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The Botanical Collection of the Țării Crișurilor Museum Tatiana Tofan's Herbarium (part.I.)

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Abstract. The present paper continues valuing the data and evidence contained in the Botanical collection of the Tarii Crisurilor Museum by presenting the herbarium of Tatiana Tofan, a former botanist of the museum. The material was processed by arranging it in a taxonomical classification which was updated by indicating the accepted names, the location, the date of and the author of its collecting. According to the taxonomical classification employed here (Systema Naturae 2000), the 258 taxons presented belong to 138 genuses and to 51 families.

Introduction

The present paper proceeds to value (subsequent to the presentation of Simonkai Lajos's herbarium – Danciu & Golban 2008, 2009), the corpus and data and information to be found in the Botanical collection of the Tarii Crisurilor Museum by describing the samples collected by Tatiana Tofan, a former botanist of the museum.

The samples introduced in the present paper were collected from Bihor county, the area of the city of Oradea and its surroundings (the villages of Sânmartin and Paleu), as well as from the sandy region in the north-western part of the county (the village of Șimian and from the area of Peștiș near Aleșd).

Material and method

The examined material consists of herbarium sheets to be found in the collection of the Tarii Crisurilor Museum in Oradea, according to the inventory number following the botanical denomination. When rendering the denomination of the species, we considered the accepted botanical name with the mention of the reference source of its first description. Consequently, to check and update our data, we employed the data of the Royal Botanic Garden Edinburgh – *Flora Europaea*, *Global Biodiversity Information Facility*. (<http://www.gbif.org>), and *uBio Portal* (www.ubio.org/portal/-5k). To render the units systematically, we consulted the study of V. Ciocârlan (2000) that 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 (the variant entered after October 17, 2009). We also mentioned the present location where the collection was done, the locality, the date and the name of the collector. Where determination was missing, the name of the determinator was mentioned.

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

Systematic part

Kingdom ***Plantae*** Haeckel, 1866
Subkingdom ***Viridaeplantae*** Cavalier-Smith, 1981
Phylum ***Tracheophyta*** Sinnott, 1935 ex Cavalier-Smith, 1998
Subphylum ***Euphyllophytina***
Infraphylum ***“Moniliformopses”*** Kenrick & Crane, 1997
Clas. ***Equisetopsida*** C. Agardh.
Ord. ***Equisetales*** Dumortier, 1829
Fam. ***Equisetaceae*** A. Michaux ex Alph. De Candolle, 1804

Gen ***Equisetum*** L.

***Equisetum arvense* L.** - (n. 22.606) – ref.: Sp. Pl. ed. 1 1061 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Peșea Rivulet”), mesophile meadow; 13.06.2002; T.Tofan.

***Equisetum arvense* L.** – (n. 24.160)– ref.: *Species Plantarum* 2: 1061. 1753.; - Romania, Bihor, Șimian (natural reserve), sands, 16.10.2001; leg. T. Tofan

***Equisetum arvense* L.** -- (n. 24.148; 24.149) - ref.: Sp. Pl. ed. 1 1061 (1753); - Romania, Bihor, Aleșd, Peștiș, Valea Morilor, on the rivulet bank, among alders, 02.08.2001, leg. T.Tofan

***Equisetum variegatum* Weber.** – (n. 24.159)– ref.: Bot. Taschenb. 60, 447. 1807.; - Romania, Bihor, Șimian (natural reserve), meadow on the sands, 16.10.2001; leg. T. Tofan

Clas. ***Polypodiopsida*** Cronquist

Ord. ***Polypodiales*** Link.

Fam. ***Aspleniaceae*** Newman

Gen ***Asplenium*** L.,1753

***Asplenium trichomanes* L.** - (n. 24.152/a.; 24.152/b.; 24.152/c.) - ref.: Sp. pl. 2:1080. 1753; - Romania, Bihor, Aleșd, Peștiș, (Valea Morilor), on the rocks in the rivulet bed, 02.08.2001, leg. T.Tofan

Fam . ***Dryopteridaceae*** Ching, 1965, nom.cons.

Gen ***Dryopteris*** Adanson, 1763, nom.cons.

***Dryopteris filix-mas* (L.) Schott.** - (n. 24.151) - ref.: *Journal für die Botanik* 1800(2): 38. 1801.; - România, Bihor, Aleșd, Peștiș (Valea Morilor), on shady rocks, 02.08.2001, leg. T.Tofan

Fam. ***Woodsiaceae*** (Champ.) Herter

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

***Athyrium filix-femina* (L.) Roth** - (n. 24.150) - ref.: Tent. Fl. Germ. 3(1): 65. 1800; syn.: - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), on the stream, 02.08.2001, leg. T.Tofan

Infraphylum ***“Radiatopses”*** Kenrick & Crane, 1997

Clas. ***Magnoliopsida*** Brogniart, 1843

Ord. **Nymphaeales** Dumortier, 1829
Fam. **Cabombaceae** Rich. ex A. Richard, 1828

Gen **Cabomba** Aublet, 1775

Cabomba caroliniana L. - (n. 22.643/1; 22.643/2; 22.643/3) – ref.: Ann. Lyceum Nat. Hist. New York 4:46. 1837; - Romania, Bihor, Sânmartin, Băile 1 Mai („The Natural Reserve of the Pețea Rivulet”), the thermal lake Ochiul Mare; 10. - 14.07.2001; leg.: T. Tofan

Fam. **Nymphaeaceae** Salisbury, 1805
Subfam. **Nymphaeoidae**

Gen **Nymphaea** L., 1753

Nymphaea lotus L. **forma thermalis** (DC.) Tuzson - (n. 22.646/1; 22.646/2; 22.646/3) – ref.: Math. Természettud. Értes. 25(4):32, 36. 1907; - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), the thermal lake; 14. - 31.07.2001; leg.: T. Tofan

“monocotyledons”

Ord. **Alismatales** Dumortier, 1829
Fam. **Araceae** Adans., 1763, nom. cons.
Subfam. **Lemnoideae**

Gen **Lemna** L., 1753

Lemna trisulca L. - (n. 22.571) – ref.: Sp. Pl. ed. 1 970 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the water-lily lake Ochiul Mare; 08.08.2001; leg. T.Tofan

Fam. **Hydrocharitaceae** A.L. de Jussiey, 1789
Subfam. **Anacharidoideae** (Endl., 1837) Thome, 1886

Gen **Elodea** A. Michaux, 1803

Elodea canadensis Michx. - (n. 22.534/1; 22.534/2) – ref. Fl. Bor.-Amer. 1: 20 (1803); - Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the thermal lake Ochiul Mare; 10.07.2001; leg. T.Tofan.

Fam. **Patamogetonaceae** Bercht. & J. Presl, 1823

Gen **Potamogeton** L. 1753

Potamogeton crispus L. - (n. 22.626) – ref.: Sp. Pl. ed. 1 126 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the water-lily lake; 02.04.2001; leg. T.Tofan.

Potamogeton natans L. - (22.654/1; 22.654/2) – ref. Sp. Pl. ed. 1 126 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), the water-lily lake Ochiul Mare; 31.07.2001; leg. T.Tofan.

Ord. **Asparagales** Bromhead, 1838

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

Subfam. **Ruscoideae** (Dumort, 1829) Dippel, 1889

Gen **Ruscus** L., 1753

Ruscus aculeatus L. (n. 24.064) – ref.: Sp. Pl. Ed. 1 1041 (1753); - Romania, Bihor, Paleu, Săldăbagiu de Munte, Săldăbagiu forest (phytocenosis with Ruscus), 05.10.2001, leg. T.Tofan

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

Subfam. **Epidendrideae**

Trib **Neottieae**

Gen **Cephalanthera** L.C. Richard, 1818

Cephalanthera damasonium (Mill.) Druce - (n. 24.061)– ref.: Ann. Scott. Nat. Hist. 15(60): 225. 1906. ; - Romania, Bihor, Paleu, Săldăbagiu de Munte, Săldăbagiu forest (phytocenosis with Ruscus), 05.10.2001, leg. T.Tofan

“commelinids”

Ord. **Poales** Small, 1903

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

Subfam. **Cyperoideae**

Trib **Cypereae**Gen **Cyperus** L., 1753

Cyperus fuscus L. - (n. 22.647/1; 22.647/2) - Reference: Sp. Pl. ed. 1 46 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), the swampy shore of the water-lily lake; 31.07.2001; leg. T.Tofan.

Subfam. **Caricoideae**Gen **Carex** L., 1753

Carex hirta L. - (n. 22.608) – ref. Sp. Pl. ed. 1 975 (1753), - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), the Ochiului Mare shore; 14.05.2002; leg. T.Tofan.

Carex ovalis Gooden. – (n. 24.172) – ref.: Trans. Linn. Soc. London 2: 148 (1794); - Romania, Bihor, Simian (natural reserve), sand hills; 16.10.2001; leg. T. Tofan

Carex pilosa Scop. – (n. 24.049) – ref.: Flora Carniolica, Editio Secunda 2: 226. 1772. ; - Romania, Bihor, Paleu, Săldăbagiu de Munte, Săldăbagiu forest (phytocenosis with Ruscus), 05.10.2001, leg. T.Tofan

Carex spicata Huds. - (n. 22.607) - Reference: Fl. Angl. ed. 1 349 (1762); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), coastal xenophiles meadow; 14.05.2002; leg. T.Tofan.

Fam. **Gramineae** A.J. de Jussieu, 1789, nom.cons.Gen **Corynephorus** Palisot de Beauvois, 1812, nom. cons.

Corynephorus canescens (L.) Beauv. – (n.24.155/a.; 24.155/b.; 24.155/c.; 24.155/d.) – ref.: Ess. Agrostogr. 90, t. 18, fig. 2. 1812; Romania, Bihor, Șimian (natural reserve), sands, 16.10.2001; leg. T. Tofan

Subfam. **Pooideae**Trib **Aveneae**Subtrib **Alopecuridinae**

Gen **Agrostis** L., 1753

Agrostis capillaris L. – (n. 24.132) - ref.: Sp. Pl. ed. 1 62 (1753); - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), in the beech forest , 02.08.2001, leg. T.Tofan

Agrostis stolonifera L. – (n. 24.156) – ref.: Sp. pl. 1:62. 1753; - Romania, Bihor, Șimian (natural reserve), sands, 16.10.2001; leg. T. Tofan

Gen **Alopecurus** L., 1753

Alopecurus geniculatus L. - (n. 22.617) – ref. Sp. Pl. ed. 1 60 (1753); - România, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), coastal xerophilous meadow; 14.05.2002; leg. T.Tofan.

Gen **Calamagrostis** Adanson, 1763

Calamagrostis epigejos (L.) Roth - (n. 22.620) – ref. Tent. Fl. Germ. 1: 34 (1788); - România, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “ Pețea Rivulet”), mesophile meadow; 12.06.2002; leg. T.Tofan.

