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The Theodor Schreiber Herbarium in the Botanical Collection of the Țării Crișurilor Museum in Oradea, Bihor County (part I)

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Abstract. This paper aims to initiate the evaluation of the data and information contained in a herbarium bound and with hard covers, labeled with the name of Theodor Schreiber, and representing a part of a larger herbarium included in the Botanical Collection of the Țării Crișurilor Museum in Oradea in 1955 by transfer from the then Highschool no. 4 in Oradea. The bound volume contains 92 sheets, respectively 187 pages with botanized plants received from different collectors of that epoch. The collection is considered to date from the 19th century and the collection areas are mostly from the former Austro-Hungarian Empire (mostly from Austria, but also from Switzerland, Hungary, Slovakia, Slovenia, Italy, the Czech Republic, Germany and Romania). After processing the material, we arranged it according to an updated taxonomic classification, specifying the accepted name, and where it was possible, the location, the date and the author of the collection (where mentioned or identified by signature). Here we present a number of 200 species belonging to 118 genera and 45 families.

Introduction

This paper attempts to value the information contained in the bound, hard-covered herbarium labeled with the name of Theodor Schreiber (Szárnövények készítette Schreiber Th. – 1866), representing a part of a larger herbarium belonging

to the same author but whose sheets are not bound. This herbarium entered in the Botanical Collection of the Țării Crișurilor Museum on December 15, 1955, being transferred from the Highschool no. 4 in Oradea, the former Gymnasium of the Premonstratensian Order which functioned around the Premonstratensian Monastery of the "Mother of Sorrows", the today National College „Mihai Eminescu”. This paper refers only to the bound, hard-covered herbarium which contains 92 sheets, respectively 187 numbered pages with botanized plants, collected by several authors whose names, acronyms or signatures are not always mentioned and neither are the date or location of their collection. Even when signatures existed and locations were mentioned, the legibility of the handwriting often proved indecipherable. The collection period should be the 19th century if considered the time mentions on some labels. As with regard to the collection areas, most of them belong to the former Austro-Hungarian Empire, which are today in several European countries, mostly in Austria, but also in Switzerland, Hungary, Slovakia, Slovenia, Italy, the Czech Republic, Germany and Romania. Among the collectors we identified there are personalities famous in the world of naturalists (herbalists) at the time, who specialized in plant taxonomy, even if their work was more or less connected to botany (as they were doctors, pharmacists or teachers). Thus we mention the names of a number of collectors in the Austrian areas such as Jakob Juratzka, J. C. Equis a Pittoni, Gustav Mayr, J. Reiche, Alois Friedrich Rogenhofer, Robert Rauscher, J. v. Niessl ori Andorfer; or of seome collectors who activated in Austrian, German and Hungarian areas such as H. W. Reichardt, P. Krabler, Joseph Leithner, J.N. Buek or Johan Baptist Duftschmid. We also found collectors who worked in more restricted areas, such as Ettel Josephine Kablik (J. Kablikova) in the Czech Republic (Boemia), Elise Braig in Italy (Trieste), Wilhelm August Schneller in Slovakia (Bratislava), Julius Wolff in Transylvania (Cluj), and Winkler Moritz who collected in Germany, Hungary and Switzerland. Besides the fact that they are names of collectors that we found nothing special about or their signatures could not be deciphered, there are samples with no mention of any author.

Material and method

The examined material represents an album-like, bound, hard-covered herbarium consisting of 92 sheets, respectively 187 numbered pages, containing botanized plants in the collection of the Țării Crișurilor Museum in Oradea, as highlighted

by the inventory number following the botanical denominations next to the number of the page where the plant is found. When rendering the names of the species, we considered the accepted scientific name, with the mention of the reference source of its first description and its synonyms. To verify and update the data, we used the database of Royal Botanical Garden Edinburgh – *Flora Europaea* and *uBio Portal* (www.ubio.org/portal/-5k), and The Plant List database (<http://www.theplantlist.org/>). When presenting the systematical units, we consulted the study of V. Ciocârlan (2000), which follows the rules and recommendations of the International Code for Botanical Cataloguing, and the site *Systema Naturae 2000* (<http://taxonomicom.taxonomy.nl>) in order to update the taxonomic classification (the variant entered after April 7, 2012). We also mentioned the current locations of the collecting sites, the date and the collector's name when it was mentioned and the signature was legible.

Abbreviations used: n.= number of inventory; ref. = reference index for the first description of the species; leg. = the author who collected and determined the plant; Ord.= order; Fam. = Family.

Systematic part

Kingdom **Plantae** Haeckel, 1866

Viridiplantae Cavalier-Smith, 1981

Streptophyta

Embryophyta Endlicher, 1836 „**polysporangiophytes**”

Phylum **Tracheophyta** Sinnott, 1935 ex Cavalier-Smith, 1998

Subphylum **Euphyllophytina**

Infraphylum „**Radiatopses**” Kenrick & Crane, 1997 „**lignophytes**”

Clas. **Spermatopsida** „**core seed plants**”

Subclas. **Magnoliidae** Novák ex Takhtajan, 1967 „**core angiosperms**”

Superord. **Liliana** Takhtajan, 1967 „**commelinids**”

Ord. **Alismatales** R. Br. ex Bercht. & J. Presl, 1820

Fam. **Zosteraceae** Dumortier, 1829, nom. cons.

Gen **Zostera** C. Linnaeus, 1753

Zostera marina L. – (n. 8233/p. 185. 83) – Ref.: Sp. Pl. ed. 1 968 (1753); - unidentified location, no date, leg. no signature

Ord. **Asparagales** Link, 1829

Fam. **Alliaceae** Batsch ex Borkh., 1797, nom. cons.

Subfam. **Allioideae** (Borkh., 1797) Herb., 1837

Trib. **Allieae** (Borkh., 1797) Dumort., 1827

Gen. **Allium** C. Linnaeus, 1753

Allium senescens L. subsp. **montanum** (F. W. Schmidt) Holub – (n. 8233/p. 79) – Ref.: Folia Geobot. Phytotax. (Prague) 5:341 (1970); Syn.: *A. fallax* Schult. & Schult., nom. illegit.; *A. lusitanicum* Lam.; *A. montanum* F.W.Schmidt, non Schrank; - Austria, Graz, no date, leg. J. v. Niessl.

Fam. **Amaryllidaceae** Jaume Saint-Hilaire, 1805, nom. cons.

Trib. **Galantheae** Parl., 1858

Gen. **Galanthus** C. Linnaeus, 1753

Galanthus nivalis L. – (n. 8233/p. 80/b) – Ref.: Sp. Pl. ed. 1 288 (1753); - unmentioned location, no date, leg. no signature.

Fam. **Asparagaceae** A. L. de Jussieu, 1789, nom. cons.

Trib. **Hyacintheae** Dumort., 1827

Gen. **Scilla** C. Linnaeus, 1753

Scilla bifolia L. – (n. 8233/p. 81) – Ref.: Sp. Pl. ed. 1 309 (1753); Syn.: *S. bifolia* L. subsp. *bifolia* var. *nivalis* (Boiss) Baker; *S. subtriphylla* Schur; - unmentioned location, no date, leg. no signature.

Subfam. **Convallarioideae** (Dumort., 1827) Herb., 1837

Trib. **Convallarieae** Dumort., 1827

Gen. **Convallaria** C. Linnaeus, 1753

Convallaria latifolia Jacq. – (n. 8233/p. 76) – Ref.: Fl. Austriac. 3: 18, t. 232. 1775; Syn.: *C. hirta* Bosc ex Poir.; *Polygonatum hirtum* (Bosc ex Poir) Pursh; *P. latifolium* (Jacq.) Desf.; - Austria, Vienna, no date, leg. illegible signature.

Fam. **Orchidaceae** A. L. de Jussieu, 1789, nom. cons.

Subfam. **Orchidoideae**

Trib. **Orchideae** Small, 1933

Subtrib. **Orchidinae** Rchb., 1841

Gen. **Dactylorhiza** Necker ex Nevski, 1937

Dactylorhiza maculata (L.) Soó – (n. 8233/p. 176. 74) – Ref.: Nom. Nov. Gen. *Dactylorhiza* 7 (1962); Syn.: *Orchis maculata* L.; *O. maculata* L. subsp. *maculata* var. *maculata*; *O. cornubiensis* Pugsley; *Dactylorchis maculata* (L.) Verm.; *D. maculata* (L.) Verm. subsp. *maculata*; - unmentioned location, no date, leg. no signature.

Ord. **Liliales** Perleb, 1826

Fam. **Liliaceae** A. L. de Jussieu, 1789, nom. cons.

Subfam. **Lilioideae**

Trib. **Lloydieae**

Gen. **Gagea** R.A. Salisbury, 1806

Gagea arvensis (Pers) Dumort. – (n. 8233/p. 80/a) – Ref.: Fl. Belg. 140 (1827); Syn.: *G. arvensis* Schult.; *G. villosa* (M. Bieb.) Duby; - unmentioned location, no date, leg. no signature.

Fam. **Melanthiaceae** Batsch, 1802, nom. cons.

Gen. **Veratrum** C. Linnaeus, 1753

Veratrum nigrum L. – (n. 8233/p. 77) – Ref.: Sp. Pl. ed. 1 1044 (1753); - unidentified location, no date, leg. H. W. Reichardt (stem and foliage)

V. nigrum L. – (n. 8233/p. 78) – Ref.: Sp. Pl. ed. 1 1044 (1753); - unidentified location, no date, leg. H. W. Reichardt. (bloom).

Ord. **Poales** Small, 1903

Fam. **Juncaceae** A. L. de Jussieu, 1789, nom. cons.

Gen. **Juncus** C. Linnaeus, 1753

Juncus bufonius L. – (n. 8233/p. 75) – Ref.: Sp. Pl. ed. 1 328 (1753); Syn.: *J. dregeanus* C. Presl.; *J. divaricatus* Gilib.; - Austria, Vienna, no date, leg. no signature

J. inflexus L. subsp. inflexus – (n. 8233/p. 74) – Ref.: Sp. Pl. ed. 1 326 (1753); Syn.: *J. glaucus* Ehrh. ex P. Gaertn., B. Mey. & Scherb.; - unmentioned location, no date, leg. H. W. Reichardt.

Fam. **Cyperaceae** A. L. de Jussieu, 1789, nom. cons.

Subfam. **Caricoideae**

Gen. **Carex** C. Linnaeus, 1753

Carex digitata L. – (n. 8233/p. 24) – Ref.: Sp. Pl. ed. 1 975 (1753); Syn.: *C. digitata* L. subsp. *piroskana* (Nyár) S.Eerb. & Nyár.; *C. digitata* L. subsp. *bulgarica* (Velen) Nyman; *C. ornithopoda* auct. balcan. pro parte, non Willd.; - unmentioned location, no date, leg. no signature (ex Herbario Jos. Bon. Holzingerj).

C. flacca Schreb. subsp. flacca – (n. 8233/p. 23) – Ref.: Spicil. Fl. Lips. App. 178 (1771); Syn.: *C. glauca* Scop.; *C. glauca* Scop. subsp. *glauca*; *C. diversicolor* Crantz var. *claviformis* (Hoppe); *C. diversicolor* Crantz var. *diversicolor* pro parte; - Austria, Vienna, May 17, 1855, leg. J. Juratzka.

C. michelii Host – (n. 8233/p. 18/a) – Ref.: Syn. Pl. Austr. 507 (1797); - Austria, Vienna, no date, leg. illegible signature.

