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**CALOPLACA CRENULATELLA, RINODINA PITYREA AND VERRUCARIA MACROSTOMA F. FURFURACEA – THREE TAXA OF LICHENISED FUNGI NEW TO ROMANIA**

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**Abstract:** Notes to *Caloplaca crenulatella*, *Rinodina pityrea* and *Verrucaria macrostoma* f. *furfuracea* – three lichen taxa new to Romania are given. Nearly all the samples were collected around the railway station in Nădlac (Banat, cca. 50 km west of Arad). *Bacidia fuscoviridis*, *Caloplaca chlorina* and *Polysporina lapponica* are other species collected on the locality.

During my stay on the railway station in Nădlac (the small town situated in Banat, cca. 50 km west of Arad), I found some interesting species of lichens. Among them were three taxa new to Romania.

All the cited samples are deposited in the herbarium of the Faculty of Biological Sciences at the University of South Bohemia (Czech Republic). The number in brackets at the end of the locality description indicates the sample number in this herbarium. The nomenclature of lichen taxa not followed by author's name corresponds to Nimis et Martellos (2003). The representative phytosociological reléves are added to notes of *Rinodina pityrea* and *Verrucaria macrostoma* f. *furfuracea*.

1. *Caloplaca crenulatella* (Nyl.) Oliv. (1909). It is a species from *C. lactea* group, which is similar to *C. aquensis* and *C. ferrarii* (Navarro-Rosinés et Hladun 1996). Recently, it has been found to be a common inhabitant of concrete and other artificial substrata throughout Europe (cf. Hafellner et Türk 2001, Khodosovtsev 2001, Navarro-Rosinés et Hladun 1996, Martellos et Nimis 2001, Santesson et al. 2004, Scholz 2000, Vondrák 2004). In Romania, I have collected it on pebbles in the railway line as well as on concrete.

**Localities:** Nădlac (distr. Arad), , near the railway station, 46°09'N, 20°47'E, iron-influenced pebbles in the railroad, 5.8.2004 (2136); Subcetate (distr. Hunedoara), near the railway station, 45°40'N, 23°00'E, on horizontal concrete plate, 6.8.2004 (2129).

2. *Rinodina pityrea* Ropin & Mayrhofer (1995). This species is characterised by dark grey to black thallus, consisted of minute granules, which contain a pigment Sedifolia-grey (pigment nomenclature after Meyer et Pritzen 2000). This species is similar to *R. colobina*, but differs in ascospores, which are double-walled, of tunicata-type (cf. Mayrhofer et Poelt 1979). *R. pityrea* is distributed throughout most parts of Europe (Ropin et Mayrhofer 1995) on bark of various species of deciduous trees. Nevertheless, the authors cited also the other substrata, such as wood, loess and concrete. The Romanian specimen was collected on south-exposed mortar on a wall.

**Locality:** Nădlac (distr. Arad), near the railway station, 46°09'N, 20°47'E, S-exposed mortar, 5.8.2004 (2133). Reléve (area 6 dm<sup>2</sup>, total cover 40%): *Rinodina pityrea* 20, *Caloplaca citrina* 15, *C. decipiens* 1, *C. crenulatella* +, *C. saxicola* +, *Candelariella aurella* 1, *Lecanora dispersa* +.

3. *Verrucaria macrostoma* f. *furfuracea* B. de Lesd. (1949). This intraspecific taxon can be easily recognised by its strongly sorediate, thickly areolated to sublobate thallus. It is mostly sterile and its affinity to *Verrucaria* is supported by the anatomical structure. Algae are typically arranged in vertical rows as in *V. macrostoma* (Servit 1954). After several authors, this taxon is synonymised with *Verrucaria tectorum* (e.g. Nimis et Martellos 2003), but Servit (1954) did not discuss the sorediate form in the diagnose of *V. tectorum*.

*Verrucaria macrostoma* was published from Banat and Hunedoara within Romania (Moruzi et al. 1967), but sorediate form, f. *furfuracea*, has not been published. I have collected this taxon on north-exposed mortar, where *V. macrostoma* f. *furfuracea* was a dominant lichen.

**Locality:** Nădlac (distr. Arad), near the railway station, 46°09'N, 20°47'E, N-exposed mortar, 5.8.2004 (2130). Reléve (area 6 dm<sup>2</sup>, total cover 40%): *Verrucaria macrostoma* f. *furfuracea* 35, *Caloplaca flavocitrina* 5, *C. crenulatella* +, *Lecania erysibe* r.