Calamagrostis epigejos (L.) Roth – (n. 24.157) – ref.: Tent. Fl. Germ. 1: 34 (1788); - Romania, Bihor, Șimian (natural reserve), sands, 16.10.2001; leg. T. Tofan

Subtrib. **Aveninae**Gen **Arrhenatherum** Palisot de Beauvois, 1812

Arrhenatherum elatius (L.) P.Beauv. ex J.Presl & C.Presl - (n. 22.532/1) – ref.: Fl. C Kechica 17 (1819); - România, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “ Pețea Rivulet”), mesophile meadow, the Ochiul Mare shore; 14.05.2002; leg. T.Tofan.

Arrhenatherum elatius (L.) P.Beauv. ex J.Presl & C.Presl - (n. 22.532/2) – ref.: Fl. C Kechica 17 (1819); - Romania, Bihor, Sânmartin, Băile 1 Mai , oaktree forest; 31.07.2001; leg. T.Tofan.

Subtrib **Phalaridinae**

Gen ***Anthoxanthum*** L., 1753

***Anthoxanthum odoratum* L.** - (n. 22.612/1; 22.612/2) – ref. Sp. Pl. ed. 1 28 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), mesophile meadow; 14.05.2002; leg. T.Tofan.

Trib ***Brachypodieae***Gen ***Brachypodium*** Palisot de Beauvois, 1812

***Brachypodium sylvaticum* (Huds.) P. Beauv.** - (n. 22.639) – ref. Agrost. 101 & 155 (1812); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), mesophile meadow; 20.07.2001; leg. T.Tofan.

***Brachypodium sylvaticum* (Huds.) P. Beauv.** - (n. 24.105) - ref.: Ess. Agrostogr. 101, 155, 156, 181. 1812; - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), beech forest, 02.08.2001, leg. T.Tofan

Trib ***Bromeae***Gen ***Bromus*** L., 1753

***Bromus arvensis* L.** - (n. 22.587) – ref. Sp. Pl. ed. 1 77 (1753); - România, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), the road curb, on area with ruderal plants; 07.08.2001; leg. T.Tofan.

***Bromus hordeaceus* L.** (n. 22.615) – ref. Sp. Pl. ed. 1 77 (1753), - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), mesophile meadow on the shore of Ochiului Mare; 14.05.2002; leg. T.Tofan.

***Bromus inermis* Leyss.** - (n. 22.528) – ref. Fl. Hal. ed. 1 16 (1761); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), mesophile meadow; 08.08.2002; leg. T.Tofan.

***Bromus sterilis* L.** - (n. 22.614/1 ; 22.614/2) – ref. Sp. Pl. ed. 1 77 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), mesophile meadow with ruderal plnts; 14.05.2002; leg. T.Tofan.

Trib **Meliceae**Gen **Glyceria** R. Brown, 1810, nom.cons.

Glyceria fluitans (L.) R.Br. - (n. 22.579) – ref. Prodr. Fl. Nov. Holl. ed. 1 179 (1810); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), the lake shore at the water brim; 14.08.2002; leg. T.Tofan.

Gen **Melica** L., 1753

Melica uniflora Retz. - (n. 24.066) – ref.: Obs. Bot. 1: 10 (1779); - Romania, Bihor, Paleu, Săldăbagiu de Munte, Săldăbagiu forest (phytocenosis with *Ruscus*), 06.08.2001, leg. T.Tofan

Trib **Poeae**Gen **Briza** L., 1753

Briza media L. - (n. 22.599) – ref. Sp. Pl. Ed. 1 70 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), mesophile meadow, 14.05.2002; leg. T.Tofan.

Gen **Cynosurus** L., 1753

Cynosurus cristatus L. – (n. 24.131) - ref.: Sp. Pl. ed. 1 72 (1753); - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), on the rivulet bank, among alders, 02.08.2001, leg. T.Tofan

Gen **Dactylis** L., 1753

Dactylis glomerata L. - (n. 22.551/1; 22.551/2) – ref. Sp. Pl. ed. 1 71 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), mesophile meadow; 10.07.2001; leg. T.Tofan.

Gen **Festuca** L., 1753

Festuca drymeja Mert. & W. D. J. Koch . – (n. 24.133; 24.134) - ref.: J. C. Röing, Deutschl. Fl. ed. 3, 1:670. 1823; - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), in the beech forest, 02.08.2001, leg. T.Tofan

***Festuca pratensis* Huds.** - (n. 22.613) – ref. Fl. Angl. ed. 1 37 (1762); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), mesophile meadow; 12.06.2002; leg. T.Tofan.

***Festuca rupicola* Heuff.** - (n. 24.208) – ref.:Verh. K. K. Zool.-Bot. Ges. Wien 8:233. 1858; - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), Zone III. of the reserve, 14.05.2002, leg. T. Tofan

Gen ***Holcus*** L., 1753

***Holcus lanatus* L.** - (n. 22.616) – ref. Sp. Pl. ed. 1 1048 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), mesophile meadow; 14.03.2002; leg. T.Tofan.

Gen ***Poa*** L., 1753

***Poa angustifolia* L.** - (n. 22.619) – ref. Sp. Pl. ed. 1 67 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), coastal xerophile meadow, 14.05.2002; leg. T.Tofan.

***Poa annua* L.** - (n. 22.611/1) – ref. Sp. Pl. ed. 1 68 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), coastal xerophile meadow; 14.05.2002; leg. T.Tofan.

***Poa annua* L.** - (n. 22.611/2) – ref. Sp. Pl. ed. 1 68 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), mesophile meadow; 12.06.2002; leg. T.Tofan.

***Poa palustris* L.** - (n. 22.610/1; 22.610/3) – ref. Syst. Nat. ed. 10 2: 874 (1759); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), mesophile meadow, 14 - 16.05.2002; leg. T.Tofan.

***Poa palustris* L.** - (n. 22.610/2) – ref. Syst. Nat. ed. 10 2: 874 (1759); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), mesophile meadow near Ochiul Mare, 14.06.2002; leg. T.Tofan.

***Poa pratensis* L.** - (n. 22.618) – ref. Sp. Pl. ed. 1 67 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), coastal xerophile meadow, 14.05.2002; leg. T.Tofan.

Subfam. **Chloridoideae**

Trib **Eragrostideae**

Subtrib **Eleusininae**

Gen **Eragrostis** N.M. Wolf, 1776

Eragrostis minor Host - (n. 22.589) – ref. Gram. Austr. 4: 15 (1809); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), road curb; 14.08.2001; leg. T.Tofan.

Subfam. **Ehrhartoideae**

Trib Oryzeae

Gen **Leersia** O. Swartz, 1788, nom.cons.

Leersia oryzoides (L.) Sw. - (n. 22.531/1; 22.531/3) – ref. Nov. Gen. Sp. Pl. 21 (1788); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), in the water of Ochiul Pompei stream; 08.08.2001; leg. T.Tofan.

Leersia oryzoides (L.) Sw. - (n. 22.531/2;) – ref. Nov. Gen. Sp. Pl. 21 (1788); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), on the shore of the thermal lake; 31.07.2001, leg. T.Tofan.

Subfam. **Panicoideae**

Trib **Andropogoneae**

Subtrib **Sorghinae**

Gen **Sorghum** Moench, 1794, nom. cons.

Sorghum halepense (L.) Pers. – (n. 24.076) – ref.: Syn. pl. 1:101. 1805; - Romania, Bihor, Oradea, riverside road curb, 12.09.2001, leg. T. Tofan

Trib **Paniceae**

Subtrib **Setariinae**

Gen **Setaria** Palisot de Beauvois, 1812, nom. cons.

Setaria pumila (Poir.) Schult. - (n.22.530/1; 22.530/2) – ref. Mantissa 2: 274 (1824); - România, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), weeds, road curb, 07- 14.08.2001; leg. T.Tofan.

***Setaria viridis* (L.) P.Beauv.** - (n. 22.529) – ref. Agrost. 51 & 178 (1812); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), road curb, 07.08.2001; leg. T.Tofan.

Fam. ***Juncaceae*** Durande 1782, nom.cons.

Gen ***Juncus*** L., 1753

***Juncus articulatus* L.** – (n. 24.135) - ref.: Sp. Pl. ed. 1 327 (1753); - Romania, Bihor, Alesd, Peștiș (Valea Morilor), on the stream, 02.08.2001, leg. T.Tofan.

***Juncus articulatus* L.** - (n. 24.153) - ref.: Sp. Pl. ed. 1 327 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), the left shore of Ochiul Mare , 31.07.2001, leg. T.Tofan

***Juncus effusus* L.** – (n. 24.130) - ref.: *Species Plantarum* 1: 326. 1753. ; - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), on the stream, 02.08.2001, leg. T.Tofan

***Juncus inflexus* L.** - (n. 22.547) – ref.: Sp. Pl. ed. 1 326 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), swampy ground; 14.08.2001; leg. T.Tofan.

***Juncus inflexus* L.** - (n. 22.577) – ref.: Sp. Pl. ed. 1 326 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), swampy ground on the lake shore, 14.07.2001; leg. T.Tofan.

***Juncus tenuis* Willd.** - (n. 24.147) - ref.: Sp. Pl. 2: 214 (1799) ; - Romania, Bihor, Aleșd, Peștiș, on the stream, 02.08.2001, leg. T.Tofan.

Juncus spp. – (n. 24.209) – ref.: *Species Plantarum* 1: 325-330. 1753. - Romania, Bihor, Suplacul de Barcău, in the village, 24.05.2002, leg. T.Tofan

Fam. ***Typhaceae*** Durande, 1782, nom.cons.

Gen ***Typha*** L., 1753

***Typha angustifolia* L.** - (n. 22.561) – ref.: Sp. Pl. ed. 1 971 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), the water-lily lake Ochiul Mare; 31.07.2001; leg. T.Tofan.

Ord. **Ranunculales** Dumontier, 1829

Fam. **Ranunculaceae** Adans., 1763, nom. cons.

Subfam. **Ranunculoideae**

Trib **Anemoneae**

Gen **Anemone** L., 1753

Anemone nemorosa L. - (n. 22.630) – ref.: Sp. Pl. ed. 1 541 (1753); - Romania, Bihor, Sânmartin, Băile Felix, hornbean and oaktree forest, 19.03.2002, leg. T. Tofan.

Anemone nemorosa L. – (n. 24.068; 24.069) – ref.: Sp. pl. 1:541. 1753; - Romania, Bihor, Sânmartin, Haieu, the Șomleu Hills, 31.03.2002, leg. T. Tofan

Tribe **Ranunculeae**

Gen **Ranunculus** L., 1753

Ranunculus auricomus L. - (n. 22.629/1; 22.629/2) – ref.: Sp. Pl. ed. 1 551 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the shore of the water-lily lake Ochiul Mare; 19. 03. 2002; leg.: T.Tofan.

