

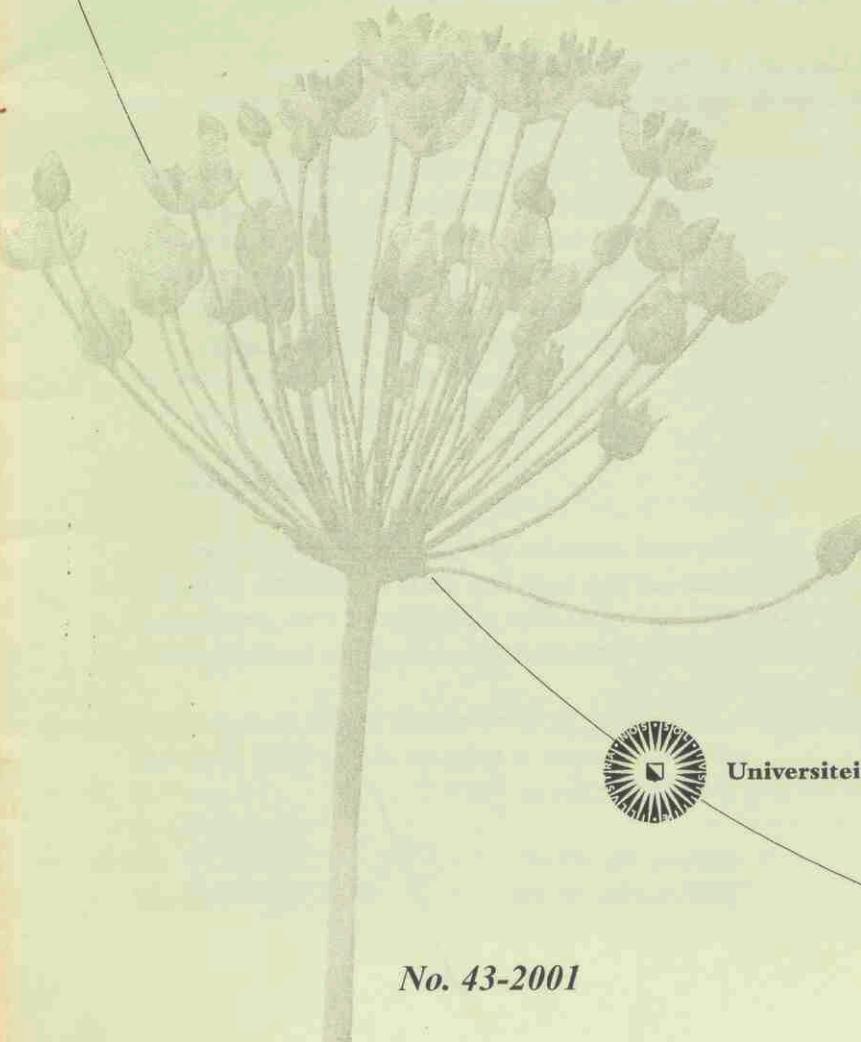


Index seminum

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Index Seminum

*Utrecht University
Botanic Gardens
The Netherlands*



No. 43-2001

Universiteit Utrecht

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4216 3711

Utrecht University Botanic Gardens

P.O. Box 80.162
3508 TD Utrecht
The Netherlands

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Index Seminum No. 43 - 2001

In response to the Convention on Biological Diversity, Utrecht University Botanic Gardens supply the seed collections requested on the condition that:

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Notes on ordering:

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Staff

General Department:

Ing. Arie Oudijk, General Director	<i>A.Oudijk@bio.uu.nl</i>
Drs. Akkie J. Joosse, Communications Officer	<i>A.J.Joosse@bio.uu.nl</i>
Mrs. Ceciel Sillevius Secretary	<i>C.Sillevius@bio.uu.nl</i>

Curators' Department:

Drs. Hans Persoon Curator and Deputy Director	<i>H.Persoon@bio.uu.nl</i>
Drs. Eric J. Gouda Curator	<i>E.J.Gouda@bio.uu.nl</i>
Dr. Piet C. de Jong Guest Staff Member	<i>PCdeJong@arbor.demon.nl</i>

Educational Department:

Drs. Jaap Vos, Education officer	<i>J.Vos@bio.uu.nl</i>
Ir. Ruth C. de Visser-de Jonge, Coordinator Theme Garden Project	<i>R.C.deVisser@bio.uu.nl</i>

B.G.C.I. - The Netherlands

Drs. Bert J.W. van den Wollenberg
L.J.W.vandenWollenberg@bio.uu.nl
Web Site: <http://www.bio.uu.nl/botgard/bgci.htm>



From the General Department

On March 2001 drs. Hans Persoon has been appointed as Curator/Dept. Director. Hans will be a member of the management staff and will also be the successor of Jan Tolsma. Jan will be retiring on 1 February 2001 after an employment of nearly 40 years, in which he devotedly served the Utrecht Botanical Gardens.

As a follow-up of the Theme Garden a "Vlinderhof" (Butterfly Garden) has been opened at Fort Hoofddijk. The aim of this garden is to show native butterflies, their life cycle in their natural environment and the plants with which they have relationships. The accompanying information about these relationships is given from the perspective of the plants.

