

Utrecht University Botanic Gardens

P.O. Box 80.162 3508 TD
Utrecht The Netherlands

Index Seminar No. 62 - 2020-21

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 (**I**nternational **P**lant **E**xchange **N**etwork) 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 (**B**otanic **G**ardens **C**onservation **I**nternational).

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 **April 1, 2021**. 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

General Department:

Drs. Fenna F. Hanraets, General Director	<i>F.F.Hanraets@uu.nl</i>
Dr. Edwin T. Pos, Scientific Director	<i>E.T.Pos@uu.nl</i>
Drs. Akkie J. Joosse, Communications Officer	<i>A.J.Joosse@uu.nl</i>
Mrs. Christine Das-van der Knaap Secretary	<i>c.j.m.vanderknaap@uu.nl</i>

Curators' Department:

Drs. Hans Persoon Curator and Deputy Director	<i>J.G.M.Persoon@uu.nl</i>
Drs. Gijs Steur Curator and Research	<i>G.Steur@uu.nl</i>
Drs. Eric J. Gouda Curator and Research	<i>E.J.Gouda@uu.nl</i>
Mr. Lennart Everts Assistant	<i>M.L.Everts@uu.nl</i>

Educational Department:

Drs. Nick.A.J.Meijdam Education officer	<i>N.A.J.Meijdam@uu.nl</i>
Ir. Ruth C. de Visser-de Jonge, Coordinator Theme Garden Project	<i>R.C.deVisser@uu.nl</i>

Technical/collecting staff (Utrecht)

Gerard van Buiten Hortulanus	<i>G.vanBuiten@uu.nl</i>
Roel Vonk	<i>R.Vonk@uu.nl</i>
Fred H.J. Siesling	<i>F.H.J.Siesling@uu.nl</i>

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

Situation and climate:

Geographical position of the Main Garden	52° 06' N : 5°11' E
Altitude	2 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. **62-2020-21** 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] and Gijs Steur [GS]: 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* [EG]
 - *Orchidaceae* [EG]
 - *Costaceae* [EG]
- *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 & 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.

Alstromeriaceae

1. 2W *Bomarea edulis* (Tussac) Herb.
[IPEN sr0u-1980GR00248] Suriname , Kabelebo area, along
Barieba Creek,
Coll.: Lindeman,J.C. & A.R.A.Görts 455 *2020

Annonaceae

2. 3W *Mkilua fragrans* Verdc.
[IPEN ke-0-u-1991GR01649] Kenya. *2020

Apiaceae

3. 2Z *Eryngium planum* L.
[IPEN RO-0-CLA-3022] Romania *2020

Aristolochiaceae

4. 2W *Aristolochia trilobata* L.
[IPEN gf0u-1992GR00904] French Guiana , Saül. , Coll.: Mori, S.
22351 *2016

Asteraceae

5. 2Z *Aster amellus* subsp. *ibericus* (Stev.) Grierson
[IPEN TR-0-B-2513680] Turkey , Prov. Artvin, Demirkent , Alt.:
2200 m. , Coll.: Ern,H. 6536 *2020
6. 2Z *Helichrysum nudifolium* subsp. *pilosellum* (L.f.) Beentje
[IPEN LS-1-M-2010/0431] Lesotho , Qacha's Nek Distr.,
Ramatseliso's Gate,
Alt.: 2418 m. , Coll.: B.Ntloko *2020

Betulaceae

7. 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

8. 1W *Chilopsis linearis* (Cav.) Sweet
[IPEN us-0-u-2011GR01069] United States, Texas *2018

Brassicaceae

9. 2W *Arabis soyeri* subsp. *jacquinii* (G.Becker) B.M.G.Jones
[IPEN sk-0-u-1992BL01345] Slovakia , Velka Fatra,
Selenec. *2018
10. 2W *Lobularia maritima* (L.) Desv.
[IPEN IT-0-U-2010BL00205] Italy , Marina di Grosseto (Grosseto),
bordo macchia Alt.: 3 m. , Coll.: F.Conti & L.Donati
23/07/2008 *2020
11. 1W *Pachyphragma macrophyllum* (Hoffm.) N.Busch
[IPEN xx0u-1998BL00720] Caucasus , NW. *2019

