

# A contribution to the Lichenized Fungi of Serbia

## Ein Beitrag zu den lichenisierten Pilzen Serbiens

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**Key words:** biodiversity, bibliography, Balkan Peninsula, lichens, Serbia.

Schlagwörter: Biodiversität, Bibliographie, Balkanhalbinsel, Flechten, Serbien.

**Summary:** A list of 115 species of lichenized fungi from Serbia is presented, based on herbarium specimens and hitherto unevaluated literature data. Eleven species are new to Serbia: *Caloplaca xerica*, *Fuscopannaria ignobilis*, *Hypogymnia laminoisorediata*, *Mycobilimbia hypnorum*, *Pertusaria hymenea*, *Polychidium muscicola*, *Pycnora xanthococca*, *Rhizocarpon kakurgon*, *Spilonema revertens*, *Trapelia placodioides* and *Xanthoria ulophyllodes*.

Zusammenfassung: Eine Liste mit 115 Arten von Flechten aus Serbien wird vorgelegt, basierend auf Herbarbelegen und bisher nicht erfassten Literaturdaten. Elf Arten sind neu für Serbien: *Caloplaca xerica*, *Fuscopannaria ignobilis*, *Hypogymnia laminoisorediata*, *Mycobilimbia hypnorum*, *Pertusaria hymenea*, *Polychidium muscicola*, *Pycnora xanthococca*, *Rhizocarpon kakurgon*, *Spilonema revertens*, *Trapelia placodioides* und *Xanthoria ulophyllodes*.

## Introduction

The lichenological exploration of South-Eastern Europe has been intensified during the last decade, resulting in the publication of checklists and bibliographies for Slovenia (SUPPAN et al. 2000, MAYRHOFER 2006), Bulgaria (MAYRHOFER et al. 2005), Serbia (SAVIĆ & TIBELL 2006) and Albania (HAFELLNER 2007). MAYRHOFER et al. (2007) report on the progress with the checklist for Montenegro.

Serbia is lichenologically poorly investigated. This is mainly due to the lack of resident lichenologists for long periods, although recent contributions (e.g. DIMOVIĆ 2001, 2003; SAVIĆ et al. 2006) have improved the knowledge considerably. The present study contributes data from specimens kept in the herbarium GZU. These were mainly collected by Josef POELT, Josef HAFELLNER and Helmut MAYRHOFER in 1974 and 1977 and by Helmut MAYRHOFER in 2004. In

addition, some previously overlooked papers have been evaluated (TROTTER 1905, KÖFARAGO-GYELNIK 1935, RECHINGER 1935, VĚZDA 1969, 1975 and 1982, ANONYMUS 1989, LOPPI et al. 2003, JIA et al. 2005, and MANOJLOVIC et al. 2005). Besides the newly reported taxa, two more could be added from the publications of VĚZDA (1969, *Verrucaria floerkeana*) and JIA et al. (2005, *Punctelia borreri* as *Parmelia b.*). The number of known species from Serbia (SAVIĆ & TIBELL 2006) is raised to 599.

## Taxa

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

*Acarospora fuscata* (SCHRAD.) TH.FR.

RECHINGER 1935: 389.

*Acrocordia gemmata* (ACH.) A.MASSAL.

TROTTER 1905: 253 (as *A. tersa*).

*Amandinea punctata* (HOFFM.) COPPINS & SCHEID.

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara NE of Deliblato, c. 180 m; fragment of sand vegetation surrounded by shrubs and trees, on *Robinia pseudacacia*, 08.IX.2004, H. MAYRHOFER 17003 (GZU); ibid., on *Juniperus communis*, 08.IX.2004, V JOHN (POLL 7482).

*Anaptychia ciliaris* (L.) KÖRB.

RECHINGER 1935: 389.

*Aspicilia caesiocinerea* (NYL. ex MALBR.) ARNOLD

RECHINGER 1935: 389 (as *Lecanora gibbosa*).

*Aspicilia calcarea* (L.) MUDD

RECHINGER 1935: 389 (as *Lecanora c.*).

*Bacidia rubella* (HOFFM.) A.MASSAL.

TROTTER 1905: 252.

*Bellemerea cinereorufescens* (ACH.) CLAUZADE & CL.ROUX

RECHINGER 1935: 389 (as *Lecanora cinereo-rufescens*).

