

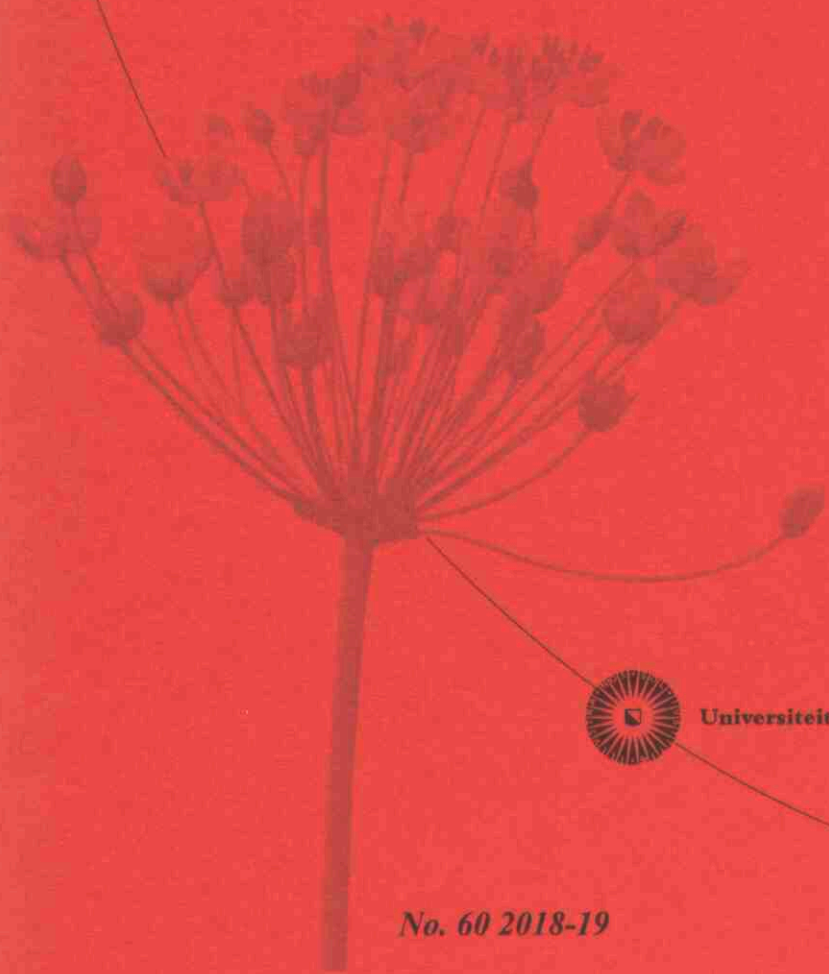


Index seminarum

<https://hdl.handle.net/1874/433808>

Index Seminum

*Utrecht University
Botanic Gardens
The Netherlands*



Universiteit Utrecht

No. 60 2018-19

UNIVERSITEITSBIBLIOTHEEK UTRECHT



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Index Seminum No. 60 - 2018-19

Internet Orders: <http://botgard.bio.uu.nl>
(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/

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, 2019**. 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.

Staff

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Garden location

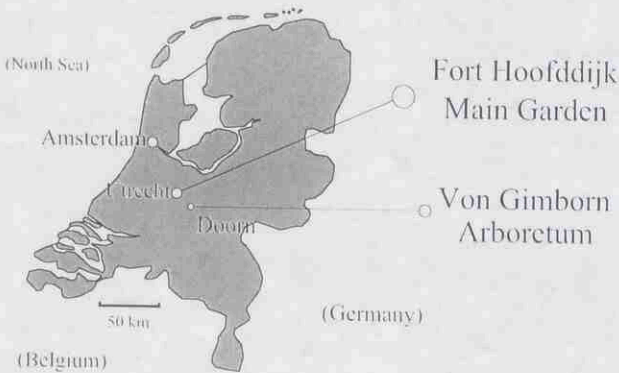
- Utrecht: Fort Hoofddijk (University Centre)

Further (collecting) gardeners for Utrecht: G.E. Bruinenberg, I. van Capel, A. Jacobs, W. Jansen, A.A. Jongerius, R. Koops, H.W.M. Noordman and B. Valstar.

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. **60-2018-19** 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]: Systematic Garden, Theme Garden, Central Route and student courses.
- 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*

- *Annonaceae* (Research Collection) [EG]
- *Cecropiaceae* [EG]
- *Rhipsalis* [EG]
- *Aeonium* [EG]
- Alpines [EG]
- *Penstemon* [EG]
- *Eriogonum* [EG]
- selected woodland plants (*Arisaema*, *Asarum*, & *Trillium*) [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.

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 & Equador) 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.

