



# Index seminarum

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Botanische Tuinen Utrecht [www.botanischetuinen.uu.nl](http://www.botanischetuinen.uu.nl)

# *Index Seminum*

*Utrecht University  
Botanic Gardens  
The Netherlands*



Universiteit Utrecht

*No. 50-2008*

UNIVERSITEITSBIBLIOTHEEK UTRECHT



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*Index Seminum No. 50 - 2008*

Internet Orders: <http://botgard.bio.uu.nl/collection/>  
(including many pictures)

In response to the Convention on Biological Diversity (CBD), the Utrecht University Botanic Gardens supplies seeds and other plant material in accordance with the Code of Conduct for Botanic Gardens and similar collections. We are IPEN-member (International Plant Exchange Network) and can exchange material with other IPEN-members without bi-lateral agreements

For a list of current IPEN-members check the web-site of BGCI (Botanic Gardens Conservation International).

[http://www.bgci.org/resources/History\\_of\\_IPEN/](http://www.bgci.org/resources/History_of_IPEN/)

Non IPEN-members have to return the "Agreement on the supply of living plant material for non-commercial purposes leaving the International Plant Exchange Network (IPEN version 2b)" which must be signed by **authorized staff**. This agreement can be made valid for 1, 3 or 5 years and is printed on the back-side of the order form.

*Notes on ordering:*

- Correspondents are asked to use the order-form provided, **which must be signed by authorised staff**, and send it to the address mentioned upon it. Furthermore, they should check with their own authorities concerning import-regulations and include any necessary permits with their order.
- The first distribution will be shortly after **March 1, 2009**. Many seeds of limited amount will be out of stock shortly afterward, so please order before this date. Requests, with a maximum of 25 packets will be handled in sequence of entry.
- Our Fax no. is +31 30 2535177 (do not use e-mail).

## Staff

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Nico.R. Stolwijk and Wim Wildschut

## Gardens location

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

### Situation and climate:

Geographical position of the Main Garden .....	52° 06' N : 5° 11' E
Altitude .....	2 m above sea level
Geographical position of the Von Gimborn Arboretum .....	52° 00' N : 5° 20' E
Altitude .....	3 m above sea level
Mean daily minimum of the coldest month .....	- 0,6°C
Mean daily maximum of the warmest month .....	+ 21,6°C
Highest temperature .....	+ 36,8°C *
Lowest temperature .....	- 24,8°C *
Average rainfall .....	803 mm

\*Monitored since 1849



## From the Curator's Department

With the presentation of this Index Seminum No. **50-2008** 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]  
*Aceraceae*                      *Betulaceae*                      *Ericaceae*  
*Euonymus*                      *Laburnum*                      *Magnolia*  
*Oleaceae* (esp.: *Fraxinus* and *Syringa*)
  
- *Annonaceae* (Research Collection) [EG]
- Conifers (esp. *Tsuga*) [HP]
- Alpines [EG]
- selected woodland plants (*Arisaema*, *Asarum* & *Trillium*) [EG]
- *Penstemon* [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:*

The research within the *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
- \* 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 analysed 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" and for the Flora of Ecuador: 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 & Ecuador) 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

### 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:

0= not been determined by any authority;

1= determined by comparison with other named plants;

2= determined by a taxonomist or other competent person;

3= determined by a specialist (taxonomist working on that group)

### Explanation of provenance codes of the plants:

**W=** Accession of wild source (treat as 'Z' because the donor plant is cultivated in our B.G., except W\*, which is wild collected seed, distributed as such.)

**Z=** from a wild source plant in cultivation.

**G=** Garden origin.

### IPEN-Number:

The first two positions are the iso-code of the country of origin. xx means: country of origin unknown.

The next position is a digit meaning: special restrictions (1) or not (0).

The next position is the abbreviation of the garden introducing the material in IPEN (in this seed-list only u).

The rest consists of the internal accession number:

The first four digits of it indicate the year of registration, (1900 = 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; **ZS** and **ZB**= Perennials.

The other five digits are a sequence number within a year.

The IPEN-number as a whole stays attached to the accession, wherever it may go, so that it is always possible to trace back its origin.

The \* at the end of the description is followed by the seed-list collecting year.

### Source of illustrations used:

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

This Index Seminum is printed on BIOTOP<sup>®</sup> (recycled, chlorine-free) paper.