Ranunculus polyanthemos L. - (n. 22.594) – ref. Sp. Pl. ed. 1 554 (1753); Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the shore of the water-lily lake Ochiul Mare; 14. 05. 2002; leg.: T.Tofan.

Ranunculus repens L. - (n. 24.143) - ref.: Sp. pl. 1:554. 1753; - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), in the hazel wood, 02.08.2001, leg. T.Tofan

Ranunculus sceleratus L. - (n. 22.580) – ref.: Sp. Pl. ed. 1 551 (1753);– Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), swampy ground on the lake shore, 14.08.2001; leg T.Tofan.

Fam. **Papaveraceae** Adans., 1763, nom. cons.

Subfam. **Fumarioideae**

Trib **Fumarieae**

Gen ***Corydalis*** A.P. de Candolle, in Lamarck & A.P. de Candolle, 1805

***Corydalis solida* (L.) Clairv.** - (n. 22.635) – ref.: Svensk Bot. 8: t. 531 (1817); – Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), meadow on the water-lily lake shore, 14.08.2001; leg T.Tofan.

Ord. ***Caryophyllales*** Perleb. 1826

Fam. ***Amaranthaceae*** Adans., 1763 ex A.L. de Jussieu, 1789, nom.cons.

Subfam. ***Amaranthoideae***

Trib ***Amarantheae***

Gen ***Amaranthus*** L., 1753

***Amaranthus blitum* L.** - (n.22.527) - ref.: Sp. Pl. ed. 1 990 (1753);– Romania, Bihor, the city of Oradea, road curb; 13.09.2001, leg. T.Tofan.

***Amaranthus retroflexus* L** - (n.22.548) – ref.: Sp. Pl. ed. 1 991; – Romania, Bihor, Sânmartin, Băile 1 Mai, road curb; 14.07.2001, leg. T.Tofan.

Subfam. ***Chenopodioideae***

Trib ***Atripliceae*** C.A. Mey.

Gen ***Atriplex*** L., 1753

***Atriplex patula* L.** - (n. 22.523) – ref.: Sp. Pl. ed. 1 1053 (1753); – România, Bihor, the city of Oradea, the curb of the street, 24.09.2001; leg. T.Tofan.

Trib ***Camphorosmeae***

Gen ***Bassia*** Allioni, 1766

***Bassia laniflora* (S.C. Gmelin) A.J. Scott.** - (n. 24.161)– ref.: Feddes Repert. 89(2-3): 108. 1978.; - Romania, Bihor, Șimian (natural reserve), hayfield on the sand ,16.10.2001; leg. T. Tofan

Trib ***Chenopodieae***

Gen ***Chenopodium*** L., 1753

***Chenopodium album* var. *striatum* (Krasan) Kartesz, comb. nov. ined.** - (n. 22.524) –ref.: Festschr. Ascherson 222 (1904); – Romania, Bihor, the city of Oradea, the curb of the street, 24.09.2001; leg. T.Tofan.

***Chenopodium polyspermum* L.** - (n.22.570) – ref. Sp. Pl. ed.1 220 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), road curb, area with ruderal plants; 08.08.2001; leg. T. Tofan

Fam. ***Caryophyllaceae*** Durande, 1872, ex A.L. de Jussieu, 1789, nom. cons.

Gen: ***Petrorhagia*** (Seringe) Link, 1831

***Petrorhagia prolifera* (L.) P.W Ball & Heywood** - (n. 24.169) – ref. Bull. Brit. Mus. (Nat. Hist.), Bot. 3:161. 1964; - Romania, Bihor, Șimian (natural reserve), sand hills, 16.10.2001; leg. T. Tofan

Subfam. ***Alsinoideae***Trib ***Alsineae***Gen ***Cerastium*** L., 1753

***Cerastium fontanum* Baumg. subsp. vulgare (Hartm.) Greuter & Burdet** - (n. 22.592) – ref.: Willdenowia 12: 37 (1982); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), coastal xerophile meadow, 14.05.2002; leg. T. Tofan.

***Cerastium glomeratum* Thuill.** - (n. 22.566/1) – ref.: Fl. Paris ed. 2 226 (1799); – Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), road curb, beaten path, 08.08.2001; leg. T. Tofan.

***Cerastium glomeratum* Thuill.** - (n. 22.566/2) – ref.: Fl. Paris ed. 2 226 (1799); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), coastal xerophile meadow; 14.05.2002; leg. T. Tofan.

***Cerastium pumilum* Curtis** - (n. 24.164)– ref.: Flora Londinensis 2(6,69): pl. 30. 1794. ; - Romania, Bihor, Șimian (natural reserve), sand hills, 25.05.2002; leg. T. Tofan

***Cerastium semidecandrum* L.** - (n. 22.662) – ref.: Sp. Pl. ed. 1 438 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), road curb; 07.08.2001; leg. T. Tofan.

***Cerastium semidecandrum* L.** - (n. 24.141; 24.142) - ref.: Sp. pl. 1:438. 1753; - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), in the hazel wood, 02.08.2001, leg. T.Tofan

Gen ***Myosoton*** Moench, 1794

***Myosoton aquaticum* (L.) Moench** - (n. 22.638) – ref.: Meth. 225 (1794); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), mesophile meadow, 14.05.2002; leg. T. Tofan.

Subfam. ***Caryophylloideae***

Trib ***Caryophylleae***

Gen ***Gypsophila*** L., 1753

***Gypsophila muralis* L.** - (n. 22.593) – ref.: Sp. Pl. Ed. 1 408 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), coastal xerophile meadow, 14.05.2002; leg. T. Tofan.

***Gypsophila muralis* L.** - (n. 24.166)– ref.: Sp. Pl. ed. 1 408 (1753); - Romania, Bihor, Șimian (natural reserve), sands, 16.10.2001; leg. T. Tofan

Gen ***Saponaria*** L., 1753

***Saponaria officinalis* L.** - (n. 22.542) – ref.: Sp. Pl. ed. 1 408 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the shore of the thermal lake Ochiul Mare, 10.07.2001; leg. T. Tofan.

Trib ***Sileneae***

Gen ***Cucubalus*** L., 1753

***Cucubalus baccifer* L.** - (n. 22.658/1; 22.658/2; 22.658/3; 22.658/4) – ref.; Sp.

Pl. ed. 1 414 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai, oaktree forest, 31.07.2001; leg. T.Tofan.

Gen ***Lychnis*** L., 1753

***Lychnis flos-cuculi* L.** - (n. 22.598/1; 22.598/2) – ref.: Sp. Pl. ed. 1 436 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “ Pețea Rivulet”), coastal xerophilous meadow, 14.05.2002; leg. T. Tofan.

Gen ***Silene*** L., 1753

***Silene vulgaris* (Moench) Garcke** - (n. 22.526) – ref. : Fl. Nord-Mittel-Deutschl. ed. 9 64 (1869), – Romania, Bihor, the city of Oradea, the railroad embankment; 12.09.2001; leg. T. Tofan.

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

Subfam. ***Polygonoideae***

Trib ***Polygoneae***

Gen ***Fallopia*** Adanason, 1763

***Fallopia convolvulus* (L.) A.Löve.** - (n. 22.567) – ref.: Taxon 19: 300 (1970); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “ Pețea Rivulet”), the shore of the water-lily lake, 08.08.2001; leg. T. Tofan.

***Fallopia dumetorum* (L.) Holub** - (n. 22.569) – ref.: Folia Geobot. Phytotax. (Praha) 6: 176 (1971); – Romania, Bihor, Sânmartin, Băile 1 Mai Spas, (the Natural Reserve “ Pețea Rivulet”), on area with ruderal plants, 07.08.2001; leg. T. Tofan.

Gen ***Polygonum*** L., 1753

***Polygonum lapathifolium* L.** - (n. 22.568) – ref. : Sp. Pl. ed. 1 360 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “ Pețea Rivulet”), on area with ruderal plants, 14.08.2001; leg. T. Tofan.

***Polygonum minus* Huds.** - (n. 24.123; 24.124) - ref.: *Flora Anglica* 1: 148. 1762; - Romania, Bihor, Alesd, Pestis (Valea Morilor), on the stream; 02.08.2001, leg. T.Tofan

Polygonum mite Schrank - (n. 24.122) - ref.: Baier. Fl. 1: 668 (1789); - Romania, Bihor, Alesd, Pestis (Valea Morilor), the road curb, on the water shore; 02.08.2001, leg. T.Tofan

Polygonum mite Schrank – (n. 24.154 /a.; 24.154 /b.) – ref.: Baier. Fl. 1: 668 (1789); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), the left shore of Ochiul Mare, 31.07.2001, leg T. Tofan

Polygonum mite Schrank – (n. 24.052) – ref.: Baier. Fl. 1: 668 (1789); - Romania, Bihor, Paleu, Săldăbagiu de Munte, Săldăbagiu forest (phytocenosis with *Ruscus*) ; 05.10.2001, leg. T.Tofan

Polygonum persicaria L. - (n. 22.588) – ref.: Sp. Pl. ed. 1 361 (1753);– Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the road curb, on areas with ruderal plants, 14.08.2001; leg. T. Tofan.

Trib ***Rumiceae***

Gen ***Rumex L.***, 1755

Rumex acetosa L. - (n. 22.601) – ref.: Sp. Pl. ed. 1 337 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), mesophile meadow, 16.05.2002; leg. T. Tofan.

Rumex acetosella L. - (n. 24.168) – ref.: Species Plantarum 1: 338. 1753.; - Romania, Bihor, Simian (natural reserve), sands, 16.10.2001; leg. T. Tofan

Rumex conglomeratus Murray - (n. 22.604 /1) – ref. Prodr. Stirp. Gotting. 52 (1770); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), mesophile meadow, 13.06.2002; leg. T. Tofan .

Rumex conglomeratus Murray - (n. 22.604 /2) – ref. Prodr. Stirp. Gotting. 52 (1770); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), mesophile meadow, 31.07.2001; leg. T. Tofan .

Rumex hydrolapatum Hudson (n. 22.573) – ref.: Fl. Angl. ed. 2 154 (1778); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), mesophile meadow, 14.08.2001; leg. T. Tofan.

***Rumex obthusifolius* L.** - (n. 22.564) – ref. Sp. Pl. ed. 1 335 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, oaktree forest; 31. 07. 2001, leg. T. Tofan.

***Rumex patientia* L.** - (n. 22.602) – ref.: Sp. Pl. ed. 1 333 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), coastal xerophile meadow, 14.05.2002; leg. T. Tofan .

Subclas. ***Rosidae*** Takhtajan, 1967

Ord. ***Geraniales*** Dumortier, 1829

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

Trib ***Geranieae***

Gen ***Erodium*** L'Herit.

***Erodium cicutarium* (L.) L'Hér.** - (n. 22.555) – ref. Hort. Kew. ed. 1 2: 414 (1789); – Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), mesophile meadow; 10.07. 2001; leg. T. Tofan.