C. pendula Huds. – (n. 8233/p. 19) – Ref.: Fl. Angl. ed. 1 352 (1762); Syn.: *C. maxima* Scop.; - Slovakia, Bratislava (Pressburg), no date, leg. Schneller.
Obs.: Labels are mixed: *Carex pendula* with *Carex remota* L. (!?).

C. pilosa Scop. – (n. 8233/p. 25) – Ref.: Fl. Carn. ed. 2 2: 226 (1772); - Austria, Vienna, April 25, 1878, leg. J. Juratzka.

C. praecox Schreb. – (n. 8233/p. 26) – Ref.: Spicil. Fl. Lips. 63 (1771); Syn.: *C. schreberi* Schrank.; *C. schreberi* Schrank subsp. *schreberi*; *C. schreberi* Schrank subsp. *curvata* (Knaf) P. Fourn.; - unidentified location, no date, leg. no signature

C. remota L. – (n. 8233/p. 20) – Ref.: Fl. Angl. 24 (1754); Syn.: *C. axillaris* Gooden.; - Slovakia, Bratislava (Pressburg), no date, leg. Schneller.
- Obs. Labels are mixed: *C. pendula* with *C. remota* L. (!?)

C. sempervirens Vill. – (n. 8233/p. 22) – Ref.: Hist. Pl. Dauph. 2: 214 (1787); Syn.: *C. ferruginea* Scop. subsp. *ferruginea* var. *sempervirens* (Vill.) Fiori.; *C. sempervirens* Vill. subsp. *granatica* (Braun-Blanq) C. Vicioso; *C. sempervirens* Vill. subsp. *tristis* auct. eur., non (M. Bieb.) Kük.; *C. tatroum* (Zapal) Racib.; - Austria, Vienna, no date, leg. J. Juratzka.

C. stenophylla Wahlenb. – (n. 8233/p. 21) – Ref.: Kungl. Svenska Vet.-Akad. Handl. nov. ser. 24:142 (1803); Syn.: *C. divisa* Huds. subsp. *divisa* var. *stenophylla* (Wahlenb) Fiori; *C. uralensis* C. B. Clarke.; - Austria, Vienna (in arenois - ?), June 15, 1850, leg. J. Juratzka.

Subfam. **Cyperoideae**

Trib. **Cypereae** Dumort., 1829

Gen. **Cyperus** C. Linnaeus, 1753

Cyperus longus L. – (n. 8233/p. 27) – Ref.: Sp. Pl. ed. 1 45 (1753); Syn.: *Chlorocyperus longus* (L.) Palla; *Cyperus myriostachys* Ten.; *C. preslii* Parl.; *Pycneus longus* (L.) Hayek; - Austria, Vienna, no date, leg. Rogenhofer.

Fam. **Gramineae** A. L. de Jussieu, 1789, nom. cons., nom. alt.

Subfamily **Chloridoideae**

Trib. **Cynodonteae** Dumort., 1824

Gen. **Crypsis** W. Aiton, 1789, nom. cons.

Crypsis alopecuroides (Piller & Mitterp) Schrad. – (n. 8233/p. 28) – Ref.: Fl. Germ. 167 (1806); Syn.: *C. nigricans* Guss.; *Heleochoa alopecuroides* (Piller &

Mitterp) Host ex Roem.; - Hungary, Szeged, no date, leg. Gustav Mayr

Subfam. **Pooideae**

Trib. **Poeae** R. Br., in M. Flinders, 1814

Gen. **Sesleria** Scopoli, 1760

Sesleria caerulea (L.) Ard. – (n. 8233/p. 18/b) – Ref.: Animadv. Bot. Spec. Alt. 18 (1764); Syn.: *S. caerulea* (L.) Ard. subsp. *uliginosa* (Opiz) Hayek.; *S. uliginosa* Opiz; - Austria, unidentified location, no date, leg. no signature.

„core angiosperms”, „eudicots”

Superord. **Ranunculanae** Takhtajan ex Reveal, 1992

Ord. **Ranunculales** Dumortier, 1829

Fam. **Berberidaceae** A. L. de Jussieu, 1789, nom. cons.

Subfam. **Berberidoideae**

Trib. **Berberideae** Rchb., 1832

Gen. **Berberis** C. Linnaeus, 1753

Berberis vulgaris L. – (n. 8233/p. 82) – Ref.: Sp. Pl. ed. 1 330 (1753); - unmentioned location, no date, leg. H. W. Reicherdt.

Fam. **Ranunculaceae** A. L. de Jussieu, 1789, nom. cons.

Subfam. **Ranunculoideae**

Trib. **Adonideae** Horan., 1847

Gen. **Adonis** C. Linnaeus, 1753

Adonis aestivalis L. – (n. 8233/p. 114) – Ref.: Sp. Pl. ed. 2 771 (1762); - unidentified location, May 1855, leg. no signature.

Trib. **Anemoneae** DC., 1817

Gen. **Anemone** C. Linnaeus, 1753

Anemone halleri All. – (n. 8233/p. 110) – Ref.: Auctorium synops. meth. stirp. horti reg. Taurine 40. 1773 (Mélanges Philos. Math. Soc. Roy. Turin 5:92. 1774); Syn.: *Pulsatilla halleri* (All) Willd.; - unmentioned location, no date, leg. J. v. Niessl.

A. nemorosa L. – (n. 8233/p. 111) – Ref.: Sp. pl. 1:541. 1753; Syn.: *A. nemorosa* var. *nemorosa* L.; *Anemonidium nemorosum* (L.) Holub.; - Switzerland, in Nuen, Baldern, April, May 4, leg. no signature.

A. sylvestris L. – (n. 8233/p. 106) – Ref.: Sp. Pl. 1: 540. 1753 (1 May 1753); Syn.: *A. sylvestris* Vill.; *A. sylvestris* var. *ochotensis* Fisch.; - unidentified location, no date, leg. Dr. Rauscher.

Gen. **Hepatica** P. Miller, 1754

Hepatica nobilis Schreb. – (n. 8233/p. 53/a) – Ref.: Gard. Dict. ed. 8 no. 1 (1768);

Syn.: *H. triloba* Chaix.; *Anemone angulosa* auct., non Lam.; *A. hepatica* L.; - unmentioned location, no date, leg. no signature.

Gen. ***Pulsatilla*** P. Miller, 1754

***Pulsatilla vulgaris* Mill.** – (n. 8233/p. 107) – Ref.: Gard. dict. ed. 8: *Pulsatilla* no. 1. 1768; Syn.: *Anemone pulsatilla* L.; *A. serotina* (Schur) Coste; *Pulsatilla vulgaris* var. *serotina* Schur.; - unidentified location, no date, leg. no signature.

***P. vernalis* (L.) Mill.** – (n. 8233/p. 108) – Ref.: Gard. Dict., ed. 8. n. 3. 1768 [16 Apr. 1768]; Syn.: *Anemone vernalis* L.; - The Czech Republic, beim Teufelgärtchen, no date, leg. Josephine Kablik.

Trib. ***Delphinieae*** Schrödinger, 1909

Gen. ***Consolida*** (DC) S.F. Gray, 1821

Consolida regalis* Gray subsp. *regalis – (n. 8233/p. 115) – Ref.: Nat. Arr. Brit. Pl. 2: 711 (1821); Syn.: *Delphinium consolida* L.; *D. consolida* L. subsp. *arvense* (Opiz) Graebn.; *D. consolida* L. subsp. *consolida*; *Consolida regalis* Gray subsp. *arvensis* (Opiz) Soó; - Austria, Vienna, no date, leg. no signature.

Trib. ***Helleboreae*** DC., 1817

Gen. ***Trollius*** C. Linnaeus, 1753

***Trollius europaeus* L.** – (n. 8233/p. 105) – Ref.: Sp. Pl. ed. 1 556 (1753); - unidentified location, no date, leg. Rogenhofer.

Trib. ***Ranunculeae***

Gen. ***Ranunculus*** C. Linnaeus, 1753

***Ranunculus acris* L.** – (n. 8233/p. 113) – Ref.: Sp. pl. 1:554. 1753; Syn.: *R. acer* Auct.; *R. stevenii* Beck; - unidentified location, no date, leg. no signature.

***R. bulbosus* L.** – (n. 8233/p. 112) – Ref.: Sp. pl. 1:554. 1753; Syn.: *R. bulbosus* L. var. *dissectus* Barbey.; *R. bulbosus* L. var. *valdepubens* (Jord) Briq.; - Austria, Graz, Blabutsch, May 15, 1845, leg. J. v. Niessl.

„**core eudicots**”

Superord. ***Rosanae*** Takhtajan, 1967

„**fabids**”

Ord. ***Cucurbitales*** Juss. ex Bercht. & J. Presl, 1820

Fam. ***Cucurbitaceae*** A. L. de Jussieu, 1789, nom. cons

Subfam. ***Cucurbitoideae***

Trib. ***Benincaseae*** Ser., 1825

Gen. ***Bryonia*** C. Linnaeus, 1753

Bryonia alba L. – (n. 8233/p. 177. 75) – Ref.: Sp. Pl. ed. 1 1012 (1753); - unidentified location, no date, leg. no signature.

Gen. **Ecballium** A. Richard, in Bory de St.-Vincent, 1824, nom. cons.

Ecballium elaterium (L.) A. Rich. – (n. 8233/p. 183. 81) – Ref.: Dict. Class. Hist. Nat. 6: 19 (1824); Syn.: *Momordica elaterium* L.; - Italy, Trieste (S. Anare), 20.09.1855, leg. Elise Braig.

Ord. **Fabales** Bromhead, 1838

Fam. **Leguminosae** A. L. de Jussieu, 1789, nom. cons.

Gen **Lembotropis**

Lembotropis nigricans (L.) Griseb. subsp. *australis* (Freyn ex Wohlf.) Holub – (n. 8233/p. 144. 2) – Ref.: Syn.: *Cytisus australis* (Freyn ex Wohlf) Rothm.; *C. nigricans* L. var. *australis* (Freyn ex Wohlf) Hayek; - Austria, Bezirk Krems-Land, Langenlois, no date, leg. no signature.

L. nigricans (L.) Griseb. – (n. 8233/p. 145. 43) – Ref.: Spicil. Fl. Rumel. 1: 10 (1843); Syn.: *Cytisus nigricans* L.; - Austria, Graz, no date, leg. J. v. Niessl.

Subfam. **Papilionoideae** (Giseke, 1792) DC., 1825

Trib. **Galegeae** Bronn, in B.C.J. Dumortier, 1827

Gen. **Astragalus** C. Linnaeus, 1753

Astragalus cicer L. – (n. 8233/p. 146. 44) – Ref.: Sp. Pl. ed. 1 757 (1753); - Austria, Viena, June 12 1856, leg. illegible signature.

Gen. **Colutea** C. Linnaeus, 1753

Colutea arborescens L. – (n. 8233/p. 147. 45) – Ref.: Sp. Pl. ed. 1 723 (1753); Syn.: *C. arborescens* var *bullata* G. Nicholson.; *C. arborescens* subsp. *gallica* forma *brevialata*; - Austria, Vienna, no date, leg. no signature.

