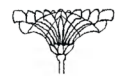


F. Verloove

Catalogue of neophytes in Belgium

(1800-2005)



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Abstracts

Samenvatting. – Catalogus van de neofyten van België (1800-2005). Gebaseerd op een nauwgezette en kritische revisie van de voornaamste Belgische publieke en enkele kleinere, maar eveneens relevante private herbaria, wordt voor het eerst een catalogus van de Belgische neofyten samengesteld. Alle sedert 1800 spontaan in België aangetroffen niet-inheemse taxa van vaatplanten (met uitsluiting van de zogenaamde archeofyten die reeds voor 1500 in onze streken voorkwamen) werden in aanmerking genomen, ongeacht hun inburgeringsstatus (dus van occasioneel verwilderende cultuurplanten en efemere adventieven tot invasieve probleemplanten). Voor elk taxon worden de volgende gegevens verstrekt: wetenschappelijke naam, (eventueel) synoniem, familie, wijze van introductie (opzettelijk/onopzettelijk), datum eerste collectie (behoudens enkele uitzonderingen, bv. indien vroegere betrouwbare waarnemingen beschikbaar zijn), datum meest recente waarneming, inheems areaal, aan- of afwezigheid in Vlaanderen, het Brussels Hoofdstedelijk Gewest en Wallonië, inburgeringsgraad en (voornaamste) vector(en) van introductie. 1969 taxa zijn in de catalogus weerhouden. Meer dan 20 % blijkt ‘nieuw’ te zijn voor de Belgische flora. Anderzijds dienen meer dan 30 taxa, die voorheen foutief gedetermineerd waren, uit de Belgische Flora geschrapt te worden.

Er werd vastgesteld dat het exact bepalen van de status van veel taxa uit de ‘Belgische’ flora problematisch is. Enerzijds bleek de scheiding tussen inheems en niet-inheems vaak onduidelijk (bv. interpretatie van natuurlijke areaaluitbreidingen), anderzijds lag voor (vermoedelijk) niet-inheemse taxa ook het onderscheid archeofyt/neofyt niet altijd voor de hand. Ook het bepalen van de inburgeringsgraad (i.c. het meten van het succes van een niet-inheems taxon) was vaak problematisch. Met name de praktische toetsing van begrippen als ‘ingeburgerd’ en ‘invasief’ – talloze recente internationale publicaties ten spijt – bleek niet evident.

De Belgische niet-inheemse vaatplantenflora is heel gevarieerd: niet minder dan 139 families zijn vertegenwoordigd, maar de meeste families tellen slechts (zeer) weinig taxa. De Poaceae en Asteraceae maken samen meer dan een kwart uit van alle niet-inheemse taxa. Een belangrijk deel van de introducties bestaat uit opzettelijk ingevoerde taxa, hoofdzakelijk geïntroduceerd als tuinplanten. Het aandeel van de opzettelijke introducties wordt bovendien nog versterkt bij de ingeburgerde en invasieve taxa (ca. 60 %). De Belgische niet-inheemse flora blijkt voornamelijk uit Europa en gematigd Azië afkomstig te zijn. Voorts zorgen ook Afrika (vooral Noord-Afrika) en Amerika (vooral Noord-Amerika) voor nogal wat adventiefplanten. Het aandeel Australische, tropisch Aziatische en (sub-) tropische

taxa is, zoals kon verwacht worden, beperkt. Minstens driekwart van de introducties blijft strikt efemeer. Niet meer dan 20 % van de ingevoerde soorten slaagt er uiteindelijk in plaatselijk of wijd verbreid in te burgeren. Momenteel blijft het aantal invasieve soorten (snel uitbreidend in min of meer natuurlijke habitats) en probleemsoorten (problematisch voor biodiversiteit, gezondheid en/of economie) gering. De horticultuur is vandaag de belangrijkste bron voor nieuwe plantenintroducties (verwilderde sierplanten). Tot in de jaren 1960 was de wolimport verantwoordelijk voor veel onopzettelijke introducties. Nu geldt de graanimport als belangrijkste vector voor onopzettelijke plantenintroducties. Tenslotte kon worden vastgesteld dat het aantal gekende plantenintroducties in de voorbije decennia sterk is toegenomen. Hetzelfde geldt voor het aantal nieuwe gevallen van inburgering.

Résumé. – Catalogue des néophytes de Belgique (1800-2005). Un catalogue des néophytes de Belgique est dressé pour la première fois, sur base de la révision critique des principaux herbiers publics belges et de quelques herbiers privés, plus restreints mais importants. Toutes les plantes vasculaires non indigènes récoltées en Belgique après 1800 sont incluses (à l’exception des archéophytes, c’est-à-dire des plantes qui étaient déjà naturalisées dans le pays à l’époque précolombienne), quel que soit leur degré de naturalisation (depuis des plantes occasionnellement échappées de culture ou des adventices éphémères jusqu’à des taxons invasifs). Les informations suivantes sont fournies pour chaque taxon: nom scientifique, synonyme(s), famille, mode d’introduction (accidentelle/délibérée), dates de la première et de la dernière données fiables, aire d’indigénat, présence ou absence dans les trois entités politiques de la Belgique (Flandre, Région de Bruxelles Capitale et Wallonie), degré de naturalisation et principaux vecteurs d’introduction. 1969 taxons sont traités dans ce catalogue. Plus de 20 % d’entre eux s’avèrent « nouveaux » pour la flore belge; en outre, au moins 30 taxons avaient été mal déterminés antérieurement et devront être supprimés dans une future édition de la Flore de la Belgique.

L’appréciation du statut exact de nombreux taxons de la flore « belge » reste problématique. D’une part, la limite entre le caractère « indigène » et « non indigène » est parfois floue (par ex. lors de l’interprétation comme naturelle d’une extension d’aire); d’autre part, dans le cas de plantes présumées non indigènes, leur statut d’archéophytes ou de néophytes n’est pas toujours évident. Il en va de même en ce qui concerne l’estimation du degré de naturalisation, c’est-à-dire

d'implantation persistante d'une espèce. En pratique, malgré de nombreuses publications internationales, la distinction entre « naturalisé » et « invasif » reste empreinte d'un certain arbitraire.

La flore vasculaire non indigène de la Belgique est remarquablement riche et variée: pas moins de 139 familles sont représentées, mais la majorité de celles-ci ne comptent qu'un seul taxon (ou très peu). Les Poaceae et les Asteraceae sont numériquement les plus importantes, représentant ensemble plus d'un quart de cette flore. Une part considérable de ses représentants fut à l'origine introduite volontairement (principalement à des fins horticoles). Parmi les plantes naturalisées et invasives, la proportion de taxons volontairement introduits au départ est encore plus élevée (env. 60 %). La principale provenance géographique des introductions est l'Europe et l'Asie tempérée; ensuite viennent l'Afrique (surtout l'Afrique du Nord) et l'Amérique (principalement l'Amérique du Nord). Comme on pouvait s'y attendre, le nombre d'introductions depuis l'Australie, l'Asie tropicale et les autres régions (sub)tropicales reste limité. Une large majorité des xénophytes (au moins 75 %) ont une présence strictement éphémère. Au plus 20 % sont capables de se naturaliser, localement ou plus largement. Actuellement, le nombre d'espèces invasives (s'étendant rapidement, dans des habitats plus ou moins naturels) et des taxons nuisibles (posant problème en termes de biodiversité, de santé publique ou d'impact économique) est limité. Les pratiques horticoles sont actuellement la source principale des introductions végétales (plantes échappées de jardins). Jusque dans les années 1960, l'importation de laines fut le vecteur principal des introductions éphémères. Aujourd'hui, celles-ci sont surtout liées aux activités céréalières et grainières. Enfin, on peut constater que le nombre de nouvelles introductions recensées a fortement augmenté durant ces dernières décennies. Il en va de même en ce qui concerne le nombre de nouvelles naturalisations.

Abstract. – Catalogue of neophytes in Belgium (1800-2005). A catalogue of Belgian neophytes has been compiled for the first time on the basis of a thorough and critical revision of the main public and some smaller but nevertheless relevant Belgian herbaria. All non-native vascular plant species, recorded in Belgium since 1800, are included regardless of degree of naturalization (including occasional garden escapes and casual aliens as well as invasive taxa). Taxa that were already naturalized in Belgium in pre-Columbian times, are excluded. The following data are provided for each taxon: scientific name, synonym, family, mode of introduction (accidental/deliberate), date of the first collection (except if earlier reliable records are available), date of the most recent record, native geographic area, presence or absence in Flanders, Brussels Capital Region and Wallonia (the three main political units), degree of naturalization and (main) vector(s) of introduction.

1,969 taxa are included. More than 20 % appears to be “new” for the Belgian flora. On the other hand, at least 30 taxa were erroneously included in the present-day Flora and need to be omitted in a future edition.

Assessing the exact status of many taxa of the “Belgian” flora proved to be problematic. On the one hand, the distinction between native and non-native turned out to be often critical (for instance: interpretation of natural range extensions). On the other hand, assessing archaeophytic or neophytic status for (presumed) non-native taxa turned out not to be always obvious. Similarly, the assessment of the degree of naturalization (measurement of a taxon's success) was not always straightforward. In practice, and despite numerous recent international papers on this subject, the distinction between “naturalized” and “invasive” regularly proved to be arbitrary.

The Belgian non-native vascular flora is remarkably wealthy and diverse: no less than 139 families are represented but most families count for only (very) few taxa. Poaceae and Asteraceae are the largest families and represent more than a quarter of the total number of alien taxa in Belgium. A huge number of the aliens were initially introduced deliberately, primarily for horticultural reasons. Among the naturalized and/or invasive taxa the proportion of deliberate introductions is even more important (ca. 60 %). Introductions from Europe and temperate Asia are most common. To a lesser extent, Africa (especially North-Africa) and America (especially North-America) are also important sources. As expected, the number of introductions from Australia, tropical Asia and the (sub-) tropics as a whole is limited. A large majority, at least 75 %, of the introductions remains strictly casual. At most 20 % is able to become naturalized, locally as well as widespread. At present, the number of invasive taxa (spreading fast in more or less natural habitats) and noxious taxa (harmful in terms of biodiversity, public health or for economic reasons) is limited. Currently, the main vector for plant introductions appears to be horticulture (garden escapes). Until the 1960's wool-importation was chiefly responsible for the occurrence of accidental aliens. Nowadays, accidental aliens are usually brought in with cereals and grains. The number of new introductions has much increased in the course of the past decades. Similarly, the number of newly naturalized taxa has increased.

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Introduction

The floristic composition of a given territory is not stable: certain taxa become rare or even extinct, others – as a result of human influence or not – move in and spread. In recent times such plant invasions in general and their impact on biodiversity, health and/or economy in particular are increasingly studied worldwide. An annotated checklist of non-native plant species with various kinds of information is an essential tool in the study of plant invasions. Unfortunately, until now, such a catalogue was missing for Belgium and was much awaited. This gap is now, finally, filled.

Belgium, with an area of 30,528 square kilometers, has three main *geographical* regions: a coastal area in the northwest, a central plateau and the Ardennes upland in the southeast. The coastal plain consists mainly of sand dunes and polders. The central plateau, further inland, is a smooth slowly rising area with many fertile valleys and waterways. The third region, the Ardennes, is more rugged, thickly forested and very rocky locally. Belgium's highest point, the Signal de Botrange (694 m), is located in this region. The Belgian *climate* is maritime temperate with significant precipitation in all seasons. The average temperature is 3°C in January and 18°C in July. The average precipitation is 65 mm in January and 78 mm in July. The *population density* in Belgium is one of the highest in Europe: 342/km². Important urban centers are around Brussels-Antwerp-Gent-Leuven agglomerations, as well as Liège, Charleroi, Kortrijk, Brugge, Hasselt and Namur. The Ardennes are much less densely populated than the remaining part of Belgium.

Moreover, with its dense population, Belgium is located at the heart of one of the world's most highly industrialized regions. On the European continent the *industrial revolution* initially started in Belgium in the early 1800's. Mining and steelmaking rapidly developed, especially in Wallonia. In Flanders textile industry flourished, particularly around Gent that was – at that time – reputed for its cotton processing industry. [It is unclear whether this cotton industry has generated a particular flora. Elsewhere in Europe, for instance in the French-German border area, cotton waste yielded huge amounts of exceptional aliens (Baumgartner 1975). Obviously, no 'cotton aliens' are preserved in the Belgian herbaria; one can assume that there were no interested recorders at that time in that area.] Also starting in the early 19th century the famous wool-industry in the Vesdre valley near Verviers (Wallonia) went through a phase of rapid expansion. Inter-continental imports of wool became much more important around the middle of the 19th century. The alien flora related to this wool importation is well documented (see below). After World War II Antwerpen and Gent experienced a fast

expansion of the chemical and petroleum industries. At present the port of Antwerpen is the second largest in Europe and one of the most important worldwide. Belgium has a particularly developed and excellent transportation infrastructure of ports, canals, railways and highways. As a result of all the above human pressure upon native flora is exceptionally high.

In Belgium the non-native flora has been studied at various times in the course of the past two centuries. Especially in the first half of the 20th century much attention was paid to the extraordinary exotic flora associated with the wool-processing industry in the Vesdre-valley (see for instance Visé 1942, 1958; Lambinon & al. 1959). In former times the effluents from the woollen mills carrying seeds found their way into the river. As a consequence, numerous exotic plants occurred on the riverbanks downstream of the mills. As a result of the severe crisis in the Belgian textile industry and changed industrial processes, especially from the 1960's onward, this particular alien flora has disappeared completely now. In the past decades grain importation proved to be the main vector for plant introductions. Agricultural weeds are harvested with the crops in the countries of origin. Once introduced they are spilled near unloading quays, granaries or mills, under grain conveyors, along highways,... This alien flora related to grain importation has been studied thoroughly in more recent times (see for instance: Robbrecht & Jongepier 1986, 1989; Lambinon 1991; Verloove & Vandenberghe 1993-1999; Verloove 1992, 2003, 2006).

The research is certainly not finished yet. On the one hand some critical groups or genera surely require further study and perhaps even specialist revision. On the other hand the number of introductions and our knowledge about these processes is still increasing and, each year, numerous new taxa are reported for the first time in Belgium. Surely, regular updates of the present catalogue will be much needed.

Materials and methods

A herbarium-based checklist

Most databases covering non-native plants are primarily or exclusively based on literature records (there are but few exceptions, see for instance Wu & al. 2004). Literature records are not always reliable and therefore the present catalogue is almost entirely based on a thorough herbarium revision of the main public Belgian herbaria: the herbarium of the National Botanic Garden of Belgium (BR), the herbarium of the University of Liège (LG) and the herbarium of the University of Gent (GENT). In addition some smaller private but nevertheless relevant herbaria were also revised, at least in part: the private herbaria of the author, J.E. De Langhe, L. Delvosalle,...). As such over 30.000 herbarium specimens have been revised and digitalized. Only taxa of which the identification was confirmed after revision, often assisted by specialists, are included in the list. If a record has been sufficiently documented in the literature and confusion with other taxa is unlikely (for instance *Carrichtera annua*, *Polypodium hesperium* or *Valeriana pyrenaica*) they are accepted, even if voucher specimens are wanting. Some additional taxa – also without herbarium references – have been taken from a recently published list of subspontaneous woody cultivated taxa (Verhaeghe 1999). As dendrologists have compiled this list, the data appear to be sufficiently reliable for inclusion in the present catalogue.

Many other species surely have occurred, especially prior to 1900 (see for instance De Wildeman & Durand 1899 for lists of non-native taxa recorded in Belgium in the 19th century), but as these records are unverifiable, often dubious or possibly erroneous they have not been taken into account for the present catalogue. The same holds true for several more recent records of non-native taxa in FLORABANK (a database with floristic data for Flanders) when no voucher specimens are preserved in one of the abovementioned herbaria (for instance *Echinops ritro*, *Sophora japonica* and several others).

Some genera are still insufficiently known and surely require specialist revision or are badly in need for a thorough systematic revision (for instance *Aster* s.l., *Bromus* s.l., *Camelina*, *Cotoneaster*, *Hordeum*, *Potentilla inclinata-intermedia-norvegica*-group, *Prunus*, *Rosa*, *Rubus*, *Taraxacum*, *Triticum*,...). Such genera were often only superficially studied for the present catalogue.

The identification of many garden escapes sometimes proved to be very difficult or almost impossible: through hybridization, selection,... many cultivated taxa have a complex origin and their identification might be only tentative.

Apart from the mentioned taxonomical difficulties various practical problems were also encountered during herbarium revisions. To name but one: the reliability

of certain old records. Leten (1991) made an excellent analysis on problematic floristic data in Belgium. Complementary to this analysis, the case of C. Pelgrims is probably worth mentioning. At least part of Pelgrims' wool-alien herbarium collections from the Vesdre valley are really remarkable. His collections of various (sub-) tropical grasses (such as *Digitaria acuminatissima*, *Eustachys neglecta*, *E. retusa*,...; most originally wrongly identified) are not 'unrealistic' but at least very exceptional (especially when compared with wool-alien floras of well-investigated countries or regions; see for instance Probst 1949, Ryves 1974 & 1988,...). As we cannot prove Pelgrims' possible unreliability¹ his records are included in this list.

Hence, we have opted to base the present catalogue primarily on correctly identified voucher specimens. As a consequence old records from Nieuwpoort by Rouzée of *Crucianella angustifolia* and *Seseli montanum* (both GENT!) are upheld whereas his records of *Coronilla minima* and *Linum tenuifolium* from the same area are rejected because no voucher specimens were found (see also Leten 1991, p. 30).

Many old collections are sometimes (very) poorly labelled as collection data were only of secondary interest in that era. Even more recently it is sometimes not quite obvious whether a herbarium specimen was taken from a cultivated or a spontaneous plant (for instance for a large majority of the cultivated trees and shrubs: *Aesculus* sp., *Castanea sativa*, *Pinus* sp.,...). In some better documented cases the herbarium label provides lots of information but, even then, one has to be careful: formerly some records were surprisingly considered to be "naturalisé" (naturalized): some recorders seemingly have intermixed "subspontaneous" and "naturalized".

Criteria for inclusion of taxa in the catalogue

The catalogue comprises all non-native taxa of vascular plants found in the wild in Belgium from 1800 onwards. The limits might seem rather clear-cut but in

¹ The recent discovery of the correspondence between A. Visé (wool merchant and wool-alien hunter) and A. Lawalrée (head of the Jardin Botanique de l'Etat at that time) between 1954 and 1957 still strengthens our suspicion. Visé, while preparing his annotated catalogue of wool-alien plants in the Vesdre valley (Visé 1958), wrote: "(...) je n'ai renseigné de Pelgrims que ce que vous avez eu par lui, (...). Il m'a parlé un jour de 82 graminées qu'il aurait trouvées et déterminées par certains de ces amis et par vous. Je n'ai pas de confiance dans tout cela et préfère ne renseigner que ce dont je suis sûr." (in litt. 28.09.1956).

practice many problems have been encountered. In this chapter the inclusion of some and exclusion of other taxa is concisely explained.

Native or non-native status

The native or non-native status of a given taxon was generally based upon information taken from the “Nouvelle Flore de la Belgique, du Grand-Duché de Luxembourg, du Nord de la France et des régions voisines” (Lambinon & al. 2004), the most recent Flora covering the entire territory. As a rule, the distinction native/non-native proved to be straightforward for the majority of the taxa but there were, however, several difficulties. As the distribution of taxa and their native status are indicated in terms of phytogeographical units in the Flora (which, of course, do not coincide with territorial frontiers) for certain taxa it was not always obvious whether a taxon should be considered native or not.

Webb (1985) already discussed at length the difficulties encountered when assessing native/non-native status. He proposes criteria for suggesting presumed native status and provides a list with taxa generally accepted as native without question but which man probably or almost certainly introduces. This proves that, at least in some cases, assessing native status remains problematic. Below are enumerated some specific cases and their treatment in the present catalogue.

Flora Europaea (Tutin & al. 1964-1980) also provided some relevant information but, as recently correctly indicated by Pyšek (2003), the reliability of data for individual countries regularly proves to be critical. Some evidently native taxa are considered to be absent from Belgium (and Luxembourg; “Be” in Flora Europaea); this applies for instance to *Anthriscus caucalis*, *Arabis glabra*, *Picris echioides*, *Silene conica*,... Others, on the contrary, are indicated for our territory (“native” as well as “introduced”), doubtlessly in error: see for instance *Bryonia alba*, *Camelina* div. sp.,...

If a given taxon is native in at least one Belgian locality (but otherwise a much more regular non-native taxon) it is not included in the catalogue (see also Preston & al. 2002). Such taxa are for instance *Artemisia campestris* subsp. *campestris*, *Silene armeria* and several horticultural taxa (for instance *Lonicera xylosteum*). Similarly, taxa that used to be found as natives in a well circumscribed and usually small ecological or geographical entity but that have recently migrated to secondary suitable habitats (for instance several halophytes such as *Cochlearia danica*, *Plantago coronopus* or *Puccinellia distans*) are excluded from the catalogue as well, although they are not native in the major part of the territory. Other originally native taxa (including archaeophytes; see below) are (almost or completely) extinct in the habitat in which they were formerly most commonly found (for instance as a cereal weed) but are recently increasingly found in ruderal or other man-made habitats (for instance *Holosteum umbellatum*,...); such taxa are not taken into account for the present catalogue as they once used to be native (or

at least archaeophytes). On the contrary, taxa that were supposedly native in pre-Columbian times (for instance *Pinus sylvestris*) and occur spontaneously more recently are included in the list. Some taxa formerly doubtfully considered being native and presently only occurring as casuals are also taken into account. A good example is *Trifolium squamosum*, formerly considered to be a (rare) native in Belgian coastal areas (which would be very surprising considering its historical absence in the adjacent coastal areas in northern France; cf. Collectif Botanique du Nord/Pas de Calais 2005).

It is particularly difficult to assess the actual status of numerous archaeophyte cornfield weeds. Many have now disappeared or almost so (see also below). These species are usually not included in this catalogue because they used to be included with native species. Some however have not been recorded for many decades as cereal weeds and are now considered to be extinct. At present they sometimes occur as ephemeral (grain-) aliens in ports and, as such, do not differ from other grain aliens that are upheld in the catalogue. This applies to several tens of taxa, for instance: *Agrostemma githago*, *Consolida regalis*, *Galium spurium*, *G. tricorutum*, *Turgenia latifolia*,... (see also below). As, in fact, they no longer belong to the present-day Belgian flora, they should probably be considered as casual aliens rather than as (extinct) archaeophytes or natives. On the other hand, their re-appearance in a near future cannot totally be excluded. Moreover, for several archaeophyte arable weeds it is not always obvious whether in the past they were really naturalized or remained dependent on continuous reintroduction as contaminants with the crop seeds (which surely does not hold true for the present-day agricultural weeds). In the latter case they are casual aliens instead of archaeophytes. Hence, assessing the exact status of such taxa will always remain very tentative. The status of several former flaxseed weeds (*Camelina alyssum*, *Cuscuta epilinum*, *Lolium remotum*,...) can be variously interpreted: as the cultivation of flax in Belgium predates 1500 at least some of these taxa can be considered as archaeophytes and hence are not included in this catalogue. But, again, since most vanished as such, their status probably needs to be altered.

Another difficulty met with is the interpretation of natural range extensions. Some taxa were only very recently recorded for the first time in Belgium but their presence is believed to be the result of a recent natural migration, devoid of any human interaction, from nearby areas outside Belgium. Such taxa are for instance *Bupthalmum salicifolium*, *Cirsium tuberosum*, *Conopodium majus*, *Lathyrus japonicus*, *Lilium bulbiferum* subsp. *croceum*, *Vulpia fasciculata* or *V. membranacea*. As their appearance is assumed to be natural they are not included in the catalogue. It is however obvious that it is often rather difficult to judge whether an appearance is natural or not; in general only new taxa that are found in (semi-) natural environments, similar as those in their native distribution range, are considered to be natural and thus native. Other taxa, for which a possible natural

appearance cannot be excluded, are considered to be non-native as they generally are found in less natural habitats. These include for instance *Bromus diandrus* (ruderalized sandy areas) or *Hierochloa odorata* (roadverges). They are regarded, with some doubt, as non-native and included in the catalogue.

For certain taxa more profound research is surely needed to assess their presumed status. In some cases this has been done. *Conopodium majus* for instance needs to be treated as an overlooked native species (cf. Fabri & al. 1987); the same holds true for *Capsella rubella* (cf. Auquier & Sérusiaux 1978). For *Oenanthe pimpinelloides* on the contrary, the likelihood of a non-native status was recently suggested by Ronse (2005).

In practice the distinction native (incl. archaeophyte; see below)/non-native proved to be rather arbitrary in many cases. For instance *Setaria pumila*, *S. verticillata* and *S. viridis* might be archaeophytes as well as neophytes. The same applies to *Melilotus albus* and *M. officinalis* or various taxa of *Muscari* and many others. In such cases we attempted to consider inclusion or exclusion based upon older floristic literature. The main source proved to be the “Prodrome de la flore belge” (De Wildeman & Durand 1899) but even then data often turned out to be conflicting. *Melilotus albus*, for instance, is considered to be native (or an archaeophyte) by De Wildeman & Durand l.c. (first observation around 1500) while, according to Lawalrée (1961), it is an alien or at most locally naturalized.

The exact status of some (very) old records is also uncertain: *Bassia hirsuta* for instance is considered to be an extinct native species in the recent Atlas of the flora of Flanders and Brussels (Van Landuyt 2006). Aellen (1960) who thoroughly studied the Chenopodiaceae in Europe and far beyond did not recognize *Bassia hirsuta* as native in Belgium and hence it is included, with some doubt, in the present catalogue. There are several similar cases, e.g. *Salvinia natans*.

Some taxa were formerly considered erroneously to be native. As we are sure now about their non-native status they are, of course, included in the catalogue. Examples are *Juncus tenuis* and *Veronica peregrina* (cf. De Wildeman & Durand 1899). Inversely, *Schoenoplectus pungens*, formerly commonly regarded as a New World taxon appears to be native in Western Europe as well and, as a consequence, is excluded from the catalogue (contrary to Vanhecke 2006).

Finally, nothotaxa with only native parental species are not taken into account even if they are only exceptionally found as spontaneous hybrids. This holds true for taxa such as *Sorbus × thuringiaca* (hybrid between native *S. aria* and *aucuparia*) or *Tilia × europaea* (hybrid between native *T. cordata* and *platyphyllos*). Natural hybrids between these taxa are very rarely produced in the wild in Belgium but both nothotaxa are often cultivated and subsequently escape. As the parental taxa are native, such nothotaxa are not included in the present catalogue.

Archaeophytic or neophytic status (= residence status)

For practical reasons (and contrary to certain other recent catalogues of alien plants; see for instance Pyšek & al. 2002) only neophytes are included in the present catalogue. That is taxa of vascular plants that have appeared spontaneously within the borders of the Belgian territory since ca. 1500, the so-called post-Columbian era. Taxa that are presumably not native but that already were found spontaneously in Belgium before 1500 (archaeophytes) are not taken into account; they are usually assimilated with native taxa, in part because their exact time of arrival is uncertain. Especially Dodoens (1554) provided relevant information about the Belgian flora at that time.

Many of the present day ruderal or (former) agricultural taxa are in fact of archaeophyte origin: *Centaurea cyanus*, *Papaver* spp., *Reseda* spp., etc. Archaeophytes constitute an important part of our national flora. In the Czech Republic (Pyšek & al. 2002) for instance 332 taxa are considered to be archaeophytes (237 of which are naturalized); the same probably applies to the Belgian situation.

As it is too difficult to separate many originally native from archaeophyte taxa, the latter are not included in the present catalogue. Moreover, it is sometimes unclear what is meant by “archaeophytes”. As a rule, this term applies to non-native taxa that used to be *naturalized* before 1500. Theoretically, all Eurasian taxa could have been introduced as *casual* aliens in pre-Columbian times. The real naturalization of many of our so-called archaeophytes could come into question since many of them were probably never fully naturalized with us. Especially several former cereal weeds (for instance *Adonis aestivalis*, *Agrostemma githago*, *Consolida regalis*,...) are usually given archaeophytic status (and are thus not included in the present catalogue) but their status is probably in need of revision (see also above).

A particular problem encompasses some cultivated taxa. Some have surely been introduced (long) before 1500 (for instance *Castanea sativa*, *Cydonia oblonga*, *Juglans regia*, *Mespilus germanica*,...) but reproduction probably only started posterior to 1500², sometimes even in (very) recent times. Such taxa, although introduced well before 1500, are included in the catalogue as they were not naturalized before 1500.

² As a matter of fact for many of these taxa we simply don't know. In the Middle Ages western Europe experienced a milder climate and some of these cultivated plants possibly were already capable of naturalizing then and subsequently disappeared again as a result of the cooling of the climate. With the available botanical information it is impossible to assess if certain phenomena are recent or have already happened in the past.

Spontaneous appearance

As a rule, every taxon that spontaneously³ appeared has been selected for the present catalogue. This implies that, for instance, offspring of any cultivated taxon is taken into account. We agree with Kowarik (1995) that any reproduction (generative as well as vegetative) constitutes a first step towards a possible future invasion and the early detection of newly escaping taxa is important (Böcker 1998). Unfortunately, at present the knowledge about the spontaneous reproduction of cultivated taxa is still insufficient in Belgium. In Poland, for instance, a recent survey of alien tree and shrub species regenerating by self-sowing yielded not less than 317 taxa (Danielewicz & Maliński 2003)! The naturalization of cultivated taxa is usually a long-term process and many taxa are not recorded until they are well established. As a consequence, in the present catalogue only the more regular escapes are included (plus some additional, more exceptional taxa taken from Verhaeghe 1999); their proportion will surely increase in the future.

As spontaneous appearance is the key factor for inclusion in the list, no restriction is made in terms of habitat in which they were found. Taxa found outdoors as well as indoors are selected. In urban areas for instance exotic ferns (especially of the genera *Adiantum*, *Cyrtomium* and *Pteris*) are increasingly found on basement walls, in sewers or ruins in which frostbite is less likely. Likewise, greenhouse weeds are also included even if their survival outside the greenhouse area is unlikely at present. In Belgium the spontaneous flora of greenhouses has never been studied in detail so far (contrary to several other European countries; see for instance: Kuitunen & Lahtonen 1994 for Finland or Galera and Ratyńska 1999 for Poland). Hence, only some occasional records are included (for instance *Acalypha indica*, *Laportea aestuans*, *Phyllanthus tenellus* or *Pilea hyalina*). They are probably of minor importance but a future naturalization, outside the greenhouse area, can never be totally excluded. *Oxalis corniculata*, now a common urban weed, started its invasion history in Belgium as a greenhouse weed and, more recently, *Soleirolia soleirolii*, once dependent of heated indoor areas, is increasingly found as a naturalized urban weed. Similarly, *Adiantum raddianum* and perhaps also *Tradescantia fluminensis* are candidates for future naturalization.

Taxa that are planted (sometimes massively so!) but for which reproduction has not (yet) been reported are not included in the catalogue. This applies for instance to many Pinaceae that are introduced for timber production: *Picea orientalis*, *P. sitchensis*, *P. omorika*, *P. pungens*, *Tsuga heterophylla*, *T. canadensis*, *Pseudotsuga menziesii* and *Larix kaempferi*.

³ This criterium might sound unambiguous but in practice it is often difficult to judge whether and when off-spring of a cultivated plant should be taken into account in floristic inventories. At least a certain spatial barrier should be crossed but there are in fact no well-defined criteria to assess spontaneity.

Also problematic is the treatment of so-called “stinsenplanten”, “plantes castrales” or “feudal plants”. These taxa were once deliberately planted in parks and around castles, where they have survived without maintenance ever since. Often, they hardly spread beyond their original area of introduction, particularly if they reproduce only clonally. This applies to many bulbs such as *Chionodoxa* spp., *Galanthus* spp., *Scilla siberica*, etc. Although sometimes difficult to assess, some are perhaps better regarded as relics of cultivation and are not really “spontaneous”. Another critical example is the numerous taxa of Bambuseae (bamboos) formerly planted in parks. In Wépion (Parc de la Marlagne) various taxa have been collected in the 1950’s (and some surely still persist; comm. J. Lambinon) but only those more or less freely proliferating are considered here, for instance *Pseudosasa japonica* and *Sasa palmata*.

The case of some recently introduced aquatic ornamentals is analogous. Most surely are deliberate introductions and as they reproduce only clonally or not at all, it is difficult to assess if and when they are “escaping”. *Aponogeton distachyos* (cf. Saintenoy-Simon & Duvigneaud 1994) has reluctantly been included in the catalogue, essentially because this record is referred to by Lambinon & al. (2004), but several others are simply considered as planted and are not included in the catalogue (for instance *Equisetum robustum*, *Zizania aquatica*,...; cf. Saintenoy-Simon & Duvigneaud 1998, Saintenoy-Simon 2005).

Taxonomic level

Basically, only taxa at specific or subspecific level are included in the list. Taxa of lower taxonomic rank (varieties and forms) are usually withheld but in some rare cases they are nevertheless accepted. For instance varieties or forms that are easily distinguished and that probably deserve a more elevated taxonomic rank (viz *Lavatera trimestris* var. *brachypoda*), varieties or forms that have not been mentioned before in Belgium (viz *Malva alcea* var. *ribifolia*) or horticultural varieties – so-called “cultivars” – that are either more or less widespread or have not been mentioned before from Belgium (viz *Iberis amara* var. *coronaria*).

Nothotaxa with at least one non-native parental taxon are regarded as non-native, following Kowarik (2003) or Pyšek & al. (2004). Pyšek & al. (2002) already stressed the relevance of this group as hybrids proved to constitute 13,3% of the total number of non-native taxa in the Czech Republic. Unfortunately the knowledge about many supposed hybrids in Belgium is rather poor and no particular research has been undertaken in the course of the present study. As a consequence, beside the few newly identified by the author (viz *Rumex* × *erubescens*), only those nothotaxa enumerated by Lambinon & al. (2004) are included in the list but their exact identity has not been verified.

Layout, headings and abbreviations

The following data are provided in the catalogue: name of the taxon, mode of introduction (deliberate or accidental), data about the first and most recent observation in Belgium, area of origin, presence/absence in the three main political units in Belgium (Flanders, Brussels Capital Region and Wallonia), degree of naturalization, means of introduction, family to which the taxon belongs and synonym. In this paragraph each of these datasets are explained.

Name of the taxon

In general, the nomenclature follows the latest edition of the Belgian Flora (Lambinon & al. 2004). This implies for instance the treatment of *Bromus* in a broad sense (see also below). In some rare cases more recent taxonomical insights are followed [for instance for the genera *Diplachne* (versus *Leptochloa*) or *Euphorbia* (versus *Chamaesyce*) or for the *Amaranthus hybridus*-complex]. These nomenclatural changes will be adopted, at least in part, in the next edition of the Belgian Flora.

Taxa that were not mentioned yet by Lambinon & al. l.c. or Verloove (2002) are given in bold face. These include taxa that are, indeed, first-mentioned for the Belgian flora. Some older records however surely have been published before but were no longer included in the current Flora (chiefly as their identification was considered to be suspect up to present).

Presumed reliable literature references for a few taxa for which no herbarium collections were found (see above) are given in italic.

Some nomenclatural novelties (new names and/or combinations) are published separately (Verloove & Lambinon 2006).

Mode of introduction (Abbrev.: MoI)

Indicates whether a given taxon was originally introduced deliberately (D) or accidentally (A). Deliberately introduced non-native taxa are usually of horticultural (introduced in private as well as public areas) or agricultural origin (various cereals and other crops, vegetables, fruits). As a rule, most if not all woody immigrants are deliberate introductions (see also Mack & Erneberg 2002). Other examples of deliberate introductions are for instance commercially grown birdseed components like *Carthamus tinctorius*, *Echinochloa esculenta*, *E. frumentacea*, *Panicum miliaceum* subsp. *miliaceum*, *Phalaris canariensis*, etc...

(Hanson & Mason 1985). Taxa, introduced as contaminants in commercial birdseed mixtures are of course accidentally introduced taxa.

Some taxa might be introduced sometimes deliberately and other times accidentally or used to be introduced deliberately in the past but are presently rather introduced accidentally (or vice versa). For instance, *Consolida ajacis* is a regular garden escape (D) but is also introduced as a grain alien (A). Or *Bromus catharticus* might have been introduced formerly as a silage crop (D) but is now essentially a grain alien (A). In such cases both abbreviations are given, the most frequent/recent one first (A/D or D/A).

In other cases it is not quite obvious whether a taxon was introduced deliberately or not (even not after literature search or studying herbarium labels). In such cases the most likely mode of introduction is given, followed by a question mark (D?, A?).

Hybrids (in general natural hybrids; those obtained in cultivation are of course deliberate introductions) are usually indicated as “H” if a deliberate or accidental mode of introduction is not obvious.

First record (Abbrev.: FiR)

Data about the first record of a given taxon are chiefly taken from the databased herbarium collections. No literature as such has been consulted as data from literature are not verifiable (see above). One major exception is made for some neophytes that a) were already present before 1900 and b) that usually have not been confused with related taxa. As old herbarium labels usually provide rather little information, for such taxa data were taken from De Wildeman & Durand (1899), except if certain herbarium collections predate this publication. Reliable data were obtained for instance for *Geranium phaeum*, *Hepatica nobilis*, *Hesperis matronalis* and many others. For others, for instance *Solidago canadensis* (widely confused with the related *S. gigantea*) or many taxa of *Hieracium* subgenus *Pilosella*, only verifiable data from the herbaria are taken into account.

As a rule, neophytes that already occurred prior to 1800 are indicated as “<1800” as their exact time of arrival usually is only estimative.

As a consequence the “first record” data usually indicate only the first time a given taxon was collected in Belgium. Some taxa were already naturalized the first time they were collected, others were only able to become naturalized (much) later or are still regarded as casuals.

A particular issue is the escape (sexual or clonal reproduction) of many formerly cultivated taxa. From the herbarium labels of such taxa it is not always obvious whether a collection was taken from a cultivated or an escaped plant. As such, the exact time of escape of many cultivated taxa – even if fairly recent! – is not knowable. Examples are *Aesculus hippocastanum*, *Castanea sativa*, *Juglans regia*, *Pinus* spp., etc... This lack of information is compounded because escaped horticultural taxa formerly were often completely ignored and were not collected at all. For such taxa there might be a considerable difference between the given and the real time of spontaneous occurrence.

Most recent record (Abbrev.: ReR)

Following Pyšek & al. (2004) the most recent record of a given taxon is also provided as this is considered to be an important piece of information. This enables us to select taxa that have only occurred recently and ignore taxa that have not been confirmed in, for instance, the past 50 or 100 years (or vice versa).

For this item, herbarium sources were completed with field notes, essentially those of the author. Taxa that are widely naturalized – and that, theoretically, might be recorded every year – are indicated as such (abbreviated: “N”). Several ephemeral taxa (not naturalized) are rather or even very common (both locally or widely) and are also seen every year, at least in the past decade; such taxa are indicated as seen annually (abbreviated: “Ann.”).

Origin

What is meant is the initial area of origin of a given taxon. As a rule, secondary areas are not given (many of the taxa now have a cosmopolitan or pantropical distribution). These data are chiefly taken from Clement & Foster (1994), Ryves & al. (1996) and/or Lambinon & al. (2004). For the remaining taxa numerous local floras were consulted.

For the interpretation of the various areas of origin the continental scheme (level 1) of Brummitt (2001) was followed. The following units are distinguished: Europe (E), Africa (AF), temperate Asia (AS-Te), tropical Asia (AS-Tr), Australasia (AUS), Northern America (NAM) and Southern America (SAM). Some taxa are originally native in more than one continental unit; Mediterranean taxa, for instance, are indicated as “E AF AS-Te”, or pan-American taxa as “AM”, etc. Other taxa are represented in the (sub-) tropics of both the Old and New World; they are indicated as “Trop.”. Still others are of unknown origin (“?”) or arose in cultivation (“Cult.”, for taxa that are of artificial origin). For taxa of presumed spontaneous hybrid origin, no area of origin is provided; they are indicated as “Hybr.”.

Presence in Flanders, Brussels and Wallonia (Abbrev.: Fl, Br, Wa)

For every taxon from the list we have checked – again, essentially based on the digitalized herbarium collections – whether it has been recorded in the three major administrative units of Belgium (Flanders, Brussels Capital Region and/or Wallonia). Additional recent information for Brussels has been obtained from Luc Allemeersch (floral cartography of the Brussels Capital Region, 2003-2006).

Degree of naturalization (Abbrev.: DN)

The terminology used to indicate the degree of naturalization of non-native plants (= invasive status) is often confusing and sometimes conflicting. In order to avoid further complication we have chosen to rely (chiefly⁴) on the concepts as proposed by Richardson & al. (2000) and Pyšek & al. (2004) since they simplify things considerably. The same terminology was used to define the invasive status of the non-native plants in Flanders (northern part of Belgium; Verloove 2002).

In spite of the elucidating, methodological approach of Pyšek & al. l.c. and Richardson & al. l.c., it sometimes remains hard to distinguish between “casual” and “naturalized” on one hand, and between “naturalized” and “invasive” on the other. At least one criterion proposed for assessing invasive status by these authors seems not realistic: dispersal over more than 100 meters within 50 years time for taxa spreading by seed would render many (most?) of the sexually reproducing “naturalized” taxa to “invasive” taxa!

Data for Flanders are taken from Verloove (2002), except if the degree of naturalization for certain taxa would have changed since then (for instance *Astragalus cicer*, *Persicaria capitata*). Otherwise, the indication of invasive status is often an estimate or is taken from Lambinon & al. (2004) since no specific research was undertaken to check this. Assessing invasion success of several taxa proved to be very critical.

The following abbreviations are used:

- Cas. (casual): deliberately or accidentally introduced taxa that fail to reproduce after their introduction or that reproduce sexually or clonally but fail to maintain their populations at the long term.

This group primarily consists of ephemeral taxa that are introduced accidentally (for instance with wool or cereals), sometimes residing temporarily but usually soon disappear. Another major group are the so-called garden escapes that

⁴ We have excluded “weeds” and “transformers”. The former are included among the “naturalized” taxa (more rarely among the “casual” taxa), the latter are included in the “invasive” group. In addition to the groups presented by Pyšek & al. l.c. we have created a supplementary group of “extinct” taxa (formerly naturalized – usually locally – but now gone).

are not yet naturalized. Since they have not been able yet to fulfill several life cycles (which usually takes many years or even several decades for many horticultural shrubs and trees) and to form self-replacing populations, they are still considered as casuals (see also Keil & Loos 2005a). Several surely are candidates for future naturalization (for instance *Deutzia scabra*, *Juglans regia*, *Paulownia tomentosa*, *Platanus × hispanica*, *Populus trichocarpa*, *Prunus laurocerasus*, *Viburnum rhytidophyllum*,...). Verloove (2002) grouped such taxa separately (so-called “persistent” taxa).

- Nat. (naturalized): deliberately or accidentally introduced taxa that sustain self-replacing populations, at least for a reasonable time, but that are not invading (semi-) natural ecosystems (see below).
- Ext. (extinct): introduced taxa that once were naturalized (usually rather locally) but that have not been confirmed in recent times in their known localities. Only taxa that are certainly extinct are indicated as such. Some of these extinct taxa are no longer considered as naturalized but still occur as casuals; such taxa are indicated as “Ext./Cas.” (for instance *Tragopogon porrifolius*). Some additional taxa are definitely decreasing and their status is in serious need of revision; for the time being they are still accepted as being naturalized (for instance *Arabis collina*).
- Inv. (invasive): naturalized taxa that penetrate and proliferate in (semi-) natural habitats, not necessarily causing damage. Taxa that are found only occasionally or temporarily in (semi-) natural habitats are not considered as such (for instance *Coronopus didymus*).

Some invasive species actually cause severe damage in various ways: impact on biodiversity (aliens out-competing natives,...), health (aliens causing hay fever, photodermatitis) and/or economy (aliens disturbing watercourses,...). Such taxa are indicated as “Inv.*”.

Noxious agricultural weeds are not included in this group as they only proliferate in man-made habitats.

Taxa with an uncertain degree of naturalization are considered to be “casual” even if naturalization cannot be completely excluded. Similarly, naturalized taxa that might show some potential invasive behavior are still grouped among the “naturalized” taxa.

Means of introduction (Abbrev.: Means intr.)

This item provides information about how a given taxon was introduced (escaped from cultivation or introduced along with foodstuffs or other commodities; see

Clement & Foster 1994). This information has primarily been taken from the herbarium labels. In many cases (ancient herbarium collections were sometimes very poorly labelled!) this item is only indicative and partly based on other sources (literature,...). Most terms cited are self-explanatory but they are briefly enumerated and clarified hereafter.

- Agriculture (abbrev.: Agric.): crops (cereals, vegetables and other food plants), spices and condiments,...; commercial birdseed components and fruit trees are here excluded and grouped separately (see below); all are deliberate introductions.
- Birdseed: commercially grown birdseed components (*Guizotia abyssinica*, *Phalaris canariensis*,...) or birdseed impurities that have been introduced exclusively and certainly with commercially grown birdseed components (most birdseed impurities are introduced with grains as well and are included in the latter subgroup); these are deliberate and accidental introductions respectively.
- Fish: at least one taxon (*Lindernia dubia*) was supposedly introduced through fish farms.
- Food refuse: usually exotic vegetables found on dumps (kitchen waste), sewage works or in urban habitats (from thrown away pits); as a rule these taxa are deliberate introductions.
- Grain: accidental introductions brought in with genuine cereals (*Avena*, *Hordeum*, *Secale*, *Triticum*,...), oil seeds (*Glycine max*, *Helianthus annuus*, *Linum usitatissimum*,...), or other commodities used for the production of food, feed, etc.; also included are impurities in commercially grown birdseeds (see above).
- Hay: an exceptional vector for accidental introductions.
- Horticulture (abbrev. Hort.): deliberately introduced taxa for ornamental purposes found as garden-escapes, on dumps,...; fruit trees and trees for wood production are included in this subgroup; some taxa surely have been introduced through agriculture as well.
- Hybridization: indicated for natural hybrids, usually by the absence of a true vector of introduction; artificially raised, horticultural or agricultural hybrids are excluded (they belong in the Hort.-subgroup).
- Military troops: usually difficult to assess but at least some taxa have probably been brought in through military activities.
- Nurseries: taxa that are accidentally introduced (as weeds) via plant nurseries.
- Ore: taxa that are accidentally introduced with various kinds of ore (sand, gravel,...).

