

BANKS & SOLANDER BOTANICAL COLLECTIONS TAI RAWHITI

Ewen Cameron, Botanist, Auckland War Memorial Museum

In 1769 Garden In Florilegium

1. TAONEROA (POVERTY BAY)

FERNS

39: *Pteridium esculentum* (G.Forst.) Cockayne

PTERIS ESCULENTA Ts 220; MS 1533

Pteris esculenta G.Forst.

(1786)

Fig.pict. (BF 568)

Maori - e anuhe [aruhe]

"the root is edible after being roasted over a fire and finally bruised with a mallet, serving the natives in place of bread. We have heard the roasted root called he taura by the New Zealanders."

Hab. - extremely abundant on the hills - 1,2,3,4,5,6,7

AK 114337, 189113; WELT P9484

ANGIOSPERMS

a. (a) Dicotyledons

Aizoaceae



50: *Tetragonia tetragonioides* (Pallas) Kuntze Florilegium

TETRAGONIA CORNUTA Ts 115; MS 687

Tetragonia cornuta Gaertn. (1791)

Fig.pict. (BF 532)

Hab. - in sand and along the seashore - 1,2,3,4,6,7

AK 100180-100181, 184590; WELT 63687

Apiaceae

53: *Apium prostratum* Labill. ex Vent. var. *prostratum*

APIUM DECUMBENS α SAPIDUM Ts 71; MS 379

Fig.pict. (BF 460)

Maori - tutagavai, he tutaiga [tutae-koau]
Hab. - by the seashore, abundant throughout - 1-8
AK 189279; WELT 63736

57: *Hydrocotyle heteromeria* A.Rich.
HYDROCOTYLE GLABRATA Ts 64; MS 338
Fig.pict.
Maori - he totara, tara
Hab. - damp shady places - 1,2,3,4,7
AK 104432; WELT 63735



60: *Scandia rosifolia* (Hook.) Dawson **Florilegium**
LIGUSTICUM AROMATICUM Ts 70; MS 360
Ligusticum aromaticum Hook.f. (1864)
Fig.pict. (BF 461)
Maori - koerik [koheriki]
Hab. - on forest margins and in meadows - 1,2,3,4,6
AK 189114; WELT 63739

Asteraceae



70: *Brachyglottis repanda* J.R.Forst. & G.Forst. **Florilegium**
CINERARIA DEALBATA Ts 154; MS 1244
Fig.pict. (BF 487)

Maori - harangiola [rangiora]
Hab. - 1,2,3,4
AK 107053, 297938; WELT 63841

73: *Euchiton involucratum* (G.Forst.) Holub
GNAPHALIUM INVOLUCRATUM Ts 144; MS 1200
Gnaphalium involucratum G.Forst. (1786)
Hab. - 1,2,3,4,7
AK 106986 (*E. sphaericus*); WELT 63824 (*E. involucratum*)

78: *Lagenophera pumila* (G.Forst.) Cheeseman
BELLIS GEUM Ts 156; MS 1248
Fig.pict. (BF 483)
Hab. - on hills and in dry flat areas - 1,2,3,4,6,8
WELT 63830

85: *Ozothamnus leptophyllus* (G.Forst.) Breitw. & J.M.Ward
CALEA CINERA Ts 142; MS 1179
Fig.pict. (BF 484)
Maori - koroggi, tauwhenni koroggi [tauhinu]
Hab. - sandy flats - 1,3,4,6,7
AK 102896, 121049; WELT 63826-63827

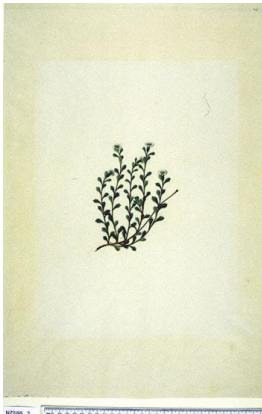
86: *Pseudognaphalium luteoalbum* (L.) Hillard & B.L.Burt
GNAPHALIUM CANDIDUM Ts 144; MS 1196
Maori - pugetea [puketea]
Hab. - sandy places - 1,2,3,4,7
AK 106987, 297939; WELT 63825



88: *Senecio glomeratus* Poir. **Florilegium**
SENECIO PLEBIJUS Ts 147; MS 1215
Fig.pict. (BF 491)
Maori - te etmogo, maga?
Hab. - 1,2,3,4
AK 107063; WELT 63843



- 91: *Senecio quadridentatus* Labill. **Florilegium**
SENECIO ANGUSTIFOLIUS Ts 147; MS 1215
Fig.pict. (BF 492)
Maori - pahohoraga?
Hab. - 1,2,3,4
AK 107066; WELT 63842(a,b)



- 97: *Vittadinia australis* A.Rich. **Florilegium**
ASTER HUMILIS Ts 150; MS 1225
Fig.pict. (BF 481)
Hab. - sunny places - 1,2,4,6
AK 106909

Brassicaceae



- 101: *Cardamine debilis* Bank ex DC. (1821) **Florilegium**

CARDAMINE DEBILIS Ts 131; MS 915

Fig.pict. (BF 408)

Hab. - damp shady places - 1,2,3,4

AK 100053-100054, 184766; CHR 450696; WELT 6395



103: *Lepidium oleraceum* Sparrm. **Florilegium**

LEPIDIUM FRONDOSUM Ts 129; MS 899

Fig.pict. (BF 410)

Maori - he nau, whennaugh [nau]

Hab. - abundant on the seashore - 1,2,3,4,5,6,7

WELT 63697



105: *Rorippa palustris* (L.) Besser **Florilegium**

SYMBRIUM PILOSUM Ts 132; MS 917

Fig.pict. (BF 407)

Maori - pannapanna [panapana]

Hab. - damp places - 1,2,3,4

AK 100057-100058; WELT 63693(a,b)

Campanulaceae

107: **Wahlenbergia violacea** J.A.Petterson

CAMPANULA POLYMORPHA Ts 52; MS 232

Hab. - in Novae Zelandiae - as below

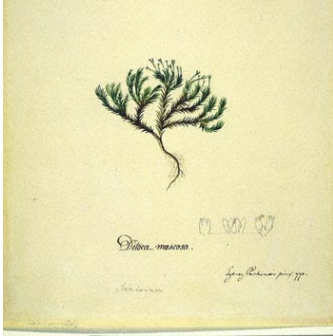
α TENELLA - Fig.pict. (BF 499 as *W. marginata*) (= *W. violacea**)

