



ANALYSIS OF SOME FAMILIES FROM CARL STUDNICZKA'S HERBARIUM (IV)

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Ključne riječi:

Herbarij C. Studniczke, Prirodoslovni muzej Split, Hrvatska.

SYNOPSIS

We analysed the following families or their parts: Campanulaceae (ord. Campanulaceen), Cactaceae (ord. Cacteen) and Haloragaceae (ord. Halorageen) with total of 121 herbarium sheets. According to the labels, the majority of herborized material was collected in the area of Austria (21 sheets). Most herbarium sheets belong to Flora Dalamtiens collection (23). In reference to the part of Studniczka's herbarium which has already been analysed, there are three collection which are mentioned for the first time. Most herbarium sheets were collected by Studniczka himself (61).

SINOPSIS

ANALIZA NEKIH PORODICA IZ HERBARIJA CARLA STUDNICZKE (IV)

Analizirali smo neke porodice: Campanulaceae (ord. Campanulaceen), Cactaceae (ord. Cacteen) i Haloragaceae (ord. Halorageen) u kojima se nalazi 121 herbarijski list. Najviše herbarijskog materijala je s područja Austrije (21 herbarijski list). Najveći broj herbarijskih listova njih 23, pripada zbirci Flora Dalamtiens. U odnosu na do sada analizirani dio Studniczkinog herbarija po prvi put se spominju tri zbirke. Najviše herbarijskog materijala sakupio je sam Studniczka (61 herbarijski list).

INTRODUCTION

Since 2005, we have been working on Carl Studniczka's herbarium (compare Vladović et al., 2007b) which can be found in the Natural History Museum in Split. As a botanist amateur, Carl

Studniczka collected plants while he was traveling (1869-1904) and working as an officer (data are known from herbarium labels: wide surrounding area of Vienna and Wiener Neustadt in Austria, of Split in Croatia, of Kotor in Montenegro, of Olomouc and Leitmeritz in the Czech Republic, of Przemysl in Poland and at last the wide surrounding area of Trieste

in Italy). The analysis has shown that this herbarium contains samples of the plants which were collected and sent to Studniczka by many botanists or collectors of that time.

MATERIALS AND METHODS

In this paper we analysed the herbarium sheets from some families: Campanulaceae (ord. Campanulaceen), Cactaceae (ord. Cacteen) and Haloragaceae (ord. Halorageen). From the labels of the herbarium sheets first, we copied the Latin name of the genus and the species; then the date, month and year of collection; followed by the collector and the affiliation to the particular herbarium collection. According to The Plant list and USDA plants Database we listed the name of the species in brackets; from the label we copied the name of the place where the plant had been found with altitude data if available and listed the number of herbarium samples in brackets.

RESULTS AND DISCUSSION

List of species

Campanulaceae

(Ord. Campanulaceen)

CAMPANULA a

1. *Campanula alpina* L. 16.8.1874. **Borbás** Flora Transsilvaniae (*C. alpina* Jacq.) in pascuis alpium Retyezát 6600' alt. (3)
2. *C. alpina* L. 8.1871. **Halácsy** Flora der Raxalpe (*C. alpina* Jacq.) Triften auf der Heukuppe (2)
3. *C. alpina* Jacq. 13.7.1897. **Kumlien** Flora von Wr Neustadt (*C. alpina* Jacq.) am Waxriegel das Schneeberges (3)

