NOTES ON THE VASCULAR FLORA OF THE LAKE SURDUC AREA

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Abstract. *We present a conspectus of cormophytes species in the area surrounding the artificial lake of Surduc (Timiș County, SW Romania) whose dam was buil-up in the '1975. Under the Romanian name "Lacul Surduc", the lake water surface and a small belt of its border constitutes since 1995 a mixt nature reserve (WDPA ID 183478, category IV IUCN) of a 3.62 km^2 total area. After 1990, the lake area became a local touristical attraction, and a chaotic implantation of summer residencies began. The list of species is compiled mainly from our field studies carried-on since 2000. This list contains: aquatic and paludicolous species (Caltha palustris, Carex riparia, Eleocharis palustris, Iris pseudacorus, Juncus spp., Lythrum salicaria, Mentha aquatica, Najas minor, Polygonum amphibium, Potamogeton crispus, Rorippa amphibia, Schoenoplectus lacustris, Typha angustifolia, Veronica anagalis-aquatica etc.), species from the surrounding deciduous forest (Fagus sylvatica, Quercus petraea, Carpinus betulus, Prunus avium, Crataegus monogyna, Rosa canina, Alium ursinum, Anemone nemorosa, A. ranunculoides, Erytronium dens-canis, Ficaria verna, Galium odoratum, Mycelis muralis etc.), meadows species (Agrostis capillaris, A. stolonifera, Alopecurus pratensis, Festuca rupicola, F. valesiaca, Leontodon autumnalis, Lotus corniculatus, Trifolium pretense, Plantago media etc.), weeds (Anagallis arvensis, Chenopodium album, Digitaria sanguinalis, Lathyrus tuberosus, Setaria pumila, Veronica persica etc.), invasives (Ambrosia artemisiifolia, Erigeron annuus, Rudbeckia laciniata, Phytolaca americana) and many ornamental trees and herbaceous planted in small gardens of residencies. Remarkable is the presence of Lindernia procumbens on S-E lake border, species listed in the Annex IV of the Council Directive 92/43/EEC. We noted that the anthropic pressure on aquatic and paludicolous vegetation increase since the beginning of our observations period, although some conservation actions were implemented.*

Keywords*: Surduc Lake, nature reserve, vascular plants diversity, Lindernia procumbens*

INTRODUCTION

The number of the lakes in our country is relatively great (136), but their area is often reduced. The most numerous are human made (ROMANESCU *et al*., 2010).

In the Banat hydrographical area there are 7 major river basins (Aranca, Bega, Timiș, Caraș, Nera, Cerna, Danube) and an important number of retentions: Gozna, Trei Ape, Secu, Poiana Mărului, Surduc etc. (SOROCEAC, 2010). Among the biggest water problems in Banat is pollution and floods. The Banat Water Directorate conducts, at hydrographic basins level, programs aimed at reducing the pressures on the aquatic environment and water pollution. Because the water comes from many sources, there are many types of pollution: eutrophication, microbiological pollution, chemical pollution, solid waste, oil pollution etc. In the European Union, 38 % of water bodies are significantly under pressure of agricultural pollution (FAO 2017). The other problem, the floods affect people's life, river works, water quality, infrastructure, agriculture,

plants communities etc. Talking about it, the serious floods in the spring of 2005, produced unexpected changes on flora and vegetation. ARSENE *et al*. (2006) notice among others, the intrusion of semiaquatic plants and the better survival of clonal species to floods than seed propagated species.

Talking about the accumulation lake Surduc, this is part of the landscaping hydrotechnical work ensemble for the Timiș–Bega basin. It is located on the Gladna river, in a floodable depression, at 2.5 km upstream from the Surducu Mic village, and at 90 km away from the city of Timișoara. It covers a 364 ha surface, representing the largest accumulation from the Western Piedmonts. At present, it is administered by the "Romanian Waters" - Direction of Banat Waters. The accumulation was founded in 1975 and started functioning in 1981, its purpose being to insure the drinking and industrial water supply of the city of Timișoara, the production of electrical power, the irrigation of some land surfaces, the mitigation of flooding waves effects, pisciculture, recreational activities. The frontal type dam, executed with a reinforced concrete sealing mask is supported on the upstream beak, incased in the basic rock, in the riverbed and on the two slopes. The dam foundation was achieved from basic rock, through a drainage cushion. Today, the technical structure needs reinforcement and improvements (www.rowater.ro/dabanat).The lake constitute since 1995 a mixt nature reserve (WDPA ID 183478, category IV IUCN).