- Pines: some taxa have been introduced accidentally with imported pines.
- Seeds: weedy taxa that are accidentally introduced with various seeds or other diaspores of crop plants (for instance clover seed); sometimes poorly distinguished from grain aliens.
- Timber: accidental introductions that are found around timber or bark storages; perhaps more taxa are introduced in this way but sometimes difficult to assess.
- Traffic: very few taxa are believed to have been introduced accidentally through traffic (for many others, traffic surely is an important vector for further dispersal but not really as a vector of introduction).
- Urban weeds: the number of taxa accidentally brought in to urban areas without obvious vector of introduction (traffic?, tourists?,...) is recently increasing; if there are no other vectors they are included in this subgroup.
- Waterfowl: taxa that are accidentally brought in with migrating animals (usually birds); as with vehicle traffic, waterfowl is surely more important as a vector for spreading, rather than original introduction.
- Wool: between 1880-1960 perhaps the most important vector for accidentally introduced plants in Belgium. Introduced sheep wool contained lots of burrs and seeds. After cleaning the effluents passed directly into the Vesdre river and a copious exotic wool-alien flora occurred downstream of the wool-processing factories.

Family

The family sequence also follows Lambinon & al. (2004). Hence, the traditional classification is still adopted although a new classification as recently proposed by the Angiosperm Phylogeny Group (2003) is becoming widely accepted. The implementation of the latter classification would transfer, for instance, many of the Scrophulariaceae to the Plantaginaceae and would, of course, have severe implications for the composition of charts of taxonomic diversity (see below).

The application of Lambinon & al. l.c. also implies that certain families are considered in a strict sense (for instance Fumariaceae versus Papaveraceae s.l., Amygdalaceae and Malaceae versus Rosaceae s.l., etc....).

Synonym / Remark

The number of synonyms provided is restricted and one should refer to Lambinon & al. (2004) for full synonymy. As a rule, synonyms are only provided in a few cases: a) if the name in the catalogue differs from the name currently used in the

latest edition of the Flora (Lambinon & al. 2004); b) if recent taxonomic insights (new generic concepts, molecular studies, etc.) have become more or less widely accepted in the areas of origin but not yet in Europe. Especially in Australia and North America, recent taxonomic studies provided us with numerous new binomials. Examples are the segregation of the genera *Aster*, *Gnaphalium*,... within Asteraceae and the segregation of the genera *Bromus*, *Stipa*,... within Poaceae.

Analysis and statistics

Neophytes in Belgium in a broader context

A thorough herbarium revision of the main Belgian herbaria yielded 1969 taxa of non-native vascular plants (most at specific level plus some additional infra-specific taxa). Out of these, 409 are “new” (see below) for the Belgian non-native flora. On the other hand, more than 30 taxa currently enumerated in the Flora of Belgium (Lambinon & al. 2004) turned out to be included in error and need to be omitted in the next edition of this Flora (Verloove & Lambinon, in preparation).

To evaluate these figures several parameters need to be taken into account. As shown in the general introduction Belgium is a small country with relatively little climatological and geographical diversity. Horticulture has not really a long and rich tradition in Belgium. As a consequence a comparison with the 4166 non-native taxa in the British Isles (Clement & Foster 1994; Ryves & al. 1996) makes no sense: in the first place the British Isles have a much larger territory and they are climatologically and geographically much more diverse with the mild-climatic Channel Islands in the south as well as sub-alpine areas in the north. Moreover, the British Isles have a rich and long horticultural tradition, which is surely reflected in its remarkably rich flora of garden escapes. Moreover, as a rule, its alien flora has surely been studied more detailed than has ever been the case in Belgium. Especially the British wool-alien flora was investigated much more profoundly which yielded several hundreds of exceptional aliens (see for instance Lousley 1961; Ryves 1974, 1988). Similarly, research on the British birdseed aliens produced a list of 438 species of plants believed to be introduced by this agency (Hanson & Mason 1985).

Comparison with the recently compiled catalogue of alien plants in the Czech Republic (Pyšek & al. 2002) is perhaps more appropriate (although this country is more than twice as big as Belgium, has a much lower population density and a more continental climate). For the Czech Republic 1378 taxa are presented, including 24,1% archaeophytes (which are excluded from the present catalogue for Belgium). Moreover, this catalogue is essentially based on literature records. As shown before, such data are not always reliable. A thorough herbarium revision is much more effective (more than 20 % “new” taxa!), more reliable but – of course – much more time-consuming.

To conclude: in spite of its small size and its relative geographical homogeneity Belgium proves to have a remarkably rich non-native flora.

Taxonomic diversity

The Belgian non-native vascular flora is remarkably diverse: not less than 139 families are represented. The taxa are however very unevenly distributed among the families: most have only few representatives and not more than eight have at least 50 taxa. As a consequence, few families are species-rich and many families only have few taxa. (Table 1)

Two families (Poaceae, $n = 328$ and Asteraceae, $n = 249$) represent more than a quarter of the total number of taxa. The four largest families worldwide (Poaceae, Asteraceae, Fabaceae and Brassicaceae) contribute most to the total number of alien species in Belgium, which corresponds well with Pyšek (1998) (Fig. 1). A similar or even identical taxonomic pattern has been shown for the Czech Republic (Pyšek & al. 2002), Portugal (Almeida 1999), the city of Kiev (Mosyakin & Yavorska 2002), Switzerland (Weber 1999), Spain (Sanz Elorza & al. 2004),... and for Europe as a whole (Weber 1997). The same applies to more remote and climatologically fairly different areas, such as Taiwan (Wu & al. 2004).

Several families have disproportionately many alien representatives compared to the native Belgian flora (Chenopodiaceae, Onagraceae, Solanaceae, Verbenaceae,...) (see also Crawley & al. 1997). Many families (51 out of 139!) are exclusively represented by non-native species. In this subgroup Amaranthaceae count for 41 taxa but most only have few members (see Table 1). Inversely, some of the larger native families only have a few or no non-native representatives. Such disproportional representation is striking in, for example, the Cyperaceae, the Orchidaceae (the largest monocotyledon family worldwide) and the Potamogetonaceae.

When only naturalized and/or invasive taxa are taken into account the proportions change considerably (Fig. 2). Asteraceae appear to be comparatively more successful than Poaceae. The relative importance of Rosaceae, and to a lesser extent Apiaceae, strongly increases and Fabaceae and Chenopodiaceae have fewer naturalized representatives than expected.

For comparison with data from other countries the adopted taxonomy should be kept in mind. If, for instance, Rosaceae would be considered in a broad sense (incl. Amygdalaceae and Malaceae) its portion within the subgroup of naturalized and/or invasive non-native taxa would become even more important. Similarly, *Oenothera* (here treated as including numerous microspecies) can be variously interpreted taxonomically (see for instance Wisskirchen & Haeupler 1998 for a comparison of the different viewpoints).

Table 1. Taxonomic diversity of the total Belgian non-native vascular flora: enumeration of all families with their number of non-native representatives in Belgium. Families with only non-native representatives in Belgium are indicated with *.

328	Poaceae	29	Malvaceae
249	Asteraceae	28	Malaceae, Ranunculaceae
163	Fabaceae	25	Geraniaceae
110	Brassicaceae	24	Euphorbiaceae
60	Chenopodiaceae	22	Cyperaceae
53	Scrophulariaceae	21	Liliaceae
52	Lamiaceae	19	Salicaceae
51	Solanaceae	17	Crassulaceae
48	Rosaceae	13	Caprifoliaceae, Rubiaceae
46	Apiaceae	12	Convolvulaceae
44	Caryophyllaceae	11	Papaveraceae, Verbenaceae
41	* Amaranthaceae	10	Amygdalaceae, Campanulaceae
37	Boraginaceae	9	Ericaceae
36	Onagraceae, Polygonaceae	8	Juncaceae, Portulacaceae, Saxifragaceae
7	Alliaceae, Amaryllidaceae, Cucurbitaceae, Iridaceae, Oleaceae, Plantaginaceae, Valerianaceae		
6	Berberidaceae, * Commelinaceae, Dipsacaceae, Fumariaceae, * Pinaceae, * Polemoniaceae, Primulaceae, Urticaceae		
5	* Aizoaceae, Araliaceae, Betulaceae, Hydrocharitaceae, Oxalidaceae		
4	Araceae, Asclepiadaceae, Cuscutaceae, Elaeagnaceae, Grossulariaceae, * Hydrophyllaceae, Pteridaceae, Resedaceae, * Tamaricaceae, * Vitaceae		
3	* Anacardiaceae, Balsaminaceae, * Caesalpiniaceae, Celastraceae, Dryopteridaceae, Fagaceae, * Hydrangeaceae, * Juglandaceae, Linaceae, Lobeliaceae, Lythraceae, Orobanchaceae, Plumbaginaceae		
2	Aceraceae, * Agavaceae, * Aristolochiaceae, * Bignoniaceae, * Buddlejaceae, Cannabaceae, Cornaceae, Cupressaceae, Haloragaceae, * Hippocastanaceae, Hypericaceae, Lemnaceae, * Martyniaceae, * Molluginaceae, * Moraceae, * Nyctaginaceae, Orchidaceae, * Passifloraceae, * Phytolaccaceae, * Platanaceae, * Pontederiaceae, Pyrolaceae, Rhamnaceae, * Rutaceae, * Salvinaceae, * Sapindaceae, Violaceae		
1	* Acanthaceae, * Actinidiaceae, Alismataceae, Apocynaceae, * Aponogetonaceae, * Azollaceae, * Begoniaceae, Buxaceae, * Cabombaceae, * Cannaceae, * Capparaceae, Cistaceae, * Clethraceae, Elatinaceae, * Ephedraceae, * Frankeniaceae, Gentianaceae, * Limnanthaceae, * Loasaceae, * Magnoliaceae, Ophioglossaceae, * Pedaliaceae, Polypodiaceae, * Saururaceae, * Selaginaceae, Selaginellaceae, * Simaroubaceae, * Staphyleaceae, * Taxodiaceae, * Trapaceae, * Tropaeolaceae, Typhaceae, Woodsiaceae, * Zygophyllaceae		

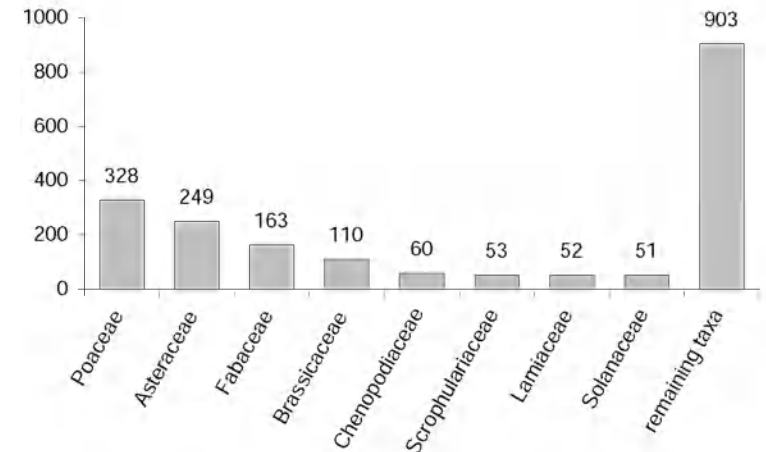


Figure 1. Taxonomic diversity of the total Belgian non-native vascular flora: representation of the eight families with the highest number of non-native taxa in Belgium.

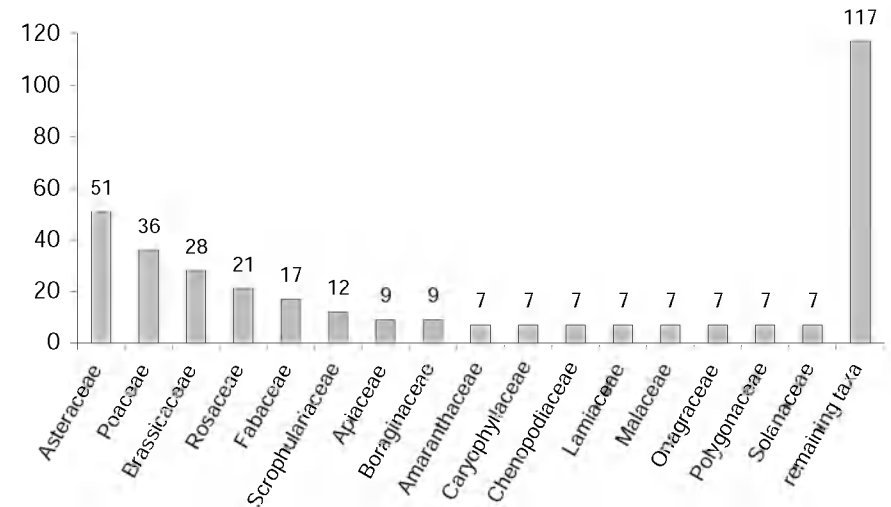


Figure 2. Taxonomic diversity of the naturalized and/or invasive Belgian non-native vascular flora: representation of the 16 families with the highest number of non-native taxa in Belgium.

Mode of introduction

The global all-time Belgian non-native flora, regardless of degree of naturalization, is mainly constituted by accidental introductions (57 % versus 42 % deliberate introductions; Fig. 3). A further 1 % are (natural) hybrids (not of horticultural origin). More or less identical figures were obtained for the Czech Republic (respectively 53,4 and 46,6 % accidental and deliberate introductions; Pyšek & al. 2002).

The species-rich, accidentally introduced alien flora associated with the wool-processing factories (essentially in the Vesdre-valley in Wallonia) strongly diminished from the 1960's onwards and has completely disappeared now. A large array of this particular wool-alien flora (with many African and Australian representatives) has never re-occurred after cessation of these local industrial activities.

As a result of the ongoing increase of commercial trade in Belgium the possibilities for accidental introductions perhaps never have been better than today, but in practice, the number of new ephemeral introductions seems to decrease⁵. The raw materials are usually brought in with much less contaminants: weed-killers and seed-cleanings are now more effective in the area of origin or were formerly not practiced at all. Moreover, modern unloading activities are more accurate and less seeds are spilled. Generally, unloading quays are nowadays usually asphalted and there is little chance that foreign seeds might grow. The same tendencies are reported from neighbouring countries (see for instance Keil & Loos 2005b for Germany).

On the other hand the number of deliberately introduced taxa running wild is much increasing recently. As a matter of fact, the majority of current introductions are of horticultural origin (see also Esler & Astridge 1987).

When focusing on the naturalized and invasive taxa (Fig. 4) it is evident that the proportion of deliberate introductions is increasingly important: almost 60% of the Belgian naturalized or invasive flora has originally been introduced deliberately. Mack & Erneberg (2002) has already revealed that the naturalized flora of the United States is largely the product of deliberate introductions. Naturalization occurs much more frequently in species imported on purpose than in those introduced accidentally (Thellung 1912; Kowarik 1999).

Moreover, all taxa currently considered to be noxious in one way or another (*Fallopia japonica*, *Heracleum mantegazzianum*, *Hydrocotyle ranunculoides*, *Impatiens glandulifera*, *Ludwigia grandiflora*, *Prunus serotina*, *Rhododendron*

ponticum and *Rosa rugosa*) are initially deliberate introductions and could have been prevented.

In short: there is a remarkable decline of accidentally introduced non-native taxa but the number of deliberately introduced taxa (primarily garden-escapes) has recently dramatically increased.

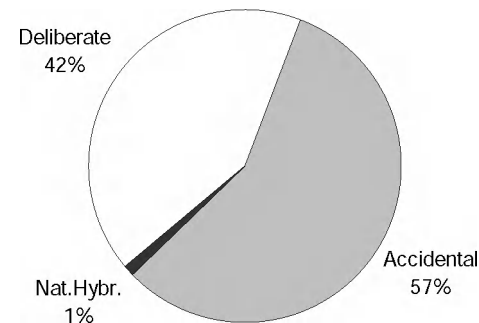


Figure 3. Analysis of the mode of introduction of the total Belgian non-native vascular flora (regardless of degree of naturalization).

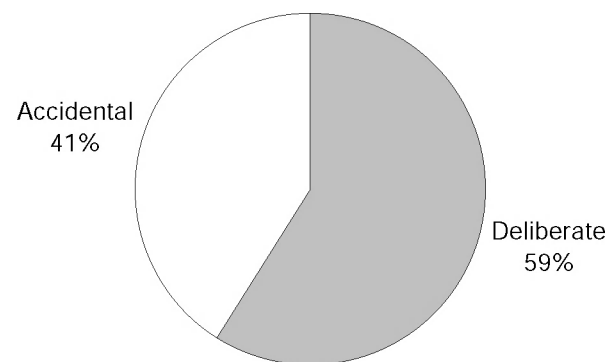


Figure 4. Analysis of the mode of introduction of the naturalized and/or invasive Belgian non-native vascular flora.

⁵ There is a remarkable paradox between the declining number of accidentally introduced, primarily ephemeral species and the increasing number of deliberately introduced species with a considerably higher degree of invasion success.

Geographic diversity

The geographic diversity of the total Belgian non-native flora represents a remarkable pattern (Fig. 5). It is evident that the majority originates in Europe and temperate Asia. Furthermore, an important part came in from Africa (especially North Africa) and the Americas (predominantly North America), both representing ca. 17 % of the total number of taxa. Other geographical units are represented much less: Australasian taxa count for 3,54 %, tropical Asian taxa for not more than 2,33 % and pan (sub-) tropical ones for only 1,15 %. 52 additional taxa are of unknown or obscure origin and 49 are of hybrid origin (which is a minor group compared with the 184 hybrids in the Czech non-native flora; cf. Pyšek & al. 2002).

It is difficult to compare these figures with those for other countries or areas since in many cases no information is provided whether all or only naturalized taxa are considered. In general however, these results correspond well with those found for accidentally introduced taxa for the city of Brussels, Belgium (Godefroid 1996). When compared with those from the Czech republic, European taxa are under-recorded in Belgium, while African, Australasian and Asian taxa seem to be better represented (partly, at least, due to its well-studied wool-alien flora with many African and Australian representatives).

The relatively huge presence of African and temperate Asian taxa is partly explainable through the Mediterranean element, which constitutes almost 14 % of the total number.

If compared with Mediterranean countries the American element is surprisingly restricted in Belgium. In Portugal for instance, American taxa constitute 33,6 % of the total number of non-native taxa (Almeida 1999) and, similarly, in Spain the American element is also predominant (Sanz Elorza & al. 2004). In various northern African countries, on the contrary, the average (naturalized!) American element (17 %) corresponds well with the Belgian data (Vilà & al. 1999).

If only naturalized and invasive taxa are considered it becomes evident that, after the prevailing Eurasian element (more than 63 %), the number of North American taxa is steadily increasing (16,05 %) (Fig. 6; see also Tamis & al. 2005). Thus, the number of North American introductions is relatively restricted but their invasion success appears to be comparatively higher. Contrariwise, the African element decreases within this subgroup and the Australian, tropical Asian and (pan-) tropical element becomes negligible.

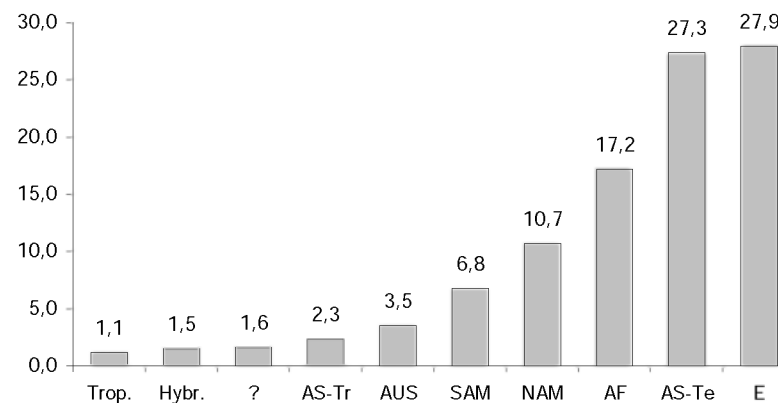


Figure 5. Geographic origin of the total Belgian non-native vascular flora (following Brummitt 2001; for abbreviations see above). A taxon that is native in more than one geographical unit is considered to be a representative of each of them. Data are given in percents.

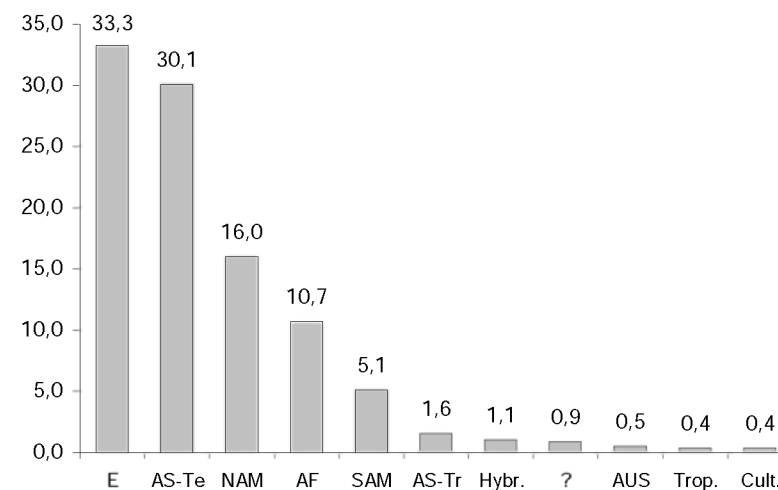


Figure 6. Geographic origin of the naturalized and/or invasive Belgian non-native vascular flora (following Brummitt 2001; for abbreviations see above). Taxa that are native in more than one geographical unit are considered to be representatives of each of them. Data are given in percents.

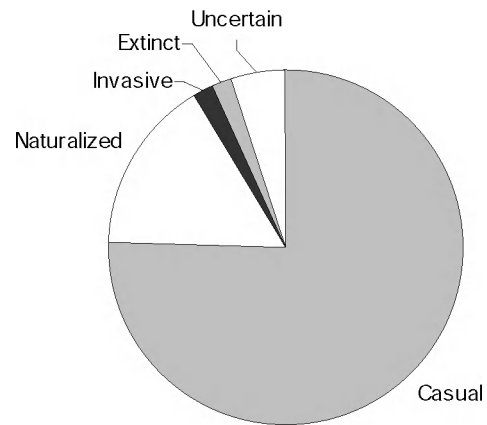


Figure 7. Degree of naturalization of the Belgian non-native vascular flora.

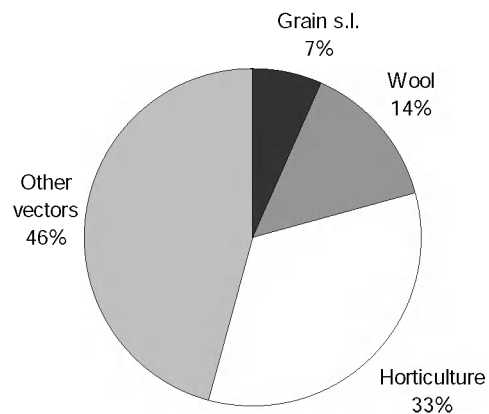


Figure 8. Main vectors of introduction of the total Belgian non-native flora. See text for further explanation.

Degree of naturalization

Data about the degree of naturalization are extremely important within the field of plant invasion studies, since they reflect the invasion success of every non-native taxon. Unfortunately assessing the degree of naturalization regularly proved to be problematic and was, in fact, not a main objective of this study (see above).

An analysis of the non-native flora of Belgium reveals that a large majority of the introductions are ephemeral. Moreover, a considerable number of the ephemeral plant introductions surely remain undetected. Only a small (but apparently increasing) portion can become naturalized and, at least at present, a negligible part is considered to be invasive and/or noxious (Fig. 7). Similar results were shown for several European countries, for instance in Germany (Kowarik 1999). Figures, of course, depend upon the adopted classification system for assessing invasion success.

The invasion success of the diverse subgroups (garden escapes, wool and grain aliens,...) is remarkably variable. Out of the 274 exclusive wool aliens only one (*Senecio inaequidens*) was able to become naturalized (0,36 %). Inversely, garden escapes turned out to be much more successful: at least 185 out of the 660 exclusively horticultural aliens became naturalized (more than 28 %).

Means of introduction

Often a number of vectors have contributed to the introduction of a single taxon. Sometimes the importance of one vector has declined in favour of another. Therefore, the actual importance of each vector among the non-native taxa is not easily reflected in a chart. If taxa with multiple vectors of introduction are excluded only few important vectors come to light; the most predominant are horticulture, wool and grain (including birdseed, oilseed,...) (Fig. 8).

Doubtlessly, the most important are the horticultural introductions: 660 taxa (33,52 %) were exclusively introduced for horticultural reasons. The huge representation of wool-aliens in the total list of non-native plants is remarkable. Not less than 274 taxa (13,92 % of the total number of introductions) have exclusively been introduced through the wool-processing industry. Finally, exclusive grain aliens contribute for 134 taxa (6,81 %). The remaining taxa (901 or 45,76 %) have been introduced through at least two vectors (many often also at least partly with grain and/or wool) or exclusively through one minor vector (for instance ore, hay or military troops).

Trends

The total number of plant introductions has proceeded steadily in the past decades (Fig. 9). Especially in the period 1990-2005 the number of new introductions increased enormously (more than 300 firstly reported taxa!). This figure on the one hand reflects a greater interest in non-native plants. On the other hand, there must have been a real spectacular increase in new plant introductions. As shown before, this is largely the result of the increasing number of garden escapes (deliberate introductions); the number of accidental introductions is steadily decreasing.

Similarly, the number of naturalizations is increasing (Fig. 10). Although data for the period prior to 1800 are scarce one can assume that not earlier than during the 19th century a first wave of naturalizations took place. Since then, the number of new naturalizations has steadily increased.

Outlook: much remains to be done

With the compilation of this annotated catalogue of non-native vascular plants, a gap in our knowledge has been finally bridged. However not all work is done. Several problems, of various kinds, remain unresolved. Many taxonomically difficult genera and species-groups are still in serious need of revision. An improvement of our knowledge on certain genera (for instance *Cotoneaster*) will surely reveal numerous additional taxa. Likewise, the more systematic exploration of usually neglected habitats with a rich non-native flora (for instance (sub-) urban areas,...) will ameliorate our current knowledge about the distribution and spread of certain aliens.

Apart from these (minor) taxonomical and distributional problems we have experienced a more severe one. The assessment of the exact status of a given taxon regularly proved to be problematic, in terms of residence status (native/non-native; archaeophyte/neophyte) as well as in terms of invasive status (casual/naturalized/invasive). Recent systems for the classification of naturalized and invasive plants (Richardson & al. 2000, Pyšek & al. 2004) surely have the merit of simplifying complicated earlier systems, but often do not withstand a critical analysis, since some of the criteria used are questionable. Many problems with the status designation could be avoided by simply replacing the term “invasive species” by “invading species”. By untying the invasive potential of species from the invasion processes, and by accepting that being invasive is a temporal, transitional state in which every innocent species can get when the opportunities are appropriate, it is easier to focus on the real invasion processes and the active invaders at any scale. While elaborating the present catalogue it thus became clear that an additional, updated and total checklist or database of the Belgian vascular flora of native as well as naturalized alien taxa is urgently needed. In this list the

actual⁶ status of each Belgian taxon should be assessed, preferably by addressing the following questions: 1) is the taxon native or not?, 2) if non-native, is the taxon an archaeophyte or a neophyte and finally 3) is the (naturalized) taxon invading or not. The resolution of these newly arisen problems should be a challenge for Belgian botanists in the near future.

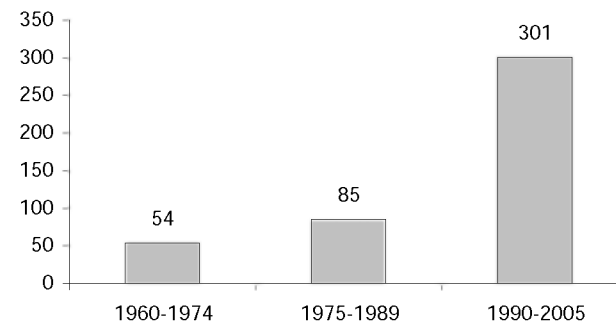


Figure 9. Number of new introductions in Belgium in the past decades (1960-2005).

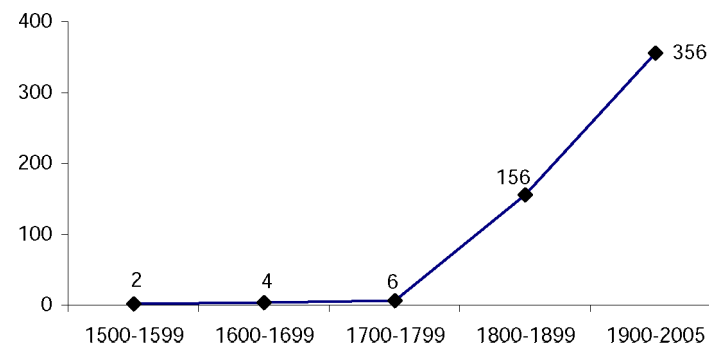


Figure 10. Cumulative number of naturalizations of non-native plants in Belgium between 1500 and 2005. Data prior to 1800 are estimative rather than effective.

⁶ We need to accept that present-day checklists provide an idea of the knowledge at a given time and that they can soon become obsolete.

Catalogue of neophytes in Belgium (1800-2005)



Headings, abbreviations, and conventions used in the catalogue.

See text for further details.

- | | |
|--|--|
| <ul style="list-style-type: none">• Taxon
<i>italic</i> – literature reference only
bold – taxon ‘new’ for the Flora• MoI – Mode of introduction
A – accidentally
D – deliberately
A/D or D/A – both deliberately and accidentally
A? – most likely accidentally
D? – most likely deliberately• FiR – First record• ReR – Most recent record
Ann. – seen each year; not (yet) naturalized
Nat. – naturalized• Origin
AF – Africa
AM – America
AS-Te – temperate Asia
AS-Tr – tropical Asia
AUS – Australasia
Cult. – arisen in cultivation
E – Europe
Hybr. – spontaneous hybrids
NAM – Northern America
SAM – Southern America
Trop. – Old and New World tropics
? – origin unknown• Presence in Belgium
Br – Brussels Capital Region
Fl – Flanders
Wa – Wallonia | <ul style="list-style-type: none">• DN – Degree of naturalization
Cas. – casual
Nat. – naturalized
Ext. – extinct
Ext./Cas. – casual, formerly naturalized
Inv. – invasive
Inv.* – taxon with a high impact on biodiversity, economy, health, etc.• Means intr. – Means of introduction
Agric. – agriculture
Birdseed
Fish
Food refuse
Grain
Hay
Hort. – horticulture
Hybridization
Military troops
Nurseries
Ore
Pines
Seeds
Timber
Traffic
Urban weeds
Waterfowl
Wood• Family• Synonym / Remark |
|--|--|

Taxon	MoI	FiR	ReR	Origin	Fl	Br	Wa	DN	Means intr.	Family	Synonym/Remark
Abronia fragrans Nutt.	D	1951	1951	NAM	●			Cas.	Hort.	Nyctaginaceae	
<i>Abutilon theophrasti</i> Med.	A	<1929	Ann.	E AS-Te	●	●	●	Cas.?	Grain	Malvaceae	
Acalypha indica L.	A	2003	2003	AF AS-Tr	●			Cas.	Nurseries	Euphorbiaceae	
<i>Acanthospermum hispidum</i> DC.	A	1997	2005	SAM	●			Cas.	Grain	Asteraceae	
<i>Acanthus mollis</i> L.	D	1998	1998	E AF			●	Cas.	Hort.	Acanthaceae	
<i>Acer cappadocicum</i> Gled.	D	1992	1992	AS-Te		●		Cas.	Hort.	Aceraceae	
<i>Acer negundo</i> L.	D	1955	N	NAM	●	●	●	Inv.	Hort.	Aceraceae	
<i>Achillea ageratum</i> L.	D	1953	1960	E AF	●			Cas.	Hort.	Asteraceae	
Achillea cartilaginea Ledeb. ex Reichenb. s.l.	D?	1986	1986	E AS-Te	●			Cas.	Hort.	Asteraceae	Incl. <i>A. salicifolia</i> Besser
<i>Achillea filipendulina</i> Lam.	D	1944	1944	AS-Te	●			Cas.	Hort.	Asteraceae	
<i>Achillea nobilis</i> L.	A/D	1880	1952	E AS-Te	●	●	●	Ext.	Grain, wool, hort.	Asteraceae	
<i>Achillea setacea</i> Waldst. et Kit.	A	1885	1886	E AS-Te	●			Cas.	Grain?	Asteraceae	
<i>Achnatherum calamagrostis</i> (L.) Beauv.	D?	<1835	1953	E	●		●	Cas.	Hort.	Poaceae	<i>Calamagrostis argentea</i> DC.
Acmella spec.	A	1955	1955	Trop.			●	Cas.	Wool	Asteraceae	
<i>Aconitum napellus</i> L. subsp. <i>napellus</i> var. <i>giganteum</i> (Dum. ex Thielens) J.Duvigneaud	D	<1835	N	E	●	●	●	Nat.	Hort.	Ranunculaceae	
<i>Aconitum x stoerkianum</i> Reichenb. (<i>A. napellus x variegatum</i> L.)	D	<1835	1977	Cult.	●		●	Cas.	Hort.	Ranunculaceae	
<i>Acorus calamus</i> L.	D	1680	N	AS-Te	●	●	●	Nat.	Hort.	Araceae	
<i>Actinidia deliciosa</i> (Chevalier) C.S.Liang et A.R.Ferguson	D	2000	2005	AS-Te	●			Cas.	Food refuse	Actinidiaceae	
Adenostyles alliariae (Gouan) A.Kerner	A?	1971	1971	E			●	Cas.	?	Asteraceae	
Adiantum capillus-veneris L.	D	2001	N	Trop.	●			Cas.	Hort.	Pteridaceae	
Adiantum raddianum C.Presl	D	2003	2005	SAM	●	●		Cas.	Hort.	Pteridaceae	
<i>Adonis annua</i> L.	A/D	1846	1998	E AF AS-Te	●		●	Ext./Cas.	Seeds, hort.	Ranunculaceae	Incl. subsp. <i>cupaniana</i> (Guss.) C.Steinberg
<i>Adonis flammae</i> Jacq.	A/D	1864	1978	E			●	Ext./Cas.	Seeds, hort.	Ranunculaceae	
<i>Aegilops cylindrica</i> Host	A	1876	1954	E AS-Te	●		●	Cas.	Grain, wool....	Poaceae	
<i>Aegilops geniculata</i> Roth	A	1854	1973	E AF AS-Te	●		●	Cas.	Grain....	Poaceae	
<i>Aegilops triuncialis</i> L.	A	1854	1946	E AF AS-Te	●	●	●	Cas.	Seeds....	Poaceae	
<i>Aegilops ventricosa</i> Tausch	A	<1835	1892	E AF AS-Te	●		●	Cas.	Grain....	Poaceae	
Aeluropus littoralis (Gouan) Parl.	A	1853	1853	E AF AS-Te	●			Cas.	?	Poaceae	
Aeschynomene americana L.	A	2003	2003	AM	●			Cas.	Grain	Fabaceae	
<i>Aeschynomene indica</i> L.	A	1999	1999	Trop.	●			Cas.	Birdseed	Fabaceae	
<i>Aesculus hippocastanum</i> L.	D	<1980	N	E	●	●		Nat.	Hort.	Hippocastanaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Aesculus indica</i> (Wallich ex Cambess.) Hook.	D	<1997	<1997	AS-Te		•		Cas.	Hort.	Hippocastanaceae	
<i>Ageratum houstonianum</i> Mill.	D	1908	1981	AM	•	•	•	Cas.	Hort.	Asteraceae	
<i>Agrimonia repens</i> L.	A	<1827	<1827	AS-Te			•	Cas.	?	Rosaceae	
<i>Agropyron cristatum</i> (L.) Gaertn. subsp. pectinatum (Bieb.) Tzvelev	A	1947	2001	E AF AS-Te	•		•	Cas.	Grain, wool	Poaceae	
Agrostemma gracilis Boiss.	D	1978	2005	E AS-Te	•			Cas.	Hort.	Caryophyllaceae	
<i>Agrostis avenacea</i> J.F.Gmel.	A	1892	1967	AUS			•	Cas.	Wool	Poaceae	<i>Lachnagrostis filiformis</i> (Forst.) Trin.
Agrostis billardierei R.Brown	A	1911	1911	AUS			•	Cas.	Wool	Poaceae	<i>Lachnagrostis billardieri</i> (R.Brown) Trin.
Agrostis castellana Boiss. et Reut.	A	1904	2004	E AF AS-Te	•		•	Cas.	Grass seed, wool	Poaceae	
Agrostis eriantha Hack.	A	1904	1951	AF			•	Cas.	Wool	Poaceae	
Agrostis exarata Trin.	A	1990	1990	NAM AS-Te	•			Cas.	Grass seed	Poaceae	
<i>Agrostis lachnantha</i> Nees	A	1893	1959	AF			•	Cas.	Wool	Poaceae	
<i>Agrostis nebulosa</i> Boiss. et Reut.	D	1881	1881	E AF			•	Cas.	Hort.	Poaceae	
<i>Agrostis scabra</i> Willd.	A	1930	N	NAM AS-Te	•		•	Nat.	Grain, wool	Poaceae	
<i>Agrostis</i> x <i>fouilladeana</i> Lambinon et Verloove (<i>A. capillaris</i> L. x <i>castellana</i>)	D?	1998	N	Hybr.	•			Nat.	Grass seed	Poaceae	
<i>Ailanthus altissima</i> (Mill.) Swingle	D	1952	N	AS-Te	•	•	•	Inv.	Hort.	Simaroubaceae	
Aira elegantissima Schur	A	1898	1911	E AF AS-Te			•	Cas.	Wool,...	Poaceae	
Alcea ficifolia L. (<i>Alcea rosea</i> x <i>rugosa</i>)	D	2002	2002	AS-Te	•			Cas.	Hort.	Malvaceae	
<i>Alcea rosea</i> L.	D	1976	N?	?	•			Nat.?	Hort.	Malvaceae	
Alchemilla conjuncta Bab.	D	<1830	1884	E			•	Ext.	Hort.	Rosaceae	
<i>Alchemilla micans</i> Buser	A?	1950	1956	E	•		•	Cas.	?	Rosaceae	
<i>Alchemilla mollis</i> (Buser) Rothm.	D	1995	N	E AS-Te	•	•		Nat.	Hort.	Rosaceae	
<i>Alchemilla tythantha</i> Juzepcz.	D	1960	1969	E			•	Ext.	Hort.	Rosaceae	
<i>Allium carinatum</i> L.	D?	1811	1957	E AS-Te			•	Ext.?	Hort.?	Alliaceae	
<i>Allium fistulosum</i> L.	D	<1850	<1850	AS-Te			•	Cas.	Hort.	Alliaceae	
<i>Allium moly</i> L.	D	1885	1885	E			•	Cas.	Hort.	Alliaceae	
<i>Allium paradoxum</i> (Bieb.) G.Don var. <i>paradoxum</i>	D	1999	N	AS-Te	•		•	Nat.	Hort.	Alliaceae	
<i>Allium porrum</i> L.	D	1948	1948	?			•	Cas.	Agric.	Alliaceae	
<i>Allium schoenoprasum</i> L.	D	1836	1994	E	•	•	•	Cas.?	Agric.	Alliaceae	
<i>Allium scorodoprasum</i> L.	D	1925	N	E	•		•	Nat.	Hort.	Alliaceae	
<i>Alnus cordata</i> (Loisel.) Duby	D	1992	N?	E	•		•	Nat.?	Hort.	Betulaceae	
<i>Alnus incana</i> (L.) Moench	D	1869	N	E AS-Te	•	•	•	Nat.	Hort.	Betulaceae	
<i>Alnus</i> x <i>pubescens</i> Tausch (<i>A. glutinosa</i> (L.) Gaertn. x <i>incana</i>)	H	1963?	1973?	Hybr.	•		•	Cas.?	Hybridization	Betulaceae	

Taxon	MoI	FiR	ReR	Origin	Fl	Br	Wa	DN	Means intr.	Family	Synonym/Remark
Alopecurus borealis Trin. subsp. borealis	A	1912	1912	E AM AS			●	Cas.	Wool	Poaceae	Incl. A. magellanicus Lam.
Alopecurus carolinianus Walter	A	1921	1921	NAM			●	Cas.	Wool	Poaceae	
Alternanthera angustifolia R.Brown	A	1895	1895	AUS			●	Cas.	Wool	Amaranthaceae	
Alternanthera caracasana Humb., Bonpl. et Kunth	A	1947	1948	SAM			●	Cas.	Wool	Amaranthaceae	
Alternanthera denticulata R.Brown	A	1895	1947	AUS			●	Cas.	Wool	Amaranthaceae	
Alternanthera nodiflora R.Brown	A	1947	1947	AF AS-Tr AUS			●	Cas.	Wool	Amaranthaceae	
Alternanthera paronychioides A.St. Hil.	A	1911	1911	SAM			●	Cas.	Wool	Amaranthaceae	
Alternanthera pungens Humb., Bonpl. et Kunth	A	<1949	<1949	SAM			●	Cas.	Wool	Amaranthaceae	
Alternanthera sessilis (L.) DC.	A	1911	1951	Trop.			●	Cas.	Wool	Amaranthaceae	
Alternanthera tenella Colla	A	2001	2002	SAM	●			Cas.	Grain	Amaranthaceae	
Althaea hirsuta L.	A	1855	1998	E AS-Te	●	●		Cas.	Grain....	Malvaceae	
Alyssum desertorum Stapf	A	1864	1910	E AS-Te	●	●		Cas.	Wool....	Brassicaceae	
Alyssum hirsutum Bieb.	A	1879	1879	E AS-Te	●			Cas.	Grain?	Brassicaceae	
Alyssum montanum L.	D	2002	N?	E			●	Nat.?	Hort.	Brassicaceae	
Alyssum murale Waldst. et Kit.	D?	<1850	N	E AS-Te			●	Nat.	Hort.	Brassicaceae	
Alyssum saxatile L.	D	1889	2003	E AS-Te	●	●		Cas.?	Hort.	Brassicaceae	Aurinia saxatile (L.) Desv.
Alyssum simplex Rudolphi	A	<1850	1924	E AF AS-Te	●	●	●	Cas.	Wool, grain....	Brassicaceae	
Alyssum strigosum Banks et Sol.	A	1909	1909	E AS-Te			●	Cas.	?	Brassicaceae	
Amaranthus acutifolius Uline et Bray	A	1908	1928	NAM			●	Cas.	Wool	Amaranthaceae	
Amaranthus albus L.	A	1857	N	NAM	●	●	●	Nat.	Grain, wool....	Amaranthaceae	
Amaranthus blitoides S.Watson	A	1886	N	NAM	●		●	Nat.	Grain, wool....	Amaranthaceae	
Amaranthus blitum L. s.l.	A	<1835	N	E AF AS	●	●	●	Nat.	Grain, wool....	Amaranthaceae	
Amaranthus bouchonii Thell.	A	1957	N	E	●	●	●	Nat.	Grain....	Amaranthaceae	Amaranthus hybridus L. subsp. bouchonii (Thell.) O.Bolós et Vigo
Amaranthus capensis Thell. subsp. capensis	A	1890	1911	AF			●	Cas.	Wool	Amaranthaceae	
Amaranthus capensis Thell. subsp. uncinatus (Thell.) Brenan	A	1890	1949	AF			●	Cas.	Wool	Amaranthaceae	Amaranthus dinteri Schinz var. uncinatus Thell.
Amaranthus caudatus L.	D	1874	2005	Trop.	●	●		Cas.	Hort.	Amaranthaceae	
Amaranthus clementii Domin	A	1939	1949	AUS			●	Cas.	Wool	Amaranthaceae	
Amaranthus crispus (Lesp. et Thév.) N.Terrac.	A	1884	1959	SAM			●	Cas.	Wool....	Amaranthaceae	
Amaranthus cruentus L.	D	2005	2005	SAM			●	Cas.	Hort.	Amaranthaceae	Amaranthus hybridus L. subsp. cruentus (L.) Thell.
Amaranthus deflexus L.	A	<1850	N	SAM	●	●		Nat.	Grain, wool....	Amaranthaceae	
Amaranthus graecizans L.	A	1874	1962	E AF AS	●	●		Cas.	Wool....	Amaranthaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Amaranthus hybridus</i> L. subsp. <i>hybridus</i> var. <i>hybridus</i>	A	1870	N	AM	•	•	•	Nat.	Grain, wool,...	Amaranthaceae	
<i>Amaranthus hybridus</i> L. subsp. <i>hybridus</i> var. <i>pseudoretroflexus</i> (Thell.) Carretero	A	1904	2004	NAM	•	•	•	Cas.	Grain, wool,...	Amaranthaceae	<i>Amaranthus powellii</i> S.Watson
<i>Amaranthus hypochondriacus</i> L.	D	1857	2005	NAM	•		•	Cas.	Hort.	Amaranthaceae	<i>Amaranthus hybridus</i> subsp. <i>hybridus</i> var. <i>erythrostachys</i> Moq.
<i>Amaranthus macrocarpus</i> Benth. var. <i>macrocarpus</i>	A	1911	1949	AUS			•	Cas.	Wool	Amaranthaceae	
<i>Amaranthus macrocarpus</i> Benth. var. <i>pallidus</i> Benth.	A	1947	1947	AUS			•	Cas.	Wool	Amaranthaceae	
<i>Amaranthus mitchellii</i> Benth.	A	1892	1948	AUS			•	Cas.	Wool	Amaranthaceae	
<i>Amaranthus muricatus</i> (Moq.) Hieron.	A	1947	1975	SAM	•		•	Cas.	Wool,...	Amaranthaceae	
<i>Amaranthus palmeri</i> S.Watson	A	1952	2005	NAM	•	•	•	Cas.	Grain	Amaranthaceae	
<i>Amaranthus polygonoides</i> L.	A	1959	1959	AM			•	Cas.	Wool	Amaranthaceae	
<i>Amaranthus quitensis</i> Kunth	A	1898	2000	SAM	•	•	•	Cas.	Grain, wool,...	Amaranthaceae	
<i>Amaranthus retroflexus</i> L.	A	1857	N	NAM	•	•	•	Nat.	Grain, wool,...	Amaranthaceae	
<i>Amaranthus rudis</i> Sauer	A	1983	2003	NAM	•			Cas.	Grain	Amaranthaceae	
<i>Amaranthus spinosus</i> L.	A	1887	1995	Trop.	•		•	Cas.	Grain, wool,...	Amaranthaceae	
<i>Amaranthus standleyanus</i> Parodi ex Covas	A	1903	2000	SAM	•		•	Cas.	Grain, wool,...	Amaranthaceae	
<i>Amaranthus thunbergii</i> Moq.	A	1857	1975	AF	•		•	Cas.	Wool,...	Amaranthaceae	
<i>Amaranthus tuberculatus</i> (Moq.) Sauer	A	1992	2005	NAM	•			Cas.	Grain	Amaranthaceae	
<i>Amaranthus viridis</i> L.	A	1905	1998	SAM	•		•	Cas.	Wool, grain,...	Amaranthaceae	
<i>Amaranthus</i> x <i>ozanonii</i> (Thell.) C.Schuster et M.Goldschm. (<i>A. hybridus</i> x <i>retroflexus</i>)	A	1983	1994	Hybr.	•		•	Cas.	Hybridization	Amaranthaceae	
<i>Amaranthus</i> x <i>ralletii</i> Contré (<i>A. bouchonii</i> x <i>retroflexus</i>)	A	1985	1985	Hybr.		•		Cas.	Hybridization	Amaranthaceae	
<i>Ambrosia artemisiifolia</i> L.	A	1883	2005	NAM	•	•	•	Cas.	Grain, wool,...	Asteraceae	
<i>Ambrosia coronopifolia</i> Torr. et A.Gray	A	1917	N	NAM	•	•	•	Nat.	Ore,...	Asteraceae	
<i>Ambrosia trifida</i> L.	A	1829	2005	NAM	•	•	•	Cas.	Grain, wool,...	Asteraceae	
<i>Amelanchier lamarckii</i> F.G.Schroeder	D	1876	N	NAM	•	•	•	Inv.	Hort.	Malaceae	
<i>Amelanchier spicata</i> (Lam.) K.Koch	D	1886	1947	NAM	•		•	Cas.	Hort.	Malaceae	
Amethystea caerulea L.	A	1959	1959	AS-Te		•		Cas.	?	Lamiaceae	
<i>Ammi majus</i> L.	A	1813	2005	E AF AS-Te	•	•	•	Cas.	Grain,...	Apiaceae	
<i>Ammi visnaga</i> (L.) Lam.	A	1880	2005	E AF AS-Te	•		•	Cas.	Grain, wool,...	Apiaceae	
<i>Amorpha fruticosa</i> L.	D	1953	2005	NAM	•		•	Cas.	Hort.	Fabaceae	
Amphiachyris dracunculoides (DC.) Nutt.	A	1991	1991	NAM	•			Cas.	Ore?	Asteraceae	<i>Gutierrezia dracunculoides</i> (DC.) S.T.Blake
<i>Amphibromus neesii</i> Steud.	A	1904	1904	AUS			•	Cas.	Wool	Poaceae	
Amphibromus recurvatus Swallen	A	1904	1904	AUS			•	Cas.	Wool	Poaceae	

