



Šiaulių
akademija
Botanikos sodas

INDEX SEMINUM 2021 No 21





VILNIUS UNIVERSITY ŠIAULIAI ACADEMY
BOTANICAL GARDEN

INDEX SEMINUM 2021

No 21

VILNIUS UNIVERSITY ŠIAULIAI ACADEMY BOTANICAL GARDEN

Phone: +370 659 93748

E-mail: subotanika@sa.vu.lt

Web: www.sa.vu.lt/bs

Facebook: <https://www.facebook.com/SAVUbotanikossodas>

Authors: Virginija Aleknienė, Karolis Grušas, Rita Šulskienė, Lina Šuntaitė-Kruopienė, Rimanta Vainorienė, Žydrūnė Valainytė, Martynas Kazlauskas.

Cover design Karolis Grušas

Photos are from the archive of botanical garden

VILNIAU UNIVERSITY ŠIAULIAI ACADEMY BOTANICAL GARDEN

ŠIAULIAI AREA. Šiauliai is a city of Northern Lithuania. It counts its years from the Battle of Saulė which took place in 1236. Šiauliai is the fourth largest city by its population. Population: 101 500.

HISTORY. Šiauliai University Botanical Garden was established in 1997 at the former site of Agrobiological Station of Šiauliai Pedagogical Institute. Since 2021, botanical garden is part of Vilnius University Šiauliai Academy. Total area of the garden is 6.54 ha. Since 2003 botanical garden is a member of Botanic Gardens Conservation International, Planta Europa Network, Association of Botanic Gardens in the Baltic Sea Region, Botanical Gardens of the Baltic Countries, and the Association of Lithuanian University Botanic Gardens (LUBSA). Since 2005 the Botanic Garden is a member of International Network of Phenological Gardens of Europe (IPG). There is a Club of Botanic Garden Friends at the Botanical Garden. The Garden exchanges seeds with more than 300 botanical gardens of the world. Director: dr. Martynas Kazlauskas.

Fields of research:

- research on plant biodiversity *ex situ* and *in situ*,
- research on introduction and acclimatization of ornamental plants,
- phenological observations,
- research on plant bioactive compounds of pharmaceutical interest.

Other activities:

- *ex situ* conservation,
- educational activities at the botanical garden,
- environmental and cultural events at the botanical garden.

COLLECTIONS OF THE BOTANICAL GARDEN. The garden has specimens of over 4400 species and varieties of plants. The plants are kept in 6 sections.

- **Section of Plant Systematics and Geography.** The purpose of the Division of Plant Systematics and Geography is to gather a rich collection of outdoor plants, including diverse plant families, genera and species from Lithuania and different geographical regions worldwide, where various educational and scientific research activities could take place. The plants are grouped and displayed in accordance with the system of *Magnoliophyta* division by A. L. Takhtajan. Plant families are arranged in alphabetical order. Since 2000 the section has specimens of over 650 plant species from 85 families. The section is supervised by botanical collections senior supervisor Žydrūnė Valainytė.
- **Section of Lithuanian Flora.** Section of Lithuanian Flora was established in 2011. The section includes herbaceous plants from different ecosystems: swamps, wet and dry meadows, forests ca 200 species. Priorities: rare and protected species of plants, beneficial (medicinal and ethnobotanical) plants. The section covers 78 species of plants included in the Red Book of Lithuania. The section is supervised by the botanical collections' supervisor Virginija Aleknienė.
- **Section of Floriculture.** The purpose of the division is to gather ornamental herbaceous outdoor plants, broaden and exhibit their collection. The section was opened in 2004. It currently has over 1350 species and varieties of annual and perennial ornamental plants which fall under 58 families. Most flower breeds were brought from Estonia, Latvia, Poland as well as Lithuanian florists and botanical gardens. Some plants were grown from seeds, received from various botanical gardens worldwide via the seed exchange programme. The largest collections are those of *Lilium*, *Hemerocallis* and *Iris*. The section is supervised by senior supervisor of botanical collections Rita Šulskienė.
- **Section of Mountain Plants.** The purpose of the division is to gather a collection of mountain flora, suitable for cognitive and educational purposes, carrying out plant evaluation and scientific

research. Since 2000 this section has specimens of mountain flora from Europe, Asia, and North America. There are over 1150 species and varieties of plants which fall under 70 families. The main priorities for choosing the species are: ornamental features, natural resources of the species, beneficial features of the plant. The alpine plants of the division are grown in a rock-garden and hotbeds. The rock-garden is built on an artificial hill and covers 7.5 ares. Herbaceous mountain flora is influenced by changing climate conditions of vertical zonality as well as harsh growing conditions and, therefore, contains a large morphological variety with numerous tufted, evergreen, dwarf, rosette, thick-leaved, fluffy and leathery-leaved plants. The section is supervised by researcher dr. Rimanta Vainorienė.

- **Section of Dendrology.** Dendrological collection has been maintained since 1999. The division includes 300 coniferous and 680 leafy trees and shrubs. The area of the garden is not large, therefore, it mainly focuses on groundling plants. One of the largest collections is that of *Ericaceae* family, covering over 300 species and varieties from *Rhododendron*, *Calluna*, *Kalmia*, *Gaultheria*, *Erica* and *Vaccinium* genera. The section is supervised by landscape architect Karolis Grušas.
- **Phenological Garden.** Since 2005 our Botanical Garden is a member of Phenological Observations Network in Europe. Phenological garden is intended for observation of phenological phases of 18 plants genetically identical woody plants. Supervisor: researcher dr. Rimanta Vainorienė.

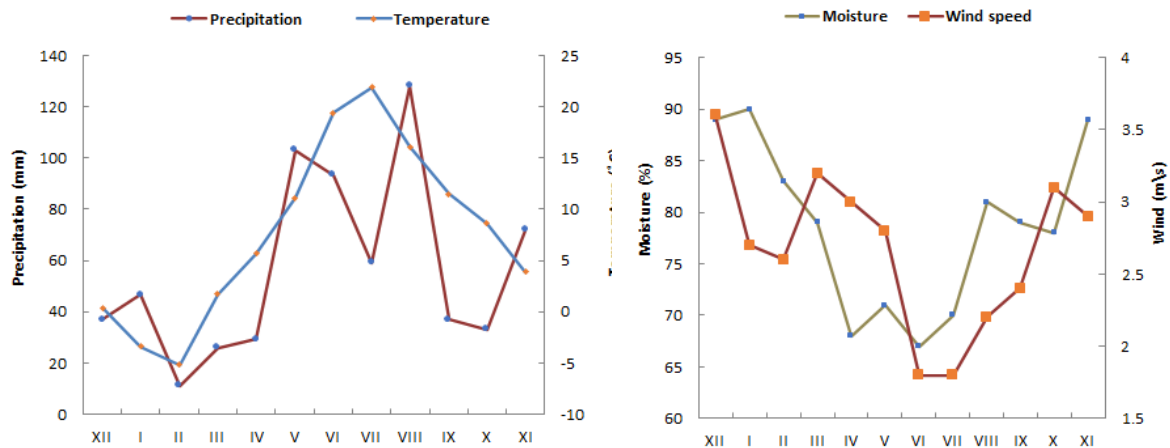
GEOGRAPHICAL SITUATION:

Latitude N 55° 55' 57.7"

Longitude E 23° 16' 57.0"

Zone 5 (Baltic region plant hardiness map)

CLIMATIC CONDITIONS:



Distribution of mean month: precipitation and temperature (A), moisture and wind speed (B) from December 2020 till November 2021.