The research on the lake Surduc area considered the following aspects: hydrometric analysis (TEODORESCU, 2008), chemical properties and soils fertility (LAȚO *et al*., 2013), monitoring the water quality (GÎRBACIU *et al*., 2013, GÎRBACIU *et al*., 2015, SEGNEANU *et al*., 2013, ȘMULEAC *et al*., 2013), grasslands research (DURĂU, 2006), the tourist potential (IGNEA & BIROU, 2014) etc. and less the diversity of all flora.

MATERIAL AND METHODS

The field study period in which we made the observations is between the years 2004-2017. The limits of the studied area are shown in Fig.1. Species identification was made using CIOCÂRLAN (2000, 2009) and SÂRBU *et al.* (2013).

Fig. 1. The Lake Surduc and the surrounding study area (white line) (source: GoogleEarth).

Nomenclature and classification are according to ThePlantList (www.theplantlist.org/). We considered the following categories of species: aquatic and paludicolous, forest species, meadows species, weeds, invasives and ornamentals. We published previously some preliminary results (NEACȘU *et al.*, 2007).

RESULTS AND DISCUSSIONS

The vascular flora in the lake Surduc area is represented by 291 species that belong to 72 botanical families. Families well represented by species are: *Asteraceae, Poaceae, Lamiaceae, Fabaceae, Rosaceae, Cyperaceae, Polygonaceae, Scrophulariaceae, Ranunculaceae*. Among the genera well represented by species, we mention: *Polygonum, Carex, Juncus, Ranunculus, Poa, Festuca*. In the following, we will present the flora content. In order to be more eficient, the species are organised in alphabetical order.

1. *Achillea millefolium* L. - *Asteraceae*
2. *Aegopodium podagraria* L. - *Apiaceae*
3. *Agrimonia eupatoria* L. - *Rosaceae*
4. *Agrostis capillaris* L. - *Poaceae*
5. *Agrostis stolonifera* L. - *Poaceae*
6. *Ajuga reptans* L. - *Lamiaceae*
7. *Alisma plantago-aquatica* L. - *Alismataceae*
8. *Alliaria petiolata* (Bierb.) Cavara et Grande - *Brassicaceae*
9. *Allium ursinum* L. - *Alliaceae*
10. *Alnus glutinosa* (L.) Gaertner - *Betulaceae*
11. *Alopecurus aequalis* Sobol. - *Poaceae*
12. *Alopecurus pratensis* L. - *Poaceae*
13. *Amaranthus retroflexus* L. - *Amaranthaceae*
14. *Ambrosia artemisiifolia* L. - *Asteraceae*
15. *Anagallis arvensis* L. - *Primulaceae*
16. *Anemone nemorosa* L. - *Ranunculaceae*
17. *Anemone ranunculoides* L. - *Ranunculaceae*
18. *Apera spica-venti* (L.) Beauv. - *Poaceae*
19. *Aposeris foetida* (L.) Less. - *Asteraceae*
20. *Arctium lappa* L. - *Asteraceae*
21. *Artemisia vulgaris* L. - *Asteraceae*
22. *Arum maculatum* L. - *Araceae*
23. *Asarum europaeum* L. - *Aristolochiaceae*
24. *Asclepias syriaca* L. - *Asclepiadaceae*
25. *Asperula odorata* L. - *Rubiaceae*
26. *Asperula taurina* L. - *Rubiaceae*
27. *Bellis perennis* L. - *Asteraceae*
28. *Bidens tripartita* L. - *Asteraceae*
29. *Brachypodium sylvaticum* (Hudson) Beauv. - *Poaceae*
30. *Bromus arvensis* L. - *Poaceae*
31. *Butomus umbellatus* L. - *Butomaceae*
32. *Calamagrostis epigeios* (L.) Roth. - *Poaceae*
33. *Caltha palustris* L. - *Ranunculaceae*
34. *Calystegia sepium* (L.) R.Br. - *Convolvulaceae*
35. *Campanula abietina* Griseb. - *Campanulaceae*
36. *Campanula persicifolia* L. - *Campanulaceae*
37. *Campanula rapunculus* L. - *Campanulaceae*
38. *Carex acutiformis* Ehrh. - *Cyperaceae*
39. *Carex distans* L. - *Cyperaceae*

