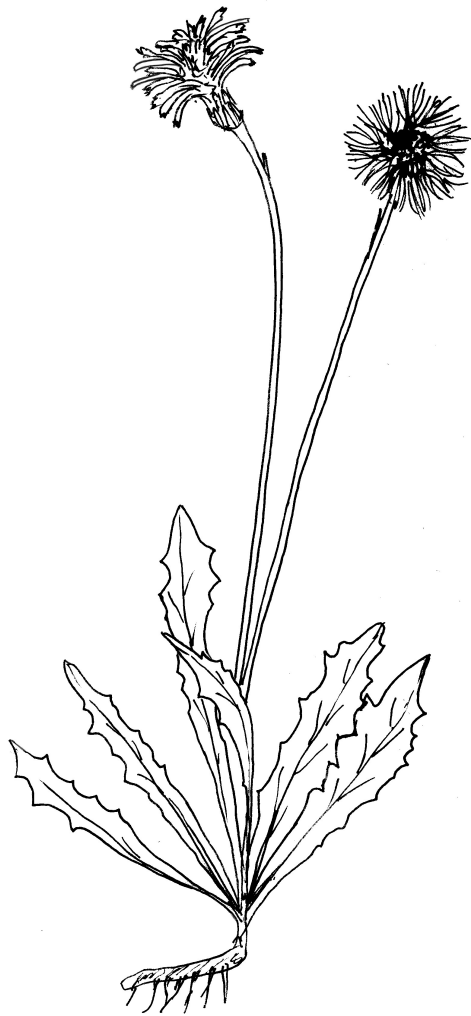


INDEX SEMINUM

Leontodon hispidus L. subsp. *danubialis* (Jacq.) Simonk.



TALLINN 2024

TALLINNA BOTAANIKAAED



INDEX SEMINUM

anno 2023 collectorum

quae

HORTUS BOTANICUS TALLINNENSIS

pro mutua commutatione offert

Tallinn 2024

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It is by the recipients of seeds to respect and to stand to international binding settlements of protection of endangered taxa and to uphold the interests of the nations of origin.

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I Semina et sporae plantarum in horto botanico cultarum

PTERIDOPHYTA

Aspleniaceae

- + 1 *Cystopteris sandwicensis* Brack. (Kauai, 2012)
- + 2 *Stenochlaena tenuifolia* (Desv.) T.Moore

Polypodiaceae

- + 3 *Microsorium thailandicum* Boonkerd & Noot. (Tartu, 2021)

Pteridaceae

- + 4 *Hemionitis arifolia* (Burm.f.) T.Moore (Cluj-Napoca, 2019)
- + 5 *Hemionitis palmata* L. (Cluj-Napoca, 2019)

SPERMATOPHYTA

GYMNOSPERMAE

Cupressaceae

- 6 *Chamaecyparis pisifera* (Siebold & Zucc.) Siebold & Zucc. ex Endl. **cv. Plumosa** (Lviv, 1957)
- + 7 *Cupressus sempervirens* L.
- + 8 *Hesperocyparis arizonica* (Greene) Bartel (Firenze, 1987)
- 9 *Juniperus squamata* Buch.-Ham. ex D.Don **cv. Meyeri** (Moscow, 1961)
- * 10 *Microbiota decussata* Kom. (*Rossia extremiorientalis*, Mt. Khualaza, 1961)
- 11 *Thujopsis dolabrata* (L.f.) Siebold & Zucc. (Estonia, Tallinn, 1964)

Pinaceae

- A 12 *Tsuga diversifolia* (Maxim.) Mast (Mustila, 1995)
- A 13 *Tsuga heterophylla* (Raf.) Sarg. (Mustila, 1995)

Taxaceae

- 14 *Taxus cuspidata* Siebold & Zucc.

+ = Seeds collected in the Greenhouses / Samen aus den Gewächshäusern

* = Seeds of a cultivated plant of known wild origin / Samen von kultivierte Pflanzen bekannter Wildherkunft

A = Seeds of a cultivated plant from Audaku Experimental Station (Saaremaa Island, 58.29806, 22.10250) / Samen von kultivierte Pflanzen von wissenschaftlicher Beobachtungsstelle Audaku (Insel Ösel, 58.29806, 22.10250)

ANGIOSPERMAE**Dicotyledoneae****Acanthaceae**

- 15 *Acanthus mollis* L. (Wrocław, 1973)
 + 16 *Crossandra nilotica* Oliv.
 + 17 *Ruellia brevifolia* (Pohl.) C.Ezcurra

Aceraceae

- A** 18 *Acer argutum* Maxim. (Rogów, 2002)
 19 *Acer campestre* L.
 20 *Acer caudatum* Wall. ex Rehder subsp. *ukurunduense* (Trautv. & C.A.Mey.) E.Murray
A 21 *Acer circinatum* Pursh (Seattle, 1987)
 * 22 *Acer mandshuricum* Maxim. (*Rossia extremiorientalis*, Okeanskaya, 1961)
 * 23 *Acer mandshuricum* Maxim. (*Rossia extremiorientalis*, Lazo, 1977)
A 24 *Acer monspessulanum* L. subsp. *turcomanicum* (Pojark.) E.Murray (Ashgabat, 1957)
 25 *Acer negundo* L. (Estonia, Tallinn, 1959)
 * 26 *Acer negundo* L. var. *interius* (Britton) Sarg. (Edmonton, 1967)
 * 27 *Acer pseudosieboldianum* (Pax) Kom. (*Rossia extremiorientalis*, Lazo, 1977)
 * 28 *Acer pseudosieboldianum* (Pax) Kom. (*Rossia extremiorientalis*, Okeanskaya, 1961)
A* 29 *Acer pseudosieboldianum* (Pax) Kom. (*Rossia extremiorientalis*, Okeanskaya, 1961)
 30 *Acer tataricum* L. subsp. *aidzuense* (Franch.) P.C.De Jong (Tsukuba, 2003)
 * 31 *Acer tataricum* L. subsp. *ginnala* (Maxim.) Wesm. (*Rossia extremiorientalis*, Okeanskaya, 1961)
A* 32 *Acer tegmentosum* Maxim. (*Rossia extremiorientalis*, Kedrovaya Pad', 1961)

Actinidiaceae

- 33 *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq. cv. **Weiki × Purpurna Sadova** (Estonia, Tallinn, 2010)
 34 *Actinidia kolomikta* (Rupr. & Maxim.) Maxim.

Anacardiaceae

- 35 *Cotinus coggygria* Scop.
 36 *Rhus typhina* L. (Estonia, Kuressaare, 1977)

Annonaceae

- + 37 *Artabotrys hexapetalus* (L.f.) Bhandari (Lund, 1999)

Apocynaceae

- + 38 *Alyxia ruscifolia* R.Br. (Düsseldorf, 1991)

Aquifoliaceae

- 39 *Ilex laevigata* (Pursh) A.Gray (Holland, 1993)
 * 40 *Ilex verticillata* (L.) A.Gray (Mentor, 1994)

Araliaceae

- * 41 *Aralia cordata* Thunb. (*Insulae Kurilenses, Kunashiri*, 1981)
 A* 42 *Aralia elata* (Miq.) Seem. (*Rossia extremiorientalis, Shamora*, 1983)
 43 *Aralia racemosa* L. (Rogów, 2002)
 44 *Eleutherococcus senticosus* (Rupr. & Maxim.) Maxim. (Dolinsk, 1962)
 * 45 *Eleutherococcus sessiliflorus* (Rupr. & Maxim.) S.Y.Hu
 (*Rossia extremiorientalis, Artem*, 1961)
 A* 46 *Eleutherococcus sessiliflorus* (Rupr. & Maxim.) S.Y.Hu
 (*Rossia extremiorientalis, Artem*, 1961)
 47 *Eleutherococcus sieboldianus* (Makino.) Koidz (Kiel, 1997)
 * 48 *Oplopanax elatus* (Nakai) Nakai (*Rossia extremiorientalis, Mt. Khualaza*, 1961)

Asteraceae

- 49 *Aster alpinus* L. **cv. Albus** (Linz, 1997)
 * 50 *Centaurea ruthenica* Lam. (Samara, 2017)
 * 51 *Leibnitzia anandria* (L.) Nakai (Toyama, 2018)
 * 52 *Silphium integrifolium* Michx. (Glencoe, 1993)

Begoniaceae

- + 53 *Begonia carolineifolia* Regel (Northampton, 1995)
 + 54 *Begonia dichroa* Sprague (Tübingen, 2015)
 + 55 *Begonia dregei* Otto & A.Dietr. **cv. Tripartita**
 + 56 *Begonia venosa* Skan ex Hook.f. (Lyon, 1999)

