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A donation from Tiberiu Jurcsák for the Natural History collections of the Țării Crișurilor Museum in Oradea

Vasile Maxim Danciu, Dorina Golban

*Muzeul Țării Crișurilor, B-dul Dacia nr. 1-3, 410464 Oradea, Romania
siledanciu@yahoo.com*

Abstract. This paper aims to publish the data contained in a donation by Tiberiu Jurcsák for the Natural History collections of the Țării Crișurilor Museum in Oradea. This donation, consisting of several double cardboards, includes botanized pieces, representing species of algae, fungi, lichens, mosses, ferns, Cyanobacteria, Chromista, and Animalia. The collection is considered to date from the second half of the 19th century (in several instances the year 1856 is mentioned), and its collection areas are in many European countries (Croatia, Slovenia, Italy, Slovakia, France, Romania and western Ukraine), but also in Central America (Mexico), South America (Brazil), the Far East (Japan), and Australia. T. Jurcsák was a member of the staff of the museum, the founder and the first head of the Department of Natural Sciences, which he managed until his retirement (1988). After processing the material, we arranged it according to an updated taxonomic classification, specifying the accepted name and the location, date and author of the collection (where mentioned). Thus we present 352 taxa belonging to 183 genera and 112 families.

Introduction

The present work continues to highlight the information contained in the botanical collection of the Țării Crișurilor Museum, by presenting a donation made by Tiberiu

Jurcsák (1927-1992), a former member of the staff of the museum, the founder and the first head of the Department of Natural Sciences, whose years of activity were exceptional (Dumitraşcu & Paina 1986, Grigorescu 1993, Paina 1992). This donation consists of a total of 22 cardboards on which botanized samples were fixed representing species of algae, fungi, lichens, mosses, ferns, and also other organisms belonging to the phyla of Cyanobacteria, Chromista, and Animalia. The material comes from several collectors and different locations, and most of it may have been collected, in our opinion, by Pius Titius Vendel (1801-1884), a monk of the Franciscan Order of the Minorites, whose name is found on some of the cardboards. Sometimes the year and the location of the collection are mentioned, and the method of botanization and the handwriting show this. Our findings in this respect show some parallels between the locations mentioned on some boards by the collector botanist and several moments in the biography of Pius Titius Vendel, a famous botanist collector, who was considered the first Hungarian algologist (Vöröss 1972, 1973). A large part of the material collected by him ended in different schools, institutions, and at other scientists of the time as well (e. g. F. Ardissonne, A. Bertoloni, G.B. De Toni, G. Frauenfeld, F. T. Kützing, G. Zanardini). Parts of this collected material entered the collections of the Natural History Museums in Vienna, Budapest, Paris and Trieste, the Antonian Library in Padua, the Franciscan Monastery in the Cresu island, and the „G. R. Carli” high school in Koper.

Titius Pius Vendel was born on October 23, 1801, in Jasov, near Košice in Slovakia; after becoming a priest in 1828, he taught Latin at Levoča (Lőcse), a town in the historical region Zips (Spiš), in eastern Slovakia. In 1836 he became a teacher in Kanta in Transylvania (today the place is part of Târgu Secuiesc, Covasna county). From 1838 on he was a priest for the Leningen-Westerburg regiment in Przemysl, Galicia. As a priest chaplain he went to Normandy, and in 1846 he followed the regiment to Split, Croatia.

In 1850 he was in Transylvania again, in Arad, where the Minorite Friars were running a high school where biology was taught among other disciplines. Here he could exhibit his collection of algae, mussels and snails obtained from the Dalmatian coast, and that of butterflies gathered in Galicia. Then he was summoned again to his regiment as a priest chaplain, an opportunity that facilitated the enriching of his collection in the area of the Adriatic Sea, from Venice to Trieste. He stayed in Rome for a while acting as a father confessor in Hungarian at St. Peter's Basilica, and in 1854 he was as a priest in St. Anthony Basilica in Padua; during all this time, he continued his collecting in Dalmatia.

In order to be able to continue his studies on the marine flora and fauna of the northern Adriatic Sea, he moved to the Istrian coast in 1860, living in the monastery of St. Francis of Piran. During his stay he devoted himself to collecting,

studying and describing species of plants, especially algae, as well as other sea and terrestrial organisms, an activity which provided him with a certain reputation in the field of natural sciences, eventually becoming a sought for expert. He is acknowledged for the description and scientific naming of 64 species of algae. He died on December 20, 1884, in Piran, in present day Slovenia.

The collection areas, which are sometimes mentioned on the paper tags of the botanized specimens, indicate the territories where Pius Titius lived, worked, or travelled. The fact that Tiberiu Jurcsák as a specialist came into their possession does not seem to be completely at random (we do not exclude the possibility that he had a certain involvement, as shown by a seal with his name affixed to the cardboards). He understood both the unity that holds them together and the scientific and historical importance of these pieces, and their donation to the museum in Oradea confirms this.

We found in this collection mentions of the following collection sites of botanized species: the North-West Carpathians (the mountains of Slovakia and historic Galicia, the present day Transcarpathia), the western part of Transylvania (Ardeal, Oradea, Săvârșin), the Dalmatian Coast or Croatia (the canton of Split in Dalmatia), Slovenia (the Slovenian Kraina), and the Gulf of Venice (the northern Adriatic Sea, reaching eastward to the Coast of Istria, in Slovenia and Croatia) with the internal bays of Trieste and Piran. In addition to the locations related to the Adriatic Sea, several are related to the Mediterranean Sea (the Gulf of Genoa) and the Atlantic Ocean, as well as pieces originating in areas like the Pyrenees (France), Mexico, Brazil, Australia, and Japan, probably resulting from exchange.

We considered it essential to find out the name of the collector who put together the botanized pieces and, consequently, we tried to decipher the signature found on the margins of the specimens. Such a name can be that of Karl Eduard Ortgies (1829-1916), a German horticulturalist and botanist whose author abbreviation is *Ortgies*. As a horticulturalist he travelled in Europe, maintained an extensive correspondence and compiled catalogues, becoming even the head of the Old Botanical Garden in Zürich. He met Luis van Houtte (1810-1876) and Benedict Roezl (1823-1885), both horticulturalists and botanic collectors who had reached exotic destinations during their travels. Luis van Houtte was a Belgian horticulturalist who, after having worked in Brussels, where he reached a professional fame, became the co-owner of some gardens near Ghent (Gendbrugge), in East Flanders, where he opened a nursery and built greenhouses for multiplication and preservation of exotic plants.

Benedict Roezl was a Czech horticulturalist who worked both for the gardens of Count Thun in northern Bohemia (the western part of the Czech Kingdom within

the Austrian Empire) and, in 1846, for the Ghent gardens of Luis van Houtte, being in charge mostly with the greenhouses and the plants existing in them. He traveled to America and Mexico, collecting there and bringing to Ghent exotic plants of various species. He also gained a professional fame through several studies on the Mexican and American flora (Roezl, 1857). This might explain the presence in the collection of some specimens collected in Mexico, Brazil, and probably, by extension, those coming from Australia and Japan.

Material and methods

The examined material consists of 22 cardboards with the botanized pieces included in the collection of the Țării Crișurilor Museum in Oradea, as indicated by the inventory number following the botanical denominations. 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 the Royal Botanic Garden Edinburgh – *Flora Europaea*, the *Algaebase* (world-wide electronic publication, National University of Ireland, Galway, <http://www.algaebase.org>), the *uBio Portal* (www.ubio.org/portal/-5k), The Plant List database (<http://www.theplantlist.org/>), <http://www.indexfungorum.org>., and the Checklist of Norwegian mosses (<http://www.nhm2.uio.no/botanisk/mose/m-taxa.htm>). In order to have a systematical presentation of the units, we consulted the study of V. Ciocârlan (2000), which follows the rules and recommendations of the International Code for Botanic Cataloguing, and the site *Systema Naturae 2000* (<http://taxonomicom.taxonomy.nl>) in order to update the taxonomic classification (following the variant entered after October 17, 2009). We also mentioned the current location of collecting, the locality, the date and the collector's name.

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

Domain *Bacteria* (Haeckel, 1894) C.R. Woese et al., 1990

Phylum *Cyanobacteria* Stanier, 1974 ex Cavalier-Smith, 2002

Class *Cyanobacteria*

Ord. *Nostocales* T. Cavalier-Smith, 2002, nom. ileg.

Fam. *Nostocaceae* Eichler, 1886

Subfam. *Nostocoideae*

Gen. *Nostoc* Vaucher ex Bornet & Flahault, 1888

***Nostoc commune* Vaucher ex Bornet & Flahault** (n. 8324/22) – ref.: Bornet, E. & Flahault, C. 1886 '1888'. *Annales des Sciences Naturelles, Botanique, Septieme Serie* 7: 177-262; unmentioned location and date, 19th century, no signature, donation T. Jurcsák.

***Nostoc lacustre* Kutzing** (n. 8323/144) – ref.: Bornet, E. & Flahault, C. 1886 '1888'. *Annales des Sciences Naturelles, Botanique, Septieme Serie* 7 : 177-262; syn.: *Nostoc lacustris* Ag.; Carpathians (Transcarpatia, *Kárpátalja*), freshwater, 19th century, no signature, donation T. Jurcsák.

Fam. *Rivulariaceae* Kutzing, 1843**Gen *Calothrix* C. A. Agardh, 1824 ex E. Bornet & C. Flahault, 1886**

***Calothrix wrangelii* C. Agardh** (n. 8329/139) – Status: Accepted Name. Last taxonomic scrutiny Guiry M. D. (created: 11 April 2002 by M. D. Guiry; last updated: 23 Sept. 2004 by M. D. Guiry); syn.: *Calothrix wrangeliana* Kg.; Carpathians (Transcarpatia, *Kárpátalja*), freshwater, 19th century, no signature, donation T. Jurcsák.

Subclass *Oscillatoriophyceae***Ord. *Oscillatoriales* T. Cavalier-Smith, 2002, nom. ileg.****Fam. *Oscillatoriaceae* Engler, 1898****Gen. *Lyngbya* C. A. Agardh ex Gomont, 1892, nom. cons.**

***Lyngbya majuscula* (W. Dillwyn) W. H. Harvey** (n. 8323/118) – ref.: *Lyngbya majuscula* (Dillwyn) Harvey 1833: 370, in Hooker ex Gomont, 1892-1893; Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

Phylum *Proteobacteria* Garrity et al. 2005**Class *Betaproteobacteria* Garrity et al. 2006****Ord. *Burkholderiales* Garrity et al. 2006****Gen. *Leptothrix* Kutzing, 1843, nom. approb.**

***Leptothrix ochracea* (Roth 1797) Kutzing** (n. 8324/36) – ref.: Validly Published (Roth 1797) Kutzing 1843 (Approved Lists 1980); syn.: *Conferva ochracea* Roth, 1797; unmentioned location, 19th century, no signature, donation T. Jurcsák.

Domain *Eucaryota*

Kingdom *Chromista* T. Cavalier-Smith, 1981
Subkingdom *Chromobiota* Cavalier-Smith, 1991
Infrakingdom *Heterokonta* (Cavalier-Smith, 1986) Cavalier-Smith, 1995
Phylum *Ochrophyta* (Cavalier-Smith, 1986) T. Cavalier-Smith, 1995
Subphylum *Phaeista* Cavalier-Smith, 1995
Infraphylum *Chrysista* (Cavalier-Smith, 1986) T. Cavalier-Smith, 1995
Superclass *Phaeistia* Cavalier-Smith, 1995
Class *Phaeophyceae*
Ord. *Chordariales*
Fam. *Chordariaceae*
Gen. *Asperococcus* J. V. Lamouroux, 1813

***Asperococcus bullosus* J. V. Lamouroux** (n. 8323/75) – ref.: J. V. Lamouroux (1813: 277, pl.12: fig. 5). *Annales du Muséum d'Histoire Naturelle, Paris* 20: 21-47, 115-139, 267-293, Plates 7-13.; syn.: *Asperococcus bulbosus* Lam. 1822; *Asperococcus bulosus* Bor.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Dictyosiphon*

***Dictyosiphon capillaceus* Rp.** (n. 8323/97) – ref.: Greville, R. K. (1830). *Algae britannicae.*; syn.: *Dictyosyphon capillaceus* Rp.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Mesogloia* C. A. Agardh, 817

***Mesogloia mediterranea* J. Agardh.** (n. 8323/96) – ref.: Agardh, J. G. (1842: 33-34). *Algae maris Mediterranei et Adriatici*; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Fam. *Spermatochneaceae*

Gen. *Stilophora* J. G. Agardh, 1841, nom. cons.

***Stilophora adriatica* J. Agardh** (n. 8323/20) – ref.: Gerloff, J. & U. Geissler, 1974. Eine revidierte Liste der Meeresalgen Griechenlands. *Nova Hedwigia*, 22: 724-793; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Stilophora rhizodes* (C. Agardh) J. Agardh** (n. 8323/126) - ref.: Agardh, J. G. (1841). *Linnea* 15: 1- 50, 443-457; syn.: *Stilophora tenella* (Esper) P. C. Silva - (8323/126); Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

***Stilophora tenella* (Esper) C. Silva, Basson & Moe** (n. 8323/16) – ref.: P. C. Silva et al. (1996). *University of California Publications in Botany* 79: 1-1259; According to De Clerck (2003); syn.: *Dictyota papillosa* Lamouroux; *Stilophora papillosa* (J. V. Lamouroux) J. Agardh; *Stilophora papillaris* Ag.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Ord. Cutleriales

Fam. Cutleriaceae

Gen. *Cutleria* R. K. Greville, 1830

***Cutleria penicillata* Kutzing** (n. 8324/65) – ref.: Greville, R. K. (1830) *Algae britannicae*; Croatia, Split, Dalmatia, Adriatic Sea, 19th century, leg. Titius, donation T. Jurcsák.

Ord. Desmarestiales

Fam. Desmarestiaceae

Gen. *Desmarestia* J. V. F. Lamouroux, 1813, nom. cons.

***Desmarestia aculeata* (L.) Lamouroux** (n. 8323/133) – ref.: *Annales du Muséum d'Histoire Naturelle, Paris* 20: 21-47, 115-139, 267-293, Plates 7-13; Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

Ord. Dictyotales

Fam. Dictyotaceae

Gen. *Dictyota* J. V. Lamouroux, 1809

***Dictyota dichotoma* (Hudson) J. V. Lamouroux** (n. 8324/48) – ref.: Lamouroux, J. V. F. (1809), *Journal de Botanique [Desvaux]* 2: 38-44; Croatia, Split (Spalato), Adriatic Sea, 19th century, leg. Titius, donation T. Jurcsák.

***Dictyota dichotoma* (Hudson) J. V. Lamouroux** (n. 8323/48) – ref.: J. V. Lamouroux (1809: 42). *Journal de Botanique [Desvaux]* 2: 38-44; syn.: *Dictyota acuta* Lam.; *Dictyota acuta* Kutzing; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Dictyota dichotoma* (Hudson) J. V. Lamouroux** (n. 8323/46) – ref.: J. V. Lamouroux (1809: 42). *Journal de Botanique [Desvaux]* 2: 38-44; syn.: *Fucus dichotoma* Hudson; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Dictyota fasciola* (Roth) J. V. Lamouroux** (n. 8324/49) – ref.: *Nouveau Bulletin des Sciences, par la Société Philomathique de Paris* 1: 330-333, fig. 2, pl.6; syn.:

Dictyota denticulata (Kutzing) Kutzing; Croatia, Split (Spalato), Adriatic Sea, 19th century, leg. Titius, donation T. Jurcsák.

***Dictyota implexa* (Desfontaines) J. V. Lamouroux** (n. 8323/47) – ref.: J. V. Lamouroux (1809: 42). *Journal de Botanique [Desvaux]* 2: 38-44; syn.: *Fucus implexus* Desfontaines; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Dictyopteris* J. V. F. Lamouroux, 1809, nom. cons.

***Dictyopteris polypodioides* (A. P. De Candolle) J. V. Lamouroux** (n. 8323/90) – ref.: J. V. Lamouroux (1809: 332). *Nouveau Bulletin des Sciences, par la Société Philomathique de Paris* 1: 330-333, fig.2 pl.6; syn.: *Halyseris polypodioides* Agardh (Ag. — Kg. l. c. 561. ej. *Phycol. gener. Tab. 23. Anatomia*); Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Dictyopteris polypodioides* (A. P. De Candolle) J. V. Lamouroux** (n. 8323/92) – ref.: *Nouveau Bulletin des Sciences, par la Société Philomathique de Paris* 1: 330-333, fig.2, pl.6; syn.: *Halyseris polypodioides* (de Candolle) C. Agardh (1820: 142-143); *Halyseris polypodioides* varietas *angustifolia*; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Gymnosorus* J. Agardh

***Gymnosorus collaris* (C. Agardh) J. Agardh** (n. 8323/27) – ref.: Agardh, J. G. (1894: 11). *Lunds Universitets Ars-Skrift, Andra Afdelningen, Kongl. Fysiografiska Sällskapet i Lund Handlingar* 29(9): 1-144, 2 plates; syn.: *Padina collaris* (C. Agardh) Greville; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Padina* M. Adanson, 1763, nom. cons.

