAO XING WEI MAO *Euonymus mupinensis*. Ref: 278.

**15079 Muramine**

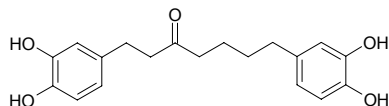
Cryptopalmatine [2292-20-8] $C_{22}H_{27}NO_5$ (385.46). Source: HEI SHUI YE YING SU *Papaver nudicaule* ssp. *amurense*. Ref: 1321.

**15080 Muricarpone A**

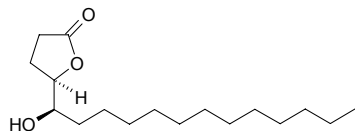
$C_{20}H_{24}O_6$ (360.41). Syrup, $[\alpha]_D^{25} = -7.1^\circ$ ($c = 0.88$, MeOH). Source: YOU GUO DOU KOU *Amomum muricarpum* (rhizome: yield = 0.001%dw). Ref: 927.

**15081 Muricarpone B**

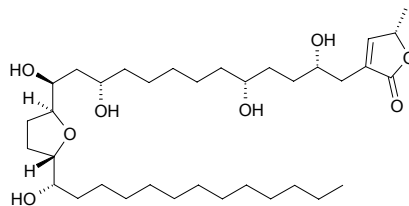
$C_{19}H_{22}O_5$ (330.38). Syrup. Source: YOU GUO DOU KOU *Amomum muricarpum* (rhizome: yield = 0.036%dw). Ref: 927.

**15082 Muricatacin**

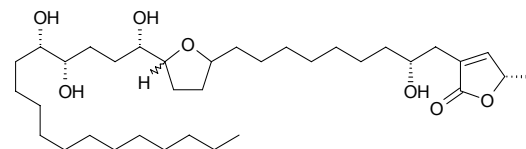
[134698-86-5] $C_{17}H_{32}O_3$ (284.44). mp 50°C, $[\alpha]_D^{20} = -16.1^\circ$. Pharm: Cytotoxic (A549, $ED_{50} = 23.3\mu\text{g/mL}$, MCF7, $ED_{50} = 9.8\mu\text{g/mL}$, HT29, $ED_{50} = 14.0\mu\text{g/mL}$). Source: CI GUO FAN LI ZHI *Annona muricata*. Ref: 1549.

**15083 Muricatacin**

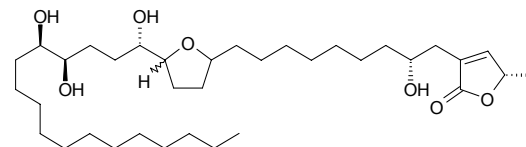
[179308-46-4] $C_{35}H_{64}O_8$ (612.90). White crystals, mp 105~106°C, $[\alpha]_D^{20} = +17.7^\circ$ ($c = 0.4$, methanol). Source: CI GUO FAN LI ZHI *Annona muricata*. Ref: 385.

**15084 Muricatetrocin A**

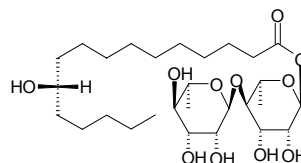
[153125-14-5] $C_{35}H_{64}O_7$ (596.90). mp 102°C, $[\alpha]_D^{25} = 10.3^\circ$ ($c = 0.15$, chloroform); mixed with muricatetrocin B, colorless oil, $[\alpha]_D^{25} = +22.2^\circ$ ($c = 0.25$, CHCl_3). Pharm: Cytotoxic (A549, $ED_{50} = 0.14\mu\text{g/mL}$, MCF7, $ED_{50} = 1.03\mu\text{g/mL}$, HT29, $ED_{50} \leq 10^{-8}\mu\text{g/mL}$, BST, $LC_{50} = 1.4\mu\text{g/mL}$, PD experiment, tumor inhibition rate = 76%); cytotoxic (*in vitro*, mixed with Muricatetrocin B, HepG2, $IC_{50} = 0.0495\mu\text{g/mL}$, Hep2,2,15, $IC_{50} = 0.00483\mu\text{g/mL}$; control Adriamycin, HepG2, $IC_{50} = 0.241\mu\text{g/mL}$, Hep2,2,15, $IC_{50} = 0.45\mu\text{g/mL}$)^[3067]. Source: CI GUO FAN LI ZHI *Annona muricata*, CI GUO FAN LI ZHI *Annona muricata* (seed)^[3067]. Ref: 1550, 3067.

**15085 Muricatetrocin B**

[153220-48-5] $C_{35}H_{64}O_7$ (596.90). mp 89~90°C, $[\alpha]_D^{25} = 15.0^\circ$ ($c = 0.43$, chloroform); mixed with muricatetrocin A, colorless oil, $[\alpha]_D^{25} = +22.2^\circ$ ($c = 0.25$, CHCl_3). Pharm: Cytotoxic (A549, $ED_{50} = 0.49\mu\text{g/mL}$, MCF7, $ED_{50} = 1.86\mu\text{g/mL}$, HT29, $ED_{50} = 0.028\text{ng/mL}$, BST, $LC_{50} = 1.8\mu\text{g/mL}$, PD experiment, tumor inhibition rate = 53%); cytotoxic (*in vitro*, mixed with Muricatetrocin A, HepG2, $IC_{50} = 0.0495\mu\text{g/mL}$, Hep2,2,15, $IC_{50} = 0.00483\mu\text{g/mL}$; control Adriamycin, HepG2, $IC_{50} = 0.241\mu\text{g/mL}$, Hep2,2,15, $IC_{50} = 0.45\mu\text{g/mL}$)^[3067]. Source: CI GUO FAN LI ZHI *Annona muricata*, CI GUO FAN LI ZHI *Annona muricata* (seed)^[3067]. Ref: 1550, 3067.

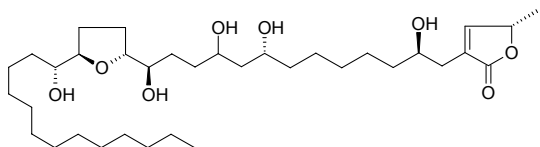
**15086 Muricatin B**

[68124-11-8] $C_{28}H_{52}O_{11}$ (564.72). Source: WU ZHAO LONG *Ipomoea cairica* [Syn. *Ipomoea palmata*]. Ref: 6.

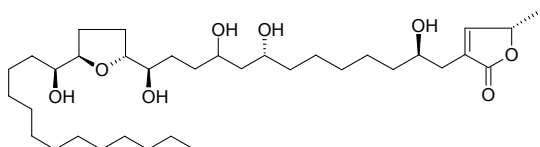


15087 Muricatocin A

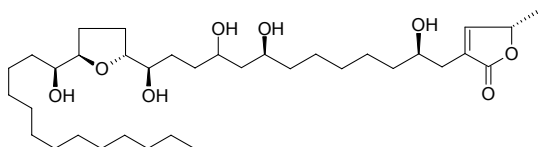
[167172-79-4] C₃₅H₆₄O₈ (612.90). White amorphous powder, $[\alpha]_D^{22} = +21.8^\circ$ ($c = 0.001$, ethanol). **Pharm:** Cytotoxic (hmn A549, ED₅₀ = 0.0755 μg/mL, MCF7, ED₅₀ = 0.123 μg/mL, HT29, ED₅₀ = 1.56 μg/mL, BST, LC₅₀ = 0.699 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata*. **Ref:** 1048.

**15088 Muricatocin B**

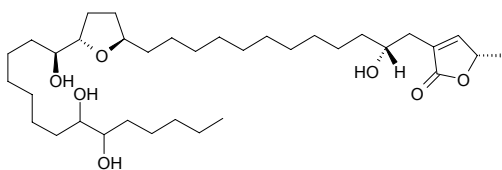
[167355-38-6] C₃₅H₆₄O₈ (612.90). White amorphous powder, $[\alpha]_D^{22} = +62.5^\circ$ ($c = 0.001$, ethanol). **Pharm:** Cytotoxic (hmn A549, ED₅₀ = 0.334 μg/mL, MCF7, ED₅₀ = 0.103 μg/mL, HT29, ED₅₀ = 1.66 μg/mL, BST LC₅₀ 0.557 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata*. **Ref:** 1048.

**15089 Muricatocin C**

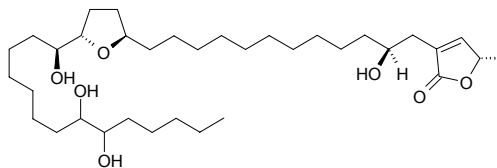
[167355-40-0] C₃₅H₆₄O₈ (612.90). White amorphous powder, $[\alpha]_D^{22} = +32.5^\circ$ ($c = 0.001$, ethanol). **Pharm:** Cytotoxic (hmn A549, ED₅₀ = 0.0909 μg/mL, MCF7, ED₅₀ = 0.0645 μg/mL, HT29, ED₅₀ = 1.48 μg/mL, BST, LC₅₀ = 0.604 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata*. **Ref:** 1049.

**15090 Muricin A**

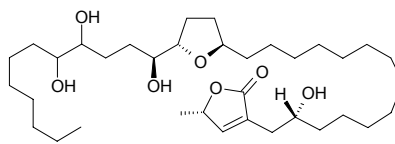
C₃₃H₆₄O₇ (596.9). White waxy solid, $[\alpha]_D^{25} = +7.2^\circ$ ($c = 0.25$, CHCl₃). **Pharm:** Cytotoxic (*in vitro*, HepG2, IC₅₀ = 5.04 μg/mL, Hep2,2,15, IC₅₀ = 0.00513 μg/mL; control Adriamycin, HepG2, IC₅₀ = 0.241 μg/mL, Hep2,2,15, IC₅₀ = 0.45 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed). **Ref:** 3067.

**15091 Muricin B**

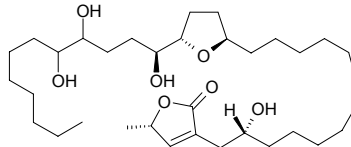
C₃₃H₆₄O₇ (596.9). White waxy solid, $[\alpha]_D^{25} = 0^\circ$ ($c = 0.11$, CHCl₃). **Pharm:** Cytotoxic (*in vitro*, HepG2, IC₅₀ = 1.78 μg/mL, Hep2,2,15, IC₅₀ = 0.00429 μg/mL; control Adriamycin, HepG2, IC₅₀ = 0.241 μg/mL, Hep2,2,15, IC₅₀ = 0.45 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed). **Ref:** 3067.

**15092 Muricin C**

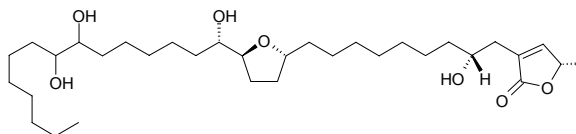
C₃₃H₆₄O₇ (596.9). White waxy solid, $[\alpha]_D^{25} = +86.0^\circ$ ($c = 0.15$, CHCl₃). **Pharm:** Cytotoxic (*in vitro*, HepG2, IC₅₀ = 0.499 μg/mL, Hep2,2,15, IC₅₀ = 0.00387 μg/mL; control Adriamycin, HepG2, IC₅₀ = 0.241 μg/mL, Hep2,2,15, IC₅₀ = 0.45 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed). **Ref:** 3067.

**15093 Muricin D**

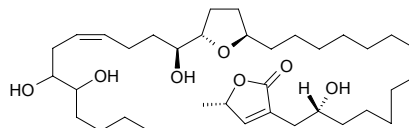
C₃₃H₆₀O₇ (568.84). White waxy solid, $[\alpha]_D^{25} = +77.6^\circ$ ($c = 0.34$, CHCl₃). **Pharm:** Cytotoxic (*in vitro*, HepG2, IC₅₀ = 0.00066 μg/mL, Hep2,2,15, IC₅₀ = 0.048 μg/mL; control Adriamycin, HepG2, IC₅₀ = 0.241 μg/mL, Hep2,2,15, IC₅₀ = 0.45 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed). **Ref:** 3067.

**15094 Muricin E**

C₃₃H₆₀O₇ (568.84). White waxy solid, $[\alpha]_D^{25} = +91.4^\circ$ ($c = 0.23$, CHCl₃). **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed). **Ref:** 3067.

