



INDEX SEMINUM NOVODVORENSIS 49.



ARBORETUM NOVÝ DVŮR
SLEZSKÉ ZEMSKÉ MUZEUM
2010/2011

**INDEX SEMINUM NOVODVORENSIS
49.
2010/2011**

ARBORETUM NOVÝ DVŮR



**SLEZSKÉ ZEMSKÉ MUZEUM
ARBORETUM NOVÝ DVŮR
746 01 OPAVA
CZECH REPUBLIC**

**WEB: www.szmo.cz
E-MAIL: arboretum@szmo.cz
PHONE: +420 553 661 031**

LEADERSHIP:

Mgr. Antonín Šimčík

Museum Director

Dipl. Ing. Petr Vlk

Vice-director & Deputy for Natural Science

EDITORS:

Ing. et Ing. Dalibor Lička, Ph.D.

Head of the Nový Dvůr arboretum

Ing. Kamila Mücková

Curator

Ing. Eva Ptáčková, DiS.

Curator

Mgr. Martina Rigauxová

Curator

SEED COLLECTORS:

Jitka Janošková

Květoslava Pešková

Lenka Konečná

Vlastimila Kořínková

GENERAL INFORMATION

Established in: 1958

Geographical location: 17°46'50"E, 49°56'12"N

Altitude: 336-354 m

Area: 23 hectares

CLIMATIC CONDITIONS (OPAVA)

Annual mean temperature (1876-1975): 8,2°C

Annual rainfall (1876-1975): 621 mm

^{*)} The picture from title page displays fructiferous branch of fifty years old Japanese Umbrella Pine ***Sciadopitys verticillata*** (Thunberg) P.Siebold & Zuccarini growing in the Arboretum Nový Dvůr (Lička, Ptáčková, 2011)



Obr. 1: Beautiful flowers of chilean hemiparasite ***Tristerix verticillatus*** (Ruiz & Pav.) Barlow & Weins (Quintral) growing on *Nothofagus* in NP Nahuelbuta are pollinated by humming-birds (Lička, 15.1.2011)

HISTORY OF THE ARBORETUM NOVÝ DVŮR

The Arboretum Nový Dvůr (AND) was found on the base of the original collection of woody plants of its founder Mr. Quido Riedel (1878 -1946) who established the park in English style inclusive of romantic elements around its 1,5 large landed estate and residency. The park was built up between the years of 1906 and 1928 when its founder gives over all his property to his daughter.

And so the park has still been maintained, but it is no more extended as for planting up to 1945. The family was turned out after the war and the abandoned property and park was managed by different administrators and organizations. The park in Nový Dvůr has been remaining without any maintenance up to 1957. At the time of research of parks in the region of Opava, the botanists from the Slezské zemské muzeum (Silesian Regional Museum) proposed to establish an arboretum resulting from the, at that time, well-preserved park.

The Arboretum Nový Dvůr was founded on January 1st, 1958 under the administration of the Silesian Regional Museum. An important sanitation began in February 1958 as for the air-raid woody plants and maintenance of the park.

After 1960, the AND develops in its premises programs for collections, research and educational programs, it establishes also a collection of herbariums, specialized groups of woody species and expert library. The AND enlarges also its collection in dendrology and makes it accessible for visitors all over the year and, step by step, the Arboretum Nový Dvůr builds up the premises of Arboretum with the silvicultural background, greenhouse and services for visitors into the form of today. The issue of the first Index Seminum has been dated since 1960.

SEEDS COLLECTED IN THE ARBORETUM NOVÝ DVŮR

GYMNOSPERMAE

CUPRESSACEAE

1. *Chamaecyparis lawsoniana* (A. Murray) Parl. 'Fletcheri'
2. *Chamaecyparis lawsoniana* (A. Murray) Parl. 'Lane'
3. *Chamaecyparis nootkatensis* (D. Don) Spach 'Variegata'
4. *Chamaecyparis obtusa* S. et Z.
5. *Chamaecyparis obtusa* S. et Z. 'Formosana'
6. *Juniperus communis* L.
7. *Juniperus chinensis* L. 'Monarch'
8. *Juniperus virginiana* L. 'Blue Moon'
9. *Microbiota decussata* Komarov
10. *Thuja occidentalis* L. 'Pendula'
11. *Thuja occidentalis* L. 'Pendula'