Collectors: V. Aleknienė, B. Balašaitienė, K. Grušas, R. Šulskienė, D. Ūsienė, R. Vainorienė, Ž. Valainytė.

* - Seeds collected in 2020

** - Seeds collected in 2019

**SEEDS FROM PLANTS
CULTIVATED IN THE GARDEN
EXCEPT REPRESENTATIVES OF LITHUANIAN FLORA**

PINOPHYTA Cronquist, Takht. et W. Zimm. ex Reveal
PINOPSIDA Burnett

CUPRESSACEAE Rich. ex Bartl.

1. *Juniperus rigida* Siebold et Zucc.* [Dubrava Arboretum of Dubrava Experimental-Training Forest Enterprise, Vaišvydava, Kaunas district, LT, 2005].

PINACEAE Lindl.

2. *Abies koreana* E. H. Wilson [The nursery "Virblės medelynas", Butkai, Klaipėda district, LT, 2020].
3. *Pseudotsuga menziesii* (Mirb.) Franco* [Radviliškis Forest Enterprise, LT, 2003].
4. *Tsuga canadensis* (L.) Carriere* [Private collection of A. Žakevičius, Šiauliai, LT, 2001].

MAGNOLIOPHYTA Cronquist, Takht. et W. Zimm. ex Reveal
MAGNOLIOPSIDA Brongn.

ACERACEAE Juss.

5. *Acer ginnala* Maxim.* [Arboretum Novy Dvur, Opava, CZ, 2007].
6. *Acer tataricum* L. subsp. *tataricum** [Rogów Arboretum of Warsaw University of Life Sciences, PL, 2006].

ANACARDIACEAE Lindl.

7. *Rhus typhina* L.** [Botanical Garden of Šiauliai University, LT. No data available of their origin].

APIACEAE Lindl.

8. *Athamanta turbith* (L.) Brot. subsp. *haynaldii* (Borbás et Uechtr.) Tutin* [Botanical Garden Rennsteiggarten Oberhof, DE, 2010].
9. *Bupleurum griffithii* 'Décor' [Ural State University Botanical Garden, Ekaterinburg, RU, 2004].
10. *Bupleurum rigidum* L. [The Botanical Garden of Nice, FR, 2002].
11. *Carum carvi* L. [Vytautas Magnus University Botanical Garden, LT, 2020].
12. *Chaerophyllum aromaticum* L. [Botanic Garden of the University of Stuttgart-Hohenheim, Stuttgart, DE, 2008].
13. *Chaerophyllum aureum* L. [Botanical Garden University of Hamburg, DE, 2004].
14. *Coriandrum sativum* L. [The Commercial Source, LT, 2020].
15. *Cryptotaenia canadensis* (L.) DC. [Botanic Garden of the University of Stuttgart-Hohenheim, Stuttgart, DE, 2004].
16. *Cuminum cyminum* L. [The Botanical Garden of Naples, IT, 2020].
17. *Eryngium bourgatii* Gouan [University of Oxford Botanic Garden and Harcourt Arboretum, UK, 2004].
18. *Eryngium bromeliifolium* F. Delaroché [Botanical Garden Teplice, CZ, 2015].
19. *Ferula assa-foetida* L.* [Botanic Garden Meise, BE, 2002].
20. *Meum athamanticum* Jacq [Private collection of I. Burneckienė, Šiauliai, LT, 2006].
21. *Myrrhis odorata* (L.) Scop.* [Botanical Garden of Šiauliai University, LT. No data available of their origin].
22. *Laser trilobum* (L.) Borkh. [Botanic Garden of the Philipp University of Marburg, DE, (Deu Hessen 5517 Anhohe Oberkleen), 2002].
23. *Laserpitium latifolium* L. [Private collection of J. Balvočiūtė, Gyvoliai, Mažeikiai district, LT, 2005].
24. *Ligusticum lucidum* Mill. [Alpine Garden Mt. Patscherkofel University Innsbruck, AT, 2019].
25. *Levisticum officinale* W.D.J.Koch. [Botanical Garden of Šiauliai University, LT. No data available of their origin].
26. *Peucedanum cervaria* (L.) Lapeyr.* [Botanical Garden of the University Vienna, AT, 2002].
27. *Peucedanum rablense* W.D.J.Koch [Botanical Garden of the Carinthian Botanic Center, Klagenfurt, AT, 2019].
28. *Sanicula marilandica* L. [The Botanical Garden of Bonn University, DE, 2003].
29. *Seseli elatum* subsp. *osseum* (Crantz) P. W. Ball [The Botanical Garden of the University of Tübingen, DE, 2016].

AQUIFOLIACEAE Bartl.

30. *Ilex aquifolium* L.** [Ogród Botaniczny Zarząd Zieleni Miejskiej, PL, 2001].

ARALIACEAE Juss.

31. *Eleutherococcus sessiliflorus* (Rupr. et Maxim.) S. Y. Hu [Salaspils National Botanical Garden, LV, 2001].

ARISTOLOCHIACEAE Juss.

32. *Aristolochia clematitidis* L.* [Botanical Garden of Klaipėda University, LT, 2003].

ASTERACEAE Dumort.