40. *Carex hirta* L. - *Cyperaceae*
41. *Carex lasiocarpa* Ehrh. - *Cyperaceae*
42. *Carex pilosa* Scop. - *Cyperaceae*
43. *Carex riparia* Curtis - *Cyperaceae*
44. *Carex vulpina* L. - *Cyperaceae*
45. *Carpinus betulus* L. - *Betulaceae*
46. *Centaurea pannonica* (Heuffel) Simonkai - *Asteraceae*
47. *Centaurium erythraea* Rafin. - *Gentianaceae*
48. *Cerastium glomeratum* Thuill. - *Caryophyllaceae*
49. *Ceratophyllum demersum* L. - *Ceratophyllaceae*
50. *Chamaecytissus austriacus* (L.) Link - *Fabaceae*
51. *Chelidonium majus* L. - *Papaveraceae*
52. *Chenopodium album* L. - *Chenopodiaceae*
53. *Chenopodium polyspermum* L. - *Chenopodiaceae*
54. *Cichorium intybus* L. - *Asteraceae*
55. *Circaea lutetiana* L. - *Onagraceae*
56. *Cirsium arvense* (L.) Scop. - *Asteraceae*
57. *Cirsium palustre* (L.) Scop. - *Asteraceae*
58. *Cirsium vulgare* (Savi.) Ten - *Asteraceae*
59. *Clematis vitalba* L. - *Ranunculaceae*
60. *Clinopodium vulgare* L. - *Lamiaceae*
61. *Convallaria majalis* L. - *Liliaceae*
62. *Convolvulus arvensis* L. - *Convolvulaceae*
63. *Conyza canadensis* (L.) Cronq. - *Asteraceae*
64. *Cornus mas* L. - *Cornaceae*
65. *Cornus sanguinea* L. - *Cornaceae*
66. *Corydalis cava* (L.) Schweigg. et Koerte - *Fumariaceae*
67. *Corylus avellana* L. - *Betulaceae*
68. *Crataegus monogyna* Jacq. - *Rosaceae*
69. *Crocus vernus* (L.) Hill. - *Iridaceae*
70. *Cruciata glabra* (L.) Ehrend. - *Rubiaceae*
71. *Cruciata laevipes* Opiz - *Rubiaceae*
72. *Cucurbita pepo* L. - *Cucurbitaceae*
73. *Cyperus fuscus* L. - *Cyperaceae*
74. *Dactylis glomerata* L. - *Poaceae*
75. *Daucus carota* L. - *Apiaceae*
76. *Dentaria bulbifera* L. - *Brassicaceae*
77. *Deschampsia caespitosa* (L.) Beauv. - *Poaceae*
78. *Digitaria sanguinalis* (L.) Scop. - *Poaceae*
79. *Dipsacus laciniatus* L. - *Dipsacaceae*
80. *Echinochloa crus-galli* (L.) Beauv. - *Poaceae*
81. *Eleocharis acicularis* (L.) Roemer et Schultes - *Cyperaceae*
82. *Eleocharis palustris* (L.) Roemer et Schultes - *Cyperaceae*
83. *Elymus repens* (L.) Gould. - *Poaceae*
84. *Epilobium palustre* L. - *Onagraceae*
85. *Epilobium tetragonum* L. - *Onagraceae*
86. *Equisetum arvense* L. - *Equisetaceae*
87. *Eragrostis pilosa* (L.) Beauv. - *Poaceae*
88. *Erigeron annuus* (L.) Pers. - *Asteraceae*
89. *Erythronium dens-canis* L. - *Liliaceae*
90. *Eupatorium cannabinum* L. - *Asteraceae*
91. *Euphorbia amygdaloides* L. - *Euphorbiaceae*
92. *Euphorbia cyparissias* L. - *Euphorbiaceae*