PINACEAE

12. *Abies koreana* Wils.
13. *Larix gmelinii* (Rupr.) Kuzen.
14. *Larix gmelinii* (Rupr.) Kuzen. *subsp. principis-rupprechtii* (Mayr) Pilger
15. *Larix laricina* (Du Roi) K.Koch
16. *Larix laricina* (Du Roi) K.Koch
17. *Larix sibirica* Ledeb.
18. *Picea abies* (L.) Karst. 'Acrocona'
19. *Picea orientalis* (L.) Link 'Aurea'
20. *Pinus armandii* Franch.
21. *Pinus contorta* Dougl. ex Loud. 'Breeding Form'
22. *Pinus x murraybanksiana* Righter & Stockw.
23. *Tsuga canadensis* (L.) Carr. 'Pendula'
24. *Tsuga caroliniana* Engelm.
25. *Tsuga diversifolia* (Maxim.) Mast.
26. *Tsuga heterophylla* (Raf.) Sarg.

Seeds collected in the Arboretum Nový Dvůr

TAXACEAE

- 27. *Taxus baccata* L. 'Dovastoniana'
- 28. *Taxus baccata* L. 'Nissens Corona'
- 29. *Taxus baccata* L.
- 30. *Taxus baccata* L.

TAXODIACEAE

- 28. *Cryptomeria japonica* D. Don.
- 29. *Cryptomeria japonica* D. Don.
- 30. *Cunninghamia lanceolata* (Lamb.) Hook.
- 31. *Metasequoia glyptostroboides* Hu et Cheng.



Obr. 2: Natural forest stand formed by Monkey Puzzle Tree *Araucaria araucana* (Molina) K. Koch in NP Nahuelbuta in Chile (Lička, 15.1.2011)

Seeds collected in the Arboretum Nový Dvůr

ANGIOSPERMAE

ACERACEAE

32. *Acer buergerianum* Miq.
33. *Acer campestre* L. 'Royal Ruby'
34. *Acer circinatum* Pursh.
35. *Acer crataegifolium* Siebold & Zucc.
36. *Acer davidii* Franch.
37. *Acer ginnala* Maxim.
38. *Acer ginnala* Maxim.
39. *Acer griseum* (Franch.) Pax
40. *Acer grosseri* Pax
41. *Acer grosseri* var. *hersii* (Rehder) Rehder
42. *Acer japonicum* Thunb.
43. *Acer japonicum* Thunb. 'Aconitifolium'
44. *Acer laxiflorum* Pax.
45. *Acer macrophyllum* Pursh.
46. *Acer mandshuricum* Maxim.
47. *Acer micranthum* Siebold & Zucc.
48. *Acer micranthum* Siebold & Zucc. 'Candelabrum'
49. *Acer negundo* L.
50. *Acer negundo* L.
51. *Acer negundo* L. var. *violaceum* Booth ex G.Kirchn.
52. *Acer palmatum* Thunb.
53. *Acer palmatum* Thunb. 'Atropurpureum'
54. *Acer pensylvanicum* L.
55. *Acer pensylvanicum* L.
56. *Acer platanoides* L.
57. *Acer shirasawanum* Koidz.
58. *Acer tataricum* L.

ACTINIDIACEAE

59. *Actinidia arguta* (Siebold et Zucc) Planch. ex Miq.

Seeds collected in the Arboretum Nový Dvůr

ANACARDIACEAE

60. *Cotinus coggygria* Scop.

AQUIFOLIACEAE

70. *Ilex aquifolium* L.

ARALIACEAE

71. *Acanthopanax setchuenensis* Harms.
72. *Acanthopanax sieboldianus* Makino
73. *Aralia chinensis* L.
74. *Eleutherococcus henryi* Oliver

BERBERIDACEAE

75. *Berberis amurensis x japonica*
76. *Berberis thunbergii* DC. 'Aurea'
77. *Berberis thunbergii* DC. 'Aurea'
78. *Berberis vulgaris* L.