**15095 Muricin F**

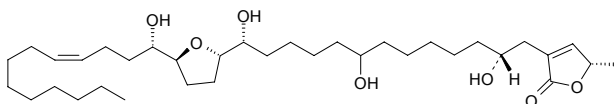
C₃₃H₆₂O₇ (594.88). White waxy solid, $[\alpha]_D^{25} = +48.2^\circ$ ($c = 0.48$, CHCl₃). **Pharm:** Cytotoxic (*in vitro*, HepG2, IC₅₀ = 0.0428 μg/mL, Hep2,2,15, IC₅₀ = 0.00386 μg/mL; control Adriamycin, HepG2, IC₅₀ = 0.241 μg/mL, Hep2,2,15, IC₅₀ = 0.45 μg/mL). **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed). **Ref:** 3067.



15096 Muricin G

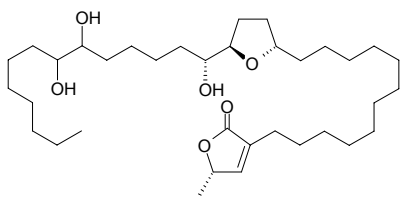
$C_{35}H_{62}O_7$ (594.88). White waxy solid, $[\alpha]_D^{25} = +47.0^\circ$ ($c = 0.63$, $CHCl_3$).

Source: CI GUO FAN LI ZHI *Annona muricata* (seed). **Ref:** 3067.

**15097 Muricin H**

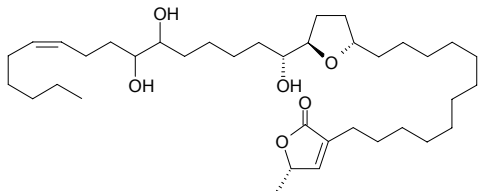
$C_{35}H_{64}O_6$ (580.9). Colorless waxy solid, $[\alpha]_D^{25} = +9.5^\circ$ ($c = 0.76$, $CHCl_3$).

Pharm: Cytotoxic (*in vitro*, HepG2, $IC_{50} = 0.0951\mu g/mL$, control Adriamycin, $IC_{50} = 0.241\mu g/mL$; Hep2,2,15, $IC_{50} = 0.0118\mu g/mL$, control Adriamycin, $IC_{50} = 0.45\mu g/mL$). **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed: yield = 0.01%dw). **Ref:** 4617.

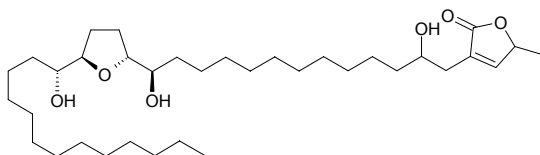
**15098 Muricin I**

$C_{37}H_{66}O_6$ (606.93). White waxy solid, $[\alpha]_D^{25} = +88.0^\circ$ ($c = 0.25$, $CHCl_3$). **Pharm:**

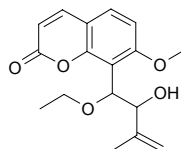
Cytotoxic (*in vitro*, HepG2, $IC_{50} = 0.0509\mu g/mL$, control Adriamycin, $IC_{50} = 0.241\mu g/mL$; Hep2,2,15, $IC_{50} = 0.222\mu g/mL$, control Adriamycin, $IC_{50} = 0.45\mu g/mL$). **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed: yield = 0.001%dw). **Ref:** 4617.

**15099 Murisolin**

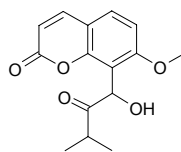
[129683-96-1] $C_{35}H_{64}O_6$ (580.90). mp 62~64°C. **Source:** CI GUO FAN LI ZHI *Annona muricata* (seed: yield = 0.0008%dw; leaf: yield = 0.0001%dw)^[4617], JIN PING GE NA XIANG *Goniothalamus leiocarpus*, NIU XIN FAN LI ZHI *Annona reticulata*. **Ref:** 420, 432, 4617.

**15100 Murpanicin**

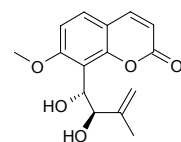
Muraxocin [113349-35-2] $C_{17}H_{20}O_5$ (304.35). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. **Ref:** 11, 1335.

**15101 (±)-Murpaniculol**

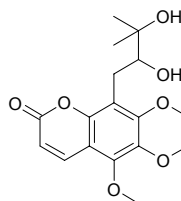
[112458-25-0] $C_{15}H_{16}O_5$ (276.29). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 1336.

**15102 (S)-Murpanidin**

[88546-96-7] $C_{15}H_{16}O_5$ (276.29). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 11.

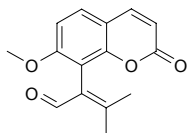
**15103 Murragleinin**

$C_{17}H_{22}O_7$ (338.36). $[\alpha]_D^{24} = -4.7^\circ$ ($c = 0.2$, MeOH). **Pharm:** Platelet aggregation inhibitor (washed rabbit platelets, induced by thrombin, AA, collagen and PAF, 100 $\mu g/mL$: thrombin = 0.1U/mL, AggRt = (89.3 \pm 2.8)%, $p < 0.05$, control, AggRt = (80.0 \pm 1.1)%; AA = 100 $\mu mol/L$, AggRt = (77.0 \pm 2.6)%, control, AggRt = (77.0 \pm 1.5)%; collagen = 10 $\mu g/mL$, AggRt = (71.3 \pm 2.2)%, $p < 0.05$, control, AggRt = (78.3 \pm 1.3)%; PAF = 1ng/mL, AggRt = (79.0 \pm 3.6)%, control, AggRt = (82.5 \pm 1.5)%). **Source:** QI GUO JIU LI XIANG *Murraya omphalocarpa* (leaf). **Ref:** 5417.

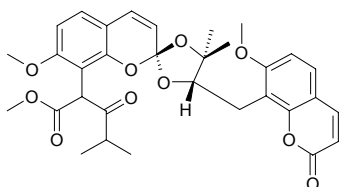


15104 Murralongin

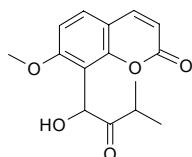
[53011-72-6] C₁₅H₁₄O₄ (258.28). mp 135°C. **Pharm:** Platelet aggregation inhibitor (washed rabbit platelets, induced by thrombin, AA, collagen and PAF, 100µg/mL: thrombin = 0.1U/mL, AggRt = (77.3±1.8)%, control, AggRt = (80.0±1.1)%; AA = 100µmol/L, AggRt = (73.0±3.1)%, control, AggRt = (77.0±1.5)%; collagen = 10µg/mL, AggRt = (70.0±0.9)%, p<0.001, control, AggRt = (78.3±1.3)%; PAF = 1ng/mL, AggRt = (77.0±2.9)%, control, AggRt = (82.5±1.5)%^[5417]. **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], QI GUO JIU LI XIANG *Murraya omphalocarpa* (leaf), YAN JIAO CAO *Boeminghamenia albiflora*. **Ref:** 11, 1521, 2495, 5417.

**15105 Murramarin A**

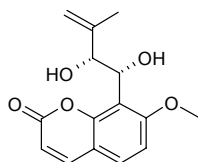
C₃₂H₃₄O₁₀ (578.62). Colorless oil, [α]_D²⁰ = +96° (c = 0.135, MeOH). **Source:** ZHONG HUA JIU LI XIANG *Murraya exotica* (vegetative branches). **Ref:** 4510.

**15106 (+)-Murranganone**

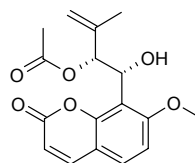
[112789-91-0] C₁₅H₁₆O₅ (276.29). [α]_D²⁰ = +105.8° (c = 0.06, CHCl₃) **Source:** XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. **Ref:** 1272.

**15107 Murrangatin**

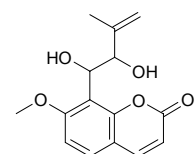
C₁₅H₁₆O₅ (276.29). [α]_D²⁴ = +6.8° (c = 0.7, MeOH). **Pharm:** Platelet aggregation inhibitor (washed rabbit platelets, induced by thrombin, AA, collagen and PAF, 100µg/mL: thrombin = 0.1U/mL, AggRt = (81.7±1.9)%, control, AggRt = (80.0±1.1)%; AA = 100µmol/L, AggRt = (71.0±1.7)%, control, AggRt = (77.0±1.5)%; collagen = 10µg/mL, AggRt = (69.7±0.03)%, p<0.001, control, AggRt = (78.3±1.3)%; PAF = 1ng/mL, AggRt = (80.0±2.4)%, control, AggRt = (82.5±1.5)%). **Source:** QI GUO JIU LI XIANG *Murraya omphalocarpa* (leaf). **Ref:** 5417.

**15108 Murrangatin acetate**

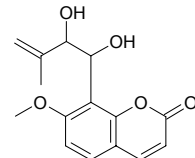
C₁₇H₁₈O₆ (318.33). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 1336.

**15109 erythro-Murrangatin**

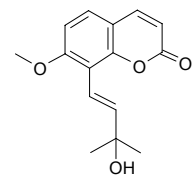
C₁₅H₁₆O₅ (276.29). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 1337.

**15110 threo-Murrangatin**

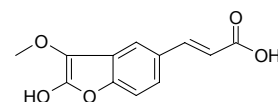
C₁₅H₁₆O₅ (276.29). Needle crystals (Et₂O-CHCl₃), mp 133°C, [α]_D²⁰ = -3° (c = 0.49, CHCl₃). **Source:** JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. **Ref:** 1521.

**15111 Murraol**

C₁₅H₁₆O₄ (260.29). **Source:** XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. **Ref:** 1272.

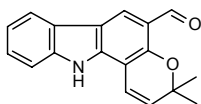
**15112 Murraxonin**

[113270-89-6] C₁₂H₁₀O₅ (234.21). **Source:** XIAO YE JIU LI XIANG *Murraya paniculata* var. *exotica*. **Ref:** 1338.

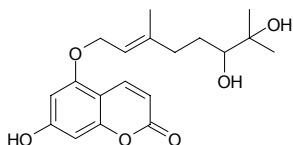


15113 Murrayacine

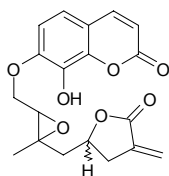
[27300-29-4] C₁₈H₁₅NO₂ (277.33). Source: YIN DU JIU LI XIANG *Murraya koenigii*. Ref: 11.

**15114 Murrayacoumarin A**

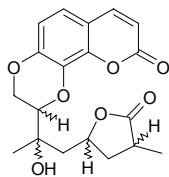
C₁₉H₂₄O₆ (348.40). Colorless oil, $[\alpha]_D^{24} = +7.9^\circ$ ($c = 0.114$, MeOH). Pharm: EBV-EA inhibitor (TPA-induced, IC₅₀ = 230 Mol ratio/32 pmol TPA, control β -Carotene, IC₅₀ = 400 Mol ratio/32 pmol TPA). Source: YUAN DONG JIU LI XIANG *Murraya siamensis* (leaf). Ref: 5255.

**15115 Murrayacoumarin B**

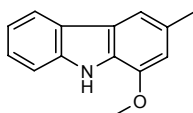
C₁₉H₂₈O₇ (358.35). Colorless oil, $[\alpha]_D^{24} = +64.1^\circ$ ($c = 0.103$, MeOH). Pharm: EBV-EA inhibitor (TPA-induced, IC₅₀ = 465 Mol ratio/32 pmol TPA, control β -Carotene, IC₅₀ = 400 Mol ratio/32 pmol TPA). Source: YUAN DONG JIU LI XIANG *Murraya siamensis* (leaf). Ref: 5255.

**15116 Murrayacoumarin C**

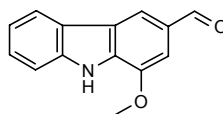
C₁₉H₂₀O₇ (360.37). Colorless oil, $[\alpha]_D^{24} = +79.0^\circ$ ($c = 0.371$, MeOH). Pharm: EBV-EA inhibitor (TPA-induced, IC₅₀ = 442 Mol ratio/32 pmol TPA, control β -Carotene, IC₅₀ = 400 Mol ratio/32 pmol TPA). Source: YUAN DONG JIU LI XIANG *Murraya siamensis* (leaf). Ref: 5255.

