

# Myxomycetes of Turkey

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ERGÜL, C.C. & DÜLGER, B. 2000: Myxomycetes of Turkey. – Karstenia 40: 39–41. Helsinki. ISSN 0453-3402.

This paper contains a complete list of Myxomycetes of Turkey. The checklist, which is mainly based on literature records, includes 102 taxa, belonging to 31 genera.

Key words: Turkey, Myxomycetes, checklist

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## Introduction

Work on Turkish myxomycete flora is very recent. The first myxomycete records are in works on macrofungi (Lohwag 1957, 1964). Detailed work by Finnish scientists followed after a gap of twenty years (Härkönen & Uotila 1983, Uotila & Kurtto 1984, Härkönen 1987). The first specific accounts by Turkish workers began later (Gücin & Öner 1986). In particular, a PhD thesis on the myxomycetes of the Southern Marmara region increased the number of known Turkish species (Ergül 1993). In the following years there has been an important increase in records (Ergül & Gücin 1993, 1994, 1995, 1996; Ergül 1997; Ergül & Dülger 1999 a–c; Ergül 1999; Gücin & Ergül 1995; Gün 1995). A major checklist of the myxomycetes of the Mediterranean region includes Turkish records (Lado 1994). Extending the study of myxomycetes from Marmara, the Aegean coast and the western Black Sea region to the whole country will reveal the richness of the Turkish myxomycete flora. Turkey, is at the intersection of four phytogeographical regions (Mediterranean, Euro-Siberian, Mesopotamian and Irano-Turanian) and has a rich natural vegetation with different macro-microclimates, and is thus an ideal study area.

## Methods

The checklist is based on literature records of myxomycetes collected in Turkey. The generic

treatment follows Martin et al. (1983). Species are those accepted by Martin & Alexopoulos (1969) and Nannenga Bremekamp (1991).