Aceraceae

1. 2 G xx0u-1900ZG00997 *Acer micranthum* Siebold & Zucc. \*2008

Aloaceae

2. 1 Z za0u-2004BL00355 *Kniphofia northiae* Baker South Africa: KwaZulu-Natal, Busterfutpad Coll.: Compton, d'Arcy & Rix 165 \*2008

Apiaceae

3. 2 G xx0u-1970BL00073 *Astrantia trifida* G.F.Hoffm. \*2008  
4. 2 W xx0u-1966BL00184 *Athamanta turbith* subsp. *haynaldii* (Borbás & Uechtr.) Tutin N. Balkan, no other details available! \*2007  
5. 1 W fr0u-1998BL01658 *Eryngium bourgatii* Gouan France, Pyrenees, Lapiaz calcaire, near Pic d'Annie \*2007  
6. 1 W us0u-2002BL00542 *Eryngium yuccifolium* Michx. United States: Michigan, Ingham county, MSU Prairie Planting, naturalized area, dry. Alt.: 256 m. 04/10/2001 \*2008

Apocynaceae

7. 2 G xx0u-1974GR00732 *Alyxia buxifolia* R.Br. \*2008

Aquifoliaceae

8. 2 G xx0u-1961RD00653 *Ilex pedunculosa* var. *pedunculosa* Miq. \*2008

Araceae

9. 2 G xx0u-1986BL00211 *Arisaema amurense* Maxim. \*2008  
10. 3 W cn0u-1989BL00077 *Arisaema ciliatum* var. *liubaense* Gusman & Gouda China: Sichuan, Liuba Alt.: 3600 m. Coll.: Teune, C. 369 14/09/1981 \*2008  
11. 2 G xx0u-1987BL00172 *Arisaema ciliatum* var. *liubaense* Gusman & Gouda \*2008

Araceae (cont.)

12. 2 Z cn0u-1998BL00143 *Arisaema consanguineum* Schott China , Tie Jie Shan, just before the summit pass on the drive from ali to Lijiang. Alt.: 3000 m. \*2008
13. 2 Z cn0u-2001BL00109 *Arisaema consanguineum* Schott China , San-ba. Coll.: A Exp.-'94 China (A.G.S.) 2036 \*2008
14. 2 G xx0u-2003BL01974 *Arisaema costatum* (Wall.) Mart. ex Schott \*2008
15. 2 Z in0u-2000BL01126 *Arisaema flavum* (Forssk.) Schott subsp. *flavum* India: Himachal Pradesh , Upper Kulu Valley (from Manali) Alt.: 2200 m. Coll.: Chadwell, Chris et al. 92/853 \*2008
16. 2 G xx0u-1998BL00062 *Arisaema jacquemontii* Blume \*2007
17. 2 W in0u-1997BL00004 *Arisaema tortuosum* (Wall.) Schott India: Uttar Pradesh , Kumaon area, C.Himalaya Alt.: 1500 -2800 m. Coll.: Chadwell, Chris et al. CC-1760 \*2008
18. 2 W us0u-1998BL00681 *Arisaema triphyllum* (L.) Schott United States: Massachusetts , Hadley \*2007

Aristolochiaceae

19. 2 Z sv0u-1992GR00988 *Aristolochia littoralis* Parodi El Salvador , Acajutla. \*2007
20. 2 W gf0u-1992GR00904 *Aristolochia trilobata* L. French Guiana , Saül. Coll.: Mori, S. 22351 \*2007



*Aristolochia fimbriata* Cham. (Aristolochiaceae)

Asteraceae

21. 2 W fr0u-1967BL00147 *Achillea odorata* L. France , E.Pyrenees, Llo. Alt.: 1400 m. \*2008
22. 2 W\* nl0u-2007ZS01528 *Artemisia maritima* L. Netherlands: Prov. Friesland , Isle of Terschelling, Boschplaat, near Tweede Duintjes. Alt.: 0 m. Coll.: Persoon, J.G.M. 18/09/2007 \*2007
23. 2 Z ca0u-1996BL00417 *Aster foliaceus* (A.subspicatus Nees) Canada: British Columbia , Peace River District. \*2007
24. 2 Z fr0u-2002BL00804 *Aster pyrenaicus* Desf. ex DC. France, Dept. Haut Pyrenees , Centre d'Ecologie, Montagnarde, Gabas Coll.: Ern,H. 7249 \*2008
25. 1 Z za0u-2005BL01021 *Berkheya purpurea* Benth., Hook.f. & Mast. South Africa , Drakensberge \*2008
26. 1 W it0u-2001BL00758 *Cynara cardunculus* L. Italy: Sicilia , 1994 \*2008
27. 2 G xx0u-2003BL00104 *Ericameria nauseosa* (Pall. ex Pursh) G.L.Nesom & G.I.Baird \*2008
28. 1 Z us0u-2007BL00556 *Gaillardia aristata* Pursh United States: Montana , Glacier Nat. Park, Iceberg Lake \*2008
29. 1 Z za0u-2006BL00849 *Helichrysum cooperi* Harv. South Africa: KwaZulu-Natal , Underberg Divisoion.Sani Pass \*2008
30. 2 W de0u-1965BL00167 *Leontopodium alpinum* subsp. *alpinum* Cass. Germany , without locality. \*2008
31. 2 G xx0u-1992BL00809 *Leontopodium alpinum* subsp. *nivale* (Ten.) Tutin \*2007
32. 2 G xx0u-1978BL00425 *Raoulia subsericea* J.D.Hook. \*2008
33. 2 W fi0u-1990BL00036 *Solidago virgaurea* L. subsp. *virgaurea* Finland , Koillismaa Taivalkoski, Hanhela; coll.: 88-08-27 \*2008