**15117 Murrayafoline A**

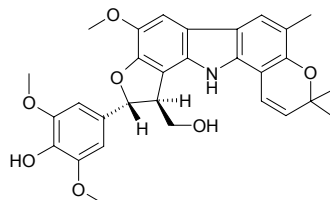
C₁₄H₁₃NO (211.27). Brown oil. Source: DOU YE JIU LI XIANG *Murraya euchrestifolia* [Syn. *Clausena euchrestifolia*], TAI WAN JIU LI XIANG *Murraya crenulata*, XIA GUO SHAN XIAO JU GEN *Glycosmis stenocarpa*. Ref: 11, 2569.

**15118 Murrayanine**

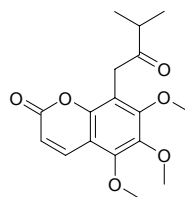
[723-97-7] C₁₄H₁₁NO₂ (225.25). Colorless rhombic crystals, mp 168°C; Silver white plates (EtOAc), mp 155°C. Pharm: Cytotoxic (KB, ED₅₀ = 26µg/mL); platelet aggregation inhibitor (rbt, due to collagen, arachidonic acid and PAF); antibacterial inactive (*Mycobacterium tuberculosis*; control Isoniazide, MIC = 0.040–0.090µg/mL, kanamycin sulfate, MIC = 2.0–5.0µg/mL)^[5367]; antifungal inactive (*Candida albicans*; control Amphotericin, IC₅₀ = 0.01µg/mL)^[5367]. Source: DOU YE JIU LI XIANG *Murraya euchrestifolia* [Syn. *Clausena euchrestifolia*], JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*], SHAN HUANG PI *Clausena excavata*, XIA GUO SHAN XIAO JU GEN *Glycosmis stenocarpa*, YIN DU JIU LI XIANG *Murraya koenigii*, YUAN DONG JIU LI XIANG *Murraya siamensis*. Ref: 11, 658, 2569, 5367.

**15119 Murrayanine II***

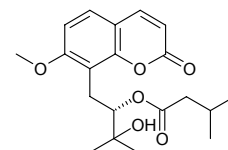
C₃₀H₃₁NO₇ (517.58). Brown powder, $[\alpha]_D^{25} = +8.0^\circ$ ($c = 0.74$, CH₃OH). Source: YIN DU JIU LI XIANG *Murraya koenigii* (aerial parts). Ref: 4681.

**15120 Murrayanone**

C₁₇H₂₀O₆ (320.35). Pharm: Platelet aggregation inhibitor (washed rabbit platelets, induced by thrombin, AA, collagen and PAF, 100µg/mL; thrombin = 0.1U/mL, AggRt = (78.7±1.7)%, control, AggRt = (80.0±1.1)%; AA = 100µmol/L, AggRt = (66.7±7.8)%, $p < 0.001$, control, AggRt = (77.0±1.5)%; collagen = 10µg/mL, AggRt = (71.7±1.2)%, $p < 0.01$, control, AggRt = (78.3±1.3)%; PAF = 1ng/mL, AggRt = (75.7±0.1)%, $p < 0.01$, control, AggRt = (82.5±1.5)%). Source: QI GUO JIU LI XIANG *Murraya omphalocarpa* (leaf). Ref: 5417.

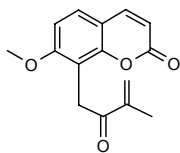
**15121 Murrayatin**

C₂₀H₂₆O₆ (362.43). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 1336.

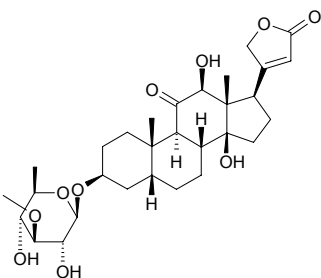


15122 Murrayone

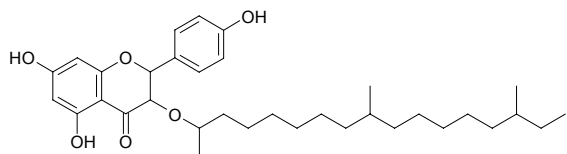
[19668-69-0] C₁₅H₁₄O₄ (258.28). Source: JIU LI XIANG *Murraya paniculata* [Syn. *Chalcas paniculata*]. Ref: 11.

**15123 Musaroside**

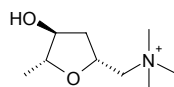
C₃₀H₄₄O₁₀ (564.68). Pharm: Toxin (vertebrate). Source: YANG JIAO AO ZI *Strophanthus divaricatus*. Ref: 658.

**15124 Muscanone**

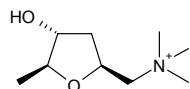
3-*O*-(1'',8'',14''-Trimethylhexadecanyl)naringenin C₃₄H₅₀O₆ (554.77).
Brownish solid, mp 124~126°C. Pharm: Antifungal (*Candida albicans*).
Source: A MAN SU DAN MO YAO *Commiphora wightii*. Ref: 2014.

**15125 Muscarine I**

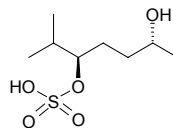
C₉H₂₀NO₂⁺ (174.24). mp 182°C. Source: MA HUA *Cannabis sativa*. Ref: 6.

**15126 Muscarine II**

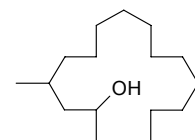
C₉H₂₀NO₂⁺ (174.27). Chloride (C₉H₂₀ClNO₂); thick prismatic crystals (ethanol-acetone), mp 180~181°C, [α]_D²⁵ = +8.1° (c = 3.5, ethanol). Pharm: Cholineoid action; CNS depressant (mus, *in vivo*, potentiates hypnotic effect of barbital); antihypertensive (cat, MED = 0.004μg/kg iodide); LD₅₀ (mus, iv) = 0.23mg/kg. Source: HUO MA REN *Cannabis sativa*. Ref: 661.

**15127 Musclide A₁**

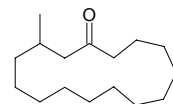
C₈H₁₈O₅S (226.29). Pharm: Enhances action of β-adrenalin. Source: SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. Ref: 1406.

**15128 Muscol**

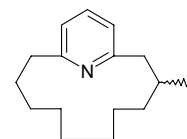
C₁₆H₃₂O (240.43). Source: SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. Ref: 2.

**15129 Muscone**

[541-91-3] C₁₆H₃₀O (238.42). Colorless liquid, bp (–) 130°C/0.5mmHg, [α]_D = –13°, insoluble in water, soluble in ethanol.^[5507] Pharm: Bidirectional action to drowsiness (excitation in low dose and inhibition in high dose); coronary vasodilator (increases coronary flow); increases tolerance to anoxia (mus, cardiac muscles, 100mg/kg ip); LD₅₀ (mus, iv) = 152~172mg/kg, (mus, ip) = 270~290mg/kg. Source: SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus* (dried secretion obtained from musk gland of musk deer: content scope = 0.50%~5.00%^[5501], content scope of 9 batch samples = 0.37%~5.30%, mean content = 2.91%^[5508]). Ref: 2, 4, 6, 658, 5501, 5507, 5508.

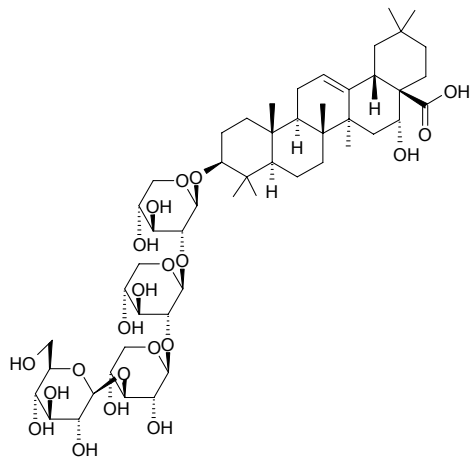
**15130 Muscopyridine**

C₁₆H₂₅N (231.38). Source: SHE XIANG *Moschus moschiferus*; *Moschus berezovskii*; *Moschus sifanicus*. Ref: 2.

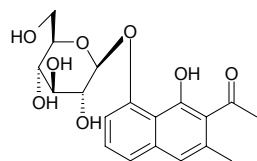


15131 Musennin

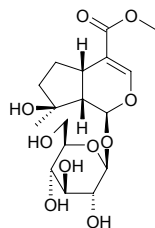
$C_{51}H_{82}O_{21}$ (1031.21). **Pharm:** Anthelmintic. **Source:** QU CHONG HE HUAN *Albizia anthelmintica*. **Ref:** 658.

**15132 Musizin-8-O-β-D-glucoside**

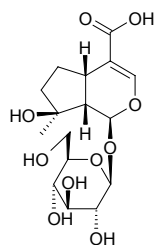
$C_{19}H_{22}O_8$ (378.38). **Source:** DA HUANG *Rheum officinale*. **Ref:** 2.

**15133 Mussaenoside**

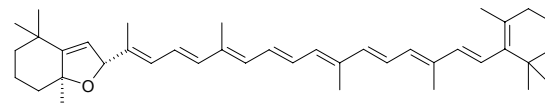
Linearoside $C_{17}H_{26}O_{10}$ (390.39). **Source:** SI CHI SI LENG CAO *Schnabelia tetradonta* (aerial parts: yield = 0.0021%dw). **Ref:** 4665.

**15134 Mussaenosidic acid**

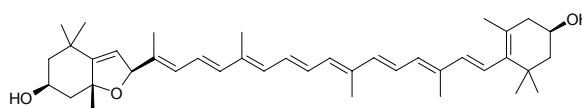
$C_{16}H_{24}O_{10}$ (376.36). $[\alpha]_D^{29} = -62.6^\circ$ ($c = 0.15$, MeOH). **Pharm:** Cytotoxic inactive (Vero cells)^[5456]; COX-2 inhibitor inactive^[5456]. **Source:** HUA YE JIA DU JUAN *Barleria lupulina* (flower), ROU CONG RONG *Cistanche deserticola*, GUAN HUA ROU CONG RONG *Cistanche tubulosa*. **Ref:** 2448, 5456.

**15135 Mutatochrome**

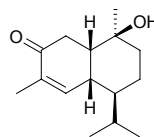
[515-06-6] $C_{40}H_{56}O$ (552.89). **Pharm:** Precursor to biosynthesis of vitamin A. **Source:** FAN MU GUA *Carica papaya*, FAN QIE *Lycopersicon esculentum*, TIAN CHENG *Citrus sinensis*, TONG HAO *Chrysanthemum coronarium*, *Calendula* sp., *Forsythia* sp. **Ref:** 658.

**15136 Mutatoxanthin**

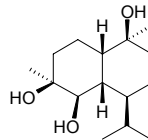
$C_{40}H_{56}O_2$ (568.89). **Source:** SU TIE SHU GUO *Cycas revoluta*. **Ref:** 1473, 1521.

**15137 Muurolan-3-en-9β-ol-2-one**

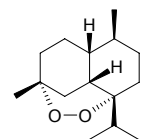
$C_{15}H_{24}O_2$ (236.36). **Source:** HUANG QI II *Engelhardia roxburghiana* (root). **Ref:** 5059.

**15138 Muurolane-4β,5β,10β-triol**

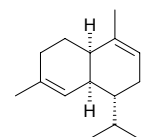
$C_{15}H_{28}O_3$ (256.39). mp 168–170°C, $[\alpha]_D^{27} = -6.4^\circ$ ($c = 0.14$, $CHCl_3$). **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (root). **Ref:** 4371.

**15139 (+)-Muurolan-4,7-peroxide**

$C_{15}H_{26}O_2$ (238.37). Colorless oil. **Source:** TIE JIAO JUE YU TAI *Plagiochila asplenioides* (essential oil). **Ref:** 5257.

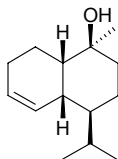
**15140 α-Muurolene**

$C_{15}H_{24}$ (204.36). **Source:** REN SHEN *Panax ginseng* [Syn. *Panax schinseng*], SAN QI *Panax pseudo-ginseng* var. *notoginseng* [Syn. *Panax notoginseng*]. **Ref:** 2, 1521.

