

## A contribution to the lichenized fungi of Bosnia and Herzegovina

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**Abstract:** A list of 27 species of lichenized fungi from Bosnia and Herzegovina is presented, based on herbarium specimens kept in GZU. Six species are new to Bosnia and Herzegovina: *Fuscopannaria sampaiana*, *Lecidea tessellata*, *Micarea melana*, *Rinodina polysporoides*, *Usnea barbata*, and *Xanthoparmelia verruculifera*.

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### Introduction

Within the framework of a catalogue of the lichenized fungi of Bulgaria (MAYRHOFFER et al. 2005), the lichen collection of the herbarium GZU has been evaluated for material from the Balkan Peninsula. The few specimens from Bosnia and Herzegovina were mainly collected by Josef Poelt in the Drina valley N of Visegrad on serpentine, by Antonín Vězda in a narrow valley between Boračko jezero and the mountain Prenj, and by Helmut Mayrhofer during a short trip to the Sutjeska National Park.

### Material and methods

The nomenclature follows SANTESSON et al. (2004) and, for taxa not represented in this checklist, NIMIS & MARTELOS (2003) or other modern treatments. New records for Bosnia and Herzegovina are marked with an asterisk (\*).

### List of species

***Anaptychia ciliaris*** (L.) Körb.

Pale bei Sarajevo, [date of sampling and collector unknown]. – Sutjeska National Park, Tjentište, Umgebung von Hotel Mladost, 43°21'N/18°42'E, ca. 450 m, auf *Juglans regia*, 21.V.2003, leg. H. Mayrhofer 14575. – Sutjeska National Park, Prijedor unter dem Berg Maglič, ca. 1550 m, auf *Fagus sylvatica*, 21.V.2003, leg. H. Mayrhofer 14581.

***Aspicilia crusii*** Klem.

Drina-Tal 3 km nördlich von Visegrad, ca. 300 m, Serpentin, 12.VII.1974, leg. J. Poelt.

***Calicium salicinum*** Pers.

Montes Prenj, in valle angusta inter Boračko jezero et montem summum Prenj, 1250 m, ad lignum Abietis, 21.VII.1979, leg. et det. A. Vězda.

***Caloplaca crenularia*** (With.) J.R.Laundon

Drina-Tal 3 km nördlich von Visegrad, ca. 300 m, Serpentin, 12.VII.1974, leg. J. Poelt.

***Candelariella vitellina*** (Hoffm.) Müll.Arg.

Drina-Tal 3 km nördlich von Visegrad, ca. 300 m, Serpentin, 12.VII.1974, leg. J. Poelt.

***Collema cristatum*** (L.) Weber ex F.H.Wigg.

Sutjeska National Park, Schlucht entlang des Flusses Sutjeska, 21.V.2003, leg. H. Mayrhofer 14582.

***Degelia plumbea*** (Lightf.) P.M.Jørg. & P.James

Montes Prenj, in valle angusta inter Boračko jezero et montem Prenj, 500 m, 25.VII.1979, leg. et det. A. Vězda. – Sutjeska National Park, Dragoš sedlo über dem Urwald Perućica, ca. 1150 m, auf *Fagus sylvatica*, 21.V.2003, leg. H. Mayrhofer 14579.

***Dermatocarpon miniatum*** (L.) W.Mann

Debelo Brdo "bei Sarajevo", Kalkfelsen, 04.XI.1899, [collector unknown].

***Evernia prunasti*** (L.) Ach.

Semeč-planina, 1896, [collector unknown]. – Pale bei Sarajevo, 1897, [collector unknown].

***Flavoparmelia caperata*** (L.) Hale

Sutjeska National Park, Tjentište, Umgebung von Hotel Mladost, 43°21'N/18°42'E, ca. 450 m, auf *Quercus petraea*, 21.V.2003, leg. H. Mayrhofer 14577.

**\**Fuscopannaria sampaiana*** (C.Tav.) P.M.Jørg.

Montes Prenj, in valle angusta inter Boračko jezero et montem Prenj, 1400 m, 25.VII.1979, leg. et det. A. Vězda.

**\**Lecidea tessellata*** Flörke

Drina Tal, 3 km nördlich von Visegrad, ca. 300 m, Steilhänge mit *Pinus nigra*-Wäldern, Serpentin, 12.VII.1974, leg. J. Poelt, det. M. Pietschmann.

***Lobaria amplissima*** (Scop.) Forssell

Montes Prenj, in valle angusta inter Boračko jezero et montem Prenj, 500–1200 m, 25.VII.1979, leg. et det. A. Vězda. – Sutjeska National Park, Prijedor unter dem Berg Maglić, ca. 1550 m, auf *Fagus sylvatica*, 21.V.2003, leg. H. Mayrhofer 14580.

***Micarea lignaria*** (Ach.) Hedl.

Montes Prenj, in valle angusta inter Boračko jezero et montem Prenj, 1400 m, ad corticem Pinorum, 25.VII.1979, leg. et det. A. Vězda, conf. B.J. Coppins.