Bromeliaceae

12. 3G *Aechmea bracteata* (Sw.) Griseb.
[IPEN XX-0--M-1985/1137] *2020
13. 3W *Wittmackia lingulata* (L.) Mez
[IPEN MQ-0-U-1996GR00403] Martinique , near parque Trois
Ilets, epiphyte on *Haematoxylon campedrianum*. *2019
14. 3W *Aechmea longicuspis* Baker
[IPEN PE-0-U-2018GR00610] Peru, Reg. Loreto , Yurimaguas ,
Alt.: 165 m. , Coll.: Fernandez, R., E.J.Gouda & R.Gouda 3644
21/12/2012 *2020
15. 3W *Aechmea mertensii* (Meyers) Schult.f.
[IPEN GF-0-U-2020GR00375] French Guiana , Mt. de Kaw , Coll.:
Piet van Beest (BCG) *2020
16. 3W *Guzmania donnellsmithii* Mez ex J.D.Sm.
[IPEN PA-0-U-2020GR00384] Panama , Coll.: Jeroen van der Steen
GUSPC-0301 02/02/2018 *2020
17. 3W *Guzmania donnellsmithii* Mez ex J.D.Sm.
[IPEN PA-0-U-2020GR00383] Panama , Coll.: Jeroen van der Steen
GUSPC-0298 02/2018 *2020

18. 3W *Pitcairnia burchellii* (Mez) Mez
[IPEN BR-0-U-2017GR00237] Brazil, Brazil Northeast,
Pernambuco , São Francisco Cannion , Coll.: Leme, E. 9131
2017 *2020
19. 3Z *Pitcairnia capixaba* Fraga & Leme
[IPEN BR-0-U-2012GR00905] Brazil, Brazil Southeast, Espirito
Santo , border Minas Gerais, Vargena Alta *2020
20. 3W *Pitcairnia chiapensis* Miranda
[IPEN MX-0-U-2012GR00674] Mexico, Mexico Southeast,
Chiapas , 5 miles S of Tuxtla Gutierrez along highway 190, at the
bridge over Río Chiapas H. Wiedman s.n. 08/1972 *2020
21. 3W *Pitcairnia grafii* Rauh
[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 *2019
22. 3W *Pitcairnia orchidifolia* Mez
[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 *2019
23. 3Z *Pitcairnia orchidifolia* Mez
[IPEN VE-0-U-2016GR00908] Venezuela , Cuyagua district in
Aragua Cathcart & Lemieux *2019
24. 3W *Pitcairnia pungens* Kunth
[IPEN EC-0-U-2015GR00925] Ecuador , Sigas , Alt.: 1570 m. ,
Coll.: Jan Verkade F#7412 *2020
25. 3W *Pitcairnia recurvata* (Scheidw.) K.Koch
[IPEN GT-0-U-2015GR00941] Guatemala , Semuc
(Guatamala/Belize) , Coll.: Piet van Beest (BCG) *2020
26. 3Z *Racinaea fraseri* (Baker) Spencer & L.B.Sm.
[IPEN ec0u-2011GR00563] Ecuador , Coll.: Elly Bak (NL)
1990 *2020
27. 3W *Racinaea tenuispica* (André) M.A.Spencer & L.B.Sm.
[IPEN CO-0-U-2018GR00502] Colombia, Dept. Tolima , S of
Fusagasugá, near La Vega , Alt.: 1336 m. , Coll.: Monika Bruggaier
& Timm Stolten BS-CO-2015-33 2015 *2020
28. 3W *Tillandsia complanata* Benth.
[IPEN PE-0-U--2010GR00363] Peru 09/2003 *2020
29. 3G *Wallisia cyanea* Barfuss & W. Till
[IPEN XX-0-U-2004GR01092] *2020

30. 3W *Vriesea rubra* (Ruiz & Pav.) Beer
[IPEN CO-0-U-2016GR00719] Colombia , above Choachi , Alt.:
2500 m. , Coll.: Peter Tristram 2016 *2020
31. 3W *Vriesea rubra* (Ruiz & Pav.) Beer
[IPEN CO-0-U-2016GR00717] Colombia , Buena Vista area, above
Villavicencio , Alt.: 800 m. , Coll.: Peter Tristram #2 2016 *2020
32. 3W *Zizkaea tuerckheimii* (Mez) W. Till & Barfuss
[IPEN DO-0-U-2004GR01127] Dominican Republic ,
Hispaniola *2020