Betulaceae

34. 1 W ch0u-1997BL00840 *Alnus viridis* (Chaix) DC. subsp. *viridis* Switzerland , Groubunden, Morteratsch. Alt.: 1920 m. \*2008
35. 2 W ca0u-1986RD00002 *Betula lenta* L. subsp. *lenta* Canada: Ontario Niagara Reg., Louth Tp., only verified population in Canada, steep slope above Lake Ontario; 1985. Alt.: 88 m. \*2007

Boraginaceae

36. 2 W it0u-2001BL00715 *Onosma echioides* L. Italy , Bosco di S. Antonio, Majella (Aq). Alt.: 1500 m. \*2007

Brassicaceae

37. 1 W xx0u-1998BL00720 *Pachyphragma macrophyllum* (Hoffm.) N.Busch Caucasus , NW. \*2007

Bromeliaceae

38. 0 G ar0u-2008GR00906 *Aechmea spec.* Argentina , Coll.: Jeroen van der Steen \*2008
39. 3 Z xx0u-1998GR00809 *Aechmea aquilega* (Salisb.) Griseb. Dominican Republic , \*2008
40. 2 W sr1u-1999GR00107 *Aechmea aquilega* (Salisb.) Griseb. var. *aquilega* Suriname , Parimaribo (Suriname Riv.). Coll.: Gouda, E.J. 99-41 1999 \*2008
41. 3 G xx0u-2005GR00295 *Aechmea bromeliifolia* (Rudge) Baker \*2008
42. 3 Z xx0u-1997GR00626 *Aechmea bromeliifolia* var. *albobracteata* Philcox \*2008
43. 3 W br0u-1997GR00639 *Aechmea coelestis* (K.Koch) E.Morren var. *coelestis* Brazil , Rio de Janeiro, Teresopolis. Coll.: Leme, E. 1922 \*2008
44. 3 G xx0u-2006GR01609 *Aechmea fraseri* Baker \*2008
45. 3 W mq0u-1996GR00403 *Aechmea lingulata* (L.) Baker Martinique , near parque Trois Ilets, epiphyte on *Haematoxylon campedrianum*. \*2008
46. 3 G xx0b-1184074 *Aechmea lueddemanniana* (K. Koch) Mez \*2008
47. 2 G xx0u-1999GR00796 *Aechmea mexicana* Baker \*2008
48. 2 Z br0u-1996GR00653 *Aechmea nudicaulis* (L.) Griseb. var. *nudicaulis* Brazil: Bahia , Mun. Camaca, Estrada BR101, 2 km S Camaca, "mata higrofila" with Cacao. Epiphyte Coll.: Leuenberger et al. 3096 23/04/1983 \*2008
49. 3 G xx0u-1997GR00056 *Aechmea strobilina* (Beurling) L.B.Sm. & Read \*2008
50. 3 W gf0u-2001GR01168 *Araecoccus flagellifolius* Harms French Guiana , Montagne de Kaw, ca PK 35 Coll.: Moonen, J.(FG) 290 2001 \*2008

Bromeliaceae (cont.)