## The checklist

Division: Gymnomycota

Subdivision: Plasmodiogymnomycota

Classis: Myxomycetes

Subclassis: Ceratiomyxomycetidae

Order: Ceratiomyxales

Family: Ceratiomyxaceae

**Ceratiomyxa fruticulosa** (O.F. Muell.) T. Macbr. – Härkönen 1987; Ergül 1993; Gün 1995

Subclassis: Myxogasteromycetidae

Order: Liceales

Family: Liceaceae

**Licea castanea** G. Lister – Ergül 1993

**L. denudescens** Keller & Brooks – Härkönen & Uotila 1983

**L. kleistobolus** Martin – Härkönen & Uotila 1983; Härkönen 1987

**L. minima** Fries – Ergül 1993

**L. operculata** (Wingate) Martin – Ergül 1993

**L. parasitica** (Zukal) Martin – Ergül 1993

**L. pedicellata** (H.C. Gilbert) H.C. Gilbert – Ergül 1993

**L. punctiformis** Martin – Ergül 1993

**L. pusilla** Schrad. – Ergül 1993

**L. pusilla** var. **pygmaea** Meylan – Ergül 1993; Ergül & Dülger 1999

**L. tenera** Jahn – Ergül 1993

Family: Cribriariaceae

**Cribaria aurantiaca** Schrad. – Ergül 1998

**C. cancellata** (Batsch) Nann.-Bremek – Ergül 1993;

Ergül & Gücin 1993; Ergül & Dülger 1999a

**C. minutissima** Schw. – Ergül 1998

- C. violacea** Rex – Härkönen & Uotila 1983; Ergül 1993; Gün 1995; Ergül & Dülger 1999a  
Family: Enteridiaceae
- Enteridium splendens** (Morgan) Macbr. – Gücin & Ergül 1995; Gün 1995
- Lycogala epidendrum** (L.) Fries – Härkönen 1987; Ergül 1993; Gün 1995; Ergül & Dülger 1999a
- L. flavofuscum** (Ehrenb.) Rostaf. – Ergül 1993  
Order: Echinosteliales  
Family: Echinosteliaceae
- Echinostelium arboreum** Keller & Brooks – Ergül 1993
- E. coelocephalum** Brooks & Keller – Ergül 1993; Gün 1995
- E. colliculosum** Whitney & Keller – Härkönen & Uotila 1983; Ergül 1993; Gün 1995
- E. corynophorum** Whitney – Gün 1995
- E. cribrariooides** Alexop. – Ergül 1993
- E. elachistum** Alexop. – Härkönen 1987
- E. fragile** Nann.-Brem. – Ergül 1993; Gün 1995
- E. minutum** de Bary – Härkönen & Uotila 1983; Härkönen 1987; Ergül 1993; Gün 1995, Ergül & Dülger 1999a  
Family: Clastodermataceae
- Clastoderma debaryanum** Blytt – Ergül 1993
- C. pachypus** Nann.-Brem. – Ergül 1993  
Order: Trichiales  
Family: Arcyriaceae
- Arcyria cinerea** (Bull.) Pers. – Härkönen & Uotila 1983; Härkönen 1987; Ergül 1993; Gün 1995; Ergül & Dülger 1999a
- A. denudata** (L.) Wetst. – Härkönen 1987; Ergül 1993; Gün 1995
- A. incarnata** (Pers.) Pers. – Ergül 1993; Gün 1995; Ergül & Dülger 1999a
- A. insignis** Kalchbr. & Cooke – Ergül 1993
- A. minuta** Buchet – Ergül & Dülger 1999b
- A. nutans** (Bull.) Grev. – Ergül 1993; Ergül & Dülger 1999a
- A. pomiformis** (Leers) Rost. – Härkönen & Uotila 1983; Härkönen 1987; Ergül 1993; Gün 1995
- A. versicolor** Phill. – Härkönen 1987; Gün 1995
- Perichaena chrysosperma** (Currey) Lister – Ergül 1993; Gün 1995; Ergül & Dülger 1999a
- P. corticalis** (Batsch) Rostaf. – Härkönen & Uotila 1983; Härkönen 1987; Ergül 1993; Gün 1995
- P. vermicularis** (Schw.) Rost. – Ergül 1993; Gün 1995  
Family: Dianemaceae
- Calomyxa metallica** (Berk.) Nieuwl. – Ergül 1993  
Family: Trichiaceae
- Trichia alpina** (R.E.Fries) Meylan – Härkönen 1987
- T. botrytis** (J.F.Gmel.) Pers. – Ergül 1993
- T. contorta** (Ditmar) Rost. – Härkönen & Uotila 1983
- T. contorta** var. **karstenii** (Rostaf.) Ing – Ergül & Gücin 1995
- T. decipiens** (Pers.) Macbr. – Härkönen 1987; Ergül 1993
- T. favaginea** (Batsch) Pers. – Härkönen 1987; Ergül 1993
- T. lutescens** (Lister) Lister – Gücin & Öner 1986
- T. varia** (Pers.) Pers. – Gücin & Öner 1986; Ergül 1993; Gün 1995
- Hemitrichia calyculata** (Speg.) Farr. – Ergül 1999
- H. clavata** (Pers.) Rostaf. – Härkönen 1987
- Metatrichia vesparium** (Batsch) Nann.-Bremek. – Ergül & Gücin 1993  
Order : Physarales  
Family: Physaraceae
- Badhamia foliicola** Lister – Härkönen & Uotila 1983; Ergül 1993; Gün 1995; Ergül & Dülger 1999a
- B. macrocarpa** (Ces.) Rostaf. – Gücin & Öner 1986; Ergül 1993
- B. nitens** Berk – Ergül 1993
- B. panicea** (Fries) Rostaf. – Härkönen & Uotila 1983
- B. versicolor** Lister – Härkönen & Uotila 1983
- B. viridescens** Meylan – Ergül 1992
- Badhamiopsis ainoae** (Yamash.) Brooks & Keller – Ergül 1993; Gün 1995
- Fuligo septica** (L.) Wiggers – Ergül & Gücin 1994
- Leocarpus fragilis** (Dicks.) Rostaf. – Gün 1995; Ergül & Dülger 1999a
- Physarum auriscalpium** Cooke – Härkönen & Uotila 1983; Härkönen 1987
- P. bitectum** G. Lister – Härkönen & Uotila 1983
- P. cinereum** (Batsch) Pers. – Härkönen 1987; Ergül 1993
- P. compressum** Alb. & Schw. – Ergül 1993
- P. contextum** (Pers.) Pers. – Härkönen & Uotila 1983
- P. decipiens** Curt. – Ergül 1993
- P. leucophaeum** Fries – Ergül 1993; Gün 1995
- P. nutans** Pers. – Ergül 1993; Gün 1995; Ergül & Dülger 1999a
- P. oblatum** Macbr. – Ergül 1993
- P. pusillum** (Berk. & Curt.) G. Lister – Ergül 1997; Ergül & Dülger 1999a
- P. viride** (Bull.) Pers. – Ergül 1993; Ergül & Dülger 1999a  
Family: Didymiaceae
- Diderma chondrioderma** (de Bary & Rost.) G. Lister – Ergül 1992; Ergül & Dülger 1999a
- D. hemisphaericum** (Bull.) Hornem. – Ergül 1993
- Didymium difforme** (Pers.) S.F.Gray – Ergül 1993; Gün 1995
- D. floccosum** Martin, Thind & Rehill – Ergül & Gücin 1996; Ergül & Dülger 1999a
- D. minus** (Lister) Morgan – Ergül & Gücin 1996
- D. quitense** (Pat.) Torrend – Härkönen & Uotila 1983
- D. squamulosum** (Alb. & Schw.) Fries – Härkönen & Uotila 1983
- Mucilago crustacea** Wiggers – Ergül 1999  
Subclassis: Stemonitomycetidae  
Order: Stemoniales  
Family: Stemonitaceae
- Amaurochaeta atra** (Alb.&Schw.) Rost. – Sümer 1982
- Comatricha dictyospora** Celak. – Ergül 1993; Gün 1995
- C. elegans** (Racib.) G.Lister – Härkönen & Uotila 1983; Ergül 1993
- C. ellae** Härkönen – Ergül 1993; Gün 1995
- C. laxa** Rost. – Härkönen & Uotila 1983; Ergül 1993; Gün 1995; Ergül & Dülger 1999a
- C. lurida** Lister – Ergül 1993
- C. nigra** (Pers.) Schroet. – Härkönen & Uotila 1983; Ergül 1993; Gün 1995; Ergül & Dülger 1999a
- Diachea leucopodia** (Bull.) Rost. – Härkönen & Uotila 1983
- Enerthenema papillatum** (Pers.) Rostaf. – Härkönen & Uotila 1983; Ergül 1993; Gün 1995

