

MYXOMYCETES DATA FROM THE DANUBE–TISZA INTERFLUVE AND SOME OTHER PARTS OF HUNGARY

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The paper provides a record of 84 data referring to 52 Myxomycetes species collected from the environs of the town of Kecskemét and in some other parts of Hungary. Some of the species listed in this paper are rare in the country and *Badhamia populina*, *Cribraria microcarpa*, *Hemitrichia stipitata* and *Oligonema flavidum* are reported for the first time from Hungary.

Key words: Danube–Tisza Interfluve, Myxomycetes species

INTRODUCTION

Records of Myxomycetes are relatively rarely published in Hungary. There are many hardly investigated areas of Hungary, but it is suspected that the thoroughly studied areas might also support further data. More than 80 percent of the collections listed in this paper were made in the Danube–Tisza Interfluve (D–T) near the town of Kecskemét. Earlier studies for microscopic fungi in the area include those by Hungarian mycologist L. Hollós who lived and worked in Kecskemét and investigated the surroundings between 1905 and 1910 (HOLLÓS 1913). The microscopic fungi of the Kiskunság National Park (KNP) and some neighbouring parts of D–T were studied again between 1979 and 1982 by GÖNCZÖL and RÉVAY (1999).

The specimens enumerated below were collected by the second author with one exception. *Cribraria microcarpa* was collected by the first author. The identification of the samples was made by the first author. The vouchers of taxa reported in this paper are deposited in the herbarium of the Hungarian Natural History Museum (BP).

RESULTS

The collecting trips were mostly made in the Danube–Tisza Interfluve between 13.09.2001 and 01.11.2004. The majority of the collections were made in each year in summer and autumn. The paper records 84 data referring to 52

Myxomycetes species. Species names which are new data for the area of D–T are preceded by asterisk (*).

LIST OF THE SPECIES

***Amaurochaete atra** (Alb. et Schw.) Rost. – Kunbaracs, on wood of *Pinus sylvestris* L., BP 97965, 03.08.2004.

Arcyria cinerea (Bull.) Pers. – Hetényegyháza, on dead twigs of *Quercus robur* L., BP 97832, 14.06.2004; Kecskemét, in forest Csalánosi-erdő, on trunk of *Pinus sylvestris*, BP 97775, 12.08.2002; Kecskemét, in forest Nyomási-erdő, on bark of *Pinus sylvestris*, BP 97785, 10.08.2002; Kunbaracs, on trunk of *Pinus sylvestris*, BP 97966, 03.08.2004; Tőserdő near Lakitelek, on dead wood, BP 97783, 26.07.2002. (HOLLÓS 1913 as *Arcyria albida* Pers., GÖNCZÖL and RÉVAY 1999).

Arcyria denudata (L.) Wettst. – Kecskemét, in forest Nyomási-erdő, on bark of *Pinus sylvestris*, BP 97781, 18.08.2002; Tőserdő near Lakitelek, on dead wood, BP 97967, 29.11.2003. (HOLLÓS 1913 as *Arcyria punicea* Pers., GÖNCZÖL and RÉVAY 1999).

***Arcyria incarnata** (Pers.) Pers. – Kecskemét in a garden, on dead trunk of *Platanus* sp., BP 97778, 29.11.2003; Kecskemét, in forest Nyomási-erdő, on dead wood of *Quercus robur*, BP 97968, 02.08.2004; Tőserdő near Lakitelek, on dead branches, BP 97776, 30.06.2002.

***Arcyria insignis** Kalchbr. et Cooke – Bácsalmás, on bark of *Platanus* sp., BP 97969, 02.08.2004; Kecskemét, in forest Nyomási-erdő, on dead branch of *Platanus* sp., BP 97780, 10.08.2002; Kecskemét, in forest Nyomási-erdő, on dead trunk of *Pinus sylvestris*, BP 97782, 20.07.2003.

Arcyria nutans (Bull.) Grev. – Hetényegyháza, on dead wood of *Quercus* sp., BP 97774, 24.07.2002; Káptalanfűred, on dead trunk of *Pinus sylvestris*, BP 97777, 14.07.2003; Királyrét, Börzsöny Mts, on dead wood, BP 97970, 04.08.2004; Nyárlőrinc, on dead wood, BP 97784, 26.07.2002. (HOLLÓS 1913 as *Arcyria flava* Pers., GÖNCZÖL and RÉVAY 1999).