4. *C. aparinoides* Pursh 26.7.1871. **Ayasse** (*C. aparinoides* Pursh) Wisconsin (3)
5. *C. apricorum* Gdgr! 27.8.1877. **Gandoger** Flora Gallica exsiccata (?) No 1166, 3552. Pommiers, Rhône, 1100' (1)
6. *C. barbata* L. 7. **Brandmayer** Flora von N. Oesterreich (*C. barbata* L.) am Sonnenwendstein bei Schottwin (3)
7. *C. bononiensis* L. 25.7.1875. **Studniczka** Flora Dalmatiens (*C. bononiensis* L.) bei Dugopolje (4)
8. *C. bononiensis* L. 12.7.1894. **Studniczka** Flora von Wr Neustadt (*C. bononiensis* L.) auf der Malleiten bei Fischau (3)
9. *C. bononiensis* L. 13.7.1902. **Studniczka** Flora von Triest (*C. bononiensis* L.) zwischen Obelisk v. Općina n. Napoleonstrasse (3)
10. *C. caespitosa* Scop. 9.1876. **Halácsy** E Flora Austriae inf. (*C. caespitosa* Scop.) In petrosis subalpinis ad Reichenau (1)
11. *C. capitata* Sims. 4.1877. **Studniczka** Flora Dalmatiens (*C. lingulata* Waldst. & Kit.) Hügel um Cattaro (1)
12. *C. capitata* Sims. 5.1880. **Studniczka** Flora Dalmatiens (*C. lingulata* Waldst. & Kit.) sonnige Hügel u. Abhänge um Glavaty bei Cattaro (6)
13. *C. cavolini* Ten v. *glabra* 7.1875. **Groves** Herbarium H. Groves (Florentia) (*C. fragilis* Cyr. ssp. *cavolinii* /Ten./ Damboldt) ad sepes prope Castelovecchio in Aprutio (1)
14. *C. cavolini* Tenore β *incana* Ten. 21.7.1875. **Porta et Rigo** Porta et Rigo extinere II talico (*C. fragilis* Cyr. ssp. *cavolinii* /Ten./ Damboldt) No 29 Italia med. Aprutio, in muris a rupibus circa Caramanico sol. calcar. 1-2000' (2)
15. *C. cavolini* Ten. v. *incana* Ten. 7.1875. **Groves** C. Baenitz Herbarium Europaeum (*C. fragilis* Cyr. ssp. *cavolinii*

/Ten./ Damboldt) Fl. Italica: Prope Caramanico in Aprutio (2)

16. *C. cervicaria* L. 19.7.1885.

Studniczka Flora von oesterr. Polen (*C. cervicaria* L.) Holzschläge von Krasychin b. Przemysl (1)

17. *C. cervicaria* L. 16.6.1894.

Studniczka Flora von Wr Neustadt (*C. cervicaria* L.) Stollhofwiese b. W Neustadt (2)

18. *C. crassipes* Heuff. 24.9.1874.

Borbás Flora Banatica (*C. crassipes* Heuffel) in fissuris rupium calcar. vallis Kazán infra pag. Plavischevitza ad Danubium inferiorem (1)

19. *C. dichotoma* L. 24.6.1874. **Strobl**

Flora aetnensis (*C. dichotoma* L.) In regione inferiore montis Aetnae solo vulcanico 15-2500' (3)

20. *C. dichotoma* Desf. 1879.

Gandoger Flora Algeriensis exsiccata (*C. dichotoma* L.) No 660 Hab. in ditione urbis Alger, loco dicto Mustapha (4)

21. *C. divergens* Willd = *C. spathulata*

W. Kit. 26.5.1874. **Borbás** Magyar flora Szörény megye (*Campanula sibirica* subsp. *divergens* /Waldst. & Kit. ex Willd./ Nyman) in rupestribus vallis Kazán in Banatu (1)

22. *C. erinus* L. 4.1873. **Studniczka**

Flora Dalmatiens (*C. erinus* L.) auf Felsen, an Mauern um Punta d'Ostro, Castelnuovo u. Spalato (Marian) (4)

23. *C. erinus* L. 8.5.1880. **Studniczka**

Flora Dalmatiens (*C. erinus* L.) überall zwischen Mauer spalten in u. um Cattaro (3)

24. *C. erynus* L. 4.1877. **Studniczka**

Flora Dalmatiens (*C. erinus* L.) felsen um Cattaro (7)

25. *C. falcata* Roem. 18.5.1873.

Studniczka Flora Dalmatiens (*Legousia falcata* /Ten./ Fritsch ex Janch.) um Punta d'Ostro (4)

26. *C. foliosa* Ten. 7.1875. **Groves** C.

Baenitz Herbarium Europaeum (*C.*

foliosa Ten.) 3554. In nemorosis montis Sirente in Aprutio Alt: 6000 ped. (2)

CAMPANULA b

27. *C. glomerata* L. 14.6.1894.

Studniczka Flora v. N. Oesterreich (*C. glomerata* L.) Stollhofwiesen in der neuen stels b. Wr Neustadt (3)

28. *C. glomerata* L. ϵ *elliptica*

7.1885. **Studniczka** Flora von oesterr. Polen (*C. glomerata* L. ssp. *elliptica* /Kit. ex Schultes/ Kirschl.) in Gebüsch nächst d. Laborat. b. Przemysl (2)

29. *C. glomerata* L. β *farinosa* 8.1882.