***Padina pavonica* (L.) Thivy** (n. 8323/31) – ref.: Taylor, W. R. (1960: 234-235). *Marine algae of the eastern tropical and subtropical coasts of the Americas*. pp. xi + 870, 14 figs, 80 plates. Ann Arbor: the University of Michigan Press; syn.: *Padina pavonia* Lam.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Ord. *Ectocarpales*

Fam. *Ectocarpaceae*

Gen. *Ectocarpus* Lyngbye, 1819, nom. cons.

***Ectocarpus finicularis* Ag.** (n. 8323/59) – ref.: Lyngbye, H. C. (1819). *Tentamen hy-*

drophytollgiae danicae; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Ectocarpus siliculosus* (Dillwyn) Lyngbye** (n. 8324/67) – ref.: Lyngbye, H. G. (1819) *Tentamen hydrophytologiae danicae* 1819: 131, pl. 43B, C; Croatia, Split, Dalmatia, Adriatic Sea, 19th century, leg. Titnics, donation T. Jurcsák.

***Ectocarpus tomentosus* (Hudson) Lyngbye** (n. 8323/73) – ref.: Lyngbye, H. C. (1819: 132, pl.44: fig A). *Tentamen hydrophytologiae danicae*; syn.: *Ectocarpus tomentosus* Kg.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Fam. Pilayellaceae

Gen. Pilayella Bory de Saint-Vincent, 1823

***Pilayella littoralis* (L.) Kjellman** (n. 8323/134) – ref.: Kjellman, F.R. (1872). *Bi-drag till kannedomen om Skandinaviens Ectocarpeer och Tilopterider*. pp. 1-112, 2 plates. Stockholm; syn.: *Ectocarpus compactus* (Roth) C.Agardh; Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

Ord. Fucales Kylin

Fam. Cystoseiraceae

Gen. Bifurcaria Stackhouse, 1809

***Bifurcaria bifurcata* R. Ross (1958)** (n. 8323/112) – ref.: Ross, R. (1958). *Journal of the Linnean Society of London, Botany* 55: 753-754; syn.: *Fucus tuberculatus* Huds. (Hudson [W] (1778). *Flora anglica*); Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

Gen. Cystoseira C. A. Agardh, 1820, nom. cons.

***Cystoseira baccata* (S.G. Gmelin) P. C. Silva** (n. 8323/111) – ref.: Silva P. C. (1952). *University of California Publications in Botany* 25: 241-323; syn.: *Cystoseira fibrosa* (Hudson) Agardh; Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

***Cystoseira barbata* (Stackhouse) C. Agardh** - (n. 8323 /40) – ref.: Agardh, C. A. (1820: 57). *Species algarum*; syn.: *Abrotanifolia barbata* Stackhouse 1809; Adriatic Sea, 19th century, no signature – donation T. Jurcsák.

***Cystoseira concatenata* (L.) C. Agardh** (n. 8323/41) – ref.: Agardh, C. A. (1820: 57). *Species algarum*; syn.: *Cystoseira foeniculacea* (L.) Greville; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Cystoseira catenella* Ag.** (n. 8324/31) – ref.: Agardh, C. A. (1820 '1821'). *Species*

algarum; unmentioned location, 19th century, no signature, donation T. Jurcsák.

***Cystoseira corniculata* (Turner) Zanardini** (n. 8324/32) – ref.: *Memorie della Reale Accademia delle Scienze di Torino, ser. 2 4: 105-255, pls. I-VIII*; unmentioned location 19th century, no signature, donation T. Jurcsák.

***Cystoseira corniculata* (Turner) Zanardini** (n. 8323/42) – ref.: Zanardini, G. (1841: 243). *Memorie della Reale Accademia delle Scienze di Torino, ser. 2. 4: 105-255, pls. I-VIII*; syn.: *Fucus ericoides* var. *corniculatus* Turner; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Cystoseira crinita* Duby** (n. 8323/38) – ref.: Duby, J. E. (1830: 936). *Aug. Pyramide de candolle Botanicon gallicum*; syn.: *Fucus crinitus* Desfontaines; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Cystoseira foeniculacea* (L.) Greville** (n. 8323/39) – ref.: Greville, R. K. (1830: xxxii, 5-7). *Algae britannicae*; syn.: *Cystoseira abrotanifolia* (L.) C. Agardh; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Cystoseira foeniculacea* (L.) Greville** (n. 8324/34) – ref.: Greville, R. K. (1830). *Algae britannicae*; syn.: *Cystoseira abrotanifolia* (L.) Agardh 1820: 63; unmentioned location and undated, 19th century, no signature, donation T. Jurcsák.

***Cystoseira leptocarpa* Kutz.** (n. 8323/37) – ref.: Kutz. Sp. p. 599, Tab. Phyc. X., t. 46, f.II; syn.: *Cystoseira leptocarpa* Ag.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Cystoseira spinulosa* Kg.** (n. 8323/109) – ref.: Agardh, C. A. (1820 '1821'). *Species algarum*. Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

***Cystoseira* sp.** (n. 8324/33) – ref.: Agardh, C. A. (1820 '1821'). *Species algarum*; unmentioned location, 19th century, no signature, donation T. Jurcsák.

Fam. *Fucaceae*

Gen. *Ascophyllum* Stackhouse, 1809, nom. cons., orth. cons.

***Ascophyllum nodosum* (L.) Le Jolis** (n. 8323/43) – ref.: Le Jolis, A. (1863: 96). *Memories de la Société Impériale des Sciences Naturelles de Cherbourg* 10: 5-168, pls. I-IV; syn.: *Fucus nodosus* L.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Fucus* L., 1753

***Fucus sherardii* (L.) Areschoug** (n. 8323/81) – ref.: Areschoug J. E. (1868: 106). *Botaniska Notiser* 3: 99-115; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Fucus scherardii* L.** (n. 8324/19) – ref.: Linnaeus. *Species Plantarum* 2: 1158.

1753; unmentioned location, 19th century, no signature, donation T. Jurcsák.

***Fucus vesiculosus* L.** (n. 8324/20) – ref.: Linnaeus (1753). *Species plantarum* vol.2 pp. [i], 561-1200, [1-30, index]; unmentioned location, 19th century, no signature, donation T. Jurcsák.

Gen. *Pelvetia* Decaisne & Thuret, 1845

***Pelvetia canaliculata* (L.) Decaisne & Thuret** (n. 8323/45) – ref.: Decaisne J. & Thuret, G. (1845: 13). *Annales des Sciences Naturelles, Botanique, Troisième série* 3. 5-15, pls. 1-2, 40 figs.; syn.: *Fucus canaliculatus* L.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Fam. *Sargassaceae*

Gen. *Sargassum* C. A. Agardh, 1820, nom. cons.

***Sargassum acinarium* (L.) Setchell** (n. 8323/4) – ref.: Setchell, W. A. & Gardner, N. L. (1924). *Proceedings of the California Academy of Science*, Ses. 4 12: 695-949, 77 plates; syn.: *Sargassum linifolium* C. Agardh, 1820; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Sargassum bacciferum* (Turner) Agardh** - (n. 8323/137) – ref.: Agardh, C. A. (1820 '1821'). *Species algarum*, Pars prima. Pp. [i-iv], [1]-168. Lundae; syn.: *Sargassum natans* (L.) Gaillon; Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

Sargassum cuneifolium* var. *doriae* (Grunow) Grunow** (n. 8323/8) – ref.: Grunow 1915: 430; syn.: *Sargassum dorianum* DC; ***Sargassum doriae Grunow; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Sargassum parvifolium* (Turner) C. Agardh** (n. 8323/6) – ref.: Agardh, C. A. (1820 '1821'). *Species algarum*; syn.: *Fucus parvifolius* Turner; *Sargassum parvifolium* Zan.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Sargassum vulgare* Agardh** (n. 8323/5) – ref.: Agardh, C. A. (1820, 1821'). *Species algarum*; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Sargassum vulgare* Agardh** (n. 8324/23) – ref.: *Species algarum* rite cognitae, cum synonymis, differentiis specificis et descriptionibus succinctis. Volumen primum. Pars prima. pp. [i-iv], [1]-168. Lundae; Croatia, Split (Spalato), Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Ord. *Laminariales*

Fam. *Chordaceae*

Gen. *Chorda* Stockhouse, 1797

***Chorda termis* L.** (n. 8324/21) – ref.: Stackhouse, J. (1797). *Nereis britannica*; unnamed and undated, 19th century, no signature, donation T. Jurcsák.

Ord. *Scytosiphonales***Fam. *Scytosiphonaceae*****Gen. *Scytosiphon* C. A. Agardh, 1820, nom. cons.**

***Scytosiphon lomentaria* (Lyngbye) Link.** (n. 8324/35) – ref.: *Handbuch zur Erkennung der nutzbarsten und am häufigsten vorkommenden Gewächse. Dritter Theil. pp. i-xviii, 1-536.* Berlin; syn.: *Chorda lomentaria* Lyngbye; Croatia, Split (Spalato), Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Ord. *Sphacelariales***Gen. *Sphacelocarpus***

***Sphacelocarpus labillarelinii* Agardh** (n. 8323/114) – Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

Fam. *Cladostephaceae***Gen. *Cladostephus* C. A. Agardh, 1817**

***Cladostephus myriophyllum* Agardh** (n. 8324/13) – ref.: M. D. Guiry, 2011, *Algae Base*; syn.: *Cladostephus myriophyllum* Bory, 1823: 182, nom. illeg.; *Cladostephus spongiosus* (Hudson) Agardh f. *verticillatus* (Lightfoot) Prud'homme van Reine; unnamed and undated, 19th century, no signature, donation T. Jurcsák.

***Cladostephus myriophyllum* Agardh** (n. 8323/57) – ref.: *Cladostephus myriophyllum* Bory 1823: 182, nom. illeg.; syn.: *Cladostephus verticillatus* (Lightfoot) Lyngbye; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Fam. *Stypocaulaceae***Gen. *Halopteris* F. T. Kützing, 1843**

***Halopteris filicina* (Grattan) Kützing** (n. 8323/76) – ref.: Kützing, F. T. (1843: 293). *Phycologia generalis*; syn.: *Sphacelaria disticha* Vahl ex Lyngbye 1819; *Sphacelaria filicina* (Grateloup) C. Agardh; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Halopteris scoparia* (L.) Sauvageau** (n. 8323/77) – ref.: Sauvageau, C. (1904). *Remarques sur les Sphacelariacees*. Vol.2 pp. 321-480. Bordeaux: Feret et fils; syn.: *Sphacelaria scoparia* (L.) Lyngbye; *Stypocaulon scoparium* (L.) Kützing; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Ord. Sporochneales

Fam. Sporochnaceae

Gen. *Nereia* Zanardini, 1846

Nereia filiformis* (J. Agardh) Zanardini** (n. 8323/7) – ref.: *Atti del Settimo Congresso degli Scienziati Italiani in Napoli*, 1845, 2: 899-900; syn.: ***Desmarestia filiformis J. Agardh; *Desmarestia filiformis* Lam.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Clas. Xanthophyceae Pascher, 1914

Ord. Vaucheriales

Fam. Vaucheriaceae

Gen. *Vaucheria* A. P. de Candolle, 1801

***Vaucheria cespitosa* (Vaucher) De Candolle** (n. 8323/141) – ref.: Candolle, A. P. de (1801). *Bulletin des Scians, par la Société Philomathique de Paris* 3: 17-21; syn.: *Vaucheria cespitosa* Kg.; *Vaucheria caespitosa* DC; Slovakia, north-western Carpathians, Gerlachovsky (Gerlos) region, freshwater, 19th century, leg. illegible signature, donation T. Jurcsák.

***Vaucheria cespitosa* (Vaucher) De Candolle** (n. 8324/27) – ref.: *Hedwigia*. 1890; unnamed and undated, freshwater, 19th century, no signature, donation T. Jurcsák.

Subphylum Diatomeae (Dumortier, 1821) Cavalier-Smith, 1995

Class Bacillariophyceae Haeckel, 1878

Subclass Bacillariophycidae (Haeckel, 1878) Mann, 1990

Gen. *Micromega* C. A. Agardh, 1927

***Micromega tenellum* Kützing** (n. 8323/60) – ref.: Kützing, F. T. 1844, Die kiesel-schaligen Bacilarien oder Diatomeen. Nordhausen, 152 pp., 30 pls.; syn.: *Schizonema tenellum* (Kützing) Meneghini, 1853; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Clas. Fragilariophyceae F. E. Round, in F. E. Round et al., 1990

Subclas. *Fragilariophycidae* F. E. Round, in F. E. Round et al., 1990

Ord. *Fragilariales* Silva, 1962

Fam. *Fragilariaceae* Greville, 1833

Gen. *Diatoma* Bory de Saint-Vincent, 1824, nom. cons.

Diatoma vulgare Bory de Saint-Vincent (n. 8324/46) – ref.: *Dictionnaire Classique d'Histoire Naturelle. CRA-D* (Audoin et al. eds) Vol. 5, pp. 461. Paris; unnamed and undated, 19th century, no signature, donation T. Jurcsák; missing.

Kindom *Fungi* T. L. Jahn & F. F. Jahn, 1949 ex R. T. Moore, 1980

Subkindom *Dikaria* D. S. Hibbett et al., in D. S. Hibbett et al., 2007

Phylum *Ascomycota* H. C. Bold, 1975 ex T. Cavalier-Smith, 1998

Subphylum *Pezizomycotina* O. E. Eriksson & K. Winka, 1997

Clas. *Lecanoromycetes* O. E. Eriksson & K. Winka, 1997

Subclas. *Lecanoromycetidae* P. M. Kirk et al. 2001 ex J. Miadlikowska et al., in D. S. Hibbett et al., 2007

Ord. *Lecanorales* Nannf., 1932

Fam. *Cladoniaceae* Zenker, 1827

Gen. *Cladonia* Hill ex P. Browne, 1756

Cladonia convoluta (Lamkey) Anders (n. 8324/93) – ref.: *Strauch-Blattflecht. Nordbohm*: 29 (1806); syn.: *Cenomyce endiviifolia* Ach., Lieh. üniv. (1810) p. 528 (conf. Floerk., Berl. Mag. 1810 p. 250, Coem., Clad. Ach. 1865 p. 36). Ach., Syn. Lieh. (1814) p. 250, 342 (endiviaefolia). Flot., Bern. Meuse Lieh. (1818-20) p. 152; *Cenomyce endiviifolia* Hook (Fl. Scot. ii. P. 62); *Cenomyce endiviofolia* L.; *Cladonia endiviifolia* (Dicks) Fr. (as “endiviaefolia”); *Cladonia foliacea* var. *endiviifolia* (Dicks) Schaer.; *Lichen convoluus* Lamkey; *Lichen endiviifolius* Dicks.; Croatia, Dalmatia, 19th century, no signature, donation T. Jurcsák.

Cladonia cornucopioides (L.) Hoffm. (n. 8324/74) – ref.: *Deutschl. Fl., Zweiter Theil* (Erlangen): 128 (1796); Romania, Transylvania (Erdély), 19th century, illegible signature, donation T. Jurcsák.

Cladonia cupulata Ach. (n. 8324/71) – ref.: *Prim. Fl. Holsat.* (Kiliae): 90 (1756); Slovenia, Kraina, 19th century, no signature, donation T. Jurcsák.

Cladonia pyxidata (L.) Hoffm. (n. 8324/72) – ref.: *Deutschl. Fl., Zweiter Theil* (Erlangen): 121 (1796); Romania, Bihor, Oradea, hills of Oradea, 19th century, illegible signature, donation T. Jurcsák.

Cladonia racemosa Hoffm. (n. 8324/75) – ref.: *Deutschl. Fl., Zweiter Theil* (Erlangen): 114 (1796); Romania, Transylvania (Erdély), 19th century, illegible signa-

ture, donation T. Jurcsák.

***Cladonia rangiferina* (L.) Weber ex. F.H. Wigg.** (n. 8324/73) – ref.: in Wiggers, *Prim. fl. holsat* (Kiliae): 90 (1780); Slovenia, Kraina, 19th century, illegible signature, donation T. Jurcsák.

***Cladonia utricularis* Hoff.** (n. 8324/76) – ref.: *Prim. fl. holsat*. (Kiliae): 90 (1756); Romania, Transylvania (Erdély), 19th century, illegible signature, donation T. Jurcsák.

Gen. *Lecanora* Ach., 1809

***Lecanora subfusca* (L.) Ach.** (n. 8324/100) – ref.: *Lich. Univ.*: 393. (1810); Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

Fam. *Parmeliaceae* Zenker, 1827

Gen. *Alectoria* Ach.