β JUNCEA - Fig.pict. (= *W. ramosa**)

Hab. - 1,2,3,4,6,7

WELT 63750 (α), 63752 (β)

Caryophyllaceae



109: *Scleranthus biflorus* (J.R.Forst. & G.Forst.) Hook.f. **Florilegium**

DITOCA MUSCOSA Ts 12; MS 40

Ditoca muscosa Gaertn. (1791) *nom. illeg.*

Fig.pict. (BF 528)

Hab. rocky hills - 1,2,3,4,7

AK 100164

Chenopodiaceae



114: *Sarcocornia quinqueflora* (Bunge ex Ung.-Sternb.) A.J.Scott subsp. *Quinqueflora*

Florilegium

SALICORNIA AUSTRALIS Ts 1; MS 5

Salicornia australis Sol. ex Benth. (1870)

Fig.pict. (BF 529)

Maori - eule eule [ure ure]

Hab. - abundant near the seashore - 1,3,4,5,6,7

Convolvulaceae



- 117: *Calystegia sepium* subsp. *roseate* Brummitt **Florilegium**
CONVOLVULUS LENTUS Ts 49; MS 218
Fig.pict. (BF 513)
Maori - poohuwhe [pohue]
Hab. - 1,2,3,4,6
?WELT 63758 (a,b)



- 119: *Calystegia tuguriorum* (G.Forst.) Hook.f. **Florilegium**
CONVOLVULUS VERSATILIS Ts 49; MS 218
CONVOLVULUS LACTEUS Ts 50; MS 220
Fig.pict. (BF 512, 514)
Hab. - scrub and forest margins - 1,2,3,5,6
AK 107426-107432; WELT 63757

Coriariaceae

- 122: *Coriaria arborea* R.Linds.
CORIARIA HERMOPHRODITA Ts 198; MS 1467
Fig.pict.
Maori - he tutu [tutu]
Hab. - abundant - 1,2,3,4,5,6,7
AK 190030; WELT 63809

Corynocarpaceae



123: *Corynocarpus laevigatus* J.R.Forst. & G.Forst. **Florilegium**

MERRETIA LUCIDA Ts 57; MS 277

Fig.pict. (BF 427)

Maori - he chalacha [karaka]

Hab. - abundant - 1,2,3,4,6,7

AK 103663; WELT 63810

Crassulaceae

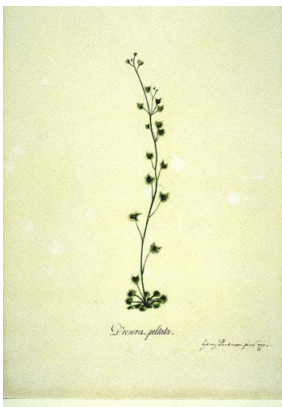
125: *Crassula sieberiana* (Schult. & Schult.f.) A.P.Druce

TILLAEA HUMILIS Ts 43; MS 186

Hab. - flat shady areas in the sun - 1,2,3,4

AK 100306; WELT 63812

Droseraceae



130: *Drosera auriculata* Planch. **Florilegium**

DROSERA PELTATA Ts 77; MS 403

Drosera peltata Thunb. (1797) = different taxon

Fig.pict. (BF 437 as *D. peltata*)

Hab. - on hills and in flat dry areas - 1,2,3,4

AK 50922, 100347; WELT 63815

Fabaceae

- 142: *Carmichaelia australis* R.Br.
GENISTA COMPRESSA Ts 136; MS 998
Fig.pict. (BF 429 as *C. solanderi*)
Maori - e tavau [tawao]
Hab. - sunny places and in forest - 1,2,3,4
AK 102896, 121049; WELT 63794



- 145: *Sophora tetraptera* J.S.Mill. (1780) *Florilegium*
SOPHORA TETRAPTERA Ts 100; MS 533
Fig.pict. (BF 430)
Maori - kowhai
Hab. - 1,2,3,4
AK 103424-103425; WELT 63797

Geraniaceae

- 149: *Geranium retrorsum* DC. (1842)
GERANIUM PATULUM Ts 135; MS 953
Geranium patulum Sol. ex G.Forst. (1786), *nom. nudum* for *G. solanderi*
Hab. - on hills and in flat areas - 1,2,3,4,6
WELT 63787(a,b); BM (type)
- 150: Carolin
GERANIUM PILOSUM Ts 135; MS 953
Geranium pilosum G.Forst. (1786), *nom. nudum*
Fig.pict. (BF 422)
Maori - pugupugu [pukupuku]
Hab. - grass - 1,2,3,4,6
AK 100858, 189111; CHR 450712; WELT 63786(a,b)



151: *Pelargonium inodorum* Willd. **Florilegium**

GERANIUM AMENUM Ts 134; MS 952

Fig.pict. (BF 423)

Hab. - flat grassy areas in sun - 1,2,3,4,6

AK 100857; WELT 63789

Gesneriaceae

152: *Rhabdothamnus solandri* A.Cunn.

COLUMNEA SCABROSA Ts 125; MS 891

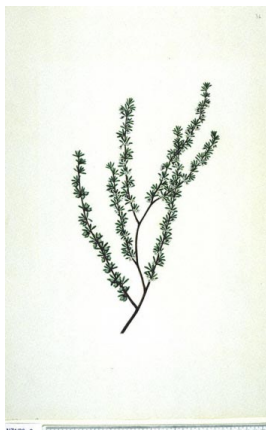
Columnea scabrosa Sol ex DC. (1845), = *R. solandri* A.Cunn. (1838)

Fig.pict. (BF 523)

Hab. - in forest near Opuragi (4), especially beside the Mangrove [Purangi] River

AK 108115-108116; WELT 63771

Malvaceae



167: *Plagianthus divaricatus* J.R.Forst & G.Forst. **Florilegium**

CONNARUS FASCICULARIS Ts 133; MS 944

Fig.pict. (BF 428)

Maori - he houwhi [houhi]

Hab. - sunny places beside the seashore - 1,3,4,7

AK 102671-102674, 184498; CHR 450693(2); WELT 63781(a,b), 78886

Myoporaceae



- 172: *Myoporum laetum* G.Forst. **Florilegium**
MYOPORUM LITTORALE Ts 128; MS 895
Fig.pict. (BF 524)
Maori - he ngaio [ngaio]
Hab. - very abundant by the seashore - 1,2,3,4,6,7
AK 37239; WELT 63770