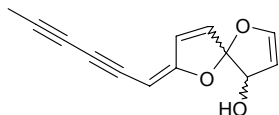


15141 T-Muurolol

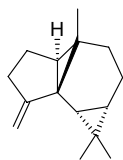
$C_{14}H_{24}O$ (208.35). **Pharm:** Cytotoxic (A549, $ED_{50} = 3.2\mu\text{mol/L}$, $ED_{50} = 14.7\mu\text{g/mL}$, control Adriamycin, $ED_{50} = 0.01\mu\text{mol/L}$, $ED_{50} = 0.02\mu\text{g/mL}$; MCF7, $ED_{50} = 0.6\mu\text{mol/L}$, $ED_{50} = 2.7\mu\text{g/mL}$, Adriamycin, $ED_{50} = 0.1\mu\text{mol/L}$, $ED_{50} = 0.1\mu\text{g/mL}$; HT29, $ED_{50} = 1.8\mu\text{mol/L}$, $ED_{50} = 8.0\mu\text{g/mL}$, Adriamycin, $ED_{50} = 0.1\mu\text{mol/L}$, $ED_{50} = 0.1\mu\text{g/mL}$)^[5088]. **Source:** TAI WAN SHAN *Taiwania cryptomerioides* (root,heartwood). **Ref:** 4371, 5088.

**15142 Mycosinol**

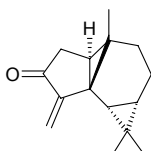
$C_{13}H_{10}O_3$ (214.22). **Pharm:** Antifungal. **Source:** QIAO GUAN JU *Coleostephus myconis*. **Ref:** 658.

**15143 (-)-(1R*,5S*,6R*,7S*,10S*)-Myli-4(15)-ene**

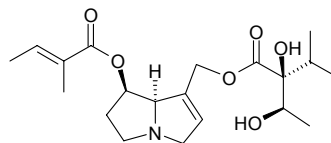
1,1,3a-Trimethyl-6-methylene-1,1a,2,3,3a,3b,4,5,6,6b-decahydrocyclopenta[2,3]cyclopropano[1,2-a]cyclopropano[c]benzene $C_{15}H_{22}$ (202.34). Colorless oil. **Source:** XIAO E TAI *Mylia taylorii* (essential oil), LUO XIAO E TAI *Mylia nuda* (essential oil). **Ref:** 3840.

**15144 (-)-(1S,5R,6R,7S,10S)-Myli-4(15)-en-3-one**

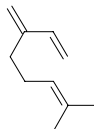
1,1,3a-Trimethyl-6-methylene-5-oxo-1,1a,2,3,3a,3b,4,-5,6,6b-decahydrocyclopenta[2,3]cyclopropano[1,2-a]cyclopropano[c]benzene $C_{15}H_{20}O$ (216.33). Colorless oil. **Source:** XIAO E TAI *Mylia taylorii* (essential oil), LUO XIAO E TAI *Mylia nuda* (essential oil). **Ref:** 3840.

**15145 Myoscorpine**

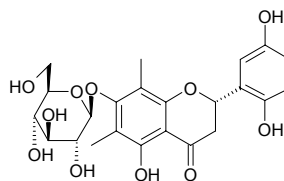
[82535-76-0] $C_{20}H_{31}NO_6$ (381.47). **Source:** ZI CAO *Lithospermum erythrorhizon*. **Ref:** 2193.

**15146 Myrcene**

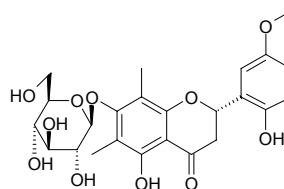
[123-35-3] $C_{10}H_{16}$ (136.24). **Pharm:** Antitussive (mouse, fog-ammonia method, 800mg/kg, perfusion in stomach, cough time of half the animals increased by 135%); dispels phlegm (mus, phenol red method, 400mg/kg and 800mg/kg, perfusion in stomach, output of phenol red increases 214% and 276% respectively); LD_{50} (mus, orl) $\geq 4.8\text{g/kg}$. **Source:** CHAI HU *Bupleurum chinense*, DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*], HUANG HAO *Artemisia scoparia* [Syn. *Artemisia capillaris* var. *scoparia*], HUANG HUA HAO *Artemisia annua*, JU PI *Citrus reticulata*, KUAN YE QIANG HUO *Notopterygium forbesii* [Syn. *Notopterygium franchetii*], LIAN QIAO *Forsythia suspensa*, LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*, MA HUANG *Ephedra sinica*, MU XIANG *Saussurea lappa* [Syn. *Aucklandia lappa*], MU XU *Medicago sativa*, TAI WAN CUI BAI *Calocedrus macrolepis* var. *formosana* (leaf), WU WEI ZI *Schisandra chinensis*, XI XIN *Asarum sieboldii*, XIANG YE *Pelargonium graveolens*, YAN JIAO CAO *Boenninghausenia albiflora*, YIN CHEN HAO *Artemisia capillaris*, YU XING CAO *Houttuynia cordata* (in 1925, the compound was isolated from the plant)^[5505]. **Ref:** 2, 660, 1446, 1447, 4298, 5505.

**15147 Myrciacitrin I**

$C_{23}H_{26}O_{11}$ (478.46). **Pharm:** Aldose reductase inhibitor (rat lens, $IC_{50} = 3.2\mu\text{mol/L}$, control Epalrestat, $IC_{50} = 0.072\mu\text{mol/L}$). **Source:** DUO HUA YANG MEI *Myrica multiflora* (leaf). **Ref:** 4174.

**15148 Myrciacitrin II**

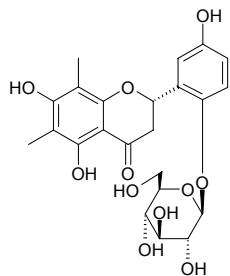
$C_{24}H_{28}O_{11}$ (492.48). **Pharm:** Aldose reductase inhibitor (rat lens, $IC_{50} = 15\mu\text{mol/L}$, control Epalrestat, $IC_{50} = 0.072\mu\text{mol/L}$). **Source:** DUO HUA YANG MEI *Myrica multiflora* (leaf). **Ref:** 4174.



15149 Myrciacitrin III

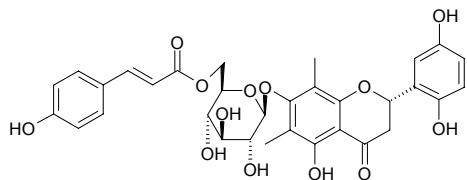
$C_{23}H_{26}O_{11}$ (478.46). Yellow powder, $[\alpha]_D^{25} = -104.2^\circ$ ($c = 0.16$, EtOH).

Pharm: Aldose reductase inhibitor (rat lens, $IC_{50} = 46\mu\text{mol/L}$, control Epalrestat, $IC_{50} = 0.072\mu\text{mol/L}$). **Source:** DUO HUA YANG MEI *Myrica multiflora* (leaf). **Ref:** 4174.

**15150 Myrciacitrin IV**

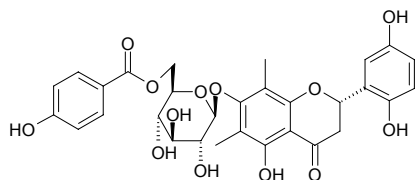
$C_{32}H_{32}O_{13}$ (624.60). Yellow powder, $[\alpha]_D^{26} = -99.2^\circ$ ($c = 0.68$, EtOH). **Pharm:**

Aldose reductase inhibitor (rat lens, $IC_{50} = 0.79\mu\text{mol/L}$, control Epalrestat, $IC_{50} = 0.072\mu\text{mol/L}$). **Source:** DUO HUA YANG MEI *Myrica multiflora* (leaf). **Ref:** 4174.

**15151 Myrciacitrin V**

$C_{30}H_{30}O_{13}$ (598.57). Yellow powder, $[\alpha]_D^{26} = +108.2.2^\circ$ ($c = 0.028$, EtOH).

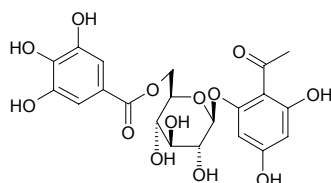
Pharm: Aldose reductase inhibitor (rat lens, $IC_{50} = 16\mu\text{mol/L}$, control Epalrestat, $IC_{50} = 0.072\mu\text{mol/L}$). **Source:** DUO HUA YANG MEI *Myrica multiflora* (leaf). **Ref:** 4174.

**15152 Myrciaphenone B**

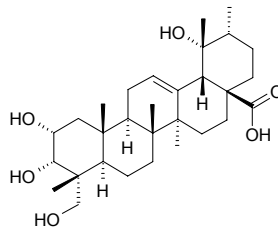
$C_{21}H_{22}O_{13}$ (482.40). $[\alpha]_D^{25} = -64^\circ$ ($c = 0.1$, MeOH). **Pharm:** Antifungal

(*Candida albicans* ATCC2091, MIC > 200 $\mu\text{g/mL}$, control Amphotericin B, MIC = 1 $\mu\text{g/mL}$; *Candida albicans* 32, MIC > 200 $\mu\text{g/mL}$, Amphotericin B, MIC = 4 $\mu\text{g/mL}$; *Candida albicans* 19, MIC = 200 $\mu\text{g/mL}$, Amphotericin B, MIC = 2 $\mu\text{g/mL}$); cytotoxic inactive (MIC > 200 $\mu\text{g/mL}$); antibacterial inactive.

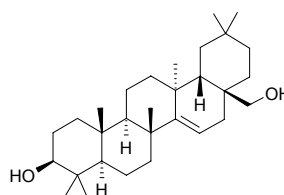
Source: *Baseonema acuminatum* (leaf). **Ref:** 5021.

**15153 Myrianthic acid**

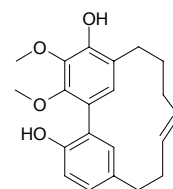
$C_{30}H_{48}O_6$ (504.71). **Source:** YANG TI *Rumex japonicus* (stem). **Ref:** 4541.

**15154 Myricadiol**

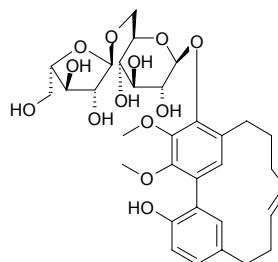
Myricadiol [17884-88-7] $C_{30}H_{50}O_2$ (442.73). **Pharm:** Inhibits degranulation and release of β -hexosaminidase (RBL-2H3 cells, 100 $\mu\text{mol/L}$, InRt = $(-12.0\pm 1.9)\%$, control Curcumin, 100 $\mu\text{mol/L}$, InRt = $(62.6\pm 1.0)\%$, did not affect the enzyme activity of β -hexosaminidase^[4163]. **Source:** YANG MEI SHU PI *Myrica rubra* (bark: yield = 0.020%^[4163]). **Ref:** 1422, 4163.

**15155 Myricanene A**

$C_{21}H_{24}O_4$ (340.42). White powder, a product with high activity by enzymatic hydrolysis of the glucoside. **Pharm:** Inhibits degranulation and release of β -hexosaminidase (RBL-2H3 cells, $IC_{50} = 98\mu\text{mol/L}$, control Curcumin, $IC_{50} = 82\mu\text{mol/L}$, $p < 0.01$, did not affect the enzyme activity of β -hexosaminidase). **Source:** YANG MEI SHU PI *Myrica rubra*. **Ref:** 4163.

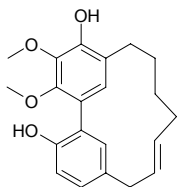
**15156 Myricanene A****5-O- α -L-arabinofuranosyl(1 \rightarrow 6)- β -D-glucopyranoside**

$C_{32}H_{42}O_{13}$ (634.68). White powder, $[\alpha]_D^{22} = -0.6^\circ$ ($c = 0.1$, EtOH). **Pharm:** Inhibits degranulation and release of β -hexosaminidase (RBL-2H3 cells, 100 $\mu\text{mol/L}$, InRt = $(7.9\pm 1.4)\%$, control Curcumin, 100 $\mu\text{mol/L}$, InRt = $(62.6\pm 1.0)\%$, did not affect the enzyme activity of β -hexosaminidase). **Source:** YANG MEI SHU PI *Myrica rubra* (bark: yield = 0.0032%). **Ref:** 4163.