***Alectoria jubata* (L.) Ach.** (n. 8324/80) – ref.: Zahlbruckner's Cat. Lich. Univ. 6: 394 | Lamb's Index nom. lich.: 15; syn.: *Bryopogon jubatum* Hoff.; *Bryopogon jubatus* (L.) Link.; *Bryoria jubata* (L.) Bystrek; Slovenia, Kraina, 19th century, illegible signature, donation T. Jurcsák.

***Alectoria ochroleuca* (Hoffm) A. Massal.** (n. 8324/81) – ref.: *Sched. critic.* 2: 47 (1885); syn.: *Bryopogon ochroleucus* (Hoffm) Link. (1833); *Bryopogon ochroleucum* Ach.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

***Alectoria ochroleuca* (Hoffm). A. Massal.** (n. 8324/88) – ref.: syn.: *Sched. Critic.* 2: 47 (1855); syn.: *Imbricaria ochroleuca* L.; *Parmelia ochroleuca* (Hoffm) Ach.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Gen. *Bryoria* Brodo & D. Hawksw.

***Bryoria capillaris* (Ach) Brodo & D. Hawksw.** (n. 8324/82) – ref.: *Op. Bot.* 42: 115 (1977); syn.: *Alectoria capillaris* (Ach) Cromb. (1871); *Bryopogon capillaris* (Ach) Bystrek (1971); *Bryopogon capillaceum* Hoffm.; Slovenia, Kraina, 19th century, illegible signature, donation T. Jurcsák.

Gen. *Cetraria* Ach.

***Cetraria aculeata* (Schred) Fr.** (n. 8324/78) – ref.: *Nov. Sched. Critic. Lich.* 4: 32

(1826); syn.: *Cenomice aculeata* Ach.; *Cladonia aculeata* (Schreb) Baumg.; *Parmelia aculeata* (Schreb) Spreng.; Romania, Bihor, Oradea, hills of Oradea, 19th century, illegible signature, donation T. Jurcsák.

***Cetraria islandica* (L.) Ach.** (n. 8324/84) – ref.: *Method. Lich.*: 293 (1803); syn.: *Cetraria islandica* ssp. *islandica* (L.) Ach.; Slovenia, Kraina, 19th century, illegible signature, donation T. Jurcsák.

Gen. *Evernia* Ach

***Evernia capillaris* Koleh** (n. 8324/92) – ref.: *Lich. Univ* : 84, 441 (1809); north-western Carpathians, 19th century, illegible signature, donation T. Jurcsák.

***Evernia divaricata* (L.) Ach.** (n. 8324/90) – ref.: *Lich. univ.*: 1-196 (1810); north-western Carpathians, 19th century, illegible signature, donation T. Jurcsák.

***Evernia prunastri* (L.) Ach.** (n. 8324/91) – ref.: *Lich. univ.*: 442, tab. 10, fig. 1 (1810); Slovenia, Kraina, 19th century, illegible signature, donation T. Jurcsák.

Gen. *Flavocetraria* Karnefelt & A. Thell,

***Flavocetraria cucullata* (Bellardi) Karnefelt & A. Thell** (n. 8324/85) – ref.: in Karnefelt, Thell, Randlane & Saag, *Acta bot. Fen.* 150: 81 (1994); syn.: *Cetraria cucullata* (Bellardi) Ach.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

***Flavocetraria nivalis* (L.) Karnefelt & A. Thell** (n. 8324/83) – ref.: in Karnefelt, Thell, Randlane & Saag, *Acta bot. fenn.* 150: 84 (1994); syn.: *Allocetraria nivalis* (L.) Randlane & Saag; *Cetraria nivalis* (L.) Ach.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Gen. *Flavoparmelia* Hale

***Flavoparmelia caperata* (L.) Hale** (n. 8324/87) – ref.: *Mycotaxon* 25(2): 604 (1986); syn.: *Imbricaria caperata* (L.) DC. (1805); Slovenia, Kraina, 19th century, illegible signature, donation T. Jurcsák.

Gen. *Melanelia* Essl.,

***Melanelia stygia* (L.) Essl.** (n. 8324/86) – ref.: *Mycotaxon* 7(1): 47 (1978); syn.: *Imbricaria stygia* (L.) DC., in Lamarck & de Candolle, *Fl. franç.*, Edn. 3 (Paris) 2: 189 (1805); Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region,

19th century, leg. illegible signature, donation T. Jurcsák.

Gen. *Pseudoevernia* Zopf.

Pseudoevernia furfuracea* (L.) Zopf. var. *furfuracea (n. 8324/89) – ref.: *Beih. Bot. Cbi.* 14: 124 (1903); syn.: *Evernia furfuracea* (L.) W. Mann, *Parmelia furfuracea* (L.) Ach.; Slovenia, Kraina, 19th century, illegible signature, donation T. Jurcsák.

Gen. *Usnea* Dill. ex Adans., 1763

***Usnea barbata* (L.) Weber ex. F.H. Wigg.** (n. 8324/97) – ref.: *Brit. Fl.* 1: 206 (1780); northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

***Usnea florida* (L.) Weber ex. F.H. Wigg.** (n. 8324/96) – ref.: *Prim. Fl. holast.* (Killae) 2: 7 (1780); Slovenia, Kraina, 19th century, illegible signature, donation T. Jurcsák.

***Usnea longissima* Ach.** (n. 8324/95) – ref.: *Lich. Univ.*: 626 (1810); Slovenia, Kraina, 19th century, illegible signature, donation T. Jurcsák.

Fam. *Physciaceae* Zahlbr., 1898

Gen. *Anaptychia* Korb.

Anaptychia ciliaris* (L.) Korb. ssp. *ciliaris (n. 8324/101) – ref.: *Sci. Rep. Fac. Agric. Kyoto Prefect. Univ.*: 197 (1853); syn.: *Borrera ciliaris* (L.) Ach., *Lich. univ.*: 496 (1810); Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

***Anaptychia runcinata* (With) J. R. Laundon** (n. 8324/77) – ref.: *Lichenologist* 16(3): 225 (1984); syn.: *Parmelia aquila* (Ach) Ach. (*Method. Lich.*: 201. 1803); Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

Gen. *Heterodermia* Trevis.

***Heterodermia speciosa* (Wulfen) Trevis** (n. 8324/79) – ref.: *Atti Soc. Ital. Sci. nat.* (Modena) 11: 614 (1868); syn.: *Anaptychia speciosa* (Wulfen) A. Massal; *Parmelia speciosa* (Wulfen) Ach.; Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

Fam. Ramalinaceae C. Agardh, 1821**Gen. Ramalina Ach.**

Ramalina calicaris (L.) Rohl. (n. 8324/102) – ref.: *Deutschl. Fl.*, Abth. 2 (Frankfurt) 3: 139 (1813); syn.: *Ramalina calicaris* Fries; Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

Ramalina fraxinea (L.) Ach. (n. 8324/94) – ref.: *Lich. Univ.*: 622 (1810); northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Ord. Peltigerales W. Watson, 1929**Subord. Collematinaceae Miadlikovaska****Fam. Collemataceae Zenker, 1827****Gen. Leptogium (Ach) Gray**

Leptogium lichenoides (L.) Zahlbr. (n. 8324/98) – ref.: *Cat. Lich. Univers.* 3: 136 (1924) [1925]; syn.: *Leptogium lacerum* (Sw) Gray; *Collema lacerum* (Sw) DC; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Subord. Peltigerineae**Fam. Lobariaceae Chevall., 1826****Gen. Lobaria (Schreb) Hoffm.**

Lobaria pulmonaria (L.) Hoffm. (n. 8324/99) – ref.: *Deutschl. Fl.*, Zweiter Theil (Erlangen): 146 (1796); syn.: *Sticta pulmonaria* (L.) Birolí; Slovenia, Kraina, 19th century, illegible signature, donation T. Jurcsák.

Fam. Peltigeraceae Dumort., 1822**Gen. Peltigera Willd., 1787**

Peltigera verucosa L. (n. 8324/105) – ref.: *Fl. Berol. Prodr.* 347 (1787); Romania, Transylvania (Erdély), 19th century, illegible signature, donation T. Jurcsák.

Ord. Teloschistales D. Hawksw. & O. E. Eriksson, 1986**Fam. Teloschistaceae Zahlbr., 1898****Gen. Xantoria (Fr) Th. Fr., 1860**

Xantoria parietina (Th. Fr) var. parietina (n. 8324/103) – ref.: *Lich. Arct.*: 69

(1860); syn.: *Physcia parietina* (L.) De Not., (1847); Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

Ord. Umbilicaricales

Fam. Umbilicariaceae Chevall., 1826

en. Umbilicaria Hoffm., 1789

Umbilicaria deusta (L.) Baumg. (n. 8324/104) – ref.: *Fl. Lips.*: 571 (1836); syn.: *Gyrophora flocculosa* Hoff.; *Gyrophora flocculosa* (Wulfen) Turner & Borrer; *Gyrophora deusta* (L.) Ach., *Umbilicaria flocculosa* (Wulfen) Hoffm.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Umbilicaria hirsuta (Sw. Ex. Westr) Ach. (n. 8324/106) – ref.: *K. Vetensk-Acad. Nya Handl.* 15: 97 (1794); syn.: *Gyrophora hirsuta* (Sw. Ex. Westr) Ach.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Clas. Lichinomycetes V. Reeb et al., 2004

Ord. Lichinales henningsen & Budel, in Hawksworth & Eriksson, 1986

Fam. Lichinaceae Nyl., 1854

Gen. Lichina C. Agardh, 1817, nom. cons.

Lichina confinis (O.F.Mull) C. Agardh (n. 8323/125) – ref.: *Spec. Alg.* 1: 105 (1821); syn.: *Lichen confinis* O.F. Mull., *Icon. Plant. Dan.* 5: 5 (1782); Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

Kingdom Plantae Haeckel, 1866

Subkingdom Biliphyta Cavalier-Smith, 1981

Phylum Rodophyta Wettstein, 1922

Subphylum Macrorhodophytina T. Cavalier-Smith, 1998

Clas. Bangiophyceae

Ord. Bangiales

Fam. Bangiaceae

Gen. Bangia Lyngbye, 1819

Bangia compacta Zan. (n. 8324/57) – ref.: *Bangia compacta* Zanardini; Lyngbye, H. C. (1819). *Tentamen hydrophytologiae danicae*; Croatia, Split (Spalato), Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Bangia fuscopurpurea* (Dilling) Lyngbye** (n. 8323/10) – ref.: Lyngbye, H. C. (1819; 83, pl. 24 C). *Tentamen hydrophytologiae*; syn.: *Bangia versicolor* Kützing; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Porphyra* C. A. Agardh, 1824, nom. cons.

***Porphyra purpurea* (Roth) C. Agardh** (n. 8324/26) – ref.: Agardh, C. A. (1824). *Systema algarum*. pp. [i]-xxxviii, [1]-312. Lundae; syn.: *Porphyra vulgaris* C. Agardh 1827; no location and data, 19th century, no signature, donation T. Jurcsák.

***Porphyra purpurea* (Roth) C. Agardh** (n. 8323/101) – ref.: Agardh, C. A. (1824: 191). *Systema algarum*. Pp. [i]-xxxviii, [1]-312. Lundae [Lund]; syn.: *Porphyra vulgaris* C. Agardh. nom. ileg.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Ord. *Erythropeltidales*

Fam. *Erythrotrichiaceae*

Gen. *Erythrotrichia* J. E. Areschoug, 1850, nom. cons.

***Erythrotrichia investiens* (Zanardini) Bornet** (n. 8323/29) – ref.: Bornet E. (1892: 260). *Mémoires de la Société des Sciences naturelles de Cherbourg* 28: 165-376, 2 plates; syn.: *Bangia investies* Zan.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Clas. *Florideophyceae*

Ord. *Ceramiales*

Fam. *Ceramiceae*

Gen. *Antithamnion* Naegeli, 1847

***Antithamnion cruciatum* (C. A. Agardh) Naegeli** (n. 8324/18) – ref.: Nägeli, C. (1847). *Neue Denkschriften der Allgemeinen Schweizerischen Gesellschaft für die Gesamten* 9(2): 1-275, pls I-X.; syn.: *Callithamnion cruciatum* C. Agardh; Croatia, Split (Spalato), Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Ballia* W. Harvey, 1840

***Ballia calitricha* (C. Agardh) Kutzing** (n. 8323/113) – ref.: Agardh, C. A. (1824), *Systema Algarum* (Berling: Lund); syn.: *Balea callitrichia* Ag.; Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

Gen. *Callithamnion* Lyngbye, 1819

***Callithamnion compactum* E.Y. Dawson** (n. 8323/104) – ref.: Dawson (1962: 29); syn.: *Callithamnion compactum* Ag.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Callithamnion corymbosum* (Smith) Lyngbye** (n. 8323/105) – ref.: Lyngbye, H. C. (1819: 125). *Tentamen hydrophytologiae danicae*; syn.: *Callithamnion versicolor* Ag.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Callithamnion corymbosum* (Smith) Lyngbye** (n. 8324/11) – ref.: Lyngbye, H. C. (1819), *Tentamen hydrophytologiae danicae*, pp.[i]-xxxii, [1]-248, pls.Hafniae [Copenhagen]; syn.: *Callithamnion versicolor* (C. Agardh) C. Agardh; Croatia, Split (Spalato), Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Ceramium* A. W. Roth, 1797, nom. cons.

***Ceramium circinatum* (Kutzing) J. Agardh** (n. 8324/52) – ref.: Agardh, J. G. (1851). *Species genera et ordines algarum*; syn.: *Ceramium ramulosum* Meneghini; *Echinoceras ramulosum* Men.; - Croatia, Split (Spalato), Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Ceramium diaphanum* (Lightfoot) Roth** (n. 8323/108) – ref.: Roth, A.G. (1806: 154), *Catalecta botanica*; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Ceramium hospitans* Zanard.** (n. 8324/59) – ref.: *Catalecta Botanica* 1: 146. 1797; syn.: *Hormoceras hospitans* Zan.; Italy, Venice, Adriatic Sea, 1856, leg. Titius, donation T. Jurcsák.

***Ceramium julaceum* (Kutzing) Rabenhorst** (n. 8323/106) – ref.: Kutzing, F. T. (1842, 1831'). *Über Ceramium* Ag. *Linnaea* 15: 727-746; syn.: *Ceramium julaceum* Kg.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Ceramium sandrianum* Meneghini** (n. 8324/60) – ref.: *Catalacta Botanica* 1: 146. 1797; syn.: *Hormoceras sandrianum* Meneg.; Italy, Friuli-Venezia Giulia, Trieste, 1856, leg. Titius, donation T. Jurcsák.

***Ceramium tenuissimum* var. *pygmaeum* (Kutzing) Hauck** (n. 8324/62) – ref.: *Ceramium tenuissimum* var. *pygmaeum* (Ktzing) Hauck 1888: 460; syn.: *Hormoceras pygmaeum* Kutzing; *Ceramium pygmaeum* (Kutzing) Ardissoni; Italy, Friuli-Venezia Giulia, Trieste, Adriatic Sea, 19th century, leg. Titius, donation T. Jurcsák.

***Ceramium virgatum* Roth** (n. 8324/61) – ref.: Roth, A. W. (1811). *Catalecta botanica*; syn.: *Hormoceras rubrum* Huds.; *Ceramium rubrum* (Huds) C. A. Agardh; Italy, Friuli-Venezia Giulia, Trieste, Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Griffithsia* Agardh, nom. cons.

***Griffithsia tenuissima* Agardh** (n. 8323/21) – ref.: Agardh, C. A. (1828). *Species algarum*; syn.: *Griffithsia tenuissima* Zan.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Halurus* Kutzing, 1843

***Halurus equisetifolius* (Lightfoot) Kutzing** (n. 8323/123) – ref.: Kutzing F. T. (1843): 374, *Phycologia generalis*; syn.: *Halurus equisetifolius* Huds.; Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

***Halurus flosculosus* (J. Ellis) Maggs & Hommersand** (n. 8323/19) – ref.: Maggs, C. A. & Hommersand, M. H. (1993: 175). *Seaweeds of the British Isles. Volume 1. Rhodophyta. Part 3A. Ceramiales*. Pp. Xv = 444, 129 figs, map. London; syn.: *Griffithsia setacea* (Hudson) C. Agardh; *Griffithsia setacea* Zan.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Hormoceras* Kutzing

Hormoceras glomeratum* Lit.** (n. 8323/107) – ref.: Kutzing, F. T. (1842 ,1841'). Über *Ceramium* Ag. *Linnaea* 15: 727-746; syn.: ***Ceramium glomeratum De Candolle; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Microcladia* Greville. 1830

***Microcladia glandulosa* (Solander ex Turner) Greville** (n. 8323/120) – ref.: Greville R. K. (1830) : I, 99, *Algae Britannicae*; Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

Gen. *Plumaria* Kuntze

***Plumaria plumosa* (Hudson) Kuntze** (n. 8323/135) – ref.: Kuntze, O. (1891). *Revisio generum plantarum. Pars 2.* pp. 375=1011. Leipzig.; syn.: *Ptilota elegans* Bonnemaison. 1828: 70; *Ptilota elegans* Grev.; *Ceramium plumosum* (Hudson) Roth, 1806; *Fucus plumosus* Hudson, 1762; Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

Gen. *Pleonosporium* C. Naegeli, 1862, nom. cons.