Reported by MURATI (1992) without citation of the locality.

*Bryoria fuscescens* (GYELN.) BRODO & D.HAWKSW.

KÖFARAGO-GYELNIK 1935: 224 (as *Bryopogon jubatus* var. *prolixus*).

*Buellia schaeferi* DE NOT.

TROTTER 1905: 252 (as *B. nigriflula*).

*Caloplaca cerina* (EHRH. ex HEDW.) TH.FR.  
MANOJLOVIC et al. 2005: 244.

*Caloplaca crenularia* (WITH.) J.R.LAUNDON  
ANONYMUS 1989: 34.

Zlatibor-Gebirge: zwischen Titovo Užice und Nova Varoš, 24 km südlich von Čajetina, 890 m, Serpentinfelsen, 13.VII.1974, J. Poelt (GZU). Vranje, Pljackovica nordwestlich der Stadt Vranje, 850 m, 07.VII.1977, J. POELT (GZU); ibid., J. HAFELLNER 3038, 3043, 3050, 3052 (GZU).

*Caloplaca ferruginea* (HUDS.) TH.FR.  
VĚZDA 1982: 6.

*Caloplaca lactea* (A.MASSAL.) ZAHLBR.  
RECHINGER 1935: 389.

*Caloplaca variabilis* (PERS.) MÜLL.ARG.  
RECHINGER 1935: 389.

\**Caloplaca xerica* POELT & VĚZDA

Tal der Juzna Morava ca. 16 km südlich von Niš, südwestlich der Ortschaft Malosiste, 07 VII.1977, J. POELT (GZU).

*Candelariella reflexa* (NYL.) LETTAU

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara NE of Deliblato, c. 180 m; fragment of sand vegetation surrounded by shrubs and trees, on *Robinia pseudacacia*, 08.IX.2004, H. MAYRHOFER 17002 (GZU); ibid., oak forest (*Quercetum virgiliana*), on dead branches, 08.IX.2004, H. MAYRHOFER 17014 (GZU); ibid., lime tree forest (*Tilietum argenteae*), on *Quercus* spec., 08.IX.2004, H. MAYRHOFER 17028 (GZU). – Previously recorded only from the Tara National Park (DIMOVIĆ & LÖKÖS 2003).

*Candelariella vitellina* (HOFFM.) MÜLL.ARG.

TROTTER 1905: 252 (as *Candelaria v.*).

Tal der Juzna Morava ca. 16 km S von Niš, SW der Ortschaft Malosiste, 07 VII.1977, J. HAFELLNER 41449 (GZU). Zlatibor-Gebirge, an der Straße ca. 6 km NE von Mokra Gora, Serpentinfels, 12.VII.1974, J. POELT (GZU).

*Candelariella xanthostigma* (ACH.) LETTAU

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara SE of Sušara, c. 170 m; sand dune landscape with solitary oaks, on *Quercus* spec., 08.IX.2004, H. MAYRHOFER (GZU).

*Catillaria nigroclavata* (NYL.) SCHULER

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara NE of Deliblato, c. 180 m; oak forest (*Quercetum virgiliana*), on dead

branches, 08.IX.2004, H. MAYRHOFER (GZU). – Previously recorded only from Fruška gora (SERVÍT 1934).

***Cetraria islandica* (L.) ACH.**

LOPPI et al. 2003: 279.

***Cladonia coniocraea* (FLÖRKE) SPRENG.**

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara S of Sušara, c. 180 m; lime tree forest (*Tilietum argenteae*), on *Tilia argentea*, 08.IX.2004, H. Mayrhofer 17017 (GZU).

***Cladonia convoluta* (LAM.) ANDERS**

JIA et al. 2005: 391.

***Cladonia pyxidata* (L.) HOFFM.**

RECHINGER 1935: 388 (as *C. p.* var. *neglecta*).

***Collema flaccidum* (ACH.) ACH.**

Tara Planina: ca. 20 km W Bajina Bašta, ca. 5 km SW Raštiste, 11.VII.1974, J. HAFELLNER (GZU).

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

7 km NE von Mokra Gora, an der Straße von Titovo Ušice nach Višegrad, Serpentin, 14.VII.1974, J. HAFELLNER 241 (GZU).