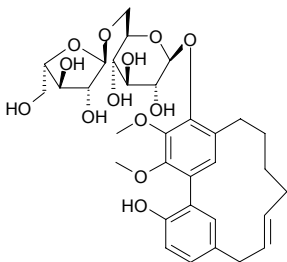


15157 Myricanene B

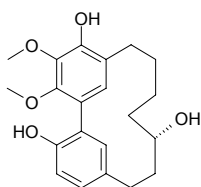
$C_{21}H_{24}O_4$ (340.42). White powder, a product with high activity by enzymatic hydrolysis of the glucoside. **Pharm:** Inhibits degranulation and release of β -hexosaminidase (RBL-2H3 cells, $IC_{50} \approx 100\mu\text{mol/L}$, control Curcumin, $IC_{50} = 82\mu\text{mol/L}$, $p < 0.01$, did not affect the enzyme activity of β -hexosaminidase). **Source:** YANG MEI SHU PI *Myrica rubra*. **Ref:** 4163.

**15158 Myricanene B 5-O- α -L-arabinofuranosyl(1 \rightarrow 6)- β -D-glucopyranoside**

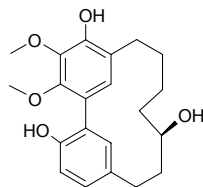
$C_{32}H_{42}O_{13}$ (634.68). White powder, $[\alpha]_D^{22} = -10.8^\circ$ ($c = 0.1$, EtOH). **Pharm:** Inhibits degranulation and release of β -hexosaminidase (RBL-2H3 cells, $100\mu\text{mol/L}$, InRt = $(-5.2 \pm 2.8)\%$, control Curcumin, $100\mu\text{mol/L}$, InRt = $(62.6 \pm 1.0)\%$, did not affect the enzyme activity of β -hexosaminidase). **Source:** YANG MEI SHU PI *Myrica rubra* (bark: yield = 0.0029%). **Ref:** 4163.

**15159 (+)-S-Myricanol**

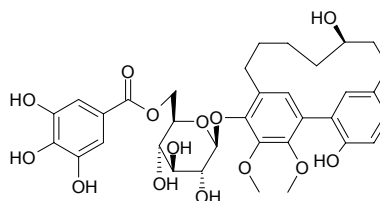
$C_{21}H_{26}O_5$ (358.44). White powder, $[\alpha]_D^{22} = +37.3^\circ$ ($c = 0.2$, CHCl_3), a product with high activity by enzymatic hydrolysis of the glucoside. **Pharm:** Inhibits degranulation and release of β -hexosaminidase (RBL-2H3 cells, $IC_{50} = 28\mu\text{mol/L}$, control Curcumin, $IC_{50} = 82\mu\text{mol/L}$, $p < 0.01$, did not affect the enzyme activity of β -hexosaminidase). **Source:** YANG MEI SHU PI *Myrica rubra*. **Ref:** 4163.

**15160 Myricanol**

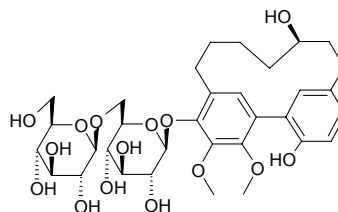
[33606-81-4] $C_{21}H_{26}O_5$ (358.44). **Pharm:** Inhibits degranulation and release of β -hexosaminidase (RBL-2H3 cells, $IC_{50} = 63\mu\text{mol/L}$, control Curcumin, $IC_{50} = 82\mu\text{mol/L}$, $p < 0.01$, did not affect the enzyme activity of β -hexosaminidase)^[4163]. **Source:** YANG MEI SHU PI *Myrica rubra* (bark: yield = 0.73%dw). **Ref:** 1421, 4163.

**15161 Myricanol galloyl glucoside**

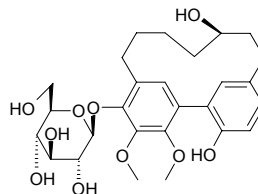
$C_{34}H_{40}O_{14}$ (672.69). **Source:** YANG MEI SHU PI *Myrica rubra*. **Ref:** 1247.

**15162 Myricanol gentiobioside**

$C_{33}H_{46}O_{15}$ (682.73). **Source:** YANG MEI SHU PI *Myrica rubra*. **Ref:** 1247.

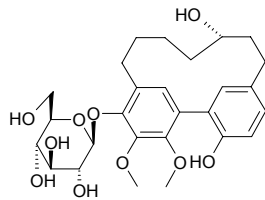
**15163 R-Myricanol 5-O- β -D-glucopyranoside**

$C_{27}H_{36}O_{10}$ (520.58). **Pharm:** Inhibits degranulation and release of β -hexosaminidase (RBL-2H3 cells, $100\mu\text{mol/L}$, InRt = $(6.7 \pm 5.5)\%$, control Curcumin, $100\mu\text{mol/L}$, InRt = $(62.6 \pm 1.0)\%$, did not affect the enzyme activity of β -hexosaminidase)^[4163]. **Source:** YANG MEI SHU PI *Myrica rubra* (bark: yield = 0.20%). **Ref:** 1421, 4163.

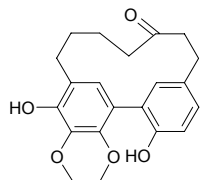


15164 (+)-S-Myricanol 5-O-β-D-glucopyranoside

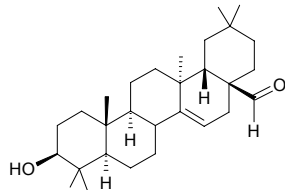
$C_{27}H_{36}O_{10}$ (520.58). White powder, $[\alpha]_D^{22} = +81.3^\circ$ ($c = 0.2$, EtOH). **Pharm:** Inhibits degranulation and release of β -hexosaminidase (RBL-2H3 cells, $100\mu\text{mol/L}$, $\text{InRt} = (-13.1 \pm 3.6)\%$, control Curcumin, $100\mu\text{mol/L}$, $\text{InRt} = (62.6 \pm 1.0)\%$, did not affect the enzyme activity of β -hexosaminidase). **Source:** YANG MEI SHU PI *Myrica rubra* (bark: yield = 0.074%). **Ref:** 4163.

**15165 Myricanone**

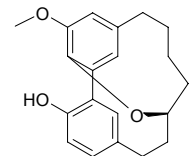
[32492-74-3] $C_{21}H_{24}O_5$ (356.42). **Pharm:** Inhibits degranulation and release of β -hexosaminidase (RBL-2H3 cells, $\text{IC}_{50} = 46\mu\text{mol/L}$, control Curcumin, $\text{IC}_{50} = 82\mu\text{mol/L}$, $p < 0.01$, did not affect the enzyme activity of β -hexosaminidase)^[4163]. **Source:** YANG MEI SHU PI *Myrica rubra* (bark: yield = 0.036%). **Ref:** 1421, 4163.

**15166 Myricaolal***

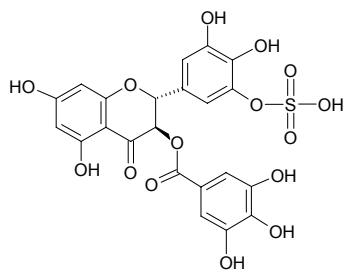
Myrkolal $C_{29}H_{46}O_2$ (426.69). **Source:** YANG MEI SHU PI *Myrica rubra*. **Ref:** 1247.

**15167 Myricarborin**

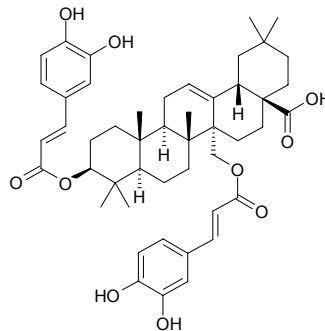
$C_{20}H_{22}O_3$ (310.40). Colorless plates (CH_2Cl_2), mp $141\text{--}143^\circ\text{C}$, $[\alpha]_D^{22} = +9.3^\circ$ ($c = 0.41$, MeOH). **Source:** QIAO MU ZHUANG YANG MEI *Myrica arborea* (stem and root cortex). **Ref:** 5079.

**15168 Myricatin**

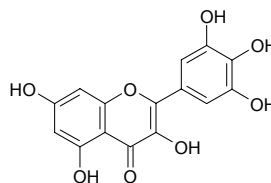
[87388-96-3] $C_{22}H_{16}O_{15}S$ (552.43). **Source:** YANG MEI SHU PI *Myrica rubra*. **Ref:** 1420.

**15169 Myriceric acid C**

$C_{48}H_{60}O_{10}$ (797.01). **Pharm:** Anti-HIV (H9 lymphocytic cells, inhibits replication, IC_{50} (concentration that inhibits uninfected H9 cell growth by 50%) = $14.95\mu\text{g/mL}$); cytotoxic (hmn, A549 $\text{EC}_{50} = 3.9\mu\text{g/mL}$, MCF7 $\text{EC}_{50} = 4.1\mu\text{g/mL}$). **Source:** TAI WAN FU RONG *Hibiscus taiwanensis*. **Ref:** 2529.

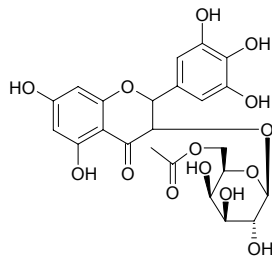
**15170 Myricetin**

3,3',4',5,5',7-Hexahydroxyflavone; Cannabiscetin; Myricetol [529-44-2] $C_{15}H_{10}O_8$ (318.24). mp $> 330^\circ\text{C}$. **Pharm:** Antibacterial (*Staphylococcus aureus*, *Bacillus coli*, *Bacillus dysenteriae*, *B. Typhosus*, *Pseudomonas maltophilia* and *Enteromorpha cloacae*); antineoplastic (B16 melanoma and L_{1210} , *in vivo*); anti-gonadotropin; cytotoxic (KB *in vitro*, $\text{EC} = 15\mu\text{g/mL}$); antitussive (dispels phlegm); diuretic; inhibits release and metabolism of arachidonic acid; aldose reductase inhibitor (mus eye lens, $100\mu\text{mol/L}$, $\text{InRt} = 100\%$); $\Delta(5)$ -lipoxygenase inhibitor; NADH oxidase inhibitor; succinic oxidase inhibitor; inhibits degranulation and release of β -hexosaminidase (RBL-2H3 cells, $\text{IC}_{50} = 23\mu\text{mol/L}$, control Curcumin, $\text{IC}_{50} = 82\mu\text{mol/L}$, $p < 0.01$, did not affect the enzyme activity of β -hexosaminidase)^[4163]; DPPH scavenger ($\text{IC}_{50} = (16.0 \pm 0.4)\mu\text{mol/L}$, control Trolox, $\text{IC}_{50} = (25.4 \pm 0.8)\mu\text{mol/L}$)^[4244]; LD (rbt, sc) = $8\text{--}10\text{g/kg}$. **Source:** BAI HUA YING SHAN HONG *Rhododendron mucronatum*, CAO YUAN DA JI *Euphorbia stepposa*, CE BAI YE *Thuja orientalis* [Syn. *Platyclusus orientalis*; *Biota orientalis*], CU LIU GUO *Hippophae rhamnoides*, GUI JIAN JIN JI ER *Caragana jubata*, HUANG SHU KUI HUA *Abelmoschus manihot*, WEN GUAN MU *Xanthoceras sorbifolia* (stem and trunk: mean content = 0.12%)^[5508], XIAN CHI SHE PU TAO *Ampelopsis grossedentata* [Syn. *Ampelopsis cantoniensis* var. *grossedentata*], YANG MEI *Myrica rubra*, YANG MEI SHU PI *Myrica rubra* (bark: content = 0.027%)^[5501], YANG PU TAO YE *Syzygium samarangense*, YING MAO JIN SI TAO *Hypericum hirsutum*, YOU SE ZI JIN NIU *Ardisia colorata* (fruit), ZHAO SHENG DA JI *Euphorbia palustris*, ZHU BAI *Myrica nagi* [Syn. *Podocarpus nagi*]. **Ref:** 2, 4, 605, 658, 4013, 4163, 4244, 4100, 5501, 5507.

