

NEW LICHEN SPECIES IDENTIFIED IN BISTRITA MOUNTAINS (EASTERN CARPATHIANS)

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Abstract: The paper presents the results of the studies upon lichen species from Bistrita Mountains (Eastern Carpathians) realized in 2008-2009 period. The conspectus of lichens taxa identified in this area includes another 70 new lichens taxa besides species identified previously.

Key words: lichens species, natural ecosystems, Bistrita Mountains

Introduction

In a previous paper we have presented the results of the researches realized in 2004-2005 period in Bistrița Mountains [POPA, 2006]. The studies have continued in 2008-2009 period and, besides the 115 species and subspecies previously presented, supplementary, there have been identified another 70 lichens species.

Material and method

The lichens taxa identification has been realized taking into account prestigious works: [CIURCHEA, 2004], [DOBSON, 1997], [PURVIS, 1992], [THOMSON, 1984], [WIRTH, 1995]. The used classifications system is that adopted by ERIKSSON (2006), www.fieldmuseum.org/myconet/, and Index Fungorum [www.indexfungorum.org], excepting the *Lecanorales* suborders where the nomenclature corresponds to Person et al. (2004). For each species is specified the area within it was found, the localities names being coded as following: 1-Arsita lui Macovei, 2- Neagra Broștenilor valley, 3-Pârâul Caprei, 4-Barnar keys, 5-Broșteni, 6-Zugreni, 7-Pârâul Văcăriei, 8-Budacu Mountain, 9-Pietrosul Bistritei peak, 10-Ortoaia, 11-Dorna Arini, 12-Cozânesti, 13-Barnar valley, 14-Rusca II, 15-Borca, 16-Holda, 17-Păltiniș, 18-Cristișor-Neagra Broșteni, 19-Tulgheș, 20-Bâda.

Results and discussion

The next list of species includes taxa identified by us and not quoted before. In this way, the latest researches have completed the data regarding lichens species spreading in Bistrita Mountains.

ASCOMYCOTA

Class *Lecanoromycetes*

Subclass *Acarosporomycetidae*

ORD. ACAROSPORALES: Fam. *Acarosporaceae* Zahlbr. (1906): *Acarospora macrospora* (Hepp.) A. Massal ex Bagl., saxicolous, 19; Fam. *Candelariaceae* Hakulinen

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(1954): *Candelariella aurella* (Hoffm.) Zahlbr., saxicolous, 19; *Candelariella vitellina* (Hoffm.) Müll. Arg., saxicolous, 12.

Subclass *Ostropomycetidae* (Lumbsch et al. 2007.)

ORD. PERTUSARIALES M. Choisy ex D. Hawksw. & O. Eriksson (1986): Fam. *Pertusariaceae* Korb. Ex Korb. (1855): *Pertusaria albescens* (Huds.) M. Choisy & Werner, corticolous, 3, 6, 10; *Pertusaria amara* (Ach.) Nyl., corticolous, 1, 19; *Ochrolechia pallescens* (L.) A. Massal., corticolous, 19; Fam. *Megasporaceae*: *Aspicilia calcarea* (L.) Mudd, saxicolous, 13, 19; *Ostropomycetidae* families of uncertain order position: Fam. *Phlyctidaceae* Poelt. Ex J.C. David & D. Hawksw. (1991): *Phlyctis argena* (Spreng.) Flot., on mosses, corticolous, 9, 19.

Subclass *Lecanoromycetidae*

ORD. LECANORALES Nannf. (1932)

SUBORD. PELTIGERINEAE: Fam. *Peltigeraceae* (1822): *Peltigera membranacea* (Ach.) Nyl., on mosses, terricolous, 19; *Solorina saccata* (L.) Ach., on mosses, 18, 19; Fam. *Lobariaceae* Chev. (1826): *Lobaria pulmonaria* (L.) Hoffm., corticolous, 10, 18; Fam. *Collembataceae* Zenker. (1827): *Collema cristatum* (L.) Weber ex F.H. Wigg., saxicolous, 19; *Leptogium gelatinosum* (With.) J.R. Laundon, on mosses, 19; *Leptogium lichenoides* (L.) Zahlbr., on mosses, 19; *Leptogium saturninum* (J. Dicks) Nyl., on mosses, corticolous, 4, 18, 19; *Leptogium tenuissimum* (Dicks.) Körb., on mosses, 19.