Trib. **Hedysareae** DC., 1825

Gen. **Onobrychis** P. Miller, 1754

Onobrychis viciifolia Scop. – (n. 8233/p. 182. 80) – Ref.: Fl. Carn. ed. 2 2: 76 (1772); Syn.: *O. sativa* Lam.; *O. sativa* Lam. var. *sativa*; *O. vulgaris* Hill; - Austria, Vienna, no date, leg. Dr. Rauscher

Trib. **Loteae** DC., 1825

Gen. **Anthyllis** C. Linnaeus, 1753

Anthyllis montana L. – (n. 8233/p. 152. 50/b) – Ref.: Sp. Pl. ed. 1 719 (1753);

Syn.: *Vulneraria montana* Scopoli.; - unmentioned location, no date, leg. no signature.

Trib. **Trifolieae**

Gen. **Medicago** C. Linnaeus, 1753

Medicago sativa L. – (n. 8233/p. 149. 47) – Ref.: Sp. Pl. ed. 1 778 (1753); - Austria, Bezirk Krems-Land, Langenlois, no date, leg. Andorfer

M. sativa L. subsp. **falcata** (L.) Arcang. – (n. 8233/p. 150. 48) – Ref.: Comp. Fl. Ital. ed. 1 160 (1882); Syn.: *M. falcata* L.; *M. falcata* L. var. *falcata*; *M. romani-ca* Prodán; - unidentified location, no date, leg. H. W. Reichardt

Fam. **Polygalaceae** Hoffmanns. & Link, 1809, nom. cons.

Trib. **Polygaleae**

Gen. **Polygala** C. Linnaeus, 1753

Polygala amara L. – (n. 8233/p. 151. 49/a) – Ref.: Syst. Nat. ed. 10 2: 1154 (1759); - unmentioned location, no date, leg. no signature.

P. chamaebuxus L. – (n. 8233/p. 152. 50/a) – Ref.: Sp. Pl. ed. 1 704 (1753); Syn.: *Chamaebuxus alpestris* Spach.; - unmentioned location, no date, leg. no signature.

Polygala vulgaris L. – (n. 8233/p. 151. 49/b) – Ref.: Sp. Pl. ed. 1 702 (1753); Syn.: *P. angustifolia* Lange.; *P. carniolica* A.Kern. var. *stojanovii* (Stef) Stoj. & Stef.; *P. ciliata* Lebel ex Gren.; *P. vulgaris* L. subsp. *tempskayana* (Degen & Dörfel) Hayek; - Austria, Graz, (Blabutsch bei Gratz), no date, leg. no signature.

Ord. **Fagales** Engler, 1892

Fam. **Betulaceae** Gray, 1821, nom. cons.

Subfam. **Betuloideae**

Gen. **Alnus** P. Miller, 1754

Alnus incana (L.) Moench – (n. 8233/p. 180. 78) – Ref.: Meth. 424 (1794); - Austria, Vienna, no date, leg. J. Juratzka

Ord. **Malpighiales** C. Martius, 1835

Fam. **Euphorbiaceae** A. L. de Jussieu, 1789, nom. cons.

Gen. **Euphorbia**

Euphorbia cyparissias L. – (n. 8233/p. 97) – Ref.: Sp. Pl. ed. 1 461 (1753); - unidentified location, no date, leg. Dr. G. Mayr

Fam. **Linaceae** A.P. de Candolle ex Perleb, 1818, nom. cons.

Subfam. **Linoideae**Trib. **Lineae** Rchb., 1832

Gen. **Linum** C. Linnaeus, 1753

Linum catharticum L. – (n. 8233/p. 73) – Ref.: Sp. Pl. ed. 1 281 (1753); - unidentified location, no date, leg. no signature.

L. flavum L. – (n. 8233/p. 71) – Ref.: Sp. Pl. ed. 1 279 (1753); Syn.: *L. hungaricum* Podp.; - Austria, Lunz (in grammosis arudis), no date, leg. no signature.

L. tenuifolium L. – (n. 8233/p. 72) – Ref.: Sp. Pl. ed. 1 278 (1753); - Slovenia, Krain bei Teriantschitsch, no date, leg. J. v. Niessl.

Fam. **Salicaceae** Mirbel, 1815, nom. cons.

Trib. **Saliceae**

Gen. **Salix** C. Linnaeus, 1753

Salix alba L. – (n. 8233/p. 179. 77) – Ref.: Sp. Pl. ed. 1 1021 (1753); - unidentified location, no date, leg. Dr. Rauscher

S. elaeagnos Scop. – (n. 8233/p. 178. 76) – Ref.: Fl. Carn. ed. 2 2: 257 (1772); Syn.: *S. incana* Schrank.; - Austria, Vienna, 19.04. and 20.08.1855, leg. J. Juratzka

Fam. **Violaceae** Batsch, 1802, nom. cons.

Subfam. **Violoideae**Trib. **Violeae**

Gen. **Viola** C. Linnaeus, 1753

Viola biflora L. – (n. 8233/p. 58/b) – Ref.: Sp. Pl. ed. 1 936 (1753); - unmentioned location, no date, leg. no signature.

V. odorata L. – (n. 8233/p. 58/a) – Ref.: Sp. Pl. ed. 1 934 (1753); Syn.: *V. stolonifera* Rodr.; - unmentioned location, no date, leg. no signature

V. tricolor L. – (n. 8233/p. 57/b) – Ref.: Sp. Pl. ed. 1 935 (1753); - unmentioned location, no date, leg. H. W. Reichardt.

Ord. **Rosales** Perleb, 1826

Fam. **Rosaceae** A. L. de Jussieu, 1789, nom. cons.

Trib.: **Potentilleae**Subtrib.: **Fragariinae**

Gen. **Fragaria** L.

Fragaria vesca L. – (n. 8233/p. 104) – Ref.: Reference: Sp. Pl. ed. 1 494 (1753); Syn.: *F. vesca* subsp. *vesca*.; - Austria, Bezirk Krems-Land, Langenlois, no date, leg. Andorfer.

Trib. **Rubeae**

Gen. **Rubus** C. Linnaeus, 1753

Rubus humifusus **Weihe & Nees** – (n. 8233/p. 102) – Ref.: Comp. Fl. Germ. 1: 685 (1825); syn: *R. flagellaris* var. *humifusus* (Torr. & Gray) Boivin; - unidentified location, no date, leg. Reicher.

R. pallidus **Weihe & Nees** – (n. 8233/p. 103) – Ref.: Comp. Fl. Germ. 1: 682 (1825); - unidentified location, no date, leg. no signature.

Fam. **Urticaceae** A. L. de Jussieu, 1789, nom. cons.

Trib. **Parietarieae** Gaudich., in H.L.C. de Saulces de Freycinet, 1830

Gen. **Parietaria** C. Linnaeus, 1753

Parietaria officinalis **L.** – (n. 8233/p. 29) – Ref.: Sp. Pl. ed. 1 1052 (1753); Syn.: *P. erecta* Mert. & W.D.J.Koch.; - Austria, Vienna (Prater Park), Jun 19 1856, leg. illegible signature. (label: Ex Herbario Jos. Ron. Holzinger).

„malvids”

Ord. **Brassicales** Bromhead, 1838

Fam. **Cruciferae** A. L. de Jussieu, 1789, nom. cons., nom. alt.

Gen. **Erophila** DC.

Erophila verna (**L.**) **Chevall.** – (n. 8233/p. 142. 0/b) – Ref.: Fl. Gén. Env. Paris ed. 1 2: 898 (1827); syn.: *Draba verna* L.; *D. verna* L. subsp. *verna*; *Erophila stenocarpa* Jord.; *E. vulgaris* DC.; - unmentioned location, no date, leg. no signature.

Gen. **Kernera** Medik.

Kernera saxatilis (**L.**) **Rchb.** – (n. 8233/p. 141. 39/b) – Ref.: Handb. ed. 2 2: 1142 (1828); Syn.: *Cochlearia saxatilis* L.; - unmentioned location, no date, leg. no signature.

Trib. **Cardamineae** Dumort., 1827

Gen. **Barbarea** R. Brown, in W. Aiton & W.T. Aiton, 1812, nom. cons.

Barbarea vulgaris **R. Br.** – (n. 8233/p. 137. 5) – Ref.: Hort. Kew. ed. 2 4: 109 (1812); Syn.: *B. arcuata* (Opiz ex J. Presl & C. Presl) Rchb.; *B. iberica* (Willd) DC.; *B. lyrata* Asch.; *B. macrophylla* Halácsy; - Austria, Graz, Schlossberg, May 14, 1855, leg. J. v. Niessl.

Gen. **Cardamine** C. Linnaeus, 1753

Cardamine bulbifera (**L.**) **Crantz** – (n. 8233/p. 140. 38) – Ref.: Class. Crucif. 127 (1769); Syn.: *Dentaria bulbifera* L.; - unmentioned location, no date, leg. H. W. Reichardt.

C. pratensis L. – (n. 8233/p. 139. 7) – Ref.: Sp. Pl. ed. 1 656 (1753); - Austria, Graz, no date, leg. Niessl

Gen. **Nasturtium** R. Br.

Nasturtium sp. – (n. 8233/p. 138. 6) – Ref.: Hort. Kew. ed. 2 4: 109 (1812); - unmentioned location, no date, leg. no signature.

Trib. **Iberideae** Webb & Berthel., 1837

Gen. **Iberis** C. Linnaeus, 1753

Iberis amara L. – (n. 8233/p. 141. 39/a) – Ref.: Sp. Pl. ed. 1 649 (1753); Syn.: *I. coronaria* hort.; *I. pinetorum* Pau; - unidentified location, no date, leg. no signature.

Trib. **Thlaspideae**

Gen. **Thlaspi** C. Linnaeus, 1753

Thlaspi arvense L. – (n. 8233/p. 142. 0/a) – Ref.: Sp. Pl. ed. 1 646 (1753); - unmentioned location, no date, leg. no signature.

Fam. **Resedaceae** Augier, 1801 ex Martinov, 1820, nom. cons.

Trib. **Resedaeae**

Gen. **Reseda** C. Linnaeus, 1753

Reseda phyteuma L. – (n. 8233/p. 99) – Ref.: Sp. Pl. ed. 1 449 (1753); Syn.: *R. aragonensis* Loscos & J. Pardo; *R. litigiosa* Sennen & Pau; - Austria, Bezirk Krems-Land, Langenlois, no date, leg. Vialbrunner.

Ord. **Geraniales** Dumortier, 1829

Fam. **Geraniaceae** A. L. de Jussieu, 1789, nom. cons.

Trib. **Geranieae** (A. L. de Jussieu, 1789) Sweet, 1820

Gen. **Erodium** L'Hérit.

Erodium cicutarium (L.) L'Hér. – (n. 8233/p. 143. 1) – Ref.: Hort. Kew. ed. 1 2: 414 (1789); Syn.: *E. viscosum* sensu Samp., vix (Mill) Steud.; - unmentioned location, no date, leg. no signature.

Ord. **Malvales** Dumortier, 1829

Fam. **Malvaceae** A. L. de Jussieu, 1789, nom. cons.

Subfam. **Malvoideae**

Trib. **Malveae** J. Presl, 1826

Gen. **Abutilon** P. Miller, 1754

Abutilon theophrasti Medik. – (n. 8233/p. 186. 84) – Ref.: Künstl. Geschl. Malv.-

Fam. 28 (1787); Syn.: *A. avicennae* Gaertn.; - Hungary, Szeged, no date, leg. Dr. Gustav Mayr.

Fam. **Thymelaeaceae** A. L. de Jussieu, 1789, nom. cons.