***Dimerella pineti* (ACH.) VĚZDA**

Tara Planina: Umgebung von Raštiste, Crvena Stijena ("Rote Wand"), 11.VII.1974, J. POELT (GZU). – Previously recorded from the same mountain region (DIMOVIĆ & LÖKÖS 2003).

***Diploschistes muscorum* (SCOP.) R.SANT.**

Tara Planina: ca. 20 km W Bajina Bašta, ca. 5 km SO Raštiste, (Crvena Stijena), 1100 m, 11.VII.1974, J. HAFELLNER (GZU).

***Evernia prunastri* (L.) ACH.**

LOPPI et al. 2003: 279.

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara S of Sušara, c. 180 m; lime tree forest (*Tilietum argenteae*), on *Tilia argentea*, 08.IX.2004, H. MAYRHOFER 17016 (GZU); *ibid.*, c. 170 m; sand dune landscape with solitary oaks, on *Quercus spec.*, 08.IX.2004, H. MAYRHOFER 17040 (GZU).

***Flavoparmelia caperata* (L.) HALE**

TROTTER 1905: 252 (as *Parmelia c.*).

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara NE of Deliblato, c. 180 m; oak forest (*Quercetum virgilianae*), on dead branches, 08.IX.2004, H. MAYRHOFER 17010 (GZU); *ibid.*, lime tree forest (*Tilietum argenteae*), on *Prunus spec.*, 08.IX.2004, H. MAYRHOFER 17019 (GZU);

ibid., lime tree forest (*Tilietum argenteae*), on *Quercus* spec., 08.IX.2004, H. MAYRHOFER 17025 (GZU).

\**Fuscopannaria ignobilis* (ANZI) P.M.JØRG.

Tal der Juzna Morava ca. 16 km S Niš, SW der Ortschaft Malosiste, 07.VII.1974, H. MAYRHOFER 3305 (GZU, associated with *Candelariella vitellina*).

*Graphis scripta* (L.) ACH.

TROTTER 1905: 253 (as *G. s.* var. *serpentina*).

Tara planina: ca. 20 km W Bajina Bašta, ca. 5 km SW Raštiste, 1000 m, 11.VII.1974, J. HAFELLNER 210 (GZU).

*Hypogymnia farinacea* ZOPF

JIA et al. 2005: 390.

\**Hypogymnia laminisorediata* D.HAWKSW. & POELT

Tara planina: Umgebung von Raštiste, Crvena stijena ("Rote Wand"), steile Nordhänge SW an der Wand, 1060 m, auf: *Picea omorika*, 11.VII.1974, J. POELT (GZU).

*Hypogymnia physodes* (L.) NYL.

Tara planina: Umgebung von Raštiste, Crvena stijena ("Rote Wand"), steile Nordhänge SW der Wand, Buchen-Tannenwald mit *Picea omorika* und *Picea abies*, 1000 m, auf: *Picea omorika*, 11.VII.1974, J. POELT (GZU).

*Lecanora argentata* (ACH.) MALME

Tara planina: Zvijezda, Berghänge ca. 3 km W ober Raštiste, 1060 m, Buchen-Tannen-Wald, auf: *Fagus sylvatica*, 11.VII.1974, J. POELT (GZU).

*Lecanora carpinea* (L.) VAIN.

RECHINGER 1935: 389.

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara SE of Sušara, c. 170 m; sand dune landscape with solitary oaks, on *Crataegus* spec., 08.IX.2004, H. MAYRHOFER 17044 (GZU).

*Lecanora dispersa* (PERS.) SOMMERF.

RECHINGER 1935: 389.

*Lecanora polytropa* (EHRH. ex HOFFM.) RABENH.

RECHINGER 1935: 389.

*Lecanora pulicaris* (PERS.) ACH.

TROTTER 1905: 252 (as *L. subfusca* var. *detrita*); RECHINGER 1935: 389 (as *L. coilocarpa*).

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara SE of Sušara, c. 170 m; sand dune landscape with solitary oaks, on *Crataegus* spec., 08.IX.2004, H. MAYRHOFER 17031 (GZU).

*Lecidea fuscoatra* (L.) ACH.

Vranje, Pljackovica NW der Stadt Vranje, 800 m, 07.VII.1977, J. HAFELLNER 3444, 3446 (GZU); *ibid.*, J. POELT (GZU); *ibid.*, H. MAYRHOFER 532 (GZU). Tal der Juzna Morava ca. 16 km S Niš, SW der Ortschaft Malosiste, 07.VII.1977, J. HAFELLNER 3428, 3440, 41458 (GZU). Zlatibor Gebirge, an der Straße ca. 6 km nordöstlich von Mokra Gora, 790 m, Serpentinfallen, 12.VII.1974, J. POELT (GZU).