Gen ***Geranium*** L.,1753

***Geranium phaeum* L.** - (n. 22.627/1) – ref. Sp. Pl. ed. 1 681 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), mesophile meadow, the Ochiului Mare shore; 14.07.2001; leg. T. Tofan.

***Geranium phaeum* L.** - (n. 22.627/2; 22.627/3) – ref. Sp. Pl. ed. 1 681 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “ Pețea Rivulet”), mesophile meadow, the Ochiului Mare shore; 02.04.2002; leg. T. Tofan.

***Geranium robertianum* L.** - (n. 22.554) – ref. Sp. Pl. ed. 1 681 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), mesophile meadow; 10. 07. 2001; leg. T. Tofan.

Ord. ***Myrtales*** Reichenbach,1828

Fam. ***Lythraceae*** Jaume Saint-Hilaire, 1805

Tribe ***Lythreae***

Gen *Lythrum* L., 1753

Lythrum salicaria L. - (n. 22.572) – ref. Sp. Pl. ed. 1 446 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), the shore of the water-lily lake, 08.08.2001, leg. T.Tofan.

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

Subfam. *Onagroideae*

Trib *Epilobieae*

Gen *Epilobium* L., 1753

Epilobium lanceolatum Sebastiani & Mauri – (n. 24.092) – ref.: Fl. Rom. 138 (1818); – Romania, Bihor, Aleșd, Peștiș (Valea Morilor), on the stream, 02.08.2001, leg. T.Tofan

Epilobium obscurum Schreb. - (n. 22.536/1;) - Reference: Spicil. Fl. Lips. 147 & 155 (1771); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the swampy shore of the lake; 14.08.2001; leg. T. Tofan.

Epilobium obscurum Schreb. - (n. 22.536/2; 22.536/3; 22.536/4) - Reference: Spicil. Fl. Lips. 147 & 155 (1771); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), mesophile meadow on the shore of the lake; 14.07.2001; leg. T. Tofan.

Epilobium obscurum Schreb. - (n. 22.536/5) - Reference: Spicil. Fl. Lips. 147 & 155 (1771); – Romania, Bihor, Sânmartin, Băile 1 Mai, oaktree forest; 31.07.2001; leg. T. Tofan.

Epilobium montanum L. subsp. *collinum* (Gmel.) Leveille – (n.; 24.091) – ref.: Sp. Pl. ed. 1 348 (1753); syn.: *Epilobium collinum* C.C.Gmel.; *Epilobium carpetanum* Willk.; - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), on the stream, 02.08.2001, leg. T.Tofan

Epilobium parviflorum Schreb. - (n.22.538) - ref.: Spicil. Fl. Lips. 146 & 155 (1771); – Romania, Bihor, Sânmartin, 1 May Spas, (the Natural Reserve “Pețea Rivulet”), swampy ground; 14.08.2001; leg. T.Tofan.

***Epilobium parviflorum* Schreb.** - (n. 24.087; 24.088; 24.089; 24.090) – ref.: Spicil. Fl. Lips. 146 & 155 (1771); - Romania, Bihor, Alesd, Pestis (Valea Morilor), on the stream, in the beech forest, 02.08.2001, leg. T.Tofan

***Epilobium tetragonum* L.** - (n. 22.537) - ref.: Sp. Pl. ed. 1 348 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivuleț”), mesophile meadow; 14.07.2001; leg. T. Tofan.

Trib ***Circaeae***

Gen ***Circaea*** L., 1753

***Circaea lutetiana* L.** - (n. 24.110; 24.114; 24.115) - ref.: Sp. pl. 1:9. 1753; - Romania, Bihor, Alesd, Peștiș (Valea Morilor), on the stream, in the hazel wood, 02.08.2001, leg. T.Tofan

Ord. ***Celastrales*** Baskerville, 1839

Fam. ***Celastraceae*** R. Brown, 1814

Subfam. ***Celastroideae***

Trib ***Euonymae***

Gen ***Euonymus*** L., 1753

***Euonymus europaeus* L.** - (n. 22.657) - ref.: Sp. Pl. ed. 1 197 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, the oaktree forest; 31.07.2001; leg. T. Tofan.

Ord. ***Fabales*** Bromhead, 1838

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

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

Trib ***Fabeae*** Rchb., 1832

Gen ***Lathyrus*** L., 1753

***Lathyrus vernus* (L.) Bernh.** - (n. 24.059)– ref.: Syst. Verz. Erfurt 247 (1800); - Romania, Bihor, Paleu, Săldăbagiu de Munte, the Săldăbagiu forest (phytocenosis with Ruscus), 05.10.2001, leg. T.Tofan

Gen ***Vicia*** L., 1753

***Vicia cracca* L.** - (n. 22.661) – ref. Sp. Pl. ed. 1 735 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, the oaktree forest; 07.08.2001; leg. T.Tofan.

***Vicia dumetorum* L.** - (n. 22.553/1; 22.553/2) – ref.: Sp. Pl. ed. 1 734 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), mesophile meadow; 10.07.2001; leg. T. Tofan.

***Vicia hirsuta* (L.) Gray** - (n. 22.591) – ref.: Nat. Arr. Brit. Pl. 2: 614 (1821); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), xerophilous meadow with bushes of *Rosa*; 14.05.2002; leg. T.Tofan.

***Vicia sativa* L.** - (n. 22.590) – ref. Sp. Pl. ed. 1 736 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), coastal xerophilous meadow; 14.05.2002; leg. T.Tofan.

Trib ***Galegeae***Gen ***Astragalus*** L., 1753

***Astragalus cicer* L.** - (n. 22.584/2; 22.584/3) - ref.: Sp. Pl. ed. 1 757 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the lake shore, in bushes of *Prunus spinosa*; 14.08. 2001, leg. T. Tofan.

***Astragalus cicer* L.** - (n. 22.584/1) - ref.: Sp. Pl. ed. 1 757 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), mesophile meadow – the lake shore, 12.06.2002; leg. T. Tofan.

***Astragalus glycyphyllos* L.** - (n. 24.138; 24.139) - ref.: Sp. pl. 2: 758. 1753; - Romania, Bihor, Alesd, Peștiș (Valea Morilor), in the beech forest, 02.08.2001, leg. T.Tofan

Trib ***Trifolieae***Gen ***Ononis*** L., 1753

***Ononis spinosa* subsp. *hircina* (Jacq.) Gams** - (n. 22.625) – ref. Syst. Nat. ed. 10 2: 1159 (1759); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve

“Pețea Rivulet”), mesophile meadow at the edge of reed beds -; 12.06.2002; leg. T. Tofan.

***Ononis spinosa* L.** - (n. 22.549) – ref.: Sp. Pl. ed. 1 716 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), mesophile meadow, the shore of the water-lily lake; 14.07.2001; leg. T. Tofan.

Ord. **Fagales** Engler, 1892

Fam. **Fagaceae** Dumortier, 1829

Subfam. **Quercoidae**

Gen **Quercus** L., 1753

***Quercus ceris* L.** – (n. 24.050) – ref.: *Species Plantarum* 2:997. 1753; - Romania, Bihor, Paleu, Săldăbagiu de Munte, Săldăbagiu forest (phytocenosis with *Ruscus*), 05.10.2001, leg. T.Tofan

***Quercus pedunculiflora* C. Koch** – (n. 24.205) – ref.: *Linnaea* 22: 324. 1849.; - Romania, Bihor, Sânmartin, Băile 1 Mai (the “Ecomuseum” Project), the forest, 07.08.2001; leg.: T. Tofan

***Quercus petraea* (Mattuschka) Lieblein** – (n. 24.051) – ref.: Fl. Fuld. 403. 1784.; - Romania, Bihor, Paleu, Săldăbagiu de Munte, Săldăbagiu forest (phytocenosis with *Ruscus*), 05.10.2001, leg. T.Tofan

***Quercus robur* L.** - (n. 22.600/1) – ref. Sp. Pl. ed. 1 996 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai, on the natural reserve, 16.05.2002; leg. T.Tofan

***Quercus robur* L.** - (n. 22.600/2) – ref. Sp. Pl. ed. 1 996 (1753); - Romania, Bihor, Sânmartin, Băile 1 Mai, the oaktree forest, 31.07. 2001 ,leg. T.Tofan

***Quercus robur* L.** – (n. 24.204 /a; 24.204 /b; 24.204 /c; 24.204 /d;) – ref.: Sp. pl. 2:996. 1753; - Romania, Bihor, Sânmartin, Băile 1 Mai, (the “Ecomuseum” Project), the forest, 31.07.2001, leg. T. Tofan

***Quercus robur* L.** – (n. 24.206 /a; 24.206 /b; 24.206 /c; 24.206 /d;) – ref.: Sp. pl. 2:996. 1753; - Romania, Bihor, Sânmartin, Băile 1 Mai (the “Ecomuseum” Project), the forest, 07.08.2001, leg. T. Tofan

***Quercus robur* L.** – (n. 24.158 /a.; 24.158 /b.) – ref. : Sp. pl. 2:996. 1753 ; - Romania, Bihor, Șimian, forests, 16.10.2001; leg. T. Tofan

Fam. ***Betulaceae*** Gray, 1821

Subfam. ***Betuloideae***

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

***Alnus glutinosa* (L.) Gaertn.** - (n. 22.550/1; 22.550/2) – ref.: Fruct. Sem. Pl. 2: 54 (1790); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), on the shore of the thermal lake Ochiul Mare; 10.07.2001; leg. T. Tofan.

***Alnus glutinosa* (L.) Gaertn.** – (n. 24.078; 24.083) – ref.: Fruct. Sem. Pl. 2: 54 (1790); - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), 02.08.2001, leg. T.Tofan

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

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

Subfam. ***Euphorbioideae***

Trib ***Euphorbieae***

Gen ***Euphorbia*** L., 1753

***Euphorbia helioscopia* L.** - (n. 24.137) - ref.: Sp. pl. 1:459. 1753.; - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), on the stream, in the beech forest, 02.08.2001, leg. T.Tofan

***Euphorbia platyphyllos* L.** - (n. 22.653) – ref. Sp. Pl. ed. 1 460 (1753);– Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the mesophile meadow; 31.07.2001; leg. T. Tofan.

***Euphorbia platyphyllos* L.** - (n. 24.125; 24.136) - ref.: Sp. pl. 1:460. 1753.; - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), the forest roadside, in the beech forest; 02.08.2001, leg. T.Tofan

***Euphorbia serrulata* Thuill.** - (n. 22.543; 22.582); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), mesophile meadow; 10.07.2001; leg. T. Tofan.