93. *Evonymus verrucosus* Scop. - *Celastraceae*
94. *Fagus sylvatica* L. - *Fagaceae*
95. *Festuca arundinacea* Schreber - *Poaceae*
96. *Festuca pratensis* Hudson - *Poaceae*
97. *Festuca rubra* L. - *Poaceae*
98. *Festuca valesiaca* Schleich. ex Gaudin - *Poaceae*
99. *Ficaria verna* Huds. - *Ranunculaceae*
100. *Filago arvensis* L. - *Asteraceae*
101. *Filipendula ulmaria* (L.) Maxim. - *Rosaceae*
102. *Filipendula vulgaris* Moench - *Rosaceae*
103. *Fragaria vesca* L. - *Rosaceae*
104. *Frangula alnus* Miller - *Rhamnaceae*
105. *Fraxinus ornus* L. – *Oleaceae*
106. *Fumaria schleicheri* Soy.-Willem. - *Fumariaceae*
107. *Gagea lutea* (L.) Ker-Gawl. - *Liliaceae*
108. *Galanthus nivalis* L. - *Amaryllidaceae*
109. *Galeopsis speciosa* Miller. - *Lamiaceae*
110. *Galinsoga parviflora* Cav. - *Asteraceae*
111. *Galium aparine* L. - *Rubiaceae*
112. *Galium mollugo* L. - *Rubiaceae*
113. *Galium palustre* L. - *Rubiaceae*
114. *Galium uliginosum* L. - *Rubiaceae*
115. *Genista sagittalis* L. - *Fabaceae*
116. *Genista tinctoria* L. - *Fabaceae*
117. *Geranium dissectum* L. - *Geraniaceae*
118. *Geranium robertianum* L. - *Geraniaceae*
119. *Geum urbanum* L. - *Rosaceae*
120. *Glechoma hederacea* L. - *Lamiaceae*
121. *Glechoma hirta* Waldst. et Kit. - *Lamiaceae*
122. *Gnaphalium uliginosum* L. - *Asteraceae*
123. *Gratiola officinalis* L. - *Scrophulariaceae*
124. *Gypsophila muralis* L. - *Caryophyllaceae*
125. *Hedera helix* L. - *Araliaceae*
126. *Helleborus purpurascens* Waldst. et Kip. - *Ranunculaceae*
127. *Heracleum spondylium* L. - *Apiaceae*
128. *Hieracium pilosella* L. - *Asteraceae*
129. *Holcus lanatus* L. - *Poaceae*
130. *Hypericum maculatum* Crantz - *Hypericaceae*
131. *Hypericum perforatum* L. - *Hypericaceae*
132. *Impatiens glandulifera* Royle - *Balsaminaceae*
133. *Impatiens noli-tangere* L. - *Balsaminaceae*
134. *Inula britannica* L. - *Asteraceae*
135. *Inula conyza* DC. - *Asteraceae*
136. *Inula hirta* L. - *Asteraceae*
137. *Iris pseudacorus* L. - *Iridaceae*
138. *Juglans regia* L. - *Juglandaceae*
139. *Juncus articulatus* L. - *Juncaceae*
140. *Juncus bufonius* L. - *Juncaceae*
141. *Juncus effusus* L. - *Juncaceae*
142. *Juncus tenuis* Willd. - *Juncaceae*
143. *Lamium amplexicaule* L. - *Lamiaceae*
144. *Lamium galeobdolon* (L.) L. - *Lamiaceae*
145. *Lamium maculatum* L. - *Lamiaceae*