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<i>Amsinckia eastwoodiae</i> Macbr.	A	1924	1924	NAM	●			Cas.	?	Boraginaceae	
<i>Amsinckia intermedia</i> Fisch. et C.A.Mey.	A	?	?	NAM	?	?	?	Cas.	?	Boraginaceae	
<i>Amsinckia lycopsoides</i> Lehm. ex Fisch. et C.A.Mey.	A	1874	1970	NAM	●	●	●	Cas.	Grain. wool. seeds	Boraginaceae	
<i>Amsinckia micrantha</i> Suksd.	A	1979	N	NAM	●	●		Nat.	Grain....	Boraginaceae	
<i>Amsinckia retrorsa</i> Suksd.	A	1884	1937	NAM	●		●	Cas.	Grain....	Boraginaceae	
<i>Amsinckia tessellata</i> A.Gray	A	1877	1953	NAM		●	●	Cas.	?	Boraginaceae	
<i>Anacyclus clavatus</i> (Desf.) Pers.	A	1911	2000	E AF AS-Te	●		●	Cas.	Grain. wool	Asteraceae	
<i>Anacyclus radiatus</i> Loisel.	A	1998	1999	E AF AS-Te	●			Cas.	Grain	Asteraceae	
<i>Anacyclus valentinus</i> L.	A	1913	1932	E AF	●		●	Cas.	?	Asteraceae	
Anagallis monelli L.	D	2004	2004	E AF	●			Cas.	Hort.	Primulaceae	
<i>Anaphalis margaritacea</i> (L.) Benth.	D	<1850	2005	NAM AS-Te	●	●	●	Cas.	Hort.	Asteraceae	
Anarrhinum bellidifolium (L.) Willd.	D	1957	1957	E			●	Cas.	Hort.	Scrophulariaceae	
<i>Anchusa azurea</i> Mill.	A	<1850	2000	E AF AS-Te	●	●	●	Cas.	Grain....	Boraginaceae	
<i>Anchusa ochroleuca</i> Bieb.	A	1889	1953	E AS-Te	●		●	Cas.	Grain. wool....	Boraginaceae	
<i>Anchusa officinalis</i> L. subsp. <i>officinalis</i>	D/A	1828	N	E AS-Te	●	●	●	Nat.	Hort., grain....	Boraginaceae	
<i>Anchusa officinalis</i> L. subsp. <i>procera</i> (Besser) Lambinon	A?	1904	N	E AS-Te	●		●	Nat.	Wool....	Boraginaceae	<i>Anchusa procera</i> Besser
<i>Anchusa ovata</i> Lehm.	A	<1850	<1850	E			●	Cas.	Seeds....	Boraginaceae	
Andrachne telephioides L.	A	1947	1947	E AF AS-Te			●	Cas.	Wool	Euphorbiaceae	
<i>Androsace maxima</i> L.	A	1954	1954	E AF AS-Te			●	Cas.	Grain	Primulaceae	
<i>Anemone apennina</i> L.	D	1807	N	E		●	●	Nat.	Hort.	Ranunculaceae	
<i>Anemone blanda</i> Schott et Kotschy	D	1984	1988	E AS-Te	●	●		Cas.?	Hort.	Ranunculaceae	
<i>Anemone coronaria</i> L.	D	2000	2000	E AF AS-Te	●			Cas.	Hort.	Ranunculaceae	
Anemone x hybrida Paxt. (A. hupehensis (Lemoine) Lemoine x vitifolia Buch.-Hamilt. ex DC.)	D	2004	2004	Cult.	●			Cas.	Hort.	Ranunculaceae	
<i>Anethum graveolens</i> L.	A/D	<1850	2005	AS-Te	●	●	●	Cas.	Agric.	Apiaceae	
<i>Angelica archangelica</i> L.	D	<1850	N	E AS-Te	●	●	●	Nat.	Hort., agric.	Apiaceae	
<i>Anoda cristata</i> (L.) Schlecht.	A	1940	Ann.	AM	●		●	Cas.	Grain....	Malvaceae	
<i>Anthemis altissima</i> L.	A	1869	2003	E AS-Te	●		●	Cas.	Grain. wool....	Asteraceae	
<i>Anthemis austriaca</i> Jacq.	A	1887	2000	E AS-Te	●		●	Cas.	Grain. wool....	Asteraceae	
<i>Anthemis mixta</i> L.	A	1854	2000	E AF AS-Te	●	●	●	Cas.	Grain....	Asteraceae	<i>Cladanthus mixtus</i> (L.) Chevall.
<i>Anthemis nobilis</i> L.	D	<1850	1985	E	●	●	●	Cas.	Hort.	Asteraceae	<i>Chamaemelum nobile</i> (L.) All.
<i>Anthemis ruthenica</i> Bieb.	A	1828	2004	E AS-Te	●			Cas.	Grain....	Asteraceae	
<i>Anthoxanthum aristatum</i> Boiss.	A	1840	N	E AF	●	●	●	Nat.	Seeds, grain....	Poaceae	
<i>Anthriscus cerefolium</i> (L.) Hoffmann	D	1859	2005	E AF	●	●	●	Cas.	Agric.	Apiaceae	

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<i>Anthyllis vulneraria</i> L. subsp. <i>carpatica</i> (Pant.) Nyman	D	1866	1983	E	●	●		Cas.?	Hort.	Fabaceae	
<i>Anthyllis vulneraria</i> L. subsp. <i>polyphylla</i> (DC.) Nyman	D	1864	1983	E AS-Te	●	●		Cas.?	Hort.	Fabaceae	
Antirrhinum granaticum Rothm.	A	1975	1975	E			●	Cas.	?	Scrophulariaceae	
<i>Antirrhinum majus</i> L.	D	1846	N	E AF	●	●	●	Nat.	Hort.	Scrophulariaceae	
<i>Apera intermedia</i> Hack.	A	1907	1907	AS-Te		●		Cas.	?	Poaceae	
<i>Apera interrupta</i> (L.) Beauv.	A	1818	N	E	●	●	●	Nat.	Grain, wool, ore	Poaceae	
<i>Aponogeton distachyos</i> L. f.	D	1993	1993	AF			●	Cas.	Hort.	Aponogetonaceae	
<i>Aptenia cordifolia</i> (L. f.) N.E.Brown	A	1892	1947	AF			●	Cas.	Wool	Aizoaceae	
<i>Arabis alpina</i> L. subsp. <i>caucasica</i> (Willd. ex Schlecht.) Briq.	D	1881	N	E AS-Te	●	●		Nat.	Hort.	Brassicaceae	
<i>Arabis collina</i> Ten.	D?	<1850	1983	E			●	Ext.?	Hort.?	Brassicaceae	
<i>Arabis hirsuta</i> (L.) Scop. subsp. <i>gerardii</i> Hartm. f.	A?	1855	1858	E	●	●		Cas.	?	Brassicaceae	<i>Arabis planisiliqua</i> (Pers.) Reichenb.
Arabis recta Vill.	A	<1850	<1850	E			●	Cas.	?	Brassicaceae	
<i>Arabis turrita</i> L.	D	1862	N	E AF AS-Te			●	Nat.	Hort.	Brassicaceae	
Arachis hypogaea L.	D	1950	1950	SAM	●			Cas.	?	Fabaceae	
<i>Aralia elata</i> (Miq.) Seem.	D	<1999	2005	AS-Te	●	●		Cas.	Hort.	Hederaceae	
Aralia racemosa L.	D	1915	1972	NAM	●		●	Cas.	Hort.	Hederaceae	
<i>Arctotheca calendula</i> (L.) Levyns	A	1902	1947	AF			●	Cas.	Wool	Asteraceae	
<i>Argemone mexicana</i> L.	A	1891	1957	AM			●	Cas.	Wool	Papaveraceae	
Aristida adscensionis L.	A	1939	1947	Trop.			●	Cas.	Wool	Poaceae	
<i>Aristida congesta</i> Roem. et Schult.	A	1947	1950	AF AS-Te			●	Cas.	Wool	Poaceae	
Aristida hordeacea Kunth	A	1884	1884	AF	●			Cas.	Wool	Poaceae	
Aristida longespica Poiret	A	1891	1891	NAM	●			Cas.	?	Poaceae	
<i>Aristolochia clematitis</i> L.	D	1828	N	E AS-Te	●	●	●	Nat.	Hort.	Aristolochiaceae	
<i>Armeria arenaria</i> (Pers.) Schult.	D	1966	1966	E	●			Cas.	Hort.	Plumbaginaceae	
<i>Armeria maritima</i> Willd. subsp. <i>elongata</i> (Hoffmann) Bonnier	D	1851	N	E	●		●	Nat.	Hort.	Plumbaginaceae	
<i>Armoracia rusticana</i> P.Gaertn., B.Mey. et Scherb.	D	1853	N	?	●	●	●	Nat.	Agric.	Brassicaceae	
Arnebia decumbens (Vent.) Coss. et Kralik	A	1955	1955	E AF AS-Te			●	Cas.	Grain	Boraginaceae	
<i>Aronia melanocarpa</i> (Michaux) S.Elliott	D	1956	1958	NAM	●			Cas.?	Hort.	Malaceae	
<i>Aronia prunifolia</i> (Marshall) Rehd.	D	1841	N	NAM	●		●	Nat.	Hort.	Malaceae	
<i>Artemisia abrotanum</i> L.	D	1872	1872	?			●	Cas.	Agric.	Asteraceae	
Artemisia afra Jacq.	A	1893	1900	AF			●	Cas.	Wool	Asteraceae	

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<i>Artemisia annua</i> L.	A	1891	N	E AS-Te	•	•		Nat.	Wool,...	Asteraceae	
<i>Artemisia austriaca</i> Jacq.	A	1944	1957	E			•	Ext.	?	Asteraceae	
<i>Artemisia biennis</i> Willd.	A	1895	Ann.	NAM AS-Te	•	•	•	Cas.	Grain,...	Asteraceae	
<i>Artemisia campestris</i> L. subsp. <i>maritima</i> Arcang.	D	2001	N	E	•			Nat.	Hort.	Asteraceae	
<i>Artemisia dracunculus</i> L.	D	1817?	1988	E AS-Te NAM	•	•	•	Cas.	Agric.	Asteraceae	
<i>Artemisia ludoviciana</i> Nutt.	A	1902	1935	NAM			•	Cas.	Wool	Asteraceae	
<i>Artemisia pontica</i> L.	D	<1850	1949	E AS-Te	•	•	•	Cas.	Hort.	Asteraceae	
<i>Artemisia scoparia</i> Waldst. et Kit.	A	1911	2000	E AS-Te	•		•	Cas.	Wool, grain,...	Asteraceae	
<i>Artemisia verlotiorum</i> Lamotte	A	1937	N	AS-Te	•	•	•	Nat.	?	Asteraceae	
<i>Arum italicum</i> Mill. s.l.	D	1955	N	E	•	•	•	Nat.	Hort.	Araceae	
<i>Aruncus dioicus</i> (Walter) Fernald	D	1951	2001	E AS-Te NAM	•		•	Cas.	Hort.	Rosaceae	
<i>Asarum europaeum</i> L.	D	1811	N	E AS-Te			•	Nat.	Hort.	Aristolochiaceae	
<i>Asclepias syriaca</i> L.	D	1987	2004	NAM	•	•		Cas.	Hort.	Asclepiadaceae	
<i>Asperugo procumbens</i> L.	A	<1850	2005	E AF AS-Te	•	•	•	Cas.	Grain,...	Boraginaceae	
<i>Asperula laevigata</i> L.	A?	1823	1854	E AF AS-Te	•	•		Cas.	?	Rubiaceae	
<i>Asperula taurina</i> L.	D	1861	1924	E AS-Te	•	•		Ext.	Hort.	Rubiaceae	
<i>Asperula tinctoria</i> L.	D?	<1835	1922	E	•		•	Cas.	Hort.?	Rubiaceae	
<i>Asphodelus tenuifolius</i> Cav.	A	1887	1920	E AF AS-Te	•		•	Cas.	Wool, grain,...	Liliaceae	
<i>Aster amellus</i> L.	D	<1951	<1951	E AS-Te		•		Cas.	Hort.	Asteraceae	
<i>Aster brachyactis</i> S.T.Blake	A	2005	2005	NAM AS-Te	•			Cas.	Grain	Asteraceae	<i>Symphotrichum ciliatum</i> (Ledeb.) Nesom
<i>Aster divaricatus</i> L.	D	1946	N	NAM	•		•	Nat.	Hort.	Asteraceae	<i>Eurybia divaricata</i> (L.) Nesom
<i>Aster laevis</i> L. (incl. <i>A. versicolor</i> Willd.)	D	1939	N	NAM	•	•	•	Nat.	Hort.	Asteraceae	<i>Symphotrichum laeve</i> (L.) A. et D.Love (incl. <i>S. versicolor</i> (Willd.) Nesom)
<i>Aster lanceolatus</i> Willd. (incl. <i>A. tradescantii</i> L.)	D	<1835	N	NAM	•	•	•	Inv.	Hort.	Asteraceae	<i>Symphotrichum lanceolatum</i> (Willd.) Nesom (incl. <i>S. tradescantii</i> (L.) Nesom)
<i>Aster novae-angliae</i> L.	D	1953	2004	NAM	•		•	Cas.?	Hort.	Asteraceae	<i>Symphotrichum novae-angliae</i> (L.) Nesom
<i>Aster novi-belgii</i> L.	D	1865	N	NAM	•	•	•	Nat.	Hort.	Asteraceae	<i>Symphotrichum novi-belgii</i> (L.) Nesom
<i>Aster pilosus</i> Willd.	D	1947	1996	NAM	•		•	Cas.	Hort.	Asteraceae	<i>Symphotrichum pilosum</i> (Willd.) Nesom
<i>Aster sedifolius</i> L.	D	1871	<1931	E			•	Cas.	Hort.	Asteraceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Aster subulatus</i> Michaux s.l.	A	1895	1895	AM			●	Cas.	Wool	Asteraceae	<i>Symphotrichum subulatum</i> (Michaux) Nesom
<i>Aster x salignus</i> Willd. (<i>A. lanceolatus</i> x <i>novi-belgii</i>)	D	1861	N?	Cult.	●	●	●	Nat.?	Hort.	Asteraceae	<i>Symphotrichum x salignum</i> (Willd.) Nesom
<i>Asteriscus aquaticus</i> (L.) Less.	A	1911	1911	E AF AS-Te			●	Cas.	Wool	Asteraceae	
<i>Asterolinon linum-stellatum</i> (L.) Duby	A	<1858	<1858	E			●	Cas.	?	Primulaceae	
<i>Astragalus boeticus</i> L.	A	1906	1906	E AF AS-Te			●	Cas.	Wool	Fabaceae	
<i>Astragalus cicer</i> L.	A?	1952	2000	E AS-Te	●	●		Cas.	?	Fabaceae	
<i>Astragalus cymbicarpos</i> Brot.	A	1906	1906	E AF			●	Cas.	Wool	Fabaceae	
<i>Astragalus hamosus</i> L.	A	2001	2001	E AF AS-Te	●			Cas.	Grain?	Fabaceae	
<i>Astragalus onobrychis</i> L.	A	1893	1934	E AF AS-Te	●		●	Cas.	Wool,...	Fabaceae	
<i>Astragalus oxyglottis</i> Bieb.	A	1955	1955	E AS-Te			●	Cas.	Grain	Fabaceae	
<i>Astragalus pelecinus</i> (L.) Barneby	A	1916	1916	E AF AS-Te			●	Cas.	?	Fabaceae	<i>Biserrula pelecinus</i> L.
<i>Astragalus stella</i> L.	A	1892	1892	E AF			●	Cas.	Wool	Fabaceae	
<i>Astrantia major</i> L.	D	1812	1972	E			●	Cas.	Hort.	Apiaceae	
<i>Athanasia trifurcata</i> L.	A	1909	1912	AF			●	Cas.	Wool	Asteraceae	
<i>Atriplex eardleyae</i> Aell.	A	1906	1906	AUS			●	Cas.	Wool	Chenopodiaceae	
<i>Atriplex halimus</i> L.	D	1922	1929	E AF AS-Te	●			Cas.	Hort.	Chenopodiaceae	
<i>Atriplex holocarpa</i> F.Muell.	A	1906	1906	AUS			●	Cas.	Wool	Chenopodiaceae	<i>Senniella spongiosa</i> (F.Muell.) Aell. var. <i>holocarpa</i> (F.Muell.) Aell.
<i>Atriplex hortensis</i> L.	D	1859	2000	AS-Te	●	●	●	Cas.	Hort., wool, grain	Chenopodiaceae	
<i>Atriplex leptocarpa</i> F.Muell.	A	1911	1951	AUS			●	Cas.	Wool	Chenopodiaceae	
<i>Atriplex micrantha</i> Ledeb.	A	1957	N	AS-Te	●	●	●	Nat.	Wool,...	Chenopodiaceae	
<i>Atriplex muelleri</i> Benth.	A	1947	1951	AUS			●	Cas.	Wool	Chenopodiaceae	
<i>Atriplex oblongifolia</i> Waldst. et Kit.	A	<1850	<1850	E AF AS-Te			●	Cas.	?	Chenopodiaceae	
<i>Atriplex pseudocampanulata</i> Aell.	A	1895	1895	AUS			●	Cas.	Wool	Chenopodiaceae	
<i>Atriplex rosea</i> L.	A	<1830	1953	E AF AS-Te	●		●	Cas.	Wool,...	Chenopodiaceae	
<i>Atriplex sagittata</i> Borkh.	A	1853	1983	E AS-Te	●	●	●	Cas.	Wool,...	Chenopodiaceae	
<i>Atriplex semibaccata</i> R.Brown	A	1947	1947	AUS			●	Cas.	Wool	Chenopodiaceae	
<i>Atriplex sibirica</i> L.	A	1967	1967	AS-Te			●	Cas.	?	Chenopodiaceae	
<i>Atriplex suberecta</i> Verdoorn.	A	1903	1954	AUS			●	Cas.	Wool	Chenopodiaceae	
<i>Atriplex tatarica</i> L.	A	<1835	1999	E AS-Te	●	●	●	Cas.	Grain, wool,...	Chenopodiaceae	
<i>Aubrieta columnae</i> Guss.	D	1896	N	E	●		●	Nat.	Hort.	Brassicaceae	
<i>Aubrieta deltoidea</i> (L.) DC.	D	1966	1966	E AS-Te	●			Cas.	Hort.	Brassicaceae	
<i>Aucuba japonica</i> Thunb.	D	1997	2001	AS-Te	●	●		Cas.	Hort.	Cornaceae	
<i>Austrodanthonia racemosa</i> (R.Brown) H.P.Linder var. <i>racemosa</i>	A	1904	1922	AUS			●	Cas.	Wool	Poaceae	<i>Danthonia racemosa</i> R.Brown

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Austrodanthonia setacea</i> (R.Brown) H.P.Linder	A	1893	1947	AUS			•	Cas.	Wool	Poaceae	<i>Danthonia setacea</i> R.Brown
<i>Austrodanthonia tenuior</i> (Steud.) H.P.Linder	A	1948	1948	AUS			•	Cas.	Wool	Poaceae	
<i>Avena barbata</i> Pott ex Link	A	1824	1953	E AF AS-Te	•		•	Cas.	Wool....	Poaceae	
<i>Avena brevis</i> Roth	A	<1885	1909	?	•		•	Cas.	Seeds	Poaceae	
<i>Avena hispanica</i> Ard.	A	1865	1865	E			•	Cas.	?	Poaceae	
<i>Avena matritensis</i> Baum	A	1902	1902	E AF			•	Cas.	Wool	Poaceae	
<i>Avena nuda</i> L.	D?	1881	1999	?	•			Cas.	Grain....	Poaceae	
<i>Avena sativa</i> L. s.l.	D	1854	Ann.	?	•	•	•	Cas.	Agric.	Poaceae	
<i>Avena sativa</i> L. x <i>sterilis</i> L.	H	1887	1920	Hybr.			•	Cas.	Hybridization	Poaceae	
<i>Avena sterilis</i> L. subsp. <i>ludoviciana</i> (Durieu) Nyman	A	1877	2005	E AF AS-Te	•		•	Cas.	Grain....	Poaceae	
<i>Avena sterilis</i> L. subsp. <i>sterilis</i>	A	1823	2005	E AF AS-Te	•		•	Cas.	Grain....	Poaceae	
<i>Avena strigosa</i> Schreb.	D	1811	1974	?	•		•	Cas.	Agric.	Poaceae	
<i>Avena</i> x <i>marquandii</i> Druce (<i>A. fatua</i> L. x <i>sativa</i>)	H	<1850	1925	Hybr.	•		•	Cas.	Hybridization	Poaceae	
<i>Avenula bromoides</i> (Gouan) H.Scholz	A	1950	1950	E	•			Cas.	?	Poaceae	
<i>Axonopus fissifolius</i> (Raddi) Kuhlmann	A	1980	1980	AM	•			Cas.	Nurseries	Poaceae	<i>Axonopus affinis</i> Chase
<i>Axyris amaranthoides</i> L.	A	1918	2005	AS-Te	•	•	•	Cas.	Grain....	Chenopodiaceae	
<i>Azolla filiculoides</i> Lam.	D?	1912	N	AM	•	•	•	Inv.	Hort.?	Azollaceae	
<i>Baccharis halimifolia</i> L.	D	1924	N	NAM	•			Inv.	Hort.	Asteraceae	
<i>Ballota nigra</i> L. subsp. <i>nigra</i>	A	1907	N	E AS-Te	•		•	Nat.	Wool, grain....	Lamiaceae	
<i>Barbarea stricta</i> Andr.	A	1880	N	E AS-Te	•	•		Nat.	Waterfowl?	Brassicaceae	
<i>Barbarea verna</i> (Mill.) Aschers.	A	1860	N	E AS-Te	•	•	•	Nat.	Grain....	Brassicaceae	
<i>Bassia hirsuta</i> (L.) Aschers.	A	<1850	<1850	E AS-Te	•			Cas.	?	Chenopodiaceae	
<i>Bassia hyssopifolia</i> (Pallas) O.Kuntze	A	<1861	1967	E AS-Te	•		•	Cas.	Wool....	Chenopodiaceae	
<i>Bassia laniflora</i> (S.G.Gmel.) A.J.Scott	A	<1861	<1861	E AS-Te	•			Cas.	?	Chenopodiaceae	
<i>Bassia scoparia</i> (L.) Voss s.l.	A	<1835	N	E AS-Te	•	•	•	Nat.	Grain, wool....	Chenopodiaceae	
<i>Beckmannia syzigachne</i> (Steud.) Fernald	A	1911	2004	NAM AS-Te	•		•	Cas.	Grain, wool....	Poaceae	
<i>Begonia</i> x <i>semperflorens</i> hort. (<i>B. cucullata</i> Willd. x <i>schmidtiana</i> Regel)	D	2005	2005	Cult.			•	Cas.	Hort.	Begoniaceae	
<i>Bellardia trixago</i> (L.) All.	A	1951	1951	E AF AS-Te	•			Cas.	?	Scrophulariaceae	
<i>Berberis gagnepainii</i> C.K.Schneider	D	2005	2005	AS-Te	•			Cas.	Hort.	Berberidaceae	
<i>Berberis julianae</i> C.K.Schneider	D	2003	2005	AS-Te	•	•		Cas.	Hort.	Berberidaceae	
<i>Berberis thunbergii</i> DC.	D	1955	2004	AS-Te	•	•	•	Cas.	Hort.	Berberidaceae	
<i>Berberis</i> x <i>ottawensis</i> C.K.Schneider (<i>B.</i> <i>thunbergii</i> x <i>vulgaris</i> L.)	D	1959	2001	Cult.	•	•		Cas.	Hort.	Berberidaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Berteroa incana</i> (L.) DC.	A	1600	N	E AS-Te	•	•	•	Nat.	Grain....	Brassicaceae	
<i>Beta macrocarpa</i> Guss.	A	1910	1941	E AF	•		•	Cas.	Wool, grain?	Chenopodiaceae	
<i>Beta trigyna</i> Waldst. et Kit.	A	1859	1913	E AS-Te	•		•	Cas.	Grain....	Chenopodiaceae	
<i>Beta vulgaris</i> L. subsp. <i>vulgaris</i>	D	1891	Ann.	?	•	•	•	Cas.	Agric.	Chenopodiaceae	
<i>Betula nana</i> L.	A	2003	2003	E AS-Te				•	Cas.	Military troops?	Betulaceae
<i>Bidens bipinnata</i> L.	A	1885	1915	SAM	•		•	Cas.	Grain?	Asteraceae	
<i>Bidens connata</i> Muhlenb. ex Willd.	A	1920	N	NAM	•		•	Nat.	Waterfowl?	Asteraceae	
<i>Bidens frondosa</i> L. var. <i>anomala</i> Porter ex Fernald	A	1979	N?	AM	•		•	Nat.?	Waterfowl?	Asteraceae	
<i>Bidens frondosa</i> L. var. <i>frondosa</i>	A	1886?	N	AM	•	•	•	Inv.	Waterfowl?	Asteraceae	
<i>Bidens pilosa</i> L.	A	1903	1993	SAM	•		•	Cas.	Wool, grain....	Asteraceae	
<i>Bidens subalternans</i> DC.	A	1903	2004	SAM	•		•	Cas.	Wool, grain....	Asteraceae	
<i>Bidens triplinervia</i> Humb., Bonpl. et Kunth var. <i>macrantha</i> (Wedd.) Sherff	D	2000	2004	SAM	•			Cas.	Hort.	Asteraceae	
<i>Bidens vulgata</i> E.Greene	A	2000	2001	NAM	•			Cas.	Grain	Asteraceae	
<i>Bifora radians</i> Bieb.	A	1889	2004	E AS-Te	•	•	•	Cas.	Grain, wool....	Apiaceae	
<i>Bifora testiculata</i> (L.) Spreng.	A	1891	2004	E AF AS-Te	•	•	•	Cas.	Grain....	Apiaceae	
Blumenbachia hieronymi Urban	D?	1974	1981	SAM	•			Cas.	Hort.?	Loasaceae	
<i>Borago officinalis</i> L.	D	<1850	2004	E AF AS-Te	•	•	•	Cas.	Hort.	Boraginaceae	
<i>Boreava orientalis</i> Jaub. et Spach	A	1909	1932	AS-Te		•	•	Cas.	Grain....	Brassicaceae	
<i>Bothriochloa decipiens</i> (Hack.) C.E.Hubbard	A	1947	1947	AUS				•	Cas.	Wool	Poaceae
<i>Bothriochloa ischaemum</i> (L.) Keng	A	1813	1916	E AF AS-Te	•		•	Ext.	Wool, ore	Poaceae	
Bothriochloa macra (Steud.) S.T.Blake	A	1911	1947	AUS				•	Cas.	Wool	Poaceae
<i>Botrychium simplex</i> Hitchc.	A	1908	1908	E NAM	•			Cas.	Pines	Ophioglossaceae	
<i>Brachiaria eruciformis</i> (Smith) Griseb.	A	1947	1949	E AF AS				•	Cas.	Wool	Poaceae
<i>Brachyachne tenella</i> (R.Brown) C.E.Hubbard	A	1947	1947	AUS				•	Cas.	Wool	Poaceae
<i>Brachypodium distachyon</i> (L.) Beauv.	A	1823	1956	E AF AS-Te	•		•	Ext.	Wool....	Poaceae	
<i>Brassica elongata</i> Ehrh. subsp. <i>integrifolia</i> (Boiss.) Breistr.	A	1886	1912	E AS-Te	•		•	Cas.	Grain, wool....	Brassicaceae	
<i>Brassica juncea</i> (L.) Czern.	A	1857	2003	AF AS	•	•	•	Cas.	Grain....	Brassicaceae	
<i>Brassica napus</i> L.	D	1858	Ann.	?	•	•	•	Cas.	Agric.	Brassicaceae	
<i>Brassica oleracea</i> L.	D	?	?	E	•	•		Cas.	Agric.	Brassicaceae	
<i>Brassica rapa</i> L.	D	<1900	Ann.	?	•	•	•	Cas.	Agric.	Brassicaceae	
<i>Brassica tournefortii</i> Gouan	A	1922	2004	E AF AS-Te	•	•	•	Cas.	Grain....	Brassicaceae	
<i>Briza maxima</i> L.	D/A	1853	2005	E AF AS-Te	•		•	Cas.	Hort....	Poaceae	
<i>Briza minor</i> L.	A	1812	1980	E AF AS-Te	•	•	•	Cas.	Seeds	Poaceae	
Bromus alopecuroides Poiret	A	1958	1958	E AF AS-Te				•	Cas.	Grain	Poaceae

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
Bromus brevis Nees ex Steud.	A	1902	1949	SAM			•	Cas.	Wool	Poaceae	Ceratochloa brevis (Nees ex Steud.) B.D.Jackson
Bromus briziformis Fisch. et C.A.Mey.	A	1922	1922	AS	•			Cas.	?	Poaceae	
Bromus carinatus Hook. et Arnott	A	1942	N	AM	•	•	•	Nat.	Grain. wool....	Poaceae	Ceratochloa carinata (Hook. et Arnott) Tutin
Bromus catharticus Vahl	A/D	1864	Ann.	SAM	•	•	•	Cas.?	Grain. wool....	Poaceae	Ceratochloa cathartica (Vahl) Herter
Bromus danthoniae Trin.	A	1954	1955	AS				Cas.	Grain	Poaceae	
Bromus diandrus Roth subsp. diandrus	A	1905	N	E AF AS-Te	•	•	•	Nat.	Grain. wool....	Poaceae	Anisantha diandra (Roth) Tutin ex Tzvelev subsp. diandra
Bromus diandrus Roth subsp. maximus (Desf.) Soó	A	1906	N	E AF AS-Te	•	•	•	Nat.	Grain. wool....	Poaceae	Anisantha rigida (Roth.) Hyl.
Bromus inermis Leyss.	A	1823	N	E AS	•	•	•	Nat.	Grain. wool....	Poaceae	Bromopsis inermis (Leyss.) Holub
Bromus japonicus Thunb.	A	1862	2003	E AS	•	•	•	Cas.	Grain. seeds....	Poaceae	
Bromus lanceolatus Roth	A	1888	2000	E AF AS-Te	•	•	•	Cas.	Grain. wool....	Poaceae	
Bromus lepidus Holmberg	A	1909	1958	E	•		•	Cas.	?	Poaceae	
Bromus madritensis L.	A	1848	2000	E AF AS-Te	•		•	Cas.	Grain. wool....	Poaceae	Anisantha madritensis (L.) Nevski
Bromus pectinatus Thunb.	A	1881	1909	AF AS AUS	•		•	Cas.	Wool....	Poaceae	Incl. B. arenarius Labill.
Bromus rubens L.	A	1904	1953	E AF AS-Te	•		•	Cas.	Wool....	Poaceae	Anisantha rubens (L.) Nevski
Bromus scoparius L.	A	1827	1954	E AF AS-Te	•	•	•	Cas.	Grain....	Poaceae	
Bromus squarrosus L.	A	<1850	1998	E AF AS-Te	•	•	•	Cas.	Grain....	Poaceae	
Brunnera macrophylla (Adams) I.M.Johnston	D	1944	2001	AS-Te	•			Cas.	Hort.	Boraginaceae	
Buddleja albiflora Hemsl.	D	1945	1945	AS-Te		•		Cas.	Hort.	Buddlejaceae	
Buddleja davidii Franch.	D	1942	N	AS-Te	•	•	•	Inv.	Hort.	Buddlejaceae	
Bunias erucago L.	A	1854	1969	E AF AS-Te	•	•	•	Cas.	Grain....	Brassicaceae	
Bunias orientalis L.	A	1858	N	E AS-Te	•	•	•	Nat.	Grain....	Brassicaceae	
Bupleurum croceum Fenzl	A	1938	2004	AS-Te	•	•		Cas.	Grain	Apiaceae	
Bupleurum fontanesii Guss. ex Caruel	A	1906	1906	E AF AS-Te		•		Cas.	?	Apiaceae	
Bupleurum gerardii All.	A	1886	1955	E AF AS-Te	•		•	Cas.	Grain....	Apiaceae	
Bupleurum praealtum L.	A	<1835	1892	E AS-Te	•		•	Cas.	?	Apiaceae	
Bupleurum subovatum Link ex Spreng.	A	1876	2000	E AF AS-Te	•	•	•	Cas.	Grain. wool....	Apiaceae	
Cabomba caroliniana A.Gray	D	1998	N	NAM	•			Nat.	Hort.	Cabombaceae	
Calamintha grandiflora (L.) Moench	D?	1875	<1893	E AS-Te			•	Cas.	Hort.?	Lamiaceae	
Calamintha menthifolia Host	D?	1855	1971	E			•	Ext.?	Hort.?	Lamiaceae	
Calamintha nepeta (L.) Savi subsp. nepeta	D?	1939	N	E AF AS-Te	•	•		Nat.	Hort.?	Lamiaceae	
Calamintha nepeta (L.) Savi subsp. spruneri (Boiss.) Nyman	A	1869	N	E AF AS-Te	•	•	•	Nat.	?	Lamiaceae	
Calandrinia elegans Spach	A?	1956	1956	AM	•			Cas.	Seeds?	Portulacaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Calceolaria chelidonioides</i> Humb., Bonpl. et Kunth	D/A	1941	1995	AM	•			Cas.	Hort., grain,...	Scrophulariaceae	
<i>Calendula arvensis</i> L.	A	1859	1947	E AF AS-Te			•	Cas.	Grain?	Asteraceae	
<i>Calendula officinalis</i> L.	D	1858	2005	?	•	•	•	Cas.	Hort.	Asteraceae	
<i>Calibrachoa parviflora</i> (Juss.) D'Arcy	A	1902	1906	AM				•	Cas.	Wool	<i>Petunia parviflora</i> Juss.
<i>Callistephus chinensis</i> (L.) Nees	D	1930	1955	AS-Te	•		•	Cas.	Hort.	Asteraceae	
<i>Calotis cuneifolia</i> R.Brown	A	1895	1963	AUS				•	Cas.	Wool	Asteraceae
<i>Calotis hispidula</i> F.Muell.	A	1898	1949	AUS				•	Cas.	Wool	Asteraceae
<i>Calotis lappulacea</i> Benth.	A	1902	1940	AUS				•	Cas.	Wool	Asteraceae
<i>Calystegia pulchra</i> Brumm. et Heywood	D	1931	1935	AS-Te	•		•	Cas.	Hort.	Convolvulaceae	
<i>Camelina alyssum</i> (Mill.) Thell.	A	1813	1921	E	•		•	Cas.	Seeds	Brassicaceae	
<i>Camelina microcarpa</i> Andrz. ex DC.	A	1848	2005	E AF AS-Te	•		•	Cas.	Grain,...	Brassicaceae	
<i>Camelina rumelica</i> Velen.	A	1893	1912	E AS-Te	•		•	Cas.	Grain,...	Brassicaceae	
<i>Camelina sativa</i> (L.) Crantz	A	1870	2005	E AS-Te	•		•	Cas.	Grain,...	Brassicaceae	
<i>Campanula carpatica</i> Jacq.	D	1951	1951	E				•	Cas.	Hort.	Campanulaceae
<i>Campanula erinus</i> L.	A	1999	2005	E AF AS-Te	•			Cas.	Grain,...	Campanulaceae	
<i>Campanula fenestrellata</i> Feer.	D	2001	N?	E	•			Nat.?	Hort.	Campanulaceae	
<i>Campanula lactiflora</i> Bieb.	D	2000	2000	AS-Te	•			Cas.	Hort.	Campanulaceae	
<i>Campanula latifolia</i> L.	D	1869	N	E AS-Te	•		•	Nat.	Hort.	Campanulaceae	
<i>Campanula medium</i> L.	D	1974	N	E	•		•	Nat.	Hort.	Campanulaceae	
<i>Campanula portenschlagiana</i> Schult.	D	1990	N	E	•	•	•	Nat.	Hort.	Campanulaceae	
<i>Campanula poscharskyana</i> Degen	D	2001	N	E	•			Nat.	Hort.	Campanulaceae	
<i>Campanula rhomboidalis</i> L.	D	1949	N	E	•			Nat.	Grass seed	Campanulaceae	
<i>Campsis radicans</i> (L.) Seem.	D	2004	2004	NAM	•			Cas.	Hort.	Bignoniaceae	
<i>Canna x generalis</i> L.H.Bailey (hybrid of obscure origin)	D	1992	2000	Cult.	•		•	Cas.	Hort.	Cannaceae	
<i>Cannabis sativa</i> L.	D/A	1853	2005	AS	•	•	•	Cas.	Birdseed,...	Cannabaceae	
<i>Capsicum annuum</i> L.	D	1905	2005	SAM	•		•	Cas.	Food refuse	Solanaceae	
<i>Cardamine corymbosa</i> Hook. f.	A	2005	2005	AUS	•			Cas.	Nurseries	Brassicaceae	
<i>Cardamine parviflora</i> L.	A	<1850	<1850	E		•		Cas.	?	Brassicaceae	
<i>Cardaminopsis halleri</i> (L.) Hayek	A	1947	N	E				•	Nat.	Ore?	Brassicaceae
<i>Cardaria draba</i> (L.) Desv. subsp. <i>chalepensis</i> (L.) O.Schulz	A	1912	1912	AS-Te				•	Cas.	?	<i>Cardaria chalepensis</i> (L.) Hand-Mazz.
<i>Cardaria draba</i> (L.) Desv. subsp. <i>draba</i>	A	1840	N	E AF AS-Te	•	•	•	Inv.	Grain,...	Brassicaceae	
<i>Cardiospermum grandiflorum</i> Swartz	A	1959	1959	SAM				•	Cas.	Wool	Sapindaceae
<i>Cardiospermum halicacabum</i> L.	A	1994	<2003	SAM	•			Cas.	Grain	Sapindaceae	
<i>Carduus hamulosus</i> L.	A	1876	1877	E AS-Te	•			Cas.	Seeds	Asteraceae	

Taxon	MoI	FiR	ReR	Origin	Fl	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Carduus nutans</i> L. subsp. <i>leiophyllus</i> (Petrovič) Arènes	A?	1908	1927	E AF AS-Te	●	●		Cas.	?	Asteraceae	
<i>Carduus pycnocephalus</i> L.	A	<1850	1913	E AF AS-Te			●	Cas.	Wool....	Asteraceae	
<i>Carduus vivariensis</i> Jord.	A	1897	1965	E	●		●	Cas.	Seeds....	Asteraceae	
<i>Carduus x theriotii</i> Rouy (<i>C. pycnocephalus x tenuiflorus</i> Curt.)	A	<1850	1892	Hybr.			●	Cas.	Hybridization	Asteraceae	
<i>Carex crawfordii</i> Fernald	A	1976	N	NAM			●	Nat.	Waterfowl?	Cyperaceae	
Carex crus-corvi Shuttlw.	A	1947	1947	NAM			●	Cas.	Wool	Cyperaceae	
Carex morrowii Boott	D	1950	1950	AS-Te	●			Cas.	Hort.	Cyperaceae	
<i>Carex muricata</i> L. subsp. muricata	A	2004	2004	E AF AS-Te	●			Cas.	Timber	Cyperaceae	
<i>Carrichtera annua</i> (L.) DC.	A	1940	1940	E AF AS-Te	●			Cas.	?	Brassicaceae	
<i>Carthamus lanatus</i> L.	A	1940	1958	E AF AS-Te			●	Cas.	Wool, grain....	Asteraceae	
<i>Carthamus tinctorius</i> L.	D	1893	Ann.	Cult.	●	●	●	Cas.	Birdseed	Asteraceae	
<i>Castanea sativa</i> Mill.	D	1873	N	E AF AS-Te	●	●		Nat.	Hort.	Fagaceae	
<i>Catalpa bignonioides</i> Walter	D	1999	2005	NAM	●	●	●	Cas.	Hort.	Bignoniaceae	
Catananche caerulea L.	D	1953	1953	E AF	●			Cas.	Hort.	Asteraceae	
Ceanothus x delilianus Spach (<i>C. americanus</i> L. x <i>coeruleus</i> Lag.)	D	1992	1992	Cult.	●			Cas.	Hort.	Rhamnaceae	
Celastrus orbiculatus Thunb.	D	2004	2005	AS-Te	●			Cas.	Hort.	Celastraceae	
<i>Cenchrus echinatus</i> L.	A	1997	1997	AM	●			Cas.	Grain	Poaceae	
Cenchrus incertus M.A.Curtis	A	1960	1960	AM			●	Cas.	Wool	Poaceae	
<i>Cenchrus longispinus</i> (Hack.) Fernald	A	1888	2004	NAM	●		●	Cas.	Grain, wool	Poaceae	
<i>Centaurea alba</i> L.	A	<1850	<1850	E	?	?	?	Cas.	?	Asteraceae	
<i>Centaurea algeriensis</i> Coss. et Durieu	A	1918	1918	AF	●			Cas.	Grain?	Asteraceae	<i>Centaurea diluta</i> Ait. subsp. <i>algeriensis</i> (Coss. et Durieu) Maire
<i>Centaurea aspera</i> L.	A	1872	1983	E	●		●	Cas.	Ore?	Asteraceae	
<i>Centaurea dealbata</i> Willd.	D?	1944	1949	AS-Te	●			Cas.	Hort.	Asteraceae	
<i>Centaurea depressa</i> Bieb.	A	1909	1922	AS-Te		●	●	Cas.	Wool....	Asteraceae	
<i>Centaurea diffusa</i> Lam.	A	1877	1924	E AS-Te	●		●	Cas.	Wool....	Asteraceae	
<i>Centaurea diluta</i> Ait.	A	1918	1981	E AF	●		●	Cas.	Grain?	Asteraceae	
<i>Centaurea glaberrima</i> Tausch	A	<1850	<1850	E			●	Cas.	?	Asteraceae	
<i>Centaurea hyalolepis</i> Boiss.	A	1954	1955	E AS-Te	●		●	Cas.	?	Asteraceae	
<i>Centaurea melitensis</i> L.	A	1848	2004	E AF AS-Te	●	●	●	Cas.	Grain, wool....	Asteraceae	
<i>Centaurea nigrescens</i> Willd.	A	1826	<1900	E			●	Cas.	?	Asteraceae	<i>Centaurea jacea</i> L. subsp. <i>nigrescens</i> (Willd.) Čelak.
<i>Centaurea orientalis</i> L.	A	1893	1894	E AS-Te			●	Cas.	Grain?	Asteraceae	
Centaurea paniculata L.	A	1895	1895	E			●	Cas.	?	Asteraceae	
Centaurea pectinata L.	A	2004	2004	E			●	Cas.	?	Asteraceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Centaurea phrygia</i> L.	A?	<1850	<1850	E			●	Cas.	?	Asteraceae	
<i>Centaurea repens</i> L.	A	1956	2004	E AS-Te	●			Cas.	Grain....	Asteraceae	
<i>Centaurea solstitialis</i> L. subsp. adamii (Willd.) Nyman	A	1927	1927	E AS-Te			●	Cas.	Grain	Asteraceae	
<i>Centaurea solstitialis</i> L. subsp. <i>solstitialis</i>	A	1824	1998	E AF AS-Te	●	●	●	Cas.	Grain, wool....	Asteraceae	
<i>Centaurea stoebe</i> L.	A	1882	1936	E	●		●	Cas.	Ore?	Asteraceae	
<i>Centaurea triumphetti</i> All.	A	1911	1911	E AF AS-Te			●	Cas.	Grain?	Asteraceae	
<i>Centaurea x extranea</i> Beck (<i>C. jacea</i> L. x <i>nigrescens</i>)	A	1863	1915	Hybr.			●	Cas.	Hybridization	Asteraceae	
<i>Centaurea x nemenyiana</i> J.Wagner (<i>C. thuillieri</i> (Dostal) Duvigneaud et Lambinon x <i>nigrescens</i>)	A	1840	1840	Hybr.			●	Cas.	Hybridization	Asteraceae	
<i>Centipeda minima</i> (L.) A.Braun et Aschers.	A	1910	1911	AS-Tr AUS			●	Cas.	Wool	Asteraceae	
<i>Centranthus ruber</i> (L.) DC.	D	1869	N	E AF AS-Te	●	●	●	Nat.	Hort.	Valerianaceae	
<i>Cephalaria alpina</i> (L.) Roem. et Schult.	D	1970	1970	E			●	Cas.	Hort.	Dipsacaceae	
<i>Cephalaria syriaca</i> (L.) Roem. et Schult.	A	1891	1954	E AF AS-Te	●		●	Cas.	Grain, wool	Dipsacaceae	
<i>Cerastium dichotomum</i> L.	A	1954	1955	E AF AS-Te			●	Cas.	Grain	Caryophyllaceae	
<i>Cerastium tomentosum</i> L.	D	1974?	N	E	●	●	●	Nat.	Hort.	Caryophyllaceae	
<i>Cerastium x maureri</i> M.Schulze (<i>C. arvense</i> L. x <i>tommentosum</i>)	H	?	N?	Hybr.	●	?	?	Nat.?	Hybridization	Caryophyllaceae	
<i>Cercis siliquastrum</i> L.	D	2005	2005	E AF AS-Te	●			Cas.	Hort.	Fabaceae	
<i>Cerinth major</i> L.	A	1921	1927	E AF AS-Te			●	Cas.	?	Boraginaceae	
<i>Cerinth minor</i> L.	A	1883	1957	E AF AS-Te	●	●	●	Cas.	Grain....	Boraginaceae	
<i>Chaenomeles japonica</i> (Thunb.) Spach	D	2002	2005	AS-Te	●			Cas.	Hort.	Malaceae	Incl. <i>C. x superba</i> (Frahm.) Rehd. (= <i>C. japonica x speciosa</i> (Sweet) Nakai)
<i>Chaenorhinum organifolium</i> (L.) Kostel.	D	2005	2005	E AF	●			Cas.	Hort.	Scrophulariaceae	
<i>Chaerophyllum bulbosum</i> L.	D?	1924	1997	E AS-Te	●		●	Cas.	Hort.?	Apiaceae	
<i>Chaerophyllum byzantinum</i> Boiss.	D	1989	1989	AS-Te			●	Cas.	Agric.	Apiaceae	
<i>Chamaecyparis lawsoniana</i> (A.Murray) Parl.	D	1998	2005	NAM	●	●		Cas.	Hort.	Cupressaceae	
<i>Chamaecytisus hirsutus</i> (L.) Link	D?	1872	1888	E AS-Te	●		●	Cas.	Hort.?	Fabaceae	
<i>Chamaesyce canescens</i> (L.) Prokh.	A	2000	2000	E AF AS-Te			●	Cas.	Traffic?	Euphorbiaceae	<i>Euphorbia chamaesyce</i> L.
<i>Chamaesyce glomerifera</i> Millsp.	A	1998	1998	AM	●			Cas.	Nurseries	Euphorbiaceae	<i>Euphorbia glomerifera</i> (Millsp.) L.C.Wheeler
<i>Chamaesyce glyptosperma</i> (Engelm.) Small	A	2003	2003	AM	●			Cas.	Grain	Euphorbiaceae	<i>Euphorbia glyptosperma</i> Engelm.
<i>Chamaesyce humifusa</i> (Willd.) Prokh.	A	1880	N	AS	●	●	●	Nat.	Nurseries	Euphorbiaceae	<i>Euphorbia humifusa</i> Willd.
<i>Chamaesyce maculata</i> (L.) Small	A	<1950	N	NAM	●	●	●	Nat.	Urban weed	Euphorbiaceae	<i>Euphorbia maculata</i> L.
<i>Chamaesyce nutans</i> (Lag.) Small	A	1995	1995	AM	●			Cas.	Grain	Euphorbiaceae	<i>Euphorbia nutans</i> Lag.
<i>Chamaesyce peplis</i> (L.) Prokh.	A	1878	1878	E AF AS-Te	●			Cas.	?	Euphorbiaceae	<i>Euphorbia peplis</i> L.