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

Trib **Hypericeae**

Gen **Hypericum** L., 1753

Hypericum hirsutum L. – (n. 24.053) – ref.: Sp. Pl. ed. 1 786 (1753); - România, Bihor, Paleu, Săldăbagiu de Munte, Săldăbagiu forest (phytocenosis with *Ruscus*), 05.10.2001, leg. T.Tofan

Hypericum hirsutum L. - (n. 24.106) - ref.: Sp. pl. 2:786. 1753; - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), on the roadside forest, 02.08.2001, leg. T.Tofan

Hypericum hirsutum L. - (n. 24.109) - ref.: Sp. pl. 2:786. 1753; - Romania, Bihor, Alesd, Pestis (Valea Morilor), on the stream in the beech forest, 02.08.2001, leg. T.Tofan

Hypericum richeri Vill. subsp. **transsilvanicum** (Celak.) Ciocârlan - (n. 24.108) - ref.: Oesterr. Bot. Z. 24: 138. 1874; - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), in the beech forest, 02.08.2001, leg. T.Tofan

Hypericum tetrapterum Fr. - (n. 24.107) - ref.: Methodus 128. 1794; - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), on the roadside forest, 02.08.2001, leg. T.Tofan

Fam. **Salicaceae** Mirbel, 1815

Trib **Saliceae**

Gen **Salix** L., 1753

Salix alba L. - (n. 22.628) – ref.: Sp. Pl. ed. 1 1021 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Peșea Rivulet”), the Ochiului Mare shore; 02.04.2002; leg. T.Tofan.

Salix triandra L. - (n. 22.576) – ref. : Sp. Pl. ed. 1 1016 (1753); — Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Peșea Rivulet”); the Ochiului Mare shore; 14.08.2001; leg. T. Tofan.

Fam. **Violaceae** Batsch, 1802

Subfam. **Violoideae**

Trib **Violeae**

Gen **Viola** L., 1753

Viola alba Besser – (n.24.077) – ref.: Prim. Fl. Galiciae austriac. 1:171. 1809; - Romania, Bihor, Oradea, the courtyard of the Cris County Museum, 28.03.2002, leg. T.Tofan

Viola odorata L. – (n. 22.633/1; 22.633/2) – ref. Sp. Pl. Ed. 1 934 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the meadow on the shore of the water-lily lake Ochiul Mare; 10.07. 2001; leg. T.Tofan.

Viola suavis M. Bieb. – (n.24.071) – ref.: Fl. Taur.-Cauc. 3: 164 (1819); - Romania, Bihor, Sânmartin, Haieu, the Șomleu Hills, 31.03.2002, leg. T. Tofan

Viola reichenbachiana Jord. ex Boreau. – (n. 24.057)– ref. : Fl. Centre Fr. Ed. 3 2 : 78 (1857) ; - Romania, Bihor, Paleu, Săldăbagiu de Munte, Săldăbagiu forest (phytocenosis with Ruscus), 05.10.2001, leg. T.Tofan

Viola reichenbachiana Boreau - (n. 24.144) - ref.: Fl. centre France ed. 3., 2:78. 1857; - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), in the beech forest, 02.08.2001, leg. T.Tofan

Ord. **Oxalidales** Heintze, 1927
Fam. **Oxialidaceae** R. Brown, 1818

Gen **Oxalis** L., 1753

Oxalis stricta L. - (n.22.641)–ref.: Sp. Pl. Ed. 1435 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the mesophile meadow; leg. T.Tofan.

Ord. **Rosales** Perleb, 1826
Fam. **Rosaceae** A.I. de Jussieu, 1789, nom.cons.
Trib **Crataegeae**

Gen **Crataegus** L., 1753

Crataegus laevigata (Poir.) DC. – (n. 22.660) – ref.: Prodr. 2: 630 (1825); – Romania, Bihor, Sânmartin, Băile 1 Mai, the oak tree forest; 07.08.2001; leg. T. Tofan.

***Crataegus monogyna* Jacq.** – (n. 22.659) – ref.: Fl. Austr. 3: 50 (1775); – Romania, Bihor, Sânmartin, Băile 1 Mai, the oaktree forest; 07.08.2001; leg. T. Tofan.

Trib ***Potentilleae***

Gen ***Potentilla* L.**, 1753

***Potentilla supina* L.** – (n. 22.585) – ref.: Sp. Pl. Ed. 1 497 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the lake shore on marl rocks, 14.08.2001; leg. T. Tofan .

Trib ***Roseae***

Gen ***Rosa* L.**, 1753

***Rosa canina* L.** – (22.597/1) – ref.: Sp. Pl. Ed. 1 491 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the dry steppe coast; 14.05.2002; leg. T. Tofan .

***Rosa canina* L.** – (22.597/1; 22.597/2) – ref.: Sp. Pl. Ed. 1 491 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the coastal xerophile meadow, 14.05.2002; leg. T. Tofan .

Trib ***Rubeae***

Gen ***Rubus* L.**, 1753

***Rubus apiculatus* Weihe & Nees ex Bluff & Fingerh.** – (n. 24.129) - ref.: *Compendium Florae Germaniae* 1: 680. 1825. - Romania, Bihor, Alesd, Pestis (Valea Morilor), on the stream, in the alder forest; 02.08.2001, leg. T. Tofan

***Rubus caesius* L.** – (n. 22.533/1; 22.533/2) – ref.: Sp. Pl. Ed. 1 493 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, the oaktree forest; 31.07.2001; leg. T. Tofan.

Ord. ***Brassicales*** Bromhead, 1838

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

Trib ***Alysseae***

Gen *Alyssum* L., 1753

Alyssum alyssoides (L.) L. - (n. 22.539) – ref. Syst. Nat. Ed. 10 2: 1130 (1759); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”); the road curb; 14.07.2001; leg. T.Tofan.

Trib *Arabideae*Gen *Draba* L., 1753

Draba verna L. – (n.24.073) – ref.: Sp. pl. 2:642. 1753; - Romania, Bihor, Sânmartin, Haieu, Somleu Hills, 31.03.2002, leg. T. Tofan

Trib *Brassicaceae*Gen *Brassica* L., 1753

Brassica nigra (L.) W.D.J.Koch - (n. 22.596/1; 22.596/2) – ref.: Deutschl. Fl. ed. 3 4: 713 (1833); - Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”); the mesophile meadow; 14.05.2002; leg. T.Tofan.

Trib *Camelineae*Gen *Camelina* Crantz, 1762

Camelina microcarpa Andr. ex DC. - (n. 22.552) – ref. Veg. Syst. Nat. 2: 517 (1821); - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), the mesophile meadow with ruderal plants; 10.07.2001; leg. T.Tofan.

Trib *Cardamineae*Gen *Rorippa* Scopoli, 1760

Rorippa sylvestris (L.) Besser – (n. 22.545) – ref. Enum. Pl. Volhyn. 27 (1822); - Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the mesophile meadow; 10.07.2001; leg. T.Tofan.

Trib *Lepidieae*

Gen. **Lepidium** L., 1753

Lepidium campestre (L.) R.Br. – (n. 24.074) – ref.: Hort. Kew. ed. 2 4: 88 (1812);
- Romania, Bihor, Sânmartin, Haieu, Șomleu Hills, 31.03.2002, leg. T. Tofan

Trib **Sisymbrieae**Gen **Sisymbrium** L., 1753

Sisymbrium loeselii L. - (n. 22.595) – ref. Cent. Pl. 1: 18 (1755); - Romania, Bihor, Sânmartin, Băile 1 Mai, the Natural Reserve “Pețea Rivulet”, the mesophile meadow with ruderal plants; 14.05.2002; leg. T.Tofan.

Ord. **Malvales** Dumortier, 1829Fam. **Malvaceae** A.L. de Jussieu, 1789, nom.cons.Subfam. **Malvoideae**Trib **Malveae**Gen **Althaea** L., 1753

Althaea officinalis L. - (n. 22.541) - ref. Sp. Pl. ed. 1 686 (1753); – Romania, Bihor, Sânmartin, 1 May Spas, (the Natural Reserve “Pețea Rivulet”); mesophile meadow with ruderal plants; 10.07.2001; leg. T.Tofan.

Subfam. **Tilioideae**Gen **Tilia** L., 1753

Tilia tomentosa Moench - (n. 22.556) – ref. Verz. Ausl. Bäume Weissenst. 136 (1785); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), on the shore of the thermal lake; 10.07. 2001; leg. T.Tofan

Tilia platyphyllos Scop - (n. 24.060) – ref.: Fl. Carn. ed. 2 1: 373 (1772); - Romania, Bihor, Paleu, Săldăbagiu de Munte, Săldăbagiu forest (phytocenosis with Ruscus), 05.10.2001, leg. T.Tofan

Subclas. **Asteridae** Takhtajan, 1967Ord. **Ericales** Dumortier, 1829Fam. **Balsaminaceae** A. Richard, 1822

Gen *Impatiens* L., 1753

Impatiens noli-tangere L. – (n. 24.079; 24.080) – ref.: Sp. pl. 2:938. 1753;
- Romania, Bihor, Alesd, Pestis (Valea Morilor), on the stream in the alder forest, 02.08.2001, leg. T.Tofan

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

Subfam. *Myrsinoideae*

Trib *Anagallideae*

Gen *Anagallis* L., 1753

Anagallis arvensis L. (n. 22.562) - ref.: Sp. Pl. ed. 1 148 (1753); — Romania, Bihor, Sânmartin, Băile 1 Mai, the oaktree forest; 31.07.2001; leg. T.Tofan.

Trib *Lysimachieae*

Gen *Lysimachia* L., 1753

Lysimachia vulgaris L. (n. 22.605) – ref. Sp. Pl. ed. 1 146 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), on the shore of the water-lily lake Ochiul Mare, 31.07.2001; leg. T.Tofan.

Lysimachia vulgaris L. (n. 22.559) – ref. Sp. Pl. ed. 1 146 (1753); – România, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), mesophile meadow; 13.06.2002; leg. T.Tofan.

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

Subfam. *Boraginoideae* (A.L. de Jussieu, 1789) Am., 1832

Trib *Boragineae* (A.L. de Jussieu, 1789) Rchb., 1831

Gen *Pulmonaria* L., 1753

Pulmonaria officinalis L. - (n. 24.104) - ref.: Sp. pl. 1:135. 1753; - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), the beech forest on the river bank; 02.08.2001, leg. T.Tofan

Ord. **Gentianales** Lindley, 1833
Fam. **Apocynaceae** A.L. de Jussieu, 1789, nom.cons.
Subfam. **Asclepiadoideae**
Trib **Asclepiadeae**
Gen **Vincetoxicum** N.M. Wolf, 1776

Vincetoxicum hirundinaria Medik. - (n. 24.067)– ref.: Hist. Comment. Acad. Elect. Theod.-Palat. 6: 404 (1790); - România, Bihor, Paleu, Săldăbagiu de Munte, Săldăbagiu forest (phytocenosis with *Ruscus*), 06.08.2001, leg. T.Tofan

Subfam. **Rauvolfioideae**
Trib **Vinceae**

Gen **Vinca** L.,1753

Vinca minor L. (n.22.632) – ref.: Sp. Pl. ed. 1 209 (1753), – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “ Pețea Rivulet”); the shore of the water-lily lake; 19.03.2002, leg.: T. Tofan

Vinca minor L. – (n.24.070)– ref.: Sp. pl. 1:209. 1753; - Romania, Bihor, Sânmartin, Haieu, Somleu Hills, 31.03.2002, **leg.** T. Tofan

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

Gen **Centaurium** J. Hill, 1756

Centaurium pulchellum (Sw.) Druce - (n. 24.127) - ref.: *Flora of Berkshire* 342. 1897.; - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), the forest roadside; 02.08.2001, leg. T.Tofan

Centaurium erythraea Rafn – (n. 24.128) - ref.: Danemarks og Holsteens Flora 2: 75 – 77 (1800); - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), on the stream, in the beech forest; 02.08.2001, leg. T.Tofan

Centaurium erythraea Rafn - (n. 24.146) - ref.: Danm. Holst. Fl. 2:75. 1800 ; - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), 02.08.2001, leg. T.Tofan

Fam. **Rubiaceae** A.L. de Juisseau, 1789, nom cons.