Myrtaceae

- 174: **Kunzea aff. ericoides** (A.Rich.) J.Thompson
PHILADELPHUS PARVIFLORUS var. AROMATICUS Ts 113a; MS 672
further subdivided -
 GRANDIFLORUS and PARVIFLORUS
Fig.pict. (BF 444 as *Leptospermum ericoides*)
Maori - he igato [kahikatoa]
Hab. - abundant throughout - 1-8
AK 102427-102428; WELT 63726-63728
- 175: **Leptospermum scoparium** J.R.Forst. & G.Forst.
PHILADELPHUS PARVIFLORUS var. RIGIDUS Ts 113a; MS 672
further subdivided -
 LINIIFOLIUS and MYRTIFOLIUS
Leptospermum scoparium var. *myrtifolium* **Hook.f.** (1853) – currently an unrecognised
 taxon
Fig.pict.
Maori – manuka [manuka]
Hab. - abundant throughout - 1-8
AK 102432-102434, 184497; CHR 450695(2), 450747; WELT 63724-63725

Onagraceae

- 186: *Epilobium billardierianum* subsp. *cinereum* (A.Rich.) P.H.Raven & Engelhorn
EPILOBIUM JUNCEUM var. CAMPESTRE Ts 86; MS 494
Epilobium junceum G.Forst. (1786) *nom. nudum*
Maori - he bugatea [pukatea]

Hab. - on hills and in flat places - 1,2,3,4,7
AK 101101

- 187: *Epilobium hirtigerum* A.Cunn.
EPILOBIUM JUNCEUM **var.** LIMOSUM Ts 86; MS 494
Hab. - damp places - 1,2,3,4,7
AK 101100

Oxalidaceae

- 192: *Oxalis exilis* A.Cunn.
OXALIS FLACCIDA **var.** PUSILLA
Hab. - 1,3,4
WELT 63785(a,b)
- 193: *Oxalis rubens* Haw.
OXALIS FLACCIDA Ts 106; MS 623
Fig.pict.
Hab. - 1,2,3,4,6
AK 100900; WELT 63784(a,b)

Piperaceae

- 198: *Piper excelsum* Forst.f. subsp. *excelsum*
PIPER MYRISTICUM Ts 14; MS 41
Fig.pict. (BF 536)
Maori - ta kawa, kawa kawa, he gawa gawa
Hab. - in forest throughout - 1,2,3,4,5,6,7
AK 130012

Polygonaceae



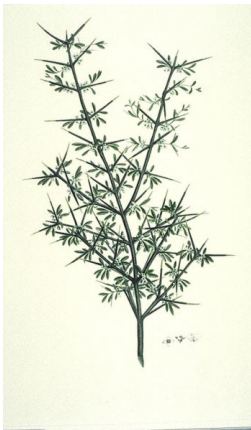
- 206: *Muehlenbeckia complexa* (A.Cunn.) *Florilegium*
POLYGONUM HETEROPHYLLUM Ts 94; MS 523
Fig.pict. (BF 534)
Hab. - among bushes - 1,3,4
AK 50926, 100196-100198; WELT 63677

Ranunculaceae



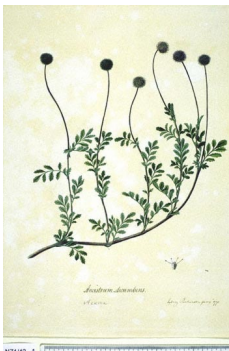
- 211: *Clematis forsteri* J.F.Gmel. *Florilegium*
CLEMATIS ODORATA Ts 120; MS 765
Fig.Pict. (BF 402)
Maori - poohuwhe, poanna [pohue, poanganga]
Hab. - scrub - 1,2,3
AK 209874; WELT 63692

Rhamnaceae



- 215: *Discaria toumatou* Raoul *Florilegium*
RHAMNUS AXILLARIS Ts 58; MS 279
Fig.pict. (BF 426)
Maori - tumatakurhu [tumatakuru]
Hab. - flat areas at Te Oneroa (1); and on hills in the island of Motuhara
(Motuara) in Tootaranui (7)
AK 104093; WELT 63801

Rosaceae



217: (J.R.Forst. & G.Forst.) J.B.Armstr. **Florilegium**

ANCISTRUM DECUMBENS Ts 6; MS 12

Ancistrum decumbens Gaertn. (1788)

Fig.pict. (BF 434)

Maori - piripiri

Hab. - grassy places - 1,2,3,4,6,7

Rubiaceae



219: **Coprosma acerosa** A.Cunn. (1839) **Florilegium**

PELAPHIA ACEROSA Ts 192; MS 1451

Fig.pict. (BF 474)

Hab. - on flat areas - 1,3,4

AK 106219-106220, 184487; CHR 450755; WELT 63855, 78855



224: **Coprosma robusta** Raoul **Florilegium**

PELAPHIA LAURIFOLIA Ts 190; MS 1451

Fig.pict. (BF 470)

Maori - he charamugh [karamu]

Hab. - abundant - 1,2,3,4,5,6,7

AK 36907-36908, 184583; CHR 450746; WELT 63861, 78858

Scrophulariaceae

135: *Hebe stricta* (Benth.) L.B.Moore var. *stricta*

VERONICA GLABELLA Ts 8; MS 14

VERONICA SALICIFOLIA Ts 9; MS 14
Veronica salicifolia G.Forst. (1786) = different taxon
Fig.pict. (BF 520 as *H. salicifolia*)
Hab. - sunny places - 1,2,3,4,6,7
AK 107330

Solanaceae



236: *Solanum aviculare* G.Forst. [and *S. laciniatum* Aiton from Baylis 1954] **Florilegium**
SOLANUM LANCEUM Ts 53; MS 264
Fig.pict. (BF 517) [as *S. aviculare*]
Maori - poroporo
Hab. - in scrub and beside the (native's) houses - 1,2,3,4,6,7
AK 107211-107212; WELT 63761(a,b) (= all *S. aviculare*)



237: *Solanum nodiflorum* Jacq. and *S. nigrum* L. **Florilegium**
SOLANUM NIGRUM L., *Sp. Pl.* Ts 53; MS 266
Fig.pict.
Hab. - 1,2,3,4,6,7
AK 107210, WELT xxxx (= *S. nigrum*?) [cf. Baylis re B&S specimens]

Thymelaeaceae

239: ***Pimelea prostrata*** (J.R.Forst. & G.Forst.) Willd.
PIMELEA LAEVIGATA Ts 3; MS 10
Pimelea laevigata Gaertn. (1788)

Fig.pict. (BF 542)

Hab. - open places - 1,2,3,4,6,7

[see Burrows letter 10Aug08, same as a collection in Stockholm?]