At the Von Gimborn Arboretum in Doorn the 75th anniversary jumble has been celebrated last year amongst other things with the placing of new text displays about the specialities of the arboretum.

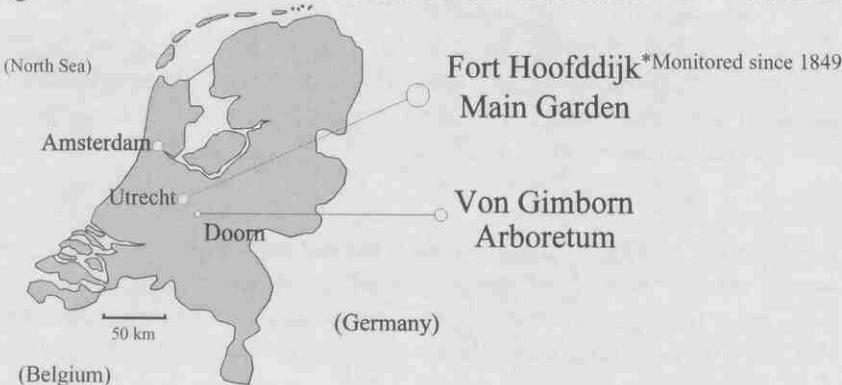
Ing. Arie Oudijk
Director

Gardens location

- Utrecht: Fort Hoofddijk (University Centre)
- Doorn: Von Gimborn Arboretum

Situation and climate:

Geographical position of the Main Garden	52E 06' N : 5E11' E
Altitude	2 m above sea level
Geopgraphical position of the Von Gimborn Arboretum	52E 00' N : 5E20'E
Altitude	3 m above sea level
Mean daily minimum of the coldest month	- 0,6EC
Mean daily maximum of the warmest month	+ 21,6EC
Highest temperature	+ 36,8EC *
Lowest temperature	- 24,8EC *
Average rainfall	803 mm



From the Curator's Department

With the presentation of this Index Seminum No. 43-2001 we take the opportunity, as usual, to inform you on the latest developments in Utrecht University Botanic Gardens.

In general, the activities of the curators are divided in the following main groups:

- Hans Persoon [HP]: Arboretum, Systematic Garden, Theme Garden
- Eric Gouda [EG]: Greenhouse Collections (focal point: Neotropical Collections) and the Rock Garden

Specializations:

In the framework of the National Plant Collection (NP), Utrecht University Botanic Gardens are maintaining specializations on the following groups and taxa:

- Flora of the Neotropics: [EG] Flora of the Guianas, with special emphasis on:
Bromeliaceae *Orchidaceae* *Costaceae*

- Broad-leaved hardy trees and shrubs: [HP]

<i>Aceraceae</i>	<i>Betulaceae</i>	<i>Ericaceae</i>
<i>Euonymus</i>	<i>Laburnum</i>	<i>Magnolia</i>
<i>Oleaceae</i> (esp.: <i>Fraxinus</i> and <i>Syringa</i>)		

- *Annonaceae* (Research Collection) [EG]

- Conifers (esp. *Tsuga*) [HP]

- Alpines [EG]

- *Crassulaceae* (Research Collection) [EG]

- selected woodland plants (*Arisaema*, *Asarum* & *Trillium*) [EG]

- *Penstemon* [EG]

- *Lecanopteris* [EG]

These specializations are given extra attention regarding verification, nomenclature, wild source material, etc.

We are especially interested in material from natural sources of the groups and taxa mentioned above. We seek cooperation with gardens with identical specializations. If you are interested, please contact us and we will provide additional information.

Aceraceae:

We have the honour to announce that our Botanic Gardens was asked for a second time to be the Host Garden for the Bursary of the International Dendrology Society. This Bursary was generously donated by the I.D.S. to Dr. Cao Wei from Shenyang, China. He started his research, which is devoted to our

Aceraceae Project in September 1999. Within the Section *Platanoidea*, the *A. pictum* - (*A. mono*) complex is the focal point of a D.N.A. research programme. The research within this *Aceraceae* Project will take place in a number of phases and we wish to thank the following organisations for their cooperation:

- * Dutch Botanic Gardens Foundation
- * The Maple Society
- * IUCN-SCC Temperate Broadleaved Trees Specialist Group
- * Botanic Gardens Conservation International (BGCI)
- * Regional Office of BGCI at Utrecht
- * Professional Growers of Aceraceae and the Keeper of the "Aceretum", Mr. D.M. v. Gelderen (Fa. C.Esveld) at Boskoop.

One of the goals will be the production of a survey of taxa of *Aceraceae*, currently considered threatened (IUCN Conservation Categories) present in the Western Botanic Gardens.

This list will be analised and completed with the threatened species native to Temperate Asia. Special emphasis will be put on specimens of recorded wild origin. In this respect we kindly request the help and support of our Chinese colleagues.

Bromeliaceae:

Study and development in the *Bromeliaceae* collection has several focus points. In the first place the *Bromeliaceae* research project for the "Flora of the Guianas": we try to grow all possible species from this area.