Berberidaceae

- 57 *Berberis aggregata* C.K.Schneid. (Stockholm, 1957)
 58 *Berberis dictyophylla* Franch. **var. approximata** (Sprague) Rehder
 (Berlin-Dahlem, 1958)
 A 59 *Berberis julianae* C.K.Schneid. (Berlin-Dahlem, 1958)
 60 *Berberis koreana* Palib. (Hørsholm, 1991)
 61 *Berberis parvifolia* Sprague (Berlin-Dahlem, 1957)
 62 *Berberis sieboldii* Miq. (Eberswalde, 1997)
 63 *Berberis thunbergii* DC. (Estonia, Tallinn, 1959)
 64 *Berberis thunbergii* DC. **cv. Silver Beauty** (Moscow, 1961)
 65 *Mahonia aquifolium* (Pursh) Nutt. × *Mahonia repens* (Lindl.) G.Don
 (Estonia, Tallinn, 1957)
 66 *Podophyllum hexandrum* Royle (Bergen, 1958)

Betulaceae

- 67 *Alnus crispa* (Aiton) Pursh **var. mollis** (Fernald) Fernald (Rogów, 2002)
 68 *Alnus japonica* (Thunb.) Steud. (Nayoro, 1973)
 69 *Alnus viridis* (Chaix) DC. (Rogów, 1973)

- * 70 *Alnus viridis* (Chaix) DC. **subsp. sinuata** (Regel) A.Löve & D.Löve (Ås, 1998)
- 71 *Betula alleghaniensis* Britton (Estonia, Järvselja, 1958)
- 72 *Betula apoiensis* Nakai (Store Milde, 1998)
- 73 *Betula ermanii* Cham. **var. lanata** Regel (Barnaul, 2011)
- 74 *Betula ermanii* Cham. **var. subcordata** (Regel) Koidz. (Nikko, 1975)
- * 75 *Betula fruticosa* Pall. (*Rossia extremorientalis*, Olga, 1977)
- * 76 *Betula nana* L. (Estonia, Patika, 2013)
- * 77 *Betula pendula* Roth **var. carelica** (Mercklin) Hämet-Ahti (*Finlandia*, 1959)
- 78 *Betula pendula* Roth **var. oycoviensis** (Besser) Dippel (Lublin, 1974)
- 79 *Betula pendula* Roth **var. oycoviensis** (Besser) Dippel (St. Petersburg, 1957)
- * 80 *Betula platyphylla* Sukaczew (*Sibiria australis*, *Dahuria*, *Mogotsha*, 1978)
- * 81 *Betula platyphylla* Sukaczew **var. japonica** (Miq.) Hara (*Insula Sachalin*, *Novoalexandrovsk*, 1961)
- 82 *Betula populifolia* Marshall
- 83 *Betula pubescens* Ehrh. **subsp. carpatica** (Waldst. & Kit. ex Willd.) Asch. & Graebn. (Strasbourg, 1998)
- 84 *Betula raddeana* Trautv. (St. Petersburg, 1965)
- 85 *Betula tatewakiana* M.Ohki & Watan. (Bayreuth, 2004)
- 86 *Betula utilis* D.Don **var. albosinensis** (Burkill) Ashburner & McAll. (Berlin-Dahlem, 1974)
- 87 *Carpinus betulus* L. **cv. Incisa** (København, 1965)

Bignoniaceae

- 88 *Incarvillea olgae* Regel (München, 2017) IPEN nr: TJ-0-M-2003/0212

Bixaceae

- + 89 *Bixa orellana* L. (Tartu, 2011)

Boraginaceae

- 90 *Arnebia pulchra* (Willd. ex Roem. & Schult.) Edm. (Tromsø, 2016)
- * 91 *Pontechium maculatum* (L.) Böhle et Hilger (Pyatigorsk, 2016)

Brassicaceae

- * 92 *Aubrieta gracilis* Spruner ex Boiss. (Göteborg, 2002)
- * 93 *Coluteocarpus vesicaria* (L.) Holmboe (München, 2014)
IPEN nr: GE-0-M-2013/1901
- 94 *Schivereckia podolica* (Besser) Andrz. (Leisnig, 2000)

Buxaceae

- 95 *Buxus sempervirens* L. (Estonia, Kihelkonna, 1995)

Cactaceae

- + 96 *Cleistocactus smaragdiflorus* (F.A.C.Weber) Britton & Rose
- + 97 *Pfeiffera monacantha* (Griseb.) P.V.Heath

Calycanthaceae

- 98 ***Calycanthus fertilis*** Walter **var. *laevigatus*** (Willd.) Bean
(Nogent-sur-Vernisson, 1964)

Caprifoliaceae

- * 99 ***Diervilla lonicera*** Mill. (Ottawa, 1966)
100 ***Diervilla rivularis*** Gatt. (Dushanbe, 1957)
101 ***Kolkwitzia amabilis*** Graebn.
102 ***Lonicera altmannii*** Regel & Schmalh. (Kiev, 1958)
* 103 ***Lonicera caerulea*** L. (Chambésy, 1979)
104 ***Lonicera caprifolium*** L. (Estonia, Tallinn, 2017)
105 ***Lonicera caucasica*** Pall.
A* 106 ***Lonicera chrysantha*** Turcz. **var. *crassipes*** Nakai (Hørsholm, 1991)
107 ***Lonicera demissa*** Rehder
108 ***Lonicera ferdinandi*** Franch. (Berlin-Dahlem, 1979)
109 ***Lonicera iberica*** M.Bieb. (Tbilisi, 1964)
110 ***Lonicera involucrata*** (Richardson) Banks ex Spreng. (Berlin-Dahlem, 1978)
111 ***Lonicera ledebourii*** Eschsch. (Kórnik, 1999)
A 112 ***Lonicera ledebourii*** Eschsch. (Kórnik, 1999)
113 ***Lonicera maackii*** (Rupr.) Maxim. (Khabarovsk, 1967)
* 114 ***Lonicera maximowiczii*** (Rupr.) Maxim. (*Rossia extremiorientalis*, Ternei, 1979)
115 ***Lonicera myrtillus*** Hook.f. & Thomson (Lausanne, 1962)
* 116 ***Lonicera nigra*** L. (Sarajevo, 1983)
A 117 ***Lonicera nigra*** L. (Amsterdam, 2003)
A 118 ***Lonicera periclymenum*** L. (Antwerpen, 1958)
119 ***Lonicera periclymenum*** L.
120 ***Lonicera periclymenum*** L. **cv. *Quercifolium*** (Salaspils, 1996)
121 ***Lonicera quinquelocularis*** Hardw. (Vilnius, 2012)
* 122 ***Lonicera ruprechtiana*** Regel (*Rossia extremiorientalis*, Ternei, 1979)
123 ***Lonicera tatarica*** L. (Barnaul, 1977)
124 ***Lonicera tatarica*** L. **cv. *Alba*** (Northampton, 1963)
A 125 ***Lonicera vesicaria*** Kom. (Vilnius, 2002)
126 ***Lonicera vesicaria*** Kom. (Minsk, 1997)
127 ***Sambucus canadensis*** L. **cv. *Aurea***
* 128 ***Sambucus williamsii*** Hance (*Rossia extremiorientalis*, Talmi, 1961)
* 129 ***Symphoricarpos albus*** (L.) S.F.Blake (East Lansing, 1974)
130 ***Symphoricarpos albus*** (L.) S.F.Blake **var. *laevigatus*** (Fernald) S.F.Blake
(Estonia, Tallinn, 1966)
131 ***Symphoricarpos occidentalis*** Hook. (Ottawa, 1968)
132 ***Weigela decora*** (Nakai) Nakai (Hørsholm, 1994)
133 ***Weigela florida*** (Bunge) A.DC. (Pyongyang, 1988)
134 ***Weigela japonica*** Thunb. (Dresden, 1960)

- * 135 *Weigela middendorffiana* (Trautv. & C.A.Mey.) K.Koch (*Insula Sachalin, Mt. Chekhov*, 1961)
- * 136 *Viburnum cassinoides* L. (Toronto, 1993)
- * 137 *Viburnum dentatum* L. **var. deamii** (Rehder) Fernald (Philadelphia, 1993)
- 138 *Viburnum lantana* L.
- 139 *Viburnum lantana* L. **cv. Variegatum** (Estonia, Järvelja, 1958)
- 140 *Viburnum lentago* L. (Estonia, Luua, 1957)
- 141 *Viburnum mongolicum* (Pall.) Rehder (Girionys, 2009)
- 142 *Viburnum opulus* L. (Tallinn, 1965)
- 143 *Viburnum sargentii* Koehne
- 144 *Viburnum sargentii* Koehne **f. calvescens** (Rehder) Rehder (Kiev, 1957)
- * 145 *Viburnum trilobum* Marshall (Montréal, 1988)
- 146 *Viburnum trilobum* Marshall
- A*** 147 *Viburnum wrightii* Miq. (*Insulae Kurilenses, Etorofu*, 1961)