Violaceae

248: *Melicytus ramiflorus* J.R.Forst. & G.Forst. subsp. *ramiflorus*

TACHITES UMBELLULIFERA Ts 196; MS 1458

Fig.pict. (BF 411)

Maori – e'mahoe, hinahina [mahoe]

Hab. - throughout - 1,2,3,4,5,6,7

AK 100253-100255, 184587; CHR 450762(2); WELT 63714-63716, 78875

(b) Monocotyledons

Liliaceae

287: *Arthropodium cirratum* (G.Forst) R.Br.

ANTHERICUM LATIFOLIUM Ts 78; MS 445

Fig.pict. (BF 558)

Maori - he ringaringa, he ringari [rengarenga]

Hab. - throughout

AK 108734-108735, 184751; CHR 450764 (2); **WELT?**

Lomandraceae

292: *Cordyline australis* (G.Forst.) Endl.

DRACOENA AUSTRALIS Ts 79; MS 451

Dracaena australis G.Forst. (1786)

Maori - he ti [ti]

Hab. - in New Zealand

AK 108365-108366; CHR 450760; WELT 63887

Orchidaceae

296: *Microtis unifolia* (G.Forst.) Rchb.f.

OPHRYS PORRIFOLIA Ts 163; MS 1342

Epipactis porrifolia Sw. (1800)

Fig.pict. (BF 554)

Hab. - grassy hills - 1,2,3,4,6,7

AK 108424; WELT 63869

Phormiaceae

302: *Phormium cookianum* Le Jol.

CLAMIDIA TENACISSIMA var. PALLENS Ts 881; MS 462

Fig.pict.

Maori - haragog, koraina [harakeke, korari]
Hab. - throughout - in all types of soil
AK 108662; WELT 63874

- 303: *Phormium tenax* J.R.Forst. & G.Forst.
CLAMIDIA TENACISSIMA var. SANGUINEA Ts 81; MS 462
Fig.pic. (from Diment et al. 1987)
Hab. - as 236 - extremely useful (to the natives)
WELT 63873

Poaceae

- 306: *Austroderia toetoe* (Zotov) N.P.Barker & H.P.Linder
ARUNDO SERICEA Ts 35; MS 120
Hab. - 1,3
AK 110395-110396; WELT **63893** – check id
- 310: *Dichelachne crinita* (L.f.) Hook.f.
AGROSTIS BARBATA Ts 28; MS 91
Maori - patidi [patiti]
Hab. - sandy places - 1,4,6,7
AK 110014-110015; WELT 63936
- 315: *Lachnagrostis billardierei* (R.Br.) Trin.
AGROSTIS DIFFUSA Ts 30; MS 92
Hab. - in sandy places - 1,2,3,4,5,6,7
AK 110201; WELT 63931, 63941
- 317: *Lachnagrostis littoralis* (Hack.) Edgar subsp. *littoralis* ?
AGROSTIS VARIABILIS var. β TENELLA Ts 29; MS 92
Hab. - on sandy flats - 1,3,4,6,7
No specimens could be traced in New Zealand or at BM with this Solander name; it was also omitted by Connor & Edgar (2002)
- 321: *Poa billardierei* (Spreng.) St.-Yves
FESTUCA JUNCEA Ts 33; MS 111
Hab. - sandy seashore - 1,2,3,4,6
AK 110199-110200; WELT 63924
- 319: *Spinifex sericeus* R.Br.
IXALUM INERME Ts 205; MS 1489
Ixalum inerme G.Forst. (1786)
Hab. - in sand along the seashore - 1,2,3,4,6
AK 109896-109897; CHR 450732; WELT 63896
- 326: *Trisetum arduanum* Edgar & A.P.Druce
AVENA FLAVESCENS L., *Sp. Pl.* Ts 33a; MS 118

Hab. - sand hills - 1,2,3,4,6,7
AK 110272; WELT 63935

Restionaceae

328: *Apodasmia similis* (Edgar) B.G.Briggs & L.A.S.Johnson
RESTIO TENAX Ts 183; MS 1450
Fig.pict.
Hab. - sandy seashore - 1,3,4
AK 109357; WELT 63878-63879

Cultivated species recorded generally for NZ:

121: *Ipomoea batatas* (L.) Lam.

126: *Lagenaria siceraria* (Molina) Standl.

[On Anne Salmond's list not on mine for this locality:



Coprosma lucida Florilegium



Sophora microphylla Florilegium



Cassinia leptophylla Florilegium



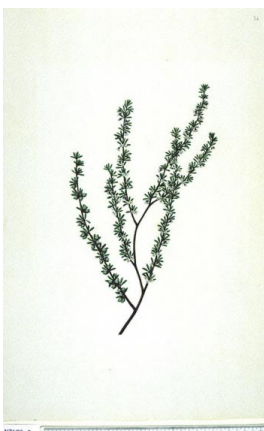
Geranium solanderi Florilegium



Lagenifera pumila Florilegium



Carmichaelia Solandri Florilegium



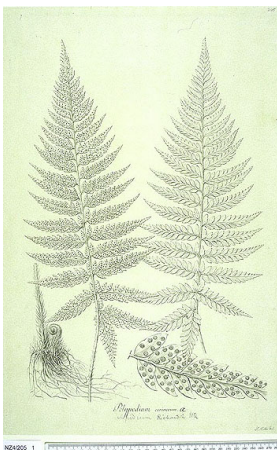
Plagianthus Divaricatus Florilegium

2. ANAURA BAY (TEGADOO)

Ferns

Blechnum novae-zelandiae

Pteridium esculentum



NZ4205 1

Polystichum richardii cf. WELT P9458-9459 **Florilegium**

Microsorium scandens

Pellaea rotundifolia

Pteris tremula

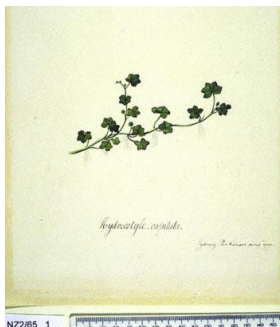
Dicotyledons

Tetragonia tetragonoides

Apium prostratum subsp. *prostratum* var. *filiforme*

Daucus glochidiatus

Hydrocotyle heteromeria



Hydrocotyle moschata **Florilegium**



Hydrocotyle novae-zelandiae **Florilegium**

Scandia rosifolia **Florilegium**

Brachyglottis repanda **Florilegium**

Euchiton involucratus

Lagenophora pumila

Pseudognaphalium luteoalbum

Senecio banksii

Senecio glomeratus **Florilegium**

Senecio quadridentatus **Florilegium**

Senecio rufiglandulosus **Florilegium**

Sigesbeckia orientalis

Sonchus kirkii

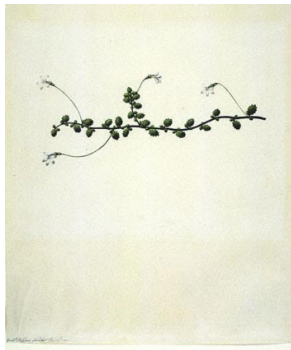
Vittadinia australis Florilegium

Myosotis forsteri

Cardamine debilis Florilegium

Lepidium oleraceum Florilegium

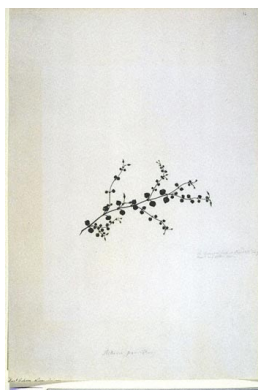
Rorippa palustris Florilegium



Lobelia angulate Florilegium

Wahlenbergia violacea

Scleranthus biflorus Florilegium



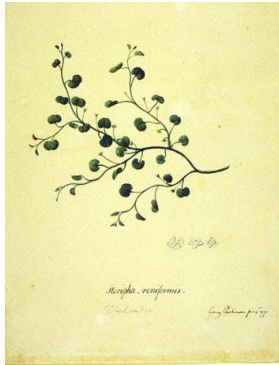
Stellaria parviflora Florilegium

Calystegia sepium subsp. *Roseate* Florilegium



Calystegia soldanella Florilegium
Calystegia soldanella × *C. tuguriorum*

Calystegia tuguriorum Florilegium



Dichondra repens Florilegium

Coriaria arborea Florilegium

Crassula sieberiana

Sicyos mawhai

Drosera auriculata

Carmichaelia australis



Clianthus puniceus Florilegium

Sophora tetraptera Florilegium

Geranium retrorsum

Geranium solanderi Florilegium

Pelargonium inodorum Florilegium



Griselinia lucida Florilegium

Haloragis erecta

Linum monogynum

Geniostoma ligustrifolium



Entelea arborescens Florilegium



Hedycarya arborea Florilegium

Kunzea robusta

Leptospermum scoparium

Epilobium billardierianum subsp. *Cinereum*

Epilobium hirtigerum



Epilobium nummulariifolium Florilegium



Fuchsia excorticata Florilegium



Euphrasia cuneata Florilegium

Oxalis rubens

Piper excelsum

Veronica stricta var. *stricta*



Muehlenbeckia australis



Rumex flexuosus Florilegium

Clematis forsteri Florilegium

Ranunculus reflexus

Acaena anserinifolia Florilegium

Coprosma robusta Florilegium

Myoporum laetum Florilegium

Solanum aviculare Florilegium

Solanum americanum

Pimelea prostrate

Melicytus ramiflorus

Monocotyledons

Arthropodium cirratum

Cordyline australis ? – no locality given

Astelia banksii & *A. solandri* – mixed collections

Carex dissita

Carex flagellifera

Carex forsteri

Carex lessoniana

Carex maorica
Carex testacea
Phormium cookianum [throughout]
Phormium tenax
Juncus planifolius
Microtis unifolia
Echinopogon ovatus
Hierochloa redolens
Lachnagrostis billardierei
Oplismenus hirtellus subsp. *Imbecillis*
Poa billardierei
Rytidosperma gracile & *R. Unarede*
Spinifex sericeus
Trisetum arduanum

[On Anne Salmond's list not on mine for this locality:



Daucus Glochidiatus Florilegium
Carmichaelia Solandri Florilegium
Corynocarpus laevigatus Florilegium
Coprosma lucida Florilegium
Lagenifera Pumila Florilegium
Muehlenbeckia complexa Florilegium
Drosera peltata Florilegium
Solanum nodiflorum Florilegium
Sophora Microphylla Florilegium
Tetragonia tetragonioides Florilegium
Entelea Arborescens Florilegium
Dichondra Repens Florilegium



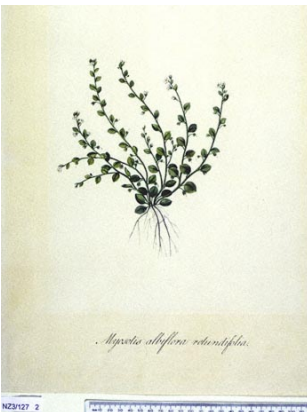
Apuleia ligustrinum
NZ1125 2
Geniostoma Rupestre Florilegium