BETULACEAE

79. *Alnus hirsuta* Turcz. ex Rupr.
80. *Alnus incana* ssp. *rugosa* (Du Roi)
R.T.Clausen
81. *Alnus japonica* (Thunb.) Steud.
82. *Alnus kamtschatica* (Callier) Kom.
Alnus mandshurica (Callier ex C. K.
83. Schneid.) Hand.-Mazz.
84. *Alnus rugosa* (Duroi) Spreng.
85. *Alnus rugosa* (Duroi) Spreng.
86. *Alnus hirsuta* var. *sibirica* (Fisch.)
C.K.Schneid.
87. *Alnus viridis* subsp. *sinuata* (Regel)
Å.Löve & D.Löve
88. *Duschekia alnobetula* (Ehrh.) Pouzar
89. *Betula litwinowii* Doluch.
90. *Betula concinna* Gunnarsson.
91. *Betula davurica* Pall.



Obr. 3: Chilean endemic tree ***Drimys winteri*** J.R. Forst. & G. Forst. (Canelo) in flower from NP Villarica (Lička, 14.1.2011)

Seeds collected in the Arboretum Nový Dvůr

BETULACEAE

92. *Betula glandulifera* (Regel) Butler
93. *Betula grossa* Siebold & Zucc.
94. *Betula humilis* Schrank.
95. *Betula humilis* Schrank.
96. *Betula jacquemontii* Spach
97. *Betula obscura* A. Kotula
98. *Betula ovalifolia* Rupr.
99. *Betula paishanensis* Nakai
100. *Betula papyrifera* Marsh.
101. *Betula platyphylla* Sukatzev var. *japonica* (Miq.) Hara
102. *Betula carpatica* Waldst. & Kit.
103. *Betula pubescens* Ehrh.
104. *Betula tatewakiana* M. Ohki et S. Watanabe
105. *Betula x aschersoniana* Hayek
106. *Betula x purpursii* C. K. Schneider
107. *Carpinus caroliniana* Walter
108. *Carpinus cordata* Blume
109. *Carpinus shensiensis* Hu

BIGNONIACEAE

110. *Catalpa bignonioides* Walter

CAPRIFOLIACEAE

111. *Kolkwitzia amabilis* Graebn.
112. *Lonicera alpigena* L.
113. *Lonicera alpigena* L. var. *glehnii* (F. Schmidt) Nakai
114. *Lonicera periclymenum* L.
115. *Lonicera subhispida* Nakai.
116. *Lonicera xylosteum* L.
117. *Lonicera xylosteum* L.
118. *Sambucus nigra* L. 'Laciniata'
119. *Sambucus nigra* L. 'Marginata'

Seeds collected in the Arboretum Nový Dvůr

CAPRIFOLIACEAE

120. *Sambucus nigra* L. 'Purpurea'
121. *Sambucus racemosa* L. f. *aureocarpa*
Hara
122. *Symphoricarpos oreophilus* A. Gray
subsp. utahensis (Rydb.) A. Nelson
123. *Symphoricarpos oreophilus* A. Gray
124. *Symphoricarpos x chenaultii* Rehder
125. *Viburnum cassinoides* L.
126. *Viburnum hupehense* Rehder
127. *Viburnum lantana* L.
128. *Viburnum lentago* L.
129. *Viburnum opulus* L.
130. *Viburnum opulus* L. var. *caluescens*
(Rehd.) Hrar
131. *Viburnum plicatum* Thunb. 'Summer Snoflake'
132. *Viburnum sargentii* Koehne
133. *Viburnum trilobum* Marsh.
134. *Viburnum wrightii* Miq.
135. *Viburnum wrightii* Miq.

CELASTRACEAE

136. *Celastrus orbiculatus* Thunb.
137. *Celastrus scandens* L.
138. *Euonymus europaeus* L. var.
angustifolius K.F.Schulz
139. *Euonymus japonicus* Thunb. 'Albomarginata'
140. *Euonymus phellomanus* Loes.
141. *Euonymus planipes* (Koehne) Koehne
142. *Euonymus sieboldianus* Blume

CERCIDIPHYLLACEAE

143. *Cercidiphyllum japonicum* S. et Z.
144. *Cercidiphyllum magnificum* Nakai



Obr. 4: Chilean Firebush ***Embothrium coccineum*** J.R.Forst. & G.Forst. in flower from NP Villarica (Lička, 14.1.2011)

Seeds collected in the Arboretum Nový Dvůr

CORNACEAE

145. *Cornus alba* L. 'Spaethii'
146. *Cornus alternifolia* L.f.
147. *Cornus amomum* Mill. var. *undulifolia*
148. *Cornus drummondii* C.A.Mey.
149. *Cornus dunbarii* Rehder
150. *Cornus kousa* Bürger ex Miq.
151. *Cornus kousa* Bürger ex Miq. subsp.
chinensis (Osborn) Q.Y.Xiang
152. *Cornus mas* L.
153. *Cornus mas* L.
154. *Cornus mas* L. 'Variegata'
155. *Cornus racemosa* Lam.