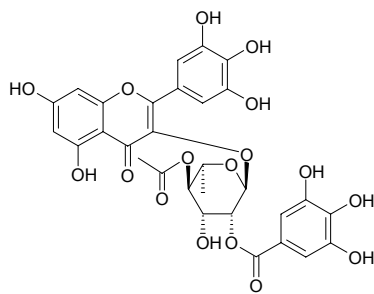


15171 Myricetin-3-O-(6''-acetyl)- β -D-galactopyranoside

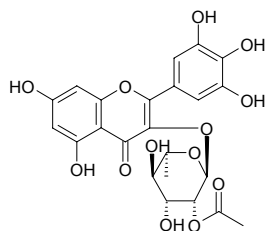
$C_{23}H_{24}O_{14}$ (524.44). Source: SAN XIAO CAO *Trifolium repens* (flower). Ref: 3970.

**15172 Myricetin-3-O-(4''-O-acetyl-2''-O-galloyl)- α -L-¹C_r-rhamnopyranoside**

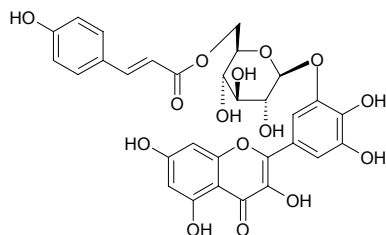
$C_{30}H_{26}O_{17}$ (658.53). Yellow amorphous powder. Source: WU MO *Eugenia jambolana* [Syn. *Syzygium cumini*; *Myrtus cumini*] (leaf). Ref: 5237.

**15173 Myricetin-3-O-(2''-O-acetyl- α -rhamnopyranoside)**

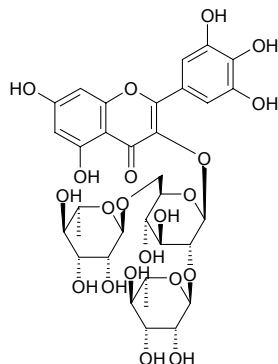
$C_{23}H_{22}O_{13}$ (506.42). Source: LAN SHUI LIAN *Nymphaea caerulea*. Ref: 2342.

**15174 Myricetin-3'-O-(6''-p-coumaroyl) glucoside**

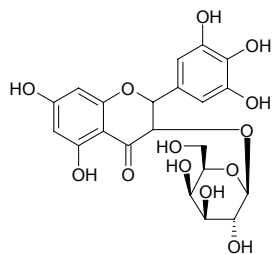
$C_{30}H_{26}O_{15}$ (626.53). Brown amorphous solid, mp 130–136°C (dec). Source: CHI YE SHUI LIAN *Nymphaea lotus*. Ref: 3405.

**15175 Myricetin-3-O-(2'',6''-di-O- α -rhamnosyl)- β -glucoside**

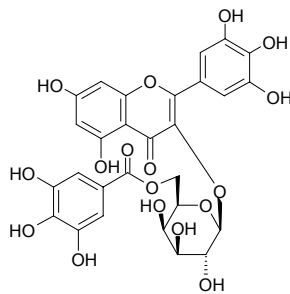
$C_{33}H_{40}O_{21}$ (772.67). Dark-yellow amorphous powder. Source: HU DIE HUA DOU *Clitoria ternatea*. Ref: 2064.

**15176 Myricetin-3-O- β -D-galactopyranoside**

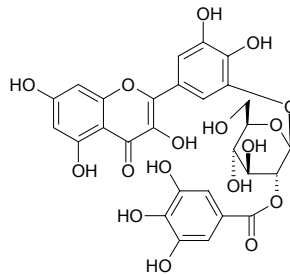
$C_{21}H_{22}O_{13}$ (482.40). Source: SAN XIAO CAO *Trifolium repens* (flower). Ref: 3970.

**15177 Myricetin-3-O- β -D-(6''-O-galloyl)-galactopyranoside**

$C_{28}H_{24}O_{17}$ (632.49). Source: FEI CAI *Sedum aizoon*. Ref: 1486.

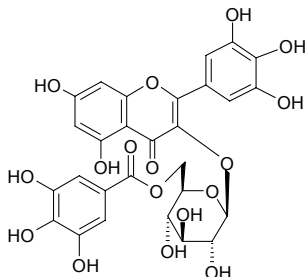
**15178 Myricetin-3-O-(2''-O-galloyl)- β -D-glucopyranoside**

$C_{28}H_{24}O_{17}$ (632.49). $[\alpha]_D^{25} = -65^\circ$ ($c = 0.17$, MeOH). Source: QU YU CAO DI LAO GUAN CAO *Geranium pratense* ssp. *funitimum* (aerial parts). Ref: 5126.

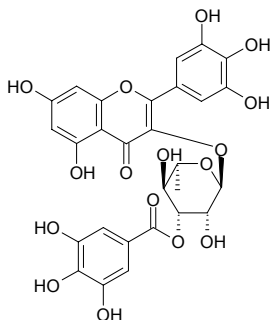


15179 Myricetin-3-O-β-D-(6''-O-galloyl)-glucopyranoside

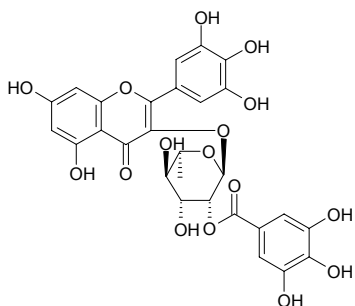
$C_{28}H_{24}O_{17}$ (632.49). Source: FENG XIANG SHU *Liquidambar formosana* [Syn. *Liquidambar taiwaniana*], FEI CAI *Sedum aizoon*. Ref: 1485, 1486.

**15180 Myricetin-3-O-(2''-O-galloyl)-α-rhamnopyranoside**

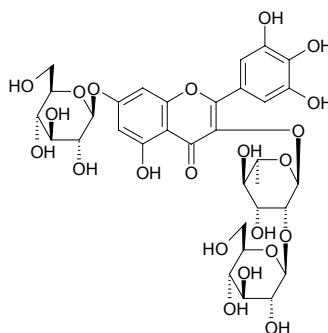
$C_{28}H_{24}O_{16}$ (616.49). $[\alpha]_D^{25} = -11.6^\circ$ ($c = 0.43$, MeOH). Pharm: Inhibits cell proliferation of PBMC (activated by phytohemagglutinin (PHA), $IC_{50} = 11.9\mu\text{mol/L}$, inhibitory mechanism may involve the blocking of IL-2 and IFN- γ production). Source: YANG PU TAO YE *Syzygium samarangense*. Ref: 4100.

**15181 Myricetin-3-O-(3''-O-galloyl)-α-rhamnopyranoside**

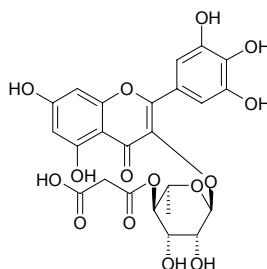
Desmanthin 1 [56939-52-7] $C_{28}H_{24}O_{16}$ (616.49). Yellow powder, mp 176°C. Source: BIAN XU *Polygonum aviculare*, YANG PU TAO YE *Syzygium samarangense*. Ref: 1521, 2210, 4100.

**15182 Myricetin-3-O-α-L-(2-O-β-D-glucopyranosyl)rhamnopyranoside-7-O-β-D-glucopyranoside**

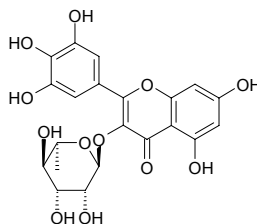
$C_{33}H_{40}O_{22}$ (788.67). Source: SHUANG HUA FAN HONG HUA *Crocus chrysanthus-biflorus*. Ref: 2343.

**15183 Myricetin-3-O-(4''-O-malonyl)-α-L-rhamnopyranoside**

$C_{24}H_{22}O_{15}$ (550.43). Source: GAO SHAN CHA BIAO *Ribes alpinum* (leaf). Ref: 3541.

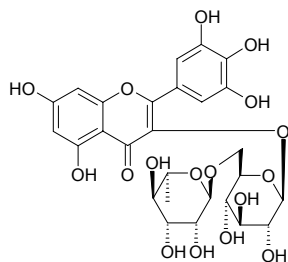
**15184 Myricetin-3-O-α-L-rhamnoside**

Myricitrin [17912-87-7] $C_{21}H_{20}O_{12}$ (464.39). mp 197~199°C (anhydrate); $[\alpha]_D^{25} = -150.0^\circ$ ($c = 0.50$, MeOH). Pharm: Antibacterial (*Pseudomonas maltophilia* and *Enteromorpha cloacae*); anti-inflammatory (induced by 12-O-tetradecanoylphorbol-13-acetate); choleric; CVS activity (contracts blood vessels, Increases blood pressure and stimulates heart); aldose reductase inhibitor (rat eye lens *in vivo*, $10\mu\text{mol/L}$, InRt = 100%); mutagen (*Salmonella aertrycke*); inhibits degranulation and release of β -hexosaminidase (RBL-2H3 cells, $100\mu\text{mol/L}$, InRt = $(12.6\pm 4.2)\%$, control Curcumin, $100\mu\text{mol/L}$, InRt = $(62.6\pm 1.0)\%$, did not affect the enzyme activity of β -hexosaminidase)^[4163]; hepatoprotective (primary cultures of rat hepatocytes, H_2O_2 -induced toxicity, $50\mu\text{mol/L}$, relative protection = 24.6% (H_2O_2 -treated, relative protection = 0.0%, control, relative protection = 100%), positive control Silibinin, Relative protection = 74.9%)^[4996]; inhibits cell proliferation of PBMC (activated by phytohemagglutinin (PHA), $IC_{50} = 75.6\mu\text{mol/L}$, inhibitory mechanism may involve the blocking of IL-2 and IFN- γ production)^[4100]. Source: CE BAI YE *Thuja orientalis* [Syn. *Platyclus orientalis*; *Biota orientalis*], DA JIN NIU CAO *Polygala chinensis* [Syn. *Polygala glomerata*], HENG GEN FEI CAI *Sedum kamschaticum*, GUI JIAN JIN JI ER *Caragana jubata*, HEI HU TAO *Juglans nigra*, SHI YE *Diospyros kaki*, XIAN CHI SHE PU TAO *Ampelopsis grossedentata* [Syn. *Ampelopsis cantoniensis* var. *grossedentata*], YANG MEI *Myrica rubra*, YANG MEI SHU PI *Myrica rubra* (5.59%), YANG PU TAO YE *Syzygium samarangense*, YOU GAN YE *Phyllanthus emblica* (leaf and branch), ZI JIN NIU *Ardisia japonica*, RI BEN GUI DENG QING *Rodgersia podophylla* (aerial parts). Ref: 6, 605, 658, 1417, 4163, 4205, 4996, 4100.

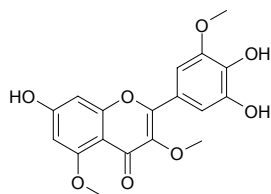


15185 Myricetin-3-rutinoside

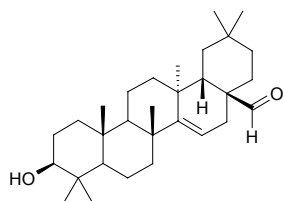
Myricetin 3-*O*-(6"-*O*- α -L-rhamnopyranosyl)- β -D-glucopyranoside C₂₇H₃₀O₁₇ (626.53). Source: LV DOU *Onobrychis viciifolia* (leaf). Ref: 5084.

**15186 Myricetin-3,5,3'-trimethyl ether**

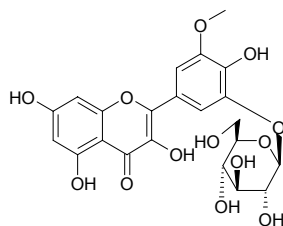
C₁₈H₁₆O₈ (360.32). Source: KE SHI FAN YING TAO *Eugenia edulis* (leaf). Ref: 3469.