Campanulaceae

33. 2W *Campanula takesimana* Nakai
[IPEN kr0u-1992BL01300] , South Korea, Ullung Isl., Chonbu-
ri *2020

Cannaceae

34. 3W *Canna indica* L.
[IPEN GY-0-U-1989GR00092] Guyana , Old Farm near Konashen.
Coll.: Jansen-Jacobs, M.J. 1781 *2020

Caprifoliaceae

35. 2Z *Scabiosa argentea* L.
[IPEN ro0u-1999BL00569] Romania , Cistr. Constanza, Vama
Veche (1997). *2017

Caryophyllaceae

36. 2W *Dianthus sylvestris* Wulfen
[IPEN FR-0-U-1993BL00776] France, Pyrenees , Aude, Montagne
de Tauch , Coll.: Bellotte, W. *2019

Cistaceae

37. 1W *Cistus ladanifer* L.
[IPEN ES-0-U-2011BL01079] Spain , Leon , Alt.: 300 m. *2020

Clusiaceae

38. 2W *Hypericum olympicum* L.
[IPEN GR-0-U-2010BL00863] Greece , Taygetos mts. , Alt.: 1500 m. 2008 *2020

Fabaceae

39. 1W *Albizia julibrissin* Durazz.
[IPEN cn-0-u-1998GR01066] China, China North-Central, Gansu , Prov., Mt. Maiji, mixed forest, mountainous area. , Alt.: 1500 m. *2018

Francoaceae

40. 1G *Francoa sonchifolia* Cav.
[IPEN XX-0-U-2004BL00394] *2019

Geraniaceae

41. 2Z *Geranium swatense* Schonbeck-Temesy
[IPEN pk0u-1998BL00788] Pakistan , without details. *2020
42. 1W *Pelargonium alchemilloides* (L.) L'Hér.
[IPEN za0u-2011ZS00378] South Africa , Balloch, Balloch Farm (near S border of Lesotho) *2020

Hydrangeaceae

43. 1G *Dichroa versicolor* (Fortune) D.R.Hunt
[IPEN XX-0-U-2012BL00604] *2020

Iridaceae

44. 2W *Iris douglasiana* Herb.
[IPEN US-0-U-1997BL00850] United States, California , San Mateo Co. *2020
45. 2Z *Iris orientalis* Mill.
[IPEN tr0u-1995BL00188] Turkey , Turkey, Prov. Samsun, near Ladik. *2020
46. 2W *Iris sintenisii* subsp. *sintenisii* Janka
[IPEN bg0u-2003BL01006] Bulgaria , Black Sea coast, Perla N of Primorsko village. , Alt.: 2 m. *2020
47. 2W *Iris sintenisii* subsp. *sintenisii* Janka
[IPEN BG-0-U-1994BL01102] Bulgaria, E.Sredna Gora Mts. , Coll.: Sterz *2019

Lamiaceae

48. 2Z *Phlomis fruticosa* L.
[IPEN HR-0-U-2009BL00316] Croatia , N. Dalmatien, N Drage , Alt.: 50 -150 m. , Coll.: Peter Gigerl 08/2007 *2019
49. 2W *Prunella grandiflora* subsp. *pyrenaica* (Gren. & Godr.) A. & O.Bolos
[IPEN fr0u-1987BL00368] France , Aude, Laprade. 1986 *2020
50. 2W *Stachys recta* subsp. *recta* L.
[IPEN RO-0-U-2009BL00946] Romania , Comuna Letcani, Satul Bogonos , Coll.: I. Sârbu et all. *2020
51. 2W *Teucrium chamaedrys* subsp. *nuchense* (K.Koch) Rech.f.
[IPEN GE-0-U-2011BL00912] Georgia , Alt.: 917 m. , Coll.: P.C.C. Georgian Expedition 2010 13-3 20/08/2010 *2019
52. 2W *Teucrium halacsyanum* Heldr.
[IPEN GR-0-U-2008BL00349] Greece , Attiki: Mt. Imittos *2019