Caryophyllaceae

- 148 *Arenaria rotundifolia* M.Bieb. (Estonia, Kohila, 1998)
- * 149 *Dianthus nardiformis* Janka (Bucuresti, 2020)
- 150 *Saponaria caespitosa* DC. (Innsbruck, 1993)
- 151 *Silene zawadzki* Herbich (Stuttgart-Hohenheim, 1990)

Celastraceae

- 152 *Celastrus orbiculatus* Thunb. (Estonia, Tallinn, 1960)
- 153 *Celastrus scandens* L.
- 154 *Euonymus alatus* (Thunb.) Siebold (Kyoto, 1985)
- 155 *Euonymus alatus* (Thunb.) Siebold (Kyoto, 1998)
- A** 156 *Euonymus alatus* (Thunb.) Siebold (Kyoto, 1998)
- * 157 *Euonymus alatus* (Thunb.) Siebold **subsp. sacrosanctus** (Koidz.) Worosch. (*Rossia extremiorientalis*, 1961)
- 158 *Euonymus bungeanus* Maxim. (Beijing, 1957)
- * 159 *Euonymus hamiltonianus* Wall. **subsp. sieboldianus** (Blume) Hara (*Insula Sachalin, Mt. Chekhov*, 1961)
- 160 *Euonymus latifolius* (L.) Mill. (Estonia, Tallinn, 1989)
- 161 *Euonymus macropterus* Rupr.
- A*** 162 *Euonymus macropterus* Rupr. (*Rossia extremiorientalis, Mt. Khualaza*, 1961)
- * 163 *Euonymus obovatus* Nutt. (East Lansing, 1999)
- A** 164 *Euonymus oxyphyllus* Miq. (Kyoto, 1988)
- * 165 *Euonymus pauciflorus* Maxim. (*Rossia extremiorientalis*, 1975)
- 166 *Tripterygium regelii* Sprague & Takeda

Cercidiphyllaceae

- 167 *Cercidiphyllum japonicum* Siebold & Zucc. **var. magnificum** Nakai

Cistaceae

- * 168 *Helianthemum canum* (L.) Hornem. (Wien, 2018)

Clusiaceae

- 169 *Hypericum androsaemum* L. (Stuttgart-Hohenheim, 2017)
 A 170 *Hypericum ascyron* L. (Vladivostok, 2019)
 171 *Hypericum olympicum* L. (Leipzig, 2017)
 172 *Hypericum reptans* Hook.f. & Thomson ex Dryer (Kiel, 2017)

Cornaceae

- 173 *Cornus alba* L.
 * 174 *Cornus alternifolia* L.f. (Niagara Falls, 2008)
 A 175 *Cornus alternifolia* L.f. (East Lansing, 2003)
 * 176 *Cornus amomum* Mill. (East Lansing, 2003)
 A 177 *Cornus amomum* Mill. (Rogów, 2004)
 178 *Cornus mas* L.
 179 *Cornus racemosa* Lam.
 A 180 *Cornus rugosa* Lam. (Rogów, 2008)
 181 *Cornus sericea* L. cv. *Flaviramea* (Leipzig, 1957)

Crassulaceae

- + 182 *Kalanchoe nyikae* Engl. (München, 1995)
 + 183 *Kalanchoe orgyalis* Baker (Kiev, 1984)
 + 184 *Kalanchoe rotundifolia* Haw. (Basel, 1994)
 * 185 *Sempervivum arachnoideum* L. (L'Aquila, 2012)
 186 *Sempervivum ciliosum* Craib (Göteborg, 1997)

Elaeagnaceae

- 187 *Elaeagnus commutata* Bernh. ex Rydb. (Estonia, Järvselja, 1960)
 188 *Elaeagnus umbellata* Thunb. (Estonia, Polli, 1975)
 * 189 *Hippophae rhamnoides* L. (Wrocław, 1997)
 190 *Shepherdia canadensis* (L.) Nutt.

Ericaceae

- 191 *Enkianthus campanulatus* (Miq.) G.Nicholson
 * 192 *Ledum groenlandicum* Oeder (Vancouver, 1962)
 * 193 *Ledum palustre* L. var. *dilatatum* Wahlenb. (*Rossia extremiorientalis*,
Sovetskaya Gavan', 1967)
 194 *Rhododendron brachycarpum* D.Don ex G.Don (Edinburgh, 1958)
 195 *Rhododendron camtschaticum* Pall.
 196 *Rhododendron catawbiense* Michx. (Chemnitz, 2002)
 197 *Rhododendron ferrugineum* L. (Edinburgh, 1958)
 198 *Rhododendron* × *halense* Grembl. (Linz, 1962)
 199 *Rhododendron insigne* Hemsl. & E.H.Wilson × *Rhododendron* sp.
 (Edinburgh, 1958)
 200 *Rhododendron luteum* Sweet
 * 201 *Rhododendron schlippenbachii* Maxim. (*Rossia extremiorientalis*, *Talmi*, 1961)
 202 *Rhododendron smirnowii* Trautv.

203 *Vaccinium arctostaphylos* L. (Paris, 1966)

* 204 *Vaccinium vitis-idaea* L. (Estonia, Ohepalu, 1993)

Euphorbiaceae

205 *Securinega suffruticosa* (Pall.) Rehder

Fabaceae

206 *Baptisia australis* (L.) R.Br. (Salaspils, 1988)

A 207 *Caragana arborescens* Lam.

208 *Caragana aurantiaca* Koehne (Wien, 1965)

209 *Caragana densa* Kom. (Lublin, 2005)

210 *Caragana frutex* (L.) K.Koch (Kiev, 1957)

211 *Caragana jubata* (Pall.) Poir. (Vácrátót, 2006)

212 *Caragana pygmaea* (L.) DC. (Salaspils, 2005)

A 213 *Cercis siliquastrum* L. (Croatia, Buzet, 2005)

214 *Chamaecytisus austriacus* (L.) Link **subsp. heuffelii** (Wierzb. ex Griseb. & Schenk) K.I.Chr. (Ulm, 2018)

A 215 *Chamaecytisus purpureus* (Scop.) Link (München, 1961)

* 216 *Chamaespartium sagittale* (L.) P.E.Gibbs (Paris, 2015)

A 217 *Colutea × media* Willd. (Bayreuth, 2006)

218 *Cytisophyllum sessilifolium* O.Lang (Ulm, 2017)

219 *Cytisus nigricans* L. (Iași, 2017)

220 *Cytisus × praecox* Bean (Estonia, Tallinn, 2019)

* 221 *Cytisus scoparius* (L.) Link (Lublin, 2007)

222 *Cytisus scoparius* (L.) Link (Przemyśl, 2019)

223 *Genista germanica* L. (Antwerpen, 2018)

* 224 *Genista tinctoria* L. (Olomouc, 1988)

A 225 *Laburnum alpinum* (Mill.) Bercht. & J.Presl

226 *Laburnum anagyroides* Medik.

227 *Laburnum anagyroides* Medik. **cv. Quercifolium** (Yalta, 1967)

* 228 *Lathyrus miniatus* M.Bieb. ex Steven (Pyatigorsk, 2019)

A* 229 *Maackia amurensis* Rupr. & Maxim. (*Rossia extremiorientalis*, Lazo, 1977)

* 230 *Maackia amurensis* Rupr. & Maxim. (*Rossia extremiorientalis*, 1961)

+ 231 *Spartium junceum* L. (Jerusalem, 2009)

Fagaceae

A 232 *Castanea dentata* (Marshall) Borkh. (Tharandt, 2002)

Gesneriaceae

233 *Ramonda serbica* Pančić (Brno, 2008)

+ 234 *Rhytidophyllum tomentosum* (L.) Mart. (Halle, 2003)

Grossulariaceae

235 *Ribes americanum* Mill.

* 236 *Ribes aureum* Pursh (Washington, 1978)

* 237 *Ribes diacanthum* Pall. (Moscow, 1989)

- 238 *Ribes divaricatum* Douglas (Vilnius, 1991)
A 239 *Ribes komarovii* Pojark. (Bayreuth, 1997)
 240 *Ribes latifolium* Jancz. (Yuzhno-Sakhalinsk, 2004)
 * 241 *Ribes mandshuricum* (Maxim.) Kom. (*Rossia extremiorientalis*,
 Okeanskaya, 1981)
 * 242 *Ribes nigrum* L. (Estonia, Kalvi, 2009)
 243 *Ribes nigrum* L. **cv. Marmoratum** (Salaspils, 1990)
 244 *Ribes petraeum* Wulfen
 245 *Ribes sanguineum* Pursh (Oslo, 1957)

Hamamelidaceae

- 246 *Fothergilla major* (Sims) Lodd. (Tharandt, 1976)
 * 247 *Hamamelis virginiana* L. (Toronto, 1982)

Hydrangeaceae

- 248 *Deutzia* × *lemoinei* Lemoine ex Bois (Estonia, Järvselja, 1958)
 * 249 *Deutzia parviflora* Bunge **var. amurensis** Regel (*Rossia extremiorientalis*, 1961)
 250 *Deutzia scabra* Thunb. **cv. Plena** (Estonia, Tallinn, 1960)
 251 *Deutzia schneideriana* Rehder **var. laxiflora** Rehder (Berlin-Dahlem, 1960)
 * 252 *Hydrangea paniculata* Siebold (*Rossia extremiorientalis*, 1961)