**15187 Myricolal**

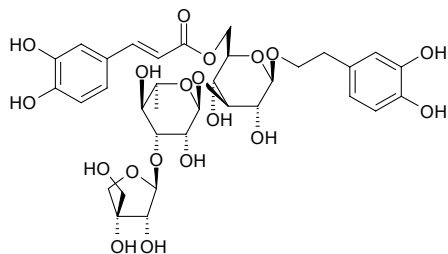
C₃₀H₄₈O₂ (440.71). Crystals, mp 288°C. Source: XIANG YANG MEI *Myrica gale*. Ref: 1512.

**15188 Myricomplanoside**

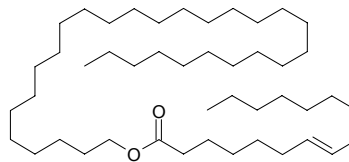
[123442-26-2] C₂₂H₂₂O₁₃ (494.41). Yellow acicular crystals, mp 255~257°C. Source: BIAN JING HUANG QI *Astragalus complanatus*. Ref: 123.

**15189 Myricoside**

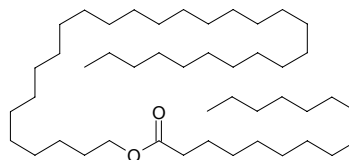
[76076-04-5] C₃₄H₄₄O₁₉ (756.71). Pharm: Insect antifeedant. Source: YANG MEI CHANG SHAN *Clerodendron myricoides*. Ref: 658.

**15190 Myricyl hypogaeate**

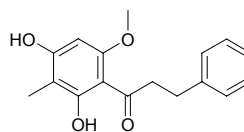
C₄₆H₉₀O₂ (675.23). Source: MI LA *Apis cerana*. Ref: 6.

**15191 Myricyl palmitate**

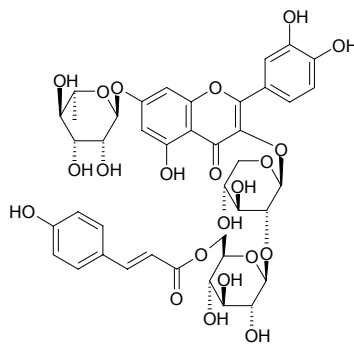
C₄₆H₉₂O₂ (677.24). Source: MI LA *Apis cerana*. Ref: 6.

**15192 Myrigalone H**

C₁₇H₁₈O₄ (286.33). Source: YANG PU TAO YE *Syzygium samarangense*. Ref: 4100.

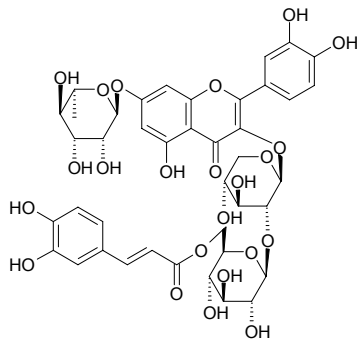
**15193 Myriophylloside B**

Quercetin-7-*O*- α -L-rhamnopyranosyl-3-*O*-(6"-*P*-coumaroyl)- β -D-glucopyranosyl-(1 \rightarrow 2)- β -D-xylopyranoside C₄₁H₄₄O₂₂ (888.79). Yellow powder, mp 218~220°C, [α]_D²⁵ = -167.5° (MeOH). Source: DUO YE JI DOU *Oxytropis myriophylla*. Ref: 4265.

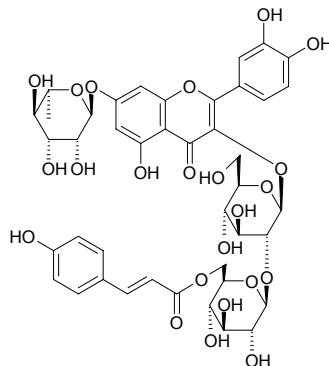


15194 Myriophylloside C

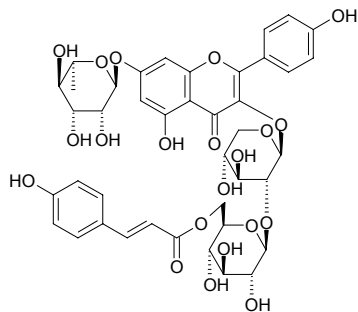
Quercetin-7-*O*- α -L-rhamnopyranosyl-3-*O*-(6"-caffeoyl)- β -D-glucopyranosyl-(1 \rightarrow 2)- β -D-xylopyranoside C₄₁H₄₄O₂₃ (904.79). Yellow powder, mp 205~207°C, $[\alpha]_D^{25} = -173.8^\circ$ (MeOH). Source: DUO YE JI DOU *Oxytropis myriophylla*. Ref: 4265.

**15197 Myriophylloside F**

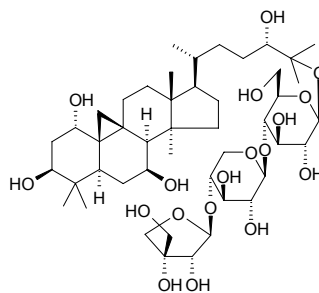
Quercetin-7-*O*- α -L-rhamnopyranosyl-3-*O*-(6"-P-coumaroyl)- β -D-glucopyranosyl-(1 \rightarrow 2)- β -D-glucopyranoside C₄₂H₄₆O₂₃ (918.82). Yellow powder, mp 224~226°C, $[\alpha]_D^{25} = -168.6^\circ$ (MeOH). Source: DUO YE JI DOU *Oxytropis myriophylla*. Ref: 4265.

**15195 Myriophylloside D**

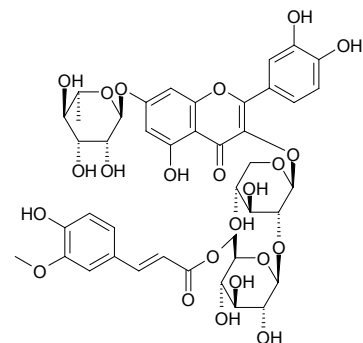
Kaempferol-7-*O*- α -L-rhamnopyranosyl-3-*O*-(6"-P-coumaroyl)- β -D-glucopyranosyl-(1 \rightarrow 2)- β -D-xylopyranoside C₄₁H₄₄O₂₁ (872.80). Yellow powder, mp 197~200°C, $[\alpha]_D^{25} = -120.3^\circ$ (MeOH). Source: DUO YE JI DOU *Oxytropis myriophylla*. Ref: 4265.

**15198 Myrioside A**

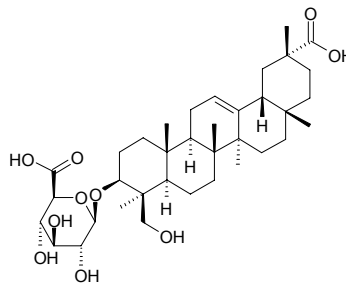
25-*O*- β -D-Apiofuranosyl(1 \rightarrow 4)- β -D-xylopyranosyl(1 \rightarrow 4)- β -D-glucopyranosyl 1 $\alpha,3\beta,7\beta,24(S),25$ -pentahydroxycycloartane C₄₆H₇₈O₁₈ (919.12). Amorphous powder, $[\alpha]_D^{16} = -10.1^\circ$ ($c = 0.10$, MeOH). Source: DUO YE JI DOU *Oxytropis myriophylla* (whole herb). Ref: 4222.

**15196 Myriophylloside E**

Quercetin-7-*O*- α -L-rhamnopyranosyl-3-*O*-(6"-feruloyl)- β -D-glucopyranosyl-(1 \rightarrow 2)- β -D-xylopyranoside C₄₂H₄₆O₂₃ (918.82). Yellow powder, mp 212~214°C, $[\alpha]_D^{25} = -154.8^\circ$ (MeOH). Source: DUO YE JI DOU *Oxytropis myriophylla*. Ref: 4265.

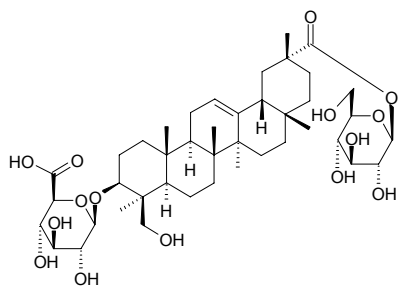
**15199 Myrioside B**

3-*O*- β -D-Glucuronopyranosyl azukisapogenol C₃₆H₅₆O₁₀ (648.84). Amorphous powder, $[\alpha]_D^{15} = +2.3^\circ$ ($c = 0.11$, MeOH). Source: DUO YE JI DOU *Oxytropis myriophylla* (whole herb). Ref: 4222.

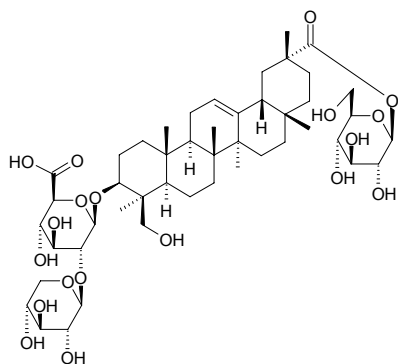


15200 Myrioside C

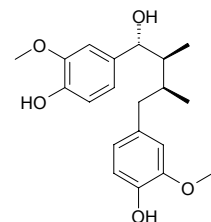
3-*O*- β -*D*-Glucuronopyranosyl azukisapogenol 29-*O*- β -*D*-glucopyranosyl ester C₄₂H₆₆O₁₅ (810.99). Amorphous powder, $[\alpha]_D^{14} = -2.2^\circ$ ($c = 0.12$, MeOH). Source: DUO YE JI DOU *Oxytropis myriophylla* (whole herb). Ref: 4222.

**15201 Myrioside D**

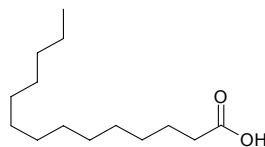
3-*O*- β -*D*-Xylopyranosyl(1 \rightarrow 2)- β -*D*-glucuronopyranosyl azukisapogenol 29-*O*- β -*D*-glucopyranoside ester C₄₇H₇₄O₁₉ (943.10). Amorphous powder, $[\alpha]_D^{15} = -4.0^\circ$ ($c = 0.10$, MeOH). Source: DUO YE JI DOU *Oxytropis myriophylla* (whole herb). Ref: 4222.

**15202 Myristargenol B**

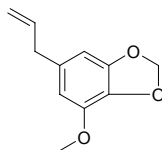
C₂₀H₂₆O₅ (346.43). Colorless amorphous, $[\alpha]_D^{24} = +10^\circ$ ($c = 0.09$, CHCl₃). Pharm: Antioxidant (DPPH scavenger). Source: FENG CHAO CAO *Leucas aspera* (whole herb). Ref: 4344.

**15203 Myristic acid**

Tetradecanoic acid [544-63-8] C₁₄H₂₈O₂ (228.38). mp 58°C, bp 250.5°C/100mmHg. Pharm: Precursor to essence synthesis; COX-1 and COX-2 inhibitor (IC₅₀ = 3.9~180 μ mol/L, lack of selectivity)^[4415]. Source: BA DOU *Croton tiglium*, BING LANG *Areca catechu*, BU GU ZHI *Psoralea corylifolia*, CU LIU GUO *Hippophae rhamnoides*, DA CHE QIAN *Plantago major*, DA ZAO *Ziziphus jujuba*, DANG GUI *Angelica sinensis*, DANG SHEN *Codonopsis pilosula*, GAN DI HUANG *Rehmannia glutinosa* [Syn. *Rehmannia glutinosa* f. *Huechingensis*], GUA LOU *Trichosanthes kirilowii*, HONG HUA *Carthamus tinctorius*, JI GUAN ZI *Celosia cristata* (seed), LANG DANG ZI *Hyoscyamus niger* (dried ripe seed: content = 0.3%)^[5508], MAN JING ZI *Vitex trifolia*, QIANG HUO *Notopterygium incisum*, ROU DOU KOU *Myristica fragrans*, SHUANG BIAN GUA LOU *Trichosanthes rosthornii* [Syn. *Trichosanthes uniflora*], XI OU YUAN WEI *Iris florentina*, XIN JIANG GAO BEN *Conioselinum vaginatum*, XING REN *Prunus armeniaca*, YIN CHEN HAO *Artemisia capillaris*, ZHONG GUO XUAN FU HUA *Inula britannica* var. *chinensis*, occurs in many plants. Ref: 2, 333, 660, 4415, 5508.