Studniczka Flora Böhmens (*C. glomerata* L. ssp. *farinosa* /Rochel ex Besser/ Kirschl.) Wälder am Radiste bei Leitmeritz (2)

30. *C. glomerata* L. var. *hirsuta*

13.7.1902. **Studniczka** Flora von Triest (*C. glomerata* L.) ober der Proseccostrasse bei Barcola (sehr rauh) (3)

31. *C. hybrida* L. 1873. **Studniczka**

Flora Dalmatiens (*Legousia hybrida* /L./ Delarbre) auf Aeckern der Hlbinsel Punta d'Ostro (2)

32. *C. hybrida* L. 5.1880. **Studniczka**

Flora Dalmatiens (*L. hybrida* /L./ Delarbre) um Cattaro (3)

33. *C. lanceolata* Lap. 15.8.1874.

Borbás Flora Transsilvaniae (*C. serrata* /Kit. ex Schultz/ Hendrych) an rupibus alpium Retyezát ad lacum Zanoga 6600' alt. (1)

34. *C. latifolia* L. 22.6.1872. **Baenitz**

Flora Böhmens (*C. latifolia* L.) Koenigsberg: am Lauther Teich (1)

35. *C. latifolia* L. 25.7.1878. **Freyn** (*C.*

latifolia L.) 340. Böhmen Mensegebirge Waldländer bei Unter-Sattel 640 m (1)

36. *C. lingulata* W. Kit. 30.5.1874.

Borbás Flora Valachiae (*C. lingulata* Waldst. & Kit.) in rupestribus ad Portam ferream infra Orsova (1)

37. *C. medium* L. 6.7.1873. **Reverchon** (*C. medium* L.) Ribieres (1)
38. *C. patula* L. 31.5.1881. **Studniczka** Flora Böhmens (*C. patula* L.) Wall von Teresienstadt (3)
39. *C. patula* L. 7.6.1885. **Studniczka** Flora von oesterr. Polen (*C. patula* L.) Wldschlge, Wiesen um Przemysl (3)
40. *C. persicifolia* L. 24.6.1875. **Studniczka** Flora Dalmatiens (*C. persicifolia* L. ssp. *sessiliflora* /Velen / Fed. Ex Greuter & Burdet) am Biokovo (2)
41. *C. persicifolia* L. 6.1886. **Studniczka** Flora von oesterr. Polen (*C. persicifolia* L. ssp. *sessiliflora* /Velen / Fed. Ex Greuter & Burdet) um Przemysl (1)
42. *C. persicifolia* L. 25.6.1900. **Studniczka** Flora von Triest (*C. persicifolia* L. ssp. *sessiliflora* /Velen / Fed. Ex Greuter & Burdet) Wäldchen ober Rojano (2)
43. *C. persicifolia* L. β *eriocarpa* 20.6.1885. **Studniczka** Flora von oesterr. Polen (*C. persicifolia* L.) Holzschläge um Buda bei Przemysl (1)
44. *C. portenschlagiana* Roem. & Sch. = *C. muralis* Portensch. = *hederacea* Host 25.6.1875. **Studniczka** Flora Dalmatiens (*C. portenschlagiana* Schult.) zwischen mauerritzen der Stadt Almissa (9)
45. *C. pulla* L. 7.1877. **Halácsy** Herbarium dr E. de Halácsy (*C. pulla* L.) In petrosis alpinis montis Schneeberg 4000' sol. calc. (9)
46. *C. pusilla* Hänk 7.1875. **Ressmann** Flora Carinthiaca (*C. cochleariifolia* Lam.) Mittagkogel (8)
47. *C. pusilla* Hänke 11.8.1895. **Studniczka** Flora von Wr Neustadt (*C. cochleariifolia* Lam.) am Sonnenwendstein (5)
48. *C. pyramidalis* 1880. **Studniczka** Flora Dalmatiens (*C. pyramidalis* L.) auf Mauern von Cattaro (2)
49. *C. pyramidalis* L. 13.7.1902. **Studniczka** Flora von Triest (*C. pyramidalis* L.) Napoleonstrasse gegen Contovello ober Barcola (1)
50. *Wahlenbergia hederacea* L. 8.1867. **Malinvaud** Eggert Herbarium Americanum (*Wahlenbergia hederacea* /L./ Reichenb.) Gallia: Limoges (1)
- CAMPANULA c
51. *C. abietina* G. et S. 16.7.1878. **Barth** J. Barth, Flora transsilvanica (*C. patula* L. ssp. *abietina* /Griseb. & Schenk/ Simonk.) In silvis abietinis Pareng (3)
52. *C. ramosissima* Sibth. 1873. **Studniczka** Flora Dalmatiens (*C. ramosissima* Sm.) auf Hügeln um Castelnuovo (1)
53. *C. ramosissima* Sibth. 5.1877. **Studniczka** Flora Dalmatiens (*C. ramosissima* Sm.) Hügel um Cattaro & Castelnuovo (1)
54. *C. ramosissima* Sibth. 6.1877. **Studniczka** Flora Dalmatiens (*C. ramosissima* Sm.) auf Grasplätzen am Giovanni Cattaro (2)
55. *C. rapunculoides* L. 6.1888. **Studniczka** Flora Böhmen (*C. rapunculoides* L.) um Theresienstadt in frucht (1)
56. *C. rapunculoides* L. 7.1888. **Studniczka** Flora Böhmens (*C. rapunculoides* L.) hügel um Theresienstadt (1)
57. *C. rapunculoides* L. 13.7.1900. **Studniczka** Flora von Triest (*C. rapunculoides* L.) Wald won Rojano (1)
58. *C. rapunculus* L. 2.1873. **Studniczka** Flora Dalmatiens (*C. rapunculus* L.) beim Dorfe Vitaglina nächst Castelnuovo (2)
59. *C. rotundifolia* L. δ *hirta* 10.9.1871. **Studniczka** Flora von Wr Neustadt (*C. rotundifolia* L.) im Adlitzgraben bei Schottwien (2)