***Arcyria pomiformis** (Leers) Rost. – Kecskemét, in forest Nyomási-erdő, on dead wood of *Pinus sylvestris*, BP 97779, 10.08.2002.

***Badhamia affinis** Rost. – Tőserdő near Lakitelek, on dead wood, BP 97971, 20.11.2003.

***Badhamia foliicola** A. Lister – Bácsalmás, on bark of *Quercus robur*, BP 97973, 01.08.2004; Kecskemét, in forest Csalánosi-erdő, on dead wood of *Pinus* sp., BP 97972, 12.08.2002.

Badhamia macrocarpa (Ces.) Rost. – Fülöpszállás, on twig of *Elaeagnus angustifolia* L., BP 97787, 23.07.2002. (HOLLÓS 1913).

Badhamia obovata (Peck) S. J. Smith – In the Mátra Mts near Mátraháza, on leaves of *Fagus sylvatica* L., BP 97786, 18.08.2002.

***Badhamia panicea** (Fr.) Rost. – Kecskemét, in forest Csalánosi-erdő, on dead mossy trunk, BP 97788, 12.09.2002.

***Badhamia populina** A. et G. Lister – Szeged, Boszorkánysziget, BP 97824, on twig of *Salix* sp., 20.10.2003; Tőserdő near Lakitelek, on dead trunk of *Populus canescens*, BP 97820, 01.11.2003; Tőserdő near Lakitelek, on dead trunk of *Populus canescens*, BP 97823, 20.11.2003.

Ceratiomyxa fruticulosa (O. F. Müll.) Macbr. – Hetényegyháza, on wood of *Quercus robur* L., BP 97791, 11.06.2002; Kecskemét, on wood of *Populus canescens* Sm., BP 97790, 11.08.2002; Kecskemét in the forest Nyomási-erdő, on bark of *Pinus sylvestris*, BP 97789, 01.08.2002; Nyárlőrinc, on wood of *Pinus sylvestris*, BP 97792, 23.07.2002. (HOLLÓS 1913 as *Ceratiomyxa mucida* Schroet.).

***Comatricha elegans** (Racib.) A. Lister – Kecskemét, in the forest Nyomási-erdő, on trunk of *Pinus sylvestris*, BP 97800, 10.08.2002.

Comatricha nigra (Pers.) J. Schröt. – Szeged, Népliget, on twig of *Quercus robur*, BP 97798, 01.07.2002; Szeged, in the Botanical Garden, on twig of *Quercus robur*, BP 97799, 18.10.2003.

***Comatricha pulchella** (C. Bab.) Rost. – Kecskemét, in forest Nyomási-erdő, on trunk of *Pinus sylvestris*, BP 97797, 10.08.2002.

Craterium leucocephalum (Pers.) Ditmar – Kecskemét, on leaves of *Populus canescens*, BP 97795, 09.08.2002; Kecskemét in forest Nyomási-erdő, on leaves of *Quercus robur*, BP 97794, 13.09.2003; Kecskemét, on bark of *Quercus robur*, BP 97974, 01.08.2004; Kecskemét in forest Nyomási-erdő, on bark of *Quercus robur*, BP 97975, 02.08.2004. (GÖNCZÖL and RÉVAY 1999).

***Cribraria aurantiaca** Schrad. – Nyárlőrinc, on dead trunk of *Pinus sylvestris*, BP 97796, 24.07.2002.

Cribraria microcarpa (Schrad.) Pers. – In valley Nagyvasfazék-völgy in Börzsöny Mts, on dead wood, BP 97976, 29.07.2004.

Dictydiaethalium plumbeum (Schum.) Rost. – Tábor-hegy near Budapest, on twig of *Quercus* sp., BP 97802, 20.10.2002.

***Dictydium cancellatum** (Batsch) Macbr. – Kecskemét, in forest Csalánosi-erdő, on wood, BP 97801, 28.07.2002.

Diderma effusum (Schw.) Morgan – Tőserdő near Lakitelek, on bark of *Alnus glutinosa* (L.) Gaertn., BP 97803, 01.05.2003.