Beside this, the *Tillandsioideae* collection (as Subfamily of the *Bromeliaceae*) is part of the National Plant Collection (NP). The genus *Tillandsia* of the Andian countries (especially Bolivia) has a special attention because of the various taxonomic problems on species level in these areas. To increase the general knowledge about the recognised genera in the Family we try to grow representatives from all genera. It is evident that our *Bromeliaceae* Collections will increase dramatically in both size and quality.

Arisaema:

The last few years we have been very active with this group, increasing the number of wild collected species in the collection. Some areas, like the Peat Garden, have been improved to grow more *Arisaemas*. International contact with various *Arisaema* (*Araceae*) specialists caused considerable improvement of the collection.

Last but not least, the living collections have been enriched this year. Many new accessions from natural sources replaced accessions from cultivated origin, as part of the long-term collection strategy to replace plants of cultivated origin for wild-collected stock.

Codes used

Explanation of provenance codes:

- E=** Seeds collected in the wild
S= Seeds derived from a plant in cultivation but from known natural source (not necessarily F1 generation).
G= Seeds from a plant from another Botanical Garden or Institute; not from known natural source.
K= Nursery origin; not from known natural source.

Verification:

The seeds in this list have been taken from verified plants and only if we were reasonably sure that cross-pollination with related species would be unlikely. Verification codes used: **V**=verified; **I**=identified; **S**=identified by specialist

Accession Numbers:

The first two digits indicate the year of registration, (-- = unknown year of entry). The next two characters are coding for the garden location or specific group of plants: **GR**=Green houses; **BL**=Rock Garden; **ZG**=Orig. Von Gimborn Arboretum; **RD**=Woody Plants; **SL**= Seedlist only; **ZE**=Annuals and Biennials. The other five digits are a sequence number.

Explanation of abbreviated collector names:

AH	K.Alpinar & H.'t Hart	LUKK.	V.P.A. Lukkien
CC	Ch. Chadwell	MAAS	P.J.M. Maas
C.GOUDA	C. Gouda	MOONEN	J. Moonen
CT	C. Theune	MORI	Scott Mori
CYT	Cytotaxonomy U.U.	MULDER	T. Mulder-Roelfsema
EAM	E. A. Mennega	RAUH	W. Rauh
E.G.	E. J. Gouda	RCK	R.C. Kruijt
ERN	H. Ern	SCHLL	A.D. Schilling
GB	G. van Buiten	Y	Cytotax.,Utrecht Univ.
HTH	H.'t Hart		Collected in: Yugoslavia

Source of illustrations used:

From colour illustrations made by Dr. C.D. Laros, Utrecht University Botanic Gardens

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Aceraceae

1. G I --ZG00997 *Acer micranthum* Siebold & Zucc.

Agavaceae

2. G I 73GR00602 *Doryanthes palmeri* A.W.Hill

Apiaceae

3. E I 01SL01172 *Eryngium campestre* L.; [GB s.n.] Netherlands, Zeeland, Schouwen-Duiveland, nature reserve Bommenede, near Zonnemaire.
4. G I 69BL00242 *Olymposciadium caespitosum* (J.E.Sm.) Wolff

Aquifoliaceae

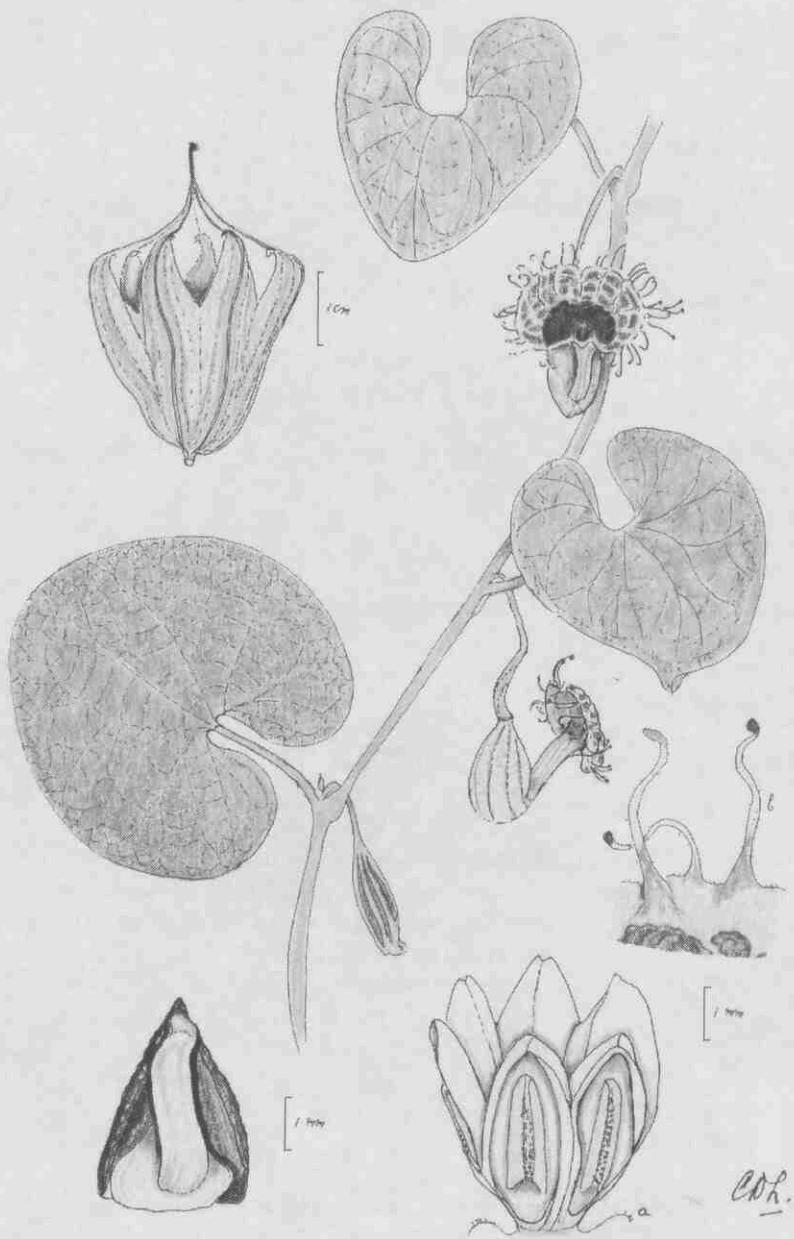
5. G V 61RD00653 *Ilex pedunculosa* Miq. var. *pedunculosa*