Juglandaceae

- 253 *Pterocarya fraxinifolia* (Lam.) Spach
A 254 *Pterocarya stenoptera* C.DC. (Beijing, 1980)
 255 *Pterocarya stenoptera* C.DC. (Beijing, 1957)

Lamiaceae

- + 256 *Clerodendrum speciosissimum* Van Geert ex Morren (Dresden, 1997)
 * 257 *Dracocephalum ruyschiana* L. (Estonia, Jalase, 1995)
 * 258 *Horminum pyrenaicum* L. (Bormio So, 2014)
 259 *Horminum pyrenaicum* L. **cv. Roseum**
 260 *Nepeta sibirica* L. (Graz, 1984)
 261 *Physostegia virginiana* (L.) Benth. **cv. Summer Snow** (Manchester, 1978)
 * 262 *Physostegia virginiana* (L.) Benth. **subsp. virginiana** (Montreal, 2018)
 * 263 *Salvia pratensis* L. (Jena, 1989)
 * 264 *Salvia tesquicola* Klok. & Pobed. (Pyatigorsk, 2013)
 265 *Sideritis glacialis* Boiss. (Erlangen, 2018) IPEN nr: XX-0-ER-2009-6765

Magnoliaceae

- 266 *Magnolia* **cv. Roseanne** (Estonia, Viimsi, 2010)
A 267 *Magnolia sieboldii* K.Koch **cv. Pride of Norway** (Estonia, Viimsi, 2008)

Malvaceae

- 268 *Kitaibelia vitifolia* Willd. (Jena, 2017) IPEN nr: MK-0-JENA-7572646
 * 269 *Malva moschata* L. (Halle, 1999)
 270 *Malva moschata* L. **cv. Alba** (Bordeaux, 1989)

Melastomataceae

- + 271 *Medinilla eximia* (Jack) Blume (Tartu, 2016)

Moraceae

- + 272 *Dorstenia contrajerva* L. (Strassbourg, 1961)
- + 273 *Dorstenia elata* Gardner (Düsseldorf, 1994)
- 274 *Morus alba* L.
- 275 *Morus alba* L. **cv. Macrophylla** (Macea, 2014)
- A 276 *Morus australis* Poir. (Cluj, 1965)
- 277 *Morus australis* Poir. (Cluj, 1965)

Myricaceae

- 278 *Myrica pensylvanica* Lam.

Myrsinaceae

- + 279 *Ardisia japonica* (Thunb.) Blume (Batumi, 1984)

Myrtaceae

- +* 280 *Eugenia uniflora* L. (*Insula Mauritiana*, 2007)
- + 281 *Melaleuca flammea* Craven (Arcadia, 1979)
- + 282 *Melaleuca hypericifolia* (Salisb.) Sm. (Amsterdam, 2002)
- + 283 *Melaleuca linearis* Schard. & J.C.Wendl. (Oxford, 2002)
- + 284 *Melaleuca paludicola* Craven (Potsdam, 2010)
- + 285 *Melaleuca subulata* (Cheel) Craven (Ness, 2010)

Oleaceae

- 286 *Forsythia ovata* Nakai (St. Petersburg, 1958)
- 287 *Forsythia suspensa* (Thunb.) Vahl
- * 288 *Fraxinus latifolia* Benth. (Vancouver, 1982)
- 289 *Ligustrum ibota* Siebold & Zucc. (København, 1991)
- 290 *Ligustrum obtusifolium* Siebold & Zucc. (Poznań, 1999)
- * 291 *Ligustrum tschonoskii* Decne. (*Insula Sachalin, Mt. Chekhov*, 1961)
- 292 *Ligustrum tschonoskii* Decne. **var. glabrescens** Koidz. (Hørsholm, 1991)
- * 293 *Ligustrum vulgare* L. (Salzburg, 1983)
- 294 *Ligustrum vulgare* L. **cv. Aureovariegatum** (Salaspils, 1964)
- 295 *Syringa josikaea* J.Jacq. ex Rchb. (Estonia, Tallinn, 1957)

Onagraceae

- + 296 *Fuchsia magellanica* Lam. (St. Petersburg, 1968)
- + 297 *Fuchsia procumbens* R.Cunn. (Tallinn ZOO, 2009)

Paeoniaceae

- * 298 *Paeonia mascula* (L.) Mill. **subsp. mascula** (Pyatigorsk, 2014)

Petiveriaceae

- + 299 *Rivina humilis* L. (Tartu, 1959)

Phyllanthaceae

- + 300 *Phyllanthus grandifolius* L.

Piperaceae

- + 301 *Piper auritum* Kunth (Villers-lès-Nancy, 1991)
- + 302 *Piper unguiculatum* Ruiz & Pav.

Pittosporaceae

- + 303 *Pittosporum crassifolium* Banks & Sol. ex A.Cunn.

Plantaginaceae

- + 304 *Tetranema roseum* (M.Martens & Galeotti) Standl. & Steyerl.

Portulacaceae

- 305 *Lewisia pygmaea* (A.Gray) B.L.Rob. (Dresden, 1999)

Primulaceae

- 306 *Androsace lactea* L. (Reykjavik, 2012) IPEN nr: IT-0-REYK-2011/013
- 307 *Dodecatheon dentatum* Hook. (Göteborg, 1997)

Proteaceae

- + 308 *Hakea trineura* F.Muell. (Canberra, 2003)
- + 309 *Stenocarpus salignus* R.Br. (South-Yarra, 1980)

Ranunculaceae

- 310 *Clematis hirsutissima* Pursh var. **scottii** (Porter) R.O.Erickson (NARGS, 2017)
- 311 *Clematis mandshurica* Rupr. (Perm, 2014)
- 312 *Delphinium tatsienense* Franch. (Potsdam, 1990)
- 313 *Helleborus foetidus* L. (Potsdam, 1990)
- * 314 *Hepatica acutiloba* DC. (Niagara Falls, 2012)
- * 315 *Pulsatilla patens* (L.) Mill. (*Estonia, Lipstu*, 2018)
- * 316 *Pulsatilla vernalis* (L.) Mill. (St. Gallen, 2019) IPEN nr: AT-0-STGAL-22825
- * 317 *Pulsatilla vulgaris* Mill. (Würzburg, 2017) IPEN nr: DE-0-WURZB-2016-17-Z-10
- 318 *Pulsatilla vulgaris* Mill. cv. **Alba** (Hamburg, 1970)
- 319 *Pulsatilla vulgaris* Mill. cv. **Rubra** (Liberec, 1972)
- 320 *Trollius laxus* Salisb. (Akureyri, 2003)

Rhamnaceae

- * 321 *Frangula alnus* Mill. (*Tallinn*, 1971)
- * 322 *Rhamnus alpina* L. (*France*, 1992)
- 323 *Rhamnus japonica* Maxim. (Trondheim, 1998)
- 324 *Rhamnus pallasii* Fisch. & C.A.Mey. (Pyatigorsk, 2004)
- 325 *Rhamnus parvifolia* Bunge (Barnaul, 1998)

Rosaceae

- 326 *Amelanchier alnifolia* (Nutt.) Nutt.
- * 327 *Amelanchier canadensis* (L.) Medik. (Harrogate, 1996)