- Lamproderma arcyrioides** ( Sommerf.) Rostaf. – Härkönen 1987  
**Macbrideola cornea** (G.Lister & Cran) Alexop. – Härkönen & Uotila 1983; Härkönen 1987; Ergül 1993; Gün 1995  
**M. decapillata** H.C.Gilbert – Ergül 1993  
**M. synsporos** (Alexop.) Alexop. – Ergül 1993; Gün 1995  
**Paradiacheopsis fimbriata** (G.Lister & Cran) Hertel – Härkönen & Uotila 1983; Härkönen 1987; Gün 1995  
**Stemonitis flavogenita** Jahn – Härkönen & Uotila 1983  
**S. fusca** Roth – Härkönen & Uotila 1983; Ergül & Dülger 1999a  
**S. nigrescens** Rex – Ergül 1993; Gün 1995  
**S. splendens** Rostaf. – Uotila & Kurtto 1983  
**Stemonitopsis hyperopta** (Meylan) Nann.-Bremek. – Ergül 1993  
**S. typhina** (F.H.Wigg.) Nann.-Bremek. – Härkönen 1987  
**Sympylocarpus flaccidus** (Lister) Ing & Nann.-Bremek. – Ergül & Dülger 1999c

## Results

In the past, very few studies have been made on myxomycetes of Turkey. Now the myxomycetes in Turkey number 102 taxa belonging to 31 genera. Since most myxomycetes are thought to be cosmopolitan, further explorations will undoubtedly increase the knowledge of myxomycetes of Turkey.

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