Araceae

6. S I 89BL00077 *Arisaema ciliatum* H.Li var. *liubaense* Gusman & Gouda; [CT 369] China, Sichuan Prov.; 81-09-14, Liuba 3600 m Alt.
7. G V 97BL00033 *Arisaema taiwanense* Murata
8. S 97BL00004 *Arisaema tortuosum* (Wall.) Schott subsp. *helleborifolium*; [CC 176] Uttar Pradesh (Kumaon area, NE Himalaya), in forest. 1500-2800 m Alt.
9. S I 73BL00133 *Biarum tenuifolium* (L.) Schott var. *abbreviatum* (Schott) Engl.; [HTH] Greece, Parnassos Mts; 73-09-03. 1200 m Alt.

Aristolochiaceae

10. G V 92GR01149 *Aristolochia fimbriata* Cham.
11. S I 92GR00988 *Aristolochia littoralis* Parodi; El Salvador, Acajutla.
12. S V 92GR00904 *Aristolochia trilobata* L.; [MORI 22351] French Guiana, Saül.



Aristolochia fimbriata Cham. (Aristolochiaceae)

Asteraceae

13. E I 01SL01174 *Aster tripolium* L.; [GB s.n.] Netherlands, Zeeland, Schouwen-Duiveland, nature reserve Bommenede, near Zonnemaire.
14. S V 99BL00985 *Erigeron atticus* Vill.; Switzerland, Valais, Lac des Dix, 2380 m Alt.
15. G V 94GR00044 *Mutisia coccinea* St.-Hil. var. *coccinea*
16. E I 01SL01180 *Pulicaria dysenterica* (L.) Bernh.; [GB s.n.] Netherlands, Zeeland, Schouwen-Duiveland, nature reserve Bommenede, near Zonnemaire.
17. S V 90ZE00538 *Sanvitalia procumbens* Lam.; Mexico, Km.26, carretera Jolalpan-Axochiapa, Morelos.
18. S I 75ZS00023 *Silphium integrifolium* Michx.; USA, N. America, no further data!
19. S V 90BL00036 *Solidago virgaurea* L. subsp. *virgaurea*; Finland, Koillismaa Taivalkoski, Hanhela; coll.: 88-08-27