51. 3 G xx0u-1997GR00493 *Billbergia brasiliensis* L.B.Sm. \*2008
52. 3 G xx0u-1999GR00805 *Billbergia pallidiflora* Liebm. \*2008
53. 3 G xx0u-2003GR01722 *Billbergia velascana* Cardenas \*2008
54. 3 W br0u-1996GR01181 *Billbergia zebrina* (Hernert) Lindl. Brazil: Rio de Janeiro , Rio de Janeiro City, Tijuca National Park Alt.: 500 m. Coll.: Leme, E. 128 05/1981 \*2008
55. 2 G xx0u-1990GR00444 *Dyckia velascana* Mez \*2008
56. 3 W br0u-2000GR00727 *Edmundoa lindenii* var. *rosea* (E.Morren) Leme Brazil: Santa Catarina , Municipality of Florianopolis, from Ilha de Santa Catarina. \*2008
57. 3 W ec0u-1996GR00616 *Guzmania rhonhofiana* Harms Ecuador , 1976 \*2008
58. 3 G xx0u-1998GR00819 *Hohenbergia penduliflora* (A.Richard) Mez \*2008
59. 3 W ve0u-2006GR01032 *Pitcairnia altensteinii* (Link, Klotzsch & Otto) Lem. Venezuela , N.-Venezuela, rancher station National Park Henri Pittier near Aragua and Carabobo \*2008
60. 3 W ec1u-2006GR00038 *Pitcairnia aureobrunnea* Rauh Ecuador: Prov. El Oro , Road Passaje - Catamayo (not main road) Alt.: 1020 m. Coll.: E.J.Gouda & J.Manzanares 05-29 23/11/2005 \*2008
61. 3 W ve0u-2005GR01552 *Pitcairnia caricifolia* Mart.ex Schult.f. Venezuela , Ilu (weide) Tepui \*2008
62. 3 G xx0u-2004GR00680 *Pitcairnia echinata* Hook.f. \*2008
63. 3 Z br0u-2001GR00086 *Pitcairnia flammea* var. *glabrior* L.B.Sm. Brazil , Teresopolis \*2007
64. 3 W br0u-2000GR00771 *Pitcairnia flammea* var. *roezlii* (E.Morr.) L.B.Sm. Brazil: Guanabara , Rio de Janeiro City Coll.: Leme, E. s.n. \*2008
65. 3 W ve1u-2001GR00854 *Pitcairnia grafii* Rauh Venezuela , E Tachira, SW of El Capacho, down to San Antonio Alt.: 1000 m. Coll.: Graf, H. Venezuela s.n. (R64680) 27/02/1993 \*2008
66. 3 Z ec0u-2001GR00065 *Pitcairnia heterophylla* (Lindl.) Beer Ecuador: Prov. Esmeraldas. , Lita-San Lorenzo \*2008

Bromeliaceae (cont.)

67. 3 Z gt0u-2005GR00894 *Pitcairnia imbricata* (Brongn.) Regel  
Guatemala , 20 km from Guatemala City  
towards el Rancho Alt.: 800 m. Coll.:  
Radtke/Moldenhauer 183 \*2008
68. 3 W co0u-2000GR00646 *Pitcairnia villetaensis* Rauh Colombia ,  
Bogota - Villeta Alt.: 900 m. Coll.: Rauh, W.  
37089 \*2008
69. 0 W\* ec1u-2008GR01074 *Puya clava-herculis* Mez & Sodiro Ecuador:  
Prov. Imbabura , Lago Mojanda in vulcano  
crater Alt.: 4032 m. Coll.: E.J.Gouda,  
J.Manzanares & B.Patterson 08-55  
05/04/2008 \*2008
70. 3 G xx0u-2005GR01069 *Puya mirabilis* (Mez) L.B.Sm. \*2008
71. 3 G xx0u-2005GR01564 *Racinaea spiculosa* var. *ustulata* (Reitz)  
L.B.Sm. \*2008
72. 3 W bo0u-1996GR00114 *Tillandsia caliginosa* W.Till Bolivia ,  
Comerapa to Cochabamba, ca. km 450 Alt.:  
3000 m. Coll.: Gouda,E.J. 95-71b 12/1995  
\*2008
73. 3 W pe0u-2001GR01048 *Tillandsia capillaris* Ruiz & Pav. Peru ,  
S.Peru \*2008
74. 3 W bo0u-1996GR01228 *Tillandsia capillaris* Ruiz & Pav. Bolivia ,  
without exact locality. Coll.: Gouda, C.S.  
96-12 11/1996 \*2008
75. 3 W bo0u-1996GR00012 *Tillandsia capillaris* Ruiz & Pav. Bolivia:  
Prov. Santa Cruz , road from Samaipata to  
Comarapa km 351, 70 km from Samaipata.  
Coll.: Gouda,E.J. 95-52 12/1995 \*2008
76. 3 W bo0u-1996GR01251 *Tillandsia capillaris* Ruiz & Pav. Bolivia:  
Prov. Tarija , S Tarija. Alt.: 2000 m. Coll.:  
Gouda, C.S. 96-35 11/1996 \*2008
77. 2 W bo0u-2002GR01073 *Tillandsia capillaris* Ruiz & Pav. Bolivia ,  
Near Entre Rios, road to Tarija. "Drakerug"  
Alt.: 2800 m. Coll.: Gouda, C.S. s.n. 02/2001  
\*2008
78. 1 W br1heid-131260 *Tillandsia neglecta* E.Pereira Brazil , Rio de  
Janeiro? Coll: Horst, HU 1195. \*2008
79. 3 W mq0u-2006GR01059 *Tillandsia polystachia* (L.) L. Martinique ,  
\*2008
80. 2 W hn0u-1994GR02192 *Tillandsia schiedeana* Steud. Honduras ,  
without locality. \*2008



Bromeliaceae (cont.)