**\**Micarea melaena*** (Nyl.) Hedl.

Montes Prenj, in valle angusta inter Boračko jezero et montem Prenj, 1400 m, ad lignum Pinorum, 25.VII.1979, leg. et det. A. Vězda, conf. B.J. Coppins.

***Micarea peliocarpa*** (Anzi) Coppins & R.Sant.

Montes Prenj, in valle angusta inter Boračko jezero et montem Prenj, 1200 m, ad lignum Abietis, 25.VII.1979, leg. et det. A. Vězda, conf. B.J. Coppins.

***Normandina pulchella*** (Borrer) Nyl.

Montes Prenj, supra lacum Boračko jezero, 350–450 m, ad corticem arborum 25.VII.1979, leg. et det. A. Vězda.

***Opegrapha niveoatra*** (Borrer) J.R.Laundon

Montes Prenj, supra lacum Boročko jezero, 600 m, ad corticem Aceris pseudoplatani, 17.VII.1966, leg. et det. A. Vězda.

***Physcia stellaris*** (L.) Nyl.

Sutjeska National Park, Tjentište, Umgebung von Hotel Mladost, 43°21'N/18°42'E, ca. 450 m, auf *Juglans regia*, 21.V.2003, leg. H. Mayrhofer 14576.

***Physconia venusta*** (Ach.) Poelt

Montes Prenj, in valle angusta inter Boračko jezero et montem Prenj, ad corticem Fagi, 25.VII.1979, leg. et det. A. Vězda (herb. Kalb 8667).

***Ramalina farinacea*** (L.) Ach.

Sutjeska National Park, Tjentište, Umgebung von Hotel Mladost, 43°21'N/18°42'E, ca. 450 m, auf *Quercus petraea*, 21.V.2003, leg. H. Mayrhofer 14578.

**\**Rinodina polysporoides*** Giralt & H.Mayrhofer

Sutjeska National Park, Tjentište, Umgebung von Hotel Mladost, 43°21'N/18°42'E, ca. 450 m, auf *Juglans regia*, 21.V.2003, leg. H. Mayrhofer 14574.

***Squamarina cartilaginea*** (With.) P.James

Debelo Brdo, "bei Sarajevo", auf Felsen, 16.IX.1899, [collector unknown; two specimens], rev. P. Navarro-Rosinés (already published as a host species of *Lichenostigma rouxii* by CALATAYUD et al. 2002: 1238). – Drina-Tal 3 km nördlich von Visegrad, ca. 300 m, Serpentin, 12.VII.1974, leg. J. Poelt.

***Toninia diffracta*** (A.Massal.) Zahlbr.

Drina-Tal 3 km nördlich von Visegrad, ca. 300 m, Serpentin, 12.VII.1974, leg. J. Poelt, det. E. Tindal (already cited by TIMDAL 1991: 62, but without exact collecting data).

\**Usnea barbata* (L.) Weber ex F.H.Wigg.

Wald zwischen Bugojno und Lupreš, [date of sampling and collector unknown]. – Pale bei Sarajevo, 16.VIII.1897, [collector unknown]. – Berg Igman, 03.VIII.1898, [collector unknown].

*Xanthoparmelia pulla* (Ach.) O.Blanco et al.

Drina-Tal 3 km nördlich von Visegrad, ca. 300 m, Serpentin, 12.VII.1974, leg. J. Poelt, rev. J. Hafellner.

\**Xanthoparmelia verruculifera* (Nyl.) O.Blanco et al.

Drina-Tal 3 km nördlich von Visegrad, ca. 300 m, Serpentin, 12.VII.1974, leg. J. Poelt.

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## References

- GALATAYUD V., NAVARRO-ROSINÉS P. & HAFELLNER J. 2002: A synopsis of *Lichenostigma* subgen. *Lichenogramma* (Arthoniales), with a key to the species. - *Mycological Research* 106 (10): 1230–1242.
- MAYRHOFER H., DENCHEV C.M., STOYKOV D.Y. & NIKOLOVA S.O. 2005: Catalogue of the lichenized and lichenicolous fungi in Bulgaria. - *Mycologia Balcanica* 2: 3–61.
- NIMIS P.L. & MARTELLI S. 2003: A second checklist of the lichens of Italy with a thesaurus of synonyms. - *Museo Regionale di Scienze Naturali Saint-Pierre, Valle d'Aosta Monografie* 4: 1–192.
- SANTESSON R., MOBERG R., NORDIN A., TØNSBERG T. & VITIKAINEN O. 2004: Lichen-forming and lichenicolous fungi of Fennoscandia. - Uppsala: Museum of Evolution.
- TIMDAL E. 1991: A monograph of the genus *Toninia* (Lecideaceae, Ascomycetes). - *Opera Botanica* 110: 1–137.