*Lecidea plana* (J.LAHM) NYL.

RECHINGER 1935: 388 (as *L. latypea*).

*Lecidea tessellata* FLÖRKE

Zlatibor Gebirge: an der Straße ca. 6 km nordöstlich von Mokra Gora, 790 m, Serpentinfallen, 12.VII.1974, J. POELT (GZU). An der Straße von Titovo Užice nach Višegrad, 7 km nordöstlich Mokra Gora, Serpentin, J. HAFELLNER 3417 (GZU).

*Lecidella carpathica* KÖRB.

Tal der Juzna Morava ca. 16 km S Niš, SW der Ortschaft Malosiste, 07.VII.1977, J. HAFELLNER 3482 (GZU). Zlatibor Gebirge: bei Dobroselica, ca. 22 km S Čajetina, an der Strecke Titovo Užice - Nova Varos, 900 m, niedrige Serpentinfallen auf einem stark insolierten SO-Hang, 13.VII.1974, J. POELT (GZU).

*Lecidella elaeochroma* (ACH.) M.CHOISY

RECHINGER 1935: 388 (as *Lecidea parasema*).

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara S of Sušara, c. 180 m; lime tree forest (*Tilietum argenteae*), on *Quercus virgiliana*, 08.IX.2004, H. MAYRHOFER 17024 (GZU). Roadside between Deliblato and Sušara SE of Sušara, c. 170 m; sand dune landscape with solitary oaks, on *Quercus* spec., 08.IX.2004, H. MAYRHOFER (GZU).

*Lepraria lobificans* NYL.

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara S of Sušara, c. 180 m; lime tree forest (*Tilietum argenteae*), on *Quercus virgiliana*, 08.IX.2004, H. MAYRHOFER 17022 (GZU). – Previously recorded from only the vicinity of the town Bor in Eastern Serbia (SAVIĆ et al. 2006)

*Lepraria nivalis* J.R.LAUNDON fibeuern - Salzburg - Brüssel; download unter www.biologiezentrum.at

Tara Planina: Umgebung von Raštiste, "Rote Wand", Steiflächen über Kalk, 11.VII.1974, J. POELT (GZU). – Previously recorded only ones without providing locality data (MURATI 1993, SAVIĆ et al. 2006).

*Leprocaulon microscopicum* (VILL.) GAMS

Vranje, Pljackovica NW der Stadt Vranje, 850 m, 07.VII.1977, J. HAFELLNER 3508 (GZU).

*Lobaria pulmonaria* (L.) HOFFM.

Tara planina: Umgebung von Raštiste, Crvena stijena („Rote Wand“), 11.VII.1974, J. POELT (GZU).

*Lobothallia radiosa* (HOFFM.) HAFELLNER

An der Straße von Titovo Užice nach Višegrad, 7 km nordöstlich Mokra Gora, Serpentin, 14.VII.1974, J. HAFELLNER 1186 (GZU); *ibid.*, J. HAFELLNER 1194 (GZU, with *Lichenostigma elongata*). Tal der Juzna Morava ca. 16 km S Niš, SW der Ortschaft Malosiste, 07.VII.1977, H. MAYRHOFER 3305 (GZU).

*Melanelixia glabra* (SCHAER.) O.BLANCO et al.

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara SE of Sušara, c. 170 m; sand dune landscape with solitary oaks, on *Quercus spec.*, 08.IX.2004, H. MAYRHOFER 17036 (GZU).

*Melanelixia subargentifera* (NYL.) O.BLANCO et al.

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara S of Sušara, c. 180 m; lime tree forest (*Tilietum argenteae*), on *Quercus spec.*, 08.IX.2004, H. MAYRHOFER 17026 (GZU). Roadside between Deliblato and Sušara SE of Sušara, c. 170 m; sand dune landscape with solitary oaks, on *Quercus spec.*, 08.IX.2004, H. MAYRHOFER (GZU).

*Melanohalea exasperatula* (NYL.) O.BLANCO et al.

RECHINGER 1935: 389 (as *Parmelia e.*).