60. *C. rotundifolia* L. ♂ *lanicifolia* 7.1888. **Studniczka** Flora Böhmens (*C. rotundifolia* L.) sandfelder um Theresienstadt (2)

61. *C. rotundifolia* L. ♂ *velutina* 21.7.1880. **Studniczka** Flora Böhmens (*C. rotundifolia* L.) um Leitmeritz (1)

62. *C. rotundifolia* L. ♂ *vulgaris* 24.7.1895. **Studniczka** Flora von Wr Neustadt (*C. rotundifolia* L.) am Mariahilfberg b. Guttenstein (2)

63. *C. scheuchzeri* Vill. 13.8.1874. **Borbás** Flora Transsilvaniae (*C. scheuchzeri* Vill.) in graminosis alpium Retyezát ad lacum Zanoga (3)

64. *C. scheuchzeri* Vill. 28.8.1880. **Freyn** (*C. scheuchzeri* Vill.) 432. Böhmen Riesengebirge Triften des Krkonoš 1400 m (4)

65. *C. serpyllifolia* Vis. 24.6.1875. **Studniczka** Flora Dalmatiens (*Edraianthus serpyllifolius* (Vis.) A.DC.) auf der höchst Spitze des Sveti Juro 5578' (Biokovo) (3)

66. *C. sibirica* L. 31.5.1874. **Studniczka** Flora Süddalmatiens (*C. sibirica* L. ssp. *sibirica*) Rainen bei Toretta gegen das Meer zu (2)

67. *C. sibirica* L. 13.7.1893. **Studniczka** Flora von N. Oesterreich (*C. sibirica* L. ssp. *sibirica*) Wälder & Wiesen um Muthmansdorf (2)

68. *C. speculum* L. ♂ *hirta* 30.5.1873. **Studniczka** Flora Dalmatiens (*Legousia speculum-veneris* /L./ Durande ex Vill.) Aecker bei Topla nächst Castelnuovo (1)

69. *C. spicata* L. 7.1872. **Brandmayer** Flora von Titol (*C. spicata* L.) Im Grödner Thale (2)

70. *C. stevenii* M.B. = *C. abietina* Griseb et Schenk. 20.8.1874. **Borbás** Flora Transsilvaniae (*C. patula* L. ssp. *abietina* /Griseb. & Schenk/ Simonk.) in silvis elatioribus sub alpe Retyezát prope vall. Valeriarka 4000' (5)

71. *C. tenuifolia* Waldst. & Kitt. 24.6.1875. **Studniczka** Flora Dalmatiens (*Edraianthus tenuifolius* /A.DC/ A.DC.) auf dem Sveti Juro 4000' (Biokovo) (3)

72. *C. thyrsoides* L. **Krenberger** (*C. thyrsoides* L.) Feistritz in Kärnthen (1)

73. *C. tommasinii* Reut. 25.8.1877. **Freyn** (*C. tommasiniana* K.Koch) Ad rupes montis "M. Maggiore" dicto supra pagum Mala Utzka Istriae bor.-orient. alt. 1300 m (3)