33. *Alfredia cernua* (L.) Cass. [Central Botanical Garden of National Academia Science of Belarus, Minsk, BY, 2003].
34. *Arnica chamissonis* Less.** [Botanical Garden of the Christian Albrechts University of Kiel, DE, 2003].
35. *Bupthalmum salicifolium* L.** [Experimental Station of Field Floriculture, LT, 2004].
36. *Carlina acaulis* L.** [University of Salzburg Botanical Garden Department of Ecology and Evolution, AT, 2013].
37. *Centaurea ruthenica* Lam. [Botanical Garden of the Ukrainian Academy of Science, Kiev, UA, 2004].
38. *Chondrilla juncea* L. [The Botanical Garden of Bonn University, DE, 2003].
39. *Coreopsis grandiflora* Hogg ex Sweet [The Botanic Garden of the University of Pisa, IT, 2002].
40. *Cosmos* 'Antiquity' [The Commercial Source LT, 2021].
41. *Cosmos sulphureus* Cav. 'Cosmic Yellow' [The Commercial Source LT, 2021].
42. *Echinops orientalis* Trautv.** [Ogród Botaniczny Zarząd Zieleni Miejskiej, PL, 2003].
43. *Emilia coccinea* (Sims) G. Don* [Prague Botanical Garden, CZ, 2019].
44. *Erigeron atticus* Vill. [The Botanical Garden of the University of Regensburg, DE, 2012].
45. *Erigeron flettii* G. N. Jones** [Botanical Garden of the University of Tartu, EE, 2008].
46. *Erigeron speciosus* DC. [Botanic Garden Meise, BE, 2002].
47. *Galatella punctata* (Waldst. et Kit.) Nees* [Salaspils National Botanical Garden, LV, 2001].
48. *Gynura aurantiaca* (Blume) Sch. Bip. ex DC.** [Private collection of S. Gliaudys, Šiauliai, LT, 2018].
49. *Hymenoxys hoopesii* (A. Gray) Bierner** [Botanical Garden of the University of Tartu, EE, 2011].
50. *Leibnitzia anandria* (L.) Turcz.** [Nancy Botanical Garden, FR, 2009].
51. *Leontopodium ochroleucum* Beauverd* [Reykjavik Botanical Garden, IS, 2011].
52. *Leontopodium wilsonii* Beauverd* [The Botanical Garden of the University of Regensburg, DE, 2004].
53. *Ligularia alatipes** [Reykjavik Botanical Garden (China: Yunnan, Lijiang, Yulon Shan, Xie Ren Ji valley, above Mu Zhou Go (CLD 1189), 3300 m), IS, 2011].
54. *Ptilostemon afer* (Jacq.) Greuter* [The Alpine Garden, south of the Upper Belvedere, Vienna, AT, 2011].
55. *Rhaponticum heleniifolium* Gren. et Godr.** [Botanical Garden, Faculty of Science, Masaryk University, Brno, CZ, 2017].
56. *Rhaponticum scariosum* Lam. subsp. *rhaponticum* (L.) Greuter* [Botanical Garden University of Oslo, NO, 2010].
57. *Rudbeckia flava* Greene* [Vytautas Magnus University Botanical Garden, LT, 2000].
58. *Scorzonera hispanica* L. [Private collection of R. Vainorienė, Šiauliai, LT, 2020].
59. *Serratula tinctoria* L.* [The Botanical Garden at the Sorgenti del Cavuto, Aniversa degli Abruzzi, IT, 2004].
60. *Solidago rigida* L.* [Salaspils National Botanical Garden, LV, 2002].
61. *Solidago uliginosa* Nutt. [Salaspils National Botanical Garden, LV, 2004].
62. *Sonchus palustris* L. [Botanical Garden of Justus-Liebig-University Giessen, DE, 2020].
63. *Tanacetum corymbosum* (L.) Sch. Bip. [Botanic Garden of Petrozavodsk State University, RU, 2004].
64. *Tanacetum parthenium* (L.) Sch. Bip.** [The Botanical Garden "Vasile Fati" Jibou, RO, 2016].
65. *Tanacetum vulgare* L. [Botanical Garden of Šiauliai University, LT, 2000].
66. *Vernonia gigantea* (Walter) Trel. ex Trel.** [Institute of Ecology and Botany Hungarian Academy of Sciences Botanical Garden, Vacratot, HU, 2003].

BERBERIDACEAE Juss.

67. *Podophyllum hexandrum* Royle* [Botanical Garden of Šiauliai University, LT, 1997].
68. *Podophyllum peltatum* L.* [The Alpine Garden, south of the Upper Belvedere, Vienna, AT, 2009].

BIGNONIACEAE Juss.

69. *Incarvillea delavayi* Bureau et Franch. 'Snowtop' [The Botanical Garden Bielefeld, DE, 2018].
70. *Incarvillea olgae* Regel [Vytautas Magnus University Botanical Garden, LT, 2000].
71. *Incarvillea zhongdianensis* Grey-Wilson [The Botanical Garden Bielefeld, DE, 2016].

BORAGINACEAE Juss.

72. *Echium russicum* J. F. Gmelin* [The Alpine Botanical Garden "Paradisias", IT, 2016].

73. *Lindelofia macrostyla* (Bunge) Popov* [Botanical Garden of the Urals Branch of Russian Academy of Sciences, RU, 2019].
74. *Lithospermum officinale* L. [Traupis Botanical Garden, LT, 1999].
75. *Lithospermum purpureocaeruleum* Desf. ex DC.* [Botanical Garden, Faculty of Science, Masaryk University, Brno, CZ, 2008].
76. *Omphalodes linifolia* (L.) Moench* [Botanical Garden of the Technical University Braunschweig, DE, 2019].

BRASSICACEAE Burnett.

77. *Alyssoides utriculata* (L.) Medik.** [The Botanical Garden of Bonn University, DE, 2003].
78. *Bunias orientalis* L. [The Botanical Garden of the University of Latvia, Riga, LV, 2006].
79. *Camelina sativa* (L.) Crantz* [Botanical Garden of the University of Tartu, EE, 2016].
80. *Crambe abyssinica* Hochst. ex R. E. Fr. [Botanical Garden, Faculty of Science, Palacky University in Olomouc, CZ, 2005].
81. *Crambe maritima* L. [Vytautas Magnus University Botanical Garden, LT, 2000].
82. *Degenia velebatica* (Degen) Hayek** [Botanical Garden Teplice, CZ, 2010].
83. *Hesperis matronalis* L. [Arboretum and Institute of Physiography in Bolestraszyce, PL, 2019].
84. *Isatis tinctoria* L. [National Botanic Garden of Belgium, Meise, BE, 2003].

CAMPANULACEAE Juss.

85. *Asyneuma canescens* (Waldst. et Kit.) Griseb. et Schenk* [Botanic Garden of Rennes, FR, 2011].
86. *Campanula* 'Cremewit'* [Private collection of G. Pociūlienė, Pakalniškiai, Radviliškis district, LT, 2012].
87. *Campanula alliariifolia* Willd.* [Institute of Botany Academy of Sciences of the Czech Republic, Pruhonice, CZ, 2012].
88. *Campanula glomerata* L. 'Alba'* [Experimental Station of Field Floriculture, LT, 2001].
89. *Campanula latifolia* L. [The nursery "Virblės medelynas", Butkai, Klaipėda district, LT, 2020].
90. *Campanula persicifolia* L.* [Institute of Ecology and Botany Hungarian Academy of Sciences Botanical Garden, Vacratot, HU, 2004].
91. *Campanula sarmatica* Ker Gawl.* [The Botanical Garden of the University of Tübingen, DE, 2003].
92. *Edraianthus graminifolius* (L.) A.DC. [Botanical Garden of the University of Potsdam, DE, 2013].
93. *Phyteuma charmelii* Vill.** [Botanical Garden of the University of Potsdam, DE, 2006].

CAPPARACEAE Juss.

94. *Cleome spinosa* Jacq. [The Commercial Source LT, 2021].
95. *Cleome spinosa* Jacq. 'White Queen' [The Commercial Source LT, 2021].

CAPRIFOLIACEAE Juss.

96. *Abelia mosanensis* Chung ex Nakai** [Vilnius University Botanical Garden, LT, 2002].
97. *Cephalaria lütvinovii* Bobrov. [Tallinn Botanic Garden, EE, 2004].
98. *Dipsacus laciniatus* L. [Botanic Garden of Rennes, FR, 2019].
99. *Triosteum himalayanum* Wall.* [Botanical Garden of the University of Tartu, EE, 2010].
100. *Triosteum pinatifidum*. Maxim.* [University of Turku Botanic Garden, FI, 2004].
101. *Viburnum lantana* L.* [Botanical park Obelynė, Akademija, Kaunas district, LT, 2001].