\**Mycobilimbia hypnorum* (LIB.) KALB & HAFELLNER

Tara planina: ca. 20 km W von Bajina Bašta, ca. 5 km SW von Raštiste, 1000 m, über Moosen am Grund eines Baumes, 11.VII.1974, J. HAFELLNER 244 (GZU).

*Ochrolechia turneri* (SM.) HASSELROT

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara SE of Sušara, c. 170 m; sand dune landscape with solitary oaks, on *Quercus spec.*, 08.IX.2004, H. MAYRHOFER 17034 (GZU).

JIA et al. 2005: 390.

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara NE of Deliblato, c. 180 m; oak forest (*Quercetum virgiliana*), on dead branches, 08.IX.2004, H. MAYRHOFER 17012 (GZU).

*Parmelina quercina* (WILLD.) HALE

JIA et al. 2005: 391 (as *Parmelia q.*).

*Parmelina tiliacea* (HOFFM.) HALE

JIA et al. 2005: 390 (as *Parmelia t.*).

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara S of Sušara, c. 180 m; lime tree forest (*Tilietum argenteae*), on *Quercus virgiliana*, 08.IX.2004, H. MAYRHOFER 17023 (GZU). Roadside between Deliblato and Sušara SE of Sušara, c. 170 m; sand dune landscape with solitary oaks, on *Quercus spec.*, 08.IX.2004, H. MAYRHOFER 17038 (GZU).

*Peltigera canina* (L.) WILLD.

RECHINGER 1935: 388.

*Peltigera collina* (ACH.) SCHRAD.

Vranje, Pljackovica NW der Stadt Vranje, 850 m, 07 VII.1977, J. HAFELLNER 41457 (GZU). – Previously recorded from only one locality (MURATI 1990).

*Peltigera horizontalis* (HUDS.) BAUMG.

Tara planina: Berghänge ca. 3 km ober Raštiste, Zvijezda, 1060 m, Buchen-Tannen-Wald, 11.VII.1974, J. POELT (GZU); *ibid.*, J. HAFELLNER 220 (GZU).

*Peltigera leucophlebia* (NYL.) GYELN.

Tara planina: Umgebung von Raštiste, Crvena stijena ("Rote Wand"), 11.VII.1974, J. POELT (GZU).

*Peltigera malacea* (ACH.) FUNCK

Tara Planina: ca. 20 km W Bajina Bašta, ca. 5 km SW Raštiste, 1000 m, 11.VII.1974, J. HAFELLNER 229 (GZU). – Previously recorded only from Kosovo (DIMOVIĆ 2003).

*Pertusaria amara* (ACH.) NYL.

Tara Planina: ca. 20 km W von Bajina Bašta, ca. 5 km SW von Raštiste, 1000 m, 11.VII.1974, J. HAFELLNER 41456 (GZU).

*Pertusaria chiodectonoides* BAGL. ex A.MASSAL.

VÉZDA 1969: 5. – Recorded by MURATI (1992) without citation of the locality.

\**Pertusaria hymenea* (ACH.) SCHAER.

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara NE of Deliblato, c. 150 m; oak forest (*Quercetum virgiliana*), on *Quercus virgiliana*, 08.IX.2004, V. JOHN (POLL 7481).

*Phaeophyscia orbicularis* (NECK.) MOBERG sel; download unter www.biologiezentrum.at

TROTTER 1905: 252 (as *Physcia obscura*).

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara NE of Deliblato, c. 180 m; oak forest (*Quercetum virgilianae*), on dead branches, 08.IX.2004, H. MAYRHOFER.

*Phaeophyscia sciastra* (ACH.) MOBERG

Zlatibor-Gebirge: an der Straße ca. 6 km nordöstlich von Mokra Gora, 820 m, Serpentin-Felsen, 12.VII.1974, J. Poelt (GZU); *ibid.*, J. HAFELLNER 41446 (GZU).

*Phlyctis argena* (SPRENG.) FLOT.

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara NE of Deliblato, c. 180 m; oak forest (*Quercetum virgilianae*), on *Crataegus* spec., 08.IX.2004, H. MAYRHOFER 17004 (GZU); *ibid.*, on *Quercus virgiliana*, 08.IX.2004, leg. H. MAYRHOFER 17005 (GZU).

