Introduction

About 100 myxomycetes species have been reported from Turkey (Ergül & Dülger, 2000). In recent studies, there have been some new records, and complete lists of myxomycetes species have been compiled from previous research (Harkonen & Uotila, 1983; Harkonen, 1988; Lado, 1994; Ergül & Dülger, 2000). However, myxomycetes flora research has not covered Turkey. This study provides 30 new records for the Myxomycetes flora of Turkey.

Materials and Methods

The specimens on natural substrata and barks and debris material were collected from the field on different dates. Natural mature material was gently and directly picked from the substratum and placed in cardboard herbarium boxes. In addition, the myxomycetes’ fructifications were obtained by the moist chamber technique in the laboratory. Several kinds of plant remains and bark from living trees were kept in an incubator at a temperature of 25 ±1°C, illuminated artificially in a 12:12 h light: dark cycle. The cultures were moistened with distilled water adjusted with KOH to pH 7. After two days, the pH of the moisture in the dishes was measured with pH sticks. The moist chambers were then examined every second or third day under a dissecting microscope. When developing myxomycetes were found, the moist chamber was allowed to dry slowly and the myxomycetes were then dried for a week. All the chambers were then rewetted for another four-week period and examined as before (Gilbert & Martin, 1933; Harkonen, 1988; Nannenga-Bremekamp, 1991). The identification of the myxomycetes species was performed according to related myxomycetes literature (Martin & Alexopoulos, 1969; Farr, 1976; Nannenga-Bremekamp, 1991). The specimens are stored at the herbarium of Uludağ University (BULU) in Bursa.

Findings

Thirty taxa belonging to 2 subclasses were recognized. Taxa indicated by asterisks in the following list were obtained using the moist chamber technique.

Kingdom: Mycetæae
Division: Gymnomycota
Subdivision: Plasmodiogymnomycotina

New Records for the Myxomycetes Flora of Turkey

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Abstract: Thirty myxomycetes species are new records for Turkey. Among these species, Craterium minutum (Leers) Fries, Dianema repens G.Lister & Cran., Lindbladia tubulina Fries and Tubifera ferruginosa (Batsch) J.F.Gmel. are also new genus record taxa for the myxomycetes flora of Turkey.

Key Words: Myxomycetes, Turkey

Türkiye Miksomiset Florası Üçin Yeni Kayıtlar


Anahtar Sözcükler: Myxomycetes, Turkey
Class: Myxomycetes
Subclass: Myxogasteromycetidae
Order: Liceales
Family: Cribrariaceae

Bursa-Eskişehir road, Mezit valley, between Mezit bridges 7 and 8, alt. 650 m, 09.VII.1999, on decayed twig, CE 185-7

* Cribraria elegans Berk. & Curt., Grevillae 2: 76, 1873.
Bartın-Arıy road, alt. 60 m, 18.VII.2000, on bark of Quercus sp., CE 214

* Cribraria microcarpa (Schrad.) Pers., Syn. Fung. 190, 1801.
Bartın, Kurucaşile-Çakraz road, alt. 30 m, 19.VII.2000, on bark of Castanea sativa, CE 218

Syn: Cribraria elata Massee, Mon. 61, 1892.
Bursa-Eskişehir road, Mezit valley, between Mezit bridges 4 and 5, alt. 440 m, 09.IX.1999, on fallen twig, CE 189-5

Lindbladia tubulina Fries, Summa Veg. Scand. 449, 1849.
Syn: Aethalium atrum Preuss, Linnaea 24: 141, 1851.
Kastamonu, Daday-Eflani road, alt. 1040 m, 20.VII.2000, on bark of Quercus sp., CE 228

Order: Trichiales
Family: Trichiaceae

Bursa-Eskişehir road, Mezit valley, between Mezit bridges 7 and 8, alt. 650 m, 25.VIII.2000, on decaying wood, CE 198-7

Arcyria ferruginea Sauter, Flora 24: 316, 1841.
Bursa, Görükle campus area, alt. 155 m, 25.IV.2001, on bark of Quercus sp., CE 233-1

Bursa, Görükle campus area, alt. 155 m, 05.VI.1998, on fallen twig, CE 174-2

Arcyria stipata (Schw.) A.Lister, Mycet: 189, 1894.
Bursa-Eskişehir road, Mezit valley, between Mezit 4 and 5 bridges, alt. 440 m, 09.IX.1999, on decaying wood, CE 189-9