The other collected species around the railway station in Nădlac are *Bacidia fuscoviridis* (2135), *Caloplaca chlorina* (2222) and *Polysporina lapponica* (2134). They occur on pebbles in the railway line. *P. lapponica* grows there parasitically on *Acarospora nitrophila*.

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## REFERENCES

1. Hafellner, J., Türk, R., 2001, Die lichenisierten Pilze Österreichs - eine Checkliste der bisher nachgewiesenen Arten mit verbreitungssangaben, *Staphia*, 76: 1-167.
2. Khodosovtsev, O.Y., 2001, A new for Ukraine species of the genus *Caloplaca* Th.Fr. (*Teloschistaceae*), *Ukrayins'kyi Botanichnyi Zhurnal*, 58: 460-465.
3. Martellos, S., Nimis, P.L., 2001, ITALIC - The Information System on Italian Lichens, version 2003. <http://dbiodbs.univ.trieste.it/global/keyspage> (9.10.2004)
4. Meyer, B., Pritzen, C., 2000, Proposal for a standardized nomenclature and standardization of insoluble lichen pigments, *Lichenologist*, 32: 571-583.
5. Mayrhofer, H., Poelt, J., 1979, *Die saxicolen Arten der Flechtengattung Rinodina in Europa*, J. Cramer, Vaduz.
6. Moruzi, C., Petria, E., Mantu, E., 1967, Catalogul lichenilor din România, *Acta Bot. Hort. Bucurestiensis*: 1-389.
7. Navarro-Rosinés, P., Hladun, N.L., 1996, Les especies saxicolo-calcícolas del grupo de *Caloplaca lactea* (*Teloschistaceae*, líquenes), en las regiones mediterránea y medioeuropea, *Bulletin de la Société Linéenne de Provence*, 47: 139-166.
8. Nimis, P.L., Martellos, S., 2003, *A second checklist of the lichens of Italy with thesaurus of synonyms*, Museo Regionale di Scienze Naturali, Aosta.
9. Ropin, K., Mayrhofer, H., 1995, Über corticole Arten der Gattung *Rinodina* (*Physciaceae*) mit grauem Epiphyllum. In: Farkas, E.E., Lücking, R., Wirth, V. (eds.): *Scripta Lichenologica*, Lichenological Papers Dedicated to Antonín Vezda. Bibliotheca Lichenologica, J. Cramer, Berlin, Stuttgart.
10. Santesson, R., Moberg, R., Nordin, A., Tonsberg, T., Vitikainen, O., 2004, *Lichen-forming and Lichenicolous Fungi of Fennoscandia*.- Museum of Evolution, Uppsala University, Uppsala, Sweden.
11. Servit, M., 1954, Československé Lišejníky Čeledi *Verrucariaceae*. Lichenes Familiae Verrucariacearum, Nakladatelství Československé Akademie, Věd, Praha.
12. Scholz, P., 2000, Katalog der Flechten und flechtenbewohnenden Pilze Deutschlands, *Schriftenreihe für Vegetationskunde*, 31: 1-298.
13. Van den Boom, P., Sérusiaux, E., Diederich, P., Brand, M., Aptroot, A., Spier, L., 1998 A lichenological excursion in May 1997 near Han-sur-Lesse and Saint-Hubert, with notes on rare and critical taxa of the flora of Belgium and Luxembourg, *Lejeunia*, 158: 1-58.
14. Vondrák, J., 2004, *Selected saxicolous species of the genus Caloplaca (lichenised fungi) occurring in the Czech Republic*, Ms. thesis, University of South Bohemia, České Budějovice.

**CALOPLACA CRENULATELLA, RINODINA PITYREA SI VERRUCARIA MACROSTOMA F.  
FURFURACEA - TREI TAXONI NOI DE CIUPERCI LICHENIZATE ÎN ROMÂNIA**

(Rezumat)

În cursul unei excursii în primăvara anului 2004, în județele Arad și Hunedoara, din gările localităților Nădlac și Simeria au fost colectate și identificate 9 specii de licheni crustosi, de pe mortar și pietriș. Dintre acestea, 3 sunt noi pentru flora lichenologică a României: *Caloplaca crenulatella*, *Rinodina pityrea* și *Verrucaria macrostoma* f. *furfuracea*. Nomenclatura taxonilor corespunde lucrărilor lui Nimis și Martellos (2003). Toate speciile de licheni colectate sunt depuse în herbarul Facultății de Științe Biologice al Universității Boemiei de Sud (Cehia).