CARYOPHYLLACEAE Juss.

102. *Agrostemma githago* L. [Botanischer Garten Chemnitz, DE, 2020].
103. *Dianthus carthusianorum* L. [Botanischer Garten Chemnitz, DE, 2020].
104. *Dianthus superbis* L.* [Botanischer Garten Chemnitz, DE, 2020].
105. *Lychnis coronaria* (L.) Desr. 'Alba'* [Cruickshank Botanic Gardens University of Aberdeen, UK, 2018].
106. *Saponaria caespitosa* DC.** [Botanical Garden of the University of Tartu, EE, 2003].
107. *Saponaria lutea* L.** [The Munich Botanical Garden, Nymphenburg (Italy, Vallone urtier, Alpe Manda, 2400 m), DE, 2004].
108. *Saponaria officinalis* L. ["Anastasiu Fătu" Botanic Garden, "Alexandru Ioan Cuza" University of Iasi, RO, 2006].
109. *Silene pusilla* Waldst. et Kit. [Botanical Garden of the Christian Albrechts University of Kiel, DE, 2018].
110. *Silene quadridentata* (L.) Pers.** [The Botanic Garden of the University of Padua (Monte Favaghera, Belluno (BL), 1500 m), IT, 2004].
111. *Silene sendtneri* Boiss. [Alpine Garden Mt. Patscherkofel University Innsbruck, AT, 2019].

CELASTRACEAE R. Br.

112. *Euonymus alatus* (Thunb.) Siebold** [Traupio Botanical Garden, LT, 2001].
113. *Euonymus europaeus* L. 'Albus'** [Botanical park Obelynė, Akademija, Kaunas district, LT, 2001].

114. *Euonymus fortunei* (Turcz.) Hand.-Mazz. var. *radicans*** (Siebold ex Miq.) Rehder [The Botanical Garden of the University of Latvia, Riga, LV, 2002].
115. *Tripterygium regelii* Sprague et Takeda** [Vilnius University Botanical Garden, LT, 2001].

CISTACEAE Juss.

116. *Helianthemum nummularium* (L.) Mill. subsp. *glabrum* (Koch) Wilczek. [The Botanical Garden of the University of Regensburg, DE, 2005].

CONVOLVULACEAE Juss.

117. *Ipomoea tricolor* Cav.** [Botanic Garden of Technical University Dresden, DE, 2019].

CORYLACEAE Mirb.

118. *Carpinus betulus* L.* [Botanical Garden of Šiauliai University, LT. No data available of their origin].

CUCURBITACEA Juss.

119. *Bryonia cretica* L. [Botanic Garden of Johannes Gutenberg University Mainz, DE, 2015].

DIPSACACEAE Juss.

120. *Scabiosa graminifolia* L.* [The Alpine Botanical Garden “Viotte”, Trento, IT, 2002].

ERICACEAE Juss.

121. *Kalmia angustifolia* L.** [Botanical Garden Grugapark Essen, DE, 2007].
122. *Kalmia latifolia* L. f. *myrtifolia* (Bosse) K. Koch.** [Batumi Botanical Garden of the Academy of Sciences, GE, 2007].
123. *Ledum groenlandicum* Oeder** [Tallinn Botanic Garden, EE, 2004].
124. *Leucothoe fontanesiana* (Steud.) Sleumer** [Vilnius University Botanical Garden, LT, 2005].
125. *Rhododendron brachycarpum* D. Don ex G. Don subsp. *fauriei* (Franchet) D. F. Chamb.** [Salaspils National Botanical Garden, LV, 2006].
126. *Rhododendron brachycarpum* G. Don** [The Botanical Garden of Lyon, FR, 2002].
127. *Rhododendron camtschaticum* Pall.** [Rhododendron nursery Babite University of Latvia, LV, 2003].
128. *Rhododendron canadense* (L.) Torr.** [The Montreal Botanical Garden, CA, 2002].
129. *Rhododendron catawbiense* Michx.** [Private collection of A. Žakevičius, Šiauliai, LT, 2002].
130. *Rhododendron degronianum* Carrière subsp. *heptamerum* (Machim.) Hara** [Rhododendron-Park and Botanical Garden of Bremen, DE, 2005].
131. *Rhododendron kiusianum* Makino** [Botanical Garden, AV Fomina Kyiv National Taras Shevchenko University, UA, 2004].
132. *Rhododendron luteum* (L.) Sweet.** [Rhododendron nursery Babite University of Latvia, LV, 2001].
133. *Rhododendron maximum* L.** [Rhododendron nursery Babite University of Latvia, LV, 2003].
134. *Rhododendron schlippenbachii* Maxim.** [Rhododendron nursery Babite University of Latvia, LV, 2002].

FABACEAE Lindl.

135. *Amorpha fruticosa* L.** [Botanical park Obelynė, Akademija, Kaunas district, LT, 2001].
136. *Astragalus adsurgens* Pall. [The Greifswald Botanic Garden and Arboretum, DE, 2004].
137. *Astragalus cicer* L. [Botanic Garden of the Jagiellonian University, Kraków, PL, 2019].
138. *Baptisia australis* (L.) R. Br. [Traupio Botanical Garden, LT, 2001].
139. *Colutea arborescens* L.* [Botanic Garden of the Jagiellonian University, Kraków, PL, 2012].
140. *Genista radiata* (L.) Scop.** [The Alpine Botanical Garden “Rezia”, Bormio, IT, 2005].
141. *Genista sagittalis* L.* [Salaspils National Botanical Garden, LV, 2006].
142. *Laburnum anagyroides* Medik.** [Skinderiškis Dendrology Park, Pajieslys, Kėdainiai district, LT, 2004].
143. *Lathyrus pisiformis* L.* [Vilnius university Botanical Garden, LT, 2001].
144. *Onobrychis viciifolia* Scop.** [University of Salzburg Department of organismic biology Study Group Botanical Garden (Austria, Salzburg, Osterhorngruppe, St. Koloman SE, Seewaldsee W 0,5 km, roadside embankment, limestone, 1000 msm, 7/09 M), AT, 2009].
145. *Ornithopus perpusillus* L. [Botanic Garden of University of Konstanz, DE, 2020].
146. *Phaseolus coccineus* L. ‘Painted Lady’** [Horticultural Gardens (Faculty of Life Sciences), University of Copenhagen, DK, 2019].
147. *Phaseolus vulgaris* L. var. *nanus* ‘Purple Queen’ [The Botanical Garden of Bonn University, DE, 2017].
148. *Phaseolus vulgaris* L. var. *vulgaris* ‘Blauhilde’ [Universitatea de Vest “Vasile Goldis” din Arad Gradina Botanica Universitara “Pavel Covaci” Macea].
149. *Pisum sativum* L. ‘Ezetha’s Krombek Blauwschok’ [The Commercial Source, LT, 2020].
150. *Trifolium fragiferum* L.* [Jardin Botanique Bordeaux, FR, 2019].

151. *Trifolium ochroleucum* Huds. [The Botanical Garden of the Heinrich-Heine University, Dusseldorf, DE, 2006].