74. *Specularia speculum* DC. var: ♂ *cordata* = *Camp. cordata* Vis. 5.1880. **Studniczka** Flora Dalmatiens (*Legousia speculum-veneris* /L./ Durande ex Vill.) um Cattaro (3)

75. *Specularia speculum* DC. ♂ *hirta* 5.1880. **Studniczka** Flora Dalmatiens (*Legousia speculum-veneris* /L./ Durande ex Vill.) auf Aeckern um Trinita & Glavaty bei Cattaro (3)

CAMPANULA d

76. *C. trachelioides* M. Bieb. 30.6.1902. **Studniczka** Flora von Triest (*C. trachelium* L.) Schlucht links von Trstenik ober Barcola (2)

77. *C. trachelium* L. 8.1881. **Studniczka** Flora Böhmens (*C. trachelium* L.) in gebüschchen an der Eger bei Theresienstadt (2)

78. *C. trachelium* L. ♂ *dasycarpa* 13.7.1893. **Studniczka** Flora von N. Oesterreich (*C. trachelium* L.) Wälder um Muthmansdorf (2)

79. *C. trachelium* L. ♂ *dasycarpa* 31.7.1900. **Studniczka** Flora von Triest (*C. trachelium* L.) Gretta (1)

80. *C. trachelium* L. *genuina* 13.8.1902. **Studniczka** Flora von Triest (*C. trachelium* L.) zwischen Contovello n. Opcina ober Barcola (2)

81. *C. uniflora* L. 3.8.1870. **Zetterstedt et Wickbom** (*C. uniflora* L.) Norvegia: Dovre, Knudshøe in pascuis alpinis editoribus (4)

82. *C. waldsteiniana* R. Sch. 15.8.1875. **Borbás** (*C. waldsteiniana* Schult.) an mont. Sveto Brdo, Croatia (3)
83. *C. zoysii* Wulf. 4.8.1870. **Kristof** (*C. zoysii* Wulfen) Kärnten: Fillacher Kocna (8)
84. *Adenophora lilifolia* Bess. 8.1871. **Halácsy** E Flora austriacae inf. (*A. lilifolia* /L./ A.DC.) Moorwiesen bei Moosbrunn (2)
85. *Castilleja coccinea* Spr.-Kuml. **Kumlien** Kumlien pl. Visconsin (*C. coccinea*/L./ Spreng.) 139. Albion, Dane Countr. (2)
86. *Edraianthus kitaibelii* DC. 6.7.1874. **Baumbach** (*E. graminifolius*/L./ A.DC. subsp. *graminifolius*) Krainer Schneeberg (7)
87. *Jasione carioni* Bor. 4.8.1876. **Gandoger** Flora Gallica exsiccata (*J. laevis* Lam. ssp. *laevis*) No 141 3550. Hab. in monte St. Bonnet supra Montmelas (Rhône) 2200' (3)
88. *J. heldreichii* Boiss. et Orph. = *J. jankae* Neilr. 21.9.1874. **Borbás** Flora Banatus (*J. heldreichii* Boiss. et Orph.) Swinitza, in rupibus montis Treskovác (6)
89. *J. montana* L. var *hirsuta* 7.1882. **Studniczka** Flora Böhmens (*J. montana* L.) Sandwälder um Theresienstadt (7)
90. *J. montana* L. var *glabra* 8.1885. **Studniczka** Flora von oesterr. Polen (*J. montana* L.) Hügel beim Birkenwald n. Pikulice (1)
91. *J. montana* L. var *glabra* 8.1881. **Studniczka** Flora Böhmens (*J. montana* L.) Sandwälder um Theresienstadt (1)
92. *J. montana* L. var *major* 7.1882. **Studniczka** Flora Böhmens (*J. montana* L.) Waldplätze um Leitmeritz (2)
93. *J. supina* Sibth. 9.1874. **Graf** (*J. supina* ssp. *pontica* /Boiss./ Damboldt) Turcia. Bythinian (6)
94. *Phyteuma canescens* W.K. 20.7.1873. **Freyn** (*Asyneuma canescens* /Waldst. & Kit./ Griseb. & Schenk) Ungarn. Comitatus Pest. - Gebüsche am Schwabenberg bei Ofen. Kalk 440 m (1)
95. *P. charestiae* Brige. 12.8.1873. **Huter et Porta** (*P. humile* Schleich. ex Murith) Lombardia, dit. Bresciana, in fissuris rupium montis Corno di Bagolino sol. granit. 7-8000' (3)
96. *P. comosum* L. **Maly** (*Physoplexis comosa* /L./ Schur) Gaulirania Tyrol (5)
97. *P. comosum* L. 7. **Brandmayer** Flora von Kärnthen (*Physoplexis comosa* /L./ Schur) bei Malborgeth (9)
98. *P. michelii* Bert. 1.8.1873. **Freyn** (*Phyteuma michelii* All.) Venetien. Hochtriften des Mte Piana bei Schluderbach Dolomit 2330 m (2)
99. *P. orbiculare* L. 5.1894. **Studniczka** Flora von Wr Neustadt (*P. orbiculare* L.) auf der Malleiten (3)
100. *P. orbicularis* L. var: *fistulosum* = *Phyt. fistulosum* Reichb. 13.7.1897. **Studniczka** Flora von Wr Neustadt (*P. orbiculare* L.) am Waxriegel d. Schneeberges (4)
101. *P. pauciflorum* L. 19.8.1872. **Brandmayer** Flora von Steiermark (*P. globulariifolium* Sternb. & Hoppe) am hohen Zinken (4)
102. *P. sieberi* Spr. 29.7.1882. **Freyn** Flora Böhmens (*P. sieberi* Spreng.) Tirol-Venezianische Grenz-Alpen. Umgebung von Schluderbach felsspalten im Val fonda des Mte Cristallo 1570 m dolomit (3)
103. *P. spicatum* L. 18.6.1885. **Studniczka** Flora Böhmens (*P. spicatum* L.) 4858. schattige Wälder im Wopparnthal (1)
104. *P. spicatum* L. 7.6.1885. **Studniczka** Flora von oesterr. Polen (*P. spicatum* L.) Alleen u. Waldränder bei Buda n. Przemysl (2)
105. *Specularia perfoliata* A. DC. 11.6.1875. **Eggert** Eggert Herbarium