Hydrocotyle americana
NZ2164C 1
Hydrocotyle Americana Florilegium

Lobelia angulata Florilegium

Muehlenbeckia Australis Florilegium



Myosotis alpestris reticulata
NZ2127 2
Myosotis Spathulata Florilegium



Phymatosorus Scandans Florilegium

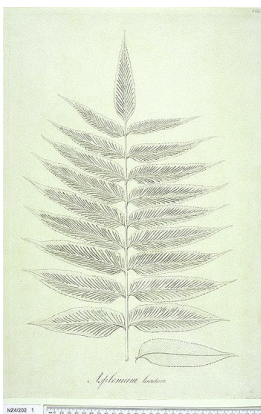


Ranunculus Hirtus Florilegium
Stellaria Parviflora Florilegium

3. TOLAGA BAY

Ferns

Asplenium flaccidum



Asplenium oblongifolium Florilegium

Asplenium polyodon

Blechnum chambersii

Blechnum filiforme

Doodia australis

Pteridium esculentum

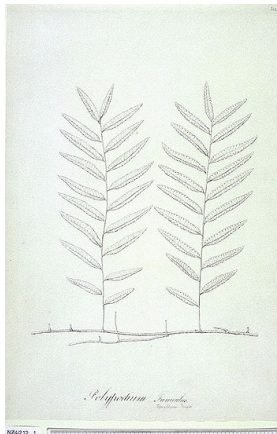
Lastreopsis hispida

Polystichum richardii cf. WELT P9458-9459

Hymenophyllum demissum

Microsorium scandens

Pteris macilenta



Arthropteris tenella Florilegium



Pneumatopteris pennigera Florilegium

Dicotyledons

Disphyma australe

Tetragonia tetragonoides

Salicornia quinqueflora subsp. *quinqueflora*

Apium prostratum subsp. *prostratum* var. *filiforme*

Daucus glochidiatus

Hydrocotyle heteromeria

Hydrocotyle moschata Florilegium

Hydrocotyle novae-zelandiae Florilegium

Scandia rosifolia



Pseudopanax arboreus Florilegium



Pseudopanax lessonii Florilegium



Schefflera digitate Florilegium

Brachyglottis perdicioides

Brachyglottis repanda Florilegium

Euchiton involucratus

Euchiton sphaericus

Lagenophora pumila

Ozothamnus leptophyllus

Pseudognaphalium luteoalbum

Senecio banksii

Senecio glomeratus



Senecio lautus Florilegium



Senecio minimus Florilegium

Senecio quadridentatus Florilegium



Senecio rufigliandulosus Florilegium



Senecio scaberulus Florilegium

Sigesbeckia orientalis

Sonchus kirkii

Taraxacum magellanicum

Myosotis forsteri

Cardamine debilis Florilegium

Lepidium oleraceum Florilegium

Rorippa divaricata

Rorippa palustris Florilegium

Lobelia anceps

Lobelia angulate Florilegium

Wahlenbergia violacea

Scleranthus biflorus

Calystegia sepium subsp. *Roseate* Florilegium

Calystegia soldanella

Calystegia soldanella × *C. tuguriorum* Florilegium

Coriaria arborea

Corynocarpus laevigatus Florilegium

Crassula sieberiana

Sicyos mawhai

Drosera auriculata

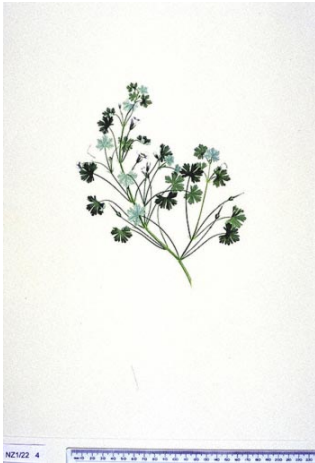


Aristolelia serrata Florilegium

Carmichaelia australis

Clianthus puniceus

Sophora tetraptera Florilegium



Geranium potentilloides Florilegium

Geranium retrorsum

Geranium solanderi Florilegium

Pelargonium inodorum Florilegium

Griselinia lucida Florilegium

Haloragis erecta



Vitex lucens Florilegium

Linum monogynum

Geniostoma ligustrifolium

Ileostylus micranthus

Entelea arborescens

Plagianthus divaricatus Florilegium



Dysoxylum spectabile Florilegium

Hedycarya arborea Florilegium

Streblus banksii

Kunzea robusta

Leptospermum scoparium

Metrosideros perforata

Epilobium billardierianum subsp. *Cinereum*

Epilobium hirtigerum

Epilobium nummulariifolium

Fuchsia excorticata

Euphrasia cuneata

Oxalis exilis

Oxalis rubens

Peperomia tetraphylla

Peperomia urvilleana

Piper excelsum

Pittosporum cornifolium



Pittosporum ralphii Florilegium



NZ3111 2
Pittosporum tenuifolium Florilegium



NZ3134 1
Gratiola sexdentata Florilegium

Plantago spathulata

Veronica macrocarpa var. *Macrocarpa*

Veronica stricta var. *stricta*

Muehlenbeckia australis

Muehlenbeckia complexa Florilegium

Rumex flexuosus Florilegium



NZ3122 2
Myrsine australis Florilegium

Samolus repens



Knightsia excelsa Florilegium

Clematis forsteri Florilegium

Ranunculus reflexus

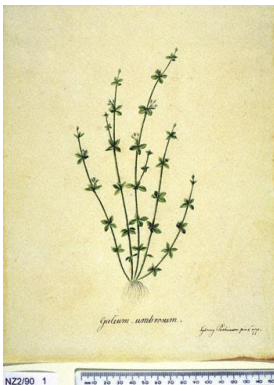
Acaena anserinifolia

Coprosma acerosa Florilegium

Coprosma lucida Florilegium

Coprosma robusta Florilegium

Coprosma spathulata Florilegium



Galium propinquum Florilegium



Melicope ternate Florilegium

Alectryon excelsus

Myoporum laetum Florilegium

Solanum aviculare Florilegium

Solanum americanum

Pimelea longifolia

Pimelea prostrate

Pimelea villosa



Parietaria debilis

Urtica sykesii

Melicytus ramiflorus

Monocotyledons

Rhopalostylis sapida

Arthropodium cirratum

Cordyline australis ? – no locality given

Astelia banksii & *A. solandri* – mixed collections

Carex dissita

Carex forsteri

Cyperus ustulatus

Eleocharis acuta

Ficinia spiralis

Isolepis cernua

Lepidosperma austral

Machaerina sinclairii

Machaerina tenax

Morelotia affinis

Schoenoplectus pungens

Phormium cookianum [throughout]

Phormium tenax

Libertia grandiflora Florilegium

Juncus australis

Juncus planifolius

Luzula banksiana var. *banksiana*

Microtis unifolia



Thelymitra longifolia Florilegium

Freycinetia banksii

Austroderia fulvida

Austroderia toetoe

Chionochloa flavicans f. *Flavicans*

Echinopogon ovatus

Hierochloa redolens

Lachnagrostis billardierei

Lachnagrostis littoralis ?