- 328 *Amelanchier laevis* Wiegand (Washington, 1975)
- 329 *Amelanchier lamarckii* F.G.Schroed.
- 330 *Amelanchier obovalis* (Michx.) Ashe (Estonia, Kaerepere, 1992)
- 331 *Amelanchier ovalis* Medik. (Ljubljana, 1959)
- 332 *Amelanchier spicata* (Lam.) K.Koch (Estonia, Reediku, 1965)
- 333 *Amygdalus nana* L. (syn. *Prunus tenella* Batsch)
- 334 *Amygdalus petunnikowii* Litv. (syn. *Prunus petunnikowii* (Litv.) Rehder) (Nizhniy Novgorod, 2006)
- 335 *Aronia arbutifolia* (L.) Pers. f. *leiocalyx* Rehder (Essen, 1957)
- 336 *Cerasus avium* (L.) Moench (syn. *Prunus avium* L.)
- 337 *Cerasus maximowiczii* (Rupr.) Kom. (syn. *Prunus maximowiczii* Rupr.)
- 338 *Chaenomeles japonica* (Thunb.) Lindl. ex Spach
- 339 *Cotoneaster divaricatus* Rehder & E.H.Wilson (Antwerpen, 1957)
- A** 340 *Cotoneaster integerrimus* Medik. (Minsk, 1957)
- 341 *Cotoneaster nebrodensis* (Guss.) K.Koch (Paris, 1957)
- A** 342 *Cotoneaster praecox* (Bois & P.Berthault) M.Vilm. ex Meun. (Stockholm, 1957)
- A*** 343 *Crataegus chlorosarca* Maxim. (*Insula Sachalin, Dolinsk*, 1961)
- 344 *Crataegus chrysoarpa* Ashe (Tartu, 1958)
- 345 *Crataegus chrysoarpa* Ashe **var. phoenicea** E.J.Palmer (Helsinki, 1960)
- 346 *Crataegus douglasii* Lindl. (Estonia, Järvelja, 1958)
- 347 *Crataegus dsungarica* Zabel ex Lange
- * 348 *Crataegus laevigata* (Poir.) DC. (Strasbourg, 1990)
- * 349 *Crataegus monogyna* Jacq. (Wien, 1975)
- 350 *Crataegus punctata* Jacq. (Almaty, 1957)
- 351 *Crataegus punctata* Jacq. **f. intermedia** Kruschke (Almaty, 1957)
- * 352 *Crataegus rhipidophylla* Gand. (Salaspils, 1979)
- 353 *Crataegus rusanovii* Cinovskis (Estonia, Tallinn, 2008)
- * 354 *Crataegus turkestanica* Pojark. (*Pamir-Alai occidentalis, Iskander-Kul*, 1962)
- * 355 *Crataegus* × *viidumaegica* Cinovskis (*Estonia, Insula Saaremaa, Viidu*, 2006)
- A** 356 *Cydonia oblonga* Mill. (Ashgabat, 1963)
- * 357 *Dryas drummondii* Richardson ex Hook. (Montreal, 2018)
- 358 *Holodiscus discolor* (Pursh) Maxim.
- 359 *Holodiscus dumosus* (Nutt. ex Hook.) A.Heller (Oslo, 1995)
- A** 360 *Malus fusca* (Raf.) C.K.Schneid. (Helsinki, 1996)
- 361 *Malus* × *purpurea* (Barbier) Rehder (Estonia, Tallinn, 1958)
- 362 *Malus toringo* (Siebold) Siebold ex de Vriese (Lviv, 1959)
- 363 *Mespilus germanica* L. (Estonia, Luua, 1958)
- A** 364 *Neillia sinensis* Oliv. (Moscow, 1961)
- A** 365 *Padellus mahaleb* (L.) Vassilcz. (syn. *Prunus mahaleb* L.) (Estonia, Tallinn, 2001)
- 366 *Padus maackii* (Rupr.) Kom. (syn. *Prunus maackii* Rupr.) (Tartu, 1958)
- 367 *Padus serotina* (Ehrh.) Borkh. (syn. *Prunus serotina* Ehrh.) (Estonia, Järvelja, 1958)
- 368 *Padus virginiana* (L.) Mill. (syn. *Prunus virginiana* L.) (Stockholm, 1999)

- 369 *Photinia villosa* (Thunb.) DC. (Vancouver, 1959)
- 370 *Physocarpus amurensis* (Maxim.) Maxim. (København, 1958)
- 371 *Potentilla alchemilloides* Lapeyr. (Poznań, 1991)
- A 372 *Prunus cerasifera* Ehrh. (Budapest, 1999)
- 373 *Prunus choreiana* Nakai ex Im (Praha, 2013)
- 374 *Prunus spinosa* L. (Cogne, 2003)
- 375 *Prunus spinosa* L. **subsp. dasyphylla** (Schur) Domin (Estonia, Paldiski, 2005)
- A 376 *Pyracantha coccinea* M.Roem (Berlin-Dahlem, 1957)
- 377 *Rhodotypos scandens* (Thunb.) Makino (Ofuna, 2017)
- 378 *Rosa acicularis* Lindl. **var. nipponensis** (Crép.) Koehne (Kyoto, 1982)
- 379 *Rosa arvensis* Huds.
- * 380 *Rosa blanda* Aiton (Philadelphia, 1983)
- * 381 *Rosa canina* L. (Liège, 1982)
- 382 *Rosa canina* L. **cv. Inermis** (Iași, 1984)
- 383 *Rosa carolina* L. **var. grandiflora** (Baker) Rehder (Glencoe, 1988)
- * 384 *Rosa corymbifera* Borkh. (*Tianschan occidentalis*, *Chimgan*, 1981)
- 385 *Rosa elegantula* Rolfe (Leiden, 1957)
- * 386 *Rosa glauca* Pourr. (Salzburg, 2002)
- 387 *Rosa hemsleyana* G.Täckh. (Stockholm, 1957)
- 388 *Rosa* × *highdownensis* H.G.K.Hillier (Reading, 1971)
- 389 *Rosa jundzillii* Besser (Tübingen, 1985)
- 390 *Rosa lucida* Ehrh. (Strasbourg, 1996)
- * 391 *Rosa maximowicziana* Regel (*Rossia extremiorientalis*, *Shamora*, 1980)
- 392 *Rosa moyesii* Hemsl. & E.H.Wilson
- 393 *Rosa multiflora* Thunb. ex Murray (Koshigaya, 1983)
- 394 *Rosa multiflora* Thunb. ex Murray **f. roseiflora** (Focke) Rehder (Beijing, 1987)
- 395 *Rosa nitida* Willd. (Helsinki, 1992)
- 396 *Rosa nitidula* Besser
- 397 *Rosa obtusifolia* Desv. (Stockholm, 1963)
- 398 *Rosa palustris* Marshall (Philadelphia, 1983)
- 399 *Rosa setigera* Michx. **var. tomentosa** Torr. & A.Gray
- 400 *Rosa setipoda* Hemsl. & E.H.Wilson (Helsinki, 1960)
- 401 *Rosa stylosa* Desv. (Düsseldorf, 1996)
- * 402 *Rosa subcanina* (H.Christ) Dalla Torre & Sarnth. (Genova, 1982)
- 403 *Rosa sweginzowii* Koehne (Kalmthout, 1961)
- 404 *Rosa sweginzowii* Koehne **cv. Macrocarpa** (Essen, 1984)
- 405 *Rosa villosa* L.
- 406 *Rubus idaeus* L. **f. chlorocarpus** Krause (Turku, 2000)
- 407 *Rubus insularis* F.Aesch (Estonia, Tallinn, 1999)
- 408 *Rubus laciniatus* Willd. (Amsterdam, 1958)
- * 409 *Rubus occidentalis* L. (South Hadley, 1997)
- * 410 *Rubus odoratus* L. (Montréal, 1970)
- 411 *Rubus parviflorus* Nutt. (Estonia, Tihemetsa, 1965)

- * 412 *Sorbaria sorbifolia* (L.) A.Braun (*Rossia extremiorientalis*, Svetlaya, 1977)
- * 413 *Sorbus americana* Marshall (Montréal, 1957)
- 414 *Sorbus chamaemespilus* (L.) Crantz
- * 415 *Sorbus sambucifolia* (Cham. & Schltld.) M.Roem. (*Rossia extremiorientalis*,
Sovetskaya Gavan', 1967)
- A** 416 *Sorbus setschwanensis* (C.K.Schneid.) Koehne (Rogów, 2002)

Rubiaceae

- 417 *Asperula purpurea* (L.) Ehrend. (Cluj-Napoca, 1991)
- + 418 *Psychotria punctata* Vatke (Düsseldorf, 2001)
- + 419 *Psychotria viridis* Ruiz & Pav.

Rutaceae

- A** 420 *Orixa japonica* Thunb.
- 421 *Phellodendron amurense* Rupr. (Estonia, Luua, 1957)
- 422 *Phellodendron chinense* C.K.Schneid.
- A** 423 *Phellodendron lavalleyi* Dode (Estonia, Luua, 1957)
- 424 *Phellodendron lavalleyi* Dode (Coimbra, 1966)
- A** 425 *Ptelea baldwinii* Torr. & A.Gray (Leipzig, 2010)
- 426 *Ptelea baldwinii* Torr. & A.Gray (Leipzig, 2010)
- 427 *Ptelea trifoliata* L.
- 428 *Ruta graveolens* L.