***Didymium clavus** (Alb. et Schw.) Rabenh. – Kecskemét, in forest Nyomási-erdő, on bark of *Quercus robur*, BP 97977, 02.08.2004; Tőserdő near Lakitelek, on leaves of *Populus alba* L., BP 97807, 28.07.2002.

Didymium squamulosum (Alb. et Schw.) Fr. – Kecskemét, on dead leaves, BP 97805, 09.08.2002; Kecskemét, in forest Nyomási-erdő, on leaves of *Quercus robur*, BP 97804, 20.04.2002; Kecskemét, in forest Nyomási-erdő, on twigs of *Ulmus laevis* Pall., BP 97806, 13.09.2003. (HOLLÓS 1913 as *Didymium effusum* Link, GÖNCZÖL and RÉVAY 1999).

***Enerthenema papillatum** (Pers.) Rost. – Kecskemét, in forest Nyomási-erdő, on trunk of *Pinus sylvestris*, BP 97808, 10.08.2002; Szeged, in island Boszorkánysziget, on twigs of *Salix alba*, BP 97846, 01.04.2004.

Enteridium lycoperdon (Bull.) M. L. Farr – Tőserdő near Lakitelek, on dead wood, BP 97829, 07.09.2003. (HOLLÓS 1913).

***Enteridium rozeanum** (Rost.) Wingate – Kecskemét, in forest Nyomási-erdő, on trunk of *Pinus sylvestris*, BP 97809, 20.07.2003.

Fuligo septica (L.) F. H. Wigg. – Kecskemét, in forest Nyomási-erdő, on twig of *Quercus robur*, BP 97811, 15.09.2003. (HOLLÓS 1913, GÖNCZÖL and RÉVAY 1999).

Hemitrichia serpula (Scop.) Rost. – Mátraháza, on wood of *Carpinus betulus* L., BP 97810, 29.10.1999.

***Hemitrichia stipitata** (Masse) Macbr. – Tőserdő near Lakitelek, on dead trunk, BP 97812, 18.07.2002.

Leocarpus fragilis (Dicks.) Rost. – Kondorfa, Zala County, on twigs of *Pinus* sp., BP 97978, 14.10.2001.

Lycogala epidendrum (L.) Fr. – Nyárlőrinc, on twig of *Pinus sylvestris*, BP 97813, 28.07.2002; Szalkszentmárton, on twig of *Salix* sp., BP 97814, 20.08.2002. (HOLLÓS 1913 as *Lycogala minianum* Pers., GÖNCZÖL and RÉVAY 1999).

***Lycogala flavofuscum** (Ehrenb.) Rost. – Kecskemét, in forest Nyomási-erdő, on trunk of *Pinus sylvestris*, BP 97815, 13.09.2001.

Metatrichia vesparium (Batsch) Nann.-Brem. – Tőserdő near Lakitelek, on dead trunk of *Quercus robur*, BP 97817, 20.03.2002. (HOLLÓS 1913 as *Hemitrichia rubiformis* (Pers.) Rost., GÖNCZÖL and RÉVAY 1999).

***Oligonema flavidum** (Peck) Peck – Tőserdő near Lakitelek, on mossy trunk, BP 97816, 26.07.2002.

Perichaena corticalis (Batsch) Rost. – Kecskemét, in forest Nyomási-erdő, on bark of *Populus alba*, BP 98411, 01.11.2004. (GÖNCZÖL and RÉVAY 1999).

Perichaena vermicularis (Schw.) Rost. – Kecskemét, in forest Nyomási-erdő, on bark of *Quercus* sp., BP 97818, 20.07.2003. (HOLLÓS 1913 as *Perichaena variabilis* Rost.).

***Physarum cinereum** (Batsch) Pers. – Kecskemét, in forest Nyomási-erdő, on bark of *Pinus sylvestris*, BP 97826, 20.04.2002; Kecskemét, in forest Nyomási-erdő, on leaves of *Quercus robur*, BP 97819, 11.08.2002; Kecskemét, in forest Nyomási-erdő, on cones of *Pinus sylvestris*, BP 97827, 10.08.2002.

Physarum didermoides (Pers.) Rost. – Szeged, Népliget, on dead wood of *Acer negundo* L., BP 97981, 15.04.2004. (GÖNCZÖL and RÉVAY 1999).