146. *Lamium purpureum* L. - *Lamiaceae*
147. *Lapsana communis* L. - *Asteraceae*
148. *Lathyrus pratensis* L. - *Fabaceae*
149. *Lathyrus tuberosus* L. - *Fabaceae*
150. *Lathyrus vernus* (L.) Bernh. - *Fabaceae*
151. *Leersia oryzoides* (L.) Swartz - *Poaceae*
152. *Lemna minor* L. - *Lemnaceae*
153. *Lemna trisulca* L. - *Lemnaceae*
154. *Leontodon autumnalis* L. - *Asteraceae*
155. *Linaria vulgaris* Miller - *Scrophulariaceae*
156. *Lindernia dubia* (L.) Pennell - *Scrophulariaceae*
157. *Lindernia procumbens* (Krocker) Philcox - *Scrophulariaceae*
158. *Lithospermum purpureocaeruleum* L. - *Boraginaceae*
159. *Lolium perenne* L. - *Poaceae*
160. *Lotus corniculatus* L. - *Fabaceae*
161. *Luzula campestris* (L.) DC. - *Cyperaceae*
162. *Lychnis flos-cuculi* L. - *Caryophyllaceae*
163. *Lychnis viscaria* L. - *Caryophyllaceae*
164. *Lycopus europaeus* L. - *Lamiaceae*
165. *Lysimachia nummularia* L. - *Primulaceae*
166. *Lysimachia vulgaris* L. - *Primulaceae*
167. *Lythrum hyssopifolia* L. - *Lythraceae*
168. *Lythrum salicaria* L. - *Lythraceae*
169. *Malva sylvestris* L. - *Malvaceae*
170. *Matricaria perforata* Mérat - *Asteraceae*
171. *Melampyrum barbatum* Waldst. et Kit. - *Scrophulariaceae*
172. *Melampyrum bihariense* A. Kerner - *Scrophulariaceae*
173. *Mentha aquatica* L. - *Lamiaceae*
174. *Mentha longifolia* (L.) Hudson - *Lamiaceae*
175. *Mentha pulegium* L. - *Lamiaceae*
176. *Molinia caerulea* (L.) Moench. - *Poaceae*
177. *Mycelis muralis* (L.) Dumort. - *Asteraceae*
178. *Myosotis scorpioides* L. - *Boraginaceae*
179. *Myosotis sylvatica* Ehrh. ex Hoffm. - *Boraginaceae*
180. *Myosoton aquaticum* (L.) Moench. - *Caryophyllaceae*
181. *Myriophyllum spicatum* L. - *Haloragaceae*
182. *Najas minor* All. - *Najadaceae*
183. *Neottia nidus-avis* (L.) L.C.M. Richard - *Orchidaceae*
184. *Oenanthe aquatica* (L.) Poiret - *Apiaceae*
185. *Oenanthe banatica* Heuffel - *Apiaceae*
186. *Oxalis stricta* L. - *Oxalidaceae*
187. *Peplis portula* L. - *Lythraceae*
188. *Petasites hybridus* (L.) P. Gaertner, B. Meyer et Scherb. - *Asteraceae*
189. *Peucedanum oreoselinum* (L.) Moench. - *Apiaceae*
190. *Peucedanum rochelianum* Heuffel - *Apiaceae*
191. *Phragmites australis* (Cav.) Steudel - *Poaceae*
192. *Phytolacca americana* L. - *Phytolaccaceae*
193. *Plantago lanceolata* L. - *Plantaginaceae*
194. *Plantago major* L. - *Plantaginaceae*
195. *Plantago media* L. - *Plantaginaceae*
196. *Platanthera bifolia* (L.) L.C.M. Richard - *Orchidaceae*
197. *Poa annua* L. - *Poaceae*
198. *Poa palustris* L. - *Poaceae*