Boraginaceae

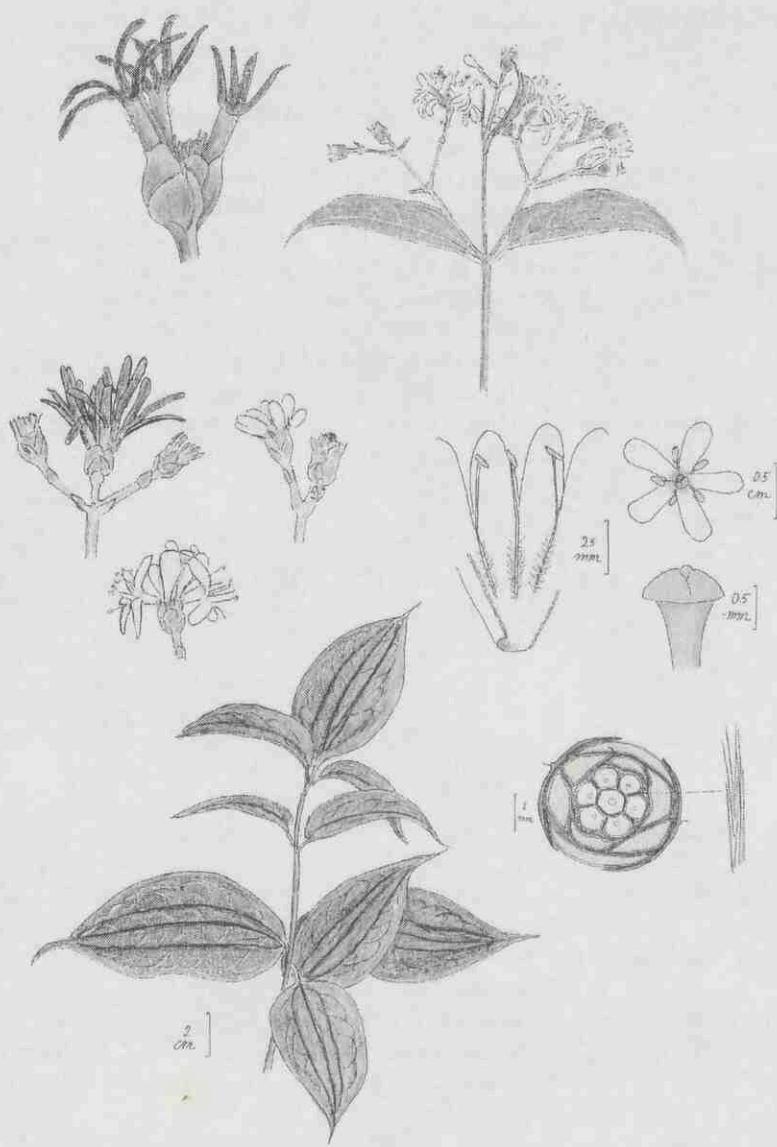
20. S V 80ZE02168 *Cerinthe major* L.; [EAM] Spain, Sierra Carboneros, W. of Guandiano; coll.:62-06-07.

Brassicaceae

21. S I 72ZE02073 *Crambe hispanica* L. var. *glabrata* (DC.) Coss.; Spain, no other data available.

Bromeliaceae

22. G I 97GR00643 *Aechmea bromeliifolia* (Rudge) Baker var. *albobracteata* Philcox
23. S I 94GR01751 *Aechmea eggersii* Mez; [C.GOUDA s.n.] Ecuador, Palmitapamba.
24. G V 99GR00798 *Aechmea smithiorum* Mez
25. S S 01GR00927 *Araeococcus goeldianus* L.B.Sm.; [MOONEN s.n.] French Guiana, prob. Savanne Roche 14e Juillet.
26. G V 90GR00444 *Dyckia velascana* Mez
27. S S 95GR00766 *Fosterella penduliflora* (C.H.Wright) L.B.Sm.; [C.GOUDA s.n.] Bolivia, without locality. 2600
28. S I 88GR00032 *Guzmania lingulata* (L.) Mez s.l.; [RCK] French Guyana, Saul Süd, Route Blanc/Jaune (starting point), to Mt. Galbao, coll.: jan. 1988.



Heptacodium miconioides Rehder (Caprifoliaceae)

29. S V 96GR01267 *Pitcairnia aureobrunnea* Rauh; [RAUH 53677] Peru,
dept. San Martin, between Tarapoto and Yrimaguas.
500 m Alt.
30. S I 88GR00043 *Tillandsia anceps* Lodd.; [RCK] French Guyana,
Fuméé, Route Blanc to Mts. de la Fuméé, coll.: jan.
1988.
31. S S 98GR01073 *Tillandsia caliginosa* W.Till; [C.GOUDA s.n.] Bolivia,
near Cochabamba or Sucre?; nov.1989.
32. S S 96GR01254 *Tillandsia caliginosa* W.Till; [C.GOUDA96-38]
Bolivia, from Padcayo to Muyuquivi. 3000
33. S S 94GR02029 *Tillandsia schiedeana* Steud.; [MULDER] Mexico (?)
34. G S 01GR01120 *Tillandsia wagneriana* L.B.Sm.
35. S I 93GR00747 *Vriesea splendens* (Brongn.) Lem. var. *formosa*
Suringar ex Witte; [MAAS] Trinidad, Maracas La
Cuevas Trail. 650 m Alt.

Campanulaceae

36. S V 94BL00069 *Adenophora liliifolia* (L.) Ledeb. ex A.DC.; Rumania,
Prejmer - Distr. Brasov.
37. S V 98BL00925 *Campanula takesimana* Nakai; South Korea, To-Dong,
Ullung-Gun, Kyongsang Pukto. 150 m Alt.
38. G I 83BL00396 *Symphyandra repens* Karpiss.

Capparaceae

39. S I 99GR00209 *Cleome viridiflora* Schreber; [MAAS 8803] Bolivia, I.
Vargas C., C. Specht, F. Chispe.

Caprifoliaceae

40. K V 85RD00389 *Heptacodium miconioides* Rehder

Caryophyllaceae

41. S I 97ZE00126 *Arenaria serpyllifolia* L.; France, Chenôve.
42. E I 01SL01175 *Spergularia salina* J.& C.Presl; [GB s.n.]
Netherlands, Zeeland, Schouwen-Duiveland, nature
reserve Bommenede, near Zonnemaire.