Oplismenus hirtellus subsp. *Imbecillis*

Poa billardierei

Spinifex sericeus

Trisetum arduanum

Apodasmia similis

Ripogonum scandens

[On Anne Salmond's list not on mine for this locality:



Coprosma Repens Florilegium

Carmichaelia Solandri Florilegium
Cassinia Leptophylla Florilegium
Drosera peltata Florilegium
Scandia rosifolia Florilegium
Lagenifera Pumila Florilegium
Sophora Microphylla Florilegium
Tetragonia Tetragonoides Florilegium
Clianthus puniceus Florilegium
Acaena anserinifolia Florilegium
Geniostoma Rupestre Florilegium
Hydrocotyle Americana Florilegium
Vittadinia australis Florilegium
Myosotis Spathulata Florilegium
Phymatosorus Scandens Florilegium
Ranunculus Hirtus Florilegium



Desmoschoenus Spiralis Florilegium



Dodonaea Angustifolia Florilegium

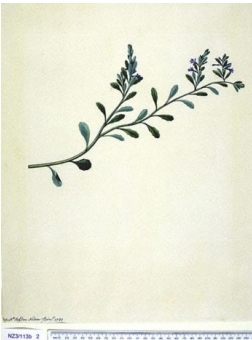
Gratiola Sexdentata Florilegium



Hebe Macrocarpa Florilegium



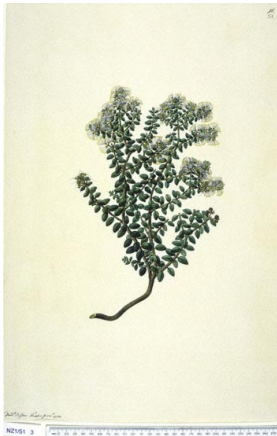
Hebe Salicifolia Florilegium



Lobelia Alata Florilegium



Libertia Iridaceae Florilegium



Metrosideros Perforata Florilegium

Parietaria Debilis Florilegium



Pimelea Arenaria Florilegium



Plantago Raoulii Florilegium

Pseudopanax Arboreus Florilegium

Pseudopanax Lessonii Florilegium



Rorippa Gigantea Florilegium



Streblus Heterophyllus Florilegium

Calystegia tuguriorum Florilegium

A Royal Society Appointment with Venus in 1769: The Voyage of Cook and Banks in the 'Endeavour' in 1768-1771 and Its Botanical Results; Author(s): William T. Stearn *Notes and Records of the Royal Society of London*, Vol. 24, No. 1 (Jun., 1969), pp. 64-90

Banks acquired a good working library of natural history books, 'all kinds of nets, trawls, drags and hooks for coral fishing . . . many cases of bottles with ground stoppers of several sizes, to preserve animals in spirits', stocks of paper for drying and storing plant specimens, and so on, and engaged two artists, A. Buchan and Sidney Parkinson (4, 17, 25, 33, 35), and a naturalist secretary, H. Sporing. Then Solander, infected by Banks's enthusiasm, volunteered to come himself (21). Banks was a gifted amateur, but he knew his technical deficiencies; Solander, well trained in Linnaean methods of description and classification, erudite, methodical and industrious, easy-going and likeable, would obviously be an ideal companion. Naturally Banks at once accepted his offer. Cook, who cannot have been pleased at the demands upon the limited space of his ship that these extra nine persons and their equipment and stores would make, nevertheless found Banks and Solander, mentioned in his journal as 'the gentlemen', both agreeable and instructive company; each man had a just respect for the abilities of the other.

Having furnished the Endeavour with wood and water at Success Bay, at the southern end of Le Maire Strait, on 21 January 1769 Cook weighed anchor and made for Cape Horn. It was to be many weeks before Banks and Solander had another opportunity to botanize ashore, but meanwhile they now had plenty to do. The wind, according to Banks, was foul, 'moderate breezes', then 'fresh gales with showers of rain', according to Cook; however, so Banks relates, 'our keeping boxes being full of new plants we little regarded any wind provided it was but moderate enough to let the draughts-men work, who to do them justice are now so used to the sea that it must blow a gale of wind before they leave off' (4). Their procedure here and later was to put the living specimens in chests and cover them with damp cloth to keep them fresh for study during the next few days.

Tierra del Fuego

Using the specimens and observations made here Banks and Solander drew up a list of the plants of Tierra del Fuego (first published in 1962 (4)) and Solander wrote an elaborate descriptive account entitled 'Primitiae Florae Terrae del Fuego sive Catalogus Plantarum prope Fretum Le Maire A. C. MDCCLXIX Diebus 14-20 Jan. collectarum', which was ready for publication long before his death in 1782 but never has been published. They found there 104 species of flowering-plants, 6 ferns, a lycopodium, and 34 mosses, lichens, etc. Solander classified them with care, referred them whenever possible to Linnaean genera, described in detail those new to science, roughly two-thirds of the flowering-plants, and coined names for these. A few of these Banks and Solander names were adopted by later authors; J. D. Hooker in his *Flora Antarctica* (1844-1847) cited many of them as synonyms of names validly published earlier. Failure to publish Solander's manuscript as a whole soon after its completion was a loss to science, for his descriptions are superior in detail and clarity to most of the descriptions of these plants published later and taken

together they would have provided in one place a sound starting point for later investigation. Parkinson figured 78 of the Fuegian plants.

New Zealand

In negotiations with the Maoris the priest Tupaia soon proved his value, for he found their language so like his own that he could fairly well understand them and they him. Nevertheless, matters did not go smoothly. They took leave of Poverty Bay (Teoneora), 'with not above 40 species of Plants in our boxes'(4). During the next few months Cook circumnavigated first the North Island, then the South Island, with enough landings made, i.e. at Anaura Bay (Tegadu), Tolaga, Mercury Bay (Opuorage), Hauraki Bay and Bay of Islands (including Motuarohia) in the North Island, Queen Charlotte Sound (Totaranui) and Admiralty Bay in the South Island, for Banks and Solander to obtain about 400 species of plants.

These were more than Parkinson could portray adequately in the time available, especially as the death of Buchan at Tahiti had obliged him to draw much else. He accordingly adopted the expedient of making a rough sketch of the plant as a whole, thus recording the poise of leaves, flowers and fruit, and also of drawing and colouring with care a few details sufficient to serve as the basis of a fully coloured drawing, especially as these sketches could be associated with herbarium specimens. As noted above, the boxes were chests in which newly gathered plants were put and covered with damp cloths to keep them fresh while Parkinson drew them and Solander studied and described them.

Poverty Bay:– notes by Anne Salmond from the *Eneavour* logs and journals October 1769

At sea: Joseph Banks [botanist]

“Now do I wish that our freinds in England could by the assistance of some magical spying glass take a peep at our situation: Dr. Solander setts at the Cabbin table describing, myself at my Bureau Journalizing, between us hangs a large bunch of sea weed, upon the table lays the wood and barnacles; they would see that notwithstanding our different occupations our lips move very often, and without being conjurors might guess that we were talking about what we should see upon the land which there is now no doubt we shall see very soon.”