Subfam. **Rubioideae**

Trib **Rubieae**

Gen **Galium** L.,1753

Galium mollugo L. (n. 22.583) – ref.: Sp. Pl. ed. 1 107 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”); mesophile meadow; 14.08.2001, ; leg. : T. Tofan

Galium rubioides L. (n. 22.586) – ref.: Sp. Pl. ed. 1 105 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”); the lake shore, in Prunus spinosa bushes; 14.08.2001; leg.: T. Tofan

Galium schultesii Vest. (n. 22.622/1; 22.622/2) – ref. Flora (Regensb.) 4: 530 (1821); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), 12.06.2002, mesophile meadow; leg: T. Tofan.

Galium sylvaticum L.– (n. 24.054; 24.055; 24.056;) – ref.: Sp. Pl. ed. 2 155 (1762); - Romania, Bihor, Paleu, Săldăbagiu de Munte, Săldăbagiu forest (phytocenosis with Ruscus), 05.10.2001, leg. T.Tofan

Galium sylvaticum L. – (n. 24.081; 24.082) – ref.: Sp. Pl. ed. 2 155 (1762); - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), on the stream, 02.08.2001, leg. T.Tofan

Galium verum L. - (n. 22.623) – ref. Sp. Pl. ed. 1 107 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), mesophile meadow;13.06.2002; leg.: T. Tofan.

Ord. **Solanales** Dumortier, 1829

Fam. **Convolvulaceae** A.L. de Jussieu, 1789

Trib **Cuscutae**

Gen **Cuscuta** L.,1753

Cuscuta epithymum (L.) L. (n. 22.666/1; 22.666/2) - ref.: Syst. Veg. ed. 13 140

(1774); — Romania, Bihor, Sânmartin, Băile 1 Mai, the oaktree forest (on *Achillea millefolium*); 31.07.2001, leg. T.Tofan.

***Cuscuta europaea* L.** (n. 22.603) – ref. Sp. Pl. ed. 1 124 (1753); – România, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the mesophile meadow (pe Rumex), 13.06.2002, leg.: T. Tofan

Ord. **Lamiales** Bromhead, 1838

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

Subfam. **Lamioideae**

Trib **Lamieae**

Gen **Galeobdolon** Adanson

***Galeobdolon luteum* Huds.** - (n. 24.063)– ref.: Flora Anglica, Editio Altera 1: 258. 1778.; - Romania, Bihor, Paleu, Săldăbagiu de Munte, Săldăbagiu forest (phytocenosis with *Ruscus*), 05.10.2001, leg. T.Tofan

Gen **Galeopsis** L.,1753

***Galeopsis ladanum* L.** - (n. 24.102; 24.103) - ref.: Sp. pl. 2:579. 1753; - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), the beech forest; 02.08.2001, leg. T.Tofan

***Galeopsis speciosa* Mill.** - (n. 22.664/1; 22.664/2) – ref. Reference: Gard. Dict. ed. 8 no. 3 (1768); – Romania, Bihor, Sânmartin, Băile 1 Mai, the oaktree forest; 31.07.2001. leg. T.Tofan.

Gen **Lamium** L.,1753

***Lamium purpureum* L.** - (n. 22.636) – ref. Sp. Pl. ed. 1 579 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the meadow on the water-lily lake shore; 19.03.2002; leg. T.Tofan.

Gen **Stachys** L.,1753

***Stachys annua* (L.) L.** - (n. 22.624) – Reference: Sp. Pl. ed. 2 813 (1763); sin.: *Stachys neglecta* Klokov; – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the mesophile meadow; 12.06.2002; leg. T.Tofan.

Subfam. **Nepetoideae**Trib **Mentheae**Subtrib **Nepetinae**Gen **Glechoma** L., 1753

***Glechoma hederacea* L.** - (n. 22.634) – ref. Sp. Pl. ed. 1 578 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the meadow on the water-lily lake shore; 19.03.2002; leg. T.Tofan.

Subtrib **Menthinae**Gen **Clinopodium** L.; 1753

***Clinopodium nepeta* (L.) Kuntze subsp. *glandulosum* (Req.) Govaerts** – (n. 24.085; 24.086) – ref.: World Checklist Seed pl. 3:18. 1999; - Romania, Bihor, Alesd, Pestis (Valea Morilor), on the stream, in the beech forest; 02.08.2001, leg. T.Tofan

***Clinopodium vulgare* L.** - (n. 24.126; 24.140) - ref.: Sp. pl. 2:587. 1753; - Romania, Bihor, Alesd, Pestis (Valea Morilor), on the stream, in the beech forest; 02.08.2001, leg. T.Tofan

Gen **Mentha** L., 1753

***Mentha aquatica* L.** - (n. 22.652/1; 22.652/2) – ref. Sp. Pl. ed. 1 576 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the swampy shore of the water-lily lake; 31.07.2001; leg. T.Tofan.

***Mentha arvensis* L.** - (n. 22.650) – ref. Sp. Pl. ed. 1 577 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, the oak tree forest ; 31.07.2001; leg. T. Tofan.

***Mentha longifolia* (L.) Huds.** - (n. 22.651) - Reference: Fl. Angl. ed. 1 221 (1762);– Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the mesophile meadow; 07.08.2001; leg. T.Tofan.

***Mentha longifolia* (L.) Huds.** - (n. 22.640) - Reference: Fl. Angl. ed. 1 221 (1762);– Romania, Bihor, Sânmartin, Băile 1 Mai, the oak tree forest; 31.07.2001; leg. T.Tofan.

Gen **Lycopus** L., 1753

Lycopus europaeus L. - (n. 22.560) – ref.: Sp. Pl. ed. 1 21 (1753); - Romania, Bihor, Sanmartin (the Natural Reserve “Pețea Rivulet”), the swampy shore of the water-lily lake, 31. 07. 2001, leg. T.Tofan.

Gen **Thymus** L.; 1753

Thymus pannonicus All. – (n. 24.171) – ref.: Fl. Pedem. i 20. 1785; - Romania, Bihor, Simian (natural reserve), sand hills; 16.10.2001; leg. T. Tofan

Subtrib **Salviinae**Gen **Salvia** L., 1753

Salvia verticillata L. - (n.22.574) – ref. Sp. Pl. ed. 1 26 (1753); syn.: *Salvia peloponnesiaca* Boiss. & Heldr; – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the mesophile meadow; 14.08.2001; leg. T.Tofan.

Subfam. **Scutellarioideae**Gen **Scutellaria** L., 1753

Scutellaria altissima L. - (n. 24.065) – ref.: Sp. Pl. ed. 1 600 (1753); - Romania, Bihor, Paleu, Săldăbagiu de Munte, Săldăbagiu forest (phytocenosis with *Ruscus*), 05.10.2001, leg. T.Tofan

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

Subfam. **Antirrhinoideae**Trib **Antirrhineae**Gen **Cymbalaria** J.Hill, 1756

Cymbalaria muralis P.Gaertn., B.Mey. & Scherb. - (n. 22.525) – ref.: Fl. Wetter. 2: 397 (1800); - Romania, Bihor, the city of Oradea on old limy walls; 30.08.2001; leg. T. Tofan.

Gen *Linaria* P. Miller

***Linaria vulgaris* Mill.** - (n. 22.575) - ref.: Gard. Dict. ed. 8 no. 1 (1768); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the area with ruderal plants to roadside land; 14.08. 2001; leg. T.Tofan.

Subfam. *Digitalidoideae*Trib *Veroniceae*Gen *Veronica* L., 1753

***Veronica anagallis-aquatica* L.** - (n. 22.655/1) – ref.: Sp. Pl. ed. 1 12 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), in the water-lily lake, near the shore, 14.08. 2001; leg. T.Tofan.

***Veronica anagallis-aquatica* L.** - (n. ; 22.655/2) – ref.: Sp. Pl. ed. 1 12 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the swampy ground on the lake shore; 14.08. 2001; leg. T.Tofan.

***Veronica anagallis-aquatica* L.** - (n. 22.655/3) – ref.: Sp. Pl. ed. 1 12 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), in the water-lily lake Ochiul Mare; 31.07.2001; leg. T.Tofan.

***Veronica hederifolia* L.** - (n. 22.631) – ref.: Sp. Pl. ed. 1 13 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), area with ruderal plants on the shore of the water-lily lake Ochiul Mare; 19.03. 2002; leg. T.Tofan.

***Veronica persica* Poir.** - (n. 22.565/1) – ref.: Encycl. Méth. Bot. 8: 542 (1808); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the meadow on the water-lily lake shore, 19.03. 2002; leg. T.Tofan.

***Veronica persica* Poir.** - (n. 22.565/2) – ref.: Encycl. Méth. Bot. 8: 542 (1808); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the road curb, the beaten path; 08.08.2001; leg. T.Tofan.

***Veronica persica* Poir.** - (n. 24.072) – ref.: Encycl. Méth. Bot. 8: 542 (1808); - Romania, Bihor, Sânmartin, Haieu, Șomleu Hills, 31.03.2002, leg. T. Tofan

Veronica verna L. - (n. 24.163) – ref.: Sp. Pl. ed. 1. 14 (1753); - Romania, Bihor, Şimian (natural reserve), sand hills, 24.05.2002; leg. T. Tofan

Subfam. **Gratioloideae** (Augier, 1801 ex Martinov, 1820) Luerse, 1822

Trib **Gratioleae** (Augier, 1801 ex Martinov, 1820) Benth., 1822

Gen **Limnophila** R. Brown, 1810, nom. cons.