81. 2 W ar0u-2002GR01075 *Tillandsia virescens* Ruiz & Pav. Argentina , Humahuaca, 23.13S, 65.20W Coll.: Gouda, C.S. s.n. 02/2001 \*2008
82. 3 G xx0u-1999GR00775 *Ursulaea macvaughii* (L.B.Sm.) R.W.Read & H.U.Baensch \*2007
83. 3 W cr0u-2006GR01558 *Werauhia notata* (L.B.Sm. & Pittendrigh) J.R.Grant Costa Rica , Coll.: Gouda,E.J. 06-25 05/08/2006 \*2008

Campanulaceae

84. 3 Z gr0u-2002BL00798 *Campanula hierapetrae* Rech.f. Greece , Kreta, Nomos Lasithiou, Afendis Kavousi. Alt.: 1200 m. \*2007
85. 2 W gr0u-2000BL01032 *Campanula incurva* Aucher. ex A.DC. Greece , Magnisia: Tsangarada. \*2007
86. 2 Z pt0u-1997BL00455 *Campanula primulifolia* Brot. Portugal , Algarve, Serra de Monchique, Perna de Negra; 94-08-00 \*2007
87. 2 W kr0u-1998BL00925 *Campanula takesimana* Nakai South Korea , To-Dong, Ullung-Gun, Kyongsang Pukto. Alt.: 150 m. \*2007
88. 1 W it0u-2004BL00944 *Campanula thyrsoides* L. Italy , Monte Faverghera, Belluno (BL) Alt.: 1500 m. \*2007
89. 2 G xx0u-1998BL01370 *Edraianthus tenuifolius* (Waldst. & Kit.) A.DC. \*2008
90. 1 W us0u-2006ZE01427 *Lobelia cardinalis* L. United States: New Jersey , Sussex Co. Sparta Turnpike, Sparta Mountain 20/09/2005 \*2008
91. 1 W us0u-2006BL00742 *Lobelia siphilitica* L. United States: Clinton county , S Shrub-Carr, Rose Lake Fen 2-track Alt.: 256 m. \*2008

Cannaceae

92. 3 W gy0u-1989GR00092 *Canna indica* L. Guyana , Old Farm near Konashen. Coll.: Jansen-Jacobs, M.J. 1781 \*2008



*Canna indica* L. (Cannaceae)

Capparaceae

93. 2 G xx0u-1991GR01779 *Cleome gigantea* L. \*2008

Caprifoliaceae

94. 2 G xx0u-1985RD00389 *Heptacodium miconioides* Rehder \*2007

Caryophyllaceae

95. 2 W at0u-2001BL00897 *Dianthus giganteiformis* subsp. *pontederacae* (A.Kerner) Soó Austria, Niederosterreich, Weinviertel, Leiser Berge, buschberg ca. 5.5 km N Ernstbrunn. Alt.: 450 m. 21/08/1999 \*2007
96. 2 Z fr0u-1994BL01124 *Dianthus subacaulis* Vill. subsp. *subacaulis* France, Herault, Felines-Minervois \*2007
97. 2 W fr0u-1993BL00776 *Dianthus sylvestris* Wulfen France: Pyrenees Aude, Montagne de Tauch Coll.: Bellotte, W. \*2007
98. 2 W sl0u-1998BL00808 *Drypis spinosa* L. Slovenia, Trnovski Gozd (Ternovaner Wald), Adovscina, Aufstieg von der Zavetisce Bavcerja Zum M.Gora. Alt.: 1000 -1200 m. Coll.: Steffan, F. 09/1997 \*2007
99. 1 W it0u-2007BL00773 *Lychnis flos-jovis* (L.) Desr. Italy, Epinel, Lessert Alt.: 1300 m. \*2008

Celastraceae

100. 2 W ca0u-1990RD00214 *Euonymus atropurpureus* Jacq. Canada: Ontario, Essex Co., Malden Tp., roadside. Alt.: 176 m. \*2008
101. 2 W jp0u-1986RD00034 *Euonymus macropterus* Rupr. Japan: Honshu Yamanashi Prefecture, area around Oshino-Mura village, near Mt. Fuji. Alt.: 95 -1000 m. \*2008
102. 2 W jp0u-1986RD00213 *Euonymus oxyphyllus* Miq. Japan: Honshu, Kuriyama Mura, Fukushima Prefecture, roadside verge, Alt.: 500 m. \*2008
103. 2 G xx0u-1991RD01554 *Euonymus sachalinensis* (F.Schmidt) Maxim. \*2008