199. *Poa pratensis* L. - *Poaceae*
200. *Poa trivialis* L. - *Poaceae*
201. *Polygonatum odoratum* (Miller) Druce - *Liliaceae*
202. *Polygonum amphibium* L. - *Polygonaceae*
203. *Polygonum aviculare* L. - *Polygonaceae*
204. *Polygonum bistorta* L. - *Polygonaceae*
205. *Polygonum convolvulus* L. - *Polygonaceae*
206. *Polygonum hydropiper* L. - *Polygonaceae*
207. *Polygonum lapathyfolium* L. - *Polygonaceae*
208. *Polygonum mite* Schrank - *Polygonaceae*
209. *Polygonum persicaria* L. - *Polygonaceae*
210. *Populus alba* L. - *Salicaceae*
211. *Potamogeton crispus* L. - *Potamogetonaceae*
212. *Potamogeton natans* L. - *Potamogetonaceae*
213. *Potentilla reptans* L. - *Rosaceae*
214. *Primula acaulis* L. (L.) - *Primulaceae*
215. *Prunella vulgaris* L. - *Lamiaceae*
216. *Prunus avium* (L.) L. - *Rosaceae*
217. *Pteridium aquilinum* (L.) Kuhn - *Dennstaedtiaceae*
218. *Pulicaria vulgaris* Gaertner - *Asteraceae*
219. *Pulmonaria officinalis* L. - *Boraginaceae*
220. *Pyrus pyraster* (L.) Burgsd. - *Rosaceae*
221. *Quercus petraea* (Mattuschka) Liebl. - *Fagaceae*
222. *Ranunculus ficaria* L. - *Ranunculaceae*
223. *Ranunculus polyanthemos* L. - *Ranunculaceae*
224. *Ranunculus repens* L. - *Ranunculaceae*
225. *Ranunculus sardous* Crantz. - *Ranunculaceae*
226. *Robinia pseudoacacia* L. - *Fabaceae*
227. *Rorippa amphibia* (L.) Besser - *Brassicaceae*
228. *Rorippa islandica* L. - *Brassicaceae*
229. *Rorripa sylvestris* (L.) Besser - *Brassicaceae*
230. *Rosa canina* L.- *Rosaceae*
231. *Rubus caesius* L. - *Rosaceae*
232. *Rubus hirtus* Waldst. et Kit. - *Rosaceae*
233. *Rudbeckia laciniata* L. - *Asteraceae*
234. *Rumex acetosella* L. - *Polygonaceae*
235. *Rumex crispus* L. - *Polygonaceae*
236. *Rumex obtusifolius* L. - *Polygonaceae*
237. *Rumex sanguineus* L. - *Polygonaceae*
238. *Salix alba* L. - *Salicaceae*
239. *Salix cinerea* L. - *Salicaceae*
240. *Salix fragilis* L. - *Salicaceae*
241. *Salvia pratensis* L. - *Lamiaceae*
242. *Sambucus ebulus* L. - *Caprifoliaceae*
243. *Sambucus nigra* L. - *Caprifoliaceae*
244. *Schoenoplectus lacustris* L. - *Cyperaceae*
245. *Scilla bifolia* L. - *Liliaceae*
246. *Sclerochloa dura* (L.) Beauv. - *Poaceae*
247. *Scutellaria hastifolia* L. - *Lamiaceae*
248. *Sedum sexangulare* L. - *Crassulaceae*
249. *Senecio jacobea* L. - *Asteraceae*
250. *Serratula tinctoria* L. - *Asteraceae*
251. *Setaria pumila* (Poiret) Schultes - *Poaceae*