Limnophila sessiliflora (Vahl) Blume – (24.033/a; 24.033/b; 24.033/c);- ref.: Bijdr. 749. 1826; - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Peţea Rivulet”), near the bridge, downstream, 14.07.2001, leg. T. Tofan

Limnophila sessiliflora (Vahl) Blume – (24.207 /a; 24.207 /b;)- ref.: Bijdr. 749. 1826; - Romania, Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve “Peţea Rivulet”), Zone III. of the reserve, 14.05.2002, leg. T. Tofan

Subfam. **Plantaginoideae** (A.L. de Jussieu, 1789) Eaton, 1836

Gen **Plantago** L., 1753

Plantago lanceolata L. - (n. 22.578/1) – ref. Sp. Pl. ed. 1 113 (1753) – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Peţea Rivulet”), the swampy ground; 14.08.2001; leg. T. Tofan.

Plantago lanceolata L. - (n. 22.578/2) – ref. Sp. Pl. ed. 1 113 (1753) – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Peţea Rivulet”), the lake shore, on marl rocks, 14.08.2001; leg. T. Tofan

Plantago major L. - (n. 22.546) – ref.: Sp. Pl. ed. 1 112 (1753) – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Peţea Rivulet”), the mesophile meadow; 10.07.2001; leg. T. Tofan.

Fam. **Orobanchaceae** Ventenat, 1799

Trib **Rhinantheae**

Gen **Melampyrum** L., 1753

Melampyrum bihariense A. Kern. - (n. 22.648) – ref. Sched. Fl. Exsicc. Austro-

Hung. 1: 35 (1881); – Romania, Bihor, Sânmartin, Băile 1 Mai; the oaktree forest; 31.07.2001; leg. T.Tofan.

Melanpyrum bihariense A. Kern. – (n. 24.058) – ref.: Sched. Fl. Exsicc. Austro-Hung. 1: 35 (1881); - Romania, Bihor, Paleu, Săldăbagiu de Munte, Săldăbagiu forest (phytocenosis with *Ruscus*), endemic, 05.10.2001, leg. T.Tofan

Trib ***Orobancheae***

Gen ***Orobanche*** L., 1753

Orobanche uniflora L. – (n.24.075) – ref.: *Species Plantarum* 2: 633. 1753.; - Romania, Bihor, Sânmartin, Haieu, Șomleu Hills, 31.03.2002, leg. T. Tofan

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

Trib ***Scrophularieae***

Gen ***Scrophularia*** L., 1753

Scrophularia nodosa L. - (n. 24.111) - ref.: *Species Plantarum* 2: 619-620. 1753. ; - Romania, Bihor, Alesd, Pestis (Valea Morilor), on the stream, 02.08.2001, leg. T.Tofan

Gen ***Verbascum*** L., 1753

Verbascum nigrum L. (n. 22.557) – ref.: Sp. Pl. ed. 1 178 (1753); .; – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the mesophile meadow; 07.08.2001; leg. T.Tofan.

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

Trib ***Verbeneae***

Gen ***Verbena*** L., 1753

Verbena officinalis L. (n.22.656) – ref. Sp. Pl. ed. 1 20 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, the oaktree forest; 30. 07. 2001; leg. T.Tofan.

Ord. **Apiales** Nakai, 1930

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

Subfam. **Apioideae**

Trib **Angeliceae**

Gen **Angelica** L., 1753

Angelica sylvestris L. - (n. 22.637) – ref.: Sp. Pl. ed. 1 251 (1753); – România, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the mesophile meadow; 26.06.2002; leg. T.Tofan.

Trib **Apieae**

Gen **Pimpinella** L., 1753

Pimpinella saxifraga L. - (n. 24.112) - ref.: Sp. Pl. ed. 1 263 (1753); - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), on the stream; 02.08.2001, leg. T.Tofan

Trib **Caucalideae**

Gen **Caucalis** L., 1753

Caucalis platycarpus (L.) Hoffm. - (22.563) – ref.: Sp. Pl. ed. 1 241 (1753); syn.: *Caucalis lappula* Grande; *Caucalis daucoides* L. (1767), non (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, the oaktree forest; 31.07.2001; leg. T.Tofan.

Trib **Scandiceae**

Gen **Chaerophyllum** L., 1753

Chaerophyllum aromaticum L. - (n. 22.645) - ref.: Sp. Pl. ed. 1 259 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the mesophile meadow; 14.07. 2001; leg. T.Tofan.

Chaerophyllum aromaticum L. - (n. 22.645 /2; 22.645 /3) - ref.: Sp. Pl. ed. 1 259 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), mesophile meadow; 10.07. 2001; leg. T.Tofan.

Trib ***Tordylieae***Gen ***Heracleum*** L., 1753

Heracleum sphondylium* L. ssp. *sphondylium - (22.535) - Reference: Sp. Pl. ed. 1 249 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, the oak tree forest; endemic, 14.07.2001; leg. T.Tofan.

Gen ***Pastinaca*** L., 1753

***Pastinaca sativa* L.** - (22.642) – ref.: Sp. Pl. ed. 1 262 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the mesophile meadow; 14.07. 2001; leg. T.Tofan.

Subfam. ***Saniculoideae***Gen ***Saniculeae*** L., 1753

***Sanicula europaea* L.** - (n. 24.113) - ref.: *Species Plantarum* 1: 235. 1753. ; syn.: *Sanicula elata* Buch.-Ham. ex. D. Don.; - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), the alder forest along the stream; 02.08.2001, leg. T.Tofan

Ord. ***Asterales*** Lindley, 1833Fam. ***Campanulaceae*** A.L. de Jussieu, 1789, nom. cons.Subfam. ***Campanuloideae***Trib ***Campanuleae***Gen ***Campanula*** L., 1753

***Campanula patula* L.** - (n. 24.094; 24.095) – ref.: Sp. pl. 1:163. 1753; - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), on the stream, in the beech forest; 02.08.2001, leg. T.Tofan

***Campanula patula* L. subsp. *abientina* (Griseb.) Simonk.** - (n. 24.096) – ref.: Enum. fl. transsilv. 383. 1887; - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), in the beech forest, 02.08.2001, leg. T.Tofan

***Campanula patula* var. *flaccida* Syr.** - (n. 24.093) – ref.: Acta Botanica Hungarica 17(1-2): 124. 1971 publ'72.; - Romania, Bihor, Aleşd, Peştiş (Valea Morilor), in the beech forest, on the steep bank; 02.08.2001, leg. T.Tofan

***Campanula persicifolia* L.** - (n. 24.097; 24.098; 24.116; 24.117) – ref.: Sp. pl. 1:164. 1753; - România, Bihor, Aleşd, Peştiş (Valea Morilor), in the beech forest; 02.08.2001, leg. T.Tofan

***Campanula rapunculoides* L.** - (n. 24.118; 24.119) - ref.: *Species Plantarum* 1: 165. 1753.; syn.: - România, Bihor, Aleşd, Peştiş (Valea Morilor), the beech forest; 02.08.2001, leg. T.Tofan

***Campanula trachelium* L.** -- (n. 24.099; 24.100; 24.101) - ref.: *Flora Lusitanica* 1: 287. - Romania, Bihor, Aleşd, Peştiş (Valea Morilor), in the beech forest; 02.08.2001, leg. T.Tofan

Fam. **Compositae** Giseke, 1792, nom.cons.

Subfam. **Asteroideae**

Trib **Anthemideae**

Subtrib **Achilleinae**

Gen **Achillea** L.; 1753

***Achillea collina* Becker ex Rchb.** - (n. 24.162) – ref.: Fl. exs. Austro-Hung. no. 991. 1883 (H. G. L. Reichenbach, Fl. germ. excurs. 850. 1832, nom. inval.); - Romania, Bihor, Şimian (natural reserve), on the sands, 16.10.2001; leg. T. Tofan

Subtrib **Leucantheminae**

Gen **Leucanthemum** P. Miller, 1754

***Leucanthemum vulgare* Lam.** - (n. 22.540)- ref. : Fl. Fr. ed. 1 2: 137 (1779); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “ Peţea Rivulet “), the mesophile meadow; 14. 07. 2001, leg. T. Tofan

Trib **Gnaphalieae**

Subtrib **Gnaphaliinae**

Gen *Filago* L.; 1753

Filago minima (Sm.) Pers. - (n. 24.165)– ref.: Novit. Fl. Suec. 268. ; - Romania, Bihor, Simian (natural reserve), on the sands, 16.10.2001; leg. T. Tofan

Trib *Inulae*Gen *Inula* L., 1753

Inula britannica L. - (n. 22.558/1; 22.558/2;) – ref.: Sp. Pl. ed. 1 882 (1753); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “ Pețea Rivulet “), the shore of the water-lily lake; 31.07.2001, leg. T.Tofan

Subfam. *Carduoideae*Trib *Cardueae*Subtrib *Carduinae*Gen *Arctium* L., 1753

Arctium tomentosum Mill. - (n. 22.663) – ref.: Gard. Dict. ed. 8 no. 3 (1768); - Romania, Bihor, Sanmartin, Băile 1 Mai (the Natural Reserve “Pețea Rivulet”), the shore of the water-lily lake; 31.07.2001, leg. T.Tofan

Gen *Cirsium* P. Miller, 1754

Cirsium oleraceum (L.) Scop. - (n. 24.062) – ref.: Annus Hist.-Nat. 2: 61 (1769); - România, Bihor, Paleu, Săldăbagiu de Munte, Săldăbagiu forest (phytocenosis with *Ruscus*), 05.10.2001, leg. T.Tofan

Subtrib *Centaureinae*Gen *Centaurea* L.,1753

Centaurea phrygia L. - (n. 22.665) – ref.: Sp. Pl. ed. 1 910 (1753); - Romania, Bihor, Sânmartin, Baile 1 Mai, the oaktree forest, 31.07.2001, leg T.Tofan

Subfam. *Cichorioideae*

Gen ***Mycelis*** Cassini, 1824

Mycelis muralis (L.) Dumort. – (n. 24.084) – ref.: Fl. Belg. 60 (1827); - Romania, Bihor, Alesd, Pestis (Valea Morilor), on the stream, in the alder forest, 02.08.2001, leg. T.Tofan

Trib ***Lactuceae***Subtrib ***Crepidinae***Gen ***Crepis*** L., 1753

Crepis setosa Haller f. (22.544) – ref.: Arch. Bot. (Roemer) 1(2): 1 (1797); - Romania, Bihor, Sanmartin Băile 1 Mai, (the Natural Reserve “Pețea Rivulet”), the mesophile meadow; 10.07.2001, leg. T. Tofan

Gen ***Lapsana*** L., 1753

Lapsana communis L. - (n. 22.649) – ref.: Sp. Pl. ed. 1 811 (1753); - Romania, Bihor, Sanmartin, Baile 1 Mai, 31.07.2001, the oaktree forest, leg. T.Tofan

Subtrib ***Hieraciinae***Gen ***Hieracium*** L., 1753***Hieracium*** subg. ***Hieracium***

Hieracium sabaudum L. – (n. 24.047; 24.048) – ref.: Sp. Pl. ed. 1 804 (1753); - Romania, Bihor, Paleu, Săldăbagiu de Munte, Săldăbagiu forest (phytocenosis with *Ruscus*), 05.10.2001, leg. T.Tofan