Subfam. **Thymelaeoideae** (A. L. de Jussieu, 1789) Burnett, 1835

Trib. **Daphneae** (Vent., 1799) Meisn., 1841

Gen. **Daphne** C. Linnaeus, 1753

Daphne cneorum L. – (n. 8233/p. 84) – Ref.: Sp. Pl. ed. 1 357 (1753); Syn. *D. julia* Koso-Pol.; - Austria, Vienna, no date, leg. no signature.

„core eudicots”

Ord. **Saxifragales** Dumortier, 1829

Fam. **Crassulaceae** J. St.-Hil., 1805, nom. cons.

Subfam. **Sedoideae**

Trib. **Sedeae**

Gen. **Sedum** C. Linnaeus, 1753

Sedum album L. – (n. 8233/p. 94) – Ref.: Sp. Pl. ed. 1 432 (1753); Syn.: *S. atho-um* DC.; *S. serpentini* Janch.; *S. vermiculifolium* P. Fourn.; - unidentified location, July 1846, leg. illegible signature.

Gen. **Sempervivum** C. Linnaeus, 1753

Sempervivum arachnoideum L. - (n. 8233/p. 101/b) – Ref.: Sp. Pl. ed. 1 465 (1753); - unidentified location, no date, leg. illegible signature

S. funckii Braun ex W. D. J. Koch – (n. 8233/p. 101/a) – Ref.: Anton Hartinger, *Sempervivum funckii*, Braune - Funk's Hauswurz., 1882, *Atlas der Alpenflora* Volume 2, p. 170.; - unidentified location, no date, leg. no signature.

S. hirsutum Pollini – (n. 8233/p. 100) – Ref.: Fl. Veron. 2: 113 1822; - Austria, Vienna, no date, leg. Miller.

Fam. **Grossulariaceae** A.P. de Candolle, 1805, nom. cons.

Gen. **Ribes** C. Linnaeus, 1753

Ribes alpinum L. – (n. 8233/p. 51) – Ref.: Sp. Pl. ed. 1 200 (1753); Syn.: *R. lucidum* Kit.; - unidentified location, July 1852, leg. illegible signature (label: Wiener Tausch-Herbarium)

Fam. **Saxifragaceae** A. L. de Jussieu, 1789, nom. cons.

Genus **Saxifraga** C. Linnaeus, 1753

Saxifraga hirculus L. – (n. 8233/p. 85/a) – Ref.: Sp. Pl. ed. 1 402 (1753); Syn.: *S.*

autumnalis L.; - unmentioned location, no date, leg. no signature.

S. aizoides L. – (n. 8233/p. 85/b) – Ref.: Sp. Pl. ed. 1 403 (1753); Syn.: *S. aizoides* Miégev.; *S. autumnalis* auct., vix L.; - unmentioned location, no date, leg. no signature.

S. exarata Vill. – (n. 8233/p. 86/a) – Ref.: Prosp. Pl. Dauph. 47 (1779); Syn.: *S. muscoides* Wulfen, non All.; *S. adenophora* K. Koch; *S. varians* Sieber; *S. tenuifolia* Rouy & E. G. Camus; - unmentioned location, no date, leg. no signature.

S. adscendens L. – (n. 8233/p. 86/b) – Ref.: Sp. Pl. ed. 1 405 (1753); Syn.: *S. controversa* Sternb.; - unidentified location (altitude 4500 m), no date, leg. no signature.

S. androsacea L. – (n. 8233/p. 87/a) – Ref.: Sp. Pl. ed. 1 399 (1753); - unmentioned location, no date, leg. no signature.

S. stellaris L. – (n. 8233/p. 87/b) – Ref.: Sp. Pl. ed. 1 400 (1753); - unidentified location, no date, leg. no signature

S. aspera L. – (n. 8233/p. 88/a) – Ref.: Sp. Pl. ed. 1 402 (1753); Syn.: *S. etrusca* Pignatti; - unmentioned location, no date, leg. no signature

S. tridactylites L. - (n. 8233/p. 88/b) – Ref.: Sp. Pl. ed. 1 404 (1753); - unmentioned location, no date, leg. no signature.

S. rotundifolia – (n. 8233/p. 89) – Ref.: Sp. Pl. ed. 1 403 (1753); Syn.: *S. olympica* Boiss.; - unidentified location , July 6 , 1854, leg. illegible signature.

S. facchinii W. D. J. Koch – (n. 8233/p. 90/a) – Ref.: Flora (Regensb.) 25: 624 (1842); - unmentioned location, no date, leg. no signature (Obs.: missing plant).

S. squarrosa Sieber - (n. 8233/p. 90/b) – Ref.: Flora (Regensb) 4: 99 (1821); - unmentioned location, no date, leg. no signature.

S. paradoxa Sternb. – (n. 8233/p. 184. 82) – Ref.: Revis. Saxifr. 22 (1810); Syn.: *Zahlbrucknera paradoxa* (Sternb) Rchb.; - unmentioned location, no date, leg. no signature.

Superord. **Caryophyllanae** Takhtajan, 1967

Ord. **Caryophyllales** Juss. ex Bercht. & J. Presl, 1820

Fam. **Amaranthaceae** A. L. de Jussieu, 1789, nom. cons.

Subfam. **Chenopodioideae**Trib. **Atripliceae** Duby, 1828

Gen. **Atriplex** C. Linnaeus, 1753

Atriplex laciniata L. – (n. 8233/p. 65) – Ref.: Sp. Pl. ed. 1 1053 (1753); Syn.: *A. sabulosa* Rouy.; *A. arenaria* J.Woods; *A. maritima* L.; - Austria, Vienna, no date, leg. H. W. Reichardt.

A. tatarica L. – (n. 8233/p. 64) – Ref.: Sp. Pl. ed. 1 1053 (1753); Syn.: *A. laciniata* auct., non L.; *A. laciniata* sensu H. J. Coste, non L.; *A. tornabenii* Tineo; - Austria, Vienna, Sept. 21, 1856, leg. J. Juratzka.

Trib **Chenopodieae** Dumort., 1829

Gen. **Chenopodium** C. Linnaeus, 1753

Chenopodium vulvaria L. – (n. 8233/p. 66) – Ref.: Sp. Pl. ed. 1 220 (1753); Syn.: *C. foetidum* Lam.; *C. olidum* Curtis; - unmentioned location, no date, leg. H. W. Reichardt.

Fam. **Caryophyllaceae** A. L. de Jussieu, 1789, nom. cons.Subfam. **Alsinoideae**Trib. **Alsineae** Lam. & DC., 1806

Gen. **Stellaria** C. Linnaeus, 1753

Stellaria holostea L. – (n. 8233/p. 92) – Ref.: Sp. Pl. ed. 1 422 (1753); - Austria, Graz, no date, leg. J. v. Niessl.

Subfam. **Caryophylloideae**Trib. **Caryophylleae** Lam. & DC., 1806

Gen. **Dianthus** C. Linnaeus, 1753

Dianthus superbus L. – (n. 8233/p. 91) – Ref.: Fl. Suec. ed. 2 146 (1755); - unidentified location, no date, leg. illegible signature.

Trib. **Sileneae**

Gen. **Lychnis** C. Linnaeus, 1753

Lychnis viscaria L. – (n. 8233/p. 93) – Ref.: Sp. Pl. ed. 1 436 (1753); Syn.: *Viscaria viscosa* Asch.; *V. vulgaris* Bernh.; - unmentioned location, no date, leg. H. W. Reichardt.

Gen. **Silene** C. Linnaeus, 1753

Silene latifolia Poir. subsp. **alba** (Mill) Greuter & Burdet – (n. 8233/p. 33) – Ref.: Willdenowia 12: 189 (1982); Syn.: *S. pratensis* (Rafn) Godr.; *S. alba* (Mill) E.

H. L. Krause; - Austria, Vienna (In pratis fertility in Vienna), no date (July ?), leg. A. Czagl.

Fam. **Phytolaccaceae** R. Brown, 1818, nom. cons.

Subfam. **Phytolaccoideae**

Gen. **Phytolacca** C. Linnaeus, 1753

Phytolacca americana L. – (n. 8233/p. 95) – Ref.: Sp. Pl. ed. 1 441 (1753); Syn.: *P. decandra* L.; - Austria, Bezirk Krems-Land, Langenlois, no date leg. Andorfer. (stem, leaf and inflorescence)

P. americana L. – (n. 8233/p. 96) – Ref.: Sp. Pl. ed. 1 441 (1753); Syn.: *P. decandra* L.; - Austria, Bezirk Krems-Land, Langenlois, no date, leg. Andorfer (leaf)

Fam. **Polygonaceae** A. L. de Jussieu, 1789, nom. cons.

Subfamily **Polygonoideae**

Trib. **Persicarieae** Dumort., 1827

Gen. **Fagopyrum** P. Miller, 1754, nom. cons.

Fagopyrum esculentum Moench – (n. 8233/p. 83) – Ref.: Meth. 290 (1794); Syn.: *Polygonum fagopyrum* L.; *Fagopyrum vulgare* T. Nees; *F. sagittatum* Gilib.; - unidentified location, no date, leg. Dr. Rauscher

Superord. **Asteranae** Takhtajan, 1967 „**lamiids**”

Fam. **Boraginaceae** A. L. de Jussieu, 1789, nom. cons.

Subfam. **Heliotropioideae**

Gen. **Heliotropium** C. Linnaeus, 1753

Heliotropium europaeum L. – (n. 8233/p. 52) – Ref.: Sp. Pl. ed. 1 130 (1753); Syn.: *H. europaeum* L. subsp. *europaeum* var. *tenuiflorum* Guss.; *H. europaeum* L. subsp. *tenuiflorum* (Guss) Nyman.; - Austria, Bezirk Krems-Land, Langenlois, no date, leg. Vialbrunner .

Ord. **Gentianales** Lindley, 1833

Fam. **Gentianaceae** A. L. de Jussieu, 1789, nom. cons.

Trib. **Gentianeae** (A. L. de Jussieu, 1789) Dumort., 1829

Subtrib. **Gentianinae** (A. L. de Jussieu, 1789) G. Don, 1837-1838

Gen. **Gentiana** C. Linnaeus, 1753

Gentiana acaulis L. – (n. 8233/p. 61/a) – Ref.: Sp. Pl. ed. 1 228 (1753); Syn.: *G. kochiana* E. P. Perrier & Songeon.; *G. excisa* C. Presl; - Slovenia, Carniola, bei Teriantschitsch, no date, leg. J. v. Niessl .

G. cruciata L. – (n. 8233/p. 60) – Ref.: Sp. Pl. ed. 1 231 (1753); Syn.: *Tretorhiza*

cruciata (L.) Delarbre; - Austria, Graz, no date, leg. J. v. Niessl.

Subtrib. **Swertiinae** (Griseb) Rchb., 1837

Gen. **Gentianella** Moench, 1794

Gentianella ciliata (L.) Borkh. – (n. 8233/p. 61/b) – Ref.: Arch. Bot. (Roemer) 1(1): 29 (1796); Syn.: *Gentiana ciliata* L.; - unidentified location, no date, leg. Dr. Rauscher.

Gen. **Swertia** C. Linnaeus, 1753

Swertia perennis L. – (n. 8233/p. 69) – Ref.: Sp. Pl. ed. 1 226 (1753); - The Czech Republic (Sudetenland), im Niefengebirge, no date, leg. Josephine Kablik.

Fam. **Rubiaceae** A. L. de Jussieu, 1789, nom. cons. – coffee (?)