*Physcia adscendens* H.OLIVIER

TROTTER 1905: 252 (as *Parmelia stellaris* var. *adscendens*); JIA et al. 2005: 391.

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara NE of Deliblato, c. 180 m; oak forest (*Quercetum virgilianae*), on dead branches, 08.IX.2004, H. MAYRHOFER 17011 (GZU); *ibid.*, fragment of sand vegetation surrounded by shrubs and trees, on *Robinia pseudacacia*, 08.IX.2004, H. MAYRHOFER 17001 (GZU). Roadside between Deliblato and Sušara SE of Sušara, c. 170 m; sand dune landscape with solitary oaks, on *Crataegus* spec., 08.IX.2004, H. MAYRHOFER 17032 (GZU); *ibid.*, on *Quercus* spec., 08.IX.2004, H. MAYRHOFER (GZU).

*Physcia aipolia* (EHRH. ex HUMB.) FÜRNR.

TROTTER 1905: 252 (as *Parmelia stellaris* var. *aipolia*).

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara S of Sušara, c. 180 m; lime tree forest (*Tilietum argenteae*), on *Populus* spec., 08.IX.2004, H. MAYRHOFER 17021 (GZU); *ibid.*, on *Quercus* spec., 08.IX.2004, H. MAYRHOFER 17029 (GZU). Roadside between Deliblato and Sušara SE of Sušara, c. 170 m; sand dune landscape with solitary oaks, on *Quercus* spec., 08.IX.2004, H. MAYRHOFER 17037 (GZU).

*Physcia biziana* (A.MASSAL.) ZAHLBR.

JIA et al. 2005: 390 and 391.

*Physcia caesia* (HOFFM.) FÜRNR.

Zlatibor-Gebirge: zwischen Titovo Užice und Nova Varoš, 24 km südlich von Čajetina, 900 m, Serpentin-felsen, 13.VII.1974, J. POELT (GZU). An der Straße ca. 6 km nordöstlich von Mokra Gora, 790 m, Serpentin-felsen, 12.VII.1974, J.

POELT (GZU): Tal der Juzna Morava ca. 16 km S Niš, SW der Ortschaft Malosiste, 07.VII.1977, J. POELT (GZU).

***Physcia stellaris* (L.) NYL.**

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara SE of Sušara, c. 170 m; sand dune landscape with solitary oaks, on *Crataegus* spec., 08.IX.2004, H. MAYRHOFER 17043 (GZU).

***Physcia tenella* (SCOP.) DC.**

TROTTER 1905: 252; JIA et al. 2005: 391.

***Physconia detersa* (NYL.) POELT**

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara NE of Deliblato, c. 180 m; oak forest (*Quercetum virgiliana*), on *Quercus virgiliana*, 08.IX.2004, H. MAYRHOFER 17008 (GZU). Roadside between Deliblato and Sušara S of Sušara, c. 180 m; lime tree forest (*Tilietum argenteae*), on *Prunus* spec., 08.IX.2004, H. MAYRHOFER 17018 (GZU); *ibid.*, on *Quercus* spec., 08.IX.2004, H. MAYRHOFER 17027, 17030 (GZU). Roadside between Deliblato and Sušara SE of Sušara, c. 170 m; sand dune landscape with solitary oaks, on *Quercus* spec., 08.IX.2004, H. MAYRHOFER 17033 (GZU). – Previously recorded from the Fruška gora (SERVÍT 1934 as *Physcia grisea* var. *detersa*).

***Physconia grisea* (LAM.) POELT**

JIA et al. 2005: 391.

***Platismatia glauca* (L.) W.L.CULB. & C.F.CULB.**

Tara planina: Umgebung von Rastiste, Crvena stijena ("Rote Wand"), 1215 m, auf: *Quercus* sp., 11.VII.1974, J. POELT (GZU).

***Pleurosticta acetabulum* (NECK.) ELIX & LUMBSCH**

JIA et al. 2005: 390 and 391 (as *Parmelia a.*).

**\**Polychidium muscicola* (Sw.) GRAY**

Vranje, Pljackovica NW der Stadt Vranje, 850 m, 07.VII.1977, J. HAFELLNER 3717 (GZU).

***Polysporinia lapponica* (ACH. ex SCHAER.) DEGEL.**

Tal der Juzna Morava ca. 16 km S Niš, SW der Ortschaft Malosiste, 07.VII.1977, J. POELT (GZU). – Previously recorded from only one locality (SAVIĆ et al. 2006).