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
Chamaesyce prostrata (Ait.) Small	A	2002	2003	AM	●	●		Cas.?	Urban weed	Euphorbiaceae	Euphorbia prostrata Ait.
Chamaesyce serpens (Kunth) Small subsp. fissistipula (Thell.) Hügin	A	1992	1994	SAM	●			Cas.	Grain	Euphorbiaceae	Euphorbia serpens Kunth subsp. fissistipula Thell.
Chasmanthium latifolium (Michaux) Yates	A	1949	1949	NAM			●	Cas.	Wool	Poaceae	
Chenopodium album L. x hircinum	A	1954	1954	Hybr.	●			Cas.	Hybridization	Chenopodiaceae	
Chenopodium album L. x missouriense	A	?	?	Hybr.	?	?	?	Cas.	Hybridization	Chenopodiaceae	
Chenopodium album L. x probstii	A	?	?	Hybr.	?	?	?	Cas.	Hybridization	Chenopodiaceae	
Chenopodium auricomiforme J.Murr et Thell.	A	1911	1911	AUS			●	Cas.	Wool	Chenopodiaceae	
Chenopodium berlandieri Moq.	A	1918	N	NAM	●	●		Nat.	Ore?	Chenopodiaceae	
Chenopodium borbasoides A. Ludwig	A	1947	1962	SAM			●	Cas.	Wool	Chenopodiaceae	
Chenopodium bushianum Aell.	A	1952	1952	NAM	●			Cas.	Grain?	Chenopodiaceae	
Chenopodium capitatum (L.) Ambr.	D	<1850	1980	?	●	●	●	Cas.	Agric.	Chenopodiaceae	
Chenopodium foliosum Aschers.	A	1858	N	E AF AS-Te	●	●	●	Nat.	Ore, wool,...	Chenopodiaceae	
Chenopodium giganteum D.Don	A	1947	2005	AS-Tr	●		●	Cas.	Grain, wool	Chenopodiaceae	
Chenopodium hircinum Schrad.	A	1874	1983	SAM	●	●	●	Cas.	Wool,...	Chenopodiaceae	
Chenopodium macrospermum Hook. f.	A	1895	1904	SAM	●		●	Cas.	Wool,...	Chenopodiaceae	
Chenopodium missouriense Aell.	A	2003	2003	NAM	●			Cas.	Grain	Chenopodiaceae	
Chenopodium opulifolium Schrad. ex Koch et Ziz	A	1857	2002	E AF AS-Te	●	●	●	Cas.	Wool, grain,...	Chenopodiaceae	
Chenopodium pratericola Rydberg s.l.	A	1893	1953	NAM	●	●	●	Cas.	Grain,...	Chenopodiaceae	
Chenopodium probstii Aell.	A	1954	2005	NAM	●		●	Cas.	Grain, wool,...	Chenopodiaceae	
Chenopodium quinoa Willd.	D	1991	1994	SAM	●		●	Cas.	Agric.	Chenopodiaceae	
Chenopodium simplex (Torr.) Rafin.	A	1882	1970	NAM	●		●	Cas.	Grain?	Chenopodiaceae	Chenopodium gigantospermum Aellen
Chenopodium striatifforme J.Murr	A	1862	1967	E	●		●	Cas.	?	Chenopodiaceae	
Chenopodium suecicum J.Murr	A	1971	1971	E AS-Te			●	Cas.	?	Chenopodiaceae	
Chenopodium x pelgrimsianum Aell. (C. album L. x bushianum)	H	1952	1952	Hybr.	●			Cas.	Hybridization	Chenopodiaceae	
Chenopodium x preissmannii J.Murr (C. album L. x opulifolium)	H	?	?	Hybr.	?	?	?	Cas.	Hybridization	Chenopodiaceae	
Chionodoxa luciliae Boiss.	D	1984	N?	AS-Te		●	●	Nat.?	Hort.	Liliaceae	
Chionodoxa sardensis Whittall ex Barr et Sugd.	D	1987	N?	AS-Te		●		Nat.?	Hort.	Liliaceae	
Chloris divaricata R.Brown	A	1889	1964	AUS			●	Cas.	Wool	Poaceae	
Chloris pectinata Benth.	A	1887	1954	AUS	●		●	Cas.	Wool	Poaceae	
Chloris pycnothrix Trin.	A	1992	1992	AF	●			Cas.	Grain	Poaceae	
Chloris truncata R.Brown	A	1887	1963	AUS	●		●	Cas.	Wool	Poaceae	
Chloris ventricosa R.Brown	A	1911	1953	AUS	●		●	Cas.	Wool	Poaceae	

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<i>Chloris virgata</i> Swartz	A	1865	1959	Trop.			●	Cas.	Wool,...	Poaceae	
Chondrilla juncea L.	A	2004	2004	E AF AS-Te	●			Cas.	Urban weed	Asteraceae	
<i>Chorispora tenella</i> (Pallas) DC.	A	1904	2004	E AS-Te	●	●		Cas.	Grain, wool,...	Brassicaceae	
<i>Cicer arietinum</i> L.	D	<1835	2005	AS-Te	●	●		Cas.	Agric.	Fabaceae	
<i>Cicerbita macrophylla</i> (Willd.) Wallr. subsp. <i>macrophylla</i>	D	1989	N	E AS-Te			●	Nat.	Hort.	Asteraceae	
<i>Cicerbita macrophylla</i> (Willd.) Wallr. subsp. <i>uralensis</i> (Rouy) P.D.Sell	D	1948	N	E AS-Te	●	●		Nat.	Hort.	Asteraceae	
<i>Cichorium endivia</i> L. subsp. <i>endivia</i>	D	<1850	2001	E AF AS	●	●	●	Cas.	Agric.	Asteraceae	
<i>Cichorium endivia</i> L. subsp. <i>pumilum</i> (Jacq.) Ball	A	1955	1973	E AF AS	●		●	Cas.	Grain	Asteraceae	
<i>Cirsium heterophyllum</i> (L.) Hill	D	1918	1943	E AS-Te	●			Ext.	Hort.	Asteraceae	
<i>Cirsium rivulare</i> (Jacq.) All.	D	1972	N	E	●			Nat.	Grass seed	Asteraceae	
<i>Cirsium</i> x <i>subalpinum</i> Gaudin (<i>C. palustre</i> (L.) Scop. x <i>rivulare</i>)	H	>1972	?	Hybr.	●			Cas.	Hybridization	Asteraceae	
<i>Citrullus lanatus</i> (Thunb.) Matsumura et Nakai	D	1908	2004	AF	●	●	●	Cas.	Food refuse	Cucurbitaceae	
<i>Clarkia pulchella</i> Pursh	D	1902	1997	NAM	●		●	Cas.	Hort.	Onagraceae	
Clarkia quadrivulnera (Douglas) Nelson et Macbr.	A	1894	1894	NAM	●			Cas.	Grain	Onagraceae	
<i>Claytonia perfoliata</i> Donn ex Willd.	D	1859	N	NAM	●	●	●	Nat.	Agric.	Portulacaceae	
<i>Claytonia sibirica</i> L.	D	1939	N	NAM	●			Nat.	Hort.	Portulacaceae	
<i>Clematis flammula</i> L.	D	1869	1958	E AF AS-Te	●		●	Cas.	Hort.	Ranunculaceae	
<i>Clematis integrifolia</i> L.	D	1882	1966	E AS			●	Cas.	Hort.	Ranunculaceae	
<i>Clematis recta</i> L.	D	1834	N?	E AS-Te			●	Nat.?	Hort.	Ranunculaceae	
<i>Clematis tangutica</i> (Maxim.) Korsh.	D	2000	N?	AS	●			Nat.?	Hort.	Ranunculaceae	
<i>Clematis viticella</i> L.	D	1864	N	E AS-Te	●		●	Nat.	Hort.	Ranunculaceae	
<i>Cleome hassleriana</i> Chodat	D	1977	2005	SAM	●		●	Cas.	Hort.	Capparaceae	
Clerodendrum trichotomum Thunb.	D	2005	2005	AS-Te	●			Cas.	Hort.	Verbenaceae	
<i>Clethra alnifolia</i> L.	D	1984	N?	NAM	●			Nat.?	Hort.	Clethraceae	
<i>Cnicus benedictus</i> L.	A/D	1886	1953	E AF AS-Te	●		●	Cas.	Agric,....	Asteraceae	
<i>Coix lacryma-jobi</i> L.	D	1959	1959	AS-Tr	●			Cas.	Hort.	Poaceae	
<i>Collinsia heterophylla</i> Buist ex Graham	D	2000	2000	NAM	●			Cas.	Hort.	Scrophulariaceae	
<i>Colutea arborescens</i> L.	D	1813	N	E AF AS-Te	●	●	●	Nat.	Hort.	Fabaceae	
<i>Colutea</i> x <i>media</i> Willd. (<i>C. arborescens</i> x <i>orientalis</i> Mill.)	D	1974	2002	Hybr.	●			Cas.?	Hort.	Fabaceae	
<i>Commelina coelestis</i> Willd.	D	1999	1999	AM	●			Cas.	Hort.	Commelinaceae	
<i>Commelina communis</i> L.	A	1947	2005	AS	●		●	Cas.	Grain,...	Commelinaceae	
<i>Commelina diffusa</i> Burm. f.	A	1997	1997	Trop.	●			Cas.	Grain	Commelinaceae	

Taxon	MoI	FiR	ReR	Origin	Fl	Br	Wa	DN	Means intr.	Family	Synonym/Remark
Commelina obliqua Vahl	A	1999	2000	SAM	•			Cas.	Grain	Commelinaceae	
Conringia austriaca (Jacq.) Sweet	A	1893	1893	E AS-Te	•			Cas.	Grain	Brassicaceae	
<i>Conringia orientalis</i> (L.) Dum.	A	<1835	1996	E AF AS-Te	•	•	•	Cas.	Grain, wool,...	Brassicaceae	
<i>Consolida ajacis</i> (L.) Schur	D/A	1854	2005	E AF AS-Te	•	•	•	Cas.	Hort., grain,...	Ranunculaceae	
<i>Consolida hispanica</i> (Costa) Greuter et Burdet	A	1893	2005	E AF AS-Te	•	•	•	Cas.	Grain, wool,...	Ranunculaceae	
<i>Convolvulus tricolor</i> L. subsp. <i>cupanius</i> (Tod.) Cavara et Grande	A	1925	1948	E AF AS-Te	•	•		Cas.	Grain,...	Convolvulaceae	
<i>Convolvulus tricolor</i> L. subsp. <i>tricolor</i>	A	1953	1995	E AF AS-Te	•		•	Cas.	Grain,...	Convolvulaceae	
<i>Conyza bilbaoana</i> J.Rémy	A	2000	N	SAM	•			Nat.	Ore,...	Asteraceae	
<i>Conyza bonariensis</i> (L.) Cronq.	A	1892	N	SAM	•		•	Nat.	Wool,...	Asteraceae	
<i>Conyza canadensis</i> (L.) Cronq.	A	1822	N	NAM	•	•	•	Nat.	Ore,...	Asteraceae	
<i>Conyza pampeana</i> (Parodi) Cabrera	A	1911	1911	SAM				• Cas.	Wool	Asteraceae	
<i>Conyza sumatrensis</i> (Retz.) E.Walker	A	1990	N	SAM	•	•	•	Nat.	Ore,...	Asteraceae	
<i>Conyza x mixta</i> Foucaud et Neyraut (<i>C. bonariensis</i> x <i>canadensis</i>)	A	2002	2002	Hybr.	•			Cas.	Hybridization	Asteraceae	
<i>Cordylocarpus muricatus</i> Desf.	A	1950	1950	AF			•	Cas.	Wool	Brassicaceae	
<i>Coreopsis lanceolata</i> L.	D	2001	N	NAM	•			Nat.	Hort.	Asteraceae	
<i>Coreopsis tinctoria</i> Nutt.	D/A	1946	2004	NAM	•		•	Cas.	Hort., wool	Asteraceae	
<i>Coreopsis verticillata</i> L.	D	1958	2002	NAM	•			Cas.	Hort.	Asteraceae	
<i>Coriandrum sativum</i> L.	D/A	1885	2005	?	•	•	•	Cas.	Agric,....	Apiaceae	
<i>Corispermum pallasii</i> Steven	A	1917	N	AS-Te	•	•		Nat.	Ore	Chenopodiaceae	
<i>Cornus sericea</i> L.	D	1885	N	NAM	•	•	•	Nat.	Hort.	Cornaceae	
<i>Coronilla scorpioides</i> (L.) Koch	A	1892	2000	E AF AS-Te	•	•	•	Cas.	Wool, grain,...	Fabaceae	
<i>Coronopus didymus</i> (L.) Smith	A	1857	N	SAM	•	•	•	Nat.	Ore?	Brassicaceae	
<i>Cortaderia selloana</i> (Schult. et Schult. f.) Aschers. et Graebn.	D	2004	2004	SAM	•			Cas.	Hort.	Poaceae	
<i>Corydalis cheilanthifolia</i> Hemsl.	D	1918	1918	AS-Te		•		Cas.	Hort.	Fumariaceae	
<i>Corylus maxima</i> Mill.	D	?	2004	E AS-Te	•		•	Cas.	Hort.	Betulaceae	
<i>Cosmos bipinnatus</i> Cav.	D	1954	2005	NAM	•		•	Cas.	Hort.	Asteraceae	
<i>Cotinus coggygria</i> Scop.	D	1957	2001	E	•		•	Cas.	Hort.	Anacardiaceae	
<i>Cotoneaster dielsianus</i> Pritzel	D	1990	2005	AS-Te	•		•	Cas.	Hort.	Malaceae	
<i>Cotoneaster divaricatus</i> Rehd. et E.H.Wilson	D	2001	2003	AS-Te	•			Cas.	Hort.	Malaceae	
<i>Cotoneaster franchetii</i> Bois	D	2004	2005	AS-Te	•			Cas.	Hort.	Malaceae	
<i>Cotoneaster horizontalis</i> Decaisne	D	1982	N	AS-Te	•	•	•	Inv.	Hort.	Malaceae	
<i>Cotoneaster integrifolius</i> (Roxb.) G.Klotz	D	2001	2003	AS-Te	•			Cas.	Hort.	Malaceae	
<i>Cotoneaster rehderi</i> Pojark.	D	1983	N	AS-Te	•	•	•	Nat.	Hort.	Malaceae	<i>Cotoneaster bullatus</i> Bois var. <i>macrophyllus</i> Rehd. et E.H.Wilson

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Cotoneaster salicifolius</i> Franch.	D	1989	N	AS-Te	●	●	●	Nat.	Hort.	Malaceae	
<i>Cotoneaster simonsii</i> Baker	D	1959	2005	AS-Te	●		●	Cas.	Hort.	Malaceae	
<i>Cotoneaster sternianus</i> (Turrill) Boom	D	1998	N	AS-Te	●		●	Nat.	Hort.	Malaceae	
<i>Cotoneaster villosulus</i> (Rehd. et E.H.Wilson) Flinck et B.Hylmö	D	1997	2002	AS-Te	●			Cas.	Hort.	Malaceae	
<i>Cotoneaster</i> x <i>watereri</i> Exell (<i>C. frigidus</i> Wallich ex Lindl. x <i>salicifolius</i>)	D	2000	2002	Cult.	●			Cas.	Hort.	Malaceae	
<i>Cotula anthemoides</i> L.	A	1896	1896	AF AUS				● Cas.	Wool	Asteraceae	
<i>Cotula australis</i> (Sieber ex Spreng.) Hook. f.	A	1893	1921	AUS				● Cas.	Wool	Asteraceae	
<i>Cotula coronopifolia</i> L.	A	1895	N?	AF AUS	●		●	Nat.?	Wool....	Asteraceae	
<i>Cotula turbinata</i> L.	A	1947	1951	AF				● Cas.	Wool	Asteraceae	<i>Cenia turbinata</i> (L.) Pers.
<i>Crambe hispanica</i> L.	D	1994	1994	E AF	●			Cas.	Agric.	Brassicaceae	<i>Crambe abyssinica</i> Hochst.
<i>Crassula decumbens</i> Thunb.	A	1904	1920	AF AUS				● Cas.	Wool	Crassulaceae	
<i>Crassula helmsii</i> (T.Kirk) Cock.	D	1982	N	AUS	●		●	Inv.	Hort.	Crassulaceae	
<i>Crassula peduncularis</i> (Smith) F.Meigen	A	1894	1920	AUS SAM				● Cas.	Wool	Crassulaceae	
<i>Crataegus persimilis</i> Sarg.	D	1959	2001	NAM	●			Cas.	Hort.	Malaceae	
<i>Crepis nicaeensis</i> Balb.	A	1860	1908	E	●		●	Cas.	Seeds	Asteraceae	
<i>Crepis sancta</i> (L.) Bornm. subsp. <i>nemausensis</i> (Vill.) Babc.	A	1948	1971	E AF AS-Te	●	●	●	Cas.	Ore....	Asteraceae	
<i>Crepis tectorum</i> L.	A	1842	2005	E	●	●	●	Cas.	Grain....	Asteraceae	
<i>Crocus tommasinianus</i> Herb.	D	?	N?	E	●			Nat.?	Hort.	Iridaceae	
<i>Crocus vernus</i> (L.) Hill	D	1969	N?	E	●			Nat.?	Hort.	Iridaceae	
<i>Crucianella angustifolia</i> L.	A	<1837	<1837	E AF AS-Te	●			Cas.	?	Rubiaceae	
<i>Crypsis aculeata</i> (L.) Ait.	A	1901	1901	E AF AS-Te	●			Cas.	Ore	Poaceae	
<i>Crypsis alopecuroides</i> (Pill. et Mitterp.) Schrad.	A	1909	1911	E AF AS-Te	●		●	Cas.	Wool	Poaceae	
<i>Crypsis schoenoides</i> (L.) Lam.	A	1914	1999	E AF AS-Te	●			Cas.	Grain....	Poaceae	
<i>Cucubalus baccifer</i> L.	A	1824	2005	E AF AS-Te	●	●	●	Cas.	Timber....	Caryophyllaceae	
<i>Cucumis melo</i> L.	D	1953	2005	AF AS	●		●	Cas.	Food refuse	Cucurbitaceae	
<i>Cucumis myriocarpus</i> Naudin	A	1895	1955	AF	●		●	Cas.	Wool....	Cucurbitaceae	
<i>Cucumis sativus</i> L.	D	1950	2003	?	●			Cas.	Food refuse	Cucurbitaceae	
<i>Cucurbita pepo</i> L.	D	1901	Ann.	AM	●		●	Cas.	Food refuse	Cucurbitaceae	
<i>Cullen americanum</i> (L.) Rydberg	A	1915	2001	E AF	●		●	Cas.	Grain, wool	Fabaceae	<i>Psoralea americana</i> L.
<i>Cullen cinereum</i> (Lindb.) J.W.Grimes	A	1911	1947	AUS				● Cas.	Wool	Fabaceae	<i>Psoralea cinerea</i> Lindl.
<i>Cuscuta campestris</i> Yunck.	A	1887	2004	AM	●	●	●	Cas.	Grain, wool....	Cuscutaceae	
<i>Cuscuta gronovii</i> Willd. ex Schult.	A	1950	1956	NAM	●	●		Cas.	Seeds	Cuscutaceae	
<i>Cuscuta planiflora</i> Ten.	A	1895	1895	NAM	●			Cas.	Grain	Cuscutaceae	
<i>Cuscuta suaveolens</i> Seringe	A	1976	1976	SAM	●			Cas.	Nurseries	Cuscutaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Cyclamen hederifolium</i> Ait.	D	2003	2003	E AF AS-Te		•		Cas.	Hort.	Primulaceae	
<i>Cyclosporum leptophyllum</i> (Pers.) Sprague ex Britton et P.G.Wilson	A	1893	1940	AM				• Cas.	Wool	Apiaceae	
<i>Cydonia oblonga</i> Mill.	D	1873	N?	AS		•	•	Nat.?	Hort.	Malaceae	
<i>Cymbalaria muralis</i> P.Gaertn., B.Mey. et Scherb. subsp. <i>muralis</i>	D	<1835	N	E		•	•	• Nat.	Hort.	Scrophulariaceae	
<i>Cymbalaria muralis</i> P.Gaertn., B.Mey. et Scherb. subsp. <i>pubescens</i> (C.Presl) D.A.Webb	D	1900	1900	E				• Cas.	Hort.	Scrophulariaceae	
<i>Cymbalaria pallida</i> (Ten.) Wettst.	D	1995	1995	E				• Cas.	Hort.	Scrophulariaceae	
<i>Cynodon dactylon</i> (L.) Pers.	A	1813	N	Trop.		•	•	• Nat.	Ore. wool	Poaceae	
<i>Cynodon incompletus</i> Nees var. <i>hirsutus</i> (Stent) de Wet et J.R.Harlan	A	1895	1952	AF				• Cas.	Wool	Poaceae	
<i>Cynoglossum clandestinum</i> Desf.	A	1948	1948	E				• Cas.	Wool	Boraginaceae	
<i>Cynosurus echinatus</i> L.	A	1824	2003	E AF AS-Te	•	•	•	Cas.	Grain....	Poaceae	
<i>Cyperus aggregatus</i> (Willd.) Endl.	A	1887	1887	SAM				• Cas.	Wool	Cyperaceae	<i>Cyperus flavus</i> (Vahl) Boeckeler
<i>Cyperus congestus</i> Vahl	A	1886	1959	AF	•		•	Cas.	Wool	Cyperaceae	
<i>Cyperus conglomeratus</i> Rottb.	A	1947	1947	AF AS				• Cas.	Wool	Cyperaceae	
<i>Cyperus cyperoides</i> (L.) O.Kuntze	A	2000	2000	AF AS	•			Cas.	Grain	Cyperaceae	
<i>Cyperus difformis</i> L.	A	1911	1947	E AF AS AUS				• Cas.	Wool	Cyperaceae	
<i>Cyperus eragrostis</i> Lam.	A	1896	N	AM	•		•	Nat.	Grain. wool....	Cyperaceae	
<i>Cyperus esculentus</i> L. var. <i>leptostachyus</i> Boeckeler	A	1981	N	NAM	•			Nat.	Seeds	Cyperaceae	
<i>Cyperus exaltatus</i> Retz.	A	1911	1947	Trop.				• Cas.	Wool	Cyperaceae	
<i>Cyperus imbricatus</i> Retz.	A	1947	1947	Trop.				• Cas.	Wool	Cyperaceae	
<i>Cyperus involucratus</i> Rottb.	D	1953	1954	AF				• Cas.	Hort.	Cyperaceae	
<i>Cyperus longus</i> L. subsp. <i>badius</i> (Desf.) Bonnier et Layens	A	1816	1947	E AF AS				• Cas.	Wool....	Cyperaceae	
<i>Cyperus longus</i> L. subsp. <i>longus</i>	D/A	1911	N?	E AF AS	•		•	Nat.?	Hort.	Cyperaceae	
<i>Cyperus longus</i> L. subsp. <i>tenuiflorus</i> (Rottb.) Kük.	A	1947	1947	AF				• Cas.	Wool	Cyperaceae	
<i>Cyperus reflexus</i> Vahl	A	1887	1892	AM				• Cas.	Wool	Cyperaceae	
<i>Cyperus rotundus</i> L.	A	1951	1952	Trop.	•			Cas.	Food refuse	Cyperaceae	
<i>Cyperus virens</i> Michaux	A	1947	1947	AM				• Cas.	Wool	Cyperaceae	
<i>Cyrtomium falcatum</i> (L. f.) C.Presl	D	1998?	2005	AS-Te	•			Cas.	Hort.	Dryopteridaceae	
<i>Cyrtomium fortunei</i> J.Smith	D	2002	2005	AS-Te	•			Cas.	Hort.	Dryopteridaceae	
<i>Cytisus decumbens</i> (Durande) Spach	D?	1858	1858	E				• Cas.	Hort.?	Fabaceae	
<i>Cytisus multiflorus</i> (L'Hérit.) Sweet	D	1955	N	E	•		•	Nat.	Hort.	Fabaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
Cytisus sessilifolius L.	D	1949	1949	E			●	Cas.	Hort.	Fabaceae	
<i>Cytisus striatus</i> (Hill) Rothm.	D	1992	N	E			●	Nat.	Hort.	Fabaceae	
<i>Dactyloctenium aegyptium</i> (L.) Beauv.	A	1882	1902	AF AS	●			Cas.	Grain?	Poaceae	
<i>Dactyloctenium radulans</i> (R.Brown) Beauv.	A	1887	1955	AUS	●		●	Cas.	Wool	Poaceae	
<i>Dahlia x cultorum</i> hort.	D	1997	1997	Cult.	●			Cas.	Hort.	Asteraceae	
<i>Dasypyrum villosum</i> (L.) P.Candargy	A	1887	1999	E AF AS-Te	●		●	Cas.	Grain, wool,...	Poaceae	
<i>Datura ferox</i> L.	A	1938	2003	AS-Te	●		●	Cas.	Grain, wool,...	Solanaceae	
<i>Datura innoxia</i> Mill.	A/D	1949	1996	SAM	●		●	Cas.	Grain, wool,...	Solanaceae	
<i>Datura stramonium</i> L.	A/D	1856	Ann.	NAM	●	●	●	Cas.?	Grain, wool,...	Solanaceae	Incl. <i>D. tatula</i> L.
<i>Daucus aureus</i> Desf.	A	1921	1921	E AF AS-Te			●	Cas.	Wool	Apiaceae	
<i>Daucus carota</i> L. subsp. <i>sativus</i> (Hoffmann) Arcang.	D	?	2005	?	●			Cas.	Agric.	Apiaceae	
<i>Daucus durieua</i> Lange	A	1938	1938	E AF AS-Te			●	Cas.	Wool	Apiaceae	
<i>Daucus glochidiatus</i> (Labill.) Fisch. C.A.Mey. et Avé-Lall.	A	1892	1905	AUS			●	Cas.	Wool	Apiaceae	
Descurainia incisa (Engelm. ex A.Gray) Britton	A	1893	1893	NAM	●			Cas.	Grain	Brassicaceae	
<i>Descurainia pinnata</i> (Walter) Britton	A	1894	1894	NAM			●	Cas.	Wool	Brassicaceae	<i>Descurainia brachycarpa</i> (Richards.) O.E.Schulz
Desmanthus illinoensis (Michaux) Mc. Millan ex Robinson et Fernald	A	1995	1998	NAM	●			Cas.	Grain	Fabaceae	
<i>Desmazeria sicula</i> (Jacq.) Dum.	A	1889	1917	E AF AS-Te	●		●	Cas.	Grain,...	Poaceae	
<i>Deutzia scabra</i> Thunb.	D	1984	2005	AS-Te	●		●	Cas.	Hort.	Hydrangeaceae	
<i>Dianthus barbatus</i> L.	D	1867	1960	E			●	Cas.	Hort.	Caryophyllaceae	
<i>Dianthus caryophyllus</i> L.	D	1972	2005	E AF AS-Te	●	●		Cas.	Hort.	Caryophyllaceae	
<i>Dianthus plumarius</i> L.	D	<1850	1955	E			●	Cas.	Hort.	Caryophyllaceae	
Dianthus subacaulis Vill.	D	2002	N	E			●	Nat.	Hort.	Caryophyllaceae	
Dianthus superbus L.	D	<1850	<1850	E AS-Te	●			Cas.	Hort.	Caryophyllaceae	
<i>Dicentra formosa</i> (Andrews) Walp.	D	1916	2000	NAM	●		●	Cas.	Hort.	Fumariaceae	
Digitaria acuminatissima Stapf	A	1947	1947	AF			●	Cas.	Wool	Poaceae	
<i>Digitaria aequiglumis</i> (Hack.et Arechav.) Parodi	A	1997	N	SAM	●			Nat.	Seeds	Poaceae	
Digitaria brownii (Roem. et Schult.) Hughes	A	1911	1921	AUS			●	Cas.	Wool	Poaceae	
<i>Digitaria ciliaris</i> (Retz.) Koeler subsp. <i>ciliaris</i>	A	1828	2005	Trop.	●		●	Cas.	Grain,...	Poaceae	
<i>Digitaria ciliaris</i> (Retz.) Koeler subsp. <i>nubica</i> (Stapf) S.T.Blake	A	1883	2003	AF	●			Cas.	Grain,...	Poaceae	
<i>Digitaria sanguinalis</i> (L.) Scop. subsp. pectiniformis Henr.	A	1856	2004	E AF AS-Te	●		●	Cas.	Ore?	Poaceae	

Taxon	MoI	FiR	ReR	Origin	Fl	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Digitaria sanguinalis</i> (L.) Scop. subsp. <i>sanguinalis</i>	A	1803	N	E AF AS-Te	•	•	•	Nat.	Grain. wool....	Poaceae	
<i>Digitaria violascens</i> Link	A	1994	1994	Trop.	•			Cas.	Grain	Poaceae	
<i>Dinebra retroflexa</i> (Vahl) Panzer	A	1994	1994	AF AS	•			Cas.	Grain	Poaceae	
<i>Diplotaxis erucoides</i> (L.) DC.	A	1920	2002	E AF AS-Te	•		•	Cas.	Grain. seeds....	Brassicaceae	
<i>Diplotaxis virgata</i> (Cav.) DC.	A	1997	2000	E AF	•			Cas.	Grain	Brassicaceae	
<i>Dipsacus laciniatus</i> L.	A	1876	N	E AS-Te	•	•		Nat.	Ore....	Dipsacaceae	
<i>Dipsacus sativus</i> (L.) Honck.	D	<1835	1953	?			•	Cas.	Hort.	Dipsacaceae	
<i>Dittrichia graveolens</i> (L.) Greuter	A	1895	N	E AF AS-Te	•		•	Nat.	Ore. wool	Asteraceae	
<i>Dittrichia viscosa</i> (L.) Greuter	A	1907	N	E AF AS-Te	•		•	Nat.	Ore	Asteraceae	
<i>Doronicum columnae</i> Ten.	D	1886	N	E	•		•	Nat.	Hort.	Asteraceae	
<i>Doronicum x excelsum</i> (N.E. Brown) Stace (<i>D. columnae</i> Ten. x <i>pardalianches</i> L. x <i>plantagineum</i> L.)	D	1867	N?	Cult.			•	Nat.?	Hort.	Asteraceae	
<i>Doronicum x willdenowii</i> (Rouy) A.W.Hill (? <i>D. pardalianches</i> L. x <i>plantagineum</i> L.)	D	1824	N	E	•	•	•	Nat.	Hort.	Asteraceae	
<i>Dorycnium hirsutum</i> (L.) Seringe	D?	2004	2004	E AF AS-Te	•			Cas.	Hort.	Fabaceae	
<i>Dorycnium pentaphyllum</i> Scop.	A	1903	1903	E AF AS-Te			•	Cas.	Wool	Fabaceae	
<i>Dracocephalum moldavica</i> L.	D	1862	1975	AS	•			Cas.	Hort.	Lamiaceae	
<i>Dracocephalum parviflorum</i> Nutt.	A	1893	2005	NAM	•	•	•	Cas.	Grain. wool....	Lamiaceae	
<i>Dracocephalum thymiflorum</i> L.	A	1893	<1896	AS-Te			•	Cas.	Wool. seeds	Lamiaceae	
<i>Duchesnea indica</i> (Andrews) Focke	D	1950	N	AS	•	•	•	Nat.	Hort.	Rosaceae	
<i>Dysphania ambrosioides</i> (L.) Mosyakin et Clemants	A	<1850	N	SAM	•	•	•	Nat.	Wool. grain....	Chenopodiaceae	<i>Chenopodium ambrosioides</i> L. s.l.
<i>Dysphania botrys</i> (L.) Mosyakin et Clemants	A	1829	2005	E AF AS-Te	•		•	Cas.	Ore. wool....	Chenopodiaceae	<i>Chenopodium botrys</i> L.
<i>Dysphania carinata</i> (R.Brown) Mosyakin et Clemants	A	1940	1995	AUS	•		•	Cas.	Wool	Chenopodiaceae	<i>Chenopodium carinatum</i> R.Brown
<i>Dysphania cristata</i> (F.Muell.) Mosyakin et Clemants	A	1899	1972	AUS			•	Cas.	Wool	Chenopodiaceae	<i>Chenopodium cristatum</i> (F.Muell.) F.Muell.
<i>Dysphania glomulifera</i> (Nees) P.G.Wilson	A	1904	1924	AUS			•	Cas.	Wool	Chenopodiaceae	
<i>Dysphania multifida</i> (L.) Mosyakin et Clemants	A	1882	1948	SAM	•	•	•	Cas.	Wool....	Chenopodiaceae	<i>Chenopodium multifidum</i> L.
<i>Dysphania pseudomultiflora</i> (J.Murr) Verloove et Lambinon	A	1947	1947	AF			•	Cas.	Wool	Chenopodiaceae	<i>Chenopodium pseudomultiflorum</i> (J.Murr) Uotila
<i>Dysphania pumilio</i> (R.Brown) Mosyakin et Clemants	A	1887	N	AUS	•	•	•	Nat.	Grain. wool....	Chenopodiaceae	<i>Chenopodium pumilium</i> R.Brown
<i>Dysphania schraderiana</i> (Schult.) Mosyakin et Clemants	A	1886	2000	AF	•		•	Cas.	Wool....	Chenopodiaceae	<i>Chenopodium schraderianum</i> Schult.
<i>Ecballium elaterium</i> (L.) A.Rich.	D	1875	1875	E AF AS-Te			•	Cas.	Hort.	Cucurbitaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Echinaria capitata</i> (L.) Desf.	A	1880	>1940	E AF AS-Te	●	●		Cas.	?	Poaceae	
<i>Echinochloa colona</i> (L.) Link	A	1889	2005	Trop.	●	●	●	Cas.	Grain, wool,...	Poaceae	
<i>Echinochloa crus-galli</i> (L.) Beauv.	A	<1800	N	E AS	●	●	●	Nat.	Grain, wool,...	Poaceae	
<i>Echinochloa elliptica</i> Michael et Vickery	A	1908	1908	AUS			●	Cas.	Wool	Poaceae	
<i>Echinochloa esculenta</i> (A.Braun) H. Scholz	D	<1950	Ann.	AS	●		●	Cas.	Birdseed	Poaceae	
<i>Echinochloa frumentacea</i> Link	D	1973	Ann.	AS	●		●	Cas.	Birdseed	Poaceae	
<i>Echinochloa inundata</i> Michael et Vickery	A	1995	2000	AUS	●			Cas.	Grain	Poaceae	
<i>Echinochloa muricata</i> (Beauv.) Fernald subsp. <i>microstachya</i> (Wiegand) Jauzein	A	1887	N	NAM	●		●	Nat.	Grain, seeds,...	Poaceae	
<i>Echinochloa muricata</i> (Beauv.) Fernald subsp. muricata	A	2000	2000	NAM	●			Cas.	Grain	Poaceae	
<i>Echinops banaticus</i> Rochel ex Schrad.	D	1841	1989	E	●	●	●	Cas.?	Hort.	Asteraceae	
<i>Echinops exaltatus</i> Schrad.	D	1926	N	E	●		●	Nat.	Hort.	Asteraceae	
<i>Echinops sphaerocephalus</i> L.	D	1821	1953	E AS-Te	●		●	Ext.?	Hort.	Asteraceae	
<i>Echium plantagineum</i> L.	A/D	1906	2005	E	●		●	Cas.	Grain, hort,....	Boraginaceae	
<i>Eclipta prostrata</i> (L.) L.	A	2000	2000	Trop.	●			Cas.	Grain	Asteraceae	
<i>Egeria densa</i> Planch.	D	1999	N	SAM	●			Inv.	Hort.	Hydrocharitaceae	
<i>Ehrharta longiflora</i> Smith	A	1911	1911	AF			●	Cas.	Wool	Poaceae	
<i>Eichhornia crassipes</i> (C.F.P.Mart.) Solms-Laub.	D	2001	2001	SAM	●			Cas.	Hort.	Pontederiaceae	
<i>Einadia polygonoides</i> (J.Murr) Wilson	A	1951	1951	AUS			●	Cas.	Wool	Chenopodiaceae	<i>Chenopodium polygonoides</i> (J.Murr) Aell.
<i>Elaeagnus angustifolia</i> L.	D	1939	N	E AS-Te	●			Nat.	Hort.	Elaeagnaceae	
<i>Elaeagnus multiflora</i> Thunb.	D	2005	2005	AS-Te	●			Cas.	Hort.	Elaeagnaceae	
<i>Elaeagnus umbellata</i> Thunb.	D	1956	N	AS-Te	●		●	Nat.	Hort.	Elaeagnaceae	
<i>Elaeagnus</i> x <i>submacrophylla</i> Servettaz (E. <i>macrophylla</i> Thunb. x <i>pungens</i> Thunb.)	D	2005	2005	Cult.	●			Cas.	Hort.	Elaeagnaceae	<i>Elaeagnus</i> x <i>ebbingei</i> J.Doorenbos
<i>Elatine alsinastrum</i> L.	A?	1860?	1863	E AF AS-Te	●		?	Cas.	?	Elatinaceae	
<i>Eleusine coracana</i> (L.) Gaertn.	A?	1947	1992	?	●		●	Cas.	Grain, wool	Poaceae	<i>Eleusine coracana</i> (L.) Gaertn. subsp. <i>coracana</i>
<i>Eleusine indica</i> (L.) Gaertn. subsp. <i>africana</i> (Kennedy-O'Byrne) S.M.Phillips	A	1887	Ann.	AF	●	●	●	Cas.	Wool, grain,...	Poaceae	<i>Eleusine coracana</i> (L.) Gaertn. subsp. <i>africana</i> (Kennedy-O'Byrne) Hilu et de Wet
<i>Eleusine indica</i> (L.) Gaertn. subsp. <i>indica</i>	A	1857	?	Trop.	●		●	Cas.	Wool, grain,...	Poaceae	<i>Eleusine indica</i> (L.) Gaertn.
<i>Eleusine tristachya</i> (Lam.) Lam.	A	1886	2005	SAM	●	●	●	Cas.	Wool, grain,...	Poaceae	
<i>Elodea canadensis</i> Michaux	A	1860	N	NAM	●	●	●	Nat.	Waterfowl?	Hydrocharitaceae	
<i>Elodea nuttallii</i> (Planch.) St John	A	1939	N	NAM	●	●	●	Inv.	Waterfowl?	Hydrocharitaceae	
<i>Elsholtzia ciliata</i> (Thunb.) Hyl.	A	1996	2000	AS	●		●	Cas.	Grain,...	Lamiaceae	
<i>Elymus canadensis</i> L.	A	1949	1956	NAM AS-Te	●		●	Cas.	Wool, grain	Poaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Elymus elongatus</i> (Host) Runemark subsp. elongatus	A	1823	1959?	E			•	Cas.	Wool....	Poaceae	
<i>Elymus elongatus</i> (Host) Runemark subsp. ponticus (Podp.) Melderis	A	<1900?	<1900?	E AF AS-Te			•	Cas.	Wool	Poaceae	
<i>Elymus scaber</i> (R.Brown) A.Löve	A	1895	1895	AUS			•	Cas.	Wool	Poaceae	
<i>Emex australis</i> Steinh.	A	1900	1992	AF	•		•	Cas.	Wool. grain	Polygonaceae	
<i>Emex spinosa</i> (L.) Campd.	A	1886	1994	E AF AS-Te	•			Cas.	Grain....	Polygonaceae	
<i>Enarthrocarpus lyratus</i> (Forssk.) DC.	A	1892	1893	E AF AS-Te	•			Cas.	Grain....	Brassicaceae	
<i>Enneapogon desvauxii</i> Beauv.	A	1912	1912	AF	•			Cas.	Wool	Poaceae	
<i>Enneapogon scaber</i> Lehm.	A	1912	1912	AF	•			Cas.	Wool	Poaceae	
<i>Enteropogon acicularis</i> (Lindl.) Lazarides	A	1953	1953	AUS			•	Cas.	Wool	Poaceae	
<i>Ephedra distachya</i> L.	A?	<1842	2005	E AS	•			Cas.	?	Ephedraceae	
<i>Epilobium ciliatum</i> Rafin.	A	1952	N	NAM	•	•	•	Inv.	Timber?	Onagraceae	
<i>Epilobium ciliatum</i> x <i>lanceolatum</i> Seb. et Mauri	H	?	?	Hybr.	?	?	?	Cas.?	Hybridization	Onagraceae	
<i>Epilobium dodonaei</i> Vill.	A	1994	N	E AS-Te			•	Nat.	Ore?	Onagraceae	
<i>Epilobium</i> x <i>floridulum</i> Smejkal (E. <i>ciliatum</i> x <i>parviflorum</i> Schreb.)	H	1965?	1965?	Hybr.	•			Cas.?	Hybridization	Onagraceae	
<i>Epilobium</i> x <i>interjectum</i> Smejkal (E. <i>ciliatum</i> x <i>montanum</i> L.)	H	?	?	Hybr.	?	?	?	Cas.?	Hybridization	Onagraceae	
<i>Epilobium</i> x <i>novae-civitatensis</i> Smejkal (E. <i>ciliatum</i> x <i>hirsutum</i> L.)	H	?	?	Hybr.	?	?	?	Cas.?	Hybridization	Onagraceae	
<i>Epimedium alpinum</i> L.	D	1847	N	E	•		•	Nat.	Hort.	Berberidaceae	
<i>Eragrostis advena</i> (Stapf) S.M.Phillips	A	1921	1921	AUS			•	Cas.	Wool	Poaceae	
<i>Eragrostis alveiformis</i> Lazarides	A	1924	1947	AUS			•	Cas.	Wool	Poaceae	
<i>Eragrostis atrovirens</i> (Desf.) Trin. ex Steud.	A	1948	1948	AF AS-Tr			•	Cas.	Wool	Poaceae	
<i>Eragrostis bahiensis</i> Schrad. ex Schult.	A	1921	1947	SAM			•	Cas.	Wool	Poaceae	
<i>Eragrostis barrelieri</i> Daveau	A	1948	1949	E AF AS-Te			•	Cas.	Wool	Poaceae	
<i>Eragrostis bicolor</i> Nees	A	1911	1911	AF			•	Cas.	Wool	Poaceae	
<i>Eragrostis brownii</i> (Kunth) Nees ex Wight	A	1920	1920	AUS			•	Cas.	Wool	Poaceae	Incl. E. benthamii Mattei
<i>Eragrostis chloromelas</i> Steud.	A	1893	1948	AF			•	Cas.	Wool	Poaceae	
<i>Eragrostis cilianensis</i> (All.) Vign.-Lut. ex Janchen	A	1824	2003	E AF AS-Te	•	•	•	Cas.	Grain. wool....	Poaceae	
<i>Eragrostis ciliaris</i> (L.) R.Brown	A	1897	1897	AF	•			Cas.	?	Poaceae	
<i>Eragrostis curvula</i> (Schrad.) Nees	A/D?	1911	N	AF	•		•	Nat.	Wool....	Poaceae	
<i>Eragrostis dielsii</i> Pilger	A	1904	1947	AUS			•	Cas.	Wool	Poaceae	
<i>Eragrostis elongata</i> (Willd.) Jacq.	A	1911	1925	AS-Tr AUS			•	Cas.	Wool	Poaceae	
<i>Eragrostis lacunaria</i> F.Muell. ex Benth.	A	1911	1949	AUS			•	Cas.	Wool	Poaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Eragrostis leptocarpa</i> Benth.	A	1904	1947	AUS			●	Cas.	Wool	Poaceae	
<i>Eragrostis leptostachya</i> (R.Brown) Steud.	A	1911	1932	AUS			●	Cas.	Wool	Poaceae	
<i>Eragrostis mexicana</i> (Hornem.) Link	A	1822	1955	AM	●		●	Cas.	Wool....	Poaceae	
<i>Eragrostis minor</i> Host	A	<1835	N	E AF AS-Te	●	●	●	Nat.	Traffic?	Poaceae	
<i>Eragrostis multicaulis</i> Steud.	A	1943	N	AS-Te	●	●	●	Nat.	Traffic?	Poaceae	<i>Eragrostis pilosa</i> (L.) Beauv. subsp. <i>damiensiana</i> (Bonnet) Thell.
<i>Eragrostis neesii</i> Trin.	A	1895	1895	SAM			●	Cas.	Wool	Poaceae	
<i>Eragrostis neomexicana</i> Vasey	A	1947	1998	NAM	●		●	Cas.	Wool, grain....	Poaceae	
<i>Eragrostis nigra</i> Nees ex Steud.	A	1913	1913	AS		●		Cas.	?	Poaceae	
<i>Eragrostis obtusa</i> (Munro ex Ficalho) Hiern	A	1911	1911	AF			●	Cas.	Wool	Poaceae	
<i>Eragrostis papposa</i> (Duf.) Steud.	A	1955	1955	E AF AS-Te			●	Cas.	Wool	Poaceae	
<i>Eragrostis parviflora</i> (R.Brown) Trin.	A	1887	1969	AUS			●	Cas.	Wool	Poaceae	
<i>Eragrostis pectinacea</i> (Michaux) Nees	A	1940	1949	AM			●	Cas.	Wool....	Poaceae	
<i>Eragrostis pilosa</i> (L.) Beauv.	A	1877	1995	E AF AS-Te	●		●	Cas.	Wool, grain....	Poaceae	
<i>Eragrostis plana</i> Nees	A	1911	1948	AF			●	Cas.	Wool	Poaceae	
<i>Eragrostis planiculmis</i> Nees	A	1947	1947	AF			●	Cas.	Wool	Poaceae	
<i>Eragrostis procumbens</i> Nees	A	1921	1947	AF			●	Cas.	Wool	Poaceae	
<i>Eragrostis rotifer</i> Rendle	A	<1950	<1950	AF			●	Cas.	Wool	Poaceae	
<i>Eragrostis tef</i> (Zucc.) Trotter	A	1939	2003	AF AS-Te	●		●	Cas.	Grain, wool	Poaceae	
<i>Eragrostis trichophora</i> Coss. et Durieu	A	1921	1921	AF			●	Cas.	Wool	Poaceae	
<i>Eragrostis virescens</i> J.Presl subsp. verloovei R.Portal	A	1999	2003	SAM	●			Cas.	?	Poaceae	
<i>Eragrostis virescens</i> J.Presl subsp. <i>virescens</i>	A	1947	2005	SAM	●		●	Cas.?	Wool, grain....	Poaceae	
<i>Eranthis hyemalis</i> (L.) Salisb.	D	1813	N	E	●	●	●	Nat.	Hort.	Ranunculaceae	
<i>Eremopoa persica</i> (Trin.) Roshev.	A	1957	1957	AS-Te			●	Cas.	Grain	Poaceae	
<i>Eremopyrum bonaepartis</i> (Spreng.) Nevski	A	1954	1954	AF AS-Te			●	Cas.	Grain	Poaceae	
<i>Erica carnea</i> L.	D	1944	1944	E	●			Cas.	Hort.	Ericaceae	
<i>Erica vagans</i> L.	D	<1900	1913	E	●		●	Cas.	Hort.	Ericaceae	
<i>Erigeron annuus</i> (L.) Desf. s.l.	D	1813	N	NAM	●	●	●	Nat.	Hort.	Asteraceae	
<i>Erigeron karvinskianus</i> DC.	D	2000	N	NAM	●			Nat.	Hort.	Asteraceae	
<i>Erigeron philadelphicus</i> L.	D	1945	1945	NAM		●		Cas.	Hort.	Asteraceae	
<i>Erigeron speciosus</i> (Lindl.) DC.	D	1869	1887	NAM	●		●	Cas.	Hort.	Asteraceae	
<i>Eriobotrya japonica</i> (Thunb.) Lindl.	D	2000	2005	AS-Te	●		●	Cas.	Hort.	Malaceae	
<i>Eriochloa australiensis</i> Stapf ex Thell.	A	1911	1911	AUS			●	Cas.	Wool	Poaceae	
<i>Eriochloa cf. crebra</i> S.T.Blake	A	1895	1947	AUS			●	Cas.	Wool	Poaceae	
<i>Eriochloa procera</i> (Retz.) C.E.Hubbard	A	1899	1947	AS-Tr	●		●	Cas.	Wool	Poaceae	
<i>Eriochloa pseudoacrotricha</i> (Stapf ex Thell.) J.M.Black	A	1904	1959	AUS			●	Cas.	Wool	Poaceae	