Celastraceae

43. G V 80RD00222 *Euonymus bungeanus* Maxim. var. *bungeanus*

Chenopodiaceae

44. E I 01SL01177 *Atriplex littoralis* L.; [GB s.n.] Netherlands, Zeeland, Schouwen-Duiveland, nature reserve Bommene, near Zonnemaire (saline).
45. E I 01SL01171 *Atriplex prostrata* Boucher ex DC. var. *prostrata*; [GB s.n.] Netherlands, Zeeland, Schouwen-Duiveland, nature reserve Bommene, near Zonnemaire.
46. E I 01SL01173 *Suaeda maritima* (L.) Dumort.; [GB s.n.] Netherlands, Zeeland, Schouwen-Duiveland, nature reserve Bommene, near Zonnemaire.

Cistaceae

47. S I 66ZE02115 *Tuberaria guttata* (L.) Fourr.; [EAM s.n.] Spain, near Camping Leiro, between Orense and Vigo.

Clusiaceae

48. G I 68GR01043 *Garcinia xanthochymus* Hook.f. ex T.Anderson
49. S I 91ZS00527 *Hypericum maculatum* Crantz; Norway, Oslo, Nordmarka, Skjærsjøelva, coll.:09-09-1990. 310 m Alt.

Commelinaceae

50. S V 91ZE00816 *Commelina communis* L.; Germany, Berckenbrück, Fürstenwalde.

Crassulaceae

51. G I 77BL00079 *Chiastophyllum oppositifolium* (Ledeb. ex Nordm.) Berger
52. S S 92HR29512 *Sedum dasyphyllum* L.; [HTH 29512] Spain, near Granada, Sierra nevada. 2150 m Alt.

53. S S 93BL00010 *Sedum obtusifolium* C.A.Mey.; [AH 33] Turkey,
Prov. Bolu, 20 km S. of Gerede,, W. of the road to
Kizilcahaman. 1350 m Alt.
54. G I 69BL00408 *Sedum sempervivoides* Fisch. ex Bieb.

Cyclanthaceae

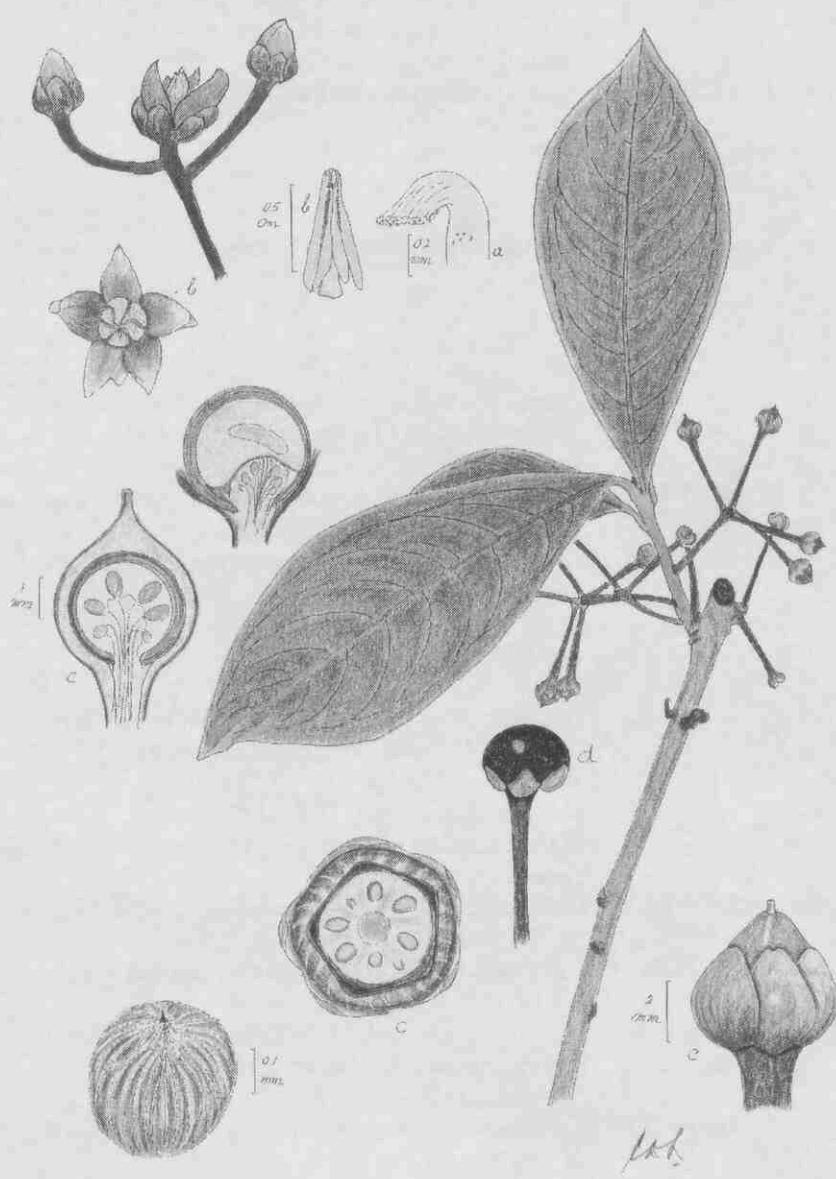
55. G I 68GR00859 *Carludovica palmata* Ruiz & Pav.