Annonaceae

1. 3W *Mkilua fragrans* Verdc.
20 [IPEN ke-0-u-1991GR01649] Kenya, *2018

Araceae

2. 2G *Arisaema ciliatum* var. *liubaense* Gusman & Gouda
10 [IPEN xx0u-1987BL00172] *2017
3. 3W *Arisaema ciliatum* var. *liubaense* Gusman & Gouda
9 [IPEN cn0u-1989BL00077] China, China
South-Central, Sichuan, Liuba, Alt.: 3600 m., Coll.:
Teune, C. 369 14/09/1981 *2017
4. 2Z *Arisaema consanguineum* Schott
11 [IPEN cn0u-1998BL00143] China, Tie Jie Shan, just
before the summit pass on the drive from ali to
Lijiang., Alt.: 3000 m. *2018
5. 2Z *Arisaema consanguineum* Schott
8 [IPEN cn0u-2001BL00109] China, San-ba., Coll.: A
Exp.-'94 China (A.G.S.) 2036 *2018
6. 2G *Arisaema flavum* var. *flavum*
4 [IPEN xx0u-1996BL01189] *2017
7. 2W *Arisaema tortuosum* (Wall.) Schott
12 [IPEN in0u-1997BL00004] India, Uttar Pradesh,
Kumaon area, C.Himalaya, Alt.: 1500 -2800 m.,
Coll.: Chadwell, C. et al. CC-1760 *2017

Arecaceae

8. 1G *Chamaerops humilis* var. *humilis*
3 [IPEN xx0u-1975GR00337] *2016

Aristolochiaceae

9. 2W *Aristolochia trilobata* L.
10 [IPEN gf0u-1992GR00904] French Guiana, Saül.,
Coll.: Mori, S. 22351 *2016

Asteraceae

- 4
11
6
12
9
10. 1Z *Baccharis sagittalis* (Less.) DC.
[IPEN CL-0-FRP-24352] Chile , Cordillera El Melón,
Quebrada Carretón 04/04/2008 *2017
11. 1Z *Berkheya cirsiifolia* (DC.) Roessler
[IPEN ZA-0-IB-008865] South Africa *2015
12. 1W *Cynara cardunculus* L.
[IPEN it0u-2001BL00758] Italy, Sicilia 1994 *2017
13. 2Z *Helichrysum compactum* Boiss.
[IPEN tr0u-2004BL01351] Turkey , Kastamonu,
Ilgaz Dagi Pass , Alt.: 1800 m. , Coll.: Persson, J.
94-17 *2017
14. 2Z *Helichrysum nudifolium* subsp. *pilosellum* (L.f.) Beentje
[IPEN ls1m-2010/0431] Lesotho , Qacha's Nek
Distr., Ramatseliso's Gate , Alt.: 2418 m. , Coll.:
B.Ntloko *2017

Begoniaceae

- 5
15. 2W *Begonia glabra* Aubl.
[IPEN pa0u-2004GR00872] Panama , Fortuna , Alt.:
1000 m. , Coll.: Maas, P.J.M. et al. s.n. 25/05/2004
*2016

Betulaceae

- 6
16. 2W *Betula lenta* subsp. *lenta*
[IPEN ca0u-1986RD00002] Canada, Ontario ,
Niagara Reg., Louth Tp., only verified population in
Canada, steep slope above Lake Ontario; 1985. , Alt.:
88 m. *2018

Bignoniaceae

- 18
17. 1W *Chilopsis linearis* (Cav.) Sweet
[IPEN us-0-u-2011GR01069] United States, Texas
*2018

Brassicaceae

- 5 18. 2W *Arabis soyeri* subsp. *jacquini* (G.Becker) B.M.G.Jones
[IPEN sk-0-u-1992BL01345] Slovakia , Velka Fatra,
Selenec. *2018
- 11 19. 2W *Erysimum pulchellum* (Willd.) Gay.
[IPEN tr0u-2010BL00844] Turkey , Boz Dag , Alt.:
2000 m. *2018
- 0 20. 1W *Pachyphragma macrophyllum* (Hoffm.) N.Busch
[IPEN xx0u-1998BL00720] Caucasus , NW. *2018

Bromeliaceae

- 6 21. 3G *Aechmea lueddemanniana* (K.Koch) Mez
[IPEN xx0u-2014GR00535] *2016
- 6 22. 3W *Aechmea* x '*pseudonudicaulis*' Leme
[IPEN BR-0-U-2009GR00733] Brazil , Coll.: Alvim
Seidel (Brazil) 1047 *2017
- 7 23. 3Z *Fosterella rusbyi* (Mez) L.B.Sm.
[IPEN bo0u-2000GR01112] Bolivia , La Paz, Puente
de Coripata , Alt.: 1150 m. *2016
- 7 24. 3Z *Pitcairnia altensteinii* (Link, Klotzsch & Otto) Lem.
[IPEN xx-0-u-2016GR00905] *2016
- 3 25. 3W *Pitcairnia* aff. *altensteinii* (Link, Klotzsch & Otto) Lem.
[IPEN AR-0-U-2012GR00690] Argentina, Argentina
Northwest, Salta , Brealito , Coll.: Jeroen van der
Steen s.n. 10/2004 *2017
- 12 26. 3Z *Pitcairnia capixaba* Fraga & Leme
[IPEN BR-0-U-2012GR00905] Brazil, Brazil
Southeast, Espirito Santo , border Minas Gerais,
Vargena Alta *2018
- 7 27. 3W *Pitcairnia echinata* Hook.f.
[IPEN CO-0-U-2014GR00824] Colombia , San
Vicente del Termale , Coll.: Peter Tristram s.n. 2014
*2017

Bromeliaceae (cont.)