***Pleonosporium borreri* (Smith) Naegeli** (n. 8324/17) – ref.: Nägeli, C. (1862 ‘1861’). *Sitzungsberichte der Koniglichen Bayerischen Academie der Wissenschaften zu München* 1861(2): 297-415, 30 figs, 1 plate; syn.: *Callithamnion seminudum* C. Agardh; Croatia, Split (Spalato), Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Pterothamnion* Naegeli, in Naegeli & Cramer, 1855

***Pterothamnion plumula* (J. Ellis) Naegeli** (n. 8323/103) – ref.: Nägeli, C. & Cramer, C. (1885: 66) *Pflanzenphysiologische Untersuchungen*. Heft 1. pp. [i-vi], [1]-120, pls. I-X. Zurich; syn.: *Callithamnion plumula* (J. Ellis) Lyngbye; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Spyridia* Harvey, in W. J. Hooker, 1833

***Spyridia filamentosa* (Wulfen) Harvey in Hooker** (n. 8323/28) – ref.: Harvey, V. H. (1833: 337). *The English Flora of Sir James Edward Smith*; syn.: *Spyridia filamentosa* Kg.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Spyridia filamentosa* (Wulfen) Harvey** (n. 8324/45) – ref.: Harvey, W.H. (1833). *The English Flora of Sir James Edward Smith, class XXIV, vol. V, part.I.*, pp. 263-265, 265-266, 326-389, 389-405, London; unmentioned location, 19th century, no signature, donation T. Jurcsák, missing plant.

Gen. *Wrangelia* C. A. Agardh, 1828

***Wrangelia penicillata* (C. Agardh) C. Agardh** (n. 8323/87) – ref.: Agardh, C. A. (1828: 138). *Systema algarum*. pp. [1]-xxxviii, [1]-312. Lundae [Lund]; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Wrangelia penicillata* (C. Agardh) C. Agardh** (n. 8324/15) – ref.: Agardh, C. A. (1824). *Systema algarum*. pp. [i]-xxxviii, [1]-312. Lundae; Croatia, Split (Spalato), Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Fam. *Dasyaceae*

Gen. *Dasya* C. A. Agardh, 1824, nom. cons., orth. cons.

***Dasya aquatica* L.** (n. 8324/50) – ref.: Costello, M. J. et al. (Ed) (2001). *European register of marine species. Collection Patrimoines Naturels*, 50: pp.20-38; Croatia, Split (Spalato), Adriatic Sea, 1856, leg. Titius, donation T. Jurcsák.

Gen. *Eupogodon* Kutzing, 1845

***Eupogodon planus* (C. Agardh) Kutzing** (n. 8323/17) – ref.: Kutzing, F. T. (1845). *Phycologia germanica*, d. i.; syn.: *Dasyopsis plana* Kg.; *Dasyopsis plana* (C. Agardh) Falkenberg; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Eupogodon planus* (C. Agardh) Kutzing** (n. 8323/99) – ref.: Kutzing, F. T. (1845: 312), *Phycologia germanica*, d. i.; syn.: *Dasya spinella* C. Agardh; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Heterosiphonia* Montagne, 1842, nom. cons.

***Heterosiphonia plumosa* (J. Ellis) Batters** (n. 8323/121) – ref.: Batters E. A. L. (1902). A catalogue of the British marine algae. *Journal of Botany, British and Foreign* 40 (Supplement): 1-107; syn.: *Dasya coccinea* (Hudson) Areschoung; Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

Fam. *Delesseriaceae***Gen. *Aglaophyllum* Montagne**

***Aglaophyllum delicatulum* (Kutzing) Kutzing** (n. 8323/35) – ref.: Montagne, J. P. F. C. (1839). *Plantae cellulares*; syn.: *Aglaophyllum delicatulum* Grev.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Aglaophyllum lobatum* Kg.** (n. 8323/33) – ref.: Montagne, L. P. F. C. (1839). *Plantae cellulares*. In *Voyage dans l’Amerique Meridionale* – (d’Orbigny, A. ed), pp. 1-39. Paris; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *ErythroglOSSum* J. Agardh, 1898

***ErythroglOSSum laciniatum* (Lightfoot) Maggs & Hommesand** (n. 8323/136) – ref.: Maggs, C. A. & Hommersand (1993). *Seaweeds of the British Isles. Volume 1. Rhodophyta. Part 3A. Ceramiales*; syn.: *Nitophyllum gmellini* Grev. (Greville, R. K. (1830). *Algae britannicae*); Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

***ErythroglOSSum sandrianum* (Zanardini) Kylin** (n. 8323/49) – ref.: Kylin, H. (1924). *Universitatis Lundensis* 20(6): 1-111, 80 figs.; syn.: *Aglaophyllum sandrianum* Kutzing; *Delesseria sandriana* Zanardini; *Delesseria sandriana* Meneghini; *Nitophyllum sandrianum* (Zanardini) Zanardini; *Phlobophyllum sandrianum* Men.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Hypoglossum* Kutzing, 1843

***Hypoglossum conferoaceum* Kutzing** (n. 8323/98) – ref.: Kutzing, F. T. (1843). *Phycologia generalis*; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Hypoglossum hypoglossoides* (Stackhouse) F. S. Collins & Hervey C.** (n. 8323/1) – ref.: Collins, F.S. & Harvey, A.B. (1917: 116). *Proceedings of the American Academy of Arts and Sciences* 53: 1-195, 6 pls.; syn.: *Delesseria hypoglossum* Gr.; *Delessenia hypoglossum* (Woodward) J. V. Lamouroux; *Hypoglossum woodwardii* Kutzing; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Nitophyllum* Greville, 1830, nom. cons.

***Nitophyllum ocellatum* (J. V. Lamouroux) J. Agardh** (n. 8324/44) – ref.: Agardh, J. G. (1842), *Algae maris Mediterranei et Adriatici*, pp. [1]-x, 1-164. Parisiis [Paris]; unmentioned location and undated, 19th century, no signature, donation T. Jurcsák.

Fam. *Rhodomelaceae***Gen. *Alsidium* C. Agardh, 1827**

***Alsidium corallinum* C. Agardh** (n. 8324/43) – ref.: Agardh, C. A. (1827): 639, *Flora* 10(40): 625-640; Croația, Split (Spalato), Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Alsidium corallinum* C. Agardh** (n. 8323/94) – ref.: C. Agardh 1827: 639. *Flora* 10 (40): 625-640; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Boergeseniella* Kylin. 1956

***Boergeseniella fruticulosa* (Wulfen) Kylin** (n. 8324/4) – ref.: Kylin, H. (1956). *Die Gattungen der Rhodophyceen*. pp. i-xv, 1-673, 458 figs. Lund: C. W. K. Gleerups; syn.: *Polysiphonia wulfenii* (Roth) J. Agardh; Croatia, Split (Spalato), Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Bostrychia* Montagne, in Sagra, 1842, nom. cons.

***Bostrychia scorpioides* (Hudson) Montagne** (n. 8323/127) – ref.: Montagne, C. (1842), *Bostrychia*, *Dictionnaire Universel d'Histoire Naturelle [Orbigny]* 2 : 660-

661; syn.: *Rhodomela scorpioides* (Hudson); Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

Gen. *Chondria* C. A. Agardh, 1817, nom. cons.

***Chondria dasyphylla* (Woodward) C. Agardh** (n. 8324/2) – ref.: Agardh, C. A. (1817). *Synopsis algarum Scandinaviae, adjecta dispositione universali algarum*. pp. [i] – xl, [1] – 135. Lundae [Lund]: ex officina Berlingiana; syn.: *Laurencia dasyphylla* (Woodward) Greville; unmentioned location, 19th century, no signature, donation T. Jurcsák.

***Chondria dasyphylla* (Woodward) C. Agardh** (n. 8323/66) – ref.: Agardh, C. A. (1817: XVIII). *Synopsis algarum Scandinaviae*, pp. [i]-xl, [1]-135. Lundae [Lund]; syn.: *Laurencia dasyphylla* (Woodward) Greville, 1830; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Halopithys* Kuetzing, 1843

***Halopithys incurva* (Hudson) Batters** (n. 8324/37) – ref.: Batters, E. A. L. (1902) A catalogue of the British marine algae. *Journal of Botany, British and Foreign* 40 (Supplement): 1-107; syn.: *Rytiphlaea pinastroides* (Stackhouse) C. Agardh; unmentioned location and undated, 19th century, no signature, donation T. Jurcsák.

***Halopithys incurva* (Hudson) Batters** (n. 8324/40) – ref.: Batters, E. A. L. (1902) A catalogue of the British marine algae. *Journal of Botany, British and Foreign* 40 (Supplement): 1-107; syn.: *Rytiphlaea pinastroides* (Stackhouse) C. Agardh; unmentioned location, 19th century, no signature, donation T. Jurcsák.

***Halopithys incurva* (Hudson) Batters** (n. 8323/26) – ref.: Batters, E. A. L. (1902: 78). *Journal of Botany, British and Foreign* 40 (Supplement): 1-107; syn.: *Halopithys pinastroides* (Stackhouse) Kuetzing; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Laurencia* J. V. F. Lamoreaux, 1813, nom. cons.

***Laurencia obtusa* (Hudson) J. V. Lamouroux** (n. 8323/64) – ref.: J. V. Lamouroux, 1813: 130. *Annales du Muséum d'Histoire Naturelle, Paris* 20: 21-47, 115-139, 267-293, Plates 7-13; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Laurencia obtusa* (Hudson) J. V. Lamouroux** (n. 8324/7) – ref.: Lamouroux, J. V. F. (1813). *Annales du Muséum d'Histoire Naturelle, Paris* 20 : 21-47, 115-139, 267-293, Plates 7/13; Croatia, Split (Spalato), Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Laurencia papillosa* (C. Agardh) Greville** (n. 8323/65) – ref.: Greville, R. K. (1830: III). *Algae britannicae*; syn.: *Chondrophycus papillosus* (C. Agardh) D. J. Garbary & J. T. Herper; *Palisada perforata* (Bory de Saint-Vincent) K. W. Nam; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Laurencia pyramidalis* Bory de Saint-Vincent ex Kutzing** (n. 8323/119) – ref.: Kutzing, F. T. (1849). *Species algarum*. pp. [i]-vi, [1]-922. Lipsiae [Leipzig]; Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

***Laurencia striolata* (C. Agardh) Greville** (n. 8324/10) – ref.: Original publication: Greville, R. K. (1830). *Algae britannicae*, pp. [i*-iii*], [i]-lxxxiii, [1]-218, pl. 1-19. Edinburgh & London: McLachlan & Stewart; Baldwin & Cradock; unmentioned location and undated, 19th century, no signature, donation T. Jurcsák, deteriorated specimen.

Gen. *Osmundaria* Lamouroux, 1813

***Osmundaria volubilis* (L.) R. E. Norris** (n. 8323/11) – ref.: Norris, R. E. (1991: 14). *Journal of the Linnean Society of London, Botany* 106: 1-40, 60 figs.; syn.: *Dictyomenia volubilis* (L.) Greville; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Osmundea*

***Osmundea pinnatifida* (Hudson) Stackhouse** (n. 8323/54) – ref.: Stackhouse J. (1809: 79). *Mémoires de la Société Impériale des Naturalistes de Moscou* 2: [50]-97; syn.: *Laurencia pinatifida* Lam.; *Laurencia pinnatifida* (Gmelin) Lamouroux; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Polysiphonia* R. K. Greville, 1823, nom. rej.

***Polysiphonia arachenoidea* (C. Agardh) Zanardini** (n. 8323/72) – ref.: Zanardini, G. (1840: 203). *Biblioteca Italiana [Milano]* 99: 195-229; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Polysiphonia denudata* (Dillwyn) Greville ex Harvey** (n. 8324/28) – ref.: Harvey W.H. (1833). Div. II. Confervoideae; Div. III. Gloiocladeae; in Hooker 1833: 332.; syn.: *Polysiphonia variegata* (C. Agardh) Zanardini; Italy, Venice, Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Polysiphonia denudata* (Dillwyn) Greville ex Harvey** (n. 8323/68) – ref.: Harvey, W.H. (1833: 332). *The English Flora of Sir James Edward Smith*; syn.: *Polysiphonia variegata* (C. Agardh) Zanardini; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Polysiphonia elongata* (Hudson) Sprengel** (n. 8323/70) – ref.: Sprengel, K. (1827: 349). *Systema vegetabilium*, vol. 4 pp. [i]-592. Gottingae; syn.: *Polysiphonia robusta* Kutzing; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Polysiphonia fucoides* (Hudson) Greville** (n. 8324/30) – ref.: Greville, R. K. (1824). *Flora edinensis*; syn.: *Polysiphonia violacea* (Roth) Sprengel; Italy, Venice, Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Polysiphonia lanosa* (L.) Tandy** (n. 8323/131) – ref.: Tandy J. (1831), *J. Bot.* 69: 225-227; syn.: *Polysiphonia fastigiata* Gr.; *Vertebrata fastigiata* (Roth) Gray; *Vertebrata lanosa* (L.) Christensen; Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

***Polysiphonia nigricens* (Hudson) Greville** (8323/132) – ref.: Harvey, W. H. (1833). *The English Flora of Sir James Eduard Smith*; syn.: *Polysiphonia fucoides* (Hudson) Greville; Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

***Polysiphonia opaca* (C. Agardh) Moris & De Notaris** (n. 8323/69) – ref.: *Memoire della Reale Accademia delle Scienze di Torino*, ser. 2: 59-1300.; pls. I-VI; syn.: *Polysiphonia ramulosa* (C. Agardh) Sprengel; *Polysiphonia ramulosa* Kg.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Polysiphonia paniculata* Montagne** (n. 8323/130) – ref.: *Annales des Sciences Naturelles, Botanique, Séconde Série* 18: 241-282, pl. 7.; syn.: *Polysiphonia paniculata* Gr.; Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

***Polysiphonia sanguinea* (C. Agardh) Zanardini** (n. 8323/67) – ref.: Zanardini G. (1840: 203). *Biblioteca Italiana [Milano]* 99: 195-229; syn.: *Polysiphonia sanguinea* Gr.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Polysiphonia sertularoides* (Gratelloup) Agardh** (n. 8324/29) – ref.: Agardh, C. A. (1863). *Species genera et ordines algarum* Volumen secundum, Part. 2, fasc.3. pp. 787-1138, 1158-1291. Lundae; syn.: *Polysiphonia grisea* Kutzing, 1843; Croatia, Split (Spalato), Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Polysiphonia wulfenii* (Roth) J. Agardh** (n. 8323/71) – ref.: Agardh, J. G. (1842) *Algae maris Mediterranei et Adriatici*; syn.: *Boergeseniella fryticulosa* (Wulfen) Kylin; *Polysiphonia wulfenii* J. Ag.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Rhodomela* C. A. Agardh, 1822, nom. cons.

***Rhodomela confervoides* (Hudson) P. C. Silva** (n. 8323 /25) – ref.: Silva, P. C. (1952: 269). *University of California Publications in Botany* 25: 242-323.; syn.: *Rhodomela subfusca* Ag.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Ord. Corallinales**Fam. Corallinaceae****Gen. Corallina L. 1758**

Corallina officinalis L. (n. 8324/24) – ref.: Linnaeus C. (1758). *Systema naturae per regnatia naturae, secundum classes, ordine, genera, species, cum characteribus, differentiis, sinonimis, locis. Tomus I. Editio decima, reformata. Editio decima revisa*. Vol. 1 pp. [i-iv], [1]-823. Holmie [Stockholm]: impensis direct. Laurentii Salvii; Croatia, Split (Spalato), Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. Jania J. V. F. Lamouroux, 1812

Jania decaisii L. (n. 8324/14) – ref.: Lamouroux, J. V. F. (1812). *Nouveaux Bulletin des sciences, par la Société Philomathique de Paris* 3: 181-188; unmentioned location and undated, 19th century, no signature, donation T. Jurcsák.