Crassulaceae

104. 3 W tr0u-1993BL00010 *Sedum obtusifolium* C.A.Mey. Turkey ,  
Prov. Bolu, 20 km S. of Gerede,, W. of the  
road to Kizilcahaman. Alt.: 1350 m. Coll.:  
Alpinar,K. & H.'t Hart 33 \*2007
105. 2 W ge0u-1977BL00127 *Sedum stoloniferum* S.G.Gmel. Georgia ,  
Abkhazia (Caucasus), Awadchara. \*2008
106. 2 W bg0u-1978BL00340 *Sempervivum zeleborii* Schott Bulgaria ,  
Rila Mts. \*2008

Ericaceae

107. 2 G xx0u-1900ZG00184 *Enkianthus cernuus* var. *rubens* (Maxim.)  
Makino \*2007
108. 2 G xx0u-1900ZG00034 *Kalmia angustifolia* L. \*2008
109. 2 G xx0u-1900ZG01222 *Kalmia latifolia* L. \*2008
110. 2 G xx0u-1900ZG00097 *Rhododendron canadense* (L.) Torr. \*2008

Gentianaceae

111. 2 W us0u-1983BL00287 *Gentiana affinis* Griseb. United States:  
Oregon , no other details available! 1982  
\*2008
112. 2 G xx0u-1996BL00905 *Gentiana triflora* Pall. \*2008

Gesneriaceae

113. 2 G xx0u-1966BL00054 *Haberlea rhodopensis* Friv. \*2008
114. 1 W fr0u-2000BL00166 *Ramonda myconi* (L.) Rechb. France,  
Pyrenees , \*2008
115. 2 Z mk0u-1982BL00132 *Ramonda nathaliae* Pancic & Petrovic  
Macedonia , Titov Veles Alt.: 230 m. 1981  
\*2006

Hydrangeaceae

116. 2 U xx0u-2000BL00755 *Deinanthe bifida* Maxim. \*2007

Iridaceae

117. 2 W gr0u-1977BL00056 *Gladiolus imbricatus* L. Greece: Thracia ,  
Dahsia (NE of Alexandropolis). Alt.: 330 m.  
\*2007
118. 2 W kr0u-1994BL00073 *Iris ensata* Thunb. Korea, Republic of: Cheju  
Do (Quelpaert Isl.) , Mt. Halla. Alt.: 1100 m.  
\*2008
119. 1 W fr0u-1999BL00576 *Iris foetidissima* L. France , Finistere,  
Mouelan-sur-Mer, Pointe de Kerhermen.  
Alt.: 10 m. \*2008
120. 2 W us0u-1996BL00959 *Iris hartwegii* Baker United States: California  
Humboldt Co., N of Eureka, Prairie Creek  
Redwoods State Park, Fern Canyon. Alt.: 40  
m. \*2007
121. 2 W at0u-1964BL00083 *Iris lutescens* Lam. Austria , \*2008
122. 2 W xx0u-2004BL00173 *Iris milesii* Baker ex Foster Himalaya , NW.  
Alt.: 2700 m. Coll.: Chadwell, Chris et al.  
4590 2003 \*2007
123. 2 Z bg0u-1995BL00180 *Iris sintenisii* subsp. *sintenisii* Janka Bulgaria  
Eastern Sredna Gora Mts Coll.: Sterz \*2008
124. 1 Z ru0u-1982BL00251 *Iris spuria* subsp. *sogdiana* (Bunge) Mathew  
Russian Federation: Asiatic Russia , exact  
location not known 1981 \*2007

Lamiaceae

125. 2 W bg0u-2002BL01040 *Micromeria dalmatica* subsp. *bulgarica*  
(Velen.) Guinea Bulgaria , Western Rodopi.  
Alt.: 1250 m. 2002 \*2008
126. 2 Z pk0u-2001BL00511 *Nepeta clarkei* Hook.f. Pakistan , NW  
Frontier Prov., Swat Divis., Ushu-valley.  
Alt.: 3200 m. \*2006
127. 1 W fr0u-2004BL01518 *Nepeta nepetella* L. France , Lautaret Alt.:  
1600 m. \*2008
128. 1 G xx0u-1992BL00857 *Salvia daghestanica* Sosn. \*2008
129. 1 W de0u-1991BL00873 *Salvia verticillata* L. Germany , Thüringen,  
Rudolstadt. \*2008
130. 2 W pt0u-1998BL00661 *Stachys germanica* subsp. *lusitanica*  
(Hoffmanns. & Link) Coutinho Portugal ,  
Fatima; 94-07-26 \*2008