Americanum (*Triodanis perfoliata*/L./ Nieuwl.) Old Boehumme Weg (3)

106. *Symphyandra vanneri* Heuff. 7.8.1874. **Borbás** Magyar flora Szörény megye (*S. wanneri* /Rochel/ Heuffel) in rupibus subalpium Kunt in Banatu ad pagum Neu Szadova (2)

107. *S. wanneri* Heuffl. = *Campanula wanneri* Rochel = *C. heterophylla* Baumgt 11.7.1873. **Lojka** (*S. wanneri* /Rochel/ Heuffel) Transylvania - Comitatus Hunyad rupium in valle "Riusor" alpis Retyezát (2)

Cactaceae

(Ord. Cacteen)

108. *Opuntia nana* Vis. = *O. vulgaris* Mill. 5.1875. **Studniczka** Flora Dalamtiens (*O. ficus-indica* (L.) Mill.) bei der Eremitage St. Girolamo am Marian bei Spalato (1)

109. *O. rafinesquii* Engelm. 20.6.1875. Eggert Eggert Herbarium Americanum (*O. humifusa* (Raf.) Raf. ssp. *humifusa*) Bluffs in Ills. (1)

Haloragaceae

(Ord. Halorageen)

110. *Ellisia ambigua* Nutt. 22.5.1875. **Eggert** Eggert Herbarium Americanum (*E. nyctelea* /L./ L.) Wald am Hamond Wege (2)

111. *Hydrophyllum appendiculatum* Michx. 30.5.1875. **Eggert** Eggert Herbarium Americanum (*H. appendiculatum* Michx.) Bluffs in Ills. (2)

112. *H. virginicum* L. **Moyer** (*H. virginicum* L.) Quakertown Pa (2)

113. *Myriophyllum alterniflorum* DeC. 7.1876. **Haesendonck** Société Helvétique (*Myriophyllum alterniflorum* DC.) Localité Waterloo (Belgique) Station ruiseaux et fossis (2)

114. *M. scabratum* Michx. 17.7.1875. **Eggert** Eggert Herbarium Americanum (*Myriophyllum pinnatum* (Walter)

Britton, Sterns & Poggenb.) An Bluffs Eisenbahn in Ills (2)

115. *Myriophyllum spicatum* L. 9.1873. **Krenberger** (*M. spicatum* L.) Aus dem Schlossteiche von Ebenthal bei Klagenfurt (2)

116. *M. spicatum* L. 26.6.1881. **Studniczka** Flora Böhmens (*M. spicatum* L.) Sümpfe bei Mlikojed nächst Leitmeritz (6)