Jania rubens (L.) Lamouroux (n. 8323/115) – ref.: Lamouroux J. V. F. (1816), *Hystoire des polypiers coralligenes flexibles*; syn.: *Jania spermophoros* Lam.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Jania rubens (L.) Lamouroux (n. 8323/117) – ref.: Lamouroux J. V. F. (1816), *Hystoire des polypiers coralligenes flexibles*; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Jania rubens var. corniculata (L.) Yendo (n. 8323/116) – ref.: Yendo, K. (1905). *Journal of the College of Science, Tokyo Imperial University* 20(12): 1-46; syn.: *Jania plumula* (Zanardini) Zanardini 1844: 1025; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Ord. Cryptonemiales**Fam. Halymeniaceae****Gen. Cryptonemia J. G. Agardh, 1842**

Cryptonemia lomation (Bertoloni) J. Agardh (n. 8323/82) – ref.: Agardh, J. G. (1851: 227). *Species genera et ordines algarum*; syn.: *Cryptonemia lactuca* (C. Agardh) J. Agardh 1842: 100; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. Halymenia C. A. Agardh, 1817

***Halymenia floresii* (Clemente y Rubio) C. Agardh** (n. 8324/25) – ref.: Agardh, C. A. (1817). *Synopsis algarum Scandinaviae*, adjecta dispositione universali algarum. pp. [i] – xl, [1] – 135. Lundae [Lund]: ex officina Berlingiana; syn.: *Halymenia florescia* Ag.; Croatia, Split (Spalato), Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Halymenia floresia* (Clem) Agardh** (n. 8323/88) – ref.: Agardh, C. A. (1817). *Synopsis algarum Scandinaviae*, pp. [i]-xl, [1]-135. Lundae [Lund]; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Grateloupia* C. A. Agardh, 1822

***Grateloupia verucosa* Agardh** (n. 8323/89) – ref.: Agardh, C. A. (1822). *Species algarum*; Italy, Liguria, Genova (Golfo di Genua), 19th century, no signature, donation T. Jurcsák.

Fam. *Peyssonneliaceae*

Gen. *Peyssonnelia* J. Decaisne, 1841

***Peyssonnelia squamaria* (S.G. Gmelin) Decaisne** (n. 8323/15) – ref.: Decaisne, J. (1842: 168). *Annales des Sciences Naturelles, Botanique, Séconde série* 17: 297-380, pls 14-17; syn.: *Fucus squamarius* S.G. Gmelin; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Ord. *Gelidiales*

Fam. *Gelidiaceae*

Gen. *Gelidium* J. V. F. Lamouroux, 1813

***Gelidium armatum* Lam.** (n. 8324/58) – ref.: Lamoureaux, J. V. F. (1813). *Annales du Muséum d'Histoire Naturelle, Paris* 20: 21-47, 115-139, 267-293, Plates 7-13; unmentioned location and undated, 19th century, no signature, donation T. Jurcsák.

***Gelidium crinale* (Turn) Lamnouroux** (n. 8324/53) – ref.: *Gelidium crinale* (Turn) Lamour., in Bory Dict. Class. 7: 191, 1825; Italy, Venice, Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Gelidium pinnatum* Ag.** (n. 8323/78) – ref.: Lamouroux, J. V. F. (1813). *Annales du Muséum d'Histoire Naturelle, Paris* 20: 21-47, 115-139, 267-293, plates 7-13; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Ord. Gigartinales**Fam. Cystocloniaceae****Gen. Cystoclonium F. T. Kützing, 1843**

***Cystoclonium purpureum* (Hudson) Batters** (n. 8323/30) – ref.: Batters, E. A. L. (1902: 68-69). *Journal of Botany, British and Foreign* 40 (Supplement): 1-107; syn.: *Gygartina purpurascens* (Hudson) Lamouroux; *Gygartina purpurascens* Ag.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. Rhodophyllis Kuetzing, 1847, nom. cons.

***Rhodophyllis divaricata* (Stackhouse) Papenfuss** (n. 8323/2) – ref.: Papenfuss, G. F. (1950: 190). *Hydrobiologia* 2: 181-208; syn.: *Rhodymenia bifida* Grev.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Fam. Furcellariaceae**Gen. Furcellaria J. V. Lamouroux, 1813, nom. cons.**

***Furcellaria lumbricalis* (Hudson) J. V. Lamouroux** (n. 8323/110) – ref.: Lamouroux, J. V. F. (1813). *Annales du Muséum d'Histoire Naturelle, Paris* 20 : 21-47, 115-139, 267-293, Plates 7-13; syn.: *Furcellaria fastigiata* (L.) J. V. Lamouroux; Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

Gen. Halarachnion Kuetzing, 1843

***Halarachnion ligulatum* (Woodward) Kützing** (n. 8323/84) – ref.: Kützing, F. T. (1843: 394). *Phycologia generalis*; syn.: *Halymenia ligulata* Grev.; *Halymenia ligulata* (Woodward) C. Agardh; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Fam. Gigartinaceae**Gen. Chondracanthus Kützing**

***Chondracanthus acicularis* (Roth) Fredericq** (n. 8323/91) – ref.: Hommersand, M. H., Guiry, Fredericq & Leister 1993; 117. *Proceedings of the International Seaweed Symposium* 14: 105-120, 41 figs.; syn.: *Gigartina acicularis* (Roth) J. V. Lamouroux; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Chondracanthus acicularis* (Roth) Fredericq** - (n. 8324/64) – ref.: Lamouroux,

J. V. F. (1813) *Annales du Muséum d'Histoire Naturelle Paris* 20: 21-47, 115-139, 267-293, Plates 7-13; syn.: *Gigartina acicularis* (Roth) Lamouroux; *Gigartina acicularis* (Wulfen) Lamouroux; *Ceramium aciculare* Roth; Croatia, Split, Dalmatia, Adriatic Sea, 19th century, leg. Titius, donation T. Jurcsák.

***Chondracanthus teedei* (Mertens ex Roth) J. V. Lamouroux** (n. 8324/63) – ref.: Kutzing, F. T. (1843) *Phycologia generalis*; syn.: *Gigartina tedii* (Roth) Lamour.; *Gigartina teedei* (Mertens ex Roth) Lamour.; *Ceramium teedei* Mertens ex Roth; Croatia, Split, Dalmatia, Adriatic Sea, 19th century, leg. Titius, donation T. Jurcsák.

***Chondracanthus teedei* (Mertens ex Roth) J. V. Lamouroux** (n. 8324/68) – ref.: Kutzing, F. T. (1843) *Phycologia generalis*; syn.: *Gigartina tedii* (Roth) Lamour.; *Gigartina teedei* (Mertens ex Roth) Lamour.; *Ceramium teedei* Mertens ex Roth; Croatia, Split, Dalmatia, Adriatic Sea, 19th century, leg. Titius, donation T. Jurcsák.

***Chondracanthus teedei* (Mertens ex Roth) Kutzing** (n. 8323/18) – ref.: Kutzing, F. T. (1843: 399). *Phycologia generalis*; syn.: *Gigartina teedii* Ag.; *Gigartina teedii* (Mertens ex Roth) J. V. Lamouroux; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Gigartina* Stackhouse, J. (1809).

***Gigartina hospitans* Stackhouse** (n. 8324/70) – ref.: Stackhouse, J. (1809). *Mémoires de la Société Imperiale des Naturalistes de Moscou* 2 : (50)-97; Croatia, Split, Dalmatia, Adriatic Sea, 19th century, leg. Titius, donation T. Jurcsák.

***Gigartina lank* Stackhouse** (n. 8324/69) – ref.: Stackhouse, J. (1809). *Mémoires de la Société Imperiale des Naturalistes de Moscou* 2 : (50)-97; Croatia, Split, Dalmatia, Adriatic Sea, 19th century, leg. Titius, donation T. Jurcsák.

***Gigartina mamilosa* (Goodenough & Woodward) J. Agardh** (n. 8323/138) – ref.: Agardh, J. G. (1851). *Species genera et ordines algarum*; syn.: *Gigartina stelata* (Stackhouse) Batters; *Mastocarpus stelatus* (Stackhouse) Guiry; Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

Fam. *Nemastomataceae*

Gen. *Nemastoma* J. G. Agardh 1842, nom. cons. orth. cons.

***Nemastoma dichotomum* J. Agardh** (n. 8323/85) – ref.: Agardh, J. G. (1842: 91). *Algae maris Mediterranei et Adriatici*; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Fam. Phyllophoraceae**Gen. Ahnfeltiopsis**

Ahnfeltiopsis linearis (C. Agardh) P. C. Silva & DeCew (n. 8324/38) – ref.: Silva, P. C. & DeCew, T. C. (1992), in *Phycologia* 31: 576-580; syn.: *Sphaerococcus linearis* C. Agardh, 1817; unmentioned location and undated, 19th century, no signature, donation T. Jurcsák.

Fam. Polyideaceae**Gen. Polyides C. A. Agardh, 1822**

Polyides rotundus (Hudson) Gaillon (n. 8323/122) – ref.: Gaillon, B. (1828): 365. *Dictionnaire des Sciences Naturelles [Levrault]* 53: 350-406, Tables 1-3; Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

Ord. Gracilariales**Fam. Gracilariaceae****Gen. Gracilaria Greville, 1830, nom. cons.**

Gracilaria armata (C. Agardh) Greville (n. 8323/55) – ref.: Greville 1830. *Algae britannicae*; syn.: *Plocaria armata* Montg.; *Sphaerococcus armatus* C. Agardh; *Giggartina armata* (C. Agardh) J. Agardh; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gracilaria gracilis (Stackhouse) M. Steentoft, L. M. Irvine & W. F. Farnham (n. 8323/93) – ref.: *Phycologia* 34: 113-127, 37 figs.; syn.: *Sphaerococcus confervoides* (F.H.Wiggers) Stackhouse; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Ord. Nemaliales**Fam. Galaxauraceae****Gen. Scinaia Bivona-Bernardi, 1822**

Scinaia furcellata (Turner) J. Agardh (n. 8323/95) – ref.: Agardh J. G. (1851: 422). *Species genera et ordines algarum*; syn.: *Ginnania furcellata* (Turner) Montagne; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Fam. Liagoraceae**Gen. Liagora Lamouroux, 1812**

***Liagora conplanata* Zan.** (n. 8323/86) – ref.: Zanardini, G. (1851). *Flora* 34: 33-38.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Liagora viscida* (Forsskal) C. Agardh** (n. 8323/36) – ref.: Agardh, C. A. (1822; 395). *Species algarum*; syn.: *Fucus viscidus* Forsskal; *Liagora viscida* Ag.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Nemalion* Duby, 1830

***Nemalion coccineum* (Poiret) Kutzing** (n. 8323/3) – ref.: Duby, J. E. (1830). *Aug. Pyrami de Candolle Botanicon gallicum*; syn: *Nemalion coccineum* Ag.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Ord. *Palmariales*

Fam. *Palmariaceae*

Gen. *Palmaria* Stackhouse, 1801

***Palmaria palmata* (L.) Weber & Mahr** (n. 8323/128) – ref.: *Beitrage zur Naturkunde* 1: 204-329; syn.: *Halymenia palmata* (L.) C. Agardh; Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

Ord. *Plocamiales*

Fam. *Plocamiaceae*

Gen. *Plocamium* Lamouroux, 1813, nom. cons.

***Plocamium cartilagineum* (L.) P. S. Dixon** (n. 8324/16) – ref.: Dixon P. S. 1967: 58; pl. 14, 16, The typification of *Fucus cartilagineus* L.. and *F. corneus* Huds. *Blumea* 15: 55-62; syn.: *Plocamium coccineum* (Hudson) Lyngbye; Croatia, Split (Spalato), Dalmatia, Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Plocanium cirrhosum* (Turner) M. J. Wynne** (n. 8323/124) – ref.: Wynne, M. J. (2002). *Plocanium cirrhosum* comb. nov. (Plocamiales, Rhodophyta) to replace *P. costatum*. *New Zealand Journal of Botany* 40: 137-142; syn.: *Plocamium costatum* (C. Agardh) J.D. Hooker & Harvey; Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

Ord. *Rhodymeniales*

Fam. *Lomentariaceae*

Gen. *Lomentaria* Lyngbye, 1819

***Lomentaria articulata* (Hudson) Lyngbye** (n. 8323/52) – ref.: Lyngbye, H. C. (1819: 101, pls. 30). *Tentamen hydrophytologiae danicae*; syn.: *Lomentaria articulata* Gr.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Lomentaria articulata* var. *linearis* Zanardini** (n. 8323/51) – ref.: Zanardini, G. (1841: 199). *Memorie della Reale Accademia delle scienze di Torino, ser. 2* 4: 105-255, pls. I-VIII; syn.: *Lomentaria phaligera* (J. Agardh) Endlicher; *Lomentaria phaligera* Kg.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Lomentaria diffusa* Stegenga, Bolton & R. J. Anderson** (n. 8323/102) – ref.: Stegenga, H., Bolton J.J. & Anderson, R. J. (1997: 373). *Seaweeds of the South African west coast*. Pp. [2]+ 1-655. Cape Town; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Lomentaria fuligera (n. 8324/8) – ref.: Lyngbye, H. C. (1819). *Tentamen hydrophytologiae danicae*; unmentioned location and undated, 19th century, no signature, donation T. Jurcsák.

***Lomentaria subarticulata* Kg.** (n. 8323/51) – ref.: Lyngbye, H. C. (1819: 101, pls. 30). *Tentamen hydrophytologiae danicae*; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Lomentaria veneta* Zan.** (n. 8323/50) – ref.: Lyngbye, H. C. (1819: 101, pls. 30). *Tentamen hydrophytologiae danicae*; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Fam. *Rhodymeniaceae***Gen. *Botryocladia* (J. Agardh) Kylin, 1931, nom. cons.**

***Botryocladia botryoides* (Wulfen) Feldman** (n. 8323/83) – ref.: Feldman, J. (1941: 90). *Revue Algologique* 12: 77-100, Figs. 26-34; syn.: *Gastroclonium uvaria* (J. A. Murray) Kützing; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Chrysomenia* J. G. Agardh, 1842

***Chrysomenia ventricosa* (J. V. Lamouroux) J. Agardh** (n. 8323/100) – ref.: Agardh, J. G. (1842: 106). *Algae maris Mediterranei et Adriatici*; syn.: *Dumontia ventricosa* J. V. Lamouroux; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Rhodymenia* Greville, 1830, nom. cons., orth. cons.

***Rhodymenia elisii* Harvey** (n. 8323/129) – ref.: Greville, R. K. (1830). *Algae britannicae*; (possible synonymes: *Carpopeltis elata* (Harvey) De Toni; *Rhodymenia elata* Harvey); Atlantic Ocean, 19th century, no signature, donation T. Jurcsák.

***Rhodymenia ligulata* Zanardini** (n. 8323/24) – ref.: Zanardini, G. (1843: 46). *Saggio di classificazione naturale delle Ficee*; syn.: *Rhodymenia ligulata* Grev.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Rhodymenia pseudopalmata* (J. V. Lamouroux) P. C. Silva** (n. 8323/13) – ref.: Silva P. C. (1953). *University of California Publication in Botany*, 25: 241-323; syn.: *Rhodymenia pseudopalmata* (Stackhouse) Greville; *Rhodymenia palmetta* Grev.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Subkingdom *Viridaeplantae* Cavalier-Smith, 1981**Phylum *Chlorophyta* A. Pascher, 1914****Clas. *Bryopsidophyceae* Bessey, 1907****Ord. *Bryopsidales* J. H. Schaffner, 1922****Fam. *Bryopsidaceae* Bory de Saint-Vincent****Gen *Bryopsis* J. V. F. Lamouroux, 1809**

***Bryopsis plumosa* (Hudson) C. Agardh** (n. 8323/74) – ref.: Agardh, C. A. (1823). *Species algarum*; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Fam. *Codiaceae* Kutzing**Gen. *Codium* J. Stackhouse, 1797**

***Codium bursa* (Olivi, 1792) C. A. Agardh** (n. 8323/80) – ref.: Agardh, C. A. (1817; xxix). *Synopsis algarum Scandinaviae*; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Codium tomentosum* (Huds) Stackh.** (n. 8324/56) – ref.: Stackhouse, J. (1797). *Nereis britannica*; Fasc.2. pp. ix-xxiv, 31-70, pls. IX-XIII. Bathoniae [Bath] & Londini [London]; Croatia, Split (Spalato), Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

***Codium tomentosum* (Huds) Stackh.** (n. 8324/79) – ref.: Stackhouse, J. (1797). *Nereis britannica*; Fasc.2. pp. ix-xxiv, 31-70, pls. IX-XIII. Bathoniae [Bath] & Londini [London]; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Fam. Derbesiaceae Hanck**Gen. Derbesia A. J. J. Solier, 1846**

***Derbesia tenuissima* (Moris & De Notaris) P. L. Crouan & H. M. Crouan** - (n. 8324/55) – ref.: P. L. Crouan & H. M. Crouan (1867). *Florule du Finistere*; syn.: *Bryopsis tenuissima* Moris & De Notaris; *Bryopsis tenuiformis* (!?); Croatia, Split (Spalato), Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Fam. Halimedaceae Link**Gen. Halimeda J. V. Lamouroux, 1812, nom.cons., orth. cons.**

***Halimeda opuntia* (L.) J. V. Lamouroux** (n. 8323/9) – ref.: Lamouroux, J. V. F. (1816). *Histoire des polypiers coralligenes flexibles*; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Fam. Udotaceae J. Agardh**Gen. Flabellia H. G. L. Reichenbach, 1841, nom. nov.**

***Flabellia petiolata* (Turra) Nizamuddin** (n. 8323/23) – ref.: Nizamuddin, M. (1987). *Nova Hedwigia* 44: 175-188, 21 figs.; syn.: *Flabellaria disfontaini* J. V. Lamouroux; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Clas. Clorophyceae Wille**Ord. Chaetophorales Wille****Fam. Chaetophoraceae Greville****Gen. Draparnaldia Bory de Saint-Vincent, 1808**

***Draparnaldia glomerata* (Vaucher) C. Agardh** (n. 8324/51) – ref.: Agardh, C. A. (1812). *Disposito algarum Sueciae*; Slovakia, Spis (Szepesseg) region, freshwater, 19th century, leg. illegible signature, donation T. Jurcsák.