Liliaceae

131. 2 W at0u-1962BL00140 *Allium senescens* L. Austria, Alps , \*2008  
 132. 1 W us0u-1996BL00788 *Disporum smithii* (Hook.) Piper United States: Oregon , Forest Park/Hoyt Arboretum. Alt.: 230 m. \*2008  
 133. 1 G xx0u-1998BL00254 *Helonias bullata* L. \*2007  
 134. 1 Z hr0u-1978BL00091 *Lilium martagon* var. *cattaniae* Vis. Croatia , Brokovo 1962 \*2007  
 135. 1 W cn0u-2002BL01491 *Lilium sargentiae* E.H.Wilson China: Yunnan , \*2008  
 136. 2 W us0u-1999BL00238 *Maianthemum racemosum* (L.) Link United States: Michigan , Ingham County, Mesic S Forest; 98-09-23. Alt.: 265 m. \*2007  
 137. 2 W nl0u-1964BL00700 *Nartheccium ossifragum* (L.) Huds. Netherlands: Prov. Drenthe , near Eelde 1964 \*2007  
 138. 1 G xx0u-2001BL00540 *Paradisea liliastrum* (L.) Bertol. \*2008  
 139. 2 G xx0u-1965BL00271 *Veratrum nigrum* L. \*2008  
 140. 2 Z cn0u-1997BL01048 *Veratrum oxysepalum* Turcz. China , S-Chekiang. \*2008

Magnoliaceae

141. 2 G xx0u-1965RD00047 *Magnolia tripetala* (L.) L. \*2008  
 142. 2 G xx0u-1900ZG01144 *Magnolia virginiana* L. \*2008

Menispermaceae

143. 2 W tw0u-1980GR00388 *Cocculus trilobus* (Thunb.) DC. Taiwan , approx. S top (Coast) Coll.: Kramer, K.U. 7928 1980 \*2008

Mimosaceae

144. 2 W vi0u-1988GR00056 *Leucaena leucocephala* (Lam.) de Wit Virgin Islands (U.S.): St.Thomas Island, on top of mountain near airlanding strip. 1967 \*2008

Myrsinaceae

145. 2 G xx0u-1974GR00008 *Ardisia solanacea* Roxb. \*2007

Myrtaceae

146. 1 W br0u-1992GR01220 *Eugenia uniflora* L. Brazil: Espirito Santo , Forest, Reserva Forestal do Vale de Rio Doce, Coll.: Maas, P.J.M. et al. \*2008

Onagraceae

147. 1 G xx0u-2004BL00405 *Epilobium canum* subsp. *angustifolium* (Keck) Raven \*2008

Paeoniaceae

148. 2 G xx0u-1978BL00200 *Paeonia mascula* (L.) Mill. subsp. *mascula* \*2008

Papaveraceae

149. 1 G xx0u-2003BL01541 *Meconopsis betonicifolia* 'Alba' \*2008  
150. 2 G xx0u-1964BL00209 *Meconopsis betonicifolia* Franch. \*2008

Pinaceae

151. 2 G xx0u-1900ZG00915 *Pseudolarix amabilis* (A.Nelson) Rehder \*2007

Plumbaginaceae

152. 2 G xx0u-1964BL00364 *Acantholimon glumaceum* (Jaub. & Spach) Boiss. \*2007  
153. 2 W fr0u-1977BL00177 *Armeria alliacea* (Cav.) Hoffm. & Link France , Hautes Alpes, Serre Chevalier, (on sand). Alt.: 1550 m. \*2008  
154. 1 Z pk0u-1987BL00526 *Bukiniczia cabulica* (Boiss.) Lincz. Pakistan Gilgit, Hunza, Batura Glacier, N. side Alt.: 2920 -3000 m. Coll.: Swedish Exp.to Pakistan 18 \*2008



*Ardisia solanacea* Roxb. (Myrsinaceae)



Poaceae

155. 1 W us0u-2002BL00753 *Bouteloua gracilis* (Willd. ex Kunth) Lag. ex Griffiths United States: South Dakota , \*2008

Polygonaceae

156. 2 Z us0u-1994BL00470 *Eriogonum strictum* var. *greenei* (A.Gray) Rev. United States: Idaho , Boise Co. \*2007
157. 1 W us0u-1994BL01273 *Eriogonum umbellatum* Torr. subsp. *umbellatum* United States: Colorado , Jefferson County, South Table Mtn. Alt.: 1859 m. \*2008
158. 2 G xx0u-1994BL00472 *Eriogonum umbellatum* var. *subaridum* S.Stokes \*2008