SUBORD. LECANORINEAE: Fam. *Lecanoraceae* Korb. (1854): *Lecanora carpineae* (L.) Vain., corticolous, 9; *Lecanora muralis* (Schreb.) Rabenh., saxicolous, 12, 16, 19; *Lecanora varia* Ach., lignicolous, 10, 16; Fam. *Cladoniaceae* Zenker (1827): *Cladonia caespiticia* (Pers.) Flörke., terricolous, 3; *Cladonia cenotea* (Ach.) Schaer., terricolous, 11, 17; *Cladonia cornuta* (L.) Hoffm., terricolous, 3, 8, 12; *Cladonia pyxidata* (L.) Hoffm. ssp. *pocillum* (Ach.) Dahl, on mosses, 2, 19, 20; *Cladonia symphylicarpa* (Flörke) Fr., on mosses, 19; Fam. *Stereocaulaceae* Chev. (1826): *Lepraria membranacea* (J. Dicks.) Vain., on mosses, 6; Fam. *Parmeliaceae* Zenker (1827): *Cetraria ericetorum* Opiz, terricolous, 9; *Evernia mesomorpha* Nyl., corticolous, 10; *Flavocetraria cucullata* (Bellardi) Kärnef. & Thell, terricolous, 9; *Hypotrachyna revoluta* (Flörke) Hale, lignicolous, 19; *Melanelia exasperata* (De Not.) Essl., corticolous, 10; *Melanelia subargentifera* (Nyl.) Essl., lignicolous, 10; *Parmelina tiliacea* (Hoffm.) Hale, lignicolous, 10, 17; *Parmeliopsis ambigua* (Wulfen) Nyl., lignicolous, 10; *Platismatia glauca* (L.) W. Culb. & C. F. Culb., corticolous, 10; *Tuckermannopsis chlorophylla* (Willd.) Hale, corticolous, 7, 10; *Usnea ceratina* Ach., corticolous, 17; *Usnea glabrescens* (Nyl. ex Vain) Vain., corticolous, 9, 17; *Usnea lapponica* Vain., corticolous, 12.

SUBORD. PSORINEAE: Fam. *Psoraceae* Zahlbr. (1898): *Protoblastenia rupestris* (Scop.) J. Steiner, saxicolous, 19; Fam. *Ramalinaceae* Ag. (1821): *Ramalina calicaris* (L.) Fr., corticolous, 19; *Ramalina farinacea* (L.) Ach., corticolous, 9, 18; *Ramalina polinaria* (Westr.) Ach., corticolous, 9, 18; *Ramalina subfarinacea* (Nyl. ex Cromb.) Nyl., saxicolous, 9; *Lecania erysibe* (Ach.) Mudd, saxicolous, 16, 19; *Toninia candida* (Web.) Th. Fr., on mosses, 19; *Toninia sedifolia* (Scop.) Timdal, on mosses, 19.

SUBORD. PHYSCIINEAE: Fam. *Physciaceae* Zahlbr. (1898): *Rinodina bischoffii* (Hepp) A. Massal., saxicolous, 19; *Calicium viride* Pers., corticolous, 17; *Physconia grisea* (Lam.) Poelt., on mosses, 19.

SUBORD. TELOSCHISTINEAE: Fam. *Teloschistaceae* Zahlbr. (1898): *Caloplaca aurantia* (Pers.) J. Steiner, saxicolous, 9; *Caloplaca cerina* (Ehrh. ex Hedw.) Th.Fr., saxicolous, 19; *Caloplaca cirrochroa* (Ach.) Th.Fr., saxicolous, 19; *Caloplaca citrina* (Hoffm.) Th.Fr., saxicolous, 19; *Caloplaca decipiens* (Arnold) Blomb. & Forssell, saxicolous, 9; *Caloplaca variabilis* (Pers.) Müll.Arg., saxicolous, 19; *Xanthoria fallax* (Hepp.) Arnold, on mosses, 19; *Xanthoria polycarpa* (Hoffm.) Rieber, corticolous, 17.

SUBORD. LECIDEINEAE: Fam. *Lecideaceae*: *Lecidoma demissum* (Rutstr.) Gotth.Schneid. & Hertel, saxicolous, 19; Fam. *Porpidiaceae* Zahlbr. (1898), *genus of uncertain family position*: *Leprocaulon microscopicum* (Vill.) Gams, terricolous, 7; *Scoliosporum umbrinum* (Ach.) Arnold. (1871), terricolous, 7.

ORD. UMBILICARIALES Lumbsch, Hestmark & Lutzoni 2007: Fam. *Umbilicariaceae* Chev. (1826): *Umbilicaria crustulosa* (Ach.) Frey, saxicolous, 9; *Umbilicaria polyphylla* (L.) Baumg., saxicolous, 9; *genus of uncertain order Umbilicariales position*: *Hypocnomyce scalaris* (Ach.) M. Choisy, lignicolous, 6; *Class Eurotiomycetes, Subclass Chaetothyriomycetidae*.

ORD. PYRENULALES Fink. ex D. Hawksw.&O. Eriksson (1986): Fam. *Monoblastiaceae*: *Acrocordia conoidea* (Fr.) Körb., saxicolous, 19; *Acrocordia gemmata* (Ach.) A. Massal., corticolous, 9, 19.

ORD. VERRUCARIALES Mattik ex D. Hawksw.&O. Eriksson (1986): Fam. *Verrucariaceae* Zenker (1827): *Verrucaria calciseda* DC., saxicolous, 19; *Verrucaria nigrescens* Pers., saxicolous, 19; *Dermatocarpon intestiniforme* (Körb.) Hasse, saxicolous, 19; *Thelidium decipiens* (Nyl.) Kremp., saxicolous, 19; *Thelidium minutulum* Körb., saxicolous, 19; *Subclass Mycocaliciomycetidae*.

ORD. MYCOCALICIALES Tibell&Wedin (2000): Fam. *Mycocaliciaceae* A. Schmidt (1970): *Stenocybe pullatula* (Ach.) Stein., corticolous, 7.

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