Gen. Pleurococcus Meneghini, 1837

***Pleurococcus mucosus* Rabenhorst** (n. 8324/47) – ref.: algaebase, org. Tax-name: 57310; syn.: *Protococcus mucosus* Kg. (Phyc. Germ. 145); northwestern Carpathians, freshwater, 19th century, leg. illegible signature, donation T. Jurcsák.

Ord. Chlorococcales Pascher**Fam. Hydrodictaceae Dumortier****Gen. Hydrodictyon A. W. Roth, nom. cons.**

***Hydrodictyon reticulatum* (L.) Bory de Saint-Vincent** (n. 8324/6) – ref.: Bory de Saint-Vincent. (1824). *Dictionnaire Classique d'Histoire Naturelle*. (Alduin, I. et al. eds.) Vol. 6, pp. 506. Paris; syn.: *Hydrodictyon utriculatum* Roth.; Romania, Arad, Săvârşin, freshwater, 19th century, leg. illegible signature, donation T. Jurcsák.

Ord. Oedogoniales Heering**Fam. Oedogoniaceae de Bary ex Hirn****Gen. Bulbochaete C. A. Agardh, 1817**

***Bulbochaete intermedia* De Bary** (n. 8323/143) – ref.: Publication details *Bulbochaete intermedia* De Bary, 1854: 72; syn.: *Bulbochaete intermedia* Kg.; Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, fresh water, 19th century, leg. illegible signature, donation T. Jurcsák.

Gen. Oedogonium Hirn, 1900

***Oedogonium capillare* (L.) Kutzing** (n. 8324/5) – ref.: Hirn, K.E. (1900). *Acta Societatis Scientiarum Fennicae* 27: IV + 394, XXVII figs, XLIV plates; ITIS – TSN 9036; northwestern Carpathians, fresh water, 19th century, leg. illegible signature, donation T. Jurcsák.

***Oedogonium fugacissimum* (Roth) Rabenhorst** (n. 8324/3) – ref.: Hirn, K. E. (1900). *Acta Societatis Scientiarum Fennicae* 27: IV + 394, XXVII figs, XLIV plates; northwestern Carpathians, 19th century, no signature, donation T. Jurcsák, damaged specimen.

***Oedogonium tenellum* Kg.** (n. 8324/1) – ref.: Hirn, K. E. (1900). *Acta Societatis Scientiarum Fennicae* 27: IV + 394, XXVII figs, XLIV plates; Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, fresh water, 19th century, leg. illegible signature, donation T. Jurcsák.

***Oedogonium tenellum* Kützing** (n. 8323/142) – ref.: Publication details *Oedogonium tenellum* Kützing; Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, fresh water, 19th century, leg. illegible signature, donation T. Jurcsák.

Ord. Tetrasporales Lemmermann**Fam. Tetrasporaceae (Nageli) Wittrock**

Gen. *Tetraspora* J. H. F. Link ex N. A. Desvaux, 1818

***Tetraspora lacunosa* Cauv.** (n. 8323/140) – ref.: *Algues des environs de Falaise*, Brebisson, L. A. de & Godey, L. L. (1835); syn.: *Tetraspora lubrica* var. *lacunosa* (Duby) Chauvin ex Brebisson; Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, fresh water, 19th century, leg. illegible signature, donation T. Jurcsák.

Clas. *Ulvophyceae* K. R. Mattox & K. D. E. Irvine & D. M. John, 1984**Ord. *Cladophorales* Haeckel****Fam. *Cladophoraceae* Wille****Gen. *Cladophora* Kutzing, 1843, nom. cons.**

***Cladophora pectinella* Grunow** (n. 8323/56) – ref.: Grunow 1867: 40-41, pl. II; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. *Conferva* L., 1753

***Conferva articulata* L.** (n. 8324/12) – ref.: *Conferva* L., *Sp. pl.* 2: 1164 (1753); unmentioned location and undated, 19th century, no signature, donation T. Jurcsák, obs.: According to Catalogue of Life: 2007 Annual Checklist: Species 2000 & Catalogue of Life Hierarchy, Edition 1 (2007).

Ord. *Dasycladales* Pascher, 1931**Fam. *Dasycladaceae* Kutzing, 1843****Gen. *Dasycladus* C. A. Agardh, 1828**

***Dasycladus vermicularis* (Scopoli) Krasser** (n. 8324/54) – ref.: *Annalen des Kaiserlich-Königlichen Naturhistorischen Hofmuseum* 13: 443-472, 2 figs.; syn.: *Dasycladus clavaeformis* (Roth) C. Agardh; *Dasycladus clavaeformis* Meng.; unmentioned location and undated, 19th century, no signature, donation T. Jurcsák.

Fam. *Polyphysaceae* Kutzing**Gen. *Acetabularia* J. V. Lamouroux, 1812, nom.cons.**

***Acetabularia acetabulum* (L.) P. C. Silva** - (n. 8323 /32) – ref.: Silva P. C. (1952: 255). *University of California Publication in Botany* 25: 241-323; syn.: *Acetabularia integra* J. V. Lamouroux; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Ord. Siphonocladales (Bleckman & Tansley) Oltmanns
Fam. Valoniaceae Kutzing

Gen. Valonia C. A. Agardh, 1823

Valonia utricularis (Roth) C. Agardh - (n. 8324/41) – ref.: *Species algarum* rite cognitae, cum synonymis, differentiis specificis et descriptionibus succintctis. Volumen primum. Pars posterior. pp. [vii-viii], [399]-531. Lundae; unmentioned location and undated, 19th century, no signature, donation T. Jurcsák.

Valonia utricularis (Roth) C. Agardh (n. 8323/12) – ref.: Agardh, C. A. (1823: 431). *Species algarum*; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Gen. Valoniopsis Borgesen

Valoniopsis pachynema (G. Martens) Borgesen (n. 8323/58) – ref.: Borgesen, F. (1934: 10, figs 1,2). *Kongelige Danske Videnskabernes Selskab, Biologiske Meddelelser* 11(6): 1-72, 8 figs, 2 plates; syn.: *Valonia confervoides* Harvey ex J. Agardh; *Valonia confervucea* Kit. (?!); Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Ord. Ulvales Blackman & Tansley
Fam. Ulvaceae J. V. Lamoreaux ex Dumortier
Gen. Ulva C. Linnaeus, 1753

Ulva lactuca L. (n. 8324/42) – ref.: Linnaeus, C. (1753) *Species plantarum*, vol.2 pp. [i], 561-1200, [1-30, index], [i, err.]. Holmiae [Stockholm]; unmentioned location, 19th century, no signature, donation T. Jurcsák.

Ulva lactuca L. (n. 8323/14) – ref.: Linnaeus, C. (1753: 1163). *Species plantarum*; vol.2 pp. [i], 561-1200, [1-30, index], [i, err.]. Holmiae [Stockholm]; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Ulva linza L. (n. 8323/22) – ref.: Linnaeus, C. (1753). *Species plantarum* vol. 2. pp. [i], 561- 1200. Stockholm; syn.: *Phicoseris linza* (L.) Kutzing; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Phylum Charophyta
Clas. Charophyceae
Ord. Zynematales

Subord. Zygmatineae

Fam. Zygmataceae

Gen. Spirogyra Link. in C. G. D. Nees, 1820, nom. cons.

***Spirogyra quinina* Kutzing** (n. 8324/39) – ref.: Publication details: *Spirogyra quinina* Kutzing; Basionym *Zygogonium affine* Kutzing; ITIS – Taxonomic serial no: 7004; unmentioned location and undated, fresh water, 19th century, no signature, donation T. Jurcsák; obs.: detailed distribution with sources: South America (Brazil), Australia and New Zealand.

Phylum Marchantiophyta

Clas. Marchantiopsida

Ord. Marchantiales

Subord. Marchantiineae

Fam. Marchantiaceae

Gen. Marchantia L. 1753

***Marchantia polymorpha* L.** (n. 8324/113) – ref.: ITIS Taxonomic Serial No.: 15587; Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

Clas. Jungermanniopsida

Subclas. Metzgeriidae

Ord. Metzgeriales

Subord. Metzgeriineae

Fam. Metzgeriaceae

Gen. Metzgeria Raddi, 1818

***Metzgeria furcata* (L.) Dumort.** (n. 8324/107) – ref.: *Rec. d »...OBS*, 26, 1835; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

***Metzgeria virens* L.** (n. 8324/108) – ref.: Raddi, Giuseppe, *Jungermanniografia Etrusca* 34. 1818; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Subclas. Jungermanniidae

Ord. Jungermanniales

Subord. Geocalycinae

Fam. Plagiochilaceae

Gen. *Plagiochila* (Dumortier) Dumortier, 1835, nom. cons.

***Plagiochila asplenoides* (L.) Dumort.** (n. 8324/142) – ref.: Recueil Observ. Jungerm. 14. 1835; syn.: *Plagiochila major* (Nees) S. Annel; France, the Pyrenees, 19th century, illegible signature, donation T. Jurcsák.

Subord. *Jungermanniiinae*

Fam. *Jungermanniaceae*

Gen. *Jungermannia* C. Linnaeus, 1753

***Jungermannia repens* D. Dietr.** (n. 8324/171) – ref.: Deutschl. Kryptog. Gewachse 6: 149. 1846; syn.: *Jungermannia repens* Kit.; Romania, Bihor, Oradea, Oradea hills, 19th century, illegible signature, donation T. Jurcsák.

Fam. *Scapaniaceae*

Gen. *Scapania* (Dumortier) Dumortier, 1835, nom. cons.

***Scapania undulata* (L.) Dumort.** (n. 8324/156) — ref.: Recueil Observ. Jungerm. 14. 1835; syn.: *Plagiochila undulata* (L.) Mont. & Nees; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Subord. *Porellinae*

Fam. *Jubulaceae*

Gen. *Frullania* Raddi, 1818

***Frullania capillaris* Stephani** (n. 8324/155) – ref.: Sp. Hep. 4: 597 (1911); syn.: *Frullania capillaris* Ness.; Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

***Frullania dilatata* (L.) Dumort.** (n. 8324/170) – ref.: Recueil Observ. Jungerm. 13 (1835); syn.: *Frullania dilatata* Ness; Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

***Frullania tamarisci* (L.) Dumort.** (n. 8324/169) – ref.: Recueil Observ. Jungerm. 13 (1835); syn.: *Frullania tamarisci* Ness; Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

Phylum *Bryophyta* A. Braun, in Ascherson, 1860

Clas. *Polytrichopsida*

Ord. Polytrichales**Fam. Polytrichaceae Schwagr.****Gen. Atrichum. P. Beauvois, 1804, nom. cons.**

Atrichum undulatum (Hedw) P. Beauv. (n. 8324/117) – ref.: Prodr. Aetheogam. 42. 1805; syn.: *Catharinea undulata* (Hedw) F. Weber & Mohr.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Gen. Polytrichum J. Hedwig, 1801

Polytrichum formosum Hedw. (n. 8324/157) – ref.: Sp. Musc. Frond. 92. pl. 19: f. 1.a (1801); Romania, Bihor, Oradea, Oradea hills, 19th century, illegible signature, donation T. Jurcsák.

Polytrichum juniperinum Hedw. (n. 8324/159) – ref.: Sp. Musc. Frond. 89. pl. 18: f. 6-10 (1801); northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Polytrichum piliferum Hedw. (n. 8324/158) – ref.: Sp. Musc. Frond. 90. (1801); Romania, Bihor, Oradea, Oradea hills, 19th century, illegible signature, donation T. Jurcsák.

Clas. Sphagnopsida**Ord. Sphagnales****Fam. Sphagnaceae Dum.****Gen. Sphagnum Linnaeus, 1753**

Sphagnum acutifolium Schrad. (n. 8324/168) – ref.: Spic. Fl. Germ. 59. (1794); Slovenia, Kraina, 19th century, no signature, donation T. Jurcsák.

Sphagnum subsecundum Ness (n. 8324/167) – ref.: Deutschl. Fl., Abt. II, Cryptog. 17 : [3] (1819); northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Clas. Bryopsida**Gen. Seratula**

Seratula filiformis Kit. (n. 8324/175) – Slovakia, north-western Carpathians, Gerlachovsky (Gerlos) region, in greenhouses, 19th century, leg. illegible signature, donation T. Jurcsák.

Subclas. Bryidae

Superord. Bryanae

Ord. Bryales

Fam. Batramiaceae Schwagr.

Gen. Plagiopus Bridel, 1826

***Plagiopus oederiana* (Sw.) Crum & Anderson** (n. 8324/109) – ref.: Brady, 1924, Sci.Rep. Austral. Antarct. Exped., 5, pt. 3, 22: syn.: *Bartramia oederi* Brid. [Muscol. Recent. 2(3): 135. pl. 2: f.9 (1803)]; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Fam. Bryaceae Schwagr.

Gen. Bryum Hedw.

***Bryum elongatum* (Hedw) With.** (n. 8324/154) – ref.: Syst. Arr. Brit. Pl. (ed. 4) 3: 815 (1801); Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

Fam. Mniaceae Schwagr.

Gen. Mnium J. Hedwig, 1801, nom.cons.

***Mnium rostratum* Schrad.** (n. 8324/151) – ref.: Bot. Zeitung (Regensburg) 1: 79 (1802); syn.: *Mnium rostratum* Dill.; *Plagiomnium rostratum* (Schrad) T. J. Kop; Romania, Bihor, Oradea, Oradea hills, 19th century, illegible signature, donation T. Jurcsák.

Gen. Pohlia J. Hedwig, 1801, nom.cons.

***Pohlia ludwigii* (Spreng. ex Schwagr) Broth.** (n. 8324/152) – ref.: Acta Soc. Sci. Fenn. 19 (12): 27 (1892); syn.: *Bryum ludwigii* Hed.; *Bryum ludwigii* Spreng. ex Schwagr.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Ord. Hedwigiales

Fam. Hedwigiaceae Schimp.

Gen. Hedwigia P. Beauvois, 1804, nom.cons.

***Hedwigia ciliata* (Hedw.) P. Beauv.** (n. 8324/133) – ref.: Prodr. Aetheogam. 15

(1805); syn.: *Hedvigia ciliaris* Sch.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Ord. Orthotrichales

Fam. Orthotrichaceae Arn.

Gen. Orthotrichum J. Hedwig , 1801

***Orthotrichum crispum* Hedwig** (n. 8324/130) – ref.: Sp. Musc. Frond. 162 (1801); northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

***Orthotrichum cupulatum* Brid.** (n. 8324/132) – ref.: Muscol. Recent. 2(2): 25 (1801); syn.: *Orthotrichum cupulatum* Hedw.; France, the Pyrenees, 19th century, illegible signature, donation T. Jurcsák.

***Orthotrichum speciosum* Nees** (n. 8324/131) – ref.: In J.W. Sturm, Deutschl. Fl. 2(3) (fasc.17): 5. 1819; syn.: *Orthotrichum speciosum* Hed.; Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

Ord. Splachnales

Fam. Meesiaceae Schimp.

Gen. Meesia J.Hedwig, 1801, nom. cons.

***Meesia longiseta* Hedw.** (n. 8324/153) – ref.: Sp. Msc. Frond., 173 (1801); northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Superord. Hypnanae W. R. Buck & B. Goffinet, 2000 ex W. R. Buck et al. 2005

Ord. Hypnales

Fam. Amblystegiaceae G. Roth

Gen. Amblystegium W. P. Schimper, in B.S.G., 1853

***Amblystegium serpens* (Hedwig) W. P. Schimper (n. 8324/128)** – ref.: Bryol. Eur. 6 : 553. pl. 564 (fasc. 55-56 Monogr. 9. pl. 3), 1853; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Fam. Anomodontaceae Kindb.