Hieracium subg. ***Pilosella***

Hieracium pilosella L. – (n. 24.170) – ref. Sp. pl. 2:800. 1753; - Romania, Bihor, Simian (natural reserve), the sand hills; 16.10.2001; leg. T. Tofan

Subtrib ***Hypochaeridinae***

Gen ***Leontodon*** L., 1753

***Leontodon hirtus* L.** - (n. 24.167)– ref.: Besch. Russ. Reich. iv. 1210.; - Romania, Bihor, Simian (natural reserve), sands, 16.10.2001; leg. T. Tofan

***Leontodon hispidus* L.** - (n. 24.120) - ref.: Sp. pl. 2:799. 1753; - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), on the stream, in the beech forest; 02.08.2001, leg. T.Tofan

***Leontodon hispidus* L. subsp. *danubialis* (Jacq.) Simonk.** - (n. 24.121) - ref.: Enum. Pl. Transs. 353 (1887); - Romania, Bihor, Alesd, Pestis (Valea Morilor), on the stream, in the beech forest; 02.08.2001, leg. T.Tofan

Subtrib ***Lactucinae***Gen ***Lactuca*** L.,1753

***Lactuca saligna* L.** (n. 22.581/1)- ref.: Sp. Pl. Ed. 1 796 (1753), – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet “), the mesophile meadow, 14.08.2001, leg.: T. Tofan

***Lactuca saligna* L.** (n. 22.581/2)- ref.: Sp. Pl. Ed. 1 796 (1753), – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet “); 14.08.2001, weeds, road curb; leg. : T. Tofan

Subtrib ***Scorzonerinae***Gen ***Tragopogon*** L.,1753

***Tragopogon pratensis* L.** (n. 22.621) – ref.: Sp. Pl. Ed. 1 789 (1753), – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve “Pețea Rivulet “), the mesophile meadow; 12.06.2002, leg.: T. Tofan

Subtrib ***Sonchinae***Gen ***Sonchus***L., 1753

***Sonchus oleraceus* L.** - (n. 22.644) – ref.: Sp. Pl. ed. 1 794 (1753); - Romania,

Bihor, Sânmartin, Băile 1 Mai (the Natural Reserve "Pețea Rivulet"), the mesophile meadow; 14.07.2001, leg. T. Tofan

Ord. **Dipsacales** Dumortier, 1829

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

Trib **Dipsaceae**

Gen **Dipsacus** L., 1753

Dipsacus pilosus L. - (n. 24.145) - ref.: *Species Plantarum* 97. 1753. ; - Romania, Bihor, Aleșd, Peștiș (Valea Morilor), on the stream; 02.08.2001, leg. T. Tofan

Gen **Knautia** L., 1753

Knautia arvensis (L.) Coult. (n. 22.609/1; 22.609/2; 22.609/3; 22.609/4) – ref.: Mém. Dipsac. 41 (1823); – Romania, Bihor, Sânmartin, Băile 1 Mai, (the Natural Reserve "Petea Rivulet"); 12.06.2002, the mesophile meadow; leg. : T. Tofan.

Conclusions

The present material, as afore mentioned, contains samples collected in Bihor County, mainly in the area of Oradea (the city and its suburbs, that is, the villages Sânmartin and Paleu) and in the outermost parts of the county, such as the village of Șimian (in the north western part of the county) and the Peștiș region surrounding the town of Aleșd (in the eastern part of the county). The eco-geographical particularities of the area foreground three distinctive situations, namely:

- the area of Oradea, situated at a height of 126 m, lies at the entry of the Crisul Repede valley, in a contact zone between the prolongations of the Apuseni Mountains and the Western Plains, an area connecting the hilly landscapes (the Western Hills, the Hills of Oradea, the Hills of Gepiș) and the plain landscapes;

- the Șimian village (made up of three smaller villages - Șimian, Șilindru and Voievozi), situated in the north-western part of Romania and of Bihor County, lies in the Carei Plains. The sands in the Șimian area, similar to those in the Valea lui Mihai and Curtușeni, are prolongations of the sandy area of the Carei Plains. On its western side, the Șimian village bounds on sand hills, whereas its eastern part is dominated by a network of streams and canals, the remains of the former swamps that used to dominate the landscape of the Ier Valley;

- in the hilly part of the Plopiș mountains, that are part of the Western Carpathians, situated in their north-western part, there are valleys which drain their slopes and are commonly deep and narrow, intensely shaded, especially those on the northern slope, characterized by a colder and damper topoclimate. The valleys on the northern slope are part of the hydrographic area of Barcău. The valleys on the southern slope are part of the hydrographic area of Crișul Repede river, the most important of them being the Borod valley, the Răchiților valley, the Omul valley, the Gepiș valley, the Peștis valley, the Morii and Sinteiu valleys. In the meadows of these valleys there usually are alluvial soils of medium texture. In the hilly region of the Plopiș mountains lies the village of Peștiș, and the valley where the samples were collected is the Morii valley.

From an administrative viewpoint, the places where the samples were collected are the following : the city of Oradea, and its bordering villages, Sânmartin and Paleu. In Sânmartin the samples were collected in 1 Mai and Felix spas and from the village of Haieu. In Paleu the samples were collected in the villages of Paleu and Săldăbagiu de Munte. They also collected samples in the village of Șimian in the rural area of Șimian, and in Suplacul de Barcău. Samples were also collected in the area of Peștiș, belonging to the town of Aleșd.

Bihor county has a moderate temperate continental climate. The landscape layers and their peculiarities (the exposure of the slopes, the size difference of the valleys, their level of coverage with forests, the albedo of the different forms of relief) determine a weather variation demonstrated by the very existence of topoclimates. The air temperature is characterized by some variations of average and extreme values. The average annual temperature in the Criș valley is of 10-11 centigrades, in the hilly region is of 8-10 centigrades, and in the mountains is of 7-8 centigrades (on the mountain tops can be of 2-7 centigrades). The average multiannual rainfalls in the plains have values of 500-700 mm, in the hillsides of 700-1000 mm, and in the mountains of 1000-1200 mm (on the mountain tops can exceed 1400 mm.). Regarding the wind conditions of the county, this is characterized by the high frequency of winds blowing from the southern regions (about 28% in December and 17% in August).

The rivers of the Bihor county belong to the Criș hydrographic area, consisting of Crișul Repede, Crișul Negru, Barcău and Ier that reaches the territories of the county downstream Andrid, being a typically plain river in the western part of the country. These rivers are also completed by their tributary streams. There are several natural lakes, too, such as Șerpilor and Stuf lakes close to Salonta, the Ochiul Mare Lake on the Peța rivulet, Tăul Mare lake in the Bihor Mountains.

The subterrean waters greatly differ according to lithological, structural, and

weather conditions, as well as the particularities of the draining and its dynamics. The deep waters are situated in aqueous horizons of hydrostatic pressure that conditions their ascensional nature (sometimes even artesian in drillings). They usually have a low degree of mineralization. A particular case is that of the waters connected by fault systems affecting the underground of the western side of the Apuseni Mountains. In such cases, highly mineralized waters reach the surface as do the carbonated streams of Tinca and the thermal waters of Oradea, Felix and 1 Mai Spas and Răbăgani.

The vegetation is represented as follows: the forest steppe of the plain region is mainly covered by cultivated lands, acacia plantations and pastures altering with clusters of oak trees. The region of deciduous forests consists of cerris and hornbeam forests, and of cerris, oak tree and evergreen oak forest alternating with secondary pastures and cultivated lands. The layer of deciduous forests (up to 1000 m) is represented by oak forests, by cerris and evergreen oak forests, by evergreen oak and hornbeam, elm, ash tree forests, by beech and hornbeam forests, by beech forests, and by beech and spruce fir forests. The coniferous region (1000-1700 m.) is made up of spruce fir forests. The interzonal and azonal vegetation is represented by the meadow vegetation, the salt marsh vegetation in the damp areas, and by the arenicolous vegetation in the sandy areas.

When it comes about the fauna, the forest steppe is inhabited by rodents, whereas the forests are populated with deer, stags, wild boars, bears, squirrels, lynxes, martens, pheasants, etc. The mountain streams are good for the trout, the hillside rivers are specific to the grayling, the chub and the broad snout, and the plain area rivers are favourable to the carp and the perch.

With regard to the protected areas, in Bihor country there are 64 protected areas, out of which several are situated in the geographical perimeters that we refer to, namely, the *Corynephorus pasture of Voievozi*, the village of Șimian, the *Natural reserve of Pețea rivulet in Baile 1 Mai*, the village of Sânmartin, the *Valea Roșie hayfield* of Săldăbagiu de Munte, the village of Paleu and the *Fossiliferous Spot of Valea Lionii – Peștiș* in the town of Aleșd.

Botanical studies were carried out mostly referring to the thermal ecosystem on the Peța rivulet, initiated by Paul Kitaibel, the first botanist who informed on the existence of the thermal water lily in this area (Waldstein & Kitaibel, 1802), followed by A. Mayer (1861) who described the area of the episcopal therms nearby Oradea, and Lajos Simonkai (1890) who described the fauna of Oradea and its surroundings. In the year 1888, A.P. Alexi, a Romanian botanist of the Bistrița-Năsăud region, happening to be in Oradea, described the thermal water

lily as „the Flower of the Fairies” in the *Familia* literary gazette. In 1908, J. Tuzson, the botanist, decides that the scientific name of the thermal water lily be *Nymphaea lotus* var. *thermalis* (DC. Tuzs.), and professor Alexandru Borza, the initiator of the nature protection project in Romania, showed a special interest for the area of the Peța rivulet, publishing a number of articles and studies (1917; 1924; 1926; 1928; 1930; 1940; 1941; 1947), and declaring the thermal water lily a Nature Monument in 1931; in 1932 the Peța rivulet becomes a Natural Reserve. There were other botanists who examined the area, such as: Tr. Stefureac (1953), Tr. Săvulescu and E. Țopa (1955), Cornelia Olteanu-Cosma (1959; 1977; 1991) and Ana Marossy (1974; 1976), I. Pop and I. Hodișan (1972; 1973). We have to mention that the author of the herbarium herself published „The systematic synopsis of the vascular flora of the natural reserve of the Peța rivulet - Baile 1 Mai (Bihor county)” in 2003 as an outcome of the collected materials. In 2002 she co-authored studies on the vegetation of the thermal lake on the Peța rivulet; in 2003 she and Marton Venczel published a study on the vegetation on the Săldăbagiu de Munte hills (see also the paper of Ștefan E. in 1972). The vegetation of the Plopiș mountains is investigated in the study of Gh. Coldea (1970).

The material was processed by arranging it in a taxonomical classification which was updated by indicating the accepted names and the main synonyms, the location, the date of and the author its collecting. According to the taxonomical classification employed here (Systema Naturae 2000), the 258 taxons presented belong to 138 genres and to 51 families.

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