GENTIANACEAE Juss.

152. *Gentiana asclepiadea* L. 'Alba' * [Botanical Garden Rennsteiggarten Oberhof, DE, 2011].
153. *Gentiana lutea* L. [The Botanical Garden of the University of Regensburg, DE, 2004].

GERANIACEAE Juss.

154. *Geranium thunbergii* Siebold ex Lindl. et Paxton* [RHS Garden Wisley, UK, 2008].

GLOBULARIACEAE DC.

155. *Globularia punctata* Lapeyr. * [Salaspils National Botanical Garden, LV, 2003].

HYPERICACEAE Juss.

156. *Hypericum inodorum* Willd.** [Botanic Garden of the University of Stuttgart-Hohenheim, Stuttgart, DE, 2006].
157. *Hypericum orientale* L. [Vilnius University Botanical Garden, LT, 2007].
158. *Hypericum patulum* Thunb.** [Vilnius University Botanical Garden, LT, 2002].

LAMIACEAE Lindl.

159. *Calamintha einseleana* F. W. Schultz* [The Botanical Garden of Ljubljana, SI, 2017].
160. *Calamintha nepetoides* Jord.* [The Alpine Garden, south of the Upper Belvedere, Vienna, AT, 2016].
161. *Dracocephalum rupestre* Hance** [Vytautas Magnus University Botanical Garden, LT, 2017].
162. *Dracocephalum tanguticum* Maxim.* [The Alpine Botanical Garden "Rezia", Bormio, IT, 2009].
163. *Horminum pyrenaicum* L. [Salaspils National Botanical Garden, LV, 2001].
164. *Hyssopus officinalis* L.* [Botanical Garden of Šiauliai University, LT, 2000].
165. *Leonurus cardiaca* L. [Botanical Garden of Šiauliai University, LT, 2015].
166. *Leonurus quinquelobatus* Gilib.* [The Botanical Garden of Udmurt State University, RU, 2017].
167. *Mentha gattefossesi* Maire** [Botanischer Garten Chemnitz, DE, 2017].
168. *Micromeria thymifolia* (Scop.) Fritsch * [National Botanic Garden of Belgium, Meise, BE, 2017].
169. *Nepeta camphorata* Boiss. et Heldr.* [Prague Botanical Garden, CZ, 2017].
170. *Nepeta laevigata* (D.Don) Hand.-Mazz* [Ural State University Botanical Garden, Ekaterinburg, RU, 2017].
171. *Nepeta manchuriensis* S. Moore * [Botanischer Garten Chemnitz, DE, 2017].
172. *Nepeta nepetella* L.* [The Alpine Botanical Garden "Paradisio", IT, 2016].
173. *Nepeta podostachys* Benth.* [Ural State University Botanical Garden, Ekaterinburg, RU, 2017].
174. *Nepeta transcaucasica* Grossh.** [The Alpine Botanical Garden "Rezia", Bormio, IT, 2017].
175. *Phlomis samia* L.* [The Botanical Garden of the Heinrich-Heine University, Dusseldorf, DE, 2004].
176. *Salvia argentea* L.* [Vytautas Magnus University Botanical Garden, LT, 2004].
177. *Salvia fruticosa* Mill.* [Botanical Garden of the University of Zurich, CH, 2017].
178. *Salvia hians* Royle ex Benth.** [The Alpine Botanical Garden "Rezia", Bormio, IT, 2016].
179. *Sideritis hyssopifolia* L.* [The Alpine Botanical Garden "Viotte", Trento, IT, 2004].
180. *Stachys pradica* (Zanted.) Greuter et Pignatti [The Alpine Botanical Garden "Chanousia", IT, 2010].

LINACEAE DC. ex Gray

181. *Linum suffruticosum* L. subsp. *apressum* (Caball.) Rivas Mart. [Botanical Garden University Innsbruck, AT, 2014].

LOASACEAE Spreng.

182. *Blumenbachia hieronymi* Urb.** [The Botanical Garden of the University of Latvia, Riga, LV, 2019].

MAGNOLIACEAE Juss.

183. *Magnolia kobus* DC.** [Rogów Arboretum of Warsaw University of Life Sciences, PL, 2004].

MALVACEAE Juss.

184. *Kitaibelia vitifolia* Willd.* [Botanical Garden of Amsterdam University, NL, 2004].

OLEACEAE Hoffmanns. et Link

185. *Syringa emodi* Wall. Ex G. Don* [Russian Academy of Sciences far East Branch Sakhalin Botanical Garden, RU, 2004].
186. *Syringa reticulata* (Blume) H.Hara subsp. *amurensis* (Rupr.) P.S.Green et M.C.Chang** [Skinderiškis Dendrology Park, Pajieslys, Kėdainiai district, LT, 2004].

PAEONIACEAE F. Rudolphi

187. *Paeonia suffruticosa* Andrews [Skinderiškis Dendrology Park, Pajieslys, Kėdainiai district, LT, 2001].

PAPAVERACEAE Juss.

188. *Papaver alpinum* L.** [Botanical Garden of Šiauliai University, LT. No data available of their origin].
189. *Papaver bracteatum* Lindl.** [The Botanical Garden of the University of Regensburg, DE, 2004].

PLANTAGINACEAE T. Lestib. ex Dumort.

190. *Plantago sempervirens* Crantz.** [Botanic Garden of Nantes, FR, 2016].
191. *Psyllium afrum* Mirb.* [Botanical Garden of the Christian Albrechts University of Kiel, DE, 2013].

POLEMONIACEAE Juss.

192. *Linanthus liniflorus* (Benth.) Greene** [The Botanical Garden of the Heinrich-Heine University, Dusseldorf, DE, 2007].
193. *Polemonium caeruleum* L. [Vytautas Magnus University Botanical Garden, LT, 2020].

POLYGONACEAE Juss.

194. *Eriogonum heracleoides* Nutt.** [The Botanical Garden of Graz, Institute for Plant science, Karl-Franzens-University Graz, AT, 2014].
195. *Eriogonum umbellatum* Torr. var. *stellatum* (Benth.) M.E.Jones** [Botanic Garden of the Philipp University of Marburg (CA, B. Columbia, Jones Corbin, 4940 N 114 49 W 488 m, BG Vancouver (MR, 2005)), DE, 2011].
196. *Rumex conglomeratus* Murray [The Botanical Garden of the University of Münster, DE, 2003].

RANUNCULACEAE Juss.