CORYLACEAE

156. *Corylus americana* Marsh.

CUCURBITACEAE

157. *Bryonia alba* L.

ERICACEAE

158. *Enkianthus cernuus* Makino
159. *Gaultheria itoana* Hayata
160. *Gaultheria miqueliana* Takeda
161. *Gaultheria shallon* Pursh
162. *Gaultheria shallon* Pursh
163. *Gaylussacia baccata* K.Koch

FABACEAE

164. *Caragana turkestanica* Kom.
165. *Cercis canadensis* L.
166. *Cytisus x praecox* Bean. 'Allgold'
167. *Genista hispanica* L.
168. *Genista lydia* Boiss.
169. *Genista pilosa* L. 'Lemon Spreader'

Seeds collected in the Arboretum Nový Dvůr

FABACEAE

170. *Laburnocytisus adami* (Poit.)
C.K.Schneid.
171. *Laburnocytisus adami* (Poit.)
C.K.Schneid.

FAGACEAE

172. *Quercus rubra* L.

HAMAMELIDACEAE

173. *Hamamelis* sp.
174. *Hamamelis japonica* S. et Z.
175. *Hamamelis japonica* S. et Z.
176. *Hamamelis japonica* S. et Z. 'Rubra'
177. *Hamamelis mollis* Oliv.
178. *Hamamelis mollis* Oliv.
179. *Hamamelis vernalis* Sarg.
180. *Hamamelis vernalis* Sarg. 'Lombart's Weeping'
181. *Hamamelis virginiana* L.
182. *Hamamelis virginiana* L.
183. *Hamamelis virginiana* L.
184. *Hamamelis virginiana* L.

HAMAMELIDACEAE

185. *Hamamelis x intermedia* Rehd. 'Diane'
186. *Hamamelis x intermedia* Rehd. 'Feuerzauber'
187. *Hamamelis x intermedia* Rehd. 'Jelena'
188. *Hamamelis x intermedia* Rehd. 'Orange Beauty'
189. *Hamamelis x intermedia* Rehd. 'Ruby Glow'

HIPPOCASTANACEAE

190. *Aesculus parviflora* Walter



Obr. 5: Small endemic tree ***Polylepis tarapacana*** Phil. (NP Lauca, Chile) is able to grow up to altitudes of 5200 m (Lička, 8.1.2011)



Obr. 6: Open forest stand of ***Prosopis tamarugo*** Phil. (Tamarugo) from NP Pampa del Tamarugal in Chile (Lička, 9.1.2011)

Seeds collected in the Arboretum Nový Dvůr

HYDRANGEACEAE

- 191. *Hydrangea paniculata* Siebold
- 192. *Hydrangea paniculata* Siebold 'Kyushu'
- 193. *Hydrangea paniculata* Siebold 'Pink Diamond'
- 194. *Philadelphus* L. 'Apollo'
- 195. *Philadelphus microphyllus* A. Gray
- 196. *Philadelphus schrenkii* Rupr.

LARDIZABELACEAE

- 197. *Decaisnea fargesii* Franch.
- 198. *Decaisnea fargesii* Franch.
- 199. *Sinofranchetia chinensis* (Franchet)
Hemsley

MAGNOLIACEAE

- 200. *Liriodendron tulipifera* L.
- 201. *Magnolia grandiflora* L.
- 202. *Magnolia liliiflora* Desr. 'Nigra'

MORACEAE

- 203. *Morus rubra* L.