Taxon	MoI	FiR	ReR	Origin	Fl	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Erodium botrys</i> (Cav.) Bertol.	A	1826	1971	E AF AS-Te	•	•		Cas.	Wool....	Geraniaceae	
<i>Erodium brachycarpum</i> (Godr.) Thell.	A	1903	1953	AF			•	Cas.	Wool	Geraniaceae	
<i>Erodium chium</i> (L.) Willd.	A	1948	1948	E AF AS-Te			•	Cas.	Wool	Geraniaceae	
<i>Erodium ciconium</i> (L.) L'Hérit.	A	1892	1893	E AF AS-Te			•	Cas.	Wool	Geraniaceae	
<i>Erodium crinitum</i> Carol.	A	1889	2001	AUS	•		•	Cas.	Wool	Geraniaceae	
<i>Erodium cygnorum</i> Nees subsp. <i>cygnorum</i>	A	1900	1971	AUS			•	Cas.	Wool	Geraniaceae	
<i>Erodium cygnorum</i> Nees subsp. <i>glandulosum</i> Carol.	A	1922	1922	AUS			•	Cas.	Wool	Geraniaceae	
<i>Erodium malacoides</i> (L.) L'Hérit.	A	1902	1994	E AF AS-Te	•		•	Cas.	Wool, grain....	Geraniaceae	
<i>Erodium moschatum</i> (L.) L' Hérit. var. <i>cicutarioides</i> Delile	A	1970	1970	E AF AS-Te			•	Cas.	Wool	Geraniaceae	
<i>Erodium moschatum</i> (L.) L'Hérit. var. <i>moschatum</i>	A	1813	1970	E AF AS-Te	•		•	Ext./Cas.	Wool....	Geraniaceae	
<i>Erodium salzmannii</i> Delile	A	1949	1949	E AF			•	Cas.	Wool	Geraniaceae	<i>Erodium cicutarium</i> (L.) L'Hérit. subsp. <i>jacquinianum</i> (Fisch., C.A.Mey. et Avé-Lall.) Briq.
<i>Erodium stephanianum</i> Willd.	A	1997	2001	AS-Te	•			Cas.	Grain	Geraniaceae	
<i>Eruca vesicaria</i> (L.) Cav. subsp. <i>sativa</i> (Mill.) Thell.	A	1837	2005	E AF AS-Te	•		•	Cas.	Grain, wool....	Brassicaceae	
<i>Erucaria hispanica</i> (L.) Druce	A	1901	1901	E AF AS-Te			•	Cas.	Wool	Brassicaceae	
<i>Erucastrum gallicum</i> (Willd.) O.E.Schulz	A	1856	2005	E	•	•	•	Cas.	Grain, wool....	Brassicaceae	
<i>Erucastrum nasturtiifolium</i> (Poiret) O.E.Schulz	A	1936	1936	E	•			Cas.	?	Brassicaceae	
<i>Eryngium giganteum</i> Bieb.	D	1978	2005	AS-Te	•		•	Cas.	Hort.	Apiaceae	
<i>Eryngium planum</i> L.	D	1850	1998	E AS-Te	•	•	•	Cas.	Hort.	Apiaceae	
<i>Erysimum cheiri</i> (L.) Crantz	D	1554	N	E	•	•	•	Nat.	Hort.	Brassicaceae	
<i>Erysimum diffusum</i> Ehrh.	A	1877	1896	E AS	•			Cas.	Grain?	Brassicaceae	
<i>Erysimum repandum</i> L.	A	1823	2003	E AS-Te	•	•	•	Cas.	Wool, grain....	Brassicaceae	
<i>Erysimum ruscinonense</i> Jord.	A	1893	1893	E			•	Cas.	Wool	Brassicaceae	
<i>Erysimum</i> x <i>marshallii</i> (Henfr.) Bois (hybrid of obscure origin)	D	2000	2000	Cult.	•			Cas.	Hort.	Brassicaceae	
<i>Erythronium dens-canis</i> L.	D	1955	1955	E AS			•	Cas.	Hort.	Liliaceae	
<i>Eschscholzia californica</i> Cham.	D	1888	1994	NAM	•		•	Cas.	Hort.	Papaveraceae	
<i>Euclidium syriacum</i> (L.) R.Brown	A	1885	1909	AS-Te	•		•	Cas.	Grain....	Brassicaceae	
<i>Euonymus hederacea</i> Champ. ex Benth.	D	1986	2004	AS-Te	•			Cas.?	Hort.	Celastraceae	<i>Euonymus fortunei</i> (Turcz.) Hand.-Mazz.
<i>Euonymus latifolius</i> (L.) Mill.	D	1979	N	E AS-Te	•		•	Nat.	Hort.	Celastraceae	
<i>Eupatorium maculatum</i> L.	D	2004	N	NAM	•			Nat.	Hort.	Asteraceae	
<i>Eupatorium rugosum</i> Houtt.	D?	1953	1953	NAM			•	Cas.	Hort.?	Asteraceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Euphorbia amygdaloides</i> L. subsp. <i>robbiae</i> (Turrill) Stace	D	2000	2005	AS-Te	●			Cas.	Hort.	Euphorbiaceae	
<i>Euphorbia brittingeri</i> Opiz ex Samp.	A	1973	N?	E			●	Nat.?	Seeds....	Euphorbiaceae	
<i>Euphorbia characias</i> L.	D	2001	2001	E AF AS-Te	●			Cas.	Hort.	Euphorbiaceae	
<i>Euphorbia dentata</i> Michaux	A	1986	2003	NAM	●			Cas.	Grain	Euphorbiaceae	<i>Poinsettia dentata</i> (Michaux) Klotzsch et Garcke
<i>Euphorbia epithymoides</i> L.	D	1937	1964	E			●	Cas.	Hort.	Euphorbiaceae	
<i>Euphorbia esula</i> L. subsp. <i>tommasiniana</i> (Bertol.) Kuzmanov	A	<1850	N	E AS-Te	●	●	●	Nat.	Ore....	Euphorbiaceae	
<i>Euphorbia heterophylla</i> L.	A	1997	2000	AM	●			Cas.	Grain	Euphorbiaceae	<i>Poinsettia heterophylla</i> (L.) Klotzsch et Garcke
<i>Euphorbia lathyris</i> L.	D	1554	N	E AF AS-Te	●	●	●	Nat.	Hort.	Euphorbiaceae	
<i>Euphorbia palustris</i> L.	D	1838	N?	E AS-Te	●			Nat.?	Hort.	Euphorbiaceae	
<i>Euphorbia seguieriana</i> Neck.	A?	1858	1858	E AS-Te	●			Cas.	Ore?	Euphorbiaceae	
<i>Euphorbia</i> x <i>pseudoesula</i> Schur (<i>E. cyparissias</i> L. x <i>esula</i>)	H	1960?	1960?	Hybr.				●	Cas.?	Hybridization	Euphorbiaceae
<i>Eustachys neglecta</i> (Nash) Nash	A	1949	1949	NAM				●	Cas.	Wool	Poaceae
<i>Eustachys retusa</i> (Lag.) Kunth	A	1950	1950	SAM				●	Cas.	Wool	Poaceae
<i>Facelis retusa</i> (Lam.) Schultz-Bip.	A	1895	1895	SAM				●	Cas.	Wool	Asteraceae
<i>Fagopyrum esculentum</i> Moench	D	1855	Ann.	AS-Te	●	●	●	Cas.	Birdseed	Polygonaceae	
<i>Fagopyrum tataricum</i> (L.) Gaertn.	A?	1856	1997	AS-Te	●	●	●	Cas.	Birdseed....	Polygonaceae	
<i>Fallopia baldschuanica</i> (Regel) Holub	D	1942	N	AS-Te	●	●	●	Nat.	Hort.	Polygonaceae	Incl. <i>F. aubertii</i> (L.Henry) Holub
<i>Fallopia japonica</i> (Houtt.) Ronse Decraene var. <i>compacta</i> (Hook. f.) J.P.Bailey	D	1981	N?	AS-Te	●			Nat.?	Hort.	Polygonaceae	
<i>Fallopia japonica</i> (Houtt.) Ronse Decraene var. <i>japonica</i>	D	1882	N	AS-Te	●	●	●	Inv.*	Hort.	Polygonaceae	
<i>Fallopia sachalinensis</i> (F. Schmidt Petrop.) Ronse Decraene	D	1924	N	AS-Te	●	●	●	Nat.	Hort.	Polygonaceae	
<i>Fallopia</i> x <i>bohemica</i> (Chrték et Chrtková) J.P.Bailey (<i>F. japonica</i> x <i>sachalinensis</i>)	D	1954	N	Hybr.	●	●	●	Nat.	Hort.	Polygonaceae	
<i>Fargesia spathacea</i> Franch.	D	1988	1988	AS-Te	●			Cas.	Hort.	Poaceae	
<i>Fatsia japonica</i> (Thunb.) Decaisne et Planch.	D	2005	2005	AS-Te	●			Cas.	Hort.	Hederaceae	
<i>Felicia tenella</i> (L.) Nees	A	1911	1911	AF				●	Cas.	Wool	Asteraceae
<i>Festuca brevipila</i> R.Tracey	D/A	1863	N	E	●	●	●	Nat.	Seeds	Poaceae	
<i>Festuca glauca</i> Vill.	D	1887	1905	E	●			Cas.?	Hort.	Poaceae	
× <i>Festulolium braunii</i> (K.Richt.) A.Camus (<i>Festuca pratensis</i> Huds. x <i>Lolium perenne</i> L.)	H	1942	1982	Hybr.	●			●	Cas.	Hybridization	Poaceae

Taxon	MoI	FiR	ReR	Origin	Fl	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Ficus carica</i> L.	D	1937	2005	AS-Te	●	●	●	Cas.	Food refuse	Moraceae	
<i>Fimbristylis dichotoma</i> (L.) Vahl s.l.	A	1911	1911	Trop.				● Cas.	Wool	Cyperaceae	
<i>Foeniculum vulgare</i> Mill.	D	1820	N	E AF AS-Te	●	●	●	Nat.	Agric.	Apiaceae	
<i>Forsythia suspensa</i> (Thunb.) Vahl	D	1961	N	AS-Te				● Nat.	Hort.	Oleaceae	
<i>Forsythia x intermedia</i> Zabel (F. <i>suspensa</i> (Thunb.) Vahl x <i>viridissima</i> Lindl.)	D	1960	2001	Cult.	●			● Cas.	Hort.	Oleaceae	
<i>Fragaria x ananassa</i> (Weston) Rozier (F. <i>chiloensis</i> (L.) Mill. x <i>virginiana</i> Mill.)	D	<1858	1998	Cult.	●			● Cas.	Agric.	Rosaceae	
<i>Frankenia pulverulenta</i> L.	A	<1835	2004	E AF AS-Te	●			● Cas.	Wool, grain....	Frankeniaceae	
<i>Fraxinus ornus</i> L.	D	1871	2005	E AS-Te	●			● Cas.	Hort.	Oleaceae	
<i>Fumaria muralis</i> Sond. ex Koch	A	1941	N	E AF	●			● Nat.	?	Fumariaceae	
<i>Gagea pratensis</i> (Pers.) Dum.	A	1998	1998	E	●			Cas.	?	Liliaceae	
<i>Gaillardia x grandiflora</i> Van Houtte (G. <i>aristata</i> Pursh x <i>pulchella</i> Foug.)	D	1953	N	Hybr.	●			Inv.	Hort.	Asteraceae	
<i>Galactites elegans</i> (All.) Nyman ex Soldano	A	1912	1912	E AF AS-Te				● Cas.	Wool	Asteraceae	<i>Galactites tomentosa</i> Moench
<i>Galanthus ikariae</i> Baker	D	1984	1984	E AS-Te		●		Cas.?	Hort.	Amaryllidaceae	
<i>Galanthus nivalis</i> L. var. <i>nivalis</i>	D	1811	N	E AS-Te	●	●	●	Nat.	Hort.	Amaryllidaceae	
<i>Galanthus nivalis</i> L. var. <i>scharlockii</i> Caspary	D	1939	N?	?	●			● Nat.?	Hort.	Amaryllidaceae	
<i>Galanthus x warei</i> J. Allen (G. <i>nivalis</i> var. <i>nivalis</i> x <i>nivalis</i> var. <i>scharlockii</i>)	D	2003	2003	Hybr.				● Cas.	Hort.	Amaryllidaceae	
<i>Galega officinalis</i> L.	D	1854	N	E AS-Te	●	●	●	Nat.	Agric.	Fabaceae	
<i>Galeopsis pubescens</i> Besser	A	1856	1860	E AS-Te	●			Cas.	?	Lamiaceae	
<i>Galinsoga parviflora</i> Cav.	A	1873	N	SAM	●	●	●	Nat.	Nurseries?	Asteraceae	
<i>Galinsoga quadriradiata</i> Ruiz et Pav.	A	1920	N	SAM	●	●	●	Nat.	Nurseries?	Asteraceae	
<i>Galium divaricatum</i> Pourr. ex Lam.	A	<1900	<1900	E AS-Te	●			Cas.	?	Rubiaceae	
<i>Galium murale</i> (L.) All.	A	1902	1902	E AF AS-Te				● Cas.	Wool	Rubiaceae	
<i>Galium parisiense</i> L. var. <i>leiocarpum</i> Tausch	A	<1850	2004	E AF AS-Te	●			Cas.	Grain....	Rubiaceae	
<i>Galium parisiense</i> L. var. <i>parisiense</i>	A	1904	1904	E AF AS-Te				● Cas.	Wool	Rubiaceae	
<i>Galium rubioides</i> L.	D	<1900	<1900	E	?	?	?	Cas.	Hort.	Rubiaceae	
<i>Galium tenuissimum</i> Bieb.	A	1906	1953	E AS-Te	●			● Cas.	Wool....	Rubiaceae	
<i>Galium verrucosum</i> Huds.	A	1904	1909	E AF AS-Te				● Cas.	Grain	Rubiaceae	
<i>Gastridium phleoides</i> (Nees et Meyen) C.E.Hubbard	A	1895	1920	AF AS-Te	●			● Cas.	Wool....	Poaceae	
<i>Gastridium ventricosum</i> (Gouan) Schinz et Thell.	A	1950	1960	E AF AS-Te	●			Cas.	Grain....	Poaceae	
<i>Gaudinia fragilis</i> (L.) Beauv.	A	1907	1953	E AF AS-Te	●			● Cas.	?	Poaceae	
<i>Gaultheria procumbens</i> L.	D	1943	1944	NAM	●			Cas.	Hort.	Ericaceae	
<i>Gentiana acaulis</i> L.	D	1844	1911	E	●			● Cas.	Hort.	Gentianaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Geranium carolinianum</i> L.	A	1998	1998	NAM	●			Cas.	Grain	Geraniaceae	
<i>Geranium divaricatum</i> Ehrh.	A	1891	1900	E AS-Te	●		●	Cas.	Grain....	Geraniaceae	
<i>Geranium endressii</i> J. Gay	D	<1900	N?	E	●	●	●	Nat.?	Hort.	Geraniaceae	
<i>Geranium macrorrhizum</i> L.	D	1855	N	E			●	Nat.	Hort.	Geraniaceae	
<i>Geranium nodosum</i> L.	D	1855	N	E			●	Nat.	Hort.	Geraniaceae	
<i>Geranium phaeum</i> L.	D	1813	N	E	●	●	●	Nat.	Hort.	Geraniaceae	
<i>Geranium purpureum</i> Vill.	A	1967	N	E AF AS-Te	●	●	●	Nat.	Ore....	Geraniaceae	
<i>Geranium pyrenaicum</i> Burm. f.	D/A	1824	N	E AF AS-Te	●	●	●	Nat.	Hort....	Geraniaceae	
<i>Geranium</i> x <i>magnificum</i> Hyl. (<i>G. ibericum</i> Cav. x <i>platypetalum</i> Fisch. et C.A.Mey.)	D	1952	1988	Cult.	●	●	●	Cas.	Hort.	Geraniaceae	
<i>Geranium</i> x <i>oxonianum</i> Yeo (<i>G. endressii</i> x <i>versicolor</i> L.)	D	<1900	N?	Cult.	●		●	Nat.?	Hort.	Geraniaceae	
<i>Geum macrophyllum</i> Willd.	A/D	1994	N	NAM AS-Te	●			Nat.	Hort.	Rosaceae	
<i>Geum quellyon</i> Sweet	D	2004	2004	SAM	●			Cas.	Hort.	Rosaceae	
<i>Gilia achilleifolia</i> Benth.	D	1954	1954	NAM	●			Cas.	Hort.	Polemoniaceae	
<i>Gilia capitata</i> Sims cf. subsp. mediomontana V.Grant	A	1893	1898	NAM	●		●	Cas.	Wool, grain....	Polemoniaceae	
<i>Gilia capitata</i> Sims subsp. <i>capitata</i>	A	1921	1921	NAM			●	Cas.	Wool	Polemoniaceae	
<i>Gilia tricolor</i> Benth.	D	1969	1969	NAM			●	Cas.	Hort.	Polemoniaceae	
<i>Glaucium corniculatum</i> (L.) Rudolph	A	1880	1997	E AF AS-Te	●		●	Cas.	Grain....	Papaveraceae	
<i>Glebionis coronaria</i> (L.) Tzvelev	A	1903	2005	E AF AS-Te	●		●	Cas.	Grain....	Asteraceae	<i>Chrysanthemum coronarium</i> L.
<i>Gleditsia triacanthos</i> L.	D	1959	1959	NAM	●			Cas.	Hort.	Caesalpiaceae	
<i>Glinus lotoides</i> L.	A	1911	1911	E AF AS			●	Cas.	Wool	Molluginaceae	
<i>Glyceria canadensis</i> (Michaux) Trin.	A	1995	N	NAM	●		●	Nat.	Military troops?	Poaceae	
<i>Glycine max</i> (L.) Merrill	D	1980	2005	?	●			Cas.	Agric.	Fabaceae	
<i>Gnaphalium antillanum</i> Urban	A	1911	1911	AM			●	Cas.	Wool	Asteraceae	<i>Gamochaeta antillana</i> (Urban) Anderberg
<i>Gnaphalium calviceps</i> Fernald	A	1901	1901	AM			●	Cas.	Wool	Asteraceae	<i>Gamochaeta calviceps</i> (Fernald) Cabrera
<i>Gnaphalium pensylvanicum</i> Willd.	A	1891	1891	AM			●	Cas.	Nurseries	Asteraceae	<i>Gamochaeta pensylvanica</i> (Willd.) Cabrera
<i>Gnaphalium sphaericum</i> Willd.	A	1892	1912	AS AUS			●	Cas.	Wool	Asteraceae	<i>Euchiton sphaericum</i> (Willd.) Holub
<i>Gnaphalium undulatum</i> L.	A	1893	1906	AF			●	Cas.	Wool	Asteraceae	<i>Pseudognaphalium undulatum</i> (L.) Hilliard et Burt
<i>Goodyera repens</i> (L.) R.Brown	A	1902	N	E AS-Te NAM	●		●	Nat.	Pines	Orchidaceae	
<i>Grindelia squarrosa</i> (Pursh) Dun.	A	1920	2005	NAM	●			Cas.	Grain....	Asteraceae	
<i>Guizotia abyssinica</i> (L. f.) Cass.	D	1908	Ann.	AF	●	●	●	Cas.	Birdseed	Asteraceae	
<i>Gypsophila elegans</i> Bieb.	D	1883	<1970	AS-Te	●		●	Cas.	Hort.	Caryophyllaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Gypsophila paniculata</i> L.	D	1882	1903	E AS-Te	●			Cas.	Hort.	Caryophyllaceae	
<i>Gypsophila pilosa</i> Huds.	A	1907	1955	AS-Te	●	●		Cas.	Grain....	Caryophyllaceae	
<i>Gypsophila scorzonrifolia</i> Seringe	D	1866	1956	AS-Te	●			Cas.	Hort.	Caryophyllaceae	
<i>Gypsophila viscosa</i> Murray	D?	1878	1965	AS-Te		●	●	Cas.	Hort.?	Caryophyllaceae	
<i>Halimodendron halodendron</i> (Pallas) Voss	D	1953	1953	E AS-Te		●		Cas.	Hort.	Fabaceae	
<i>Harpachne schimperii</i> A.Rich.	A	1947	1947	AF AS-Te			●	Cas.	Wool	Poaceae	
<i>Hebenstretia integrifolia</i> L.	A	1862	1962	AF	●	●		Cas.	Wool....	Selaginaceae	
<i>Hedera algeriensis</i> Hibberd	D	2005	N	AF	●	●		Nat.	Hort.	Hederaceae	Incl. var. 'Gloire de Marengo'
<i>Hedera colchica</i> K.Koch	D	2005	N?	E AS-Te	●			Nat.?	Hort.	Hederaceae	
<i>Hedysarum coronarium</i> L.	A	1995	1995	E AF	●			Cas.	Grain	Fabaceae	
<i>Helenium x clementii</i> Verloove et Lambinon	D	1972	1972	Cult.			●	Cas.	Hort.	Asteraceae	<i>Helenium autumnale</i> L. x <i>bigelovii</i> A.Gray x <i>flexuosum</i> Raf.
<i>Helianthus annuus</i> L.	D	1915	Ann.	NAM	●	●	●	Cas.	Birdseed....	Asteraceae	
<i>Helianthus debilis</i> Nutt.	A	1911	1954	NAM		●	●	Cas.	Wool....	Asteraceae	
<i>Helianthus laetiflorus</i> Pers.	D	1923	N	NAM	●	●	●	Nat.	Hort.	Asteraceae	
<i>Helianthus petiolaris</i> Nutt.	A	1949	1949	NAM	●			Cas.	Grain?	Asteraceae	
<i>Helianthus tuberosus</i> L.	D	1893	N	NAM	●		●	Inv.	Hort., agric.	Asteraceae	
<i>Helichrysum bracteatum</i> (Vent.) Andrews	D	1908	2005	AUS	●		●	Cas.	Hort.	Asteraceae	<i>Xerochrysum bracteatum</i> (Vent.) Tzvelev
<i>Helictotrichon sempervirens</i> (Vill.) Pilger	D	1981	1981	E	●			Cas.	Hort.	Poaceae	
<i>Heliophila pusilla</i> L. f.	A	1906	1906	AF				Cas.	Wool	Brassicaceae	
<i>Heliotropium amplexicaule</i> Vahl	D	1890	1890	SAM			●	Cas.	Hort.	Boraginaceae	
<i>Heliotropium europaeum</i> L.	A	1854	1975	E AF AS-Te	●		●	Cas.	Wool....	Boraginaceae	
<i>Heliotropium suaveolens</i> Bieb.	A	2005	2005	E AS-Te	●			Cas.	?	Boraginaceae	
<i>Helipterum floribundum</i> DC.	A	1894	1894	AUS			●	Cas.	Wool	Asteraceae	
<i>Helipterum strictum</i> (Lindl.) Benth.	A	1891	1891	AUS			●	Cas.	Wool	Asteraceae	
<i>Helleborus niger</i> L.	D	1792	1888	E	●			Ext.	Hort.	Ranunculaceae	
<i>Helleborus orientalis</i> Lam.	D	1947	1955	E AS-Te			●	Cas.	Hort.	Ranunculaceae	
<i>Hemerocallis fulva</i> (L.) L.	D	?	?	AS-Te	?	?	?	Cas.?	Hort.	Liliaceae	
<i>Hemerocallis lilioasphodelus</i> L.	D	1935	N	AS-Te	●		●	Nat.	Hort.	Liliaceae	
<i>Hemizonia fasciculata</i> Torr. et A.Gray	A	1922	1922	NAM	●			Cas.	Grain?	Asteraceae	
<i>Hemizonia pungens</i> (Hook. et Arnott) Torr. et A.Gray	A	1922	1922	NAM		●		Cas.	Grain?	Asteraceae	
<i>Hepatica nobilis</i> Schreb.	D	1825	N	E AS-Te			●	Nat.	Hort.	Ranunculaceae	
<i>Heracleum mantegazzianum</i> Somm. et Lev.	D	1945	N	AS-Te	●	●	●	Inv.*	Hort.	Apiaceae	
<i>Herniaria cinerea</i> DC.	A	1895	1955	E AF AS-Te			●	Cas.	Wool	Caryophyllaceae	
<i>Hesperis matronalis</i> L.	D	1821	N	E AS-Te	●		●	Nat.	hort.	Brassicaceae	
<i>Heuchera micrantha</i> Lindl.	D	2005	2005	NAM	●			Cas.	Hort.	Saxifragaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark	
Heuchera sanguinea Engelm.	D	1955	1955	NAM			●	Cas.	Hort.	Saxifragaceae		
Hibiscus syriacus L.	D	2004	2004	AS	●			Cas.	Hort.	Malvaceae		
Hibiscus trionum L.	A	1892	2005	E AF AS-Te	●		●	Cas.	Grain, wool,...	Malvaceae		
Hieracium amplexicaule L. subsp. speluncarum (Arv.-Touv.) Zahn	D	1873	N	E	●			Nat.	Hort.	Asteraceae		
Hieracium aurantiacum L.	D	1910	N	E	●	●	●	Nat.	Hort.	Asteraceae	Pilosella aurantiaca (L.) F.W.Schultz et Schultz-Bip.	
Hieracium bauhinii Schult. ex Besser	A	1909	N	E	●	●	●	Nat.	Ore....	Asteraceae	Pilosella bauhinii (Schult. ex Besser) Arv.-Touv.	
Hieracium caespitosum Dum.	A	<1850	1996	E AS-Te	●	●	●	Cas.?	Ore....	Asteraceae	Pilosella caespitosa (Dum.) P.D.Sell et C.West	
Hieracium flagellare Willd. ex Schlecht.	A	1999	N	E				●	Nat.	Ore....	Asteraceae	Pilosella flagellaris (Willd. ex Schlecht.) P.D.Sell et C.West
Hieracium piloselloides Vill.	A	1867	N	E AS-Te	●	●	●	Nat.	Ore....	Asteraceae	Pilosella piloselloides (Vill.) Soják	
Hieracium pilosum Schleich. ex Froel.	D?	<1890	<1890	E				●	Cas.	Hort.?	Asteraceae	
Hieracium speciosum Willd. ex Hornem.	D	<1850	<1850	E				●	Cas.	Hort.	Asteraceae	
Hieracium x brachiatum Bertol. ex DC. (H. bauhinii x pilosella L.)	H	?	?	Hybr.	?	?	?	Cas.	Hybridization	Asteraceae	Pilosella x brachiata (Bertol. ex DC.) F.W.Schultz et Schultz-Bip.	
Hieracium x duplex Peter (H. caespitosum < pilosella L.)	H	1976?	1976?	Hybr.				●	Cas.	Hybridization	Asteraceae	Pilosella x duplex (Peter) Holub
Hieracium x florentoides Arv.-Touv. (H. pilosella L. x piloselloides)	H	1979?	1979?	Hybr.				●	Cas.	Hybridization	Asteraceae	Pilosella x florentoides (Arv.-Touv.) P.D.Sell et C.West
Hieracium x prussicum Naeg. et Peter (H. caespitosum > pilosella L.)	H	2003	2005	Hybr.				●	Cas.?	Hybridization	Asteraceae	Pilosella x prussica (Naeg. et Peter) Soják
Hierochloa odorata (L.) Beauv.	A?	2002	N	E AS-Te NAM	●			Nat.	?	Poaceae		
Hippocrepis emerus (L.) Lassen	D	1860	1998	E AS-Te				●	Cas.	Hort.	Fabaceae	
Hirschfeldia incana (L.) Lagrèze-Fossat	A	1873	N	E AF AS-Te	●	●	●	Nat.	Grain, wool, ore	Brassicaceae		
Hordeum bulbosum L.	A	1889	1889	E AF AS-Te	●			Cas.	?	Poaceae		
Hordeum comosum J. Presl	A	1891	1902	SAM				●	Cas.	Wool	Poaceae	
Hordeum distichon L.	D	1871	Ann.	?	●		●	Cas.	Agric.	Poaceae	Incl. H. zeocriton L.	
Hordeum euclaston Steud.	A	1906	1907	SAM				●	Cas.	Wool	Poaceae	
Hordeum flexuosum Steud.	A	1886	1886	SAM				●	Cas.	Wool	Poaceae	
Hordeum geniculatum All.	A	1892	1956	E AF AS-Te		●	●	Cas.	Grain, wool,...	Poaceae		
Hordeum jubatum L.	A/D?	1887	N	AM-AS-Te	●		●	Nat.	Grain, wool,...	Poaceae		
Hordeum leporinum Link	A	1938	1959	E AF AS-Te	●		●	Cas.	Wool, grain,...	Poaceae		
Hordeum pusillum Nutt.	A	1893	1893	NAM	●			Cas.	Grain	Poaceae		
Hordeum vulgare L.	D	1888	Ann.	?	●		●	Cas.	Agric.	Poaceae	Incl. H. hexastichon L.	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
Hosta spec.	D	2005	2005	?	●			Cas.	Hort.	Liliaceae	
<i>Humulus scandens</i> (Lour.) Merrill	D	1954	1955	AS	●	●		Cas.	Hort.	Cannabaceae	
<i>Hyacinthoides hispanica</i> (Mill.) Rothm.	D	1882	N	E AF	●	●	●	Nat.	Hort.	Liliaceae	
<i>Hyacinthoides x massartiana</i> Geerinck (H. hispanica x non-scripta (L.) Chouard ex Rothm.)	D	1977	N	Hybr.	●	●	●	Inv.	Hort.	Liliaceae	
Hydrocotyle novae-zelandiae DC.	A	1984	N	AUS	●			Nat.	?	Apiaceae	
<i>Hydrocotyle ranunculoides</i> L. f.	D	1992	N	NAM	●	●	●	Inv.*	Hort.	Apiaceae	
Hymenolobus procumbens (L.) Nutt. ex Torr. et A.Gray	A	<1850	<1850	E AF AS-Te NAM	?	?	?	Cas.	?	Brassicaceae	
<i>Hyoscyamus albus</i> L.	A	1933	2004	E AF AS-Te		●		Cas.	Grain....	Solanaceae	
<i>Hypecoum pendulum</i> L.	A	1903	2004	E AF AS-Te	●			Cas.	Grain	Fumariaceae	
<i>Hypericum calycinum</i> L.	D	1867	1985	E AS-Te			●	Cas.	Hort.	Hypericaceae	
<i>Hypericum x inodorum</i> Mill. (H. androsaemum L. x hircinum L.)	D	2000	2000	Cult.	●			Cas.	Hort.	Hypericaceae	
Hypochaeris microcephala (Schultz-Bip.) Cabrera	A	1895	1895	SAM			●	Cas.	Wool	Asteraceae	
<i>Hyssopus officinalis</i> L.	D	1821	N	E AF AS-Te	●		●	Nat.	Agric., hort.	Lamiaceae	
Hystrix patula Moench	A	1891	1891	NAM			●	Cas.	?	Poaceae	
<i>Iberis amara</i> L. var. coronaria (D.Don) Voss	D	1973	1973	Cult.			●	Cas.	Hort.	Brassicaceae	
<i>Iberis odorata</i> L.	A	1954	1955	E AF AS-Te			●	Cas.	Grain	Brassicaceae	
<i>Iberis pinnata</i> L.	A	1892	1912	E			●	Cas.	Seeds, grain	Brassicaceae	
<i>Iberis sempervirens</i> L.	D	1912	1985	E AF AS-Te			●	Cas.	Hort.	Brassicaceae	
<i>Iberis umbellata</i> L.	D	1879	N	E AF AS-Te	●		●	Nat.	Hort.	Brassicaceae	
<i>Ibicella lutea</i> (Lindl.) Van Eselt.	A	1894	1992	SAM			●	Cas.	Wool....	Martyniaceae	
<i>Impatiens balfourii</i> Hook. f.	D	1952	N?	AS-Te	●	●	●	Nat.?	Hort.	Balsaminaceae	
<i>Impatiens glandulifera</i> Royle	D	1891	N	AS-Te	●	●	●	Inv.*	Hort.	Balsaminaceae	
<i>Impatiens parviflora</i> DC.	A	1868	N	AS-Te	●	●	●	Inv.	Timber?	Balsaminaceae	
<i>Inula helenium</i> L.	D	1813	N	E AS-Te	●		●	Nat.	Hort.	Asteraceae	
<i>Inula hirta</i> L.	D?	1850	<1900	E			●	Cas.	Hort.?	Asteraceae	
Inula spiraeifolia L.	D	1868	1874	E			●	Cas.	Hort.	Asteraceae	
<i>Ipomoea coccinea</i> L.	A	1995	2005	NAM	●			Cas.	Grain	Convolvulaceae	
<i>Ipomoea hederacea</i> (L.) Jacq. var. <i>hederacea</i>	A	1975	Ann.	SAM	●			Cas.	Grain	Convolvulaceae	
<i>Ipomoea hederacea</i> (L.) Jacq. var. <i>integruscula</i> A.Gray	A	1983	Ann.	SAM	●			Cas.	Grain	Convolvulaceae	
<i>Ipomoea hederifolia</i> L.	A	1915	1915	AM			●	Cas.	Wool	Convolvulaceae	
<i>Ipomoea lacunosa</i> L. f. <i>lacunosa</i>	A	1993	2004	NAM	●			Cas.	Grain	Convolvulaceae	
<i>Ipomoea lacunosa</i> L. f. <i>purpurea</i> Fernald	A	1997	2001	NAM	●			Cas.	Grain	Convolvulaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Ipomoea purpurea</i> Roth	A	1936	2005	SAM	●	●		Cas.	Grain, wool	Convolvulaceae	
<i>Ipomoea tricolor</i> Cav.	D	2005	2005	SAM			●	Cas.	Hort.	Convolvulaceae	
<i>Ipomoea wrightii</i> A.Gray	A	1993	2000	AM	●			Cas.	Grain	Convolvulaceae	
<i>Iris germanica</i> L.	D	1870	N	?	●	●		Nat.	Hort.	Iridaceae	
<i>Iris graminea</i> L.	D	<1850	<1850	E AS-Te			●	Cas.	Hort.	Iridaceae	
<i>Iris pumila</i> L.	D	1888	1960	E AS-Te	●	●		Cas.	Hort.	Iridaceae	
<i>Iris sibirica</i> L.	D	<1850	1958	E AS-Te			●	Cas.	Hort.	Iridaceae	
<i>Isatis tinctoria</i> L.	A	1855	1990	E AF AS-Te	●	●	●	Cas.	Grain, seeds,...	Brassicaceae	
<i>Iva annua</i> L.	A	1994	2000	NAM	●			Cas.	Grain	Asteraceae	
<i>Iva xanthiifolia</i> Nutt.	A	1908	Ann.	NAM	●	●	●	Cas.	Grain,...	Asteraceae	
<i>Jasminum nudiflorum</i> Lindl.	D	2005	2005	AS-Te	●			Cas.	Hort.	Oleaceae	
<i>Jovibarba sobolifera</i> (Sims) Opiz	D	<1893	<1893	E AS-Te			●	Cas.	Hort.	Crassulaceae	
<i>Juglans regia</i> L.	D	1972	2005	E AS-Te	●	●	●	Cas.	Hort.	Juglandaceae	
<i>Juncus anthelatus</i> (Wiegand) R.Brooks	A	1977	1977	NAM	●			Cas.	?	Juncaceae	<i>Juncus tenuis</i> Willd. var. <i>anthelatus</i> Wiegand
<i>Juncus canadensis</i> J.Gay ex Laharpe	A	1965	N	NAM	●			Nat.	Waterfowl?	Juncaceae	
<i>Juncus foliosus</i> Desf.	A	1984	N	E AF	●			Nat.	Waterfowl?	Juncaceae	
<i>Juncus imbricatus</i> Laharpe	A	1911	1911	SAM			●	Cas.	Wool	Juncaceae	
<i>Juncus pallescens</i> Lam.	A	1893	1911	SAM			●	Cas.	Wool	Juncaceae	
<i>Juncus radula</i> Buchen.	A	1916	1916	AUS			●	Cas.	Wool	Juncaceae	
<i>Juncus subsecundus</i> N.A.Wakef.	A	1921	1921	AUS			●	Cas.	Wool	Juncaceae	
<i>Juncus tenuis</i> Willd.	A	1823	N	NAM	●	●	●	Inv.	Hay?	Juncaceae	
<i>Kalmia angustifolia</i> L.	D	1903	N?	NAM	●			Nat.?	Hort.	Ericaceae	
<i>Kerria japonica</i> (L.) DC.	D	1902	2002	AS-Te	●		●	Cas.	Hort.	Rosaceae	
<i>Kitaibela vitifolia</i> Willd.	D	1949	1949	E		●		Cas.	Hort.	Malvaceae	
<i>Knautia integrifolia</i> (L.) Bertol.	A	1997	1997	E AF AS-Te	●			Cas.	Grain	Dipsacaceae	
<i>Laburnum anagyroides</i> Med.	D	1860	N	E	●	●	●	Nat.	Hort.	Fabaceae	
<i>Lactuca sativa</i> L.	D	1857	Ann.	?	●	●	●	Cas.	Agric.	Asteraceae	
<i>Lagarosiphon major</i> (Ridley) Moss	D	1993	N	AF	●		●	Inv.	Hort.	Hydrocharitaceae	
<i>Lagurus ovatus</i> L.	A/D	1848	N	E AF AS-Te	●	●	●	Nat.	Grain, hort,....	Poaceae	
<i>Lallemantia iberica</i> (Bieb.) Fisch. et C.A.Mey.	A	1954	1955	AS-Te			●	Cas.	Grain	Lamiaceae	
<i>Lamarckia aurea</i> (L.) Moench	A	1891	1917	E AF AS-Te		●	●	Cas.	Wool, grain,...	Poaceae	
<i>Lamium galeobdolon</i> (L.) L. subsp. <i>argentatum</i> (Smejkal) J.Duvigneaud	D	1897	N	?	●		●	Inv.	Hort.	Lamiaceae	
<i>Lamium garganicum</i> L. subsp. <i>garganicum</i>	D?	1906	1920	E AF AS-Te		●		Cas.	Hort.?	Lamiaceae	
<i>Laportea aestuans</i> (L.) Chew	A	1999	2002	Trop.	●			Cas.	Nurseries	Urticaceae	
<i>Lappula marginata</i> (Bieb.) Gürke	A	1880	1896	E	●		●	Cas.	Grain,...	Boraginaceae	
<i>Lappula squarrosa</i> (Retz.) Dum.	A	1811	2005	E AS-Te	●	●	●	Cas.	Grain, wool,...	Boraginaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Larix decidua</i> Mill.	D	?	2004	E		●		Cas.	Hort.	Pinaceae	
<i>Lathyrus angulatus</i> L.	A	<1850	<1850	E AF AS-Te			●	Cas.	?	Fabaceae	
<i>Lathyrus annuus</i> L.	A	1909	1990	E AF AS-Te	●	●	●	Cas.	Grain?	Fabaceae	
<i>Lathyrus cicera</i> L.	A	1867	1951	E AF AS-Te			●	Cas.	Wool, seeds,...	Fabaceae	
<i>Lathyrus clymenum</i> L.	A	1891	1913	E AF AS-Te			●	Cas.	Wool,...	Fabaceae	
<i>Lathyrus inconspicuus</i> L.	A	1894	1911	E AF AS-Te		●	●	Cas.	Wool,...	Fabaceae	
<i>Lathyrus latifolius</i> L.	D	1874	N	E AF	●	●	●	Nat.	Hort.	Fabaceae	
<i>Lathyrus niger</i> (L.) Bernh.	D	1803	N	E AF AS-Te		●	●	Nat.	Hort.	Fabaceae	
<i>Lathyrus ochrus</i> (L.) DC.	A	1913	1952	E AF AS-Te			●	Cas.	Seeds	Fabaceae	
<i>Lathyrus odoratus</i> L.	D	1880	2005	E	●		●	Cas.	Hort.	Fabaceae	
<i>Lathyrus sativus</i> L.	A	1859	1960	E AF AS	●		●	Cas.	Wool, seeds,...	Fabaceae	
<i>Lathyrus sphaericus</i> Retz.	A	1856	1927	E AF AS-Te	●		●	Cas.	?	Fabaceae	
<i>Lathyrus vernus</i> (L.) Bernh.	D?	1830	1952	E AS-Te	●		●	Cas.?	Hort.?	Fabaceae	
<i>Lavandula angustifolia</i> Mill.	D	2000	2005	E AF AS-Te	●			Cas.	Hort.	Lamiaceae	
Lavatera cretica L.	A	1997	2002	E AF AS-Te	●			Cas.	Grain,...	Malvaceae	
Lavatera maroccana (Batt. et Trabut) Maire	A	2005	2005	E AF			●	Cas.	Birdseed	Malvaceae	
Lavatera punctata All.	A	1918	1918	E AF AS-Te			●	Cas.	?	Malvaceae	
<i>Lavatera thuringiaca</i> L.	D	1893	1922	E AS-Te	●		●	Cas.	Grain,...	Malvaceae	
<i>Lavatera trimestris</i> L. var. brachypoda Pérez Lara	D	1977	1982	E	●		●	Cas.	Hort.	Malvaceae	
<i>Lavatera trimestris</i> L. var. <i>trimestris</i>	D	1941	1999	E AF AS-Te	●		●	Cas.	Hort.	Malvaceae	
Ledum palustre L.	D	1858	1880	NAM	●			Ext.	Hort.	Ericaceae	
<i>Lemna minuta</i> Humb., Bonpl. et Kunth	A	1983	N	AM	●	●	●	Inv.	Waterfowl	Lemnaceae	
Lemna turionifera Landolt	A	2005	N	NAM AS-Te	●	●	●	Nat.	Waterfowl	Lemnaceae	
<i>Lens culinaris</i> Med.	D/A	1852	2005	?	●		●	Cas.	Agric., wool,...	Fabaceae	
<i>Lens nigricans</i> (Bieb.) Godr.	A	1913	1913	E AF AS-Te			●	Cas.	Grain?	Fabaceae	
<i>Leonurus cardiaca</i> L. subsp. villosus (Dum.-d'Urv.) Hyl.	A	<1850	1991	E AS-Te	●	●	●	Cas.	?	Lamiaceae	<i>Leonurus villosus</i> Dum.-d'Urv.
Leonurus japonicus Houtt.	A	1978	2000	AS-Te	●			Cas.	Grain,...	Lamiaceae	<i>Leonurus sibiricus</i> auct. non L.
<i>Lepidium africanum</i> (Burm. f.) DC.	A	1904	1979	AF			●	Cas.	Wool	Brassicaceae	
<i>Lepidium bonariense</i> L.	A	1906	2003	SAM	●		●	Cas.	Grain, wool,...	Brassicaceae	
<i>Lepidium densiflorum</i> Schrad.	A	1886	N	NAM	●	●	●	Nat.	Grain,...	Brassicaceae	
Lepidium desertorum Eckl. et Zeyh.	A	1895	1895	AF			●	Cas.	Wool	Brassicaceae	
<i>Lepidium fasciculatum</i> Thell.	A	1889	1901	AUS			●	Cas.	Wool	Brassicaceae	
<i>Lepidium graminifolium</i> L.	A	1837	1934	E AF AS-Te	●	●	●	Cas.	Grain?	Brassicaceae	
<i>Lepidium heterophyllum</i> Benth.	A	1866	N	E	●	●	●	Nat.	Ore?	Brassicaceae	
Lepidium hirtum (L.) Smith	A	<1850	1885	E AF AS-Te			●	Cas.	?	Brassicaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Lepidium latifolium</i> L.	A	1813	N	E AF AS-Te	•	•	•	Nat.	Grain....	Brassicaceae	
<i>Lepidium neglectum</i> Thell.	A	1919	1979	NAM	•			Cas.	?	Brassicaceae	
<i>Lepidium perfoliatum</i> L.	A	1871	1999	E AS-Te	•	•	•	Cas.	Grain, wool....	Brassicaceae	
<i>Lepidium sativum</i> L.	D	1859	2005	AF AS-Te	•	•	•	Cas.	Agric.	Brassicaceae	
<i>Lepidium schinzii</i> Thell.	A	1895	1895	AF				Cas.	Wool	Brassicaceae	
<i>Lepidium virginicum</i> L.	A	1859	N	NAM	•	•	•	Nat.	Grain, wool....	Brassicaceae	
Leptochloa decipiens (R.Brown) Stapf ex Maiden s.l.	A	1911	1921	AUS				Cas.	Wool	Poaceae	Incl. <i>L. ciliolata</i> (Jedwabn.) S.T.Blake
Leptochloa divaricatissima S.T. Blake	A	1921	1921	AUS				Cas.	Wool	Poaceae	
Leptochloa dubia (Kunth) Nees	A	1921	1921	AM				Cas.	Wool	Poaceae	
<i>Leptochloa fascicularis</i> (Lam.) A.Gray	A	1831	1947	AM				Cas.	Wool....	Poaceae	<i>Diplachne fascicularis</i> (Lam.) Beauv.
<i>Leptochloa fusca</i> (L.) Kunth	A	1911	1953	Trop.	•		•	Cas.	Wool	Poaceae	<i>Diplachne fusca</i> (L.) Beauv. ex Roem. et Schult.
<i>Leptochloa panicea</i> (Retz.) Ohwi subsp. brachiata (Steud.) N.Snow	A	<1900	1947	AM	•		•	Cas.	Wool....	Poaceae	<i>Leptochloa mucronata</i> (Michaux) Kunth
<i>Leptochloa parviflora</i> (R.Brown) Verloove et Lambinon	A	1911	1947	AUS				Cas.	Wool	Poaceae	<i>Diplachne parviflora</i> (R.Brown) Benth.
Leptochloa peacockii (Maiden et Betche) Domin	A	1911	1947	AUS				Cas.	Wool	Poaceae	
<i>Leptochloa uninervia</i> (J.Presl) Hitchc. et Chase	A	1998	1998	AM	•			Cas.	Grain	Poaceae	<i>Diplachne uninervia</i> (J.Presl) Parodi
<i>Lepyrodiclis holosteoides</i> (C.A.Mey.) Fenzl ex Fisch. et C.A.Mey.	A	2000	2000	AS	•			Cas.	Grain	Caryophyllaceae	
Leucanthemella serotina (L.) Tzvelev	D	1928	1955	E	•		•	Cas.	Hort.	Asteraceae	
<i>Leucanthemum paludosum</i> (Poiret) Bonnet et Barratte	D	2000	2005	E AF	•		•	Cas.	Hort.	Asteraceae	
<i>Leucanthemum x superbum</i> (Bergm. ex J. Ingram) D.H.Kent (<i>L. lacustre</i> (Brot.) Samp. x maximum (Ramond) DC.)	D	2002	2005	Cult.	•		•	Cas.	Hort.	Asteraceae	
<i>Levisticum officinale</i> Koch	D	1870	2004	AS-Te	•		•	Cas.	Agric.	Apiaceae	
Leysera tenella DC.	A	1911	1911	AF				Cas.	Wool	Asteraceae	
<i>Ligustrum ovalifolium</i> Hassk.	D	1986	N	AS-Te	•	•		Nat.	Hort.	Oleaceae	
Ligustrum sinensis Lour.	D	2005	2005	AS-Te	•			Cas.?	Hort.	Oleaceae	
<i>Lilium martagon</i> L.	D	1912	N	E				Nat.	Hort.	Liliaceae	
<i>Limnanthes douglasii</i> R.Brown	D	1994	1994	NAM	•			Cas.	Hort.	Limnanthaceae	
<i>Limonium sinuatum</i> (L.) Mill.	D	1956	1956	E AF AS-Te	•			Cas.	Hort.	Plumbaginaceae	
Linaria angustissima (Loisel.) Borbás	A?	<1835	<1835	E				Cas.	?	Scrophulariaceae	
Linaria bipartita (Vent.) Desf.	D	1943	1966	AF	•			Cas.	Hort.	Scrophulariaceae	
Linaria chalepensis (L.) Mill.	A	1954	2002	E AF AS-Te	•		•	Cas.	Grain	Scrophulariaceae	