252. *Silene alba* (Miller) E.H.L. Krause - *Caryophyllaceae*
253. *Sisymbrium officinale* (L.) Scop. - *Brassicaceae*
254. *Solanum dulcamara* L. - *Solanaceae*
255. *Solanum nigrum* L. - *Solanaceae*
256. *Sparganium erectum* L. - *Sparganiaceae*
257. *Spergula arvensis* L. - *Caryophyllaceae*
258. *Spirodela polyrhiza* (L.) Schleiden - *Lemnaceae*
259. *Stachys officinalis* (L.) Trev. - *Lamiaceae*
260. *Stachys palustris* L. - *Lamiaceae*
261. *Stachys sylvatica* L. - *Lamiaceae*
262. *Stellaria graminea* L. - *Caryophyllaceae*
263. *Stellaria nemorum* L. - *Caryophyllaceae*
264. *Symphytum officinale* L. - *Boraginaceae*
265. *Tanacetum vulgare* L. - *Asteraceae*
266. *Torillis arvensis* (Hudson) Link - *Apiaceae*
267. *Trifolium arvense* L. - *Fabaceae*
268. *Trifolium medium* L. - *Fabaceae*
269. *Trifolium pratense* L. - *Fabaceae*
270. *Trifolium repens* L. - *Fabaceae*
271. *Tussilago farfara* L. - *Asteraceae*
272. *Typha angustifolia* L. - *Typhaceae*
273. *Typha latifolia* L. - *Typhaceae*
274. *Ulmus glabra* Hudson - *Ulmaceae*
275. *Urtica dioica* L. - *Urticaceae*
276. *Veratrum album* L. - *Liliaceae*
277. *Verbascum phlomoides* L. - *Scrophulariaceae*
278. *Verbascum phoeniceum* L. - *Scrophulariaceae*
279. *Verbena officinalis* L. - *Verbenaceae*
280. *Veronica anagallis-aquatica* L. - *Scrophulariaceae*
281. *Veronica persica* Poir. - *Scrophulariaceae*
282. *Veronica serpyllifolia* L. - *Scrophulariaceae*
283. *Vicia cracca* L. - *Fabaceae*
284. *Vicia grandiflora* L. - *Fabaceae*
285. *Vicia tetrasperma* (L.) Schreber - *Fabaceae*
286. *Vinca herbacea* Waldst. et Kit. - *Apocynaceae*
287. *Viola arvensis* Murray - *Violaceae*
288. *Viola odorata* L. - *Violaceae*
289. *Viola reichenbachina* Jordan ex Boreau - *Violaceae*
290. *Xanthium italicum* Moretti - *Asteraceae*
291. *Xanthium strumarium* L. – *Asteraceae.*

The conspectus contains aquatic and paludicolous species, species from the surrounding deciduous forest, meadows species, weeds and invasives. There are also various ornamentals, cultivated in the private small gardens: *Abies alba* Miller, *Picea abies* (L.) Karsten, *Larix decidua* Miller, *Juniperus sabina* L., *Juglans regia* L., *Thuja occidentalis* L., *Tilia tomentosa* Moench, *Populus nigra* L., *Kerria japonica* (L.) DC., *Chaenomeles japonica* (Thunb.), Spach., *Hydrangea macrophylla* (Thunb.) Ser. in DC, *Forsythia suspensa* (Thunb.) Vahl, *Philadelphus coronarius* L., *Lonicera caprifolium* L., *Hosta plantaginea* (Lamarck) Ascherson, *Tulipa gesneriana* L., *Hyacinthus orientalis* L., *Narcissus poeticus* L., *N. pseudonarcissus* L., *Lilium candidum* L., *Aconitum tauricum* Wulf., *Muscari armeniacum* Leichtlin ex Baker, *Phyllostachys viridiglaucescens* (Carr.) A. et C. Rivière etc.

A few km towards West, in the woods near Sudriaş village, there is a population of *Narcissus poeticus* subsp. *radiiflorus* (Salisb.) Baker. We also find it important to underline the presence of the species *Lindernia procumbens* (Krocker) Philcox, of communitary interest listed in the Annex IV of the Council Directive 92/43/EEC, and *Lindernia dubia* (L.) Pennell, invasive in Romania's flora and recently signaled in the flora of Banat (NEACŞU & ARSENE, 2017).

CONCLUSIONS

The vascular flora of the Surduc Lake area is important in terms of biodiversity, being represented by almost 300 cormophyte species.

We consider it important to note the presence of the habitat with *Lindernia procumbens* – small and "fugitive" from an year to another (due to significant variations in reservoir water level).

Ruderalization tendency in flora and increasing anthropic influence were noticed.

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