Saxifragaceae

- * 429 *Astilbe chinensis* (Maxim.) Franch. & Sav. (Vladivostok, 2008)
- * 430 *Boykinia major* A.Gray (NARGS, 2019)
- * 431 *Micranthes virginianensis* (Michx.) Small (Montreal, 2012)
- * 432 *Saxifraga aizoides* L. (Chambesy, 2016) IPEN nr: CH0G-20150988
- * 433 *Saxifraga crustata* Vest (Graz, 2012)
- 434 *Saxifraga luteoviridis* Schott & Kotschy (Marburg, 1997)
- * 435 *Saxifraga oppositifolia* L. (Reykjavik, 2010) IPEN nr: IS-0-REYK-2009/023
- 436 *Saxifraga pensylvanica* L. (Saarbrücken, 1989)
- 437 *Saxifraga sempervivum* K.Koch (Brno, 1993)
- 438 *Saxifraga tenella* Wulfen (Leipzig, 1959)

Schisandraceae

- * 439 *Schisandra chinensis* (Turcz.) Baill. (*Rossia extremiorientalis*,
Mt. Khualaza, 1961)

Scrophulariaceae

- 440 *Erinus alpinus* L. (Bielefeld, 2017)
- 441 *Erinus alpinus* L. cv. **Albus** (Bielefeld, 2017)
- 442 *Penstemon confertus* Douglas (Berlin-Dahlem, 1998)
- * 443 *Penstemon digitalis* Nutt. (NARGS, 2016)
- 444 *Penstemon ovatus* Douglas (Frankfurt, Palmengarten, 2016)
IPEN nr: US-0-FRP-25330

- * 445 *Scrophularia canina* L. **subsp. hoppei** (W.D.J.Koch) P.Fourn (Graz, 2019)
- * 446 *Veronica gentianoides* Vahl (Vácrátót, 2017)

Solanaceae

- 447 *Capsicum annuum* L. **cv. Escamillo Grossum Group**
- 448 *Capsicum annuum* L. **cv. Gruzinskiy Nos Grossum Group**
- 449 *Capsicum annuum* L. **cv. Hot Pops**
- 450 *Capsicum annuum* L. **cv. Hup-Hup**
- 451 *Capsicum annuum* L. **cv. Little Heart Grossum Group**
- 452 *Capsicum annuum* L. **cv. Padron Yellow Longum Group**
- 453 *Capsicum annuum* L. **cv. Plamja Drakonja Grossum Group**
- 454 *Capsicum annuum* L. **cv. Purple Tiger**
- 455 *Capsicum annuum* L. **cv. Salsa Red**
- 456 *Capsicum annuum* L. **cv. Salsa Yellow**
- 457 *Capsicum annuum* L. **cv. Sweet Bananas Banana Group**
- 458 *Capsicum annuum* L. **cv. Sweet Pickle**
- 459 *Capsicum baccatum* L. **cv. Aji Habanero**
- 460 *Capsicum baccatum* L. **cv. Aji Mango**
- 461 *Capsicum chinense* Jacq. **cv. Biquinho Vermelho**
- 462 *Capsicum frutescens* L. **cv. Zimbabwe Bird Eye** (Iasi, 2019)
- 463 *Lycium barbarum* L. (Beijing, 1957)
- * 464 *Solanum dulcamara* L. (Estonia, Tallinn, 1999)

Staphyleaceae

- 465 *Staphylea pinnata* L.
- * 466 *Staphylea trifolia* L. (East Lansing, 1989)
- * 467 *Staphylea trifolia* L. **var. pauciflora** (Zabel) Rehder (Montreal, 1983)

Styracaceae

- A 468 *Pterostyrax hispidus* Siebold & Zucc. (Estonia, Ellamaa, 2008)

Tiliaceae

- * 469 *Tilia americana* L. (Lisle, 1999)
- * 470 *Tilia cordata* Mill. (Estonia, Puhtu, 2000)
- 471 *Tilia* × *euchlora* K.Koch (Estonia, Järvselja, 1958)
- 472 *Tilia mandshurica* Rupr. & Maxim. (Vladivostok, 1978)
- 473 *Tilia platyphyllos* Scop. **cv. Aurea**
- 474 *Tilia platyphyllos* Scop. **cv. Rubra**
- 475 *Tilia platyphyllos* Scop. **cv. Sõstralehine** (Estonia, Rohu, 2009)
- * 476 *Tilia tomentosa* Moench (Moldavia, prope Chişinău, 1981)
- 477 *Tilia* **cv. Tortuosa** (Estonia, Tallinn, 2009)

Turneraceae

- + 478 *Turnera ulmifolia* L.

Ulmaceae

479 *Celtis tenuifolia* Nutt. (Tharandt, 2010)

Verbenaceae

- +* 480 *Stachytarpheta jamaicensis* (L.) Vahl (naturalized, *Insula Mauritiana*, 2003)
- * 481 *Verbena hastata* L. (East Lansing, 2011)
- 482 *Verbena macdougalii* A.Heller (Praha, 2016)

Vitaceae

- * 483 *Parthenocissus quinquefolia* (L.) Planch. emend. Rehder (East Lansing, 2009)

Monocotyledoneae**Alliaceae**

- 484 *Allium christophii* Trautv. (Dushanbe, 1960)
- 485 *Allium crenulatum* Wiegand (Göteborg, 1992)
- 486 *Allium falcifolium* Hook. & Arn. (Latvia, Rozula, 2008)
- * 487 *Allium karataviense* Regel **subsp. henrikii** Ruksans (Salaspils, 1998)
- 488 *Allium siculum* Ucria **subsp. dioscoridis** (Sm.) K.Richt.

Amaryllidaceae

- * 489 *Galanthus plicatus* M.Bieb. (*Tauria, Mt. Ai-Petri*, 1965)
- + 490 *Zephyranthes robusta* (Herb.) Baker
- + 491 *Tulbaghia violacea* Harv.

Araceae

- + 492 *Anthurium scandens* Engl. **subsp. scandens**

Arecaceae

- + 493 *Chamaerops humilis* L.
- + 494 *Serenoa repens* (W.Bartram) Small (Bogor, 1997)

Asparagaceae

- + 495 *Arthropodium cirrhatum* (G.Forst.) R.Br.
- +* 496 *Eustrephus latifolius* R.Br. (*Australiana*, 2003)
- + 497 *Ruscus aculeatus* L.

Asphodelaceae

- * 498 *Asphodelus albus* Mill. (Ljubljana, 2003)
- + 499 *Dianella caerulea* Sims (St.Petersburg, 1977)

Bromeliaceae

- + 500 *Aechmea recurvata* L.B.Sm. (München, 1961)
- + 501 *Billbergia brasiliensis* L.B. Sm. (Munster, 1983)
- + 502 *Pitcairnia heterophylla* (Lindl.) Beer (Zürich, 2014)

Cannaceae

- + 503 *Canna indica* L.

Colchicaceae

- 504 *Bulbocodium vernum* L.
 + 505 *Gloriosa modesta* (Hook.) J.C. Manning & Vinn. (St. Gallen, 2010)

Commelinaceae

- + 506 *Tradescantia spathacea* Sw.

Cyperaceae

- + 507 *Carex uncinata* (L.f.) Kük. cv. **Rubra**

Hemerocallidaceae

- * 508 *Hemerocallis minor* Mill. (*Sibiria australis*, *Khapcheranga*, 1985)

Iridaceae

- 509 *Crocus danfordiae* Maw (Praha, 2008)
 * 510 *Iris aphylla* L. (Budapest, 2017)
 * 511 *Iris ensata* Thunb. (Vladivostok, 2015)
 + 512 *Iris foetidissima* L. (Samoëns, 2010)
 * 513 *Iris setosa* Pall. ex Link (NARGS, 2010)
 * 514 *Iris spuria* L. subsp. **musulmanica** (Fomin) Takht. (Tehran, 2010)
 * 515 *Iris versicolor* L. (NARGS, 2018)
 * 516 *Iris versicolor* L. (Northampton, 2019)
 + 517 *Libertia ixioides* (G.Forst) Spreng. (Christchurch, 2013)

Liliaceae

- 518 *Fritillaria montana* Hoppe (Oslo, 1993)
 519 *Tulipa kaufmanniana* Regel (Tashkent, 1966)
 520 *Tulipa tarda* Stapf (Latvia, Riga, 1977)
 521 *Tulipa turkestanica* (Regel) Regel

Musaceae

- + 522 *Musa* × **paradisiaca** L. (Göteborg, 1998)

Zingiberaceae

- + 523 *Hedychium coccineum* Buch.-Ham. ex SM
 + 524 *Hedychium gardnerianum* Sheppard ex Ker-Gawl.