Ericaceae

56. G I --ZG00184 *Enkianthus cernuus* (Siebold & Zucc.) Makino var.
rubens (Maxim.) Makino
57. G I --ZG01222 *Kalmia latifolia* L.
58. S V 81RD00154 *Kalmia polifolia* Wangenh.; Canada, Quebec, Dep. Lac
Chouminiche, Parc des Laurentides.
59. G I --ZG01146 *Zenobia pulverulenta* (W.Bartram ex Willd.) Pollard

Fabaceae

60. S V 99BL00251 *Anthyllis vulneraria* L. subsp. *weldeniana* (Rchbn.)
Cullen; Italy, Siena, Eremo di Lecceto, gariga;
98-07-14. 339 m Alt.
61. S V 72ZE02110 *Lathyrus clymenum* L.; France, E. Pyrenees,
Roussillon, Corniche catalane: Port-Vendres, Banyuls,
Cerbère, on coastel cliffs.
62. S V 98ZS00171 *Lathyrus latifolius* L.; Germany, Güstebieser Loose /
Märkisch-Oderland.
63. S V 71ZE00834 *Lathyrus odoratus* L.; Italy, Sicily, no other details
available!
64. S V 87ZS00040 *Lathyrus tuberosus* L.; USSR, Tauria, no further data!
65. S V 96ZS00317 *Securigera varia* (L.) Lassen; Slovenia, Vel'ká Fatra,
Plesovica, on lime.
66. S I 88ZE02158 *Vicia sativa* L. subsp. *sativa*; Spain, Segovia, Santuista
de Pedraza, pradera fresca. 980 m Alt.



Ardisia solanacea Roxb. (Myrsinaceae)

Gentianaceae

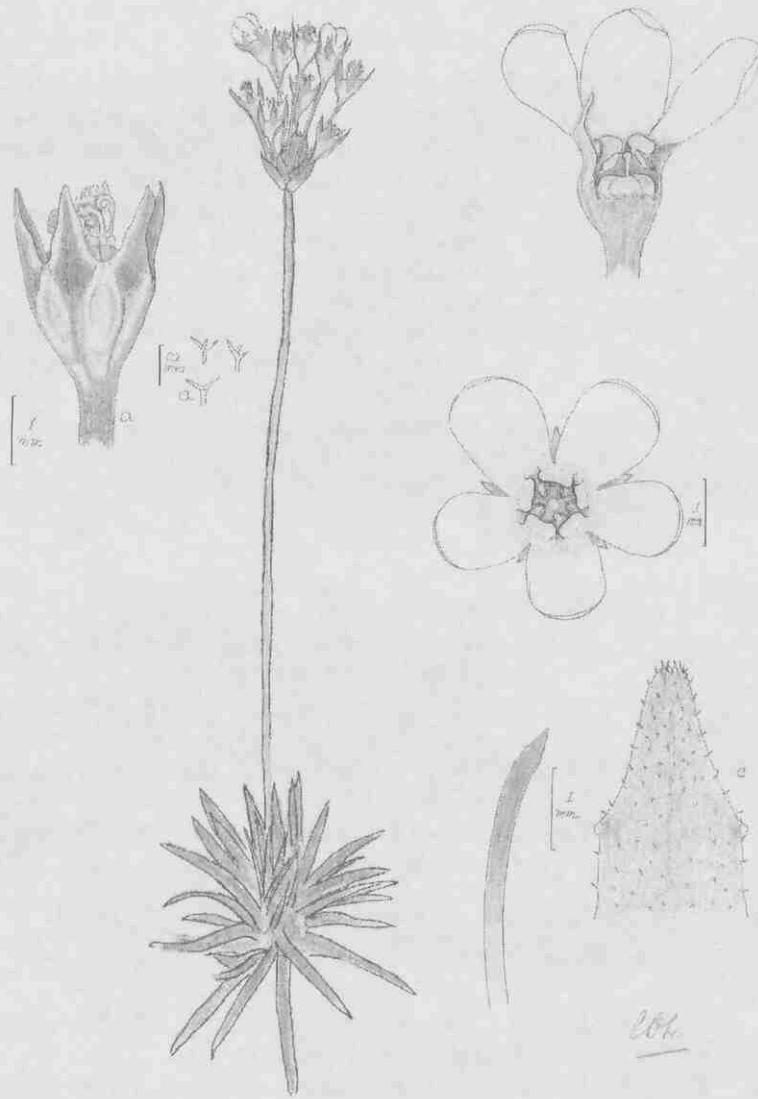
67. S V 96BL00902 *Blackstonia perfoliata* (L.) Huds. subsp. *perfoliata*; France, Ardenne, Sechault Haut des Monts. 180 m Alt.
68. E I 01SL01179 *Centaurium littorale* (Turner) Gilmour subsp. *littorale*; [GB s.n.] Netherlands, Zeeland, Schouwen-Duiveland, nature reserve Bommeneide, near Zonnemaire (saline).
69. S V 83BL00287 *Gentiana affinis* Griseb.; U.S.A. Oregon, no other details available!
70. S 95BL00118 *Gentiana asclepiadea* L.; Austria, Tirol, Steinberg near Achensee, Guffert, zw. Stubachalm und der Strasse. 1200 m Alt.
71. G V 93BL00042 *Gentiana septemfida* Pall. subsp. *septemfida*
72. G V 96BL00905 *Gentiana triflora* Pall.