***Polysporinia simplex* (DAVIES) VĚZDA**

Tal der Juzna Morava ca. 16 km S Niš, SW der Ortschaft Malosiste, 07.VII.1977, J. POELT (GZU); *ibid.*, J. HAFELLNER 41448 (GZU).

*Porpidia cinereoatra* (ACH.) HERTEL & KNOPH download unter www.biologiezentrum.at

Vranje, Pljackovica NW der Stadt Vranje, 07.VII.1977, J. HAFELLNER 3426 (GZU). – Previously recorded only from the Fruška gora (SERVÍT 1934, as *Lecidea meiospora*).

*Protopannaria pezizoides* (Weber) P.M.Jørg. & S.EKMAN

Tara planina: Umgebung von Raštiste, „Rote Wand“, 11.VII.1974, J. POELT (GZU).

*Protoparmeliopsis muralis* (SCHREB.) M.CHOISY

RECHINGER 1935: 389 (as *Lecanora m.* and *Lecanora m.* var. *diffracta*); JIA et al. 2005: 390 (as *Lecanora m.*).

Tal der Juzna Morava ca. 16 km S von Niš, SW der Ortschaft Malosiste, 07.VII.1977, J. HAFELLNER 41450 (GZU). Vranje: Pljackovica NW der Stadt Vranje, 800 m, 07.VII.1977, J. POELT (GZU). Zlatibor-Gebirge, an der Straße ca. 6 km nordöstlich von Mokra Gora, 790 m, 12.VII.1974, J. POELT (GZU).

*Pseudevernia furfuracea* (L.) ZOPF

RECHINGER 1935: 389 (as *Parmelia f.*); LOPPI et al. 2003: 279; JIA et al. 2005: 390.

*Punctelia borreri* (SM.) KROG

JIA et al. 2005: 390 and 391 (as *Parmelia b.*).

*Punctelia subrudecta* (NYL.) KROG

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara NE of Deliblato, c. 180 m; oak forest (*Quercetum virgilianae*), on *Quercus virgiliana*, 08.IX.2004, H. MAYRHOFER 17007 (GZU); *ibid.*, on dead branches, 08.IX.2004, H. MAYRHOFER 17009 (GZU). Roadside between Deliblato and Sušara SE of Sušara, c. 170 m; sand dune landscape with solitary oaks, on *Quercus spec.*, 08.IX.2004, H. MAYRHOFER 17035 (GZU).

\**Pycnora xanthococca* (SOMMERF.) HAFELLNER

Tara planina: Berghänge ca. 3 km W ober Raštiste, Zvijezda, ca. 1060 m, Buchen-Tannen-Wald, 11.VII.1974, J. POELT (GZU).

*Ramalina capitata* (ACH.) NYL.

JIA et al. 2005: 391.

*Ramalina farinacea* (L.) ACH.

JIA et al. 2005: 390.

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara SE of Sušara, c. 170 m; sand dune landscape with solitary oaks, on *Quercus spec.*, 08.IX.2004, H. MAYRHOFER 17039 (GZU).

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara S of Sušara, c. 180 m; lime tree forest (*Tilietum argenteae*), on *Tilia argentea*, 08.IX.2004, H. MAYRHOFER 17015 (GZU).

*Rhizocarpon geographicum* s. lat.

RECHINGER 1935: 388.

\**Rhizocarpon kakurgon* POELT

Tal der Juzna Morava ca. 16 km S Niš, SW der Ortschaft Malosiste, 07.VII.1977, J. POELT (GZU).

*Rhizocarpon viridiatrum* (WULFEN) KÖRB.

Zlatiborgebirge: an der Straße ca. 6 km nordöstlich von Mokra Gora, 810 m, Serpentin-Felsen, 12.VII.1974, J. POELT (GZU); *ibid.*, J. HAFELLNER 214 (GZU).

*Rinodina milvina* (WAHLENB.) TH.FR.

RECHINGER 1935: 389.

*Rinodina pyrina* (ACH.) ARNOLD

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara NE of Deliblato, c. 180 m, fragment of sand vegetation, on *Juniperus communis*, 08.IX.2004, H. MAYRHOFER 16020 & V. JOHN (GZU).

*Rinodina sophodes* (ACH.) A.MASSAL.