Seminum collectores: Ain Vammus, Anu Birnbaum, Anu Kaur, Ave Visnapuu, Helle Dikker, Jaan Mettik, Krista Kirotar, Lilian Veltermann, Ly Mik, Mare Raidma, Marju Zirk, Sille Janson, Tõnu Rähn, Õne Kuriks

II Semina plantarum spontanearum in diversis regionibus Estoniae collecta

SPERMATOPHYTA

ANGIOSPERMAE

Dicotyledoneae

Apiaceae

- 525 ***Pastinaca sativa*** L. **subsp. *sylvestris*** (Mill.) Rouy & E.G.Camus – wasteland, Vão, Tallinn, N Estonia 59.439870, 24.898150 14.09.2023 OA, TR
- 526 ***Pastinaca sativa*** L. **subsp. *sylvestris*** (Mill.) Rouy & E.G.Camus – street edge, Karjamaa, Tallinn, N Estonia 59.448072, 24.712035 03.09.2023 MR

Asteraceae

- 527 ***Achillea millefolium*** L. – dry alvar grassland (*Trifolio montani–Filipenduletum vulgaris*), Paevälja, Tallinn, N Estonia 59.452631, 24.829413 21.11.2023 OA, TR
- 528 ***Arctium lappa*** L. – street edge, Kalamaja, Tallinn, N Estonia 59.445112, 24.751500 03.09.2023 MR
- 529 ***Arctium tomentosum*** Mill. – wasteland, Vão, Tallinn, N Estonia 59.439872, 24.898532 14.09.2023 TR
- 530 ***Cirsium vulgare*** (Savi) Ten. – dry alvar grassland (*Trifolio montani–Filipenduletum vulgaris*), Aandu, Rapla County, NW Estonia 59.159778, 24.749116 19.09.2023 UL
- 531 ***Hypochaeris maculata*** L. – dry boreal *Vaccinium vitis-idaea* pine (*Pinus sylvestris*) forest (*Vaccinio vitis-idaeo–Pinetum*), Kloostrimetsa, Tallinn, N Estonia 59.467550, 24.864924 23.07.2023 EV
- 532 ***Leontodon hispidus*** L. **subsp. *danubialis*** (Jacq.) Simonk. – dry boreal *Vaccinium vitis-idaea* pine (*Pinus sylvestris*) forest (*Vaccinio vitis-idaeo–Pinetum*), Nõmme, Tallinn, N Estonia 59.379797, 24.681773 06.09.2023 OA
- 533 ***Pilosella officinarum*** Vaill. – arboretum, Kloostrimetsa, Tallinn, N Estonia 59.467711, 24.880346 30.06.2023 MR
- 534 ***Sonchus oleraceus*** L. – wasteland, Kalamaja, Tallinn, N Estonia 59.448823, 24.743917 03.09.2023 MR
- 535 ***Tragopogon pratensis*** L. – street edge, Kalaranna, Tallinn, N Estonia 59.447227, 24.745585 04.08.2023 MR
- 536 ***Tussilago farfara*** L. – ditch bank, Mäeküla, Tallinn, N Estonia 59.393597, 24.615625 23.05.2023 TR

Betulaceae

- 537 ***Betula nana*** L. – mixotrophic (transitional) mire pine (*Pinus sylvestris*) forest, Vööbu, Järva County, C Estonia 59.082170, 24.521501 06.09.2023 OA

Boraginaceae

- 538 *Echium vulgare* L. – street edge, Kalaranna, Tallinn, N Estonia
59.449932, 24.739733 09.09.2023 MR

Brassicaceae

- 539 *Alliaria petiolata* (M.Bieb.) Cavara & Grande – Tondiraba Park, Tondiraba, Tallinn, N Estonia 59.446481, 24.849492 03.07.2023 OA, MR
- 540 *Sinapis arvensis* L. – street edge, Kloostrimetsa, Tallinn, N Estonia
59.472372, 24.884245 22.09.2023 MR
- 541 *Thlaspi arvense* L. – arboretum, Kloostrimetsa, Tallinn, N Estonia
59.467918, 24.877888 06.10.2023 MR
- 542 *Turritis glabra* L. – abandoned field, Roots, Rapla County, NW Estonia
59.155111, 24.743220 29.09.2023 UL

Campanulaceae

- 543 *Campanula latifolia* L. – fresh boreo-nemoral grassland (*Agrostio capillaris–Galietum borealis*), Hellenurme, Tartu County, S Estonia 58.114420, 26.395320
10.09.2023 RK

Caprifoliaceae

- 544 *Lonicera xylosteum* L. – dry boreal *Vaccinium vitis-idaea* oak–pine (*Quercus robur–Pinus sylvestris*) forest (*Vaccinio vitis-idaeo–Querco–Pinetum*), Kloostrimetsa, Tallinn, N Estonia 59.469668, 24.881127 01.08.2023 MR
- 545 *Viburnum opulus* L. – fresh alvar grassland (*Seslerio-Molinetum*), Vão, Tallinn, N Estonia 59.439680, 24.899260 14.09.2023 OA

Clusiaceae

- 546 *Hypericum perforatum* L. – fresh alvar grassland (*Seslerio-Molinetum*), Vão, Tallinn, N Estonia 59.440221, 24.900431 14.09.2023 AK

Cucubritaceae

- 547 *Bryonia alba* L. – naturalized, on the fence, Karjamaa, Tallinn, N Estonia
59.449302, 24.712668 06.10.2023 MR

Dipsacaceae

- 548 *Succisa pratensis* Moench – dry boreo-nemoral grassland (*Festuco rubrae–Agrostietum capillaris*), Roots, Rapla County, NW Estonia 59.156900, 24.744805
09.09.2023 UL

Empetraceae

- 549 *Empetrum nigrum* L. **subsp. nigrum** – dry boreal *Vaccinium vitis-idaea* pine (*Pinus sylvestris*) forest (*Vaccinio vitis-idaeo–Pinetum*), Kolga, Harju County, N Estonia 59.468634, 25.636718 19.08.2023 SJ

Ericaceae

- 550 **Oxycoccus palustris** Pers. (syn. *Vaccinium oxycoccus* L.) – mixotrophic (transitional) mire pine (*Pinus sylvestris*) forest, Rõõsa, Harju County, N Estonia 59.144701, 25.291512 07.09.2023 AK
- 551 **Vaccinium myrtillus** L. – fresh boreal *Oxalis*–*Vaccinium myrtillus* pine (*Pinus sylvestris*) forest (*Oxali*–*Vaccinio*–*Pinetum*), Kanamardi, Pärnu County, SW Estonia, 58.444531, 23.961871 AKa
- 552 **Vaccinium myrtillus** L. – ombrotrophic bog pine (*Pinus sylvestris*) forest (*Sphagno*–*Pinetum*), Rõõsa, Harju County, N Estonia 59.145461, 25.284563 07.09.2023 OA
- 553 **Vaccinium uliginosum** L. – ombrotrophic bog pine (*Pinus sylvestris*) forest (*Sphagno*–*Pinetum*), Rõõsa, Harju County, N Estonia 59.145483, 25.284551 07.09.2023 OA
- 554 **Vaccinium uliginosum** L. – poor paludified *Vaccinium uliginosum* pine (*Pinus sylvestris*) forest (*Vaccinio uliginosi*–*Pinetum*), Kolga, Harju County, N Estonia 59.473662, 25.641180 19.08.2023 SJ

Fabaceae

- 555 **Lathyrus maritimus** (L.) Bigelow – sandy seashore, Kaberneeme, Harju County, N Estonia 59.504900, 25.292605 19.08.2023 SJ
- 556 **Medicago × varia** Martyn – naturalized, dry boreo-nemoral grassland (*Medicagini-Festucetum rubrae*), Oonga, Lääne County, W Estonia 58.818420, 23.728740 23.09.2023 RK
- 557 **Melilotus albus** Medik. – street edge, Pelgulinn, Tallinn, N Estonia 59.447007, 24.711727 03.09.2023 MR
- 558 **Vicia sylvatica** L. – fresh boreo-nemoral *Aegopodium* pine (*Pinus sylvestris*) forest (*Aegopodio*–*Pinetum*), Vetepere, Järva County, C Estonia 59.090690, 25.519310 06.09.2023 OA

Lamiaceae

- 559 **Betonica officinalis** L. (syn. *Stachys officinalis* (L.) Trevis.) – fresh boreo-nemoral grassland (*Agrostio capillaris*–*Galiatum borealis*), Hellenurme, Tartu County, S Estonia 58.115020, 26.389580 10.09.2023 RK
- 560 **Clinopodium vulgare** L. – fresh boreo-nemoral grassland (*Carici pallescentis*–*Scorzoneretum*), Rootsi, Rapla County, NW Estonia 59.158747, 24.749468 19.09.2023 UL
- 561 **Clinopodium vulgare** L. – roadside, Hellenurme, Tartu County, S Estonia 58.11310, 26.398450 10.09.2023 RK

Polygonaceae

- 562 **Rumex longifolius** DC. – railway dam, Pelgulinn, Tallinn, N Estonia 59.445296, 24.715843 03.09.2023 MR

Ranunculaceae

- 563 ***Pulsatilla pratensis*** (L.) Mill. – dry boreal grassland (*Deschampsietum flexuosae*), Kloostrimetsa, Tallinn, N Estonia 59.470370, 24.880570 30.06.2032 MR