28. 3W *Pitcairnia flammea* var. *floccosa* L.B.Sm.
 13 [IPEN br0u-2012GR00681] Brazil Southeast, Rio de Janeiro, mun. Campos, Morro do Côco, Alt.: 150-250 m., Coll.: Walter Till 11140 04/02/1995 *2016
29. 3Z *Pitcairnia flammea* var. *glabrior* L.B.Sm.
 5 [IPEN BR-0-U-2001GR00086] Brazil, Teresopolis *2018
30. 3W *Pitcairnia flammea* var. *roezlii* (E.Morr.) L.B.Sm.
 7 [IPEN BR-0-U-2000GR00771] Brazil, Brazil Southeast, Guanabara, Rio de Janeiro City, Coll.: Leme, E. s.n. *2018
31. 3W *Pitcairnia grafii* Rauh
 13 [IPEN VE-1-HEID-102579] Venezuela, E Tachira, SW of El Capacho, down to San Antonio, Alt.: 1000 m., Coll.: Graf, H. Venezuela s.n. (R64680) 27/02/1993 *2018
32. 3W *Pitcairnia heterophylla* (Lindl.) Beer
 5 [IPEN ED-0-U-2009GR01351] Ecuador, Rio Los Cedros, Alt.: 1100 m., Coll.: Doug Binns (Aus) 11/2008 *2018
33. 3Z *Pitcairnia imbricata* (Brongn.) Regel
 3 [IPEN GT-0-U-2005GR00894] Guatemala, 20 km from Guatemala City towards el Rancho, Alt.: 800 m., Coll.: Radtke/Moldenhauer 183 *2017
- 34. 3Z *Pitcairnia imbricata* (Brongn.) Regel
 2 [IPEN GT-0-B-2794993] Guatemala, dept. Guatemala, CA9 to El Rancho, 24 km behind ciudad de Guatemala, Alt.: 750 m., Coll.: Radtke & Moldenhauer 167 *2016
35. 3W *Pitcairnia maidifolia* (C.Morren) Decne.
 5 [IPEN CO-0-U-2016GR00700] Colombia, Lowlands to Medina Rd. near tower, Alt.: 700 m., Coll.: Peter Tristram 2016 *2018

Bromeliaceae (cont.)

- 36. 3W *Pitcairnia maidifolia* (C.Morren) Decne.
6 [IPEN CO-0-U-2014GR00803] Colombia, Dept.
Cauca, El Queremal Rd., Coll.: Peter Tristram s.n.
2014 *2018
37. 3W *Pitcairnia orchidifolia* Mez
11 [IPEN ve-0-u-2012GR00664] Venezuela, Estado
Carabobo, along the old road from Valencia to
Puerto Cabello, Alt.: 250 m. F. Oliva-Esteve s.n.
1997 *2016
38. 3Z *Pitcairnia orchidifolia* Mez
8 [IPEN VE-0-U-2016GR00908] Venezuela, Cuyagua
district in Aragua Cathcart & Lemieux *2018
39. 3W *Pitcairnia paniculata* (Ruiz & Pav.) Ruiz & Pav.
4 [IPEN PE-0-U-2013GR00118] Peru, rd. Tarapoto to
Pongo de Caynarachi (Yurimaguas). S6 27.386 W76
17.254, Alt.: 976 m., Coll.: Gouda, E.J. F#108
02/01/2013 *2018
40. 3G *Pseudalcantarea viridiflora* (Beer) Pinzón & Barfuss
13 [IPEN XX-0-U-2004GR01126] *2018

Campanulaceae

41. 2Z *Asyneuma canescens* (Waldst. & Kit.) Griseb. & Schenk
5 [IPEN gr0u-2008BL00486] Greece, Mt. Timfrestos
*2015
- 42. 2W *Campanula rotundifolia* L.
1 [IPEN hr-0-u-1965BL00023] Croatia, Dalmatia,
*2018

Cannaceae

43. 3W *Canna paniculata* Ruiz & Pav.
12 [IPEN pe0u-1976GR00106] Peru , dept. Huanuco,
Puente Durand, herb. 5 m, fls. red/orange; 76-03-22 ,
Alt.: 1000 m. , Coll.: Plowman, T. & Kennedy, H.
5700 *2016
44. 2W *Canna tuerckheimii* F. Kränzl.
13 [IPEN ec0u-1980GR00287] Ecuador , Alluriquin
area, between Sto. Domingo de los Colorados and
Quito, mountain forest; 80-10-00 , Alt.: 850 m. , Coll.:
Maas, P.J.M. et al. 4796 *2016