197. *Aconitum lycoctonum* L.* [The Botanical Garden of Graz, Institute for Plant science, Karl-Franzens-University Graz, AT, 2006].
198. *Aconitum volubile* Pall. [Botanical Garden Of The University Of Tartu, Ee, 2006].
199. *Actaea rubra* (Aiton) Willd.* [Salaspils National Botanical Garden, LV, 2002].
200. *Anemone altaica* Fisch. ex C. A. Mey. [Botanic Garden of the Comenius University, Bratislava, SK, 2004].
201. *Anemone demissa* Hook. f. et Thomson [The Botanical Garden of Bonn University, DE, 2010.].
202. *Anemone leveillei* Ulbr. [Vytautas Magnus University Botanical Garden, LT, 2000].
203. *Anemone rupicola* Cambess. ex Jacquem.** [Collector A. Grišaitė, (The Botanical Garden of Schellerhau, DE), 2011].
204. *Aquilegia buergeriana* Siebold. et Zucc. 'Calimero'* [Memorial University of Newfoundland Botanical Garden, CA, 2019].
205. *Aquilegia canadensis* L. * [Botanic Garden of the Jagiellonian University, Kraków, PL, 2004].
206. *Aquilegia chrysantha* A. Gray var. *chaplinei* (Standl. ex Payson) Lott** [Reykjavik Botanical Garden, IS, 2009].
207. *Clematis hirsutissima* Pursh [Botanical Garden University Innsbruck, AT, 2007].
208. *Clematis integrifolia* L. [Botanic Garden of the Voronezh State University B. M. Kozo-Poljanskii, RU, 2009].
209. *Clematis viticella* L. [Skinderiškis Dendrology Park, Pajieslys, Kėdainiai district, LT, 2002].
210. *Helleborus foetidus* L.** [Institute of Ecology and Botany Hungarian Academy of Sciences Botanical Garden, Vacratot, HU, 2002].
211. *Nigella damascena* L. [Medicinal Herbs Centre Faculty of Medicine Masaryk University, CZ, 2017].
212. *Thalictrum foetidum* L. [Institute of Ecology and Botany Hungarian Academy of Sciences Botanical Garden, Vacratot, HU, 2003].
213. *Thalictrum rochebrunnianum* Franch. et Sav.* [The Botanical Garden of the University of Regensburg, DE, 2011].
214. *Trollius ranunculinus* (Smith) Stearnq [Mountain Botanical garden of the Dagestan Scientific Centre, RU, 2005].

ROSACEAE Juss.

215. *Agrimonia procera* Wallr. [Vytautas Magnus University Botanical Garden, LT, 2018].
216. *Alchemilla mollis* (Buser) Rothm.* [Experimental Station of Field Floriculture, LT, 2002].
217. *Cotoneaster atropurpureus* Flinck et B. Hylmo** [Botanical Garden of the University of Strasbourg, FR, 2010].
218. *Cotoneaster microphyllus* Lindl.** [Experimental Station of Field Floriculture, LT, 2002].
219. *Cotoneaster procumbens* Klotz** [Botanical Garden of the University of Strasbourg, FR, 2010].
220. *Cotoneaster subadpressus* T. T. Yu** [Botanical Garden of the University of Strasbourg, FR, 2009].

221. *Cotoneaster zabelii* C. K. Schneid.** [The Alpine Botanical Garden “Rezia”, Bormio, IT, 2004].
 222. *Dryas octopetala* L. var. *vestita* Beck [Botanical Garden Rennsteiggarten Oberhof, DE, 2010].
 223. *Filipendula palmata* (Pall.) Maxim. [Vytautas Magnus University Botanical Garden, LT, 2004].
 224. *Geum urbanum* L. [Department of Botany and Soroksar Botanic Garden University of Horticulture, HU, 2012].
 225. *Malus toringo* Siebold** [Botanical park Obelynė, Akademija, Kaunas district, LT, 2001].
 226. *Pyracantha coccinea* M. Roem. [Skinderiškis Dendrology Park, Pajieslys, Kėdainiai district, LT, 2004].
 227. *Rhodotypos scandens* (Thunb.) Makino** [Vilnius University Botanical Garden, LT, 2002].
 228. *Sanguisorba dodecandra* Moretti [Tallinn Botanic Garden, EE, 2004].
 229. *Sorbus koehniiana* C. K. Schneid.* [Botanical Garden of the University of Tartu, EE, 2001].

RUBIACEAE Juss.

230. *Asperula aristata* L. f.* [Institute of Ecology and Botany Hungarian Academy of Sciences Botanical Garden, Vacratot, HU, 2006].

RUTACEAE Juss.

231. *Phellodendron amurense* Rupr.** [Botanical Garden of Šiauliai University, LT. No data available of their origin].
 232. *Ptelea trifoliata* L.** [Vilnius University Botanical Garden, LT, 2001].

SAXIFRAGACEAE Juss.

233. *Saxifraga apiculata* Engl. ‘Alba’** [Private collection of G. Pociūlienė, Pakalniškiai, Radviliškis district, LT, 2012].

SCROPHULARIACEAE Juss.

234. *Penstemon clutei* A. Nelson [Private collection of G. Pociūlienė, Pakalniškiai, Radviliškis district, LT, 2011].
 235. *Penstemon cyaneus* Pennell [The Botanical Garden of Bonn University, DE, 2004].
 236. *Penstemon eatonii* A. Gray* [RHS Garden Wisley, UK, 2011].
 237. *Penstemon procerus* Dougl. ex Graham [Botanic Garden of Warsaw University, PL, 2011].
 238. *Penstemon procerus* Dougl. ex Graham var. *tolmiei* (Hook.) Cronq.** [Akureyri Botanical Garden, IS, 2007].
 239. *Verbascum densiflorum* Bertol. [The nursery “Virblės medelynas“, Butkai, Klaipėda district, LT, 2020].
 240. *Veronica spicata* L. ‘Nana’* [Experimental Station of Field Floriculture, LT, 2005].

SOLANACEAE Juss.

241. *Datura stramonium* L. [Botanical Garden of the Carinthian Botanic Center, Klagenfurt, AT, 2021].
 242. *Datura stramonium* L. var. *tatula* (L.) Torr** [Botanical Garden, Faculty of Science, Palacky University in Olomouc, CZ, 2019].
 243. *Nicotiana langsdorffii* Weinm. [Botanical Garden, Faculty of Science, Masaryk University, Brno, CZ, 2021].
 244. *Solanum uporo* Dunal [Botanical Garden University Innsbruck, AT, 2021].

LILIOPSIDA Batsch

ALLIACEAE J. Agardh

245. *Allium caeruleum* Pall. [The Commercial Source, LT, 2020].
 246. *Allium cyathophorum* Bureau et Franch.* [University of Oxford Botanic Garden and Harcourt Arboretum, UK, 2002].
 247. *Allium moly* L. [Botanic Garden of Šiauliai University, LT, 2002].
 248. *Allium obliquum* L. [Vytautas Magnus University Botanical Garden, LT, 2020].
 249. *Allium pskemense* B. Fedtsch.* [Gothenburg Botanical Garden (Uzbekistan: Ugam Mtn. Range, Urungachsay, 2555-2800 m), SE, 2007].
 250. *Allium ramosum* L. [Ghent University Botanic Garden, BE, 2002].
 251. *Allium schubertii* Zucc. [The Commercial Source, LT, 2020].
 252. *Allium sphaerocephalon* L. [The Commercial Source, LT, 2020].

AMARYLLIDACEAE J. St.-Hil

253. *Amaryllis belladonna* L. [Tallinn Botanic Garden, EE, 2011].

ASPARAGACEAE Juss.

254. *Asparagus officinalis* L.* [Botanical Garden of Šiauliai University, LT. No data available of their origin].

ASPHODELACEAE Juss.

255. *Asphodeline brevicaulis* (BertoL.) Baker [Botanical Garden of Leipzig University, DE, 2006].