Gen. Anomodon W. J. Hooker & T. Taylor, 1818

***Anomodon arolipendulus* Hed.** (n. 8324/165) – ref.: Keyser, 1875; Mem. Geol. Surv. Rep. S. Afr. 67: 74.; Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

***Anomodon viticulosus* (Hedw) Hook. & Taylor** (n. 8324/166) – ref.: Muscol. Brit. 79 (1818); Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

***Anomodon viticulosus* (Hedw) Hook. & Tayl** (n. 8324/125) – ref.: Muscologia Britannica 79. 1818; syn.: *Neckera viticulosa* J. Hedwig.; Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

Fam. Brachytheciaceae G. Roth

Gen. Eurhynchium Bruch & Schimper, in Bruch et al., 1854

***Eurhynchium strigosum* (Hoffm. ex F. Weber & D. Mohr) Schimp.** (n. 8324/126) – ref. Bryol. Eur. 5: 218 (fasc. 57-61. Monogr. 2), 1854; syn.: *Erinchium strigosum* Sch.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Gen. Isothecium S.E. Bridel, 1827

***Isothecium myosuroides* (Hedwig) Podp.** (n. 8324/129) – ref.: Conspectus Muscorum Europaeorum 501. 1954; syn.: *Isothecium myersum* Hed.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Gen. Rhynchostegium Bruch & Schimper, in Bruch et al., 1852

***Rhynchostegium ruscifolium* L.** (n. 8324/FN) – ref.: Bryologia Europaea 5: 197 (fasc. 49-51. Mon. 1). 1852; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák; missing specimen.

Fam. Fontinalaceae Schimp.

Gen. Fontinalis J.J. Dillenius ex J. Hedwig, 1801

***Fontinalis* sp.** (n. 8324/172) – ref.: Sp. Musc. Frond. 298 (1801); Romania, Bihor, Oradea, Oradea hills, 19th century, illegible signature, donation T. Jurcsák.

Fam. Hylocomiaceae (Broth) M. Fleisch.**Gen. Hylocomium Bruch & Schimper, in Bruch et al., 1852**

Hylocomium aureum Kit. (n. 8324/124) – ref.: Bryologia Europaea 5: 169 (fasc. 49-51. Mon. 1) 1852; unmentioned location and undated, in greenhouses, 19th century, leg. illegible signature, donation T. Jurcsák.

Hylocomium lutescens Ach. (n. 8324/143) – ref.: Bryologia Europaea 5: 169 (fasc. 49-51. Mon. 1) 1852; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Hylocomium patens Dill. (n. 8324/148) – ref.: Bryol. Eur. T. 492. (1851-1855); Romania, Bihor, Oradea, Oradea hills, 19th century, illegible signature, donation T. Jurcsák.

Hylocomium squarrosum (Hedw) Schimp. (n. 8324/145) – ref.: Bryol. Eur. 5: 177. 492 (fasc. 49-51 Mon. 9.6).1852; syn.: *Rhytidiadelphus squarrosus* (Hedw.) Warnst.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Hylocomium splendens (Hedw.) Schimp. (n. 8324/147) – ref.: Bryol. Eur. 5: 173. 492 (fasc. 49-51 Mon. 5).1852; syn.: *Hylocomium splendens* Dill.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Gen. Rhytidiadelphus triquetrus (Limpricht) Warnstorf, 1906

Rhytidiadelphus triquetrus (Hedw) Warnstorf. (n. 8324/146) – ref.: Krypt.-Fl. Brandenburg, Laubm. 2: 920-922, f. 1-6 [926]. (1906); syn.: *Hylocomium triquetrum* (Hedw) Schimp (Bryologia Europaea 5: 177 (fasc. 49-51. Mon.8. 5) 1852); northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Fam. Hypnaceae Schimp.**Gen. Hypnum J. Hedwig, 1801**

Hypnum acuminatum (Hedw) P. Beauv. (n. 8324/140) – ref.: Prodr. Aetheogam. 60 (1805); syn.: *Brachythecium acuminatum* (Hedw.) Austin; *Leskea acuminata* Hedw.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Hypnum commutatum Hedw. (n. 8324/134) – ref.: Species Muscoun Frondosorum 284 (1801); syn.: *Palustirlla commutata* (Hedw.) Ochyra; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Hypnum cupressiforme Hedw. (n. 8324/141) – ref.: Species Muscoun Frondo-

sorum 291. (1801); Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

***Hypnum molle* Hedw.** (n. 8324/135) – ref.: Species Muscoun Frondosorum 273. 70 f. 7-10 (1801); syn.: *Hygrohypnum molle* (Hedw) Loeske; *Ochyraea mollis* (Hedw) Ignatov; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

***Hypnum longirostrum* Ehrh. ex Brid** (n. 8324/137) – ref.: Muscol. Recent. 2(2): 154 (1801); syn.: *Eurhynchium striatum* (Schreb. ex Hedw.) Schimp; *Hypnum striatum* Schreb. ex Hedw.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

***Hypnum stramineum* Dicks. ex Brid.** (n. 8324/136) – ref.: Muscologia Recentiorum 2(2): 172. 1801; syn.: *Amblystegium stramineum* (Dicks. ex Brid) De Not.; *Calliergon stramineum* (Dicks. ex Brid) Kindb.; *Hypnum stramineum* Sch.; *Hypnum stramineum* Dicks.; *Straminergon stramineum* (Dicks. ex Brid) Hedenäs; *Stereodon stramineum* (Dicks. ex Brid) Brid.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

***Hypnum tamariscifolium* Neck.** (n. 8324/139) – ref.: Novarum et minus cognitarum stirpium pugillus 1771; Romania, Bihor, Oradea, 19th century, illegible signature, donation T. Jurcsák.

***Hypnum velutinum* Hedw.** (n. 8324/138) – ref.: Species Muscoun Frondosorum 272 (1801); Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

Fam. Leskeaceae Schimp.

Gen. Leskea J. Hedwig, 1801

***Leskea polymorpha* Hedw.** (n. 8324/110) – ref.: Hedw. Sp. Musc. Frond. 211 (1856); Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

Fam. Neckeraaceae Schimp.

Gen. Neckera J. Hedwig, 1801, nom. cons.

***Neckera complanata* (Hedw.) Huebner.** (n. 8324/150) – ref.: Muscol. Germ. 576. (1833); Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

***Neckera crispa* Hedw.** (n. 8324/149) – ref.: Sp. Msc. Frond. 206 (1801); northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Fam. Pterigynandraceae Schimp.**Gen. Pterigynandrum J.Hedwig, 1801**

***Pterigynandrum filiforme* Hedw.** (n. 8324/111) – ref.: Sp. Musc. Frond. 81 (1801); Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

***Pterigynandrum radicans* Kit.** (n. 8324/177) – ref.: Sp. Musc. Frond. 80 (1801); Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

***Pterigynandrum secundatum* Hedw.** (n. 8324/112) – ref.: Sp. Musc. Frond. 80 (1801); Romania, Bihor, Oradea, Oradea hills, 19th century, leg. illegible signature, donation T. Jurcsák.

Subclas. Dicranidae**Ord. Dicranales****Fam. Dicranaceae Schimp.****Gen. Anisothecium Mitten, 1869**

***Anisothecium elegans* (Duby) Ther.** (n. 8324/118) – ref.: Rev. Bryol. Lichenol. 7: 170. 1935; syn.: *Brionella elegans* Kit.; *Dicranella elegans* (Duby) Larrain; Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, in greenhouses, 19th century, leg. illegible signature, donation T. Jurcsák.

Gen. Dicranum J. Hedwig, 1801

***Dicranum majus* Turner** (n. 8324/120) – ref.: Muscol. Hibern. Spic. 59. 1804; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

***Dicranum scoparium* Ehrh. ex Hedw.** (n. 8324/123) – ref.: Sp. Musc. Frond. 126. 1801; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Dicranum sp. (n. 8324/121) – ref.: Sp. Musc. Frond. 126. 1801; Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, in greenhouses, 19th century, leg. illegible signature, donation T. Jurcsák.

Gen. Paraleucobryum (S. O. Lindberg ex Limpricht) Loeske, 1907

***Paraleucobryum longifolium* (Hedw) Loeske** (n. 8324/122) – ref.: Sp. Musc. Frond. 130. 1801; syn.: *Dicranum longifolium* Ehrh. ex Hedw.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Fam. *Leucobryaceae* Schimp.**Gen. *Leucobryum* Hampe, 1839**

***Leucobryum vulgare* Hampe** (n. 8324/127) – ref.: *Linnaea* 13: 42. 1839; syn.: *Leucobrium vulgare* Hed.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Fam. *Ditrichaceae* Limpr.**Gen. *Ditrichum* G. F. Hampe, 1867, nom. cons.**

***Ditrichum flexicaule* (Schwagrinen) Hampe** (n. 8324/119) – ref.: *Flora* 50 : 182. 1867); syn.: *Trichostomum flexicaule* (Schwagr) Bruch & Schimp; *Cynodontium flexicaule* Schwagr.; *Leptotrichum flexicaule* (Schwagr) Hampe; France, the Pyrenees, 19th century, illegible signature, donation T. Jurcsák.

Ord. *Grimmiales***Fam. *Grimmiaceae* Arn.****Gen. *Grimmia* J. Hedwig, 1801**

***Grimmia funalis* (Schwagr) Bruch & Schimp** (n. 8324/174) – ref.: *Bryologia Europaea* 3: 119. 247 (fasc. 26-28 Mon. 17 11) 1845; syn.: *Trichostomum funale* Schwagr.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

***Grimmia tecticola* L.** (n. 8324/144) – ref.: *Sp. Musc. Frond.* 75. 1801; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Ord. *Pottiales***Fam. *Pottiaceae* Schimp.****Gen. *Tortula* J. Hedwig, 1801, nom. cons.**

***Tortula mucronata* (Brid) Lindb.** (n. 8324/114) – ref.: *Ofvers. Forh. Kongl. Svenska Vetensk.-Akad.* 24: 239. 1864; syn.: *Cinclidotus mucronatus* (Brid) Guim; *Diallytrichia mucronata* (Brid) Broth.; *Tortula mucronata* Hed.; France, the Pyrenees, 19th century, illegible signature, donation T. Jurcsák.

Phylum *Tracheophyta* Sinnott, 1935 ex Cavalier-Smith, 1998**Subphylum *Lycophytina*****Clas. *Lycopodiopsida* Bartl.**

Ord. Lycopodiales Dumortier, 1829**Fam. Lycopodiaceae Palist de Beauvois ex Mirbel, in Lamarck & Mirbel, 1802****Gen. Lycopodium L.**

***Lycopodium annotinum* L.** (n. 8324/176) – ref.: Sp.Pl.; 1103 (1753); northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Ord. Selaginellales Prantl, 1874**Fam. Selaginellaceae Poliset de Beauvois, 1805, nom. cons.****Gen. Selaginella (L.) Beauv. ex Mart. & Schrank**

***Selaginella casia* L.** (n. 8324/164) – ref.: Prodr. Aetheogam. 101. 1805; unmentioned location and date, in greenhouses, 19th century, leg. illegible signature, donation T. Jurcsák.

***Selaginella capillaris* Kit.** (n. 8324/173) – ref.: Journal of Botany, British and Foreign. 21: 3, 1883; Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

***Selaginella circinalis* (L.) Spring.** (n. 8324/161) – ref.: Flora 21; 220 (1838); unmentioned location and date, in greenhouses, 19th century, leg. illegible signature, donation T. Jurcsák

***Selaginella complanata* L.** (n. 8324/162) – ref.: Prodr. Aetheogam. 101. 1805; - unmentioned location and date, in greenhouses, 19th century, leg. illegible signature, donation T. Jurcsák.

***Selaginella helvetica* Spreng.** (n. 8324/163) – ref.: Flora (Regensburg) 21.149. 1805; Slovenia, Kraina, 19th century, no signature, donation T. Jurcsák.

***Selaginella plumosa* (L.) C. Presl.** (n. 8324/160) – ref.: Abh. Kongl. Bohm. Ges. Wiss. 5. 3: 583 (1845); syn.: *Selaginella stolonifera* (Sw) Spring (*Flora* 21: 193, 1838); *Lycopodium stoloniferum* Sw. (Prodr., 138. 1788); unmentioned location and date, in greenhouses, 19th century, leg. illegible signature, donation T. Jurcsák.

***Selaginella scabiosa* Kit.** (n. 8324/116) – ref.: Prodr. Aetheogam. 101. 1805; Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

***Selaginella selaginoides* L.** (n. 8324/115) – ref.: Hort. reg. monac. 1:182. 1829 (J. H. F. Link, Fil. spec. 158. 1841); syn.: *Licopodium selaginoides* L. (*Species Plantarum* 2: 1101. 1753); *Licopodium selaginella* Kit.; Slovakia, northwestern Carpathians, Gerlachovsky (Gerlos) region, 19th century, leg. illegible signature, donation T. Jurcsák.

Subphylum *Euphylophytina***Infraphylum „*Moniliformopses*” Kenrick & Crane, 1997, nom. nud.****Clas. *Polypodiopsida* Cronquist et al.****Ord. *Polypodiales* Link****Fam. *Aspleniaceae* Newman****Gen. *Asplenium* C. Linnaeus, 1753**

***Asplenium aitoni* Sch.** (n. 8324/FN) – ref.: Sp. Pl. 2: 1078-1082. 1753; Australia, 19th century, no signature, donation T. Jurcsák; missing specimen.

***Asplenium deltargesii* L.** (n. 8324/197) – ref.: Sp. Pl. 2: 1078-1082. 1753; Mexico, 19th century, no signature, donation T. Jurcsák.

***Asplenium dentex* L. V. Buch** (n. 8324/195) – ref.: Publishing author: L. v. Buch
Publication: Besch. Canar. Ins. 189. 1825; Mexico, 19th century, no signature, donation T. Jurcsák.

***Asplenium ruta-muraria* L.** (n. 8324/199) – ref.: Sp. pl. 2:1081. 1753; Slovenia, Kraina, 19th century, no signature, donation T. Jurcsák.

***Asplenium scolopendrium* L.** (n. 8324/200) – ref.: Sp. pl. 2:1079. 1753; syn.: *Scolopendrium officinale* Schwarz; *Scolopendrium vulgare* Sm.; Slovenia, Kraina, 19th century, no signature, donation T. Jurcsák.

***Asplenium triangulare* Kit.** (n. 8324/FN) – northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák, missing specimen.

***Asplenium trichomanes* L.** (n. 8324/198) – ref.: Sp. pl. 2:1080. 1753; Slovenia, Kraina, 19th century, no signature, donation T. Jurcsák.

Fam. *Blechnaceae* (C. Presl, 1851) Copeland, 1947**Subfam. *Blechnoideae*****Gen. *Blechnum* C. Linnaeus, 1753**

***Blechnum longifolium* Cav.** (n. 8324/184) – ref.: Cavanilles, Antonio Jose (Joseph), Published in 1802; syn: *Blechnum longifolium* Forst.; Mexico, 19th century, no signature, donation T. Jurcsák.

***Blechnum triangularifolium* T. C. Chambers & P. A. Farrant** (n. 8324/186) – ref.: New Zealand J. Bot. 36(1): 14 (1998); syn: *Blechnum triangulare*?; Mexico, 19th century, no signature, donation T. Jurcsák.

Fam. Dennstaedtiaceae J.P. Losty, 1909**Gen. *Pteridium* Rafin**

***Pteridium aquilinum* (L.) Kuhn** (n. 8324/180) – ref.: O. Kersten, Reis. Ost-Afr. 3(3):11. 1879; syn.: *Pteris aquilina* L. (Sp. Pl. 2 : 1075, 1753); northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Fam. Dryopteridaceae Ching, 1965, nom. cons.**Gen. *Dryopteris* (L.) Schott.**

***Dryopteris filix-mas* (L.) Schott.** (n. 8324/205) – ref.: Gen. Fil., sub pl. 9. 1834; syn.: *Aspidium filix-mas* (L.) Schrad; *Polypodium filix-mas* L.; *Tectaria filix-mas* Cav.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Fam. Polypodiaceae Berchtold & J. Presl, 1820**Subfam. Polypodioideae****Trib Polypodeae****Gen. *Polypodium* C. Linnaeus, 1753**

***Polypodium calcareum* Sm.** (n. 8324/196) – ref.: Fl. Brit. 3: 1117-1118. 1804; syn.: *Polypodium dryopteris* L. var. *calcareum* (Sm) A. Gray; *Gymnocarpium robertianum* (Hoffm) Newman; *Tectaria calcarea* (Sm) Copel.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

***Polypodium scandens* G. Forst.** (n. 8324/207) – ref. Florae Insularum Australium Prodrum 81. 1786; syn.: *Polypodium scandens* L.; *Phymatosorus scandens* (G. Forst) Pic. Serm.; Europe, 19th century, no signature, donation T. Jurcsák.

***Polypodium vulgare* L.** (n. 8324/208) – ref.: Sp. Pl. ed. 1 1085 (1753); syn.: *Polypodium vulgare* L. subsp. *vulgare*; - Slovenia, Kraina, 19th century, no signature, donation T. Jurcsák, missing specimen.

Trib. Lepisoreae**Gen. *Belvisia* Mirabel, in Lamarck & Mirabel, 1802**

***Belvisia spicata* (L.) Mirb.** (n. 8324/206) – ref.: Tardieu-Blot, M .L. 1960. Polypodiaceae. Fl. Madagasc. 5(14): 93-121; syn.: *Lomaria spicata* Willd. (Sp. Pl. ed. quarta. 289. 1810); *Acrostichum spicatum* L.; Slovenia, Kraina, 19th century, no signature, donation T. Jurcsák.