Subfam. **Rubioideae**

Trib. **Rubieae**

Gen. **Asperula** C. Linnaeus, 1753

Asperula arvensis L. – (n. 8233/p. 32) – Ref.: Sp. Pl. ed. 1 103 (1753); - Austria, Graz (Blabutach bei Gratz), no date, leg. no signature.

Gen. **Galium** C. Linnaeus, 1753

Galium sp. – (n. 8233/p. 31) – Ref.: Sp. Pl. ed. 1 105 (1753); - Austria, Vienna, no date, leg. Dr. Rauscher.

Ord. **Lamiales** Bromhead, 1838

Fam. **Labiatae** A. L. de Jussieu, 1789, nom. cons., nom. alt.

Subfam. **Ajugoideae**

Trib. **Ajugeae** Benth., 1829

Gen. **Ajuga** C. Linnaeus, 1753

Ajuga genevensis L. – (n. 8233/p. 130. 8/a) – Ref.: Sp. Pl. ed. 1 561 (1753); - un-mentioned location, no date, leg. no signature

Subfamily **Lamioideae**

Tribe **Marrubieae** Vis., 1847

Gen. **Marrubium** C. Linnaeus, 1753

Marrubium peregrinum L. – (n. 8233/p. 119) – Ref.: Sp. Pl. ed. 1 582 (1753); Syn.: *M. cive* Klokov.; *M. creticum* Mill.; - Slovakia, Bratislava (Pressburg), no date, leg. Schneller.

Subfam. **Nepetoideae**

Trib. **Mentheae** Dumort., 1827

Subtrib. **Menthinae** Endl., 1838

Gen. **Hyssopus** C. Linnaeus, 1753

Hyssopus officinalis L. – (n. 8233/p. 118) – Ref.: Sp. Pl. ed. 1 569 (1753); - Austria, Vienna, no date, leg. H. W. Reichardt

Gen. **Prunella** C. Linnaeus, 1753

Prunella vulgaris L. – (n. 8233/p. 129. 7) – Ref.: Sp. Pl. ed. 1 600 (1753); - Slovakia, Bratislava (Pressburg), no date, leg. Schneller

Fam. **Oleaceae** Hoffmannsegg & Link, 1813-1820, nom. cons.

Trib. **Oleeae** Hoffmanns. & Link ex Dumort., 1827

Subtrib. **Ligustrinae** Koehne, 1893

Gen. **Ligustrum** C. Linnaeus, 1753

Ligustrum vulgare L. – (n. 8233/p. 17) – Ref.: Sp. Pl. ed. 1 7 (1753); - Austria, unidentified location, no date, leg. Dr. Rauscher.

Gen. **Syringa** C. Linnaeus, 1753

Syringa vulgaris L. – (n. 8233/p. 16) – Ref.: Sp. Pl. ed. 1 9 (1753); - Austria, unidentified location, no date, leg. Dr. Rauscher. (Wiener Trusch-Herbarium)

Fam. **Orobanchaceae** Ventenat, 1799, nom. cons.

Trib **Rhinantheae**

Gen. **Bartsia** C. Linnaeus, 1753

Bartsia alpina L. – (n. 8233/p. 131. 29/b,) – Ref.: Sp. Pl. ed. 1 602 (1753); - unmentioned location, no date, leg. no signature.

Gen. **Euphrasia** C. Linnaeus, 1753

Euphrasia alsa F. Muell. – (n. 8233/p. 136. 4) – Ref.: Trans. & Proc. Philos. Inst. Victoria 1: 107 1855; Syn. *E. scabra* var. *alsa* (F. Muell) J. H. Willis.: - unidentified location, no date, leg. no signature .

Gen. **Melampyrum** C. Linnaeus, 1753

Melampyrum nemorosum L. – (n. 8233/p. 117) – Ref.: Sp. Pl. ed. 1 605 (1753); Syn.: *M. subalpinum* auct., non (Jur) A.Kern.; - Austria, Graz, no date, leg. J. v. Niessl.

Gen. **Pedicularis** C. Linnaeus, 1753

Pedicularis rostratocapitata Crantz – (n. 8233/p. 131. 29/a,) – Ref.: Stirp. Austr.

ed. 2 2: 320 (1769); Syn.: *P. jacquinii* W. D. J. Koch; *P. rostrata* L.; - unmentioned location, no date, leg. no signature.

Gen. ***Rhinanthus*** C. Linnaeus, 1753

***Rhinanthus alectorolophus* (Scop.) Pollich** – (n. 8233/p. 120) – Ref.: Hist. Pl. Palat. 2: 177 (1777); Syn.: *R. alectorolophus* (Scop) Pollich var. *modestus* Chabert; *R. major* L., nom. ambig. subsp. *major* var. *major*; *Alectorolophus patulus* Sterneck.; *Rhinanthus patulus* (Sterneck) Schinz & Thell.; - Austria, Graz, no date, leg. J. v. Niessl.

Fam. ***Plantaginaceae*** A. L. de Jussieu, 1789, nom. cons.

Subfam. ***Antirrhinoideae*** (Pers., 1807) Kostel., 1834

Tribe ***Antirrhineae*** Dumort., 1827

Gen. ***Chaenorhinum*** (A.P. de Candolle, in Lamarck & A.P. de Candolle, 1815) H. G. L. Reichenbach, 1828, nom. corr.

***Chaenorhinum minus* (L.) Lange** – (n. 8233/p. 127. 5) – Ref.: Prodr. Fl. Hisp. 2: 577 (1870); Syn.: *Linaria minor* (L.) Desf.; - Austria, Vienna, no date, leg. Miller

Gen. ***Kickxia*** Dumortier, 1827

***Kickxia elatine* (L.) Dumort.** – (n. 8233/p. 121) – Ref.: Fl. Belg. 35 (1827); Syn.: *Linaria elatine* (L.) Mill.; *L. elatine* (L.) Mill. subsp. *elatine*; *Elatinoides elatine* (L.) Wettst.; - unmentioned location, no date, leg. no signature.

Gen. ***Linaria*** P. Miller, 1754

***Linaria alpina* (L.) Mill.** – (n. 8233/p. 123. 2) – Ref.: Gard. Dict. ed. 8 no. 4 (1768); Syn.: *L. petraea* Jord.; - unmentioned location, no date, leg. no signature.

***L. genistifolia* (L.) Mill.** – (n. 8233/p. 125. 4) – Ref.: Gard. Dict. ed. 8 no. 14 (1768); - Austria, Vienna, no date, leg. Miller

***L. genistifolia* (L.) Mill.** – (n. 8233/p. 128. 6) – Ref.: Gard. dict. ed. 8: *Linaria* no. 14. 1768; Syn.: *Antirrhinum genistifolium* L. (basionym); - unidentified location, no date, leg. Dr. Rauscher

***L. vulgaris* Mill.** – (n. 8233/p. 124. 3) – Ref.: Gard. Dict. ed. 8 no. 1 (1768); - Austria, Vienna, no date, leg. no signature.

Genus ***Misopates*** Rafinesque, 1840

***Misopates orontium* (L.) Raf.** – (n. 8233/p. 130. 8/b) – Ref.: Autikon Bot. 158 (1840); Syn.: *Antirrhinum orontium* L.; - unidentified location, no date, leg. no signature.

Subfam. **Digitalidoideae** (Augier, 1801 ex Martinov, 1820) Luer., 1882

Trib. **Digitalideae** (Augier, 1801 ex Martinov, 1820) Dumort., 1829

Genus **Digitalis** C. Linnaeus, 1753

Digitalis grandiflora Mill. – (n. 8233/p. 132. 0) – Ref.: Gard. Dict. ed. 8 no. 4, Corr. (1768); Syn.: *D. ambigua* Murray.; - Austria, Styria, Limberg, July 1859, leg. no signature.

Trib. **Veroniceae**

Gen. **Veronica** C. Linnaeus, 1753

Veronica alpina L. – (n. 8233/p. 14./b) – Ref.: Sp. Pl. ed. 1 11 (1753); Syn.: *V. pumila* All.; - Austria, - unmentioned location, no date, leg. no signature.

V. arvensis L. – (n. 8233/p. 14./a) – Ref.: Sp. Pl. ed. 1 13 (1753); Syn.: *V. demissa* Samp.; *V. racemifoliata* Pérez Lara.; - Austria, Vienna, no date, leg. no signature.

V. austriaca L. – (n. 8233/p. 2) – ref.: Syst. Nat. ed. 10 2: 849 (1759); Syn.: *V. latifolia* L., nom. ambig.; *V. maxima* Mill.; - Romania, Cluj, Cluj-Napoca (Claudiopoli), July 1885, leg. Wolff.

V. austriaca L. – (n. 8233/p. 6) – Ref.: Syst. Nat. ed. 10 2: 849 (1759); Syn.: *V. maxima* Mill.; *V. latifolia* L., nom. ambig.; - Austria, Styria, in monte Wotsch., solo dolomitico. Majo, no date, leg. J. C. Equis a Pittoni.

V. austriaca var. dentata (F. W. Schmidt) Koch – (n. 8233/p. 5) – Ref.: Syst. Nat. ed. 10 2: 849 (1759); Syn.: *V. prostrata* var. *angustifolia* Reichenb., *V. schmidtii* R. & Sch.; *V. teucrium* subsp. *austriaca* (L.) Celak; *Veronicastrum dentatum* (F.W. Schmidt) Opiz.; *Veronica austriaca* L.; - unidentified location, (H. Krentz), no date, leg. Zelenka. (label: Wiener Tausch-Herbarium).

V. bellidioides L. – (n. 8233/p. 13/b) – Ref.: Sp. Pl. ed. 1 11 (1753); - Austria, Tirol, Nassfeld, leg. illegible signature.

V. chamaedrys L. – (n. 8233/p. 15) – Ref.: Sp. Pl. ed. 1 13 (1753); - Austria, Graz, no date, leg. Niessl.

V. fruticans Jacq. – (n. 8233/p. 9/b) – Ref.: Enum. Stirp. Vindob. 2, 200 (1762); Syn.: *V. saxatilis* Scop.; - unidentified location, July 12, 1849, leg. C. Cramcs.

V. hederifolia L. – (n. 8233/p. 11/b) – Ref.: Sp. Pl. ed. 1 13 (1753); Syn.: *V. lappago* Schrank; - Austria, Vienna, no date, leg. Leithner.

V. longifolia L. – (n. 8233/p. 4) – Ref.: Sp. Pl. ed. 1 10 (1753); Syn.: *Pseudolysimachium longifolium* (L.) Opiz; *Veronica septentrionalis* Boriss.; *V. ticinensis* Polini; - Austria, Vienna, no date, leg. Leithner.

V. montana L. – (n. 8233/p. 8/a) – Ref.: Cent. Pl. 1: 3 (1755); - Germania, Wulfsen to Aachen; 09.07.1856, leg. P. Krabler (label: Aus der Flora von Aachen)

V. opaca Fr. – (n. 8233/p. 12/a) – Ref.: Nov. Fl. Suec. ed. 1 64 (1819); Syn.: *Cochlidiosperma opaca* (Fr.) Opiz.; *Veronica agrestis* subsp. *Opaca* (Fr.) Bonnier & Layenes; - unidentified location, 1850, leg. Griecrank (?).

V. peregrina L. – (n. 8233/p. 13/a) – Ref.: Sp. Pl. ed. 1 14 (1753); - Germany, Thuringia, Naumburg, no date, leg. J. N. Buek.