Taxon	MoI	FiR	ReR	Origin	Fl	Br	Wa	DN	Means intr.	Family	Synonym/Remark
Linaria dalmatica (L.) Mill.	D	1947	1949	E AS-Te	●	●		Cas.	Hort.	Scrophulariaceae	
<i>Linaria genistifolia</i> (L.) Mill.	A	1891	<1927	E AS-Te	●		●	Cas.	Grain....	Scrophulariaceae	
<i>Linaria hirta</i> (L.) Moench	A	1999	2000	E	●			Cas.	Grain	Scrophulariaceae	
<i>Linaria incarnata</i> (Vent.) Spreng.	D?	1952	1952	E AF	●			Cas.	Hort.?	Scrophulariaceae	
<i>Linaria maroccana</i> Hook. f.	D	1938	2003	AF	●			Cas.	Hort.	Scrophulariaceae	
<i>Linaria purpurea</i> (L.) Mill.	D	2001	N?	E AF	●			Nat.?	Hort.	Scrophulariaceae	
<i>Linaria simplex</i> (Willd.) DC.	A	<1900	<1900	E AF AS-Te	?	?	?	Cas.	?	Scrophulariaceae	
<i>Linaria supina</i> (L.) Chazelles	A	1833	N	E AF	●	●	●	Nat.	Ore?	Scrophulariaceae	
<i>Linaria triornithophora</i> (L.) Willd.	A	1972	1972	E	●			Cas.	Nurseries	Scrophulariaceae	
<i>Lindernia dubia</i> (L.) Pennell	A	1993	N	NAM	●			Inv.	Fish	Scrophulariaceae	
<i>Lindernia procumbens</i> (Krocker) Borbás	A	1995	1995	E AS-Te	●			Cas.	Fish	Scrophulariaceae	<i>Lindernia palustris</i> F.X.Hartm.
<i>Linum austriacum</i> L. subsp. <i>austriacum</i>	D	2001	N	E AS-Te	●			Nat.	Hort.	Linaceae	
Linum grandiflorum Desf.	D	1887	1952	AF	●		●	Cas.	Hort.	Linaceae	
<i>Linum usitatissimum</i> L.	D	1830	Ann.	?	●	●	●	Cas.	Agric.	Linaceae	
<i>Liriodendron tulipifera</i> L.	D	<1999	<1999	NAM		●		Cas.	Hort.	Magnoliaceae	
<i>Lobelia erinus</i> L.	D	1925	2005	AF	●		●	Cas.	Hort.	Lobeliaceae	
Lobelia siphilitica L.	D	<1934	2004	NAM	●	●		Cas.	Hort.	Lobeliaceae	
<i>Lobularia maritima</i> (L.) Desv.	D	1870	Ann.	E AF AS-Te	●	●	●	Cas.	Hort.	Brassicaceae	
<i>Lolium multiflorum</i> Lam.	D	1814	N	E AF AS-Te	●	●	●	Nat.	Agric.	Poaceae	
<i>Lolium persicum</i> Boiss. et Hohen.	A	1994	1998	AS-Te	●			Cas.	Grain	Poaceae	
<i>Lolium rigidum</i> Gaudin	A	1882	2000	E AF AS-Te	●	●	●	Cas.	Grain....	Poaceae	
<i>Lolium subulatum</i> Vis.	A	1996	1996	E AF AS-Te	●			Cas.	Grain	Poaceae	
<i>Lolium x boucheanum</i> Kunth (<i>L. multiflorum</i> x <i>perenne</i> L.)	H	1950	1995	Hybr.	●		●	Cas.	Hybridization	Poaceae	
<i>Lonicera caprifolium</i> L.	D	1851	N?	E AS-Te	●	●	●	Nat.?	Hort.	Caprifoliaceae	
<i>Lonicera japonica</i> Thunb. ex Murray	D	2004	N?	AS-Te	●			Nat.?	Hort.	Caprifoliaceae	
<i>Lonicera nitida</i> Wils.	D	2000	2005	AS-Te	●			Cas.	Hort.	Caprifoliaceae	
Lonicera pileata Oliv.	D	2004	2005	AS-Te	●			Cas.	Hort.	Caprifoliaceae	
Lonicera sempervirens L.	D	1952	1952	NAM			●	Cas.	Hort.	Caprifoliaceae	
<i>Lonicera tatarica</i> L.	D	1939	2001	AS-Te	●		●	Cas.	Hort.	Caprifoliaceae	
Lonicera x italica Tausch (<i>L. caprifolium</i> x <i>etrusca</i> Santi)	D	1864	1948	Cult.	●		●	Cas.?	Hort.	Caprifoliaceae	
<i>Lopezia coronata</i> Andrews	D	1978	1998	AM	●			Cas.	Hort.	Onagraceae	<i>Lopezia racemosa</i> Cav.
<i>Lotus angustissimus</i> L.	A	1872	1872	E AF AS-Te			●	Cas.	?	Fabaceae	
<i>Lotus conimbricensis</i> Brot.	A	1809	<1850	E AF AS-Te			●	Cas.	Wool	Fabaceae	
<i>Lotus corniculatus</i> L. var. sativus Hyl. ex Jalas	D	2005	2005	Cult.	●			Cas.	Hort.	Fabaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Ludwigia grandiflora</i> (Michaux) Greuter et Burdet	D	1983	N	AM	●	●		Inv.*	Hort.	Onagraceae	
<i>Ludwigia peploides</i> (Kunth) P.H.Raven subsp. <i>montevicensis</i> (Spreng.) P.H.Raven	D	1997	1997	AM				Cas.	Hort.	Onagraceae	
<i>Lunaria annua</i> L.	D	1862	N	E	●	●	●	Nat.	Hort.	Brassicaceae	
<i>Lupinus albus</i> L.	D	1983	1983	E				Cas.	Hort.	Fabaceae	
<i>Lupinus angustifolius</i> L.	D	1861	1993	E AF AS-Te	●	●	●	Cas.	Agric.	Fabaceae	
<i>Lupinus luteus</i> L.	D	1869	1989	E AF	●			Cas.	Agric.	Fabaceae	
<i>Lupinus polyphyllus</i> Lindl.	D	1882	N	NAM	●	●	●	Nat.	Hort.	Fabaceae	
<i>Lychnis chalconica</i> L.	D	1954	2002	AS-Te	●			Cas.	Hort.	Caryophyllaceae	
<i>Lychnis coronaria</i> (L.) Desr.	D	<1850	2005	E AF AS-Te	●			Cas.	Hort.	Caryophyllaceae	
<i>Lycium barbarum</i> L.	D	1857	N	AS-Te	●	●	●	Nat.	Hort.	Solanaceae	
<i>Lycium chinense</i> Mill.	D	1946	1992	AS-Te	●			Cas.	Hort.	Solanaceae	
<i>Lycopersicon esculentum</i> Mill.	D	1861	N	SAM	●	●	●	Nat.	Food refuse	Solanaceae	Incl. var. <i>cerasiforme</i> (Dun.) Alef.; var. <i>pyriforme</i> (Dun.) Alef.
<i>Lycopus exaltatus</i> L. f.	A	1855	1909	E AS-Te	●			Cas.	?	Lamiaceae	
<i>Lysichiton americanus</i> Hultén et St John x <i>L. camtschatcensis</i> (L.) Schott	D	1997	N	Cult.				Inv.	Hort.	Araceae	
<i>Lysimachia ciliata</i> L.	D	1811	1886	NAM	●		●	Ext.	Hort.	Primulaceae	
<i>Lysimachia punctata</i> L.	D	1847	N	E AS-Te	●	●	●	Nat.	Hort.	Primulaceae	
<i>Lythrum acutangulum</i> Lag.	A	1989	1989	E AF				Cas.	Birdseed	Lythraceae	
<i>Lythrum junceum</i> Banks et Soland.	A	1926	2004	E AF AS-Te	●			Cas.	Grain....	Lythraceae	
<i>Lythrum virgatum</i> L.	D	2001	2001	E	●			Cas.	Hort.	Lythraceae	
<i>Macleaya cordata</i> (Willd.) R.Brown	D	2001	N?	AS-Te	●		●	Nat.?	Hort.	Papaveraceae	Incl. <i>M. x kewensis</i> Turrill (<i>M. cordata</i> x <i>microcarpa</i> (Maxim.) Fedde)
<i>Madia sativa</i> Molina	A	1941	1941	AM	●			Cas.	Seeds	Asteraceae	
<i>Mahonia aquifolium</i> (Pursh) Nutt.	D	1906	N	NAM	●	●	●	Inv.	Hort.	Berberidaceae	<i>Berberis aquifolium</i> Pursh
<i>Malcolmia africana</i> (L.) R.Brown	A	1994	2004	E AF AS-Te	●			Cas.	Grain	Brassicaceae	
<i>Malcolmia laxa</i> (Lam.) DC.	A	1895	1895	AS-Te	●			Cas.	Grain	Brassicaceae	
<i>Malcolmia maritima</i> (L.) R.Brown	D	1887	2002	E	●	●	●	Cas.	Hort.	Brassicaceae	
<i>Malope malacoides</i> L.	A	1995	1995	E AF AS-Te	●			Cas.	Grain	Malvaceae	
<i>Malope trifida</i> Cav.	D/A	1905	2005	E AF				Cas.	Hort., birdseed	Malvaceae	
<i>Malus sylvestris</i> (L.) Mill. subsp. <i>mitis</i> (Wallr.) Mansf.	D	<1850	2005	Cult.	●	●	●	Cas.	Hort.	Malaceae	
<i>Malva alcea</i> L. var. <i>ribifolia</i> (Viv.) Paol.	A	2004	2004	E	●			Cas.	?	Malvaceae	
<i>Malva nicaeensis</i> All.	A	1892	2001	E AF AS-Te	●		●	Cas.	Wool, grain....	Malvaceae	
<i>Malva parviflora</i> L.	A	<1850	Ann.	E AF AS-Te	●		●	Cas.	Wool, grain....	Malvaceae	
<i>Malva pusilla</i> Smith	A	1872	Ann.	E AF AS-Te	●	●	●	Cas.	Wool, grain....	Malvaceae	

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Malva verticillata L.	A/D	1858	2003	AS-Te	●	●	●	Cas.	Grain, hort....	Malvaceae	
Malvastrum americanum (L.) Torr.	A	1892	2005	SAM			●	Cas.	Birdseed, wool	Malvaceae	
Malvastrum coromandelianum (L.) Garcke	A	1996	2000	SAM	●			Cas.	Birdseed	Malvaceae	
Marrubium peregrinum L.	A	<1835	1912	E AS-Te			●	Cas.	Grain....	Lamiaceae	
Matricaria discoidea DC.	A	1893	N	NAM AS-Te	●	●	●	Nat.	Grain?	Asteraceae	
Matricaria recutita L. var. coronata (J.Gay ex Boiss.) Fertig	A	1886	1886	E AF AS-Te			●	Cas.	Wool	Asteraceae	
Matthiola longipetala (Vent.) DC. subsp. bicornis (Sibth. et Smith) P.W.Ball	D	2005	2005	E AS-Te	●			Cas.	Hort.	Brassicaceae	
Meconopsis cambrica (L.) Vig.	D	1979	2005	E	●	●	●	Cas.?	Hort.	Papaveraceae	
Medicago carstiensis Wulfen	A	1896	1896	E	●			Cas.	Seeds	Fabaceae	
Medicago cf. littoralis Rohde ex Loisel.	A	1918	1918	E AF AS-Te	●			Cas.		Fabaceae	
Medicago ciliaris (L.) All.	A	1947	1948	E AF AS-Te	●		●	Cas.	Wool....	Fabaceae	
Medicago doliata Carmign.	A	1894	1940	E AF AS-Te	●		●	Cas.	Wool....	Fabaceae	
Medicago fischeriana (Seringe) Trautv.	A	1902	1904	E AS-Te			●	Cas.	Wool	Fabaceae	
Medicago intertexta (L.) Mill.	A	<1858	1940	E AF AS-Te	●			Cas.	Seeds?	Fabaceae	
Medicago italica (Mill.) Fiori	A	1949	1949	E AF AS-Te	●			Cas.	?	Fabaceae	
Medicago laciniata (L.) Mill.	A	1891	2003	AF AS-Te	●		●	Cas.	Wool....	Fabaceae	
Medicago monantha (C.A.Mey.) Trautv. subsp. incisa (Benth.) Verloove et Lambinon	A	1885	1901	AS-Te	●		●	Cas.	Wool, grain	Fabaceae	Trigonella incisa Benth.
Medicago monantha (C.A.Mey.) Trautv. subsp. noeana (Boiss.) Greuter et Burdet	A	1886	1955	AS-Te	●		●	Cas.	Grain	Fabaceae	Trigonella noeana Boiss.
Medicago murex Willd.	A	1923	1995	E AF AS-Te	●			Cas.	Grain....	Fabaceae	
Medicago orbicularis (L.) Bartal.	A	1854	1956	E AF AS-Te	●			Cas.	Seeds?	Fabaceae	
Medicago polymorpha L. s.l.	A	1813	Ann.	E AF AS-Te	●	●	●	Cas.	Grain, wool....	Fabaceae	
Medicago praecox DC.	A	1887	2003	E AF AS-Te	●		●	Cas.	Wool....	Fabaceae	
Medicago rigidula (L.) All.	A	1822	1959	E AF AS-Te		●	●	Cas.	Wool....	Fabaceae	
Medicago sativa L.	D	1856	N	E AF AS-Te	●	●	●	Nat.	Agric.	Fabaceae	
Medicago scutellata (L.) Mill.	A	1911	2005	E AF AS-Te	●		●	Cas.	Grain	Fabaceae	
Medicago truncatula Gaertn.	A	<1834	2005	E AF AS-Te	●		●	Cas.	Grain, wool....	Fabaceae	
Medicago turbinata (L.) All.	A	1882	1882	E AF AS-Te	●			Cas.	Grain?	Fabaceae	
Medicago x varia Martyn (M. falcata L. x sativa)	H	1859	Ann.	Hybr.	●	●	●	Cas.?	Hybridization	Fabaceae	
Melampodium montanum Benth.	D	2003	2003	AM	●			Cas.	Hort.	Asteraceae	
Melampodium perfoliatum (Cav.) Humb., Bonpl. et Kunth	A	1995	2005	AM	●			Cas.	Grain	Asteraceae	
Melica altissima L.	D	1888	1888	E AS-Te			●	Cas.	Hort.	Poaceae	

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Melilotus albus Med.	A/D	<1800	N	E AS-Te	●	●	●	Nat.	Grain, wool,...	Fabaceae	
Melilotus indicus (L.) All.	A	1851	Ann.	E AS-Te	●	●	●	Cas.	Grain, wool,...	Fabaceae	
Melilotus officinalis Lam.	A/D	<1800	N	E AS-Te	●	●	●	Nat.	Grain, wool,...	Fabaceae	
Melilotus siculus (Turra) B.D.Jackson	A	1948	1948	E AF AS-Te	●		●	Cas.	Wool,...	Fabaceae	
Melilotus sulcatus Desf.	A	1893	2001	E AF AS-Te	●			Cas.	Grain,...	Fabaceae	
Melilotus wolgicus Poiret	A	1958	1958	AS-Te	●			Cas.	?	Fabaceae	
Melissa officinalis L.	D	<1800	N?	E AF AS-Te	●	●	●	Nat.?	Hort.	Lamiaceae	
Mentha spicata L. subsp. glabrata (Lej. et Court.) Lebeau	D	<1835	N?	?	●		●	Nat.?	Hort.	Lamiaceae	
Mentha x piperita L. nsubsp. piperita (M. aquatica L. x spicata subsp. glabrata)	D	<1850	1985	Hybr.	●	●	●	Cas.	Hort.	Lamiaceae	
Mentha x smithiana R.A.Graham (M. spicata subsp. glabrata x aquatica L. x arvensis L.)	D	<1835	1985	Hybr.	●		●	Cas.	Hort.	Lamiaceae	
Mesembryanthemum crystallinum L.	D	1955	1955	AF			●	Cas.	Hort.	Aizoaceae	
Mesembryanthemum nodiflorum L.	A	1895	1949	E AF AS-Te			●	Cas.	Wool	Aizoaceae	
Mespilus germanica L.	D	<1800	N	E AS-Te	●	●	●	Nat.	Hort.	Malaceae	
Microlonchus salmanticus (L.) DC.	A	1877	1890	E AF	●			Cas.	Grain	Asteraceae	Mantisalca salmantica (L.) Briq. et Cav.
Milium vernale Bieb.	A	1844	1948	E	●		●	Cas.	Wool,...	Poaceae	
Mimulus guttatus DC.	D	1953	N	NAM	●	●	●	Nat.	Hort.	Scrophulariaceae	
Mimulus moschatus Dougl. ex Lindl.	D	1882	N?	NAM	●		●	Nat.?	Hort.	Scrophulariaceae	
Mimulus x robertsii Silverside (M. guttatus x luteus L. var. rivularis Lindl.)	D	1991	1991	Cult.	●			Cas.	Hort.	Scrophulariaceae	
Minuartia laricifolia (L.) Schinz et Thell.	D?	<1850	<1850	E	?	?	?	Cas.	?	Caryophyllaceae	
Minuartia mediterranea (Link) K.Maly	A	2004	N	E AF AS-Te	●			Nat.	Urban weed	Caryophyllaceae	
Mirabilis jalapa L.	D	<1858	2005	AM	●		●	Cas.	Hort.	Nyctaginaceae	
Miscanthus sacchariflorus (Maxim.) Benth.	D	1999	2005	AS-Te	●			Cas.	Hort.	Poaceae	
Miscanthus sinensis Anderss.	D	1992	2005	AS	●			Cas.	Hort.	Poaceae	
Misopates calycinum Rothm.	A	1915	1915	E AF			●	Cas.	Grain?	Scrophulariaceae	
Modiola caroliniana (L.) G.Don f.	A	1893	1906	SAM	●		●	Cas.	Wool,...	Malvaceae	
Mollugo verticillata L.	A	1887	2004	SAM	●		●	Cas.	Ore	Molluginaceae	
Monerma cylindrica (Willd.) Coss. et Durieu	A	1906	1956	E AF AS-Te	●		●	Cas.	Wool,...	Poaceae	
Moneses uniflora (L.) A.Gray	A	<1850	<1949	E AS-Te NAM	●		●	Cas.	Pines	Pyrolaceae	
Monolepis nuttalliana (Schult.) E.Greene	A	<1900	1994	NAM AS-Te	●			Cas.	Grain,...	Chenopodiaceae	
Monsonia angustifolia E.Mey. ex A.Rich.	A	1893	1893	AF			●	Cas.	Wool	Geraniaceae	
Monsonia brevirostrata R.Knuth	A	1908	1948	AF			●	Cas.	Wool	Geraniaceae	
Morus alba L.	D	<1850	<1850	AS-Te		●		Cas.	Hort.	Moraceae	

Taxon	MoI	FiR	ReR	Origin	Fl	Br	Wa	DN	Means intr.	Family	Synonym/Remark
Muhlenbergia mexicana (L.) Trin.	A/D	1824	2005	NAM	●	●	●	Cas.	Seeds...	Poaceae	
Muscari armeniacum Leichtlin ex Baker	D	1993?	N?	E AS-Te	●		●	Nat.?	Hort.	Liliaceae	
Myagrum perfoliatum L.	A	1821	1998	E AS-Te	●	●	●	Cas.	Grain. wool...	Brassicaceae	
Myricaria germanica (L.) Desv.	D?	<1858	<1858	E	?	?	?	Cas.	Hort.?	Tamaricaceae	
Myriophyllum aquaticum (Velloso) Verdc.	D	1983	N	SAM	●	●	●	Inv.	Hort.	Haloragaceae	
Myriophyllum heterophyllum Michaux	D	1993	1993	NAM			●	Cas.	Hort.	Haloragaceae	
Myrrhis odorata (L.) Scop.	D	1811	N	E	●	●	●	Nat.	Agric.	Apiaceae	
Narcissus poeticus L.	D	1868	N?	E	●		●	Nat.?	Hort.	Amaryllidaceae	
Narcissus pseudonarcissus L. subsp. major (Curt.) Baker	D	?	?	E	?	?	?	Nat.?	Hort.	Amaryllidaceae	
Narcissus x incomparabilis Mill. (N. poeticus x pseudonarcissus)	D	?	?	Cult.	?	?	?	Cas.	Hort.	Amaryllidaceae	
Navarretia squarrosa (Eschsch.) Hook. et Arnott	A	1877	1990	NAM	●		●	Cas.	Grain. seeds...	Polemoniaceae	
Nemophila menziesii Hook. et Arnott var. integrifolia Parish	D	1895	1895	NAM			●	Cas.	Hort.	Hydrophyllaceae	
Nemophila menziesii Hook. et Arnott var. menziesii	D	1888	1903	NAM	●		●	Cas.	Hort.	Hydrophyllaceae	
Nepeta grandiflora Bieb.	D	1903	1951	AS-Te	●		●	Cas.	Hort.	Lamiaceae	
Nepeta racemosa Lam.	D	1954	1993	AS-Te	●	●		Cas.	Hort.	Lamiaceae	Nepeta mussinii Spreng. ex Henckel
Nepeta x faassenii Bergm. ex Stearn (N. nepetella L. x racemosa)	D	1946	2005	Cult.	●		●	Cas.	Hort.	Lamiaceae	
Neslia paniculata (L.) Desv. subsp. paniculata	A	1867	1992	E AF AS-Te	●	●	●	Cas.	Grain. wool...	Brassicaceae	
Neslia paniculata (L.) Desv. subsp. thracia (Velen.) Bornm.	A	1866	1927	E AF AS-Te	●		●	Cas.	Grain...	Brassicaceae	
Nicandra physalodes (L.) Gaertn.	A/D	1853	Ann.	SAM	●	●	●	Cas.	Grain. wool...	Solanaceae	
Nicotiana alata Link et Otto	D	1954	2001	SAM	●		●	Cas.	Hort.	Solanaceae	
Nicotiana forgetiana Hemsl.	D	1932	2001	SAM	●		●	Cas.	Hort.	Solanaceae	
Nicotiana langsdorfii J.A.Weinm.	D	1859	<1900	SAM	●			Cas.	Hort.	Solanaceae	
Nicotiana longiflora Cav.	A	1895	1910	SAM			●	Cas.	Wool	Solanaceae	
Nicotiana rustica L.	D	1868	1992	SAM	●	●	●	Cas.	Agric.	Solanaceae	
Nicotiana sylvestris Spegazz.	D	1924	2005	SAM	●		●	Cas.	Hort.	Solanaceae	
Nicotiana tabacum L.	D	1930	1983	SAM	●		●	Cas.	Agric.	Solanaceae	
Nicotiana velutina H.Wheeler	A	1912	1912	AUS			●	Cas.	Wool	Solanaceae	
Nicotiana x sanderae Sander ex Will. Watson (N. alata x forgetiana)	D	1931	1979	Cult.	●	●	●	Cas.	Hort.	Solanaceae	
Nigella damascena L.	D	1860	2005	E AF AS-Te	●	●	●	Cas.	Hort.	Ranunculaceae	
Nigella sativa L.	A	<1865	1999	AF AS-Te	●		●	Cas.	Grain...	Ranunculaceae	
Nonea lutea (Desr.) DC. ex Lam. et DC.	D?	2004	2004	E AS-Te	●			Cas.	Hort.?	Boraginaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Nonea pulla</i> DC.	A	1932	1932	AS-Te			●	Cas.	?	Boraginaceae	
<i>Nonea rosea</i> (Bieb.) Link	A	1828	1828	AS-Te			●	Cas.	Seeds	Boraginaceae	
<i>Notobasis syriaca</i> (L.) Cass.	A	1909	1909	E AF AS-Te			●	Cas.	Grain	Asteraceae	
<i>Notodanthonia gracilis</i> (Hook. f.) Zotov	A	1911?	1912?	AUS			●	Cas.	Wool	Poaceae	<i>Danthonia gracilis</i> Hook. f.
<i>Ocimum basilicum</i> L.	D	1886	2005	Trop.	●			Cas.	Agric.	Lamiaceae	
<i>Odontites jaubertianus</i> (Boreau) D.Dietrich ex Walp.	A	2003	2003	E	●			Cas.?	Ore	Scrophulariaceae	
<i>Odontites luteus</i> (L.) Clairv.	A	1977	N	E AF AS-Te	●			Nat.	Ore	Scrophulariaceae	
<i>Oenanthe pimpinelloides</i> L.	A/D	1859	N	E AS-Te	●	●		Nat.	Nurseries....	Apiaceae	
<i>Oenothera affinis</i> Cambess. ex A.St. Hil.	A	1909	1909	SAM			●	Cas.	Wool	Onagraceae	
<i>Oenothera angustissima</i> R.R.Gates	A	1860	1884	NAM	●			Ext.	Ore	Onagraceae	
<i>Oenothera biennis</i> L.	D	1792	N?	E AS-Te	●	●	●	Nat.?	Ore	Onagraceae	
<i>Oenothera cambrica</i> Rostański	A	2001	2001	NAM	●			Cas.	Ore	Onagraceae	
<i>Oenothera canovirens</i> Steele	A	1901	1959	NAM	●		●	Cas.	Wool....	Onagraceae	
<i>Oenothera cruciata</i> Nutt. ex G.Don	A	1883	1883	NAM			●	Cas.	?	Onagraceae	
<i>Oenothera deflexa</i> R.R.Gates	A	1915	N	NAM	●	●	●	Nat.	Ore	Onagraceae	
<i>Oenothera depressa</i> E.Greene	A	1828	1828	NAM			●	Cas.	Ore?	Onagraceae	
<i>Oenothera elata</i> Humb., Bonpl. et Kunth	A	1961	1961	AM	●			Cas.	Ore?	Onagraceae	
<i>Oenothera ersteinensis</i> R.Linder et R.Jean	A	1971	1971	E			●	Cas.	Ore	Onagraceae	
<i>Oenothera glazioviana</i> Micheli	D	1868	N	NAM	●	●	●	Nat.	Hort.	Onagraceae	
<i>Oenothera indecora</i> Cambess.	A	1895	1895	SAM	●			Cas.	Grain	Onagraceae	
<i>Oenothera laciniata</i> Hill	A	1893	1909	AM	●		●	Cas.	Grain, wool	Onagraceae	
<i>Oenothera oakesiana</i> (A.Gray) Robbins ex S.Watson et Coult.	A	1867	1923	NAM	●		●	Cas.	Ore	Onagraceae	
<i>Oenothera oehlkersii</i> Kappus	A	1884	2001	E	●		●	Cas.	Ore	Onagraceae	
<i>Oenothera parviflora</i> L.	A	1884	2000	NAM	●		●	Cas.	Ore	Onagraceae	
<i>Oenothera perangusta</i> R.R.Gates	A	1992	2001	NAM	●		●	Cas.	Ore	Onagraceae	
<i>Oenothera pycnocarpa</i> G.F.Atk. et Bartlett	A	1992	1992	NAM			●	Cas.	Ore?	Onagraceae	
<i>Oenothera rosea</i> L'Her. ex Ait.	A	<1835	1870	AM			●	Cas.	Grain?	Onagraceae	
<i>Oenothera rubricaulis</i> Kleb.	A	1887	N	E	●			Nat.	Ore	Onagraceae	
<i>Oenothera stricta</i> Ledeb. ex Link	A	1878	1984	SAM	●		●	Cas.	Grain....	Onagraceae	
<i>Oenothera subterminalis</i> R.R.Gates	A	1979	1979	NAM			●	Cas.	Ore	Onagraceae	
<i>Oenothera victorini</i> R.R.Gates et Catcheside	A	1992	N?	NAM	●		●	Nat.?	Ore	Onagraceae	
<i>Oenothera x fallax</i> Renner (<i>O. biennis</i> x <i>glazioviana</i>)	A	1956	N	Hybr.	●		●	Nat.	Hybridization	Onagraceae	
<i>Oenothera x issleri</i> Renner ex Rostański (<i>O. biennis</i> x <i>oakesiana</i>)	A	1955	1955	Hybr.			●	Cas.	Hybridization	Onagraceae	
<i>Omphalodes linifolia</i> (L.) Moench	D	<1900	<1900	E AF			●	Cas.	Hort.	Boraginaceae	

Taxon	MoI	FiR	ReR	Origin	Fl	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Omphalodes verna</i> Moench	D	1821	N	E	●	●		Nat.	Hort.	Boraginaceae	
<i>Onobrychis caput-galli</i> (L.) Lam.	A	1907	1907	E AF AS-Te			●	Cas.	Wool	Fabaceae	
<i>Onobrychis viciifolia</i> Scop.	D	<1835	N	E AS-Te?	●	●	●	Nat.	Agric.	Fabaceae	
<i>Onoclea sensibilis</i> L.	D	1831	N?	NAM AS-Te	●		●	Nat.?	Hort.	Woodsiaceae	
<i>Ononis alopecuroides</i> L.	A	1954	1989	E AF AS-Te	●		●	Cas.	Grain, wool,...	Fabaceae	
<i>Ononis natix</i> L.	A	1881	1992	E AF AS-Te	●		●	Cas.	Timber,...	Fabaceae	
Onopordum macracanthum Schousb.	D	1973	1973	E AF	●			Cas.	Hort.	Asteraceae	
Oplismenus hirtellus (L.) Beauv.	A	1901	1901	Trop.	●			Cas.	?	Poaceae	
<i>Origanum vulgare</i> L. subsp. <i>hirtum</i> (Link) A.Terrac.	A?	1998	1998	E AF AS-Te	●			Cas.	?	Lamiaceae	
<i>Orlaya daucooides</i> (L.) Greuter	A	2000	2000	E AF AS-Te	●			Cas.	Grain	Apiaceae	
<i>Ornithogalum narbonense</i> L.	A	2001	2001	E AF AS-Te	●			Cas.	Grain	Liliaceae	
<i>Ornithogalum nutans</i> L.	D/A	<1835	1976	E AS-Te	●	●	●	Cas.	Hort., seeds	Liliaceae	
<i>Ornithogalum pyramidale</i> L.	D	1987	2005	E	●		●	Cas.?	Hort.	Liliaceae	
<i>Ornithopus compressus</i> L.	A	1881	2004	E AF AS-Te	●		●	Cas.	Ore?	Fabaceae	
<i>Ornithopus sativus</i> Brot.	D	1855	2004	E AF	●		●	Cas.	Agric.	Fabaceae	
<i>Orobanche amethystea</i> Thuill.	A	1984	1984	E AF AS-Te	●			Cas.	Seeds	Orobanchaceae	
<i>Orobanche flava</i> C.F.P.Mart. ex F.W.Schultz	A	1944	1945	E		●		Cas.	Seeds	Orobanchaceae	
<i>Orobanche ramosa</i> L.	A	1792	2000	E AF AS-Te	●		●	Cas.	Seeds, grain,...	Orobanchaceae	
<i>Orthilia secunda</i> (L.) House	A	1901	1956	E AS-Te NAM	●		●	Cas.?	Pines	Pyrolaceae	
Osteospermum jucundum (Phillips) Norlindh	D	2003	2003	AF	●			Cas.	Hort.	Asteraceae	
<i>Oxalis corniculata</i> L.	D	1811	N	?	●	●	●	Nat.	Hort.	Oxalidaceae	
<i>Oxalis debilis</i> Humb., Bonpl. et Kunth	D	1954	2005	SAM	●		●	Cas.	Hort.	Oxalidaceae	
<i>Oxalis fontana</i> Bunge	D?	1792	N	NAM AS-Te	●	●	●	Nat.	Hort.?	Oxalidaceae	
<i>Oxalis latifolia</i> Kunth	D	1979	2005	AM	●		●	Cas.	Hort.	Oxalidaceae	
<i>Oxalis x uittienii</i> J.Jansen (<i>O. corniculata</i> x <i>fontana</i>)	A	1973	1973	Hybr.	●			Cas.	Hybridization	Oxalidaceae	
<i>Oxychloris scariosa</i> (F.Muell.) Lazarides	A	1921	1921	AUS			●	Cas.	Wool	Poaceae	<i>Chloris scariosa</i> F.Muell.
<i>Pachysandra terminalis</i> Siebold et Zucc.	D	1994	1994	AS-Te	●			Cas.	Hort.	Buxaceae	
Paliurus spina-christi Mill.	D	1874	1874	E AS-Te			●	Cas.	Hort.	Rhamnaceae	
Panicum antidotale Retz.	A	1895	1950	AS			●	Cas.	Wool	Poaceae	
<i>Panicum bulbosum</i> Kunth	A	1949	1949	NAM			●	Cas.	Wool	Poaceae	
<i>Panicum capillare</i> L. subsp. <i>barbipulvinatum</i> (Nash) Tzvelev	A	1922	2005	NAM	●	●	●	Cas.	Grain,...	Poaceae	
<i>Panicum capillare</i> L. subsp. <i>capillare</i>	A	1861	N	NAM	●	●	●	Nat.	Grain, wool,...	Poaceae	
<i>Panicum chloroticum</i> Nees ex Trin.	A	1904	2002	SAM	●		●	Cas.	Grain, wool	Poaceae	

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<i>Panicum clandestinum</i> L.	A?	1999	2001	NAM	•			Cas.	?	Poaceae	<i>Dichanthelium clandestinum</i> (L.) Gould
<i>Panicum coloratum</i> L.	A	1901	1916	AF AS-Te			•	Cas.	Wool	Poaceae	
<i>Panicum decompositum</i> R.Brown	A	1905	1905	AUS			•	Cas.	Wool	Poaceae	
<i>Panicum dichotomiflorum</i> Michaux	A	1881	N	AM	•		•	Nat.	Grain, seeds, wool	Poaceae	
<i>Panicum hillmanii</i> Chase	A	1888	1999	NAM	•		•	Cas.	Grain, wool,...	Poaceae	
<i>Panicum hirticaule</i> J.Presl	A	1969	1969	AM	•			Cas.	Grain?	Poaceae	
<i>Panicum laevinode</i> Lindl.	A	1904	1947	AUS			•	Cas.	Wool	Poaceae	
<i>Panicum miliaceum</i> L. subsp. <i>agricola</i> H.Scholz et Mikoláš	A	2002	N	E	•			Nat.	Seeds,...	Poaceae	
<i>Panicum miliaceum</i> L. subsp. <i>miliaceum</i>	D	1868	Ann.	AS	•	•	•	Cas.	Agric.	Poaceae	
<i>Panicum miliaceum</i> L. subsp. <i>ruderales</i> (Kitagawa) Tzvelev	A	1996	2005	AS	•			Cas.	Grain,...	Poaceae	
<i>Panicum schinzii</i> Hack.	A	1887	N	AF	•	•	•	Nat.	Wool, seeds,...	Poaceae	
<i>Panicum virgatum</i> L.	D/A	1948	2000	AM	•		•	Cas.	Hort., wool	Poaceae	
<i>Papaver atlanticum</i> (Ball) Coss.	D	1986	2005	AF	•	•		Cas.	Hort.	Papaveraceae	
<i>Papaver hybridum</i> L.	A	1880	2004	E AF AS-Te	•		•	Cas.	Grain, wool,...	Papaveraceae	
<i>Papaver pseudo-orientale</i> (Fedde) Medw.	D	2001	N	AS-Te	•			Nat.	Hort.	Papaveraceae	
<i>Papaver somniferum</i> L. subsp. <i>setigerum</i> (DC.) Arcang.	A	?	1997	AS-Te	•			Cas.	Grain,...	Papaveraceae	
<i>Papaver somniferum</i> L. subsp. <i>somniferum</i>	D	1854	Ann.	AS-Te	•	•	•	Cas.	Birdseed	Papaveraceae	
<i>Parentucellia viscosa</i> (L.) Caruel	A	1902	N	E AF AS-Te	•	•		Nat.	Seeds,...	Scrophulariaceae	
<i>Paronychia brasiliana</i> DC.	A	1887	1949	SAM			•	Cas.	Wool	Caryophyllaceae	
<i>Parthenium hysterophorus</i> L.	A	1999	1999	SAM	•			Cas.	Grain	Asteraceae	
<i>Parthenocissus inserta</i> (A. Kerner) Fritsch	D	1880	N	NAM	•	•	•	Nat.	Hort.	Vitaceae	
<i>Parthenocissus quinquefolia</i> (L.) Planch.	D	2001	N	NAM	•			Nat.	Hort.	Vitaceae	
<i>Parthenocissus tricuspidata</i> (Siebold et Zucc.) Planch.	D	1939	N	AS-Te	•		•	Nat.	Hort.	Vitaceae	
<i>Paspalum dilatatum</i> Poirlet	A	2000	2000	SAM	•			Cas.	Traffic?	Poaceae	
<i>Paspalum distichum</i> L.	A	1950	1954	Trop.	•			Cas.	Birdseed?	Poaceae	
<i>Paspalum paniculatum</i> L.	A	1999	1999	AM	•			Cas.	Grain	Poaceae	
<i>Passiflora caerulea</i> L.	D	2005	2005	SAM	•			Cas.	Hort.	Passifloraceae	
<i>Passiflora edulis</i> Sims	D	1994	2004	SAM	•		•	Cas.	Food refuse	Passifloraceae	
<i>Pastinaca sativa</i> L. subsp. <i>urens</i> (Req. ex Godr.) Čelak.	A	1947	N	E AS-Te	•	•	•	Nat.	Ore	Apiaceae	
<i>Paulownia tomentosa</i> (Thunb.) Steud.	D	1999	2005	AS-Te	•	•	•	Cas.	Hort.	Scrophulariaceae	
<i>Pelargonium capitatum</i> (L.) Ait.	D	1980	1980	AF	•			Cas.	Hort.	Geraniaceae	