Primulaceae

159. 2 G xx0u-1990BL00120 *Dodecatheon conjugens* E.Greene \*2008
160. 2 W us0u-1983BL00281 *Dodecatheon pulchellum* subsp. *pulchellum* (Raf.) Merr. United States: Oregon , N.W. 1982 \*2008

Ranunculaceae

161. 2 W fr0u-1979BL00015 *Aconitum lycoctonum* subsp. *vulparia* (Rechb.) Nyman France , Ain mountains (Praffion - Jura Francais), 78-11-01. Alt.: 1350 m. \*2008
162. 1 W xx0u-2004BL00172 *Anemone rivularis* DC. Himalaya , NW. Coll.: Chadwell, Chris et al. 4587 2003 \*2007

Rhamnaceae

163. 2 W kr0u-1983RD00218 *Rhamnella franguloides* (Maxim.) Weberb. South Korea , Cholla-Namdo, Mt. Paegyang, near White Sheet Temple \*2008

Rosaceae

164. 2 Z fr0u-1997BL01115 *Geum pyrenaicum* Mill. France, Pyrenees, without details. \*2008

Rutaceae

165. 1 G xx0u-1980RD00287 *Zanthoxylum piperitum* DC. \*2007

Saxifragaceae

166. 1 G xx0u-2002BL00017 *Peltoboykinia watanabei* (Yatabe) Hara \*2007
167. 1 Z es0u-2003BL00544 *Saxifraga canaliculata* Boiss. & Reut. ex Engl. Spain, North-, Picos de Europa, near Fuente De. 2002 \*2007
168. 2 Z de0u-1990BL00298 *Saxifraga rosacea* Moench subsp. *rosacea* Germany, Scharfenstein, near Kassel \*2008

Sciadopityaceae

169. 2 G xx0u-1900ZG01861 *Sciadopitys verticillata* (Thunb. ex Murray) Siebold & Zucc. \*2008

Scrophulariaceae

170. 2 Z tr0u-2000BL00393 *Digitalis ferruginea* L. subsp. *ferruginea* Turkey, N.-Anatolia, Bithynia: Ala-Dag, Kartalkaya 10 km before ski station. Alt.: 1600 m. \*2008
171. 2 G xx0u-2000BL00573 *Digitalis parviflora* Jacq. \*2008
172. 2 W bg0u-2002BL01044 *Digitalis viridiflora* Lindl. Bulgaria, Eastern Rodopi. Alt.: 1700 m. 2002 \*2008
173. 2 W us0u-1996BL00291 *Penstemon alpinus* Torr. United States: Colorado, Jefferson County. Alt.: 2300 m. \*2008
174. 2 W mx0u-2005BL00272 *Penstemon campanulatus* Willd. Mexico, just below the summit of Cerro Potosi Alt.: 3800 m. \*2008
175. 2 G xx0u-1969BL00346 *Penstemon pinifolius* E. Greene \*2008

Scrophulariaceae (cont.)

176. 2 Z us0u-1997BL00959 *Penstemon strictiformis* Rydb. United States: Colorado, Kenosha Pass, Park County. Alt.: 3110 m. \*2008
177. 1 Z za0u-2004BL01363 *Phygelius aequalis* Harv. ex Hiern South Africa: Free State, Mt. Aux-Sources, Witsiehoek Mt. Resort Alt.: 2300 m. Coll.: Lesotho-Edinburgh-Gothenburg Botanical Expedition 315 \*2008

Styracaceae

178. 2 G xx0u-1964RD00305 *Halesia carolina* L. \*2008
179. 2 G xx0u-1900ZG01006 *Styrax japonica* Siebold & Zucc. \*2008

Symplocaceae

180. 2 G xx0u-1900ZG00909 *Symplocos paniculata* (Thunb. ex Murray) Miq. \*2008

Taxaceae

181. 2 G xx0u-1900ZG01293 *Torreya nucifera* var. *nucifera* (L.) Siebold & Zucc. \*2008

Taxodiaceae

182. 2 G xx0u-1900ZG00035 *Cunninghamia lanceolata* (Lamb.) Hook. \*2008

Valerianaceae

183. 1 G xx0u-2005BL01368 *Patrinia villosa* (Thunb.) Juss. \*2008

Further (collecting) gardeners for Utrecht: I. van Capel, W. Jansen, D. Klinge, J.H. Rondeel and B. Valstar; for Doorn: H.B. Spoor.