V. persica Poir. – (n. 8233/p. 11/a) – Ref.: Encycl. Méth. Bot. 8: 542 (1808); Syn.: *V. buxbaumii* Ten., non F. W. Schmidt; *V. byzantina* (Sibth. & Sm.) Degen; - Austria, Vienna, no date, leg. illegible signature.

V. praecox All. – (n. 8233/p. 12/b) – Ref.: Auct. Fl. Pedem. 5 (1789); - France, Lyon a Dessines, no date, leg. no signature (Herbier Jordan)

V. prostrata L. – (n. 8233/p. 9/a) – Ref.: Sp. Pl. ed. 2 17 (1762); Syn.: *V. teucrium* L. subsp. *prostrata* (L.) Rouy.; - Germany, Brandenburg, Postdam-Mittelmark, Parsberg bei Truenbrietzen, March, 1846, leg. illegible signature.

V. scutellata L. – (n. 8233/p. 8/b) – Ref.: Sp. Pl. ed. 1 12 (1753); - The Czech Republic, Region Usti, Teplitz in Boemia; 1853, leg. M. Winkler

V. serpyllifolia L. – (n. 8233/p. 10/a) – Ref.: Sp. Pl. ed. 1 12 (1753); - Austria, Vienna, no date, leg. Leithner.

V. spicata L. – (n. 8233/p. 1) – ref.: Sp. Pl. ed. 1 10 (1753); Syn.: *Pseudolysimachium spicatum* (L.) Opiz; *P. spicatum* (L.) Opiz subsp. *spicatum*; - unmentioned location, August 1856, leg. Braunstigel.

V. spicata L. subsp. orchidea (Crantz) Hayek – (n. 8233/p. 3) – Ref.: Ill. Fl. Mitteleur. ed. 1 6(1): 46 (1913); Syn.: *V. orchidea* Crantz.; *V. orchidea* Crantz subsp. *orchidea*; *Pseudolysimachium spicatum* (L.) Opiz subsp. *orchideum* (Crantz) Hartl; - Romania, Cluj, Cluj-Napoca (Claudiopoli), July 1885, leg. Wolff.

V. triphyllos L. – (n. 8233/p. 14./c) – Ref.: Sp. Pl. ed. 1 11 (1753); - Austria, unidentified location, no date, leg. no signature.

V. urticifolia Jacq. – (n. 8233/p. 7) – Ref.: Fl. Austr. 1: 37 (1773); Syn.: *V. latifolia* auct., non L.; *V. maxima* auct., non Mill.; - unidentified location, June 1856, leg. Dr. Duftschmid.

V. verna L. – (n. 8233/p. 10/b) – Syn.: *V. brevistyla* Moris.; - Austria, Vienna, no date, leg. Miller

Subfam. **Globularioideae** (DC., in Lamarck & A.P. de Candolle, 1805) Luer., 1882

Gen. **Globularia** C. Linnaeus, 1753

Globularia cordifolia L. – (n. 8233/p. 30/b) – Ref.: Sp. Pl. ed. 1 96 (1753); - unidentified location, no date, leg. no signature.

G. vulgaris L. – (n. 8233/p. 30/a) – Ref.: Sp. Pl. ed. 1 96 (1753); - Austria, Vienna, no date, leg. H. W. Reichardt .

Subfam. **Gratioloideae** (Augier, 1801 ex Martinov, 1820) Luer., 1882

Trib. **Gratiroleae** (Augier, 1801 ex Martinov, 1820) Benth., 1835

Gen. **Gratiola** C. Linnaeus, 1753

Gratiola officinalis L. – (n. 8233/p. 133.1) – Ref.: Sp. Pl. ed. 1 17 (1753); - unmentioned location, no date, leg. no signature.

Fam. **Scrophulariaceae** A. L. de Jussieu, 1789, nom. cons.

Trib. **Scrophularieae**

Gen. **Scrophularia** C. Linnaeus, 1753

Scrophularia auriculata L. – (n. 8233/p. 134.2) – Ref.: Sp. Pl. ed. 1 620 (1753); Syn.: *S. balbisii* Hornem.; *S. aquatica* auct., non L.; *S. cretica* Boiss. & Heldr.; *S. oblongifolia* Loisel.; *S. paui* Merino; - unidentified location, no date, leg. no signature (label: Wiener Tausch-Herbarium)

S. canina L. – (n. 8233/p. 135.3) – Ref.: Sp. Pl. ed. 1 621 (1753); - unidentified location, no date, leg. no signature (label: Wiener Tausch-Herbarium)

Gen. **Verbascum** C. Linnaeus, 1753

Verbascum chaixii Vill. subsp. **orientale** Hayek – (n. 8233/p. 67) – Ref.: Prodr. Fl. Penins. Balcan. 2: 127 (1929); Syn.: *V. orientale* M. Bieb., non (L.) All.; *V. longicarpum* Degen & Prodán; - Austria, Vienna, July 16, 1856, leg. J. Juratzka.

Ord. **Solanales** Dumortier, 1829

Fam. **Solanaceae** A. L. de Jussieu, 1789, nom. cons.

Gen. **Atropa** C. Linnaeus, 1753

***Atropa bella-donna* L.** – (n. 8233/p. 54) – Ref.: Sp. Pl. ed. 1 181 (1753); - unidentified location, no date, leg. Dr. Rauscher.

„**campanulids**”

Ord. **Apiales** Nakai, 1930

Fam. **Umbelliferae** A. L. de Jussieu, 1789, nom. cons., nom. alt.

Gen **Cnidium** Cusson.

***Cnidium dubium* (Schkuhr) Thell.** – (n. 8233/p. 36) – Ref.: Ill. Fl. Mitteleur. ed. 1 5(2): 1305 (1926); Syn.: *C. venosum* W.D.J.Koch.; - Austria, Ganserndorf, Marchegg, no date, leg. no signature.

Gen **Meum** Mill.

***Meum athamanticum* Jacq.** – (n. 8233/p. 34) – Ref.: Fl. Austr. 4: 2 (1776); Syn.: *Ligusticum meum* (L.) Crantz.; *Meum nevadense* Boiss.; - unidentified location in the Alps, August 16, 18., leg. J. Rayer.

Subfam. **Apioideae**

Trib. **Apieae** Takht. ex V.M. Vinogr., 2004

Gen. **Athamanta** C. Linnaeus, 1753

***Athamanta cretensis* L.** – (n. 8233/p. 37) – Ref.: Sp. Pl. ed. 1 245 (1753); - unidentified location, 13.08.1852, leg. J. Juratzka.

Gen. **Bupleurum** C. Linnaeus, 1753

***Bupleurum bicaule* subsp. *pusillum* (Krylov) Czubarov** – (n. 8233/p. 63) – Ref.: *Turczaninowia* 7(3): 66 2004; Syn.: *B. bicaule* var. *pusillum* (Krylov) Gubanov; *B. pusillum* Krylov.; - Switzerland, in monte Geissberg prope, no date, leg. no signature.

***B. falcatum* L.** – (n. 8233/p. 62) – Ref.: Sp. Pl. ed. 1 237 (1753); Syn.: *B. woronowii* Manden.; *B. sibthorpiatum* Sm.; *B. rossicum* Woronow; *B. parnassicum* Halácsy; *B. olympicum* Boiss.; - unidentified location, no date, leg. no signature.

***B. gerardi* All.** – (n. 8233/p. 39) – Ref.: Mélang. Philos. Math. Soc. Roy. Turin (Misc. Taur.) 5: 81 (1774); Syn.: *B. australe* Jord.; *B. filicaule* Brot.; *B. jacquinianum* Jord.; *B. affine* sensu H. J. Coste, non Sadler - Austria, Vienna, no date, leg. C. Petter.

***B. praealtum* L.** – (n. 8233/p. 47) – Ref.: Fl. Monsp. 12 (1756); Syn.: *B. junceum* L.; - unidentified location, no date, leg. Dr. Rauscher.

Gen. **Falcaria** Fabricius, 1759, nom. cons.

***Falcaria vulgaris* Bernh.** – (n. 8233/p. 40) – Ref.: Syst. Verz. Erfurt 176 (1800); Syn.: *F. rivini* Host; *F. sioides* Asch.; *Carum falcaria* (L.) Lange; *Prionitis falcaria* (L.) Dumort.; - unidentified location, no date, leg. H. W. Reichardt .

Gen. ***Oenanthe*** C. Linnaeus, 1753

***Oenanthe aquatica* (L.) Poir.** – (n. 8233/p. 38) – Ref.: Encycl. Méth. Bot. 4: 530 (1798); Syn.: *O. phellandrium* Lam.; - Austria, Vienna, no date, leg. Leithner.
- Obs.: degraded plant.

***O. fistulosa* L.** – (n. 8233/p. 35) – Ref.: Sp. Pl. ed. 1 254 (1753); - Germany, Brandenburg, Postanm (?) -Mittelmark, Treuenbrietzen, Juny 1855, leg. Pausner.

Gen. ***Seseli*** C. Linnaeus, 1753

***S. annuum* L.** – (n. 8233/p. 42) – Ref.: Sp. Pl. ed. 1 260 (1753); Syn.: *S. coloratum* Ehrh.; *S. bienne* Crantz; - unidentified location, no date, leg. H. W. Reichardt.

***S. elatum* L. subsp. *gouanii* (W. D. J. Koch) P. W. Ball** – (n. 8233/p. 46) – Ref.: Feddes Repert. 79: 64 (1968); Syn.: *S. gouanii* W.D.J.Koc.; *S. hercegovinum* K. Maly; *S. bosnense* K. Maly; - Italy, Trieste, Monte Spacato, 1854, leg. E. Braig.

***S. leucospermum* Waldst. & Kit.** – (n. 8233/p. 43) – Ref.: Pl. Rar. Hung. 1: 92 (1802); - unmentioned location, no date, leg. Beyer.

***S. montanum* L.** – (n. 8233/p. 45) – Ref.: Sp. Pl. ed. 1 260 (1753); Syn.: *S. glaucum* L.; - Austria, Vienna, no date, leg. illegible signature (label: Wiener Tausch-Herbarium)

***S. pallasii* Besser** – (n. 8233/p. 44) – Ref.: Cat. Pl. Horto Cremen. 130 (1816); Syn.: *S. varium* Trevir.; - Austria, Vienna, no date, leg. illegible signature (label : Wiener Tausch-Herbarium)

Trib. ***Caucalideae*** Spreng., in J.J. Roemer & J.A. Schultes, 1820

Gen. ***Daucus*** C. Linnaeus, 1753

***Daucus carota* L.** – (n. 8233/p. 49) – Ref.: Sp. Pl. ed. 1 242 (1753); Syn.: *D. communis* Rouy & E. G. Camus; *D. gingidium* L.; - unidentified location, no date, leg. Dr. Rauscher.

Subfam. ***Saniculoideae***

Trib. ***Saniculeae***

Gen. ***Sanicula*** C. Linnaeus, 1753

***Sanicula europaea* L.** – (n. 8233/p. 50) – Ref.: Sp. Pl. ed. 1 235 (1753); - unidentified location, July 1856, leg. Dr. Rauscher.

Trib. ***Laserpitieae*** Coss. & Germ., 1845

Gen. ***Laserpitium*** C. Linnaeus, 1753

***Laserpitium prutenicum* L.** – (n. 8233/p. 41) – Ref.: Sp. Pl. ed. 1 248 (1753); - unmentioned location, no date, leg. H. W. Reichardt.