Caprifoliaceae

45. 2Z *Scabiosa argentea* L.
7 [IPEN ro0u-1999BL00569] Romania , Cistr.
Constanza, Vama Veche (1997). *2017

Caryophyllaceae

46. 2Z *Dianthus arenarius* subsp. *borussicus* Vierh.
4 [IPEN at0u-1991BL01115] Austria , no other details
available! *2018
47. 2Z *Dianthus armeria* L.
2 [IPEN hr-0-u-2005BL00101A] Croatia , Velebit (Bot.
Garden) , Coll.: S. Kovačič 06/08/2003 *2018
48. 1W *Dianthus japonicus* Thunb.
9 [IPEN jp0u-2008BL00360] Japan , Tsukuba, Ibaraki
2006 *2018
49. 2Z *Dianthus subacaulis* subsp. *subacaulis*
8 [IPEN fr0u-1994BL01124] France , Herault,
Felines-Minervois *2017
50. 2W *Dianthus sylvestris* Wulfen
5 [IPEN fr0u-1993BL00776] France, Pyrenees , Aude,
Montagne de Tauch , Coll.: Bellotte, W. *2018
51. 2W *Silene saxifraga* L.
1 [IPEN si0u-1994BL00089] Slovenia , Steiner Alpe,
Grintovec, ascent from Ceska Koca to Grintovec ,
Alt.: 1500 -2200 m. , Coll.: Steffan, F. & Th. Ster
08/1992 *2017

Cistaceae

52. 2W Helianthemum nummularium subsp. grandiflorum (Scop.)
Schinz & Thell.
4 [IPEN sk-0-u-2014BL00180] Czechoslovakia,
Slovakia , Tatra *2018

Clusiaceae

53. 1Z Hypericum montbretii Spach
8 [IPEN GR-0-B-2409692] Greece , Thrakien, Nomos
Evrou, Kallithea, Silikat, 900m, leg. , Alt.: 900 m. ,
Coll.: Raus/Schiers 18706 *2015
54. 2W Hypericum olympicum L.
4 [IPEN gr0u-2010BL00863] Greece , Taygetos mts. ,
Alt.: 1500 m. 2008 *2017

Crassulaceae

55. 2W Sedum anacampseros L.
2 [IPEN ch0u-1965BL00396] Switzerland , no further
details ! *2018
56. 2Z Sedum obtusifolium C.A.Mey.
6 [IPEN tr0u-1994BL00045] Turkey, Sugusksu
Kizilcaham, coll.: 1989. *2018
57. 2W Sedum stoloniferum S.G.Gmel.
3 [IPEN ge0u-1977BL00127] Georgia , Abkhazia
(Caucasus), Awadchara. *2018
58. 2W Sempervivum tectorum subsp. tectorum
1 [IPEN fr0u-1987BL00178] France , Lautaret. 1986
*2018

Cyclanthaceae

59. 2G Carludovica palmata Ruiz & Pav.
12 [IPEN xx0u-1968GR00859] *2017

Fabaceae

60. 1W Albizia julibrissin Durazz.
2 [IPEN cn-0-u-1998GR01066] China North-Central,
Gansu , China, Gansu Prov., Mt. Maiji, mixed forest,
mountainous area. , Alt.: 1500 m. *2018
61. 1W Dorycnium hirsutum (L.) Ser.
4 [IPEN it0u-2003BL01367] Italy , Altopiano delle
Manie (SV). , Alt.: 300 m. 14/07/1999 *2017

Geraniaceae

62. 2Z Geranium swatense Schonbeck-Temesy
2 [IPEN pk0u-1998BL00788] Pakistan , without
details. *2018
63. 1W Pelargonium alchemilloides (L.) L'Hér.
5 [IPEN za0u-2011ZS00378] South Africa , Balloch,
Balloch Farm (near S border of Lesotho) *2017

Globulariaceae

64. 2Z Globularia cordifolia L.
1 [IPEN at0u-1995BL00195] Austria ,
Niederösterreich, Eichkogel. , Alt.: 230 -350 m.
*2016

Iridaceae

65. 2Z Iris sintenisii subsp. sintenisii Janka
0 [IPEN bg0u-1995BL00180] Bulgaria , Eastern
Sredna Gora Mts , Coll.: Sterz *2018
66. 2W Iris sintenisii subsp. sintenisii Janka
4 [IPEN bg0u-2003BL01006] Bulgaria , Black Sea
coast, Perla N of Primorsko village. , Alt.: 2 m. *2018