OLEACEAE

- 204. *Ligustrum tschonoskii* Decne.
- 205. *Syringa patula* (Palibin) Nakai
- 206. *Syringa pekinensis* Rupr.
- 207. *Syringa reticulata* ssp. *amurensis* (Rupr.)
P.S. Greene & M.C. Chang

RHAMNACEAE

- 208. *Rhamnella franguloides* Weberbauer.
- 209. *Rhamnus alpinus* ssp. *fallax* (Boiss.)
Maire et Petitm.

Seeds collected in the Arboretum Nový Dvůr

ROSACEAE

210. *Amelanchier alnifolia* (Nutt.) Nutt. ex M.
Roem. var. *cusickii* (Fernald) C.L. Hitchc.
211. *Amelanchier bartramiana* Wieg.
212. *Amelanchier humilis* Wiegand
213. *Amelanchier humilis* Wiegand
214. *Amelanchier interior* E.L.Nielsen
215. *Amelanchier lamarckii* F.G.Schroed.
216. *Amelanchier spicata* (Lam.) K.Koch
217. *Amygdalus spinosissima* Bunge
218. *Aronia melanocarpa* (Michx.) Ell.
219. *Aronia prunifolia* (Marsh.) Rehd.
220. *Cotoneaster dammeri* C.K.Schneid. 'Camillo Schnaider'
221. *Cotoneaster hebephyllus* Diels.
222. *Cotoneaster langei* Klotz.
223. *Cotoneaster boisianus* Klotz.
224. *Cotoneaster boisianus* Klotz.
225. *Cotoneaster dammeri* Schneid.
226. *Cotoneaster scandinavicus* B.Hylmö
227. *Crataegus calycina* Peterm.
228. *Crataegus pedicellata* Sargent
229. *Chaenomeles speciosa* (Sweet) Nakai 'Red Ruffles'
230. *Chaenomeles superba* Rehder 'Crimson & Gold'
231. *Malus domestica* Borkh. 'Jadernička valašská'
232. *Malus* Mill. 'Lady Northcliffe'
233. *Malus* Mill. 'Makamik'
234. *Malus coronaria* (L.) Mill.
235. *Malus sieboldii* (Regel) Rehder
236. *Malus toringoides* (Rehder) Hughes
237. *Mespilus germanica* L.
238. *Neillia affinis* Hemsl.
239. *Photinia villosa* (Thunb.) D.C.
240. *Photinia villosa* (Thunb.) D.C.
241. *Physocarpus opulifolius* (L.) Maxim. 'Dart's Gold'



Obr. 7: Hemiparasite *Misodendrum punctulatum* Banks ex DC. growing on the branch of *Nothofagus* from NP Villarica (Lička, 9.1.2011)

Seeds collected in the Arboretum Nový Dvůr

ROSACEAE

242. *Potentilla fruticosa* L. 'Ochroleuca'
243. *Potentilla fruticosa* L. 'Manelys'
244. *Potentilla fruticosa* L. 'Buttercup'
245. *Prunus ssiori* F.Schmidt.
246. *Prunus tomentosa* Thunb.
247. *Pyracantha coccinea* (L.) M. Roem.
248. *Pyrus betulifolia* Bunge
249. *Rosa acicularis* Lindl.
250. *Rosa montana* DC.
251. *Rosa palustris* Marshall
252. *Rosa rugosa* Thunb.
253. *Rosa* L.
254. *Rosa virginiana* Mill.
255. *Sorbaria sorbifolia* (L.) A. Br. Strauch
256. *Sorbus cashmiriana* Hedl.
257. *Sorbus gonggashanica* McAll.
258. *Sorbus sambucifolia* (Cham. et Schlechtd.) Roem.

RUBIACEAE

259. *Cephalanthus occidentalis* L.

RUTACEAE

260. *Orixa japonica* Thunb.
261. *Phellodendron amurense* Rupr.
262. *Ptelea trifoliata* L.

SALICACEAE

263. *Salix pentandra* L.

SPIRAEACEAE

264. *Spiraea x billiardii* Herincq 'Triumphans'
265. *Spiraea x fontenaysii* Lebas
266. *Spiraea japonica* L. fil. 'Gold Flame'

Seeds collected in the Arboretum Nový Dvůr

STAPHYLEACEAE

267. *Staphylea colchica* Stev.

268. *Staphylea pinnata* L.

THEACEAE

269. *Stewartia koreana* Nakai ex Rehder

THYMELAEACEAE

270. *Daphne pontica* L.