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Pennisetum flaccidum Griseb.	D	2000	2004	AS	●			Cas.	Hort.	Poaceae	
<i>Pennisetum petiolare</i> (Hochst.) Chiov.	A	2000	2000	AF	●			Cas.	Grain	Poaceae	
<i>Pentaglottis sempervirens</i> (L.) Tausch ex L.H.Bailey	D	1836	N	E	●	●	●	Nat.	Hort.	Boraginaceae	
<i>Pentaschistis airoides</i> (Nees) Stapf	A	1911	1912	AF			●	Cas.	Wool	Poaceae	
<i>Perilla frutescens</i> (L.) Britton	D	1994	2000	AS	●			Cas.	Birdseed	Lamiaceae	
<i>Periploca graeca</i> L.	D	1918	1918	E AS-Te			●	Cas.	Hort.	Asclepiadaceae	
<i>Persicaria amplexicaulis</i> (D.Don) Ronse Decraene	D	1966	2003	AS-Te	●	●		Cas.	Hort.	Polygonaceae	
<i>Persicaria capitata</i> (Buch.-Hamilt. ex D.Don) H.Gross	D	2001	2005	AS-Te	●			Cas.	Hort.	Polygonaceae	
<i>Persicaria orientalis</i> (L.) Spach	D	1873	1974	AS	●	●	●	Cas.	Hort.	Polygonaceae	
<i>Persicaria pensylvanica</i> (L.) Gómez de la Maza	A	1902	2000	NAM	●		●	Cas.	Grain, wool	Polygonaceae	
<i>Persicaria wallichii</i> Greuter et Burdet	D	1898	N	AS-Te	●	●	●	Nat.	Hort.	Polygonaceae	
<i>Petasites albus</i> (L.) Gaertn.	D	1862	1968	E AS-Te	●		●	Cas.	Hort.	Asteraceae	
<i>Petasites japonicus</i> (Siebold et Zucc.) Maxim.	D	1989	N	AS-Te	●			Nat.	Hort.	Asteraceae	
<i>Petasites pyrenaicus</i> (L.) G.López	D	1867	N?	E AF	●		●	Nat.?	Hort.	Asteraceae	
Petrorhagia nanteuilii (Burnat) P.W.Ball et Heywood	A	1992	1992	E AF	●			Cas.	?	Caryophyllaceae	
<i>Petrorhagia saxifraga</i> (L.) Link	D	1948	2002	E AS-Te	●	●		Cas.	Hort.	Caryophyllaceae	
<i>Petroselinum crispum</i> (Mill.) Nyman ex A.W.Hill	D	1872	2005	AS-Te	●		●	Cas.	Agric.	Apiaceae	
Petunia integrifolia (Hook.) Schinz et Thell.	D	2005	2005	SAM	●			Cas.	Hort.	Solanaceae	
<i>Petunia x punctata</i> Paxt. (<i>P. axillaris</i> (Lam.) Britton, Sterns et Pogg. x <i>integrifolia</i>)	D	1954	2005	Cult.	●	●	●	Cas.	Hort.	Solanaceae	
<i>Peucedanum ostruthium</i> (L.) Koch	D	1811	N	E			●	Nat.	Hort.	Apiaceae	
Phacelia purshii Buckl.	A	1893	1893	NAM	●			Cas.	Grain	Hydrophyllaceae	
<i>Phacelia tanacetifolia</i> Benth.	D	1884	Ann.	NAM	●	●	●	Cas.	Agric.	Hydrophyllaceae	
<i>Phalaris angusta</i> Nees ex Trin.	A	1892	1921	AM			●	Cas.	Wool	Poaceae	
<i>Phalaris aquatica</i> L.	A	1998	1998	E AF AS-Te	●			Cas.	Seeds?	Poaceae	
<i>Phalaris arundinacea</i> L. var. <i>picta</i> L.	D	1861	2002	Cult.	●		●	Cas.	Hort.	Poaceae	
<i>Phalaris brachystachys</i> Link	A	1906	2000	E AF AS-Te	●			Cas.	Grain....	Poaceae	
<i>Phalaris canariensis</i> L.	D	1847	Ann.	E AF AS-Te	●	●	●	Cas.	Birdseed	Poaceae	
<i>Phalaris coerulescens</i> Desf.	A	<1950	<1950	E AF AS-Te		●		Cas.	?	Poaceae	
<i>Phalaris minor</i> Retz.	A	<1850	2002	E AF AS-Te	●	●	●	Cas.	Grain, wool	Poaceae	
<i>Phalaris paradoxa</i> L. var. <i>paradoxa</i>	A	<1850	2004	E AF AS-Te	●		●	Cas.	Grain, wool	Poaceae	
<i>Phalaris paradoxa</i> L. var. <i>praemorsa</i> (Lam.) Coss. et Durieu	A	1893	1994	E AF AS-Te	●		●	Cas.	Grain, wool	Poaceae	

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<i>Phalaris platisensis</i> Henrard ex Heukels	A	1895	1921	SAM			●	Cas.	Wool	Poaceae	
<i>Phaseolus coccineus</i> L.	D	1889	1981	SAM			●	Cas.	Agric.	Fabaceae	
<i>Phaseolus vulgaris</i> L.	D	1902	1995	SAM	●			Cas.	Agric.	Fabaceae	
<i>Philadelphus coronarius</i> L.	D	1949	N?	E AS-Te	●		●	Nat.?	Hort.	Hydrangeaceae	
<i>Philadelphus pubescens</i> Loisel.	D	2003	2003	NAM	●			Cas.	Hort.	Hydrangeaceae	
Phleum echinatum Host	A	1923	1949	E AF AS-Te	●		●	Cas.	Wool,...	Poaceae	
<i>Phleum exaratum</i> Griseb.	A	1912	2003	E AS-Te	●		●	Cas.	Grain,...	Poaceae	
Phleum hirsutum Honck.	A	<1835	<1835	E			●	Cas.	?	Poaceae	
<i>Phleum paniculatum</i> Huds.	A	1905	1994	E AF AS-Te	●		●	Cas.	Grain,...	Poaceae	
<i>Phleum subulatum</i> (Savi) Aschers. et Graebn.	A	1895	1953	E AF AS-Te	●		●	Cas.	Grain,...	Poaceae	
<i>Photinia beauverdiana</i> C.K.Schneider var. <i>notabilis</i> (C.K.Schneider) Rehd. et Wilson	D	<1999	<1999	AS-Te		●		Cas.	Hort.	Malaceae	
<i>Phuopsis stylosa</i> (Trin.) Benth. et Hook. f. ex B.D.Jackson	D	2000	2000	AS-Te	●			Cas.	Hort.	Rubiaceae	
Phyllanthus tenellus Roxb.	A	2003	2003	AF	●			Cas.	Nurseries	Euphorbiaceae	
<i>Physalis alkekengi</i> L. var. <i>franchetii</i> (Masters) Makino	D	1811	2005	E AS-Te	●	●	●	Cas.	Hort.	Solanaceae	
<i>Physalis angulata</i> L. var. <i>angulata</i>	A	1961	2005	NAM	●			Cas.	Grain,...	Solanaceae	
<i>Physalis angulata</i> L. var. <i>pendula</i> (Rydberg) Waterfall	A	1995	2000	NAM	●			Cas.	Grain	Solanaceae	<i>Physalis pendula</i> Rydberg
Physalis cinerascens (Dun.) Hitchc.	A	1948	1948	NAM			●	Cas.	Wool	Solanaceae	
Physalis grisea (Waterfall) M.Martínez	A	1909	1909	NAM			●	Cas.	Wool	Solanaceae	
Physalis ixocarpa Brot. ex Hornem.	A	1912	1970	NAM	●		●	Cas.	Wool,...	Solanaceae	
Physalis longifolia Nutt. subsp. <i>subglabrata</i> (Mack. et Bush) Cronquist	A	1902	2003	NAM	●		●	Cas.	Grain, wool	Solanaceae	<i>Physalis virginiana</i> Mill. <i>subglabrata</i> (Mack. et Bush) Waterf.
Physalis minima L.	A	1921	1921	Trop.			●	Cas.	Wool	Solanaceae	
<i>Physalis peruviana</i> L.	D	1893	Ann.	SAM	●	●	●	Cas.	Food refuse	Solanaceae	
<i>Physalis philadelphica</i> Lam.	D	1976	1995	SAM	●			Cas.	Food refuse	Solanaceae	
<i>Physalis pubescens</i> L.	A	1921	1997	AM	●		●	Cas.	Wool, grain	Solanaceae	
<i>Physocarpus opulifolius</i> (L.) Maxim.	D	1941	N	NAM	●		●	Nat.	Hort.	Rosaceae	
<i>Phytolacca acinosa</i> Roxb. s.l.	D	1960	N	AS-Te	●		●	Nat.	Hort.	Phytolaccaceae	Incl. <i>P. esculenta</i> Van Houtte
<i>Phytolacca americana</i> L.	D	1958	2002	NAM	●		●	Cas.	Hort.	Phytolaccaceae	
<i>Picea abies</i> (L.) Karst.	D	?	N	E	?	?	●	Nat.	Hort.	Pinaceae	
Pilea hyalina Fenzl	A	1980	1980	SAM	●			Cas.	Nurseries	Urticaceae	
Pilea microphylla (L.) Liebm.	D?	1995	2005	SAM	●			Cas.	Nurseries	Urticaceae	
<i>Pilea peperomioides</i> Diels	D	1985?	1985?	AS-Te	●			Cas.	Hort.	Urticaceae	
<i>Pimpinella anisum</i> L.	D	1928	2004	?	●	●		Cas.	Agric.	Apiaceae	
<i>Pimpinella peregrina</i> L.	A	2000	N?	E AF AS-Te	●			Nat.?	?	Apiaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Pinus nigra</i> Arnold subsp. <i>nigra</i>	D	1974	2001	E AS-Te	●			Cas.	Hort.	Pinaceae	
<i>Pinus pinaster</i> Ait.	D	?	?	E	?	?	?	Cas.	Hort.	Pinaceae	
<i>Pinus rigida</i> Mill.	D	?	?	NAM	?	?	?	Cas.	Hort.	Pinaceae	
<i>Pinus sylvestris</i> L.	D	?	N	E AS-Te	●	?	●	Nat.?	Hort.	Pinaceae	
<i>Piptatherum miliaceum</i> (L.) Coss. subsp. <i>miliaceum</i>	A	2004	2005	E AF AS-Te	●			Cas.	Birdseed?	Poaceae	<i>Oryzopsis miliacea</i> (L.) Benth. et Hook. ex Aschers. et Schweinf. subsp. <i>miliacea</i>
<i>Piptatherum miliaceum</i> (L.) Coss. subsp. <i>thomasi</i> (Duby) Freitag	A	1947	1993	E AF AS-Te	●		●	Cas.	Wool, birdseed	Poaceae	<i>Oryzopsis miliacea</i> (L.) Benth. et Hook. ex Aschers. et Schweinf. subsp. <i>thomasi</i> (Duby) K.Richt.
<i>Pistia stratiotes</i> L.	D	2000	2005	Trop.	●			Cas.	Hort.	Araceae	
<i>Pisum sativum</i> L. var. <i>arvense</i> (L.) Poiret	D	1912	Ann.	E AF AS-Te	●	●	●	Cas.	Agric.	Fabaceae	
<i>Pisum sativum</i> L. var. <i>sativum</i>	D	1869	Ann.	E AF AS-Te	●	●	●	Cas.	Agric.	Fabaceae	
<i>Plantago afra</i> L.	A	1884	1998	E AF AS-Te	●		●	Cas.	Grain....	Plantaginaceae	
<i>Plantago arenaria</i> Waldst. et Kit.	A	1811	N	E AF AS-Te	●	●	●	Nat.	Grain. ore. wool	Plantaginaceae	
<i>Plantago heterophylla</i> Nutt.	A	1895	1895	AM			●	Cas.	Wool	Plantaginaceae	
<i>Plantago lagopus</i> L.	A	1978	2004	E AF AS-Te	●			Cas.	Grain....	Plantaginaceae	
<i>Plantago loeflingii</i> L.	A	1886	1886	E AF AS-Te	●			Cas.	?	Plantaginaceae	
<i>Plantago myosuroides</i> Lam.	A	1895	1911	SAM			●	Cas.	Wool	Plantaginaceae	
<i>Plantago ovata</i> Forssk.	A	1906	1956	E AF AS-Te		●	●	Cas.	Wool....	Plantaginaceae	
<i>Platanus orientalis</i> L.	D	1996	1996	E AS-Te		●		Cas.	Hort.	Platanaceae	
<i>Platanus x hispanica</i> Mill. ex Münchh. (<i>P. occidentalis</i> L. x <i>orientalis</i>)	D	1985	2005	Hybr.	●	●		Cas.	Hort.	Platanaceae	
<i>Poa alpina</i> L.	A	<1850	<1850	E AF AS-Te NAM	●			Cas.	?	Poaceae	
<i>Poa sieberiana</i> Spreng.	A	1947	1947	AUS			●	Cas.	Wool	Poaceae	
<i>Podolepis auriculata</i> DC.	A	1899	1899	AUS			●	Cas.	Wool	Asteraceae	
<i>Polemonium caeruleum</i> L.	D/A	1864	N	E AS-Te	●		●	Nat.	Hort....	Polemoniaceae	
<i>Polycarpon tetraphyllum</i> (L.) L.	A	1844	N	E AF AS-Te	●	●	●	Nat.	Urban weed, wool	Caryophyllaceae	
<i>Polycnemum arvense</i> L.	A	<1835	1903	E AS-Te	●		●	Cas.	Wool....	Chenopodiaceae	
<i>Polygonum achoreum</i> S.F.Blake	A	1918	1999	NAM	●			Cas.	Grain....	Polygonaceae	
<i>Polygonum arenarium</i> Waldst. et Kit. subsp. <i>pulchellum</i> (Loisel.) D.A.Webb et Chater	A	1943	1970	E AF AS-Te	●	●		Cas.	Grain?	Polygonaceae	
<i>Polygonum argyrocoleon</i> Steud. ex Kunze	A	1995	1995	AS-Te	●			Cas.	Grain	Polygonaceae	
<i>Polygonum bellardii</i> All.	A	1882	2004	E AF AS-Te	●	●	●	Cas.	Grain. wool....	Polygonaceae	
<i>Polygonum patulum</i> Bieb.	A	1915	1915	E AF AS-Te			●	Cas.	Wool	Polygonaceae	
<i>Polygonum plebejum</i> R.Brown	A	1895	1912	AF AS AUS			●	Cas.	Wool	Polygonaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Polypodium hesperium</i> Maxon	D?	1980	1980	NAM	●			Cas.?	Hort.?	Polypodiaceae	
<i>Polypogon chilensis</i> (Kunth) Pilger	A	1906	1921	SAM			●	Cas.	Wool	Poaceae	<i>Chaetotropis chilensis</i> Kunth
<i>Polypogon elongatus</i> Humb., Bonpl. et Kunth	A	1883	1921	AM			●	Cas.	Wool	Poaceae	<i>Chaetotropis elongata</i> (Humb., Bonpl. et Kunth) Björkman
<i>Polypogon fugax</i> Nees ex Steud.	A	1906	1912	E AF AS-Te			●	Cas.	Wool, grain	Poaceae	
<i>Polypogon maritimus</i> Willd.	A	1911	2004	E AF AS-Te	●		●	Cas.	Grain, wool,...	Poaceae	
<i>Polypogon monspeliensis</i> (L.) Desf.	A	<1836	N	E AF AS-Te	●	●	●	Nat.	Grain, wool,...	Poaceae	
<i>Polypogon rioplatensis</i> Herter	A	1895	1895	SAM			●	Cas.	Wool	Poaceae	<i>Chaetotropis rioplatensis</i> (Herter) Björkman
<i>Polypogon viridis</i> (Gouan) Breistr.	A	1894	N	E AF AS-Te	●		●	Nat.	Urban weed,...	Poaceae	
<i>Pontederia cordata</i> L.	D	1985	2002	AM	●			Cas.?	Hort.	Pontederiaceae	
<i>Populus alba</i> L.	D	1955?	N	E	●	●	●	Nat.	Hort.	Salicaceae	
<i>Populus balsamifera</i> L.	D	<1999	<1999	NAM			●	Cas.	Hort.	Salicaceae	
<i>Populus deltoides</i> Bartr. ex Marshall	D	1996	1996	NAM	●			Cas.	Hort.	Salicaceae	
<i>Populus nigra</i> L. var. <i>italica</i> Muenchh.	D	?	2005	Cult.	●			Cas.	Hort.	Salicaceae	
<i>Populus trichocarpa</i> Torr. et A.Gray ex Hook.	D	1994	2005	NAM	●	●	●	Cas.	Hort.	Salicaceae	
<i>Populus x canadensis</i> Moench (<i>P. deltoides</i> Bartr. ex Marshall x <i>nigra</i> L.)	D	1973	2004	Cult.	●		●	Cas.	Hort.	Salicaceae	
<i>Populus x canescens</i> (Ait.) Smith	D	?	N	E	●	●	●	Nat.	Hort.	Salicaceae	
<i>Populus x generosa</i> A. Henry (<i>P. deltoides</i> Bartr. ex Marshall x <i>trichocarpa</i>)	D	1996	1996	Hybr.	●			Cas.	Hort.	Salicaceae	
<i>Portulaca grandiflora</i> Hook.	D	1929	1929	SAM			●	Cas.	Hort.	Portulacaceae	
<i>Portulaca oleracea</i> L. subsp. <i>granulostellulata</i> (Poelln.) Danin	A	1865	1959	Trop.	●		●	Cas.	Wool, ore,...	Portulacaceae	
<i>Portulaca oleracea</i> L. subsp. <i>nitida</i> Danin et H.G.Baker	A	1989	1989	NAM			●	Cas.	Nurseries	Portulacaceae	
<i>Portulaca oleracea</i> L. subsp. <i>oleracea</i>	A	1866	N	Trop.	●	●	●	Nat.	Grain, wool,...	Portulacaceae	
<i>Portulaca oleracea</i> L. subsp. <i>sativa</i> (Haw.) Čelak.	D	1887	1997	?	●		●	Cas.	Agric.	Portulacaceae	
<i>Potentilla fruticosa</i> L.	D	<1893	N	E AS-Te NAM	●	●	●	Nat.	Hort.	Rosaceae	
<i>Potentilla inclinata</i> Vill.	A	1931?	N	E AS-Te	●		●	Nat.	Ore,...	Rosaceae	
<i>Potentilla intermedia</i> L.	A	?	N	AS-Te	●	●	●	Nat.	Grain, ore,...	Rosaceae	
<i>Potentilla montana</i> Brot.	D	1959	1975	E	●			Ext.?	Hort.	Rosaceae	
<i>Potentilla norvegica</i> L.	A	<1899	N	E AS-Te NAM	●	●	●	Nat.	Grain, ore,...	Rosaceae	
<i>Potentilla recta</i> L.	D	1824	N	E AF AS-Te	●	●	●	Nat.	Hort.	Rosaceae	
<i>Potentilla rivalis</i> Nutt. ex Torr. et A.Gray	A	2001	N	NAM	●			Nat.	Grain?	Rosaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
Potentilla x semiargentea Borbás (P. argentea L. x inclinata)	H	?	?	Hybr.	?	?	?	Cas.	Hybridization	Rosaceae	
Pratia pedunculata (R.Brown) Benth.	D	2003	N?	AUS	●			Nat.?	Hort.	Lobeliaceae	
Prenanthes purpurea L.	D?	<1850	<1850	E AS-Te			●	Cas.	Hort.?	Asteraceae	
Proboscidea louisianica (Mill.) Thell.	A	1947	1973	NAM	●		●	Cas.	Wool, grain	Martyniaceae	
Prunus cerasifera Ehrh.	D	1958	N	E AS-Te	●	●	●	Nat.	Hort.	Amygdalaceae	
Prunus cerasus L.	D	<1850	N	?	●	●	●	Nat.	Hort.	Amygdalaceae	
Prunus domestica L. subsp. domestica	D	?	?	AS-Te		●	●	Cas.?	Hort.	Amygdalaceae	
Prunus domestica L. subsp. insititia (L.) Bonnier et Layens	D	1943	N?	AS-Te			●	Nat.?	Hort.	Amygdalaceae	
Prunus laurocerasus L.	D	1994	2005	E AS-Te	●	●	●	Cas.	Hort.	Amygdalaceae	
Prunus lusitana L.	D	2001	2001	E	●			Cas.	Hort.	Amygdalaceae	
Prunus persica (L.) Batsch	D	2004	2005	AS-Te	●			Cas.	Hort.	Amygdalaceae	
Prunus serotina Ehrh.	D	1904	N	NAM	●	●	●	Inv.*	Hort.	Amygdalaceae	
Prunus virginiana L.	D	2001	2001	NAM	●			Cas.	Hort.	Amygdalaceae	
Prunus x fruticans Weihe (P. domestica subsp. insititia x spinosa L.)	D	?	?	Hybr.	?	?	?	Cas.?	Hort.	Amygdalaceae	
Pseudofumaria alba (Mill.) Lidén	D	1905	N	E	●		●	Nat.	Hort.	Fumariaceae	
Pseudofumaria lutea (L.) Borkh.	D	1824	N	E	●	●	●	Nat.	Hort.	Fumariaceae	
Pseudosasa japonica (Siebold et Zucc. ex Steud.) Makino	D	1955	N?	AS-Te	●		●	Nat.?	Hort.	Poaceae	
Ptelea trifoliata L.	D	1959	2005	NAM	●		●	Cas.	Hort.	Rutaceae	
Pteris cretica L.	D	2003	2003	Trop.	●			Cas.	Hort.	Pteridaceae	
Pteris multifida Poiret	D	2001	2005	AS-Te	●			Cas.	Hort.	Pteridaceae	
Pterocarya fraxinifolia (Poir.) Spach	D	2005	2005	AS-Te			●	Cas.	Hort.	Juglandaceae	
Pterocarya x rhederiana C.K.Schneider (P. fraxinifolia x stenoptera DC.)	D	1995	1995	Cult.		●		Cas.	Hort.	Juglandaceae	
Ptilotus spec.	A	1947	1947	AUS			●	Cas.	Wool	Amaranthaceae	
Puccinellia stricta (Hook. f.) C.Blom	A	1901	1911	AUS			●	Cas.	Wool	Poaceae	
Pulicaria arabica (L.) Cass.	A	1898	1898	AF AS-Te			●	Cas.	Wool	Asteraceae	
Pulmonaria longifolia (Bast.) Boreau	D	1955	1983	E AS-Te			●	Cas.?	Hort.	Boraginaceae	
Pulmonaria mollis Wulfen ex Hornem.	D	<1850	1877	E			●	Cas.	Hort.	Boraginaceae	
Pulmonaria officinalis L.	D	1792	N	E	●	●	●	Nat.	Hort.	Boraginaceae	
Pulmonaria saccharata Mill.	D	<1850	1975	E	●		●	Cas.?	Hort.	Boraginaceae	
Pyracantha coccinea Roem.	D	2001	2005	E AS-Te	●			Cas.	Hort.	Malaceae	
Pyrus communis L. subsp. communis	D	?	2005	E AS-Te	●	●	●	Cas.	Hort.	Malaceae	
Quercus cerris L.	D	1961	N	E AS-Te		●	●	Nat.	Hort.	Fagaceae	
Quercus rubra L.	D	1950	N	NAM	●	●	●	Inv.	Hort.	Fagaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
Ranunculus gramineus L.	D	<1850	<1850	E			●	Cas.	Hort.	Ranunculaceae	
Ranunculus lanuginosus L.	D?	<1800	1938	E			●	Cas.	Hort.?	Ranunculaceae	
Ranunculus marginatus D'Urv.	A	1999	1999	E AF AS-Te	●			Cas.	Grain	Ranunculaceae	
Ranunculus muricatus L.	A	1886	2005	E AF AS-Te	●			Cas.	Grain	Ranunculaceae	
Ranunculus parviflorus L.	A	1950	1999	E AF	●		●	Cas.	Grain,...	Ranunculaceae	
Raphanus sativus L.	D	1906	2005	?	●	●	●	Cas.	Agric.	Brassicaceae	
Rapistrum perenne (L.) All.	A	1882	1919	E AS-Te	●		●	Cas.	Grain, wool,...	Brassicaceae	
Rapistrum rugosum (L.) All. s.l.	A	1888	N	E AF AS-Te	●	●	●	Nat.	Grain, wool,...	Brassicaceae	
Reseda alba L.	A	1857	2005	E AF AS-Te	●	●	●	Cas.	Grain,...	Resedaceae	
Reseda lutea L. subsp. vivanii (Monts.)	A	1898	1898	E			●	Cas.	Wool	Resedaceae	
Rovira											
Reseda odorata L.	D	1870	1953	?	●		●	Cas.	Hort.	Resedaceae	
Reseda phyteuma L.	A	1903	2002	E AF AS-Te	●		●	Cas.	Grain,...	Resedaceae	
Rhagadiolus stellatus (L.) Gaertn.	A	1907	1955	E AF AS-Te	●	●	●	Cas.	Grain,...	Asteraceae	
Rhododendron luteum Sweet	D	1963	N	E AS-Te	●		●	Nat.	Hort.	Ericaceae	
Rhododendron ponticum L.	D	1920	N	E AS-Te	●	●	●	Inv.*	Hort.	Ericaceae	
Rhodotypos scandens (Thunb.) Makino	D	1947	1947	AS-Te			●	Cas.	Hort.	Rosaceae	
Rhus typhina L.	D	1898	2003	NAM	●		●	Cas.	Hort.	Anacardiaceae	
Rhus x pulvinata E.Greene (R. glabra L. x typhina)	D	1983	1983	Hybr.			●	Cas.	Hort.	Anacardiaceae	
Ribes alpinum L.	D	1811	N	E AF AS-Te	●	●	●	Nat.	Hort.	Grossulariaceae	
Ribes odoratum H.L.Wendl.	D	1897	N	NAM	●		●	Nat.	Hort.	Grossulariaceae	
Ribes sanguineum Pursh	D	1942	N?	NAM	●	●	●	Nat.?	Hort.	Grossulariaceae	
Ribes spicatum E.Robson	D	1874	1902	E AS-Te	●			Cas.	Hort.	Grossulariaceae	
Ricinus communis L.	D	1940	1994	AF	●	●	●	Cas.	Hort.	Euphorbiaceae	
Ridolfia segetum Moris	A	1921	2001	E AF AS-Te	●		●	Cas.	Grain, wool	Apiaceae	
Robinia pseudoacacia L.	D	1856	N	NAM	●	●	●	Nat.	Hort.	Fabaceae	
Roemeria hybrida (L.) DC.	A	1927	2004	E AF AS-Te	●		●	Cas.	Grain,...	Papaveraceae	
Rorippa austriaca (Crantz) Besser	A	1893	N	E AS-Te	●	●	●	Nat.	Grain, wool,...	Brassicaceae	
Rorippa stylosa (Pers.) Mansf. et Rothm.	A	1854	1939	E	●	●	●	Cas.	Wool,...	Brassicaceae	
Rosa blanda Ait.	D	1861	1939	NAM	●		●	Ext.	Hort.	Rosaceae	
Rosa glauca Pourr.	D	1996	2005	E	●			Cas.	Hort.	Rosaceae	
Rosa majalis J. Herrmann	D	<1850	1920	E AS-Te			●	Ext.	Hort.	Rosaceae	
Rosa multiflora Thunb. ex Murray	D	1966	N	AS-Te	●		●	Nat.	Hort.	Rosaceae	
Rosa pendulina L.	D	<1827	1911	E	●		●	Ext.	Hort.	Rosaceae	
Rosa rugosa Thunb.	D	1934	N	AS-Te	●	●	●	Inv.*	Hort.	Rosaceae	
Rosa virginiana J. Herrmann	D	2002	2002	NAM	●			Cas.	Hort.	Rosaceae	
Rostraria cristata (L.) Tzvelev	A	1895	2005	E AF AS-Te	●	●	●	Cas.	Grain, wool	Poaceae	

Taxon	MoI	FiR	ReR	Origin	Fl	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Rubia tinctorum</i> L.	D	<1850	<1850	E AS-Te	●			Cas.	Hort.	Rubiaceae	
<i>Rubus armeniacus</i> Focke	D	2002	N	E AS-Te	●			Nat.	Hort.	Rosaceae	
<i>Rubus laciniatus</i> Willd.	D	1948	N	E	●	●	●	Nat.	Hort.	Rosaceae	
<i>Rubus odoratus</i> L.	D	1947	2001	NAM	●		●	Cas.	Hort.	Rosaceae	
<i>Rubus phoenicolasius</i> Maxim.	D	1950	1950	AS-Te		●		Cas.	Hort.	Rosaceae	
<i>Rubus spectabilis</i> Pursh	D	1979	N	NAM	●			Nat.	Hort.	Rosaceae	
<i>Rubus tricolor</i> Focke	D	2002	2002	AS-Te	●			Cas.	Hort.	Rosaceae	
<i>Rudbeckia amplexicaulis</i> Vahl	D	1950	1950	NAM		●		Cas.	Hort.	Asteraceae	
<i>Rudbeckia fulgida</i> Ait.	D	1928	2000	NAM	●		●	Cas.	Hort.	Asteraceae	
<i>Rudbeckia hirta</i> L.	D	1926	2000	NAM	●		●	Cas.	Hort.	Asteraceae	
<i>Rudbeckia laciniata</i> L.	D	1849	N	NAM	●		●	Nat.	Hort.	Asteraceae	
<i>Rumex alpinus</i> L.	D	1997	1997	E AS-Te			●	Cas.	Hort.	Polygonaceae	
<i>Rumex altissimus</i> Wood	A	1903	1909	NAM			●	Cas.	Wool	Polygonaceae	
<i>Rumex brownii</i> Campd.	A	1895	1964	AUS	●		●	Cas.	Wool	Polygonaceae	
<i>Rumex bucephalophorus</i> L.	A	1928	1928	E AF AS-Te			●	Cas.	Grain?	Polygonaceae	
<i>Rumex confertus</i> Willd.	D	1918	1918	AS-Te	●			Cas.	Hort.	Polygonaceae	
<i>Rumex dentatus</i> L.	A	1891	1954	E AF AS-Te			●	Cas.	Wool, grain	Polygonaceae	
<i>Rumex longifolius</i> DC.	D?	1857	1870	E AS-Te	●		●	Cas.	Hort.?	Polygonaceae	
<i>Rumex obovatus</i> Danser	A	1940	1949	SAM	●		●	Cas.	Wool, grain	Polygonaceae	
<i>Rumex obtusifolius</i> L. subsp. <i>sylvestris</i> (Wallr.) Čelak.	A	1953	1972	E	●		●	Cas.	?	Polygonaceae	
<i>Rumex patientia</i> L.	D	1866	N	E AS-Te	●	●	●	Nat.	Agric.	Polygonaceae	
<i>Rumex pulcher</i> L. subsp. <i>pulcher</i>	A	1903	2002	E AF AS-Te	●		●	Cas.	Wool,...	Polygonaceae	
<i>Rumex pulcher</i> L. subsp. <i>woodsii</i> (De Not.) Arcang.	A	1999	2000	E AF AS-Te	●			Cas.	Grain	Polygonaceae	
<i>Rumex rugosus</i> Campd.	D	1954	1954	?			●	Cas.	Agric.	Polygonaceae	
<i>Rumex salicifolius</i> Weinm.	A	1913	1995	NAM	●	●	●	Cas.	Wool,...	Polygonaceae	
<i>Rumex thyrsoflorus</i> Fingerh.	A	1961	N	E	●		●	Nat.	?	Polygonaceae	
<i>Rumex x erubescens</i> Simonk. (R. <i>obtusifolius</i> L. x <i>patientia</i>)	A	2004	2004	Hybr.	●			Cas.	Hybridization	Polygonaceae	
<i>Rumohra adiantiformis</i> (Forster) Ching.	D	1993	1993	AF AS-Tr SAM AUS	●			Cas.	Hort.	Dryopteridaceae	
<i>Ruscus aculeatus</i> L.	D	<1800	1972	E AF AS-Te	●		●	Cas.	Hort.	Liliaceae	
<i>Ruta graveolens</i> L.	D	1881	N	E	●		●	Nat.	Hort.	Rutaceae	
<i>Rytidosperma thomsonii</i> (Buchanan) Connor et Edgar	A	1911	1911	AUS			●	Cas.	Wool	Poaceae	
<i>Sagina subulata</i> (Swartz) C.Presl	D	1911	<1980	E			●	Cas.	Hort.	Caryophyllaceae	
<i>Sagittaria latifolia</i> Willd.	D	1997	N	AM	●		●	Nat.	Hort.	Alismataceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Salix acutifolia</i> Willd.	D	1986	1986	E AS-Te	●			Cas.	Hort.	Salicaceae	
<i>Salix babylonica</i> L. var. <i>pekinensis</i> A.Henry	D	?	2005	AS-Te	●	●		Cas.	Hort.	Salicaceae	
Salix daphnoides Vill.	D	?	?	E	●			Cas.	Hort.	Salicaceae	
<i>Salix dasyclados</i> Wimm.	D	?	N?	E	●			Nat.?	Hort.	Salicaceae	
<i>Salix elaeagnos</i> Scop. subsp. <i>angustifolia</i> (Cariot) Rech. f.	D	<1830	1955	E AF AS-Te	●		●	Cas.	Hort.	Salicaceae	
Salix eriocephala Michaux	D	?	2005	NAM	●			Cas.	Hort.	Salicaceae	
Salix irrorata Anderss.	D	2002	2005	NAM	●			Cas.	Hort.	Salicaceae	
<i>Salix pentandra</i> L.	D	<1835	2005	E AS-Te	●	●	●	Cas.	Hort.	Salicaceae	
<i>Salix purpurea</i> L. var. <i>purpurea</i>	D	?	?	E AF AS-Te	●			Cas.	Hort.	Salicaceae	
Salix udensis Trautv. et Meyer	D	?	?	AS-Te	●			Cas.	Hort.	Salicaceae	
<i>Salix x sepulcralis</i> Simonk. nvar. <i>chrysocoma</i> (Dode) Meikle (<i>S. alba</i> L. x <i>babylonica</i>)	D	?	?	Cult.	●	●		Cas.	Hort.	Salicaceae	
<i>Salpiglossis sinuata</i> Ruiz et Pav.	D	1978	2001	SAM	●			Cas.	Hort.	Solanaceae	
<i>Salvia aethiopsis</i> L.	A	<1835	1910	E AS-Te			●	Cas.	Wool,...	Lamiaceae	
<i>Salvia glutinosa</i> L.	D	1890	1912	E AS-Te	●			Ext.	Hort.	Lamiaceae	
Salvia lavandulifolia Vahl subsp. <i>gallica</i> Lippert	D	1900	1900	E			●	Cas.	Hort.	Lamiaceae	
<i>Salvia nemorosa</i> L.	D/A	1864	2005	E AS-Te	●	●	●	Cas.	Hort., wool, grain	Lamiaceae	Incl. <i>S. x sylvestris</i> L., <i>S. x superba</i> Stapf
<i>Salvia officinalis</i> L.	D	1920	1944	E	●			Cas.	Hort., agric.	Lamiaceae	
<i>Salvia reflexa</i> Hornem.	A	1947	2005	NAM	●		●	Cas.	Grain, wool	Lamiaceae	
<i>Salvia sclarea</i> L.	D	1811	2002	E AF AS-Te	●		●	Cas.	Hort.	Lamiaceae	
<i>Salvia verbenaca</i> L.	A	<1835	1952	E AF AS-Te	●	●	●	Ext.	Ore?	Lamiaceae	
<i>Salvia verticillata</i> L.	A/D	1863	N	E AF AS-Te	●	●	●	Nat.	Ore?, hort.?	Lamiaceae	
Salvia viridis L.	A	1916	1916	E AF AS-Te			●	Cas.	Grain?	Lamiaceae	
<i>Salvinia auriculata</i> Aubl.	D	1981	1991	SAM	●			Cas.	Hort.	Salviniaceae	Incl. <i>S. molesta</i> Mitch.
<i>Salvinia natans</i> (L.) All.	D	<1835	1889	E AS	●			Ext.	Hort.	Salviniaceae	
Sambucus canadensis L.	D	1972	2005	NAM	●			Cas.	Hort.	Caprifoliaceae	
<i>Sanguisorba minor</i> Scop. subsp. <i>balearica</i> (Bourgeau ex Nyman) Muñoz Garmendia et C.Navarro	D	1824	2005	E AF AS-Te	●	●	●	Cas.?	Hort.	Rosaceae	
<i>Santolina chamaecyparissus</i> L.	D	1962	1980	E AF AS-Te	●			Cas.	Hort.	Asteraceae	
Santolina rosmarinifolia L.	A	1912	1912	E			●	Cas.	Wool	Asteraceae	
<i>Saponaria ocymoides</i> L.	D	1954	1999	E			●	Cas.	Hort.	Caryophyllaceae	
<i>Saponaria officinalis</i> L.	D	<1800	N	E AS-Te	●	●	●	Nat.	Hort.	Caryophyllaceae	
<i>Sasa palmata</i> (Burbidge) E.G.Camus	D	1955	1955	AS-Te			●	Cas.	Hort.	Poaceae	
Sasaella ramosa (Makino) Makino	D	2005	N	AS-Te	●			Nat.	Hort.	Poaceae	

Taxon	MoI	FiR	ReR	Origin	Fl	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Satureja hortensis</i> L.	D	1863	1959	E AF AS-Te	●	●	●	Cas.	Agric.	Lamiaceae	
<i>Satureja montana</i> L.	D	1933	1960	E AF AS-Te			●	Cas.	Hort.	Lamiaceae	
<i>Saururus cernuus</i> L.	D	1977	N	NAM	●			Nat.	Hort.	Saururaceae	
<i>Saxifraga cymbalaria</i> L.	D	1977	1977	E AF AS-Te			●	Cas.	Hort.	Saxifragaceae	
<i>Saxifraga rotundifolia</i> L.	D	1851	N	E AS-Te			●	Nat.	Hort.	Saxifragaceae	
<i>Saxifraga x arendsii</i> Engl. s.l. (hybrid of complex origin)	D	1864	1884	Cult.	●		●	Cas.	Hort.	Saxifragaceae	
<i>Saxifraga x geum</i> L.	D	1949	1958	E			●	Cas.	Hort.	Saxifragaceae	
<i>Saxifraga x urbium</i> D.A.Webb (<i>S. spathularis</i> Brot. x <i>umbrosa</i> L.)	D	1908	1961	Cult.			●	Cas.	Hort.	Saxifragaceae	
<i>Scabiosa atropurpurea</i> L.	D	<1835	<1835	E AF AS-Te			●	Cas.	Hort.	Dipsacaceae	
<i>Scandix australis</i> L. subsp. <i>grandiflora</i> (L.) Thell.	A	1894	1894	E AF AS-Te			●	Cas.	Wool?	Apiaceae	
<i>Scandix balansae</i> Reut. ex Boiss.	A	1997	1997	AS-Te	●			Cas.	Grain	Apiaceae	
<i>Scandix iberica</i> Bieb.	A	1908	1955	AS-Te	●	●	●	Cas.	Wool, grain	Apiaceae	
<i>Schismus barbatus</i> (L.) Thell.	A	<1836	<1836	E AF AS-Te			●	Cas.	?	Poaceae	
<i>Schkuhria pinnata</i> (Lam.) O.Kuntze ex Thell. var. <i>abrotanoides</i> (Roth) Cabrera	A	1906	1953	SAM			●	Cas.	Wool	Asteraceae	<i>S. abrotanoides</i> Roth
<i>Schkuhria pinnata</i> (Lam.) O.Kuntze ex Thell. var. <i>pinnata</i>	A	1921	1997	SAM	●		●	Cas.	Grain, wool,...	Asteraceae	Incl. <i>S. advena</i> Thell.
<i>Schmidtia kalahariensis</i> Stent	A	1961	1961	AF			●	Cas.	Wool	Poaceae	
<i>Scilla siberica</i> Haw.	D	1984	N?	AS-Te		●		Nat.?	Hort.	Liliaceae	
<i>Scirpus atrovirens</i> Willd. var. <i>georgianus</i> (R.M.Harper) Fernald	A	2003	N	NAM			●	Nat.	Military troops?	Cyperaceae	
<i>Sclerolaena muricata</i> (Moq.) Domin	A	1907	1911	AUS			●	Cas.	Wool	Chenopodiaceae	
<i>Scolymus hispanicus</i> L.	A	1907	1907	E AF AS-Te			●	Cas.	Wool	Asteraceae	
<i>Scolymus maculatus</i> L.	A	1956	1997	E AF AS-Te	●		●	Cas.	Grain,...	Asteraceae	
<i>Scorpiurus muricatus</i> L. subsp. <i>muricatus</i>	A	1901	1992	E AF AS-Te	●		●	Cas.	Grain, wool	Fabaceae	
<i>Scorpiurus muricatus</i> L. subsp. <i>subvillosus</i> (L.) Thell.	A	1983	1983	E AF AS-Te	●			Cas.	Grain?	Fabaceae	
<i>Scorpiurus muricatus</i> L. subsp. <i>sulcatus</i> (L.) Thell.	A	1907	1960	E AF AS-Te	●		●	Cas.	Grain, wool	Fabaceae	
<i>Scorzonera hispanica</i> L.	D	<1835	2005	E AS-Te	●	●	●	Cas.	Agric.	Asteraceae	
<i>Scrophularia lanceolata</i> Pursh	A	1901	1901	NAM			●	Cas.	Wool	Scrophulariaceae	
<i>Scrophularia scopolii</i> Pers.	A	1976	1976	E AS-Te			●	Cas.	?	Scrophulariaceae	
<i>Scrophularia scorodonia</i> L.	A	1907	1907	E			●	Cas.	Wool	Scrophulariaceae	
<i>Scrophularia vernalis</i> L.	D	1814	N	E AS-Te	●	●	●	Nat.	Hort.	Scrophulariaceae	
<i>Scutellaria altissima</i> L.	D	1884	N	E AS-Te			●	Nat.	Hort.	Lamiaceae	
<i>Secale cereale</i> L.	D	1884	Ann.	AS-Te	●		●	Cas.	Agric.	Poaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
Secale montanum Guss.	A	1908	1908	E AF AS			●	Cas.	?	Poaceae	
<i>Securigera securidaca</i> (L.) Degen et Dörf.	A	1909	1909	E AF AS-Te			●	Cas.	Grain?	Fabaceae	
<i>Securigera varia</i> (L.) Lassen	D?	1803	N	E AS-Te	●	●	●	Nat.	Grain, Ore,...	Fabaceae	
Sedum "Autumn Joy" (S. spectabile Boreau x telephium L.)	D	1928	1928	Cult.			●	Cas.	Hort.	Crassulaceae	
Sedum anacampseros L.	D	<1850	<1850	E			●	Cas.	Hort.	Crassulaceae	
<i>Sedum anopetalum</i> DC.	D	1873	1898	E			●	Cas.	Hort.	Crassulaceae	
<i>Sedum cepaea</i> L.	D	1866	<1979	E AS-Te	●		●	Cas.	Hort.	Crassulaceae	
<i>Sedum dasyphyllum</i> L.	D	1836	1935	E AF AS-Te	●	●	●	Ext.	Hort.	Crassulaceae	
Sedum hispanicum L.	D	1871	2005	E AS-Te			●	Cas.	Hort.	Crassulaceae	
<i>Sedum hybridum</i> L.	D	2001	2002	AS-Te	●			Cas.	Hort.	Crassulaceae	
<i>Sedum kamtschaticum</i> Fisch. et C.A.Mey. subsp. <i>ellacombianum</i> (Praeg.) R.T.Clausen	D	1990	2005	AS-Te	●		●	Cas.	Hort.	Crassulaceae	
<i>Sedum sarmentosum</i> Bunge	D	1968	N	AS-Te	●			Nat.	Hort.	Crassulaceae	
<i>Sedum spurium</i> Bieb.	D	1866	N	AS-Te	●		●	Nat.	Hort.	Crassulaceae	
<i>Sedum telephium</i> L. subsp. <i>maximum</i> (L.) Rouy et E.G.Camus	D	1872	1927	E AS-Te			●	Cas.	Hort.	Crassulaceae	
<i>Selaginella kraussiana</i> (Kunze) A.Braun	D	1887	1980	AF	●		●	Cas.	Hort.	Selaginellaceae	
<i>Sempervivum tectorum</i> L.	D	<1800	N	E	●	●	●	Nat.	Hort.	Crassulaceae	
<i>Senecio cineraria</i> DC.	D	1892	N	E AF AS-Te	●		●	Nat.	Hort.	Asteraceae	
<i>Senecio gallicus</i> Chaix	A	<1850	<1850	E AF AS-Te			●	Cas.	?	Asteraceae	
Senecio glossanthus (Sonder) Belcher	A	1893	1893	AUS			●	Cas.	Wool	Asteraceae	
<i>Senecio inaequidens</i> DC.	A	1892	N	AF	●	●	●	Inv.	Wool	Asteraceae	
Senecio pterophorus DC.	A	1892	1908	AF			●	Cas.	Wool	Asteraceae	
Senecio quadridentatus Labill.	A	1893	1893	AUS			●	Cas.	Wool	Asteraceae	
<i>Senecio squalidus</i> L.	A	1805	N	E	●	●	●	Nat.	Ore?, grain?	Asteraceae	
<i>Senecio vernalis</i> Waldst. et Kit.	A	1837	N	E AS-Te	●		●	Nat.	Ore?, grain?	Asteraceae	
<i>Senna obtusifolia</i> (L.) Irwin et Barneby	A	1992	Ann.	AM	●			Cas.	Grain	Caesalpiaceae	<i>Cassia obtusifolia</i> L.
<i>Senna occidentalis</i> (L.) Link	A	1998	2005	Trop.	●			Cas.	Grain	Caesalpiaceae	<i>Cassia occidentalis</i> L.
Sesamum orientale L.	D	2004	2004	Trop.	●			Cas.	Birdseed	Pedaliaceae	<i>Sesamum indicum</i> L.
Sesbania cannabina (Retz.) Pers.	A	1949	1949	AF AS AUS			●	Cas.	Wool	Fabaceae	
<i>Sesbania exaltata</i> (Rafin.) Rydberg ex A.W.Hill	A	1993	Ann.	NAM	●			Cas.	Grain	Fabaceae	<i>Sesbania macrocarpa</i> (Muhlenb.) Rafin.
<i>Seseli montanum</i> L.	A	1815	1952	E	●		●	Cas.	?	Apiaceae	
Sesuvium portulacastrum (L.) L.	A	1907	1907	Trop.			●	Cas.	Wool?	Aizoaceae	
<i>Setaria adhaerens</i> (Forssk.) Chiov.	A	1929	1998	Trop.	●		●	Cas.	Grain, wool	Poaceae	
Setaria dielsii R.A.W.Herrmann	A	1947	1947	AUS			●	Cas.	Wool	Poaceae	