Trib. ***Peucedaneae*** (W.D.J. Koch, 1824) Dumort., 1827

Gen. ***Peucedanum*** C. Linnaeus, 1753

***Peucedanum cervaria* (L.) Lapeyr.** – (n. 8233/p. 48) – Ref.: Hist. Abr. Pyr. 149 (1813); - unidentified location, no date, leg. Dr. Rauscher.

Ord. ***Asterales*** Link, 1829

Fam. ***Campanulaceae*** A. L. de Jussieu, 1789, nom. cons.

Subfam. ***Campanuloideae***

Trib. ***Campanuleae*** Dumort., 1827

Gen. ***Adenophora*** F.E.L. Fischer, 1823

***Adenophora lilifolia* (L.) Ledeb. ex A. DC.** – (n. 8233/p. 187. 85) – Ref.: Monogr. Camp. 358 (1830); Syn.: *A. lamarckii* auct., non Fisch.; *A. stylosa* auct., non Fisch.; - Austria, Vienna, Sept. 21, August 28, 1855, leg. J. Juratzka

Gen. ***Campanula*** C. Linnaeus, 1753

***Campanula rotundifolia* L.** – (n. 8233/p. 70) – Ref.: Sp. Pl. ed. 1 163 (1753); Syn.: *C. pinifolia* R.Uechtr. ex Panckic. (?); *C. racemosa* KrasKan (?); - Austria, Graz, no date, leg. J. v. Niessl.

Tribe. ***Phyteumateae*** Dumort., 1827

Gen. ***Phyteuma*** C. Linnaeus, 1753

***Phyteuma orbiculare* L.** – (n. 8233/p. 68) – Ref.: Sp. Pl. ed. 1 170 (1753); Syn.: *P. cordifolium* Vill.; *P. fistulosum* Rchb.; *P. tenerum* Rich. Schulz subsp. *anglicum* Rich. Schulz; - Austria, Graz, no date, leg. J. v. Niessl.

Family ***Compositae*** Giseke, 1792, nom. cons., nom. alt.

Gen. ***Hypochoeris***

***Hypochoeris radicata* L.** – (n. 8233/p. 165. 63) – Ref.: Sp. Pl. ed. 1 810 (1753); - unidentified location, no date, leg. Dr. Rauscher

Subfam. **Asteroideae**Trib. **Anthemideae** Cass., 1819Subtrib. **Achilleinae** K. Bremer & Humphries, 1993Gen. **Achillea** C. Linnaeus, 1753**Achillea millefolium** L. – (n. 8233/p. 161. 59) – Ref.: Sp. Pl. ed. 1 899 (1753); - Austria, Vienna, no date, leg. Dr. G. Mayr**A. setacea** Waldst. & Kit. – (n. 8233/p. 162. 60) – Ref.: Pl. Rar. Hung. 1: 82 (1801-1802); Syn.: *Achillea kummerleana* Prodán.; - unidentified location, no date, June 1846, leg. no signature.Subtrib. **Anthemidinae** Dumort., 1827Gen. **Anthemis** C. Linnaeus, 1753**Anthemis ruthenica** M. Bieb. – (n. 8233/p. 163. 61) – Ref. Fl. Taur.-Cauc. 2: 330 & 465 (1808); Syn.: *A. neilreichii* J. Ortmann.; - unidentified location, no date, leg. illegible signature.**A. tinctoria** L. – (n. 8233/p. 164. 62) – Ref.: Sp. Pl. ed. 1 896 (1753); - unmentioned location, no date, leg. no signature.Subtrib. **Artemisiinae** Less., 1830Gen. **Artemisia** C. Linnaeus, 1753**Artemisia austriaca** Jacq. – (n. 8233/p. 170. 68) – Ref.: Fl. Austr. 1: 61 (1773); Syn.: *A. repens* Pall. ex Willd.; - unidentified location, no date, leg. no signature.**A. pontica** L. – (n. 8233/p. 171. 69) – Ref.: Sp. Pl. ed. 1 847 (1753); - Austria, Vienna, no date, leg. RogenhoferSubtrib. **Leucantheminae** K. Bremer & Humphries, 1993Gen. **Leucanthemum** P. Miller, 1754**Leucanthemum vulgare** Lam. – (n. 8233/p. 167. 65) – Ref.: Fl. Fr. ed. 1 2: 137 (1779); Syn.: *Chrysanthemum leucanthemum* L.; - Austria, Graz (Blabutsch bei Gratz), no date, leg. no signature.Trib. **Astereae** Cass., 1819Subtrib. **Asterinae** Dumort., 1827Gen. **Aster** C. Linnaeus, 1753**Aster linosyris** (L.) Bernh. – (n. 8233/p. 156. 54) – Ref.: Syst. Verz. Erfurt 151 (1800); Syn.: *Linosyris vulgaris* Cass. ex DC.; *Aster savii* Arcang.; - Austria, Graz, no date, leg. Dr. G. Mayr

A. tripolium L. – (n. 8233/p. 154. 52) – Ref.: Sp. Pl. ed. 1 872 (1753); Syn.: *Tripolium pannonicum* subsp. *tripolium* (L.) Greuter.; *T. vulgare* Nees; - unidentified location, no date, leg. no signature.

Trib. **Helenieae** Lindl., in J.C. Loudon, 1829

Subtrib. **Chaenactidinae** Rydb., 1914

Gen. **Arnica** C. Linnaeus, 1753

Arnica montana L. – (n. 8233/p. 166. 64) – Ref.: Sp. Pl. ed. 1 884 (1753); - unidentified location, no date, leg. no signature.

Trib. **Heliantheae** Cass., 1819

Subtrib. **Coreopsidinae** Dumort., 1829

Gen. **Bidens** C. Linnaeus, 1753

Bidens tripartita L. – (n. 8233/p. 175. 73) – Ref.: Sp. Pl. ed. 1 831 (1753); Syn.: *B. bullata* L.; *B. orientalis* Velen.; - unidentified location, no date, leg. no signature.

Trib. **Inuleae** Cass., 1819

Gen. **Inula** C. Linnaeus, 1753

Inula conyza DC. – (n. 8233/p. 155. 53) – Ref.: Prodr. 5: 464 (1836); Syn.: *Conyza squarrosa* L.; *Inula vulgaris* Trevis.; *Jacobaea conyza* (DC.) Merino; *Inula suaveolens* Jacq.; - Austria, Graz, no date, leg. no signature.

I. germanica L. – (n. 8233/p. 153. 51) – Ref.: Sp. Pl. ed. 1 883 (1753); Syn.: *I. media* W.D.J.Koch.; - unidentified location, no date, leg. H. W. Reichardt

Gen. **Pulicaria** J. Gaertner, 1791

Pulicaria vulgaris Gaertn. – (n. 8233/p. 168. 66) – Ref.: Fruct. Sem. Pl. 2: 461 (1791); Syn.: *P. prostrata* Asch.; - Hungary, Szeged, no date, leg. Dr. G. Mayr

Trib. **Senecioneae**

Subtrib. **Senecioninae** Dumort., 1827

Gen. **Senecio** C. Linnaeus, 1753

Senecio abrotanifolius L. – (n. 8233/p. 169. 67) – Ref.: Sp. Pl. ed. 1 869 (1753); Syn.: *Jacobaea abrotanifolia* (L.) Moenc.; - unidentified location, no date, leg. C. J. v. Niessl

Subfam. **Carduoideae**

Trib. **Cardueae** Cass., 1819, nom. corr.

Subtrib. **Carlininae** Dumort., 1827

Gen. **Carlina** C. Linnaeus, 1753

Carlina vulgaris L. – (n. 8233/p. 173. 71) – Ref.: Sp. Pl. ed. 1 828 [1231] (1753);

- unidentified location, July 1850, leg. Dr. Rauscher

Subtrib. **Centaureinae** Dumort., 1827

Gen. **Centaurea** C. Linnaeus, 1753

Centaurea calcitrapa L. – (n. 8233/p. 160. 58) – Ref.: Syn.: Pl. ed. 1 917 (1753); syn.: *C. adulterina* Moretti; *C. calcitrapa* L. subsp. *torreana* (Ten.) Nyman; *C. calcitrapa* L. subsp. *horrida* (Ten) Arcang.; *C. myacantha* DC.; *C. macroacantha* Guss.; - unidentified location, July 22, 1856, leg. illegible signature. (label: Ex Herbario Jos. Bon. Holzinger).

C. jacea L. – (n. 8233/p. 158. 56) – Ref.: Sp. Pl. ed. 1 914 (1753); Syn.: *C. commutata* (W. D. J. Koch) Stankov.; *C. variabilis* H. Lév.; *C. amara* L. subsp. *amara* var. *amara* forma *amara* proles *amara*; - unmentioned location, no date, leg. H. W. Reichardt.

C. montana L. – (n. 8233/p. 159. 57) – Ref.: Sp. Pl. ed. 1 911 (1753); Syn.: *C. angustifolia* Mill.; - Austria, Bezirk Krems-Land, Langenlois, no date, leg. Valbrunner .

C. nigra L. – (n. 8233/p. 157. 55) – Ref.: Sp. Pl. ed. 1 911 (1753); - unidentified location, no date, leg. leg. H. W. Reichardt.

Subtrib. **Echinopsidinae** K. Friedrich & G. D. Rowley, 1976

Gen. **Xeranthemum** C. Linnaeus, 1753

Xeranthemum annuum L. – (n. 8233/p. 172. 70) – Ref.: Sp. Pl. ed. 1 857 (1753); - unidentified location, no date, leg. no signature.

Subfam. **Cichorioideae**

Trib. **Lactuceae** Cass., 1819

Subtrib. **Scorzonerinae** Dumort., 1827

Gen. **Scorzonera** C. Linnaeus, 1753

Scorzonera purpurea L. – (n. 8233/p. 174. 72) – Ref.: Sp. Pl. ed. 1 791 (1753); - unmentioned location, no date, leg. no signature.

Concluding remarks

As mentioned before, this bound, hard-covered herbarium, labeled with the name of Theodor Schreiber (Szárnövények készítette Schreiber Th. – 1866; Fig.1), represents a part of a larger herbarium belonging to the same author but whose sheets are not bound. As a result of presenting the taxonomic part and the data obtained from the labels indicating the taxa, the dates and locations, where identified, as well as the names of the collectors, we find that the collection area is Central Europe, a region which, by its position, is the geographical core of Europe. Within this area there are two large countries (Germany and Poland) and six

smaller countries (Austria, the Czech Republic, Switzerland, Slovakia, Slovenia, Hungary), as well as a very small country such as Liechtenstein, to which the Transylvanian territory can be added, now part of Romania.