Physarum leucopus Link – Kecskemét, in forest Nyomási-erdő, on leaves of *Populus canescens*, BP 97793, 10.08.2002. (HOLLÓS 1913).

***Physarum melleum** (Berk. et Br.) Massee – Hetényegyháza, on leaves of *Quercus robur*, BP 97828, 03.08.2002.

Physarum nutans Pers. – Fülöpszállás, on twigs of *Elaeagnus angustifolia*, BP 97825, 23.07.2002; Kecskemét, in forest Csalánosi-erdő, on wood, BP 97822, 12.09.2002; Kecskemét, in forest Nyomási-erdő, on wood of *Quercus robur*, BP 97979, 03.08.2004. (GÖNCZÖL and RÉVAY 1999).

***Physarum pusillum** (Berk. et Curtis) G. Lister – Kecskemét, in forest Nyomási-erdő, on trunk of *Quercus robur*, BP 97980, 30.11.2003.

***Physarum viride** (Bull.) Pers. – Kecskemét, in forest Nyomási-erdő, on twig of *Pinus sylvestris*, BP 97821, 10.08.2002.

***Stemonitis ferruginea** Ehrenb. – Tőserdő near Lakitelek, on dead wood, BP 97830, 01.06.2002.

***Trichia affinis** de Bary – Bácsalmás, in Rákóczi Park, on decaying trunk, BP 97835, 28.10.2003.

***Trichia contorta** (Ditmar) Rost. – Kecskemét, in the cemetery, on decaying bark, BP 97831, 29.11.2003.

***Trichia decipiens** (Pers.) Macbr. – Szeged, in island Boszorkánysziget, on dead trunk of *Acer negundo*, BP 97847, 09.11.2003.

Trichia scabra Rost. – Kecskemét, on dead trunk of *Populus* sp., BP 97833, 10.05.2002; Tőserdő near Lakitelek, on dead trunk of *Quercus* sp., BP 97834, 20.03.2002. (GÖNCZÖL and RÉVAY 1999).

Trichia varia (Pers.) Pers. – Kecskemét, in a garden, on decaying trunk of *Populus canadensis* Mönch, BP 97836, 12.06.2002. (HOLLÓS 1913, GÖNCZÖL and RÉVAY 1999).

Tubifera ferruginosa (Batsch) J. F. Gmel. – Kecskemét, in forest Csalánosi-erdő, on trunks of *Pinus sylvestris*, BP 97848, 16.06.2004. (HOLLÓS 1913 as *Tubulina fragiformis* Pers.).

DISCUSSION

Mycological studies in the areas of the KNP and D–T include those of L. Hollós, who collected records of the fungi of Kecskemét and its surroundings for

five years and enumerated 29 Myxomycetes species in his work (HOLLÓS 1913). In their paper GÖNCZÖL and RÉVAY (1999) listed 28 Myxomycetes species from the same area. Besides the records of fungi collected by them, the microfungi references concerning this area were also listed.

During the present study – which covers a larger area than Kecskemét and its surroundings – 27 species were first recorded from the investigated area. This has expanded the knowledge of Myxomycetes for the area of the KNP and its neighbouring parts: the present records contain 72 taxa. Nine species (*Arcyria cinerea*, *A. denutata*, *A. nutans*, *Comatricha nigra*, *Didymium squamulosum*, *Fuligo septica*, *Lycogala epidendrum*, *Metatrichia vesparium* and *Trichia varia*) were recorded during both the present and earlier studies and these were collected in several parts of the D–T. Apart from many frequent and widespread species the collections resulted in some new or noteworthy records for Hungary. To our best knowledge the occurrence of *Badhamia populina*, *Cribraria microcarpa*, *Hemitrichia stipitata* and *Oligonema flavidum* were not reported earlier from the country. The occurrence in Hungary of the following six species were published only in one occasion: *Amaurochaete atra* (BODONYI and TÓTH 2004), *Badhamia affinis* (BODONYI and TÓTH 2004), *Badhamia obovata* (VASS 1972, as *Badhamia dictyospora*), *Didymium clavus* (BODONYI and TÓTH 2004), *Lycogala flavofuscum* (ZELLER and TÓTH 1971), *Physarum melleum* (VASS 1972).

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