117. *M. verticillatum* L. 19.7.1880. **Freyn** (*M. verticillatum* L.) 214. Böhmen Opočno Schotter Teich bei Podchlumy Alluv 280 m (3)

118. *M. verticillatum* L. γ *pinnatifolium* Vill. 17.7.1878. **Freyn** (*M. verticillatum* L.) 273. Böhmen In aquis stagnantibus ad pagum Lhotka non procul ab opidis Opočno Solo hum. 245 m (3)

119. *Phacelia bipinnatifida* Michx. 23.5.1875. **Eggert** Eggert Herbarium Americanum (*P. bipinnatifida* Michx.) Bluffs in Ills. (2)

120. *P. purshii* Buckley 23.5.1875. **Eggert** Eggert Herbarium Americanum (*P. purshii* Buckley) Bluffs in Ills. (3)

121. *Proserpinaca palustris* L. **Kumlien** (*P. palustris* L.) Wisconsin (3)

Total number of analysed herbarium sheets is 121 (with 330 samples of herbal plants). The majority of the plants was collected in Europe (108 herbarium sheets, 89%), 11 sheets originate from North America (9%), one herbarium sheet is from Africa and Asia. Most of the herbarium samples (fig. 1) were collected in the area of Austria (21 herbarium sheets) and: Italy (19), Czech Republic (16), Croatia (13), Montenegro (12), Romania (11), USA (11), Poland (7), France (4), Russia (1), Slovenia (1), Algeria (1), Norway (1), Hungary (1), Belgium (1) and Turkey (1) have also been registered.

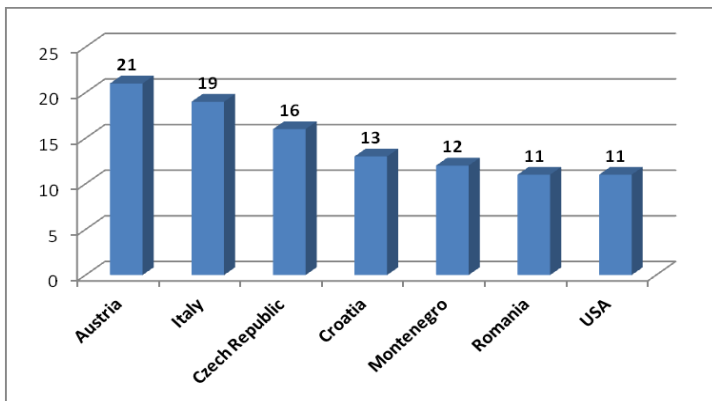


Figure 1:
Distribution of herbarium sheets (orders Campanulaceen, Cacteen and Halorageen).

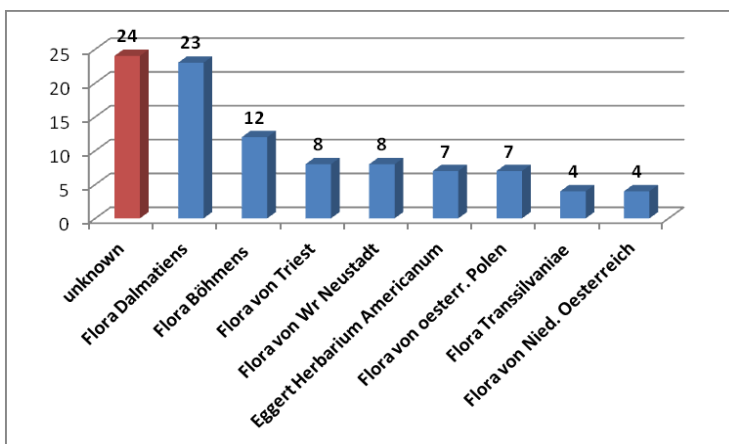


Figure 2:
Number of herbarium sheets according to the affiliation to different herbaria (orders Campanulaceen, Cacteen and Halorageen).