Family: Trichiaceae

Dianema repens G.Lister & Cran., Mycet. 3: 255, 1925.
Bursa, Uludağ-Kirazliyayla, alt. 1450 m, 17.IX.1999, on decayed wood, CE 191-5

Bursa-Eskişehir road, Mezit valley, between Mezit bridges 7 and 8, alt. 650 m, 09.IX.1999, on decaying wood, CE 190-4; 25.VIII.2000, on fallen twig, CE 198-3; 01.IX.2000, on decayed wood, CE 200-6.
Order: Physarales  
Family: Physaraceae

**Craterium minutum** (Leers) Fries, Syst. Myc. 3: 151, 1829.
Bursa-Eskişehir road, Mezit valley, between Mezit bridges 7 and 8, alt. 650 m, 09.IX.1999, on fallen twig, CE 190-1.

**Badhamia capsulifera** (Bull.) Berk., Tans. Linn. Soc. 21: 153, 1853.
Syn: *Badhamia varia* Massee, Mon. 319, 1892.
Bartın, Ünkum, alt. 60 m, 04.IX.1999, on deayed wood, CE 187-1.

**Fuligo candida** Pers., Obs. Myc. 1: 92, 1796.
Bursa, Görükle campus area, alt. 155 m, 19.X.2000, on bark of *Platanus* sp., BD 51.
Bursa-Eskişehir road, Mezit valley, between Mezit bridges 7 and 8, alt. 650 m, 01.IX.2000, on decayed wood, CE 200-6.

**Physarum flavicomum** Berk., Lond. J. Bot. 4: 66, 1873.
Bursa-Eskişehir road, Mezit valley, between Mezit bridges 3 and 4, alt. 410 m, 09.IX.1999, on fallen twig, CE 188-3.

* **Physarum notabile** Macbr., N. Am. Slime-Moulds, 2, 80, 1922.
Bartın, Abdipaşa-Ulus road, alt. 120 m, 18.VII.2000, on bark of *Platanus* sp., CE 215.

**Physarum ovisporum** G. Lister, Jour. Bot. 59: 90, 1921.
Bursa, Görükle Campus area, alt. 155 m, 09.IX.2000, on fallen twig, BD 50.

Family: Didymiaceae

**Diderma testaceum** (Schrad.) Pers., Syn. Fung. 167, 1801.
Bartın-Amasra road, alt. 250 m, 12.VIII.1998, on fallen twig, CE 195.

Kastamonu, Daday-Azdavay road, Ballıdağı gate, alt. 1245 m, 20.VII.2000, on bark of *Craeotagus* sp., CE 227.

Bartın, İnkum, alt. 60 m, 27.VII.2000, on bark of *Ulmus* sp., CE 232.

**Didymium nigripes** (Link) Fries, Syst. Myc. 3: 119, 1829.
Kastamonu, İlğaz National Park, alt. 1660 m, 20.VII.2000, on bark of *Abies* sp., CE 223.

Family: Enteridiaceae

Bursa, Uludağ-Kırázlyayla, alt. 1450 m, 24.IX.1999, on fallen twig, CE 192-5.

Subclass: Stemonitomycetidae
Order: Stemonitales
Family: Stemonitaceae

Bartın-Arıt road, alt. 60 m, 18.VII.2000, on bark of Salix sp., CE 214.

Stemonitis axifera (Bull.) Macbr., N. Am. Slime-Moulds 120, 1889.
Bursa, Görükle campus area, alt. 155 m, 05.VI.1998, on fallen twig, CE 174-2.
Bursa-Eskişehir road, Mezit valley, between Mezit bridges 4 and 5, alt. 440 m, 09.VII.1999, on fallen twig, CE 184-4; between Mezit bridges 7 and 8, alt. 650 m, 25.VIII.2000, on decayed wood, CE 198-5.

Bursa-Eskişehir road, Mezit valley, between Mezit bridges 7 and 8, alt. 650 m, 01.IX.2000, on fallen twig, CE 198-5.

Bursa-Eskişehir road, Mezit valley, between Mezit bridges 4 and 5, alt. 440 m, 11.VI.1999, on fallen twig, CE 182-1.


Bursa-Eskişehir road, Mezit valley, between Mezit bridges 3 and 4, alt. 410 m, 09.IX.1999, on fallen leaves of an unidentified tree, CE 188-2.


Bursa, Görükle Campus area, alt. 155 m, 25.IV.2001, on bark of Quercus sp., CE 233-2.

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