CANNACEAE Juss.

256. *Canna indica* L. [Leuven Botanical Garden, BE, 2010].
257. *Canna iridiflora* Ruiz & Pav. [The Botanical Garden "Vasile Fati" Jibou, RO, 2018].

IRIDACEAE Juss.

258. *Iris laevigata* Fisch.* [The Alpine Botanical Garden "Viotte", Trento, IT, 2003].
259. *Sisyrinchium angustifolium* Mill.* [The Botanical Garden of the University of Tübingen, DE, 2002].

JUNCACEAE Juss.

260. *Juncus effusus* L.* [Botanic Garden and Botanical Museum Berlin-Dahlem, DE, 2008].
261. *Luzula alpinopilosa* (Chaix) Breistr.* [The Alpine Botanical Garden "Rezia", Bormio, IT, 2013].
262. *Luzula luzuloides* (Lam.) Dandy et Wilmott* [Vytautas Magnus University Botanical Garden, LT, 2000].

LILIACEAE Juss.

263. *Fritillaria involucrata* All.* [Botanical Garden of Šiauliai University, LT, No data available of their origin].

POACEAE (R. Br.) Bernhart

264. *Aira praecox* L.** [Jardin Botanique Bordeaux, FR, 2019].
265. *Anthoxanthum odoratum* L. [Vytautas Magnus University Botanical Garden, LT, 2020].
266. *Briza media* L. [Leuven Botanic Garden, BE, 2010].
267. *Chasmanthium latifolium* (Michx.) H.O.Yates [The nursery "Virblės medelynas", Butkai, Klaipėda district, LT, 2020].
268. *Coix lacryma-jobi* L. [The Commercial Source, LT, 2021].
269. *Corynephorus canescens* (L.) P. Beauv. [Vytautas Magnus University Botanical Garden, LT, 2020].
270. *Deschampsia tzevelevii* Prob. [Botanical Garden-Institute Vladivostok, RU, 2004].
271. *Hystrix patula* Moench [The Botanical Garden of the University of Latvia, Riga, LV, 2019].
272. *Koeleria macrantha* (Ledeb.) Schult. [Lithuanian Research Centre for Agriculture and Forestry [Institute of Agriculture], Akademija, Kėdainiai district, LT, 2012].
273. *Miscanthus sacchariflorus* (Maxim.) Benth. & Hook.f. ex Franch. [The nursery "Virblės medelynas", Butkai, Klaipėda district, LT, 2020].
274. *Molinia caerulea* (L.) Moench** [Botanical Garden of the Christian Albrechts University of Kiel, DE, 2016].
275. *Pennisetum alopecuroides* Ham. [Botanic Garden of University of Konstanz, DE, 2017].
276. *Pennisetum villosum* Fresen.* [The nursery "Virblės medelynas", Butkai, Klaipėda district, LT, 2020].
277. *Sorghum bicolor* (L.) Moench** [Botanic Garden of Rennes, FR, 2019].
278. *Sporobolus heterolepis* (Gray) A.Gray* [The nursery "Virblės medelynas", Butkai, Klaipėda district, LT, 2020].
279. *Stipa calamagrostis* (L.) Wahlenb.* [The nursery "Virblės medelynas", Butkai, Klaipėda district, LT, 2020].
280. *Triticum spelta* L. [The Botanical Garden of Krefeld, DE, 2019].
281. *Triticum turgidum* L. [The Botanical Garden of Udmurt State University, RU, 2019].
282. *Zea mays* L. 'Strawberri Corn' [Botanical Garden of the University of Siena, IT, 2020].

SEED FROM PLANTS OF LITHUANIAN FLORA PROTECTED *EX-SITU* IN THE GARDEN

MAGNOLIOPHYTA Cronquist, Takht. et W. Zimm. ex Reveal.

MAGNOLIOPSIDA Brongn.

APIACEAE Lindl.

- 283. *Angelica archangelica* L. [The local area Joniškis district, LT, 2012].
- 284. *Astrantia major* L. [The local area Žagarė, Joniškis district, LT, 2000].
- 285. *Daucus carota* L. [The local area Vinkšnėnai, Šiauliai district, LT, 2011].
- 286. *Laserpitium latifolium* L. [The local area Mažeikiai district, LT, 2007].

ASTERACEAE Dumort.

- 287. *Gnaphalium luteoalbum* L. [The local area Merkinė, Varėna district, LT, 2008].

BRASSICACEAE Burnett

- 288. *Lunaria rediviva* L. [The local area Varėna district, LT, 2000].

CAMPANULACEAE Juss.

- 289. *Campanula bononiensis* L. [The local area Kėdainiai district, LT, 2007].
- 290. *Campanula cervicaria* L. [The local area Paryžė, Kupiškis district, LT, 2007].

CARYOPHYLLACEAE Juss.

- 291. *Dianthus arenarius* L. [The local area Marcinkonys, Varėna district, LT, 2008].
- 292. *Dianthus arenarius* L. subsp. *arenarius* [The local area Perloja, Varėna district, LT, 2007].
- 293. *Dianthus borbasii* Vandas** [The local area Dzūkija National Park, Varėna district, LT, 2003].
- 294. *Silene lituanica* Zapał. [The local area Marcinkonys, Varėna district, LT, 2008].
- 295. *Silene tatarica* (L.) Pers. [The local area Liškiava, Varėna district, LT, 2008].

CELASTRACEAE R. Br.

- 296. *Euonymus verrucosus* Scop.** [The local area Žagarė, Joniškis district, LT, 1999].

DIPSACACEAE Juss.

- 297. *Scabiosa columbaria* L. [The local area Vilnius district, LT, 2007].
- 298. *Succisella inflexa* Kluk [The local area Kupiškis district, LT, 2010].

FABACEAE Lindl.

- 299. *Astragalus glycyphyllos* L.** [The local area Bubiai, Šiauliai district, LT, 2019].
- 300. *Lathyrus sylvestris* L. [The local area Radviliškis district, LT, 2000].
- 301. *Ornithopus perpusillus* L. [The local area Pociūnai, Prienai district, LT, 2012].
- 302. *Trifolium arvense* L.** [The local area Spaudžiai, Kelmė district, LT, 2019].

GENTIANACEAE Juss.

- 303. *Gentiana cruciata* L. [The local area Lazdijai district, LT, 2005].

HYPERICACEAE Juss.

- 304. *Hypericum hirsutum* L. [The local area Satkūnai, Joniškis district, LT, 2007].

LAMIACEAE Lindl.

- 305. *Dracocephalum ruyschiana* L. [The local area Anykščiai district, LT, 2008].
- 306. *Mentha longifolia* (L.) Huds.** [The local area Pupiniai, Kupiškis district, LT, 2007].
- 307. *Prunella grandiflora* (L.) Scholler [The local area Varėna district, LT, 2008].
- 308. *Salvia pratensis* L. [The local area Smalininkai, Jurbarkas district, LT, 2001].
- 309. *Stachys recta* L. [The local area Kaišiadorys district, LT, 2002].

POLYGONACEAE Juss.