Fam. Pteridaceae Kirchn.**Subfam. Adiantoideae****Gen. Adiantum C. Linnaeus, 1753**

Adiantum aethiopicum L. (n. 8324/192) – ref.: Sp. Pl. 2: 1560 (1753); syn.: *Adiantum assimile* Sw. (Schrader. Journ. 1800 [2]. 83. 1801); Mexico, 19th century, no signature, donation T. Jurcsák.

Adiantum capillus veneris L. (n. 8324/194) – ref.: Sp. Pl. 1096. (1753); Europe, 19th century, no signature, donation T. Jurcsák.

Adiantum cuneatum Langsd. & Fisch. (n. 8324/187) – ref.: Pl. Voy. Russes Monde 23, t. 26 (1810); syn: *Adiantum cuneatum* Schltdl. (Linnaea 5: 615. 1830); *Adiantum cuneatum* G. Forst; Australia, 19th century, no signature, donation T. Jurcsák.

Adiantum furcatum L. (n. 8324/193) – ref.: Suppl. Pl. 447. 1781. [1881 (IF)]; Mexico, 19th century, no signature, donation T. Jurcsák.

Adiantum pedatum L. (n. 8324/191) – ref.: Sp. Pl. 2: 1095. (1753); Europe, 19th century, no signature, donation T. Jurcsák.

Adiantum pennatum L. (n. 8324/190) – ref.: Sp. Pl. 2: 1094-1097. (1753); Australia, 19th century, no signature, donation T. Jurcsák.

Adiantum radiatum L. (n. 8324/188) – ref.: Sp. Pl. 2: 1094 (1753); Mexico, 19th century, no signature, donation T. Jurcsák.

Adiantum tenerum Sw. (n. 8324/189) – ref.: Prod. 135 (1788); Mexico, 19th century, no signature, donation T. Jurcsák.

Adiantum trapeziforme L. (n. 8324/194 /a) – ref.: Sp. Pl. 1097. (1753); Australia, 19th century, no signature, donation T. Jurcsák, missing specimen.

Subfam. Pteridoideae**Gen. Pteris C. Linnaeus, 1753**

Pteris algiera Sort. (n. 8324/181) – ref.: Species Plantarum 2: 1073, 1753; Gen. Pl. ed.5., 484. 1754; Japan, 19th century, no signature, donation T. Jurcsák.

Pteris carpatica L. (n. 8324/179) – ref.: Index Filicum xlii. 1857; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Pteris elegans Sw. (n. 8324/183) – ref.: Kongl. Vetensk. Acad. Handl. 1817(1): 71. 1817; syn.: *Dryopteris nobilis* (T. Moore) C. Chr.; Mexico, 19th century, no signature, donation T. Jurcsák.

Pteris ensiformis Burm. f. (n. 8324/178) – ref.: Fl. Indica 230 (1768); syn.: *Pteris*

crenata Sw. [J. Bot. (Schrader) 1800(2): 65 65. 1801]; Mexico, 19th century, no signature, donation T. Jurcsák.

***Pteris longifolia* L.** (n. 8324/182) – ref.: Species Plantarum 2: 1074, 1753; Brazil, 19th century, no signature, donation T. Jurcsák.

Subfam. Taenitidoideae

Gen. *Onychium* Kaulfuss, 1820

***Onychium siliculosum* (Desv.) C. Chr.** (n. 8324/185) – ref.: Icones Filicum fasc. 8: 469. 1906.; syn.: *Pteris chrysocarpa* Hook. et Grev. (Icones Filicum 1(6): t. 107 1828); *Onychium chrysocarpus* (Hook. & Grev.) C. Chr.; *Onychium siliculosum* Kaulfuss var. *chrysocarpum* (Hook & Grev.) Tardieu & C. Chr.; Mexico, 19th century, no signature, donation T. Jurcsák.

Fam. Tectariaceae Panigrahi

Gen. *Tectaria* Cavanilles, 1799

***Tectaria aculeata* Lag., Garcia & Clem.** (n. 8324/202) – ref.: Anal. Cienc. 5. 145. 1802; syn.: *Aspidium aculeatum* Dill.; Slovenia, Kraina, 19th century, no signature, donation T. Jurcsák.

Fam. Thelypteridaceae Ching ex Pichi-Serm.

Gen. *Phegopteris* (Presl) Fee, 1852

***Phegopteris connectilis* (Mchx.) Watt.** (n. 8324/201) – ref.: Canad. Naturalist & Quart. J. Sci., n. s., 3:29. 1866; syn.: *Polypodium phegopteris* L.; northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Fam. Woodsiaceae (Champ) Herter

Gen. *Athyrium* A. W. Roth., 1799

***Athyrium alpestre* (Hoppe) Clairville** (n. 8324/203) – ref.: Man. Herbor. Suisse, 301. 1811; syn.: *Aspidium alpestre* Sch.; *Aspidium alpestre* Hoppe., *Athyrium distentifolium* Tausch. ex Opiz; Slovenia, Kraina, 19th century, no signature, donation T. Jurcsák.

Gen. *Cystopteris* Bernhardt, 1805

***Cystopteris gracilis* Dill.** (n. 8324/204) – ref.: Neues J. Bot. 1(2): 26. (1805); northwestern Carpathians, 19th century, illegible signature, donation T. Jurcsák.

Kindom *Animalia* C. Linnaeus, 1758
Subkindom *Bilateria* (Hatschek, 1888) Cavalier-Smith, 1983
Branch *Deuterostomia* Grobбен, 1908
Infrakingdom *Coelomopora* (Marcus, 1958) Cavalier-Smith, 1998
Phylum *Echinodermata* Klein, 1734 ex De Brugiere, 1789
Subphylum *Eleutherozoa* Bell, 1891 (Bather, 1900)
Infraphylum *Echinozoa* Haeckel, in Von Zittel, 1895
Superclas. *Cryptosyringida* Smith, 1984
Clas. *Echinoidea* Leske, 1778
Subclas. *Euechinoidea* Bronn, 1860
Superord. *Atelostomata* Zittel, 1879
Ord. *Spatagoida* Claus, 1876
Subord. *Amphisternata*
Fam. *Loveniidae* Lambert, 1905
Gen. *Lovenia* Desor, 1847

***Lovenia tetrasticha* Meneghini** (n. 8323/61) – ref.: Memor. dell'Istit. Venet. 1845, p. 183, tav. XIV, f. 2; syn.: *Lowenia tetrasticha* Meneghini; *Heteropxis tetrasticha* Heller.; *Antennularia tetrasticha* Gotl. Mark.-Turn.; Adriatic Sea, 19th century, leg. P. Titius, donation T. Jurcsák; obs.: *Lovenia* (pro *Lowenia* Meneghini 1843) Kirchenpauer 1872, Abh. Ver. Hamburg.

Branch *Protostomia* Grobбен, 1908
Infrakingdom „*Lophotrochozoa*”
Phylum *Bryozoa* Ehrenberg, 1831
Clas. *Gymnolaemata*
Ord. *Cheilostomata*
Subord. *Anasca*
Division *Cellularina*
Fam. *Bugulidae* Gray, 1848
Gen. *Bugula* Oken, 1815

***Bugula neritina* L.** (n. 8323/62) – ref.: Hayward, P.J. (2001). Bryozoa, in: Costello, M. J. et al. (ed.) (2001); syn.: *Acamarehis neritina* Mang.; *Bugula neitina* Oken.; *Cellularia neritina* Pall.; *Cellaria neritina* Ellis u. Sol.; *Sertularia neritina* L.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák, missing specimen.

Division *Malacostega*

Fam. *Flustridae***Gen. *Flustra* L., 1767**

***Flustra hyalina* Lam.** (n. 8323/63) – ref.: Howson, C. M.; Picton, B. E. (eds.) (1997). *Ulster Museum Publication*, 276; syn.: *Flustra hyalina* Pall.; Adriatic Sea, 19th century, no signature, donation T. Jurcsák.

Flustra zoophitum (n. 8324/66) – ref.: *Flustra* Linnaeus, 1761; Croatia, Split, Dalmatia, Adriatic Sea, 19th century, leg. P. Titius, donation T. Jurcsák.

Conclusions

As we have already mentioned, we consider that Tiberiu Jurcsák's donation had a direct connection with Pius Vendel Titius (whose author abbreviation is either *Titius* or *P.V. Titius*, respectively, *Pio*) a botanist known in his time as a collector specialized in algae, mostly collected from the Adriatic Sea. Among the locations mentioned on the boards (where they are mentioned, some of them right near the name of the collector and the year of collection, 1856) and Pius Titius's life journey there is a parallelism guiding us to accurately identify the geographical, administrative and environmental locations.

Titius Pius Vendel (1801-1884), a Franciscan monk, born in Slovakia, near Košice, worked as a teacher in Levoča (Presov region), in Kanta and Arad (Transylvania), and as a chaplain in Galicia, Normandy, and on the Adriatic Coast, where he died in Piran. The location names found on the boards (such as Gerlos, Oradea, Săvârșin, Split, Trieste, Piran, Venice, Genoa), the names of several administrative zones of the Austro-Hungarian Empire (Dalmatia, Kraina, Transylvania), as well as the geographical areas mentioned (the Carpathians, the Mediterranean Sea, the Adriatic Sea, the Pyrenees, the Atlantic Ocean) lead us to a route that partially overlaps the territories where he worked and lived. To this route the locations in western Italy (the Gulf of Genoa) and France (the Pyrenees) are added, as well as the Mediterranean Sea and the Atlantic Ocean, where Titius could theoretically have arrived if we take into account the period when he worked in Normandy and Italy. There might still be the probability of some exchanges of specimens between collectors who could have been botanists. Such a hypothetical alternative might be considered in case of the exotic specimens from Mexico, Brazil, Australia and Japan included in this herbarium.

The area where the specimens of this herbarium were collected is rather large and includes aquatic (marine and lacustrine) species (cyanobacteria, protobacteria, species of the „chromista” group, algae), as well as terrestrial species

(mosses, lichens, ferns); it stretches from the Atlantic Ocean to the Mediterranean Sea (with two of its inner seas, the Adriatic Sea and the Ligurian Sea), to the Pyrenees and the north-western Carpathians. The collection of these specimens can be dated in the second half of the 19th century (the year 1856 is mentioned on some of the boards), and the collection areas are today in several European countries such as Croatia, Slovenia, Italy, Slovakia, France, Romania, and possibly in today's western Ukraine. In this respect, we considered it useful to use administrative descriptions of the historical boundaries of the countries and provinces of the Austro-Hungarian Empire and to mention geographical details (seas, bays, coasts) in order to clarify possible locations, many of which were not mentioned on the margins of the board.

Most of the species gathered in the collection we refer to belong to the Mediterranean Europe which includes, besides the three great southern peninsulas (the Iberian, the Italian, and the Balkan), a series of islands and parts of the Mediterranean Sea closely linked to the mainland (bays and open seas). We have to mention here the Adriatic Sea with the Gulf of Venice (including the the Venice Lagoon and the bays of Trieste and Piran) and the Ligurian Sea with the Gulf of Genoa.

The great majority of the specimens in the collection are algae collected in the *Adriatic Sea*, which is a branch of the Mediterranean Sea separating the Italian Peninsula from the Balkan one. In the studied collection there is a single specimen (*Grateloupia verucosa* Agardh) collected from the Gulf of Genoa. Several of the locations mentioned on some herbarium sheets are the Adriatic Sea, the Dalmatian Coast, the Bay of Piran, and the cities Split (Spalato), Trieste and Venice.

- The Slovenian Kraina (Kranjska in Slovenian, Krain in German, Carniola in Italian, Krájna in Hungarian) is a historical territory that was part of the Austrian Empire and of Austria-Hungary as the Duchy of Carniola (Vojvodina Kranjska, Herzogtum Krain), and roughly corresponds to the central region of Carniola in the present state of Slovenia.

As mentioned before, the main collector of the pieces from this collection, especially of those from the northern Adriatic Sea, must have been, in our opinion, Pius Titius Vendel, as he spent most of his life on these shores. Being interested in the biodiversity of the place, especially the marine flora and fauna, he got into contact with other naturalists, sending them collected specimens, determining and describing 64 species of algae.

Among the botanists of the time who studied the flora and fauna of the Adriatic Sea and of the Mediterranean Sea in general, leaving behind important studies, are Agardh, 1839, 1842, 1844; Ardissonne, 1874-78, 1883, 1886, Ardisso-

ne et al. 1881, De Toni & Levi. 1887, De Toni, 1888, 1892, 1898, 1907, 1913-17, De Toni & Forti, 1903, Heller, 1868, Kutzing, 1845-1871, Zanardini, 1841, 1843, 1847, 1860, 1871. Some of them wrote about Pius Titius' life and work, as well as about his collections, such as Vöröss, 1972, 1973; Battelli, 2002 and Iancu et al., 2008; the last author published in Romania a Catalogue of Bryophytes, together with a group of botanists of the Prahova County Museum of Natural Sciences.

There are several herbaria containing the samples collected by Titius Pius from among the algae of the Adriatic Sea (Titius & Kalchbrenner - *Algae maris Adriatici*; Trieste: Zoologische Station *Algae Adriaticae exsiccatae*). Among the studies on the algae of the Mediterranean Sea carried out in the 20th century there are: Feldman-Mazoyer, 1941; Gayral, 1966; Coppejans, 1983; Riedl, 1983; Boudouresque & Perret-Boudouresque, 1987; Delepine et al., 1987; Bressan & Godini, 1990; Cabioc'h et al., 1992.

The Carpathians, respectively the north-western Carpathians, including the sub-carpathian region of Ruthenia (*Subcarpatia*, respectively *Transcarpatia*; *Zakarpattia* in Ukrainian, *Kárpátalja* in Hungarian, and *Podkarpatska* in Slovak), are a location frequently mentioned in the collection. Not even in this situation do we exclude the possibility that one of the collectors might be Pius Titius Vendel, taking into account his Slovak origin from near Košice, his teaching practice in the Spiš region, in northeastern Slovakia (there is a mention of the locality *Gerla*, a name that must be that of the Slovak Gerlach – today Gerlachov - in that region), and the time he spent in Transylvania (locality names like *Săvârșin* and *Oradea*, as well as the generic name of Transylvania appear on the margin of some of the boards). To that we may add the period when he was a priest chaplain in the historical Galicia. Some of the labels bear location names as the Carpathians (Karpath) and *Subcarpathia* or *Kárpátalja* (Karpath. alatt).

Some of the references on the flora of the Carpathians published since the 19th century are: F. Pax, 1898-1908; Sagorski E., 1893; Sagorski, E. & Schneider, G., 1891; Schur J.F. 1886; Simonkai L. 1887. Among those published in the 20th century, as well as those published after 2000, are: Dostal J., 1931, 1989; Pawlowski B. 1956, 1970; Paucă & Roman, 1959; Stojko S.M. 1977; Maglocky S. 1983; Marhold K. & Hindak F. 1998; Mirek Z. & Piekos-Mirkowa H., 1992; Maglocky & Ferakova. 1993; Bertova L. et al., 1966–1997; Tasenkevich L. 1998; Tutin et al., 1964-1980; Kricfalussy et al., 1999; Mirek Z. et al., 2002; Urs-Beat Brändli & Jarosław Dowhanytsch, 2003; Witkowski et al., 2003; Pop G.P. 2006; Ronikier M., 2011.

The specimens of the herbarium coming from Central and South America, Australia and Japan have a peripheral character, though we do not disregard the

role they had in the collection as a whole. They must have arrived as exchange items between collectors or through acquisitions, in an attempt to diversify the material of the original herbarium. Among the studies of that time, related to the collections made in some exotic areas (Mexico, Brazil, and Australia) that appear in the herbarium, are those of Roezi Benedikt (1867, 188?) for Mexico and South America and that of Frauenfeld (1864) for Australia.

The material presented here is a botanical collection completed around mid 19th century, its main collector is Pius Titius Vendel, a Franciscan monk whose existential route overlaps most of the geographical areas mentioned on the margin of the boards (especially the regions of the Adriatic Sea, the northwest Carpathian Mountains, up to Transcarpathia and Western Transylvania). In general, the material shows a good state of preservation, even though there are several specimens with a high degree of degradation or missing specimens, as mentioned above at the respective position when considered to be important for the unity of the collection.

The collection must have been originally richer, its pieces being important for their pedagogical role and for their utility, as we believe that the collector, according to his signature (author abbreviation), was Karl Eduard Ortgies (1829-1916), a German horticulturist and botanist. The material includes species of Bacteria (cyanobacteria and proteobacteria), *Fungi*, *Chromista*, *Plantae* (algae, mosses, lichens, ferns) and *Animalia* (phyla *Bryozoa* and *Echinodermata*), and represents a total of 352 taxa, belonging to 183 genera and 112 families.

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