The way in which the herbarium is structured, starting right from the herbozation of plants, probably made on another occasion, as well as their fixation and labelling, the existence or absence of some data such as those related to location, habitat, date, signature, and their relocation on bound sheets, page after page, with several labels cut and used to secure the plant as the plants are arranged in a certain taxonomic order (definitely not after the region of origin or identity of the collector), all this should point to the very purpose of its creation, respectively, the destination of its particular use, which can be either the basic motivation of a collector, a work of academic nature, or a work with some pedagogical purpose, if we consider the amateurish style of its organization. The collection includes specimens received from other botanists of the time, such as Michael Fuss (Sibiu), Jakob Juratzka (Vienna), Heinrich Wilhelm Reichardt (Jihlava), Josephine Kablik (Vrchlabi), Francesco Ambrosi (Trento) and others from Berlin and Württemberg. The collection also contains a miniherbarium of mosses. Three of the names of the botanists contributing to the herbarium of Sighișoara (J. Juratzka, H. W. Reichardt, and Josephine Kablik; see Figs 2-4) are mentioned in the collection of the Țării Crișurilor Museum in Oradea too (Fig. 10). It seems that at that time, this kind of exchange between persons interested in botany, even though not always localized, dated, or signed, was a practice to a certain professional level. Linked to natural sciences, sometimes the exchangers were teachers, physicians, pharmacists, monks, priests, archaeologists, officers, or employees of the administration. Accepting such an interpretation, we could get to the name of the botanical collection contained in the present herbarium of Schreiber Th. (we could not identify so far another personality of the time with this name but that of George Theodore Schreiber (1848-1912), whose signature was Dr. Theodor Schreiber, a former archaeologist, art historian and preserver, who was the director of the Museum of Fine Arts in Leipzig from 1866 till his death). Schreiber was and still is a relatively common surname in the German, Austrian, Hungarian, even Transylvanian onomastics, so that the spectrum of identification is too broad. Yet this interpretation can be narrowed down if we consider that the label on the cover is written in Hungarian and that the dates mentioned in the herbarium and on the cover refer to the year 1866. Other possibilities could be a monk in the Order Premonstratens, a teacher who taught at the gymnasium functioning within their monastery, or a graduate from this gymnasium which existed there in the 19th century.

As we have shown, many of the collectors collected their material on the present territory of Austria, among the identified locations being Vienna and its

surroundings, Linz (Upper Austria), Langenlois (Lower Austria), Graz (Styria); but we are positive that there are still other locations whose names were not available or not specified, such as parts of the other regions, southern of western. Among them we mention the names of Jakob Juratzka (1821-1878), J. C. Equis a Pittoni (1797-1878), H. W. Reichardt (1835-1885), J. Reiche, Alois Friedrich Rogenhofer (1831-1897), Robert Rauscher (1806-1890), J. Leithner (1809-?), C. Petter, Teithner and Miller, for the region of Vienna, Andorfer and Vialbrunner for Longenlois, J. v. Niessl for Graz. As we speak of the Austrian-Hungarian Empire, we come across names of collectors such as Wilhelm August Schneller (1807-1886), a Slovak officer and amateur botanist who collected from Bratislava (Pressburg, today in Slovakia), or Ettel Josephine Kablik (1787-1863), a Czech botanist and palaeontologist who collected from the present territory of the Czech Republic, in the area of the Karkonosze Mountains (Riesengebirge), as well as Elise Braig (1803-?) who collected in Trieste, a territory of present day Italy. We come across other names such as J. N. Buek (1779-1856), P. Krabler (1856) or C. E. Duftschmid, who collected on the territory of today's Germany (see Figs 6-9), or Gustav Mayr (1830-1908), who collected on the territory of today's Hungary (Fig. 5). Winkler Moritz (1812-1889) was a collector who worked at the time both in Switzerland, Germany and present day Hungary, and J. v. Niessl collected both in Austria and present day Slovenia (the former Krai region). For Transylvania, a region now in Romania, there is the name of Julius Wolff (1844-1921), a pharmacist in Turda who collected in the region of Cluj (Claudiopolis, today Cluj-Napoca; see Figure 1). As we have already mentioned, there are also unidentified locations and names of collectors about whom we could not find anything, as well as illegible signatures. There are sheets that have no mention of location, date or author.

Of the references related to the Central European flora, respectively those of authors with works from countries that compose that region and which we consider to successfully complement the material we presented, we mention the studies and articles published since the 19th century, which is the period when the herbarium was completed. Thus we can enumerate the works on the Alps flora authored by K.W. Della Torre & A. Hartinger (1882-1884), A. W. Bennett (1897), Beck-Mannagetta G. & Lerchenau G. (1907, 1908, 1913), those about the northern-western Carpathian flora authored by Sagorski E. & Schneider G. (1891, 1893) and Sabransky H. (1886) or those about the vegetation of the Danube countries, such as the works of A. J. Kerner (1863, 1875). There are works that refer to the flora in Austria, such as those of Nikolaus Joseph Jacquin (1773-1778; 1781-1793; 1797-1804) and Joseph Franz Jacquin (1811-1844), Nicolaus Thomas Host (1827-1831), Franz von Hausmann (1851), Victor von Janka (1858), Jakob Juratzka (1871), Otto Wilhelm Thome (1885), G. Beck-Mannagetta (1890-1893),

Halacsy E. (1891), K. W. Della Torre & L. Sarnthein (1900-1913), or to the flora in the Czech Republic and Slovakia, as the studies of L. J. Celakovsky (1868-1889; 1879-1897), respectively L. Bertova et al. (1966-1997). Concerning the Hungarian flora, we find significant representatives such as Fr. Waldstein & P. Kitaibel (1802-1812), Victor von Janka (1862), Borbas Vince (1886, 1890), J. Tuzson (1904, 1907); the Swiss flora is studied in the works of A. Gremli (1867, 1870, 1887). The Transylvanian flora was presented at that time and later by J. C. G. Baumgarten (1816), J. F. Schur (1886), Fr. F. Fronius (1855, 1857-58, 1873), F. Porcius (1868, 1881, 1893), Victor von Janka (1869), Simonkai L. (1887), F. Pax (1920), I. Prodan (1928, 1931), E. J. Nyarady & R. Soó (1952-1976). As a comparative study on the Central European flora, we mention the collective work of H. Meusel et al. (1965).

In conclusion, the material presented here is a botanical collection from that time, the botanized samples being assembled in a 'catalogue-type' herbarium with bound sheets and hard covers (see Appendix 1). The label on the cover has the name Schreiber Th. and the year 1866 on it, so we assume that this must be the name of its collector. The name, however, must have a certain relation to the gymnasium of the Order of Premonstratens Monastery, whose monks were in Oradea in 1804, that religious institution functioning until 1949 when the school and the cells were nationalized, being replaced by High School no. 4 in Oradea. The biologic material in the herbarium, although collected in the 19th century, displays a relatively good state of preservation, yet there are several damaged pieces, some even missing. It includes species of the Kingdom *Plantae*, Phylum *Tracheophyta*, Class *Spermatopsida*, Subclass *Magnoliidae*, representing 200 taxa which belong to 118 genera and 45 families.

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Appendix 1

Botanical collectors identified from herbarium Schreiber - Part I.

Full Name	Abbreviation	Alternative names	Dates	Countries, Provinces, areas
Andorfer.	Andorfer.			Austria
	Beyer		1852-1932	Germania, Italia, Elvetia
	Bogenhufer			
	Braunstigel			
Braig Elise	Elise Braig	E. Braig	1803 - ?	Italia (Trieste)
Buek, Johannes Nicolaus	J.N. Buek	J.N. Buek -bis	1779-1856	Germania
Cramcs C.	C. Cramcs			Austria
Czagl. A.	A. Czagl			Austria
Dufischmid	Dufischmid			Austria
Equs a Pittoni, J.C.	J.C. Equs a Pittoni.	Josef Claudius Pittoni	1797-1878	Austria,
	Griecrank (?)			
Juratzka Jakob (Jacob)	J. Juratzka		1821-1878	Austria
Kablik Ettel Josephine	Josephine Kablik	J. Kablikova	1787-1863	Cehia (Boemia)
Krabler P.	P. Krabler		1856	N. Austria, Germania (Brandenburg, Pommern.)
Leithner, Joseph, Baron von	Leithner	Baron von Leithner	1809-?	Austria, Ungaria
Limberg	Limberg			
Gustav Mayr	Gustav Mayr	Gustav L. Mayr	1830-1908	Austria
	Miller			
J. v. Niessl.	J. v. Niessl	Niessl.		Austria
	Pausner			
	C. Petter			Austria
Rauscher Robert	Rauscher		1806-1890	N. Austria
Rayer Jacob.	J. Rayer			
Reichardt Heinrich Wilhelm	H.W. Reichardt	Heinricus Guilielmus Reichardt	1835-1885	Austria, Germania, Europa Centrala
Reiche J.	Reiche			Austria (Tirol & Vorarberg)
Rogenhofer Alois Friedrich	Rogenhofer		1831-1897	Austria
Schneller Wilhelm August	Schneller		1807-1886	Cehia, Bratislava
	Teithner			Austria
	Zelenka			Cehia (?)
	Vialbrunner			Austria
Winkler Moritz	M. Winkler		1812-1889	Germania, Ungaria, Elvetia
Wolff Julius	Wolff	Julius Wolff	1844-1921	Romania, (Transilvania - Cluj, Turda)



P. 1.

P. 1. - *Veronica spicata* L. – leg. Braunstigel (unmentioned location).

P. 2-3 - *Veronica latifolia* L. & *V. orchidea* Crantz.; - leg. Wolff (in Cluj).



P. 2.



P. 3.

Fig. 1 - The cover of the Schreiber Th. herbarium (Szárnövények készítette Schreiber Th. – 1866) and the first three pages of the herbarium.



Fig. 2 - Portrait of Jakob Juratzka (1821-1878) and three of the specimens collected by him.



Fig. 3 - Josephine Kablik (1787-1863), portrait and two of the specimens collected by her (together with one collected by Dr. Rauscher).



Fig. 4 - Four specimens in the herbarium, collected by Heinrich Wilhelm Reichardt (1835-1885).



Fig. 5 - Portrait of Gustav Mayr (1830-1908) and three of the specimens collected by him.



leg. W. A. Schneller (Bratislava)



leg. Elise Braig (Trieste)



leg. P. Krabler & leg. M. Winkler



leg. J. Rayer

Fig. 6 - Plant specimens collected Wilhelm August Schneller, Elise Braig, P. Krabler, M. Winkler, and J. Rayer.



leg. Andorfer



leg. Joseph Leithner



leg. J. v. Niessl.



leg. Miller

Fig. 7 - Plant specimens collected by Andorfer, Joseph Leithner, J. v. Niessl and Miller.



leg. J. C. Equis a Pittoni.



leg. Dr. Duftschmid.



leg. Rogenhofer



leg. J. N. Buek.

Fig. 8 - Plant specimens collected by J. C. Equis a Pittoni., J. B. Duftschmid, A. F. Rogenhofer, and J. N. Buek.



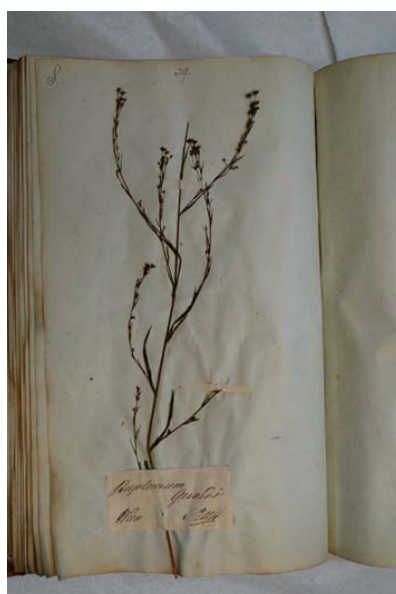
leg. A. Czegl.



leg. Czegl.



leg. Leithner & Czegl.



leg. C. Petter

Fig. 9 - Plant specimens collected by A. Czegl (3 specimens), Leithner and C. Petter.



Fig. 10 - The Mater Dolorosa Church of the the Premonstratensian Monastery and the National College „Mihai Eminescu”, the former High School no.4 in Oradea, from where the „Schreiber Th. Herbarium” was transferred.