TILIACEAE

271. *Tilia oliveri* Szyszyl.

272. *Tilia platyphyllos* Scop. 'Rubra'

ULMACEAE

273. *Hemiptelea davidii* (Hance) Planch.

WARNING – IMPORTANT NOTICE

- Electronic version of INDEX SEMINUM 2010/2011 is also downloadable from our website: <http://www.szmo.cz>
- Having any problem with opening this file please ask for hard copy of IS at the post address: ARBORETUM NOVÝ DVŮR, SLEZSKÉ ZEMSKÉ MUZEUM, 746 01 OPAVA, CZECH REPUBLIC.
- Please fill in a form of DESIDERATA 2010/2011 in full details.

AGREEMENT ON THE SUPPLY OF LIVING PLANT MATERIAL ¹ FOR NON-COMMERCIAL PURPOSES LEAVING THE INTERNATIONAL PLANT EXCHANGE NETWORK

Against the background of the provisions and decisions of the Convention on Biological Diversity of 1992 (CBD) and in particular those on access to genetic resources and benefit-sharing, the garden is dedicated to promoting the conservation, sustainable use, and research of biological diversity. The garden therefore expects its partners in acquiring, maintaining, and transferring plant material to always act in accordance with the CBD and the Convention on the International Trade in Endangered Species (CITES).

The responsibility for legal handling of the plant material passes on to the recipient upon receipt of the material. The requested plant material will be supplied to the recipient only on the following conditions:

1. Based on this agreement, the plant material is supplied only for non-commercial use such as scientific study and educational purposes as well as environmental protection. Should the recipient at a later date intend a commercial use or a transfer for commercial use, the country of origin's prior informed consent (PIC) must be obtained in writing before the material is used or transferred. The recipient is responsible for ensuring an equitable sharing of benefits.
 2. On receiving the plant material, the recipient endeavours to document the received plant material, its origin (country of origin, first receiving garden, „donor“ of the plant material, year of collection) as well as the acquisition and transfer conditions in a comprehensible manner.
 3. In the event that scientific publications are produced based on the supplied plant material, the recipient is obliged to indicate the origin of the material (the supplying garden and if known the country of origin) and to send these publications to the garden and to the country of origin without request.
 4. On request, the garden will forward relevant information on the transfer of the plant material to the body charged with implementing the CBD².
 5. The recipient may transfer the received plant material to third parties only under these terms and conditions and must document the transfer in a suitable manner (e.g. by using the documentation form, such as provided in Annex 1.3).
- I accept the above conditions.

Date, Signature

Recipient's name and address, stamp

¹ According to the CBD "genetic resources" means genetic material of actual or potential value. This definition covers both living and not living material. The Code of Conduct and the IPEN covers only the exchange of living plant material (living plants or parts of plants, diaspores) thus falling in the definition of genetic resources.
² ideally, the national focal point in the garden's home country

DESIDERATA 2010/2011

<p>ARBORETUM NOVÝ DVŮR SLEZSKÉ ZEMSKÉ MUZEUM 746 01 OPAVA CZECH REPUBLIC</p> <p>E-mail: arboretum@szmo.cz Phone: +420553661031</p>	<p>Contact Person, Institute & Your Address:</p> <p>E-mail: Phone:</p>
<p><i>In response to the International Convention of Biological Diversity (Rio de Janeiro, 1992), the Arboretum Nový Dvůr supplies the seed collections requested on the condition that:</i></p> <ol style="list-style-type: none"> 1. <i>They used for common good in the areas of research, trailing, breeding, education and the development of public botanic gardens.</i> 2. <i>If the recipient seeks to commercialise the genetic material, its products or research derived from it, then permission must be sought from the Arboretum Novy Dvur. Such commercialization will be subject to a separate agreement.</i> 3. <i>The genetic material, its products or research derived from it are not passed to a third party for commercialization without written permission from the Arboretum Novy Dvur.</i> <p><i>I agree to comply with the conditions above.</i></p> <p>Date, Signature: Stamp:</p>	

Your seed order:

*Please, limit your order to **25 numbers** and return this signed form by **31th August 2011**. Warning: We only distribute seeds after receiving this form, signed and filled in, thank you.*