- 310. *Fagopyrum tataricum* (L.) Gaertn. [The local area Šalčininkai district, LT, 2007].

PRIMULACEAE Vent.

- 311. *Androsace septentrionalis* Retz. [The local area Šiauliai district, LT, 2005].

RANUNCULACEAE Juss.

312. *Pulsatilla patens* (L.) Mill.** [The local area Varėna district, LT, 2008].

313. *Pulsatilla pratensis* (L.) Mill. [The local area Prienai district, LT, 2000].

ROSACEAE Juss.

314. *Agrimonia eupatoria* L. [The local area Joniškis district, LT, 2011].

VIOLACEAE Batsch

315. *Viola elatior* Fr. [The local area Vilnius district, LT, 2007].

LILIOPSIDA Batsch

ALLIACEAE J. Agardh

316. *Allium scorodoprasum* L. [The local area Priekulė, Klaipėda district, LT, 2007].

ASPHODELACEAE Juss.

317. *Anthericum ramosum* L. [Kurtuvėnai Regional Park, Šiauliai district, LT, 2000].

CYPERACEAE Juss.

318. *Carex buxbaumii* Wahlenb. [The local area Kėdainiai district, LT, 2008].

IRIDACEAE Juss.

319. *Gladiolus imbricatus* L. [The local area Širvintos district, LT, 2007].

320. *Iris sibirica* L. [The local area Truskava, Kėdainiai district, LT, 2008].

MELANTHIACEAE Batsch.

321. *Tofieldia calyculata* (L.) Wahlenb. [The local area Lazdijai district, LT, 2001].

ORCHIDACEAE Juss.

322. *Dactylorhiza fuchsii* (Druce) Soó* [The local area Kupiškis district, LT, 2008].

POACEAE (R. Br.) Bernhart

323. *Alopecurus arundinaceus* Poir.** [The local area Pakruojis district, LT, 2008].

324. *Bromopsis erecta* (Huds.) Fourr. [The local area Marijampolė district, LT, 2008].

325. *Festuca psammophila* (Hack. ex Celak.) Fritch. [The local area Varėna district, LT, 2008].

326. *Melica ciliata* L.* [The local area Anykščiai district, LT, 2001].

327. *Poa remota* Forselles* [The local area Žemaitėliai, Anykščiai district, LT, 2005].

328. *Sesleria caerulea* (L.) Ard. [The local area Gudmonišķė, Kelmė district, LT, 2005].

REFERENCES

1. Brummitt R. K., 1992: Vascular plant families and genera. – Royal Botanic Gardens, Kew.
Cullen J., 2005: Hardy Rhododendron Species: a guide to identification. – Royal Botanic Garden Edinburgh.
2. Cullen J., Alexander J. C. M., Brady A., Brickell C. D., Green P. S., Heywood V. H., Jørgensen P. - M., Jury S. L., Knees S. G., Leslie A. C., Matthews V. A., Robson N. K. B., Walters S. M., Webb D. A., Wijnands D. O., Yeo P. F., 2002: The European garden flora, 4. – Cambridge.
3. Cullen J., Alexander J. C. M., Brickell C. D., Edmondson J. R., Green P. S., Heywood V.
4. Cullen J., Alexander J. C. M., Brickell C. D., Edmondson J. R., Green P. S., Heywood V.
5. Czerepanov S. K., 1995: Vascular plants of Russia and adjacent states. – Cambridge.
6. Grey-Wilson C., Cribb P., 2011: Guide to the flowers of western China. – Royal Botanic Gardens, Kew.
7. Gudžinskas Z., 1999: Lietuvos induočiai augalai [Vascular plants of Lithuania]. – Vilnius.
H., Jørgensen P. - M., Jury S. L., Knees S. G., Matthews V. A., Maxwell H. S., Miller D. M., Nelson E. C., Robson N. K. B., Walters S. M., Yeo P. F., 1997: The European garden flora, 5. – Cambridge.
H., Jørgensen P. - M., Jury S. L., Knees S. G., Matthews V. A., Maxwell H. S., Miller D. M., Robson N. K. B., Walters S. M., Yeo P. F., 2000: The European garden flora, 6. – Cambridge.
8. Jankevičienė R., 1998: Botanikos vardų žodynas [Dictionary of plant names]. – Vilnius.
9. Lammers T. G., 2007: Campanulaceae. – Royal Botanic Gardens Kew.
10. Navasaitis M., 2004: Dendrologija. – Vilnius.
11. Takhtajan A., 2009: Flowering plants. – Springer.
12. Vojtěch Holubec, Pavel Křivka, 2006: The Caucasus and its flowers. – LOXIA.
13. Walters S. M., Alexander J. C. M., Brady A., Brickell C. D., Cullen J., Green P. S., Heywood V. H., Matthews V. A., Robson N. K. B., Yeo P. F., Knees S. G., 2004: The European garden flora, 3. – Cambridge.
14. Walters S. M., Brady A., Brickell C. D., Cullen J., Green P. S., Lewis J., Matthews V. A., Webb D. A., Yeo P. F., Alexander J. C. M., 2002: The European garden flora, 1. – Cambridge.
15. Walters S. M., Brady A., Brickell C. D., Cullen J., Green P. S., Lewis J., Matthews V. A., Webb D. A., Yeo P. F., Alexander J. C. M., 2003: The European garden flora, 2. – Cambridge.

LINKS

16. A gardeners forum [<https://www.agardenersforum.com/zone/place/12/lithuania.html>].
17. Lady Bird Johnson Wildflower Center [<http://www.wildflower.org/plants/>].
18. The International Plant Names Index [<http://www.ipni.org/index.html>].
19. The PFAF Database [<http://www.pfaf.org/user/default.aspx>].
20. The Plant List [<http://www.theplantlist.org>].

Postal address:
Vilnius University Šiauliai Academy
Botanical Garden
Vytauto str. 84,
LT-76352, Šiauliai
LITHUANIA

Local address:
Vilnius University Šiauliai Academy
Botanical Garden
Paitaičių Str. 4,
LT-77174, Šiauliai,
LITHUANIA
e-mail.: subotanika@sa.vu.lt

We strongly prefer orders placed by e-mail seeds@sa.vu.lt

Your order should reach us on the prepared order form before April 1, 2022. Please, limit your order to a maximum of 20 numbers.

DESIDERATA 2021

Please indicate your requests, one number in each box, and return as soon as possible.

Your address (please use capital letters if order placed other than via e-mail):

AGREEMENT ON THE SUPPLY OF PLANT MATERIAL BY BOTANICAL GARDEN OF VILNIUS UNIVERSITY ŠIAULIAI ACADEMY

In response to the International Convention on Biological Diversity (Rio de Janeiro 1992), the Botanic Garden supplies seeds offered in this catalogue on the condition that:

The seeds are for the common good in the area of research, education, conservation and the development of botanic gardens.

The genetic material, its products or research derived from it are not passed to a third party for commercial purposes without permission from the Botanical Garden of Vilnius University Šiauliai Academy.

Any publication resulting from the use of the material should acknowledge the Botanical Garden of Vilnius University Šiauliai Academy as supplier.

By ordering seeds you agree to comply with the conditions above.