Lamiaceae

67. 2W *Horminum pyrenaicum* L.
 3 [IPEN it0u-2002BL01250] Italy , Dolomites, Selva -
 Canazei, Passo di Sella. , Alt.: 1900 m. , Coll.:
 Gouda, E.J. 2002-12 04/08/2002 *2016
68. 1G *Salvia apiana* Jeps.
 11 [IPEN xx0u-2012ZS00728] *2015
69. 2Z *Salvia przewalskii* Maxim.
 11 [IPEN cn0u-2001BL00513] China South-Central,
 Yunnan , Zhongidian. , Alt.: 3240 m. , Coll.:
 Edinburgh Yunnan Exped. 1990 247 27/09/1990
 *2018
70. 1W *Scutellaria alpina* L.
 3 [IPEN fr0u-2016BL00113] France , Le Lauzet , Alt.:
 1700 m. *2017
71. 2W *Scutellaria californica* A.Gray
 8 [IPEN us0u-2010BL00078] United States, California,
 Lake Co. , North Coast Ranges , Alt.: 747 m. *2018
72. 2Z *Sideritis syriaca* L.
 8 [IPEN gr-0-u-2008BL00495] Greece , Mt Athos
 PA229 *2018
73. 2Z *Sideritis syriaca* L.
 7 [IPEN gr-0-u-2008BL00497] Greece , Mt. Olympos
 *2018
74. 2Z *Sideritis syriaca* L.
 2 [IPEN gr0u-2008BL00498] Greece , Euboea *2017
75. 2W *Stachys pradica* (Zanted.) Greuter & Pignatti
 5 [IPEN ch0u-1988BL00339] Switzerland ,
 Switzerland, Valais, Gd. St. Bernard. , Alt.: 2300 m.
 *2018
76. 2W *Teucrium halacsyanum* Heldr.
 13 [IPEN gr0u-2008BL00349] Greece , Attiki: Mt.
 Imittos *2017

Lardizabalaceae

77. 2G Stauntonia hexaphylla (Thunb. ex Murray) Decne.
9 [IPEN XX-0-U-2003BL00495] *2017

Liliaceae

78. 1W Allium altaicum Pall.
3 [IPEN ru0u-1979BL00323] Russian Federation,
Altay , S.W.-Siberia, Altai Mts., South facing talus
slope above desert steppe, near settlement of Kurai ,
Alt.: 2000 -2200 m. *2017

79. 1G Helonias bullata L.
7 [IPEN xx0u-1998BL00254] *2018

80. 2W Polygonatum multiflorum var. ramosum (Döll) Geisenh.
6 [IPEN be0u-2004BL01043] Belgium , Kortrijk, bij
ondergronds kanaaluitgraving , Coll.: Prof. P. Van
Der Veken s.n. 19/04/1979 *2016

81. 2W Trillium flexipes Raf.
25 [IPEN us0u-2008BL01795] United States, Tennessee
*2017

82. 2G Trillium kurabayashii Freeman
22 [IPEN xx0u-2000BL00131] *2017

83. 2G Veratrum album L.
4 [IPEN xx0u-1965BL00228] *2016

84. 2G Veratrum nigrum L.
4 [IPEN xx0u-1965BL00271] *2016

Magnoliaceae

85. 1G Magnolia wilsonii (Finet & Gagnep.) Rehder
13 [IPEN xx0u-2010RD00433] *2016

Malvaceae

- 86. 1W Lavatera thuringiaca L.
1 [IPEN ro0u-2015ZS00183] Romania , Near Iasi
*2016

Mimosaceae

87. 2W Leucaena leucocephala (Lam.) de Wit
1 [IPEN vi0u-1988GR00056] Virgin Islands (U.S.),
St. Thomas Island, on top of mountain near airlanding
strip. 1967 *2016

Myrtaceae

88. 2G Callistemon rigidus R.Br.
4 [IPEN xx0u-2006BL00421] *2018

Nartheciaceae

89. 2W Narthecium ossifragum (L.) Huds.
8 [IPEN nl0u-1964BL00700] Netherlands, Prov.
Drenthe, near Eelde 1964 *2016

Oleaceae

90. 1G Syringa reticulata (Blume) Hara
5 [IPEN xx-0-u-2007RD01665] *2018

Onagraceae

91. 3W Fuchsia paniculata Lindl.
7 [IPEN pa0u-1980GR00318] Panama, Chiriqui
Mt. wood near Guadeloupe, 2 km N of Cerro Punta.,
Alt.: 1800 m., Coll.: Maas, P.J.M. et al. 4985
21/10/1980 *2014

Plantaginaceae

92. 2Z Veronica bachofenii Heuff.
7 [IPEN ro0u-2000BL01251] Romania, NW Romania,
Apuseni Mts., Podisul Padesului, valley of the
Galbena r. near Poiana Florilor; 1995. *2018
93. 2W Veronica spicata subsp. spicata
3 [IPEN fr0u-2008BL00643] France, Lautaret, Alt.:
2000 m. *2017