Sunday October 9 1769

Sydney Parkinson [artist]: “The hills appear to be covered with small wood and bushes [along the coast], affording but an indifferent landscape... Within the bay there are many hills one behind another; though most part of the bay is surrounded by a valley [Waimata Valley?] in which is a number of trees; from whence, as well as other parts of the country, we saw some smoke arise... The water in the river [Turanganui] was found to be brackish, in which we were disappointed; but they shot some wild ducks of a very large size, and our botanical gentlemen gathered a variety of curious plants in flower.”

W.B. Monkhouse [surgeon]: “In the evening a party visited the northern shore where a river [Turanganui] had been observed from the Ship to empty itself into the Bay. No inhabitants now appeared – the Pinnacle was left at the mouth of the river, and the Yawl which was also ashore was ordered up the river to ferry us over.

We examined the neighbourhood and presently found some huts with signs that the natives had just deserted them, these huts were very low, the walling of reeds, and thatched with a kind of rush and coarse grass... but there was one tolerable house about eight yards by six... the burnt stump of a tree on which was placed a piece of white pumice Stone formed into a very rude resemblance of a human figure [a fishing atua, almost certainly]; two pretty large fish potts very well made of withys [eel pots?].

On the other side the river [near the Waikanae stream?] we found four or five wigwams, a quantity of limpet shell, the Shell of a lobster, and a ground oven in the Tahitian style

Lt. Gore: Landed on the east bank of the Turanganui River, then crossed the ‘salt rivulet’ [Turanganui – to the west bank of the river] – saw some Empty Hutts, Several sorts of wild fowl, And wild Sellery”

Pickersgill: They landed near the river [Turanganui] which they found to be Salt and to fall in to ye Bay with a very rapid stream... ye Capt. And marines were gone into the woods.

[Having landed on the east bank of the Turanganui, Cook, the marines and the botanists Banks and Solander crossed to the west bank of the river, where they found a small fishing settlement abandoned. At some point they headed into ‘the woods’ – which seem to have been inland on the east bank from Kaiti Hill / Titirangi. Plants were collected both close to the beach and the Waikanae Stream, and from ‘the woods’.]

Monday 10 October 1769

[Landed again on the east side of the Turanganui River, accompanied by Tupaia; challenged by a party of warriors on the opposite bank of the river. Some of these warriors crossed the river, tried to snatch at the strangers’ weapons, shootings followed, Te Rakau was shot; the Endeavour party returned to their boats, headed along the coast towards Young Nicks Head]

Lt Gore: About 2 we had rounded The Bay and Got on the South side having seen nothing but a Bank of sand Quite round the Bay on which a Great Surf. This Bank seems To have been Thrown up by the Sea Thro’ which there is a Break of The Sea into a Lake [Awapuni lagoon?] which Runs round behind the Bank beyond which There seems to be a fine Country being well wooded with fine Tall Trees [kahikatea etc?] and in all probability well inhabited. On the SW corner of the Bay [Muriwai] near a remarkable Knoll of Trees, saw a Village people and Canoes hear we Expected to have Found a Good Landing but were disappointed There being Too much Surf breaking far out.

Banks: “the countrey appeared to be much more fruitfull than where we now were. The bottom of the bay [around Muriwai?] provd to be a low sandy beach on which the sea broke most prodigiously so that we could not come near it; within was flat, a long way inland over this water might be seen from the mast head probably a lagoon but in the boat we could see

no entrance into it [*Awapuni lagoon?*] We had almost arrivd at the farthest part of the bay [*Muriwai*] when a fresh breze came in from the seaward and we saw a Canoe sailing in standing right towards us.

[Intercepted the canoe, crew resisted, more shootings, four young men taken on board the Endeavour].

Tuesday 11 October

Landed on the east side of the river, although the boys begged to not to be left there, saying that the people on that side of the river were their enemies and would eat them. Cook crossed to the west bank of the Turanganui River, and the boys would not leave them.

Banks: 'We then went along a swamp [*Awapuni lagoon, or approach to it?*] intending to shoot some ducks of which there was great plenty; the countrey was quite flat; the Sergeant and 4 marines attended us walking upon a bank abreast of us which overlookd the country [*Looks as though there was a sand bank thrown up by the sea, with a swampy area inland of it – a common coastal formation*]. We proceeded about a mile when they Calld out that a large body of Indians was marching towards us, we drew together and resolvd to retreat; before we had put this in execution the 3 boys rose out of a bush in which they were hid and put themselves again under our protection.

We went upon the beach as the clearest place and walkd briskly towards the boats. The Indians were in two parties, one marchd along the bank before spoke of, the other came round by the morass where we could not see them... When we came to our boats the pinnace was a mile at least from her station (sent their by the officer ashore to pick up a bird he had shot); the small boat only remaind, which was carried over the river, and without the midshipman who was left to attend her: the consequence of this was that we were obligd to make three trips before we were all over to the rest of the party."

Monkhouse: 'A pretty large flat extends itself along part of the north side of this Bay and across its head the soil of which is mostly a Sand, but about the lagoon we visited the soil is a rich marle; this flat is covered with a coarse grass and low shrubbery, along the South side there appeared to be several fine groves of well grown trees – the back land consists of a group of hills of good height and are pretty well cloathed with wood.

[When Cook and the officers went to shoot ducks (on a swamp close to the Awapuni lagoon?) they saw several parties of warriors approaching, returned to the east bank of the river with the boys, where a party of sailors were cutting wood. This suggests that the woods were inland from Kaiti Hill. No doubt plants were collected in these woods.]

Wednesday October 12

Banks: This morn We took our leave of Poverty bay with not above 40 species of Plants in our boxes, which is not to be wonderd at as we were so little ashore and always upon the same spot; the only time we wanderd about a mile from the boats was upon a swamp, where not more than 3 species of Plants were found.

[Of the plant species collected in Teoneroa (of which we have a comprehensive list, with illustrations), only 3 were collected by the 'swamp' – ie. inside the sand ridge that ran along the beach, thrown up by the surf, towards the Awapuni lagoon.

The rest were collected near the beach, on the east and west banks of the Turanganui River; or in the 'woods' that seem to have been inland from Kaiti Hill / Titirangi.

Once the specimens were sketched by Parkinson and given a botanical description by Solander, they were pressed between sheets taken from a waste copy of a commentary on Paradise Lost by Milton].