Geraniaceae

73. S I 95ZE00330 *Erodium cicutarium* (L.) L'Hér. ex Aiton subsp. *dunense* Andreas; France, Dept. Vendée, Ile de Noirmoutier, 'Les Sableaux'.
74. S V 98ZE00595 *Geranium rotundifolium* L.; France, Doubs, Besançon (Chaudanne). 320 m Alt.
75. K V 86BL00407 *Geranium shikokianum* Matsum. var. *yoshiianum* (Koidz.) Hara
76. S V 87BL00423 *Geranium soboliferum* Kom.; Japan, Oshino-muro, near Mnt. Fuji. 95-1000 m Alt.

Globulariaceae

77. S V 94BL00232 *Globularia punctata* Lapeyr.; Italy, Aymavilles, Syrignan. 1100 m Alt.
78. S V 98BL00265 *Globularia trichosantha* Fisch. & Mey.; Turkey, Pelli-Dag. 2200 m Alt.



Androsace brigantiaca Jord. & Fourr. (Primulaceae)

Iridaceae

79. G I 77BL00409 *Iris magnifica* Vved.
80. S V 94BL01102 *Iris sintenisii* Janka subsp. *sintenisii*; Bulgaria,
E.Sredna Gora Mts.

Lamiaceae

81. S V 94BL00415 *Scutellaria diffusa* Benth.; [ERN 6923] Turkey, Prov.
Hatay, Amanus- mts. (Gavur Daglari), Atik.
82. G I 90BL00804 *Scutellaria indica* L. var. *parvifolia* (Mak.) Mak.
83. G I 00BL00627 *Teucrium pumilum* L.

Liliaceae

84. S 78BL00091 *Lilium martagon* L. var. *cattaniae* Vis.; Croatia,
Brokovo.
85. S I 77BL00282 *Tofieldia calyculata* (L.) Wahlenb.; [Y 16606] Italy,
Ven Jul. near Platisensis; 1977. 650 m Alt.

Magnoliaceae

86. G I --ZG00099 *Liriodendron tulipifera* L.
87. G V 65RD00047 *Magnolia tripetala* (L.) L.
88. G I --ZG01144 *Magnolia virginiana* L.

Myrsinaceae

89. G I 74GR00008 *Ardisia solanacea* Roxb.

Passifloraceae

90. G V 98GR00988 *Passiflora suberosa* L.
91. G V 98GR00989 *Passiflora vitifolia* H.B. & K.



Tovaria pendula Ruiz & Pav. (*Tovariaceae*)

Pinaceae

92. G I --ZG00915 *Pseudolarix amabilis* (A.Nelson) Rehder

Plantaginaceae

93. E I 01SL01176 *Plantago coronopus* L. var. *coronopus*; [GB s.n.] Netherlands, Zeeland, Schouwen-Duiveland, nature reserve Bommenede, near Zonnemaire.
94. E I 01SL01178 *Plantago maritima* L.; [GB s.n.] Netherlands, Zeeland, Schouwen-Duiveland, nature reserve Bommenede, near Zonnemaire (saline).

Plumbaginaceae

95. S V 99BL01072 *Armeria pungens* (Link) Hoffmanns. & Link; Portugal, without locality.

Primulaceae

96. S S 94BL01450 *Androsace brigantiaca* Jord. & Fourr.; France, Isère.
97. S I 83BL00281 *Dodecatheon pulchellum* (Raf.) Merr. subsp. *pulchellum*; U.S.A., N.W. Oregon; 1982.
98. S V 00BL00753 *Samolus valerandi* L.; The Netherlands, Prov. Overijssel, Twente.

Rubiaceae

99. S I 90ZS00685 *Galium x pomeranicum* Retz.; [LUKK.] The Netherlands, the Isle of Schiermonnikoog Hertebos , collected: 90-08-31

Saxifragaceae

100. S V 00BL01370 *Parnassia palustris* L.; [E.G. s.n.] The Netherlands, N Holland, Island Texel (SW).

Sciadopytiaceae

101. G I --ZG01861 *Sciadopitys verticillata* (Thunb. ex Murray) Siebold & Zucc.

Scrophulariaceae

102. S I 90BL00944 *Linaria genistifolia* (L.) Mill. subsp. *genistifolia*; Bulgaria, Rhodopen Mts.
103. S V 96BL00291 *Penstemon alpinus* Torr.; U.S.A., Colorado, Jefferson County, 2300 m Alt.

Styracaceae

104. K V 64RD00305 *Halesia carolina* L.

Symplocaceae

105. G V --ZG00909 *Symplocos paniculata* (Thunb. ex Murray) Miq.

Taxaceae

106. G 72RD00060 *Torreya nucifera* (L.) Siebold & Zucc. var. *nucifera*

Tovariaceae

107. G V 88GR00234 *Tovaria pendula* Ruiz & Pav.

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