Plumbaginaceae

94. 2Z *Armeria maritima* subsp. *andina* (Poepp. ex Boiss.) Moore & H.O.Yates
5 [IPEN ar0m-2002/0912] Argentina, Argentina South, Santa Cruz, Lago Argentina, Califate, Peninsula Magellanes *2018

Poaceae

95. 1W *Bouteloua gracilis* (Willd. ex Kunth) Lag. ex Griffiths
13 [IPEN us0u-2002BL00753] United States, South Dakota *2017

Polemoniaceae

96. 1W *Polemonium pauciflorum* S.Watson
9 [IPEN us0u-2009BL00514] United States, Arizona, Cochise Co., Alt.: 2073 m., Coll.: Alan Bradshaw (Alplains) 70095.17 *2014

Polygonaceae

97. 1G *Eriogonum arborescens* Greene
5 [IPEN xx-0-u-2016BL00073] *2017
98. 2G *Eriogonum umbellatum* var. *subaridum* S.Stokes
5 [IPEN xx0u-1994BL00472] *2017
— 99. 2W *Oxyria digyna* (L.) J.Hill
2 [IPEN it0u-2009BL00619] Italy, Valle Urtier, A. Manda, Alt.: 2400 m. *2017

Ranunculaceae

100. 1W Aquilegia atrata W.D.J.Koch
 4 [IPEN at0u-2015BL00272] Austria, Salzburg(erland)
 Tennengau, Adnet, Seefeldmühle N, Almbach,
 Stausee , Alt.: 470 m. , Coll.: Mayr, A. (Apollonia)
 08/2014 *2017
- 101. 2W Aquilegia vulgaris subsp. vulgaris
 0 [IPEN ch0u-2000BL01193] Switzerland , Kärnten,
 Obir, lime. , Alt.: 1600 -2000 m. *2017
102. 1G Thalictrum rochebrunianum Franch. & Sav.
 3 [IPEN xx0u-2014BL00305] *2018
103. 1K Trautvetteria caroliniensis (Walter) Vail
 8 [IPEN xx0u-2013ZS00595] *2016

Rosaceae

104. 2W Acaena inermis Hook.f.
 10 [IPEN nz0o-1992BL00081] New Zealand. *2018
105. 2Z Acaena pallida (T.Kirk) J.W.Dawson
 5 [IPEN NZ-0-TUEB-4674] New Zealand *2018
106. 2W Alchemilla transiens (Buser) Buser
 3 [IPEN fr-0-u-1988BL00286] France, Gard, Mont
 Aigonal. *2018
107. 2W Geum coccineum Sibth. & Sm.
 8 [IPEN bg0u-1976BL00116] Bulgaria , Vitoscha Mts.
 *2017
- 108. 1W Mespilus germanica L.
 1 [IPEN be-0-u-2011RD00596] Belgium , without
 further location ! *2018
- 109. 2Z Potentilla arguta Pursh
 1 [IPEN ca0u-2008BL00500] Canada, British
 Columbia *2018
110. 2Z Potentilla gracilis var. flabelliformis (Lehm.) Nutt.
 3 [IPEN us0u-1999BL00564] United States , Rocky
 Mountains, (1930) without details. *2016

Saxifragaceae

111. 1W Astilbe rivularis Buch.-Ham. ex D.Don
 7 [IPEN in-0-u-2011BL00024] India, Himachal Pradesh , NW Himalaya , Alt.: 2400 m. , Coll.: Chadwell, C. et al. 6857 2010 *2018
112. 2Z Heuchera chlorantha Piper
 3 [IPEN ca-0-mb-1990/367] Canada, British Columbia Lillooet R.50 *2018
113. 2Z Heuchera cylindrica Douglas
 3 [IPEN US-0-RAMB-51094] United States, Wyoming *2017
114. 1G Peltoboykinia watanabei (Yatabe) Hara
 3 [IPEN xx0u-2002BL00017] *2014
115. 2W Saxifraga cherlerioides var. rebunshirensis (Engl. & Irmsch.) Hara
 6 [IPEN jp0u-1997BL00485] Japan , Hokkaido, Mt. Nishi-kumaneschiri-dake, Katoh-gun. *2018
116. 2W Saxifraga hostii subsp. hostii
 4 [IPEN si0u-1994BL00098] Slovenia , Jalovec, ascent from Vrsic-Pass. , Alt.: 1600 -1750 m. *2018
117. 2W Saxifraga hypnoides var. hypnoides
 2 [IPEN ie0u-1978BL00054] Ireland , Burren, Clare E.C.N 1978 *2017
118. 2Z Saxifraga umbrosa L.
 5 [IPEN es0u-1992BL01333] Spain , Picos de Europa. *2018

Scrophulariaceae

119. 1W Lophospermum erubescens D.Don
 7 [IPEN bo0u-2005GR01250] Bolivia, Prov. Santa Cruz , direction of Samaipata, near Ayacucho , Coll.: Gouda, C.S. s.n. *2016
120. 2W Penstemon alpinus Torr.
 14 [IPEN us0u-1996BL00291] United States, Colorado , Jefferson County. , Alt.: 2300 m. *2018

Scrophulariaceae (cont.)