Rosaceae

- 564 ***Agrimonia eupatoria*** L. – fresh alvar *Calamagrostis* spruce (*Picea abies*) forest (*Calamagrostio-Piceetum*), Aandu, Rapla County, NW Estonia 59.164270, 24.747040 02.10.2023 UL
- 565 ***Crataegus* × *dunensis*** Cinovskis – naturalized, dry alvar grassland (*Trifolio montani-Filipenduletum vulgaris*), Paevälja, Tallinn, N Estonia 59.448960, 24.829310 21.11.2023 OA, TR
- 566 ***Crataegus monogyna*** Jacq. em. Lindm. – naturalized, dry alvar grassland (*Trifolio montani-Filipenduletum vulgaris*), Paevälja, Tallinn, N Estonia 59.448660, 24.828500 21.11.2023 OA, TR
- 567 ***Rosa coriifolia*** Fr. – fresh boreo-nemoral *Hepatica* birch (*Betula pendula*) and spruce (*Picea abies*) mixed forest (*Hepatico-Betulo-Piceetum*), Aandu, Rapla County, NW Estonia 59.159530, 24.746918 29.09.2023 UL
- 568 ***Rosa majalis*** Herrm. – fresh alvar grassland (*Seslerio-Molinetum*), Vão, Tallinn, N Estonia 59.439700, 24.900630 14.09.2023 AK
- 569 ***Rosa subcanina*** (H.Christ) Dalla Torre & Sarnth. – wasteland, Vão, Tallinn, N Estonia 59.439830, 24.898062 14.09.2023 OA, TR
- 570 ***Rosa subcollina*** (H.Christ) Dalla Torre & Sarnth. – dry alvar grassland (*Trifolio montani-Filipenduletum vulgaris*), Paevälja, Tallinn, N Estonia 59.448780, 24.826980 21.11. 2023 OA, TR

Salicaceae

- 571 ***Salix cinerea*** L. – wasteland, Mäeküla, Tallinn, N Estonia 59.394911, 24.614832 23.05.2023 TR
- 572 ***Salix myrsinifolia*** Salisb. – wasteland, Mäeküla, Tallinn, N Estonia 59.394860, 24.614844 23.05.2023 TR
- 573 ***Salix phylicifolia*** L. – wasteland, Mäeküla, Tallinn, N Estonia 59.394702, 24.615000 23.05.2023 TR

Scrophulariaceae

- 574 ***Pedicularis palustris*** L. – mixotrophic (transitional) mire birch (*Betula pubescens*) forest, Võõbu, Järva County, C Estonia 59.084941, 25.520999 06.09.2023 SJ
- 575 ***Rhinanthus angustifolius*** C.C.Gmel. **subsp. *vernalis*** (N.W.Zinger) Soó – arboretum, Kloostrimetsa, Tallinn, N Estonia 59.467353, 24.8838540 11.07.2023 MR
- 576 ***Scrophularia nodosa*** L. – railway dam, Pelgulinn, Tallinn, N Estonia 59.446976, 24.712290 03.09.2023 MR
- 577 ***Veronica spicata*** L. – dry alvar grassland (*Trifolio montani-Filipenduletum vulgaris*), Paevälja, Tallinn, N Estonia 59.452633, 24.829532 21.11.2023 OA, TR

- 578 ***Veronica spicata*** L. – dry alvar grassland (*Trifolio montani–Filipenduletum vulgaris*), Aandu, Rapla County, NW Estonia 59.159778, 24.749116 29.09.2023 UL

Solanaceae

- 579 ***Physalis alkekengi*** L. – naturalized, Karjamaa, Tallinn, N Estonia 59.449302, 24.712668 20.11.2023 MR

Monocotyledoneae

Amaryllidaceae

- 580 ***Leucojum vernum*** L. – naturalized, naturalized, drained peatland *Oxalis* birch (*Betula pubescens*) forest (*Oxali-Betuletum*), Laagri, Tallinn, N Estonia 59.356322, 24.622513 08.06.2023 OA, TR

Convallariaceae

- 581 ***Convallaria majalis*** L. – dry boreal grassland (*Deschampsietum flexuosae*), Kloostrimetsa, Tallinn, N Estonia 59.470355, 24.880641 28.09.2023 MR
- 582 ***Convallaria majalis*** L. – dry boreal *Vaccinium vitis-idaea* pine (*Pinus sylvestris*) forest (*Vaccinio vitis-idaeo–Pinetum*), Nõmme, Tallinn, N Estonia 59.379642, 24.682013 06.09.2023 OA

Cyperaceae

- 583 ***Carex flacca*** Schreb. – fresh alvar *Calamagrostis* pine (*Pinus sylvestris*) forest (*Calamagrostio–Pinetum*), Sarve, Hiiumaa Island, W Estonia 58.857901, 23.047269 04.08.2023 RK

Hyacinthaceae

- 584 ***Scilla siberica*** Andrews – naturalized, drained peatland *Oxalis* birch (*Betula pubescens*) forest (*Oxali-Betuletum*), Laagri, Tallinn, N Estonia 59.356322, 24.622513 08.06.2023 OA, TR

Juncaceae

- 585 ***Luzula pallescens*** Sw. – fresh boreo-nemoral grassland (*Agrostio capillaris–Galietum borealis*), Hellenurme, Tartu County, S Estonia 58.114910, 26.391130 10.09.2023 RK

Poaceae

- 586 ***Brachypodium pinnatum*** (L.) P.Beauv. – fresh alvar *Calamagrostis* pine (*Pinus sylvestris*) and spruce (*Picea abies*) mixed forest (*Calamagrostio–Pino–Piceetum*), Aandu, Rapla County, NW Estonia 59.165403, 24.742152 19.09.2023 UL
- 587 ***Calamagrostis arundinacea*** (L.) Roth – dry boreal *Vaccinium vitis-idaea* pine (*Pinus sylvestris*) forest (*Vaccinio vitis-idaeo–Pinetum*), Nõmme, Tallinn, N Estonia 59.379873, 24.684712 05.09.2023 OA

- 588 ***Calamagrostis arundinacea*** (L.) Roth – fresh boreo-nemoral Hepatica birch (*Betula pendula*) and spruce (*Picea abies*) mixed forest (*Hepatico–Betulo–Piceetum*), Aandu, Rapla County, NW Estonia 59.159490, 24.745594 19.09.2023 UL
- 589 ***Elymus repens*** (L.) Gould – abandoned field, Roots, Rapla County, NW Estonia 59.154067, 24.743684 02.10.2023 UL
- 590 ***Festuca gigantea*** (L.) Vill. – fresh alvar *Calamagrostis* pine (*Pinus sylvestris*) forest (*Calamagrostio–Pinetum*), Aandu, Rapla County, NW Estonia 59.160669, 24.751616 02.10.2023 UL
- 591 ***Festuca rubra*** L. – dry alvar grassland (*Trifolio montani–Filipenduletum vulgaris*), Aandu, Rapla County, NW Estonia 59.159778, 24.749116 29.09.2023 UL

III *Semina plantarum in diversis regionibus Estoniae cultarum*

ANGIOSPERMAE

Dicotyledoneae

Aceraceae

- 592 *Acer saccharinum* L. – street edge, Pelguranna, Tallinn, N Estonia
59.452296, 24.687622 30.06.2023 OA

Rosaceae

- 593 *Crataegus rusanovii* Cinovskis – street edge, Pelgulinn, Tallinn,
N Estonia 59.446137, 24.713070 03.09.2023 MR

IV *Semina plantarum spontanearum in diversis regionibus Europae et Asiae collecta*

ANGIOSPERMAE

Dicotyledoneae

Fabaceae

- 594 *Alhagi pseudalhagi* (M.Bieb.) Desv. ex B.A.Keller & Schaparenko
– desert foothill, Gissar Range, Jizzakh Region, Uzbekistan,
39.693508, 68.250547 1988 m 27.10.2023 AK

Rosaceae

- 595 *Crataegus monogyna* Jacq. em. Lindm. – dune with *Salix repens*
subsp. *argentea* (*Salicion arenariae*), Sønderho, Fanø Island,
Denmark 55.352728, 8.430411 28.09.2023 RK

Seminum collectores: Anu Kala (AKa), Anu Kaur (AK), Ela Velviste (EV), Mare Raidma (MR), Olev Abner (OA), Rein Kalamees (RK), Sille Janson (SJ), Tõnu Rähn (TR), Urmas Laansoo (UL)

Urve Sinijärv
Horti Director

Olev Abner
Custos

Heli Russak
Seminum Curator

KAUR Weather Records 2023
Tallinn - Harku

The highest air temperature: 32,0 °C (August 7)

The lowest air temperature: -14,1 °C (December 9)

Annual rainfall total: 857 mm

Average Monthly Temperature and Rainfall

Month	Ground (°C)	Air Average (°C)	Air Min (°C)	Air Max (°C)	Rainfall (mm)
Jan	-0,4	-1,0	-14,0	6,0	100,5
Feb	-1,6	-1,0	-13,3	7,2	32,5
Mar	-0,1	0,2	-11,9	10,7	56,2
Apr	8,2	5,8	-2,8	21,3	30,8
May	16,1	10,4	-3,9	23,9	9,1
Jun	24,5	16,3	-0,1	29,3	9,2
Jul	19,2	16,2	8,4	27,7	186,8
Aug	19,6	17,6	7,8	32,0	88,1
Sep	15,6	15,2	2,8	24,6	84,6
Oct	5,0	5,7	-2,9	16,3	111,7
Nov	0,4	1,1	-12,0	10,6	103,1
Dec		-2,9	-14,1	6,3	44,1