Taxon	MoI	FiR	ReR	Origin	Fl	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Setaria faberi</i> R.A.W.Herrmann s.l.	A	1977	N	AS-Te	●			Nat.	Grain	Poaceae	<i>Setaria macrocarpa</i> Lucznik
<i>Setaria italica</i> (L.) Beauv.	D	1856	Ann.	?	●	●	●	Cas.	Birdseed	Poaceae	
<i>Setaria parviflora</i> (Poir.) Kerguelen	A	1887	N	AM	●		●	Nat.	Grain. wool....	Poaceae	
<i>Setaria pumila</i> (Poir.) Roem. et Schult.	A	1811	N	E AF AS	●	●	●	Nat.	Grain. wool....	Poaceae	
<i>Setaria sphacelata</i> (Schumach.) Stapf et C.E.Hubbard ex M.B.Moss	A	2002	2002	AF AS-Te	●			Cas.	Grain	Poaceae	
<i>Setaria verticillata</i> (L.) Beauv. var. <i>ambigua</i> (Guss.) Parl.	A	1990	N	E AF AS	●		●	Nat.	Grain. wool....	Poaceae	
<i>Setaria verticillata</i> (L.) Beauv. var. <i>verticillata</i>	A	<1800	N	E AF AS	●	●	●	Nat.	Grain. wool....	Poaceae	
<i>Setaria viridis</i> (L.) Beauv. s.l.	A	<1800	N	E AF AS	●	●	●	Nat.	Grain. wool....	Poaceae	
<i>Sicyos angulatus</i> L.	A	1882	Ann.	NAM	●		●	Cas.	Grain. wool....	Cucurbitaceae	
<i>Sida rhombifolia</i> L.	A	1993	Ann.	Trop.	●			Cas.	Grain	Malvaceae	
<i>Sida spinosa</i> L.	A	1976	Ann.	Trop.	●			Cas.	Grain	Malvaceae	
<i>Sidalcea candida</i> A.Gray	D	1920	1929	NAM			●	Cas.	Hort.	Malvaceae	
<i>Sidalcea oregana</i> (Nutt.) A.Gray	D	1968	1968	NAM	●			Cas.	Hort.	Malvaceae	
<i>Sideritis lanata</i> L.	A	1907	1907	E AF AS-Te		●		Cas.	Grain?	Lamiaceae	
<i>Sideritis montana</i> L.	A	<1850	1940	E AF AS-Te	●	●	●	Cas.	Grain. wool....	Lamiaceae	
<i>Sigesbeckia orientalis</i> L.	A	1940	1948	AF AS			●	Cas.	Wool	Asteraceae	
<i>Silene behen</i> L.	A	1978	1978	E AF AS-Te	●			Cas.	Grain	Caryophyllaceae	
<i>Silene coeli-rosa</i> (L.) Godr.	D	1956	1956	E AF AS-Te	●			Cas.	Hort.	Caryophyllaceae	
<i>Silene conoidea</i> L.	A	1876	1994	E AS-Te	●	●	●	Cas.	Grain. wool	Caryophyllaceae	
<i>Silene cretica</i> L.	A	1950	1950	E AS-Te			●	Cas.	Seeds	Caryophyllaceae	
<i>Silene cserei</i> Baumg.	A	1908	1908	E AS-Te			●	Cas.	Wool	Caryophyllaceae	
<i>Silene dichotoma</i> Ehrh.	A	1860	N	E AS-Te	●	●	●	Nat.	Grain. seeds. ore	Caryophyllaceae	
<i>Silene gallica</i> L.	A	1824	2003	E AF AS-Te	●	●	●	Cas.	Grain. seeds	Caryophyllaceae	
<i>Silene muscipula</i> L.	A	1918	2000	E AF AS-Te	●		●	Cas.	Grain....	Caryophyllaceae	
<i>Silene nocturna</i> L. subsp. <i>nocturna</i>	A	1997	1999	E AF AS-Te	●			Cas.	Grain	Caryophyllaceae	
<i>Silene otites</i> (L.) Wibel	A	<1858	1920	E AS-Te	●		●	Cas.	Grain....	Caryophyllaceae	
<i>Silene pendula</i> L.	D	1866	1988	E AF AS-Te	●	●	●	Cas.	Hort.	Caryophyllaceae	
<i>Silene scabriflora</i> Brot.	A	1860	1860	E AF	●			Cas.	Seeds	Caryophyllaceae	
<i>Silene schafta</i> S.G.Gmel. ex Hohen.	D	2002	N	AS-Te			●	Nat.	Hort.	Caryophyllaceae	
<i>Silene stricta</i> L.	A	1908	1997	E AF	●		●	Cas.	Grain....	Caryophyllaceae	
<i>Silene viscosa</i> (L.) Pers.	A?	1947	1947	E			●	Cas.	Wool	Caryophyllaceae	
<i>Silphium perfoliatum</i> L.	D?	1871	1972?	NAM	●		●	Cas.	Hort.?	Asteraceae	
<i>Silybum marianum</i> (L.) Gaertn.	A/D	1803	2005	E AF AS-Te	●	●	●	Cas.	Grain. hort....	Asteraceae	
<i>Sinapis alba</i> L.	D	<1800	Ann.	E AF AS-Te	●	●	●	Cas.	Agric.	Brassicaceae	
<i>Sinapis dissecta</i> Lag.	A	1882	1951	E AF	●		●	Cas.	Grain. seeds	Brassicaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Sisymbrium altissimum</i> L.	A	1840	N	E AS-Te	•	•	•	Nat.	Grain, wool,...	Brassicaceae	
<i>Sisymbrium austriacum</i> Jacq. subsp. <i>chrysanthum</i> (Jord.) Rouy et Fouc.	A	1858	N	E	•		•	Nat.	Wool,...	Brassicaceae	
<i>Sisymbrium erysimoides</i> Desf.	A	1961	1970	E AF AS-Te			•	Cas.	Wool	Brassicaceae	
<i>Sisymbrium irio</i> L.	A	1886	2004	E AF AS-Te	•	•	•	Cas.	Wool,...	Brassicaceae	
<i>Sisymbrium loeselii</i> L.	A	1872	N	E AS-Te	•	•	•	Nat.	Grain, wool,...	Brassicaceae	
<i>Sisymbrium orientale</i> L.	A	1823	N	E AF AS-Te	•	•	•	Nat.	Grain, wool,...	Brassicaceae	
<i>Sisymbrium runcinatum</i> Lag. ex DC.	A	2004	2004	E AF	•			Cas.	Grain	Brassicaceae	
<i>Sisymbrium septulatum</i> DC.	A	1954	1954	AS-Te			•	Cas.	Grain?	Brassicaceae	
<i>Sisymbrium strictissimum</i> L.	A	1857	1924	E			•	Cas.	?	Brassicaceae	
<i>Sisymbrium volgense</i> Bieb. ex E.Fourn.	A	1953	N	AS-Te	•		•	Nat.	Grain,...	Brassicaceae	
<i>Sisyrinchium montanum</i> E.Greene	A	1939	N?	NAM	•		•	Nat.?	Military troops?	Iridaceae	
<i>Smilax excelsa</i> L.	D	1990	N	E AS-Te	•			Nat.	Hort.	Liliaceae	
<i>Smyrniium perfoliatum</i> L.	D	1850	1942	E AS-Te	•		•	Cas.	Hort.	Apiaceae	
<i>Solanum americanum</i> Mill.	A	1987	Ann.	Trop.	•			Cas.	Grain	Solanaceae	
<i>Solanum capsicoides</i> All.	A	1920	1920	SAM	•			Cas.	?	Solanaceae	
<i>Solanum carolinense</i> L.	A	1947	1995	NAM	•		•	Cas.	Grain, wool	Solanaceae	
<i>Solanum chenopodioides</i> Lam.	A	1908	N?	SAM	•			Nat.?	Grain	Solanaceae	
<i>Solanum elaeagnifolium</i> Cav.	A	1997	1997	SAM	•			Cas.	Grain	Solanaceae	
<i>Solanum nigrum</i> L. subsp. <i>schultesii</i> (Opiz) Wessely	A	1893	N	E	•	•	•	Nat.	?	Solanaceae	
<i>Solanum physalifolium</i> Rusby var. <i>nitidibaccatum</i> (Bitter) Edmonds	A	1942	N	SAM	•	•	•	Nat.	Grain, wool,...	Solanaceae	
<i>Solanum pygmaeum</i> Cav.	A	1902	1915	SAM	•	•	•	Cas.	Wool,...	Solanaceae	
<i>Solanum rostratum</i> Dun.	A	1890	2005	NAM	•	•	•	Cas.	Grain, wool,...	Solanaceae	
<i>Solanum sarachoides</i> Sendtn.	A	1891	N	SAM	•		•	Nat.	Grain, wool,...	Solanaceae	
<i>Solanum sisymbriifolium</i> Lam.	A	1880	2002	SAM	•	•	•	Cas.	Grain, wool,...	Solanaceae	
<i>Solanum triflorum</i> Nutt. var. <i>ponticum</i> (Prodan) Borza	A	1940	N	AM	•	•		Nat.	Ore, grain, wool	Solanaceae	
<i>Solanum triflorum</i> Nutt. var. <i>triflorum</i>	A	1893	N	AM	•	•	•	Nat.	Ore, grain, wool	Solanaceae	
<i>Solanum tuberosum</i> L.	D	1867	2005	SAM	•	•	•	Cas.	Agric.	Solanaceae	
<i>Solanum viarum</i> Dun.	A	2000	2000	SAM	•			Cas.	Grain	Solanaceae	
<i>Solanum villosum</i> Mill. subsp. <i>miniatum</i> (Bernh. ex Willd.) Edmonds	A	1899	2005	E AF AS-Te	•		•	Cas.	Grain, wool,...	Solanaceae	
<i>Solanum villosum</i> Mill. subsp. <i>villosum</i>	A	1857	1993	E AF AS-Te	•		•	Cas.	Grain, wool,...	Solanaceae	
<i>Soleirolia soleirolii</i> (Req.) Dandy	D	1941	N	E	•	•	•	Nat.	Hort.	Urticaceae	
<i>Solidago canadensis</i> L.	D	1863	N	NAM	•	•	•	Nat.	Hort.	Asteraceae	

Taxon	MoI	FiR	ReR	Origin	Fl	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Solidago gigantea</i> Ait.	D	1869	N	NAM	•	•	•	Nat.	Hort.	Asteraceae	
<i>Solidago graminifolia</i> (L.) Salisb.	D	<1900	1978	NAM	•		•	Cas.	Hort.	Asteraceae	<i>Euthamia graminifolia</i> (L.) Nutt.
<i>Solidago rugosa</i> Mill.	A	1883	2005	NAM	•	•		Cas.	Ore?	Asteraceae	
<i>Soliva anthemifolia</i> (Juss.) R.Brown	A	1893	1904	SAM			•	Cas.	Wool	Asteraceae	
<i>Soliva pterosperma</i> (Juss.) Less.	A	1887	1904	AM			•	Cas.	Wool....	Asteraceae	
<i>Sonchus tenerrimus</i> L.	A	2004	2004	E AF AS-Te	•			Cas.	Ore	Asteraceae	
<i>Sorbaria sorbifolia</i> (L.) A.Braun	D	1973	N?	AS-Te	•	•	•	Nat.?	Hort.	Rosaceae	
<i>Sorbaria tomentosa</i> (Lindl.) Rehd.	D	2000	N	AS-Te	•			Nat.	Hort.	Rosaceae	
<i>Sorbus domestica</i> L.	D	1873	1873	E AF AS-Te			•	Cas.	Hort.	Malaceae	
<i>Sorbus hybrida</i> L.	D	1961	1961	E			•	Cas.	Hort.	Malaceae	
<i>Sorbus intermedia</i> (Ehrh.) Pers.	D	1934	2004	E	•	•	•	Cas.	Hort.	Malaceae	
<i>Sorbus latifolia</i> (Lam.) Pers.	D	1986	1987	E			•	Cas.	Hort.	Malaceae	
<i>Sorghum bicolor</i> (L.) Moench	D	1935	Ann.	?	•	•	•	Cas.	Birdseed	Poaceae	
<i>Sorghum halepense</i> (L.) Pers.	A	1884	N	E AF AS-Te	•	•	•	Nat.	Grain. wool	Poaceae	
<i>Spartina pectinata</i> Link	D	1996	2005	NAM	•			Cas.	Hort.	Poaceae	
<i>Spartina x townsendii</i> H. et J.Groves (S. alterniflora Loisel. x maritima (Curt.) Fernald)	A	1938	N	Hybr.	•			Inv.	Hybridization	Poaceae	
<i>Spartium junceum</i> L.	D	1993	N	E AF AS-Te	•		•	Nat.	Hort.	Fabaceae	
<i>Sphaeralcea bonariensis</i> (Cav.) Griseb.	A	<1950	<1950	SAM			•	Cas.	Wool	Malvaceae	
<i>Spinacia oleracea</i> L.	D	1872	2005	?	•	•	•	Cas.	Agric.	Chenopodiaceae	
<i>Spiraea alba</i> Du Roi	D	1803	N	NAM	•	•	•	Nat.	Hort.	Rosaceae	
<i>Spiraea canescens</i> D.Don	D	2001	2001	AS-Te	•			Cas.	Hort.	Rosaceae	
<i>Spiraea chamaedryfolia</i> L. subsp. ulmifolia (Scop.) J.Duvigneaud	D	1882	N	E AS-Te			•	Nat.	Hort.	Rosaceae	
<i>Spiraea douglasii</i> Hook.	D	1885	N	NAM	•	•	•	Inv.	Hort.	Rosaceae	
<i>Spiraea hypericifolia</i> L.	D	1885	1911	E AS-Te			•	Cas.	Hort.	Rosaceae	
<i>Spiraea japonica</i> L. f.	D	1901	2005	AS-Te	•		•	Cas.	Hort.	Rosaceae	
<i>Spiraea tomentosa</i> L.	D	1870	N	NAM	•			Nat.	Hort.	Rosaceae	
<i>Spiraea x billardii</i> Héring (S. alba x douglasii)	D	1895	N	Cult.	•	•	•	Nat.	Hort.	Rosaceae	Incl. S. x pseudosalicifolia Silverside
<i>Spiraea x rosalba</i> Dippel (S. alba x salicifolia L.)	D	2003	N?	Cult.			•	Nat.?	Hort.	Rosaceae	
<i>Spiraea x vanhouttei</i> (Briot) Carr. (S. cantoniensis Lour. x trilobata L.)	D	1959	1983	Cult.			•	Cas.	Hort.	Rosaceae	
<i>Sporobolus africanus</i> (Poiret) Robyns et Tournay	A	1911	2005	AF AS		•	•	Cas.	Wool. grain	Poaceae	
<i>Sporobolus caroli</i> Mez	A	1911	1947	AUS			•	Cas.	Wool	Poaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
Sporobolus creber De Nardi	A	1911	1911	AUS			●	Cas.	Wool	Poaceae	
Sporobolus elongatus R.Brown	A	1951	1951	AUS			●	Cas.	Wool	Poaceae	
Sporobolus indicus (L.) R.Brown	A	1886	1999	AM	●		●	Cas.	Grain, wool	Poaceae	
Sporobolus virginicus (L.) Kunth	A	<1900	<1900	AM	?	?	?	Cas.	?	Poaceae	
Stachys atherocalyx K.Koch	A	1922	1922	E			●	Cas.	?	Lamiaceae	
Stachys byzantina K.Koch	D	1882	2005	E AS-Te	●		●	Cas.	Hort.	Lamiaceae	
Stachys cretica L.	D	1872	1942	E AF AS-Te	●		●	Cas.	Hort.	Lamiaceae	
Staphylea pinnata L.	D	1948	N	E AS-Te		●	●	Nat.	Hort.	Staphyleaceae	
Stephanandra incisa (Thunb.) Zabel	D	2004	2004	AS-Te	●			Cas.	Hort.	Rosaceae	
Stipa bromoides (L.) Dörfel.	A	1948	1948	E			●	Cas.	Wool	Poaceae	
Stipa filiculmis Delile	A	1949	1949	SAM			●	Cas.	Wool	Poaceae	Nassella filiculmis (Delile) Barkworth
Stipa formicarum Delile	A	1884	1915	SAM	●		●	Cas.	?	Poaceae	Nassella formicarum (Delile) Barkworth
Stipa hyalina Nees	A	1897	1897	SAM			●	Cas.	Wool	Poaceae	Nassella hyalina (Nees) Barkworth
Stipa neesiana Trin. et Rupr.	A	1895	1915	SAM	●		●	Cas.	Wool,...	Poaceae	Nassella neesiana (Trin. et Rupr.) Barkworth
Stipa nitida Summerh. et C.E.Hubbard	A	1902	1902	AUS			●	Cas.	Wool	Poaceae	Austrostipa nitida (Summerh. et C.E.Hubbard) S.W.L.Jacobs et J.Everett
Stipa pennata L. s.l.	D	1824	1892	E AF AS-Te	●		●	Cas.	Hort.	Poaceae	
Stipa scabra Lindl. subsp. falcata (Hughes) Vickery	A	1896	1896	AUS			●	Cas.	Wool	Poaceae	Austrostipa scabra (Lindl.) S.W.L.Jacobs et J.Everett subsp. falcata (Hughes) S.W.L.Jacobs et J.Everett
Stipa scabra Lindl. subsp. scabra	A	1897	1939	AUS			●	Cas.	Wool	Poaceae	Austrostipa scabra (Lindl.) S.W.L.Jacobs et J.Everett subsp. scabra
Stipa tenuissima Trin.	A	1894	1907	AM			●	Cas.	Wool	Poaceae	Nassella tenuissima (Trin.) Barkworth
Stipa verticillata Nees ex Spreng.	A	1953	1963	AUS			●	Cas.	Wool	Poaceae	Austrostipa verticillata (Nees ex Spreng.) S.W.L.Jacobs et J.Everett
Stipagrostis pungens (Desf.) De Winter	A	1947	1947	AF			●	Cas.	Wool	Poaceae	
Stuartina muelleri Sond.	A	1906	1914	AUS			●	Cas.	Wool	Asteraceae	
Sutera cordata (Thunb.) O. Kuntze	D	1999	2005	AF	●		●	Cas.	Hort.	Scrophulariaceae	
Symphoricarpos albus (L.) S.F.Blake	D	1866	N	NAM	●	●	●	Nat.	Hort.	Caprifoliaceae	
Symphoricarpos x chenaultii Rehd. (S. microphyllus Humb., Bonpl. et Kunth x orbiculatus Moench)	D	?	?	Cult.	?	?	?	Cas.?	Hort.	Caprifoliaceae	
Symphoricarpos x doorenbosii Krüssm. (S. x chenaultii x albus)	D	1955	N	Cult.	●		●	Nat.	Hort.	Caprifoliaceae	
Symphytum asperum Lepechin s.l.	D	1884	N	E AS-Te	●	●	●	Nat.	Hort.	Boraginaceae	Incl. S. x uplandicum Nyman = S. asperum x officinale L.

Taxon	MoI	FiR	ReR	Origin	Fl	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Symphytum grandiflorum</i> DC.	D	1999	N	E AS-Te	●			Nat.	Hort.	Boraginaceae	
<i>Syringa vulgaris</i> L.	D	1854	N?	AS	●	●	●	Nat.?	Hort.	Oleaceae	
<i>Taeniatherum caput-medusae</i> (L.) Nevski var. <i>caput-medusae</i>	A	1911	1954	E AF AS-Te	●		●	Cas.	Wool, grain	Poaceae	
<i>Tagetes erecta</i> L.	D	1953	1953	AM			●	Cas.	Hort.	Asteraceae	
<i>Tagetes minuta</i> L.	A	1880	1997	SAM	●		●	Cas.	Grain, wool,...	Asteraceae	
<i>Tagetes patula</i> L.	D	2005	2005	AM	●			Cas.	Hort.	Asteraceae	
<i>Tagetes tenuifolia</i> Cav.	D	1992	1992	AM			●	Cas.	Hort.	Asteraceae	
<i>Tamarix canariensis</i> Willd.	D	1946	1946	E AF	●			Cas.	Hort.	Tamaricaceae	
<i>Tamarix gallica</i> L.	D	1940	N?	E AF	●			Nat.?	Hort.	Tamaricaceae	
<i>Tamarix parviflora</i> DC.	D	1997	N?	E AF AS-Te	●			Nat.?	Hort.	Tamaricaceae	
<i>Tanacetum balsamita</i> L.	D	1941	1983	AS-Te	●		●	Cas.	Hort.	Asteraceae	
<i>Tanacetum coccineum</i> (Willd.) Grierson	D	1958	1958	AS-Te	●			Cas.	Hort.	Asteraceae	
<i>Tanacetum corymbosum</i> (L.) Schultz-Bip.	D?	1809	<1850	E			●	Cas.	Hort.?	Asteraceae	
<i>Tanacetum macrophyllum</i> (Waldst. et Kit.) Schultz-Bip.	D	1882	1960	E AS-Te		●	●	Cas.	Hort.	Asteraceae	
<i>Tanacetum parthenium</i> (L.) Schultz-Bip.	D	<1800	N	E AS-Te	●	●	●	Nat.	Hort.	Asteraceae	
<i>Taxodium distichum</i> (L.) L.C.M.Rich.	D	2000	2005	NAM	●			Cas.	Hort.	Taxodiaceae	
<i>Telekia speciosa</i> (Schreb.) Baumg.	D	1870	N	E AS-Te	●	●	●	Nat.	Hort.	Asteraceae	
<i>Tellima grandiflora</i> (Pursh) Dougl. ex Lindl.	D	1932	N	NAM	●	●	●	Nat.	Hort.	Saxifragaceae	
<i>Tetragonia tetragonioides</i> (Pallas) O.Kuntze	A/D	1888	1997	AS-Tr AUS SAM	●	●	●	Cas.	Agric., wool	Aizoaceae	
<i>Tetragonolobus maritimus</i> (L.) Roth	A	1861	1933	E AF AS-Te	●		●	Cas.	Seeds?	Fabaceae	
<i>Tetragonolobus purpureus</i> Moench	A	1854	1954	E AF AS-Te	●		●	Cas.	?	Fabaceae	
<i>Teucrium resupinatum</i> Desf.	A	1998	1998	E AF			●	Cas.	Birdseed	Lamiaceae	
<i>Thalictrum aquilegifolium</i> L.	D	1856	1978	E AS-Te	●	●	●	Cas.	Hort.	Ranunculaceae	
<i>Thlaspi alliaceum</i> L.	A	<1850	1993	E AS-Te	●			Cas.	Grain	Brassicaceae	
<i>Thlaspi brachypetalum</i> Jord.	A	1949	1949	E			●	Cas.	?	Brassicaceae	
<i>Thuja plicata</i> Donn ex D.Don	D	2004	2005	NAM	●			Cas.	Hort.	Cupressaceae	
<i>Thymus pannonicus</i> All.	D?	1886	1887	E	●			Cas.	Hort.?	Lamiaceae	<i>Thymus marschallianus</i> Willd.
<i>Thymus vulgaris</i> L.	D	1899	2001	E AF AS-Te	●		●	Cas.	Hort.	Lamiaceae	
<i>Thymus x citriodorus</i> (Pers.) Schreb. (T. <i>pulegioides</i> L. x <i>vulgaris</i>)	D	1866	1974	Hybr.	●		●	Cas.	Hort.	Lamiaceae	
<i>Tordylium maximum</i> L.	A	2004	2004	E AS-Te	●			Cas.	?	Apiaceae	
<i>Torilis arvensis</i> (Huds.) Link subsp. <i>purpurea</i> (Ten.) Hayek	A	1999	2001	E AF AS-Te	●			Cas.	Grain	Apiaceae	
<i>Torilis leptophylla</i> (L.) Reichenb. f.	A	1872	1955	E AF AS-Te			●	Cas.	Wool, grain	Apiaceae	
<i>Trachelium caeruleum</i> L.	D	2005	2005	E AF	●			Cas.	Hort.	Campanulaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Trachyspermum ammi</i> (L.) Sprague ex Turrill	A	1892	1985	?		•	•	Cas.	Wool,...	Apiaceae	
<i>Trachystemon orientalis</i> (L.) G.Don f.	D	1955	N	E AS-Te	•			Nat.	Hort.	Boraginaceae	
Tradescantia fluminensis Velloso	D	1988	2005	SAM	•			Cas.	Hort.	Commelinaceae	
<i>Tradescantia virginiana</i> L.	D	1946	2001	Cult.	•		•	Cas.	Hort.	Commelinaceae	
<i>Tragopogon dubius</i> Scop.	A	1954	N	E AS-Te	•	•		Nat.	Grain,...	Asteraceae	
<i>Tragopogon porrifolius</i> L.	D	1813	2003	E AF AS-Te	•	•	•	Ext./Cas.	Hort.	Asteraceae	
<i>Tragus australianus</i> S.T.Blake	A	1899	1963	AUS	•		•	Cas.	Wool	Poaceae	
Tragus berteronianus Schult.	A	1947	1947	AF AS-Tr				•	Cas.	Wool	Poaceae
<i>Tragus koelerioides</i> Aschers.	A	1887	1947	AF				•	Cas.	Wool	Poaceae
<i>Tragus racemosus</i> (L.) All.	A	<1850	1947	E AF AS	•		•	Cas.	Wool,...	Poaceae	
<i>Trapa natans</i> L.	D	<1800	1991	E AF AS	•	•	•	Cas.	Hort.	Trapaceae	
Traunsteinera globosa (L.) Reichenb.	D?	<1812	<1812	E		•		Cas.	Hort.?	Orchidaceae	
<i>Tribulus terrestris</i> L.	A	<1835	1959	E AF AS-Te	•	•	•	Cas.	Wool,...	Zygophyllaceae	
<i>Trifolium alexandrinum</i> L.	D/A	1961	2003	AF AS-Te	•		•	Cas.	Agric., grain	Fabaceae	
<i>Trifolium angustifolium</i> L.	A	<1850	1970	E AF AS-Te	•		•	Cas.	Wool, seeds,...	Fabaceae	
<i>Trifolium constantinopolitanum</i> Seringe	A	1995	1995	AF AS-Te	•			Cas.	Grain	Fabaceae	
<i>Trifolium diffusum</i> Ehrh.	A	1891	1913	E	•		•	Cas.	Grain, wool,...	Fabaceae	
<i>Trifolium echinatum</i> Bieb.	A	1904	1991	E AF AS-Te	•	•	•	Cas.	Grain, seeds,...	Fabaceae	
<i>Trifolium glomeratum</i> L.	A	1900	1999	E AF AS-Te	•		•	Cas.	Wool, grain	Fabaceae	
<i>Trifolium hirtum</i> All.	A	1883	1971	E AF AS-Te				•	Cas.	Wool,...	Fabaceae
<i>Trifolium hybridum</i> L. subsp. <i>elegans</i> (Savi) Aschers. et Graebn.	A	1813?	1995	E AS-Te	•	•	•	Cas.	Grain,...	Fabaceae	
<i>Trifolium hybridum</i> L. subsp. <i>hybridum</i>	D	1813	N	E AS-Te	•	•	•	Nat.	Agric.	Fabaceae	
<i>Trifolium incarnatum</i> L.	D	1859	2002	E	•	•	•	Cas.	Agric.	Fabaceae	
<i>Trifolium isthmocarpum</i> Brot.	A	1877	1995	E AF	•			Cas.	Grain,...	Fabaceae	
<i>Trifolium lappaceum</i> L.	A	1921	1995	E AF AS-Te	•		•	Cas.	Grain, wool,...	Fabaceae	
<i>Trifolium nigrescens</i> Viv.	A	1999	1999	E AF AS-Te	•			Cas.	Grain	Fabaceae	
<i>Trifolium pallidum</i> Waldst. et Kit.	A	1995	1995	E AF AS-Te	•			Cas.	Grain	Fabaceae	
<i>Trifolium patens</i> Schreb.	A	1920	1920	E AS-Te	•			Cas.	?	Fabaceae	
Trifolium purpureum Loisel.	A	1876	1877	E AF AS-Te	•			Cas.	Seeds	Fabaceae	
<i>Trifolium resupinatum</i> L.	A/D	1861	2004	E AF AS-Te	•	•	•	Cas.	Grain, wool,...	Fabaceae	
<i>Trifolium retusum</i> L.	A	<1835	1937	E AS-Te	•		•	Cas.	Wool, grain	Fabaceae	
<i>Trifolium spumosum</i> L.	A	1954	1955	E AF AS-Te			•	Cas.	Grain	Fabaceae	
<i>Trifolium squamosum</i> L.	A	1854	1995	E AF AS-Te	•			Cas.	Grain,...	Fabaceae	
Trifolium squarrosum L.	A	1990	1995	E AF AS-Te	•		•	Cas.	Grain, birdseed	Fabaceae	
Trifolium stellatum L.	A	1977	1977	E AF AS-Te				•	Cas.	Wool	Fabaceae
<i>Trifolium strictum</i> L.	A	1995	1995	E AF AS-Te	•			Cas.	Grain	Fabaceae	

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Trifolium tomentosum L.	A	1907	1995	E AF AS-Te	●		●	Cas.	Wool....	Fabaceae	
Trifolium vesiculosum Savi	A	1913	1913	E AS-Te	●			Cas.	?	Fabaceae	
Trigonella arabica Delile	A	1955	1955	AF AS-Te	●			Cas.	Grain	Fabaceae	
Trigonella caesyriaca Boiss.	A	1954	1971	AS-Te	●		●	Cas.	Grain, wool	Fabaceae	
Trigonella caerulea (L.) Seringe	A	1882	1947	?	●	●	●	Cas.	Grain, wool....	Fabaceae	
Trigonella calliceras Fisch.	A	1948	1948	AS-Te			●	Cas.	Wool	Fabaceae	
Trigonella corniculata (L.) L.	A	2003	2004	E AF AS-Te	●			Cas.	Grain	Fabaceae	
Trigonella foenum-graecum L.	D/A	1898	2001	E AF AS-Te	●	●	●	Cas.	Agric....	Fabaceae	
Trigonella hierosolymitana Boiss.	A	1886	1901	AF AS-Te	●		●	Cas.	Grain....	Fabaceae	Trigonella hamosa L. (nom. rej.)
Trigonella maritima Delile ex Poiret	A	1977	1977	E AF AS-Te	●			Cas.	Grain	Fabaceae	
Trigonella procumbens (Besser) Reichenb.	A	1886	1922	E AS-Te	●		●	Cas.	Grain, wool....	Fabaceae	
Trigonella spinosa L.	A	1941	1941	E AS-Te			●	Cas.	Wool	Fabaceae	
Trigonella stellata Forssk.	A	1911	1911	AF AS-Te			●	Cas.	Wool	Fabaceae	
Triraphis mollis R.Brown	A	1899	1947	AUS	●		●	Cas.	Wool	Poaceae	
Trisetum paniceum (Lam.) Pers.	A	1947	1947	E AF AS-Te			●	Cas.	Wool	Poaceae	
Triticum aestivum L.	D	?	Ann.	?	●			Cas.	Agric.	Poaceae	
Triticum compactum Host	D	1921	1954	?	●		●	Cas.	Agric.	Poaceae	
Triticum dicoccon (Schrank) Schübl.	D	?	?	?	?	?	?	Cas.	Agric.	Poaceae	
Triticum durum Desf.	D	1972	1972	?	●			Cas.	Agric.	Poaceae	
Triticum monococcum L.	D	?	?	?	?	?	?	Cas.	Agric.	Poaceae	
Triticum polonicum L.	D	1895	1926	?			●	Cas.	Agric.	Poaceae	
Triticum spelta L.	D	?	?	?	?	?	?	Cas.	Agric.	Poaceae	
Triticum turgidum L.	D	1972	1972	?	●			Cas.	Agric.	Poaceae	
Trollius europaeus L.	D	1852	1952	E AS-Te	●		●	Cas.	Hort.	Ranunculaceae	
Tropaeolum majus L.	D	1953	2005	SAM	●		●	Cas.	Hort.	Tropaeolaceae	
Tuberaria guttata (L.) Fourr.	A	<1837	<1837	E AF AS-Te	●			Cas.	?	Cistaceae	
Tulipa gesneriana L.	D	<1850	2005	Cult.	●		●	Cas.	Hort.	Liliaceae	
Tulipa sylvestris L.	D	<1800	N	E AF AS-Te	●		●	Nat.	Hort.	Liliaceae	
Typha minima Funck	D?	1827	1867	E AS-Te	●			Cas.	Hort.?	Typhaceae	
Ulex gallii Planch.	D?	<1895	1961	E	●		●	Cas.	Hort.?	Fabaceae	
Ulex minor Roth	D?	1852	1962	E	●			Cas.	Hort.?	Fabaceae	
Umbilicus rupestris (Salisb.) Dandy	A	2000	N	E AF AS-Te	●			Nat.	Ore	Crassulaceae	
Urochloa panicoides Beauv.	A	1993	2003	AF AS	●			Cas.	Grain	Poaceae	
Urochloa platyphylla (Munro ex Wright) R.Webster	A	1992	2005	AM	●			Cas.	Grain	Poaceae	
Urtica incisa Poiret	A	1911	1911	AUS			●	Cas.	Wool	Urticaceae	
Urtica pilulifera L.	A	1864	2004	E AF AS-Te	●			Cas.	Grain?	Urticaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Vaccaria hispanica</i> (Mill.) Rauschert	A	1811	2005	E AF AS-Te	•	•	•	Cas.	Grain....	Caryophyllaceae	
<i>Vaccinium corymbosum</i> L.	D	1996	1996	NAM	•			Cas.	Hort.	Ericaceae	
<i>Vaccinium macrocarpon</i> Ait.	D	1957	N	NAM	•			Nat.	Hort.	Ericaceae	
Valeriana phu L.	D	<1850	1910	AS-Te				• Cas.	Hort.	Valerianaceae	
<i>Valeriana pyrenaica</i> L.	D	<1957	<1957	E				• Cas.	Hort.	Valerianaceae	
<i>Valerianella coronata</i> (L.) DC.	A	1823	1906	E AF AS-Te	•		•	Cas.	Seeds	Valerianaceae	
<i>Valerianella eriocarpa</i> Desv.	A	1813	1954	E AF AS-Te	•		•	Cas.	Seeds	Valerianaceae	
<i>Valerianella locusta</i> (L.) Laterr. var. <i>oleracea</i> (Schlecht.) Breistr.	D	2005	2005	E AF AS-Te	•			Cas.	Agric.	Valerianaceae	
Valerianella vesicaria (L.) Moench	A	<1850	<1850	E AS-Te				• Cas.	?	Valerianaceae	
<i>Vallisneria spiralis</i> L.	D?	1864	1957	Trop.	•			• Cas.	Hort.?	Hydrocharitaceae	
Veratrum album L.	D?	<1835	<1893	E AS-Te NAM				• Cas.	Hort.?	Liliaceae	
<i>Verbascum banaticum</i> Schrad.	A	1908	1908	E				• Cas.	Wool?	Scrophulariaceae	
Verbascum blattaria L. x phoeniceum L.	A	1954	1954	Hybr.	•			Cas.	Hybridization	Scrophulariaceae	
<i>Verbascum chaixii</i> Vill.	A/D	1912	<1934	E AS-Te	•	•		Cas.	Hort.?....	Scrophulariaceae	
<i>Verbascum phlomoides</i> L.	A/D	1811	2005	E AS-Te	•		•	Cas.	Ore....	Scrophulariaceae	
<i>Verbascum phoeniceum</i> L.	D/A	1895	2005	E AS-Te	•		•	Cas.	Grain, ore....	Scrophulariaceae	
<i>Verbascum sinuatum</i> L.	A	1831	1949	E AF AS-Te				• Cas.	Wool, grain	Scrophulariaceae	
<i>Verbascum virgatum</i> Stokes	A	1906	2004	E	•		•	Cas.	Ore?	Scrophulariaceae	
<i>Verbascum</i> x <i>interjectum</i> Pfund (V. <i>densiflorum</i> Bertol. x <i>phlomoides</i>)	H	?	?	Hybr.	?	?	?	Cas.	Hybridization	Scrophulariaceae	
Verbena aristigera S.Moore	D	1950	1950	SAM	•			Cas.	Hort.	Verbenaceae	<i>Glandularia aristigera</i> (S.Moore) Tronc.
<i>Verbena bonariensis</i> L.	D/A	1893	2005	SAM	•		•	Cas.	Hort., wool	Verbenaceae	
Verbena gaudichaudii (Briq.) Michael	A	1921	1939	NAM				• Cas.	Wool	Verbenaceae	<i>Verbena officinalis</i> L. var. <i>gaudichaudii</i> Briq.
Verbena halei Small	A	1940	1940	NAM				• Cas.	Wool	Verbenaceae	<i>Verbena officinalis</i> L. var. <i>halei</i> (Small) Munir
<i>Verbena hastata</i> L.	D/A	1902	2001	NAM	•	•	•	Cas.	Wool, hort.?	Verbenaceae	
<i>Verbena litoralis</i> Kunth var. <i>brasiliensis</i> (Velloso) Briq.	A	1993	1993	SAM	•			Cas.	Grain	Verbenaceae	<i>Verbena brasiliensis</i> Velloso
Verbena rigida Spreng.	D	1951	1975	SAM	•	•	•	Cas.	Hort.	Verbenaceae	
<i>Verbena supina</i> L.	A	1947	1947	E AF AS-Te				• Cas.	Wool	Verbenaceae	
<i>Verbena urticifolia</i> L.	A	1996	2005	NAM	•			Cas.	Grain	Verbenaceae	
<i>Verbena</i> x <i>hybrida</i> Voss (hybrid of complex origin)	D	1888	1888	Cult.	?	?	?	Cas.	Hort.	Verbenaceae	
<i>Verbesina alternifolia</i> (L.) Britton	D	1984	N?	NAM	•			Nat.?	Hort.	Asteraceae	
<i>Verbesina encelioides</i> (Cav.) Benth. et Hook. f. ex A.Gray	A	<1950	1959	NAM	•		•	Cas.	Wool....	Asteraceae	

Taxon	MoI	FiR	ReR	Origin	Fl	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Veronica campylopoda</i> Boiss.	A	1955	1955	AS			●	Cas.	Grain	Scrophulariaceae	
<i>Veronica ceratocarpa</i> C.A.Mey.	A	1854	1874	AS-Te	●			Cas.	Grain?	Scrophulariaceae	
<i>Veronica filiformis</i> Smith	D	1927	N	AS-Te	●	●	●	Nat.	Hort.	Scrophulariaceae	
<i>Veronica glauca</i> Sibth. et Smith	A	1954	1954	E			●	Cas.	Grain	Scrophulariaceae	
<i>Veronica longifolia</i> L.	D	<1830	N	E AS-Te	●		●	Nat.	Hort.	Scrophulariaceae	
<i>Veronica peregrina</i> L.	A	1836	N	AM	●	●	●	Nat.	Nurseries	Scrophulariaceae	
<i>Veronica persica</i> Poiret	A	1824	N	AS-Te	●	●	●	Nat.	Grain....	Scrophulariaceae	
<i>Veronica teucrium</i> L. subsp. <i>teucrium</i>	D	2005	2005	E AS-Te	●			Cas.	Hort.	Scrophulariaceae	
<i>Viburnum rhytidophyllum</i> Hemsl.	D	1990	2005	AS-Te	●	●		Cas.	Hort.	Caprifoliaceae	
<i>Vicia benghalensis</i> L.	A	1933	1966	E AF AS-Te		●	●	Cas.	?	Fabaceae	
<i>Vicia bithynica</i> (L.) L.	A	<1835	2002	E AF AS-Te	●		●	Cas.	Grain....	Fabaceae	
<i>Vicia dumetorum</i> L.	A	<1835	1969	E	●		●	Cas.	?	Fabaceae	
<i>Vicia ervilia</i> (L.) Willd.	A	1824	<1963	E AF AS-Te	●		●	Cas.	Grain?	Fabaceae	
<i>Vicia faba</i> L.	D	1863	2005	?	●	●	●	Cas.	Agric.	Fabaceae	
<i>Vicia grandiflora</i> Scop.	A	1893	1953	E AS-Te	●	●	●	Cas.	Grain....	Fabaceae	
<i>Vicia hybrida</i> L.	A	1876	1913	E AF AS-Te	●		●	Cas.	Grain	Fabaceae	
<i>Vicia lutea</i> L.	A	1873	2004	E AF AS-Te	●	●	●	Cas.	Grain. wool....	Fabaceae	
<i>Vicia melanops</i> Smith	A	1877	2004	E	●		●	Cas.	Grain....	Fabaceae	
<i>Vicia monantha</i> Retz.	A	1913	1913	E AF AS-Te			●	Cas.	?	Fabaceae	
<i>Vicia narbonensis</i> L. subsp. <i>narbonensis</i>	A	1888	1996	E AF AS-Te	●	●	●	Cas.	Grain....	Fabaceae	
<i>Vicia narbonensis</i> L. subsp. serratifolia (Jacq.) Cerati	A	1876	2002	E AF AS-Te	●		●	Cas.	Grain....	Fabaceae	
<i>Vicia pannonica</i> Crantz subsp. <i>pannonica</i>	A	1877	2000	E AF AS-Te	●	●	●	Cas.	Grain. wool....	Fabaceae	
<i>Vicia pannonica</i> Crantz subsp. <i>striata</i> (Bieb.) Nyman	A	1894	1946	E AF AS-Te	●	●	●	Cas.	Grain. wool....	Fabaceae	
<i>Vicia peregrina</i> L.	A	1912	<1914	E AF AS-Te		●	●	Cas.	Wool, grain	Fabaceae	
<i>Vicia sativa</i> L. subsp. <i>sativa</i>	D	1883	1974	?	●	●	●	Cas.	Agric.	Fabaceae	
<i>Vicia sicula</i> (Rafin.) Guss.	A	1920	1920	E	●			Cas.	Grain?	Fabaceae	
<i>Vicia sylvatica</i> L.	A	1886	1886	E AS-Te		●		Cas.	?	Fabaceae	
<i>Vicia villosa</i> Roth subsp. eriocarpa (Hausskn.) P.W.Ball	A	1877	1934	E AS-Te	●		●	Cas.	Grain?	Fabaceae	<i>Vicia eriocarpa</i> (Hausskn.) Halácsy
<i>Vicia villosa</i> Roth subsp. <i>varia</i> (Host) Corb.	A	1867	2005	E AF AS-Te	●	●	●	Cas.	Grain. wool....	Fabaceae	<i>Vicia dasycarpa</i> Ten.
<i>Vicia villosa</i> Roth subsp. <i>villosa</i>	A	1864	N	E AF AS-Te	●	●	●	Nat.	Grain. wool....	Fabaceae	
<i>Vigna radiata</i> (L.) Wilczek	D	1995	2003	AS-Te	●			Cas.	Agric.	Fabaceae	
<i>Vinca major</i> L.	D	<1835	N	E AF AS-Te	●	●	●	Nat.	Hort.	Apocynaceae	
<i>Vincetoxicum nigrum</i> (L.) Moench	D	1877	1950	E	●		●	Cas.	Hort.	Asclepiadaceae	
<i>Vincetoxicum rossicum</i> (Kleopow) Barbar.	D	1965	1965	E AS-Te	●			Cas.	Hort.	Asclepiadaceae	
<i>Viola cornuta</i> L.	D	<1835	1913	E			●	Cas.	Hort.	Violaceae	

Taxon	MoI	FiR	ReR	Origin	F1	Br	Wa	DN	Means intr.	Family	Synonym/Remark
<i>Viola x wittrockiana</i> Gams ex Kappert (hybrid of complex origin)	D	1935	2005	Cult.	●		●	Cas.	Hort.	Violaceae	
<i>Vitis vinifera</i> L.	D	1869	2005	?	●	●	●	Cas.	Agric.	Vitaceae	
<i>Vulpia alopecuroides</i> (Schousb.) Dum.	A	1948	1977	E AF		●	●	Cas.	Grain?	Poaceae	
<i>Vulpia ciliata</i> Dum. subsp. <i>ciliata</i>	A	1948	2002	E AF AS-Te	●		●	Cas.?	Wool, ore	Poaceae	
<i>Vulpia eriolepis</i> (Desv.) C.Blom	A	1910	1910	SAM			●	Cas.	Wool	Poaceae	
<i>Vulpia geniculata</i> (L.) Link	A	1886	2005	E AF	●		●	Cas.	Grain?	Poaceae	
<i>Vulpia ligustica</i> (All.) Link	A	1871	1923	E AF AS-Te	●	●		Cas.	?	Poaceae	
<i>Vulpia myuros</i> (L.) C.C.Gmel. var. <i>megalura</i> (Nutt.) Auquier	A	1877	1979	E	●		●	Cas.	Wool,...	Poaceae	
<i>Vulpia octoflora</i> (Walter) Rydberg	A	1889	1889	AM			●	Cas.	?	Poaceae	
Weigelia floribunda (Siebold et Zucc.) K.Koch	D	1991	2004	AS-Te	●		●	Cas.	Hort.	Caprifoliaceae	
<i>Xanthium ambrosioides</i> Hook. et Arnott	A	1906	1907	SAM			●	Cas.	Wool	Asteraceae	
<i>Xanthium orientale</i> L. s.l.	A	1824	N	AM	●	●	●	Nat.	Wool, grain	Asteraceae	Incl. <i>X. albinum</i> (Widder) H.Scholz, <i>X. orientale</i> s.str., <i>X. saccharatum</i> Wallr.
<i>Xanthium spinosum</i> L.	A	1848	1997	SAM	●	●	●	Cas.	Wool, grain	Asteraceae	
<i>Xanthium strumarium</i> L.	A	<1800	2005	AM	●		●	Cas.	Wool, grain	Asteraceae	
<i>Yucca filamentosa</i> L.	D	2001	2005	NAM	●			Cas.	Hort.	Agavaceae	
<i>Yucca gloriosa</i> L.	D	2001	2005	NAM	●		●	Cas.	Hort.	Agavaceae	
<i>Zea mays</i> L.	D	1923	Ann.	SAM	●	●	●	Cas.	Agric.	Poaceae	
<i>Zinnia angustifolia</i> Humb., Bonpl. et Kunth var. <i>angustifolia</i>	D	1948	1950	NAM		●		Cas.	Hort.	Asteraceae	<i>Zinnia linearis</i> Benth.

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