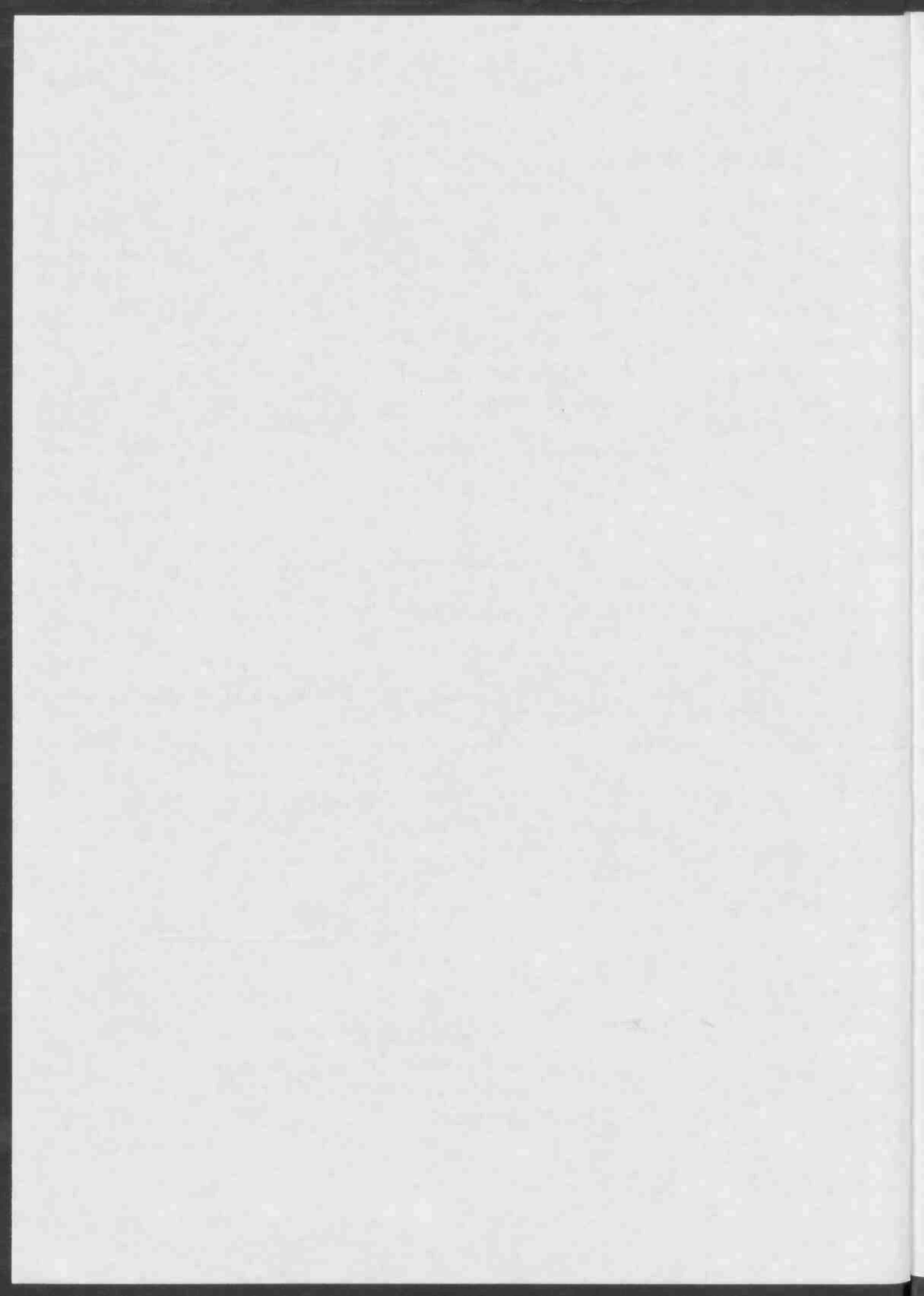
121. 2W Penstemon barbatus var. barbatus
 10 [IPEN us0u-1996BL00222] United States, Oregon
 *2017
122. 1W Penstemon cardwellii T.J.Howell
 16 [IPEN us0u-1991BL00700] United States, Oregon ,
 Multnomah Co., no further details! , Alt.: 1080 m.
 *2013
123. 2W Penstemon digitalis Nutt.
 7 [IPEN us0u-1995BL01112] United States, Michigan ,
 Ingham county, roadbank above seep , Alt.: 259 m.
 *2017
124. 2W Penstemon euglaucus English
 15 [IPEN us0u-1999BL01169] United States, Oregon ,
 USA, Oregon, Santiam Pass. *2013
125. 2G Penstemon hirsutus var. pygmaeus R.W.Bennett
 11 [IPEN xx-0-u-2009BL00079] *2018
126. 2Z Penstemon tubiflorus Nutt.
 14 [IPEN us0u-2011BL00995] United States, Missouri ,
 Rock Hill *2013
127. 1Z Verbascum phoeniceum L.
 3 [IPEN RO-0-BERN-1980/93] Romania, Distr. Sibiu ,
 Slimnie *2017
128. 2W Veronicastrum sibiricum (L.) Pennell
 3 [IPEN ru-0u-2000BL01083] Russian Federation,
 Asiatic Russia, Arctic Isls. , Russky Island (S of
 Vladivostoc). *2018