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara SE of Sušara, c. 170 m; sand dune landscape with solitary oaks, on *Quercus spec.*, 08.IX.2004, H. MAYRHOFER 17041 (GZU).

*Scoliciosporum umbrinum* (ACH.) ARNOLD

Vranje, Pljackovica NW der Stadt Vranje, 850 m, 07.VII.1977, J. POELT (GZU).

\**Spilonema revertens* NYL.

Zlatibor-Gebirge: an der Straße ca. 6 km nordöstlich von Mokra Gora, 790 m, 12.VII.1974, J. POELT (GZU).

*Squamarina serpentini* POELT

VĚZDA 1975: 3 (as *S. serpentina*).

*Tephromela atra* (HUDS.) HAFELLNER var. *atra*

Vranje, Pljackovica NW der Stadt Vranje, 850 m, 07.VII.1977, H. MAYRHOFER (GZU); *ibid.*, J. HAFELLNER 3301 (GZU).

*Toninia cinereovirens* (SCHAER.) A.MASSAL.

Zlatibor-Gebirge: an der Straße ca. 6 km NE Mokra Gora, 790 m, Serpentin-Felsen, 12.VII.1974, J. POELT (GZU); *ibid.*, H. MAYRHOFER 209 (GZU). – Recorded only by TIMDAL (1991) without citing the locality.

\**Trapelia placodioides* COPPINS & P.JAMES essel; download unter www.biologiezentrum.at

Vranje, Pljackovica NW der Stadt Vranje, 800 m, 07.VII.1977, J. POELT (GZU).

*Umbilicaria deusta* (L.) BAUMG.

RECHINGER 1935: 388 (as *Gyrophora d.*).

*Usnea subfloridana* STIRT.

RECHINGER 1935: 389 (as *U. florida* var. *sorediifera*).

*Verrucaria floerkeana* DALLA TORRE & SARNTH.

VĚZDA 1969: 6.

*Verrucaria muralis* ACH.

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara NE of Deliblato, c. 150 m; on beebles on the ground, 08.IX.2004, V JOHN (POLL 7480).

*Xanthoparmelia pulla* (ACH.) O.BLANCO et al.

Tal der Juzna Morava ca. 16 km S von Niš, SW der Ortschaft Malosiste, 07.VII.1977, J. HAFELLNER 3542 (GZU).

*Xanthoparmelia stenophylla* (GYELN.) AHTI & D.HAWKSW.

JIA et al. 2005: 391 (as *Parmelia somloensis*)

*Xanthoparmelia verruculifera* (NYL.) O.BLANCO et al.

Tal der Juzna Morava ca. 16 km S von Niš, SW der Ortschaft Malosiste, 07.VII.1977, J. HAFELLNER 3548 (GZU). – Previously recorded only from Mt Ostrovica in Central Serbia (SAVIĆ et al. 2006, as *Neofuscelia v.*).

*Xanthoria elegans* (LINK) TH.FR.

Zlatibor-Gebirge: an der Straße von Titovo Užice nach Višegrad, 7 km NO Mokra Gora, Serpentin, 14.VII.1974, J. HAFELLNER 232 (GZU).

*Xanthoria parietina* (L.) TH.FR.

TROTTER 1905: 252 (as *Physcia p.*); JIA et al. 2005: 390.

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara NE of Deliblato, c. 180 m; oak forest (*Quercetum virgilianae*), on dead branches, 08.IX.2004, H. MAYRHOFER 17013 (GZU). Roadside between Deliblato and Sušara S of Sušara, c. 180 m; lime tree forest (*Tilietum argenteae*), on *Populus spec.*, 08.IX.2004, H. MAYRHOFER 17020 (GZU). Roadside between Deliblato and Sušara SE of Sušara, c. 170 m; sand dune landscape with solitary oaks, on *Quercus spec.*, 08.IX.2004, H. MAYRHOFER (GZU); *ibid.*, on *Crataegus spec.*, 08.IX.2004, H. MAYRHOFER 17042 (GZU).

\**Xanthoria ulophyllodes* RÄSÄNEN

Deliblatska Peščara: Velika Peščara, roadside between Deliblato and Sušara NE of Deliblato, c. 180 m; oak forest (*Quercetum virgilianae*), on *Quercus virgiliana*, 08.IX.2004, H. MAYRHOFER 17006 (GZU).

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