**15204 Myristicin**

[607-91-0] C₁₁H₁₂O₃ (192.22). bp 157°C/21mmHg, 149.5°C/15mm; 95~97°C/0.2mmHg. Pharm: Antineoplastic (mus lung tumor, InRt = 65%, stomach tumor InRt = 31%); antifungal (*Cladosporium cucumerinum* *in vitro*, MED = 20 μ g); hallucinogen (normal hmn); induces activity of cytochrome system (rat, ip, 500 μ mol/kg, improves liver P450-1A1/2, 2B1/2 and 2E1 activity by 2~20 times); antioxidant (mus liver, inhibits lipid peroxidation); platelet aggregation inhibitor (rbt, *in vitro*); monoamine oxidase inhibitor (*in vitro*); larvicide (larva of *Stegomyia calopus*, 100% killed in 24h, 25mg/L); teratogen. Source: DA CAO KOU *Alpinia speciosa*, GAO BEN *Ligusticum sinense* (root and rhizome: content = 11.31%)^[5508], HAN QIN *Apium graveolens*, HUI HUI SU GENG *Perilla frutescens* var. *crispa*, JIAN ZI SU YE *Perilla frutescens* var. *acuta* [Syn. *Perilla frutescens* var. *purpurascens*], LIAO GAO BEN *Ligusticum jeholense* (root and rhizome: content = 1.51%)^[5508], LIAO XI XIN *Asarum heterotropoides* var. *mandshuricum*, NAN HE SHI *Daucus carota*, OU FANG FENG *Pastinaca sativa*, ROU DOU KOU *Myristica fragrans* (kernel: content scope = 2.12%~2.88%, mean content = 2.49%)^[5508], XI XIN *Asarum sieboldii*, XIN JIANG GAO BEN *Conioselinum vaginatum* (root and rhizome: content = 2.21%)^[5508], YUN NAN ZHANG *Cinnamomum glanduliferum*, ZHOU YE OU QIN *Petroselinum crispum*. Ref: 2, 660, 900, 5508.

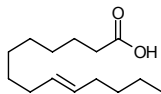


15205 Myristoleic acid

Tetradecenoic acid C; *cis*-9-Tetradecenoic acid [544-64-9] C₁₄H₂₆O₂ (226.36).

Source: BING LANG *Areca catechu*, ZHANG MU *Cinnamomum camphora*.

Ref: 2, 1475.

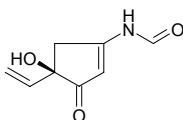
**15206 Myrothenone A**

5(*R*)-5-Ethenyl-3-formamido-5-hydroxy-2-cyclopenten-1-one C₈H₉NO₃

(167.17). Pharm: Tyrosinase inhibitor (IC₅₀ = 6.6 μmol/L, control Kojic acid,

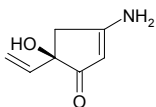
IC₅₀ = 7.7 μmol/L, used as a functional personal-care compound). Source:

Myrothecium sp. Ref: 4457.

**15207 Myrothenone B**

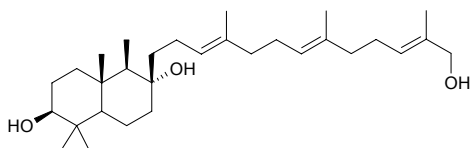
3-Amino-5-ethenyl-5-hydroxy-2-cyclopenten-1-one C₇H₉NO₂ (139.16).

Colorless oil. Source: *Myrothecium* sp. Ref: 4457.

**15208 Myrrhanol A**

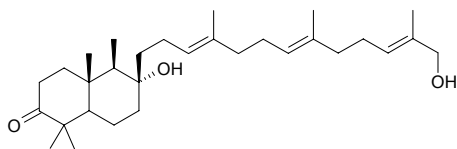
C₃₀H₅₂O₃ (460.75). Colorless oil, [α]_D²⁷ = +12.2° (*c* = 1.00, MeOH). Source:

MU KU ER MO YAO *Commiphora mukul*. Ref: 2572.

**15209 Myrrhanone A**

C₃₀H₅₀O₃ (458.73). Colorless oil, [α]_D²⁸ = +11.9° (*c* = 1.00, MeOH). Source:

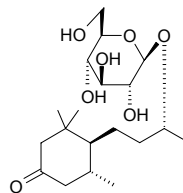
MU KU ER MO YAO *Commiphora mukul*. Ref: 2572.

**15210 Myrsinioside A**

(5*R*,6*S*,9*R*)-Megastigma-3-on-9-ol 9-*O*-β-*D*-glucopyranoside C₁₉H₃₄O₇

(374.48). Amorphous powder, [α]_D²⁴ = -13.8° (*c* = 1.30, MeOH). Source:

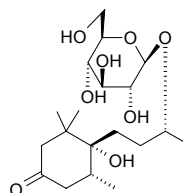
Myrsine seguinii (leaf). Ref: 4119.

**15211 Myrsinioside B**

(5*R*,6*R*,9*R*)-Megastigma-3-on-6,9-diol 9-*O*-β-*D*-glucopyranoside C₁₉H₃₄O₈

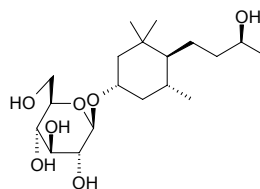
(390.48). Amorphous powder, [α]_D²⁴ = -3.0° (*c* = 0.41, MeOH). Source:

Myrsine seguinii (leaf). Ref: 4119.

**15212 Myrsinioside C**

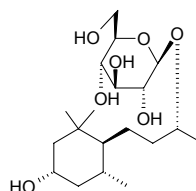
(3*S*,5*R*,6*S*,9*S*)-Megastigma-3,9-diol 3-*O*-β-*D*-glucopyranoside C₁₉H₃₆O₇

(376.49). Amorphous powder. Source: *Myrsine seguinii* (leaf). Ref: 4119.

**15213 Myrsinioside D**

C₁₉H₃₆O₇ (376.49). Amorphous powder, [α]_D²⁴ = -28.6° (*c* = 1.40, MeOH).

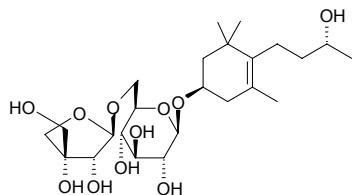
Source: *Myrsine seguinii* (leaf). Ref: 4119.



15214 Myrsinioside E

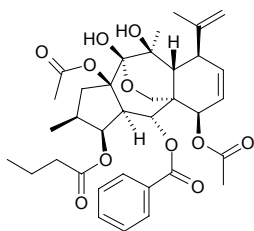
$C_{24}H_{42}O_{11}$ (506.60). Amorphous powder, $[\alpha]_D^{24} = -76.4^\circ$ ($c = 0.72$, MeOH).

Source: *Myrsine seguinii* (leaf). Ref: 4119.

**15215 Myrsinol-type diterpene ester CPB51-719-1**

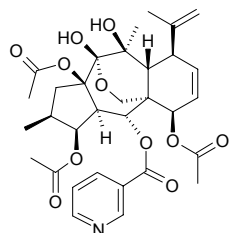
$C_{35}H_{44}O_{11}$ (640.73). Colorless oil, $[\alpha]_D^{23} = -3.28^\circ$ ($c = 0.12$, $CHCl_3$). Pharm:

Prolyl endopeptidase inhibitor (*in vitro*, $IC_{50} = 3.195\mu\text{mol/L}$, positive control Bacitracin, $IC_{50} = 129.26\mu\text{mol/L}$). Source: MI HUO DA JI *Euphorbia decipiens*. Ref: 4350.

**15216 Myrsinol-type diterpene ester CPB51-719-2**

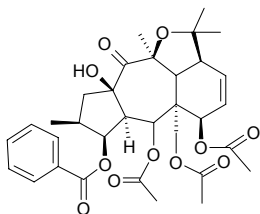
$C_{32}H_{39}NO_{11}$ (613.67). Colorless oil, $[\alpha]_D^{23} = -6.63^\circ$ ($c = 1.66$, $CHCl_3$). Pharm:

Urease inhibitor (*in vitro*, $IC_{50} = 81.39\mu\text{mol/L}$, positive control Thiourea, $IC_{50} = 21\mu\text{mol/L}$). Source: MI HUO DA JI *Euphorbia decipiens*. Ref: 4350.

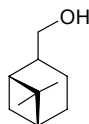
**15217 Myrsinol-type diterpene ester CPB51-719-3**

$C_{32}H_{40}O_{11}$ (612.68). Colorless oil, $[\alpha]_D^{23} = -9.68^\circ$ ($c = 0.14$, $CHCl_3$). Pharm:

Prolyl endopeptidase inhibitor (*in vitro*, $IC_{50} = 10.52\mu\text{mol/L}$, positive control Bacitracin, $IC_{50} = 129.26\mu\text{mol/L}$). Source: MI HUO DA JI *Euphorbia decipiens*. Ref: 4350.

**15218 Myrtanol**

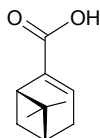
$C_{10}H_{18}O$ (154.25). Source: CHAI HU *Bupleurum chinense*, ZHU YE CHAI HU *Bupleurum marginatum*, XIAN YE CHAI HU *Bupleurum angustissimum*, XIAO YE HEI CHAI HU *Bupleurum smithii* var. *parvifolium*, ZHAI ZHU YE CHAI HU *Bupleurum marginatum* var. *stenophyllum*. Ref: 1350, 660.

**15219 Myrtenal**

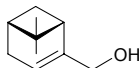
[23727-16-4] $C_{10}H_{14}O$ (150.22). Source: DU HUO *Angelica pubescens* f. *biserrata* [Syn. *Angelica pubescens*]. Ref: 2.

**15220 Myrtenic acid**

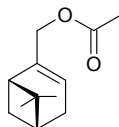
[601-74-1] $C_{10}H_{14}O_2$ (166.22). Source: RU XIANG *Boswellia carterii*. Ref: 1271.

**15221 Myrtenol**

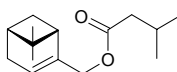
[6712-78-3] $C_{10}H_{16}O$ (152.24). bp (-) 221~222°C. Pharm: dispels phlegm; antimicrobial; immunoenhancer. Source: CHAI HU *Bupleurum chinense*. Ref: 2, 1612, 1613.

**15222 (+)-Myrtenyl acetate**

$C_{12}H_{18}O_2$ (194.28). Source: XIE CAO *Valeriana officinalis*. Ref: 6.

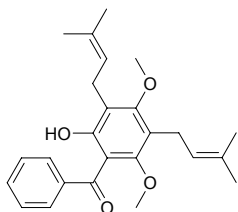
**15223 L-Myrtenyl isovalerate**

$C_{15}H_{24}O_2$ (236.36). Source: XIE CAO *Valeriana officinalis*. Ref: 6.

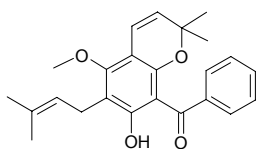


15224 Myrtiapheone A

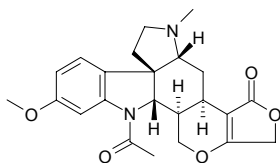
6-Hydroxy-2,4-dimethoxy-3,5-bis(3-methyl-2-butenyl)benzophenone
 $C_{25}H_{30}O_4$ (394.52). Source: FEI JI TENG HUANG *Garcinia pseudoguttifera*
 (heartwood). Ref: 3911.

**15225 Myrtiapheone B**

2,2-Dimethyl-8-benzoyl-7-hydroxy-5-methoxy-6-(3-methyl-2-butenyl)benzopyran
 $C_{24}H_{26}O_4$ (378.47). Source: FEI JI TENG HUANG *Garcinia pseudoguttifera*
 (heartwood). Ref: 3911.

**15226 Myrtoidine**

$C_{23}H_{26}N_2O_5$ (410.47). Crystals (EtOAc and cyclohexane which char without melting), $[\alpha]_D^{20} = -46.6^\circ$ ($c = 0.5$, CH_2Cl_2). Source: *Strychnos myrtoides*. Ref: 2297.

**15227 Myxoxanthophyll**

$C_{41}H_{60}O_7$ (664.93). Source: FA CAI *Nostoc flagelliforme*. Ref: 660.