Liliaceae

53. 1G *Helonias bullata* L.
[IPEN xx0u-1998BL00254] *2018
54. 2Z *Veratrum oxysepalum* Turcz.
[IPEN cn0u-1997BL01048] China , S-Chekiang. *2020

Magnoliaceae

55. 1G *Magnolia wilsonii* (Finet & Gagnep.) Rehder
[IPEN xx0u-2010RD00433] *2016

Malvaceae

56. 2W *Hibiscus moscheutos* L.
[IPEN GE-0-U-2009BL00946] United States, Georgia NYBG-G
2007 *2020

Myrtaceae

57. 2G *Callistemon rigidus* R.Br.
[IPEN xx0u-2006BL00421] *2018

Nartheciaceae

58. 2W *Narthecium ossifragum* (L.) Huds.
[IPEN NL-0-U-1964BL00700] Netherlands, Prov. Drenthe , near
Eelde 1964 *2016

Pinaceae

59. 2W *Abies cephalonica* Loudon
[IPEN xx-0-u-1991RD01803] Balkan , Coll.: Cytotax 24529 *2019

Poaceae

60. 1W *Bouteloua gracilis* (Willd. ex Kunth) Lag. ex Griffiths
[IPEN us0u-2002BL00753] United States, South Dakota *2020

Polygonaceae

61. 1Z *Pteroxygonum giraldii* Dammer & Diels
[IPEN CN-0-U-2014BL01103] China, China North-Central,
Shaanxi , Quin Ling mountains, Taibai Shan , Alt.: 1400 m. *2020

Ranunculaceae

62. 1K *Trautvetteria caroliniensis* (Walter) Vail
[IPEN xx0u-2013ZS00595] *2016

Rosaceae

63. 2W *Acaena ovalifolia* Ruiz & Pav.
[IPEN PE-0-U-2016BL00744] Peru, Reg. Amazonas, Prov.
Chachapoyas , Rd. Leymebamba to Balsas, near Collonco , Alt.:
3513 m. , Coll.: Gouda, E.J. 15-321 28/11/2015 *2020
64. 2Z *Acaena pallida* (T.Kirk) J.W.Dawson
[IPEN NZ-0-TUEB-4674] New Zealand *2019
65. 1W *Sorbaria kirilowii* var. *kirilowii*
[IPEN XX-0-U-2004BL00158] NW. Himalaya , Alt.: 3300 m. ,
Coll.: Chadwell, C. et al. 4547 2003 *2020

Saxifragaceae

66. 2W *Heuchera pulchella* Wootton & Standl.
[IPEN US-0-U-2015BL00472] United States, New Mexico,
Bernalillo Co , Alt.: 3170 m. , Coll.: Alan Bradshaw (Alplains)
70924.37 *2019
67. 2W *Saxifraga cherlerioides* var. *rebunshirensis* (Engl. & Irmsch.) Hara
[IPEN JP-0-U-1997BL00485] Japan , Hokkaido, Mt. Nishi-
kumaneschiri-dake, Katoh-gun. *2019
68. 2Z *Saxifraga rosacea* subsp. *rosacea*
[IPEN DE-0-U-1990BL00298] Germany , Scharfenstein, near
Kassel *2019

Scrophulariaceae

69. 1W *Lophospermum erubescens* D.Don
[IPEN bo0u-2005GR01250] Bolivia, Prov. Santa Cruz , direction of
Samaipata, near Ayacucho , Coll.: Gouda, C.S. s.n. *2016
70. 2W *Penstemon barbatus* var. *barbatus*
[IPEN us0u-1996BL00222] United States, Oregon *2019

Taxaceae

71. 1G *Taxus brevifolia* Nutt.
[IPEN XX-0-U-2006RD01789] *2020

Urticaceae

72. 1G *Dendrocnide moroides* (Wedd.) Chew
[IPEN xx-0-u-2016BL01618] *2018

Verbenaceae

73. 1G *Petrea volubilis* L.
[IPEN xx0u-1992GR01111] *2020