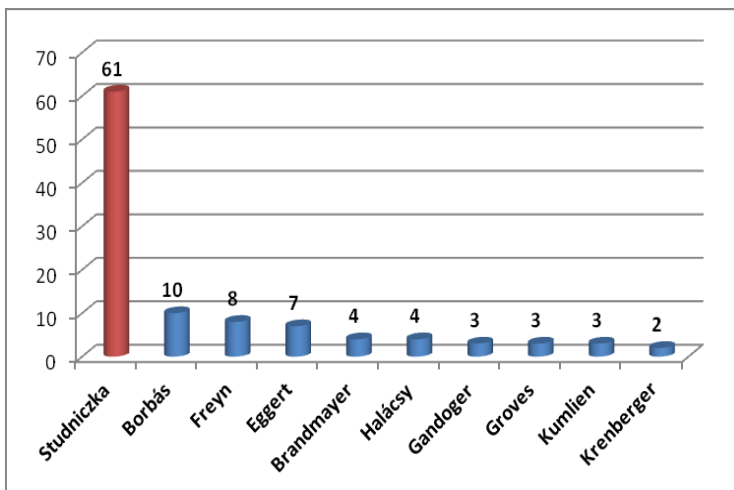


Figure 3:
Collectors and number of collected herbarium sheets (orders Campanulaceen, Cacteen and Halorageen).

According to the affiliation to a particular herbarium collection (fig. 2) in analysed familys or their parts the most represented is Flora Dalmatiens with 23 herbarium sheets. This is followed by other collections, such as: Flora Böhmens

(12), Flora von Triest (8), Flora von Wr. Neustadt (8), Eggert Herbarium Americanum (7), Flora von oesterr. Polen (7) and others. In the part of the herbarium which has already been analysed (compare with Vladović et al.,

2007 a, b; Vladović et al., 2009 a, b; Vladović et al., 2010 a, b; Vladović et al., 2011; Vladović et al., 2012; Vladović et al., 2013 (in press); Ževrnja et al., 2008 a, b; Ževrnja et al., 2009 a, b, c; Ževrnja et al., 2010 a,b; Ževrnja et al., 2011; Ževrnja et al., 2013a (in press); Ževrnja et al., 2013b (in press); Mitić et al., 2008 a, b; Mitić et al., 2010-2011; Mitić et al., 2011; Mitić et al., 2012), three new collections is mentioned and there are: Magyar flora Szörény Megye (2 herbarium sheets), Flora von Steiermark (1 herbarium sheet) and Porta et Rigo extinere il Talico (1 herbarium sheet). There are 24 herbarium sheets that are unmarked and therefore we do not know which herbarium collection they belong to.

Most of the samples of herbarium plants (fig. 3) were collected by Studniczka himself (61 herbarium sheets), while others were sent to him by: Borbás (10), Freyn (8), Eggert (7),

Halácsy (4), Brandmayer (4), Gandoger (3), Groves (3), Kumlien (3) and others.

The oldest herbarium sheet dates from 1867, where as the newest ones date from 1902. The vast majority of herbarium sheets (74), was collected during the period from 1871 to 1880 (fig. 4). The exact year of collection is missing from eight herbarium labels.

According to Studniczka, within 121 herbarium sheets (orders Campanulaceen, Cacteen and Halorageen) there are 15 genera with 76 species, and 20 varieties. The most species represented genera are: *Campanula* (45 species and 13 varieties), and *Phyteuma* (8 species and 1 variety). According to The Plant list and USDA plants Database there are 18 genera with 70 species of plants and 9 subspecies. The most species respresented genera are: *Campanula* (35 species and 7 ssp.) and *Phyteuma* (6 species).

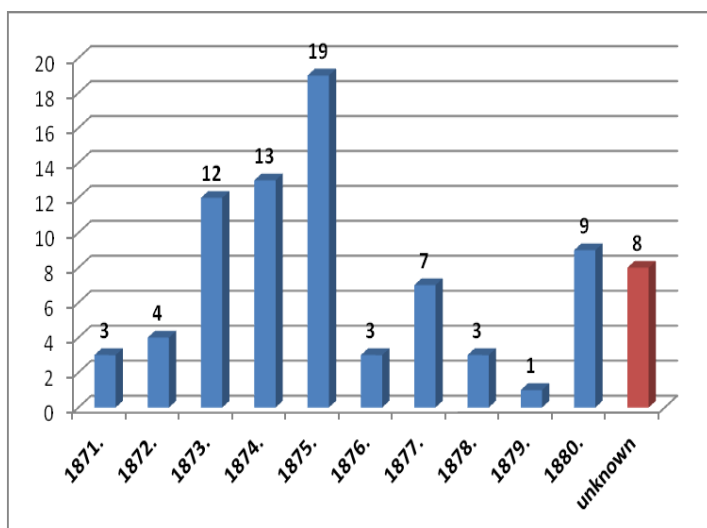


Figure 4:
Number of herbarium sheets according to the year of collection (orders Campanulaceen, Cacteen and Halorageen).

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