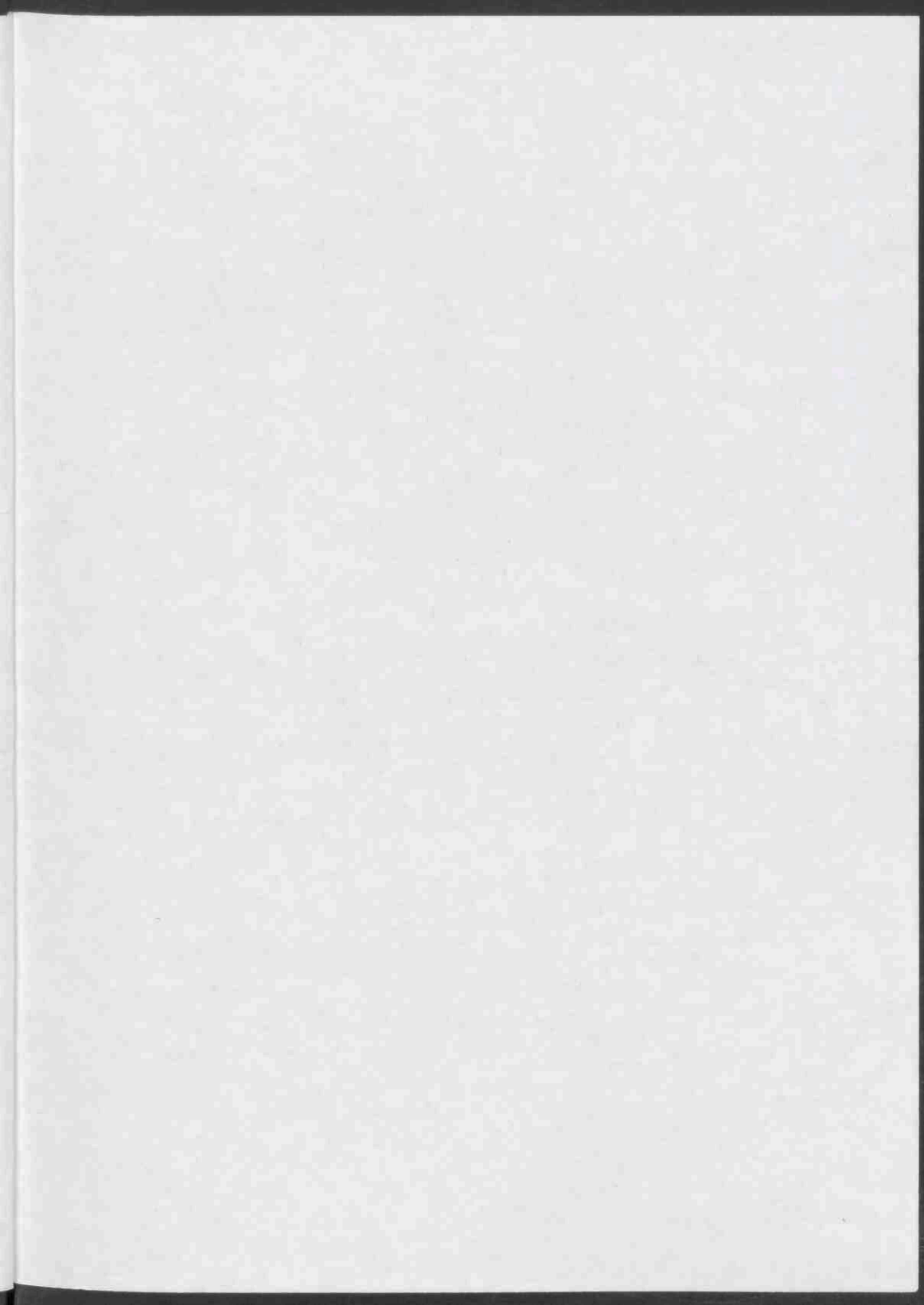
Urticaceae

129. 1W Dendrocnide moroides (Wedd.) Chew
 6 [IPEN xx-0-u-2016BL00618] , ~~Coll.: Pavelka, M.~~
 *2018

Valerianaceae

130. 1Z Patrinia scabiosifolia Fisch. ex Link
 9 [IPEN jp0u-2014BL00144] Japan, Hokkaido ,
 Shiraoi-machi, Shiraoi-gun , Coll.: H. Takahashi ea..
 27/07/2000 *2016





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