

## MACROFUNGI OF ÇEMİŞGEZEK (TUNCELİ) DISTRICT

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### Abstract

This study, is based on the macrofungi collected from Çemişgezek county of Tunceli province between 1995-1997. At the end of the study, 30 taxa belonging to 2 classes and 16 families have been identified. Two of them, *Coprinus stanglianus* Bender & Gröger. (*Coprinaceae*) and *Pholiota spumosa* (Fr.) Sing. (*Strophariaceae*)

**Key Words:** Macrofungi, Flora, Taxonomy, Çemişgezek, Turkey

### Introduction

Although several studies were carried out on the macrofungi flora of our country(1), many regions have not been identified yet were recorded for the first time for Turkish mycoflora. Some floristic studies were also carried on by Gücin (2,3), Işiloğlu and Öder (4), Demirel (5), Demirel and Uzun (6) to determine the mycoflora of east anatolian region, but there were no floristic study related to Çemişgezek and its surroundings.

Çemişgezek is a town of Tunceli in the upper Fırat region of East Anatolia. It takes place at Eastwest of Tunceli and surrounded by Pertek and Hozat at east, Ovacık, Kemah and Erzurum at north, Ağın and Elazığ at west and Keban Dam Lake at south (Fig. 1). The town is 975 m above sea level and has a surface area of 877 square km. The research area has a semi-continental climate (7).

The aim of this study is to determine the macrofungi growing in Çemişgezek district and its surroundings.

### Material & Method

Macrofungi specimens, which constitute the study material, were collected from study area by field trips carried out between 1995 and 1997. During the collection of specimens, morphological properties were noted and colour photographs were taken. After they were brought to the laboratory, spore prints were obtained and they were dried. Then, the specimens were stored as herbarium material in polyethylene bags. According to the data obtained by macroscopic and microscopic

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investigation of the specimens, their descriptions were prepared and identified with the help of relevant literature (8-11). The samples are kept in Biology Department of Science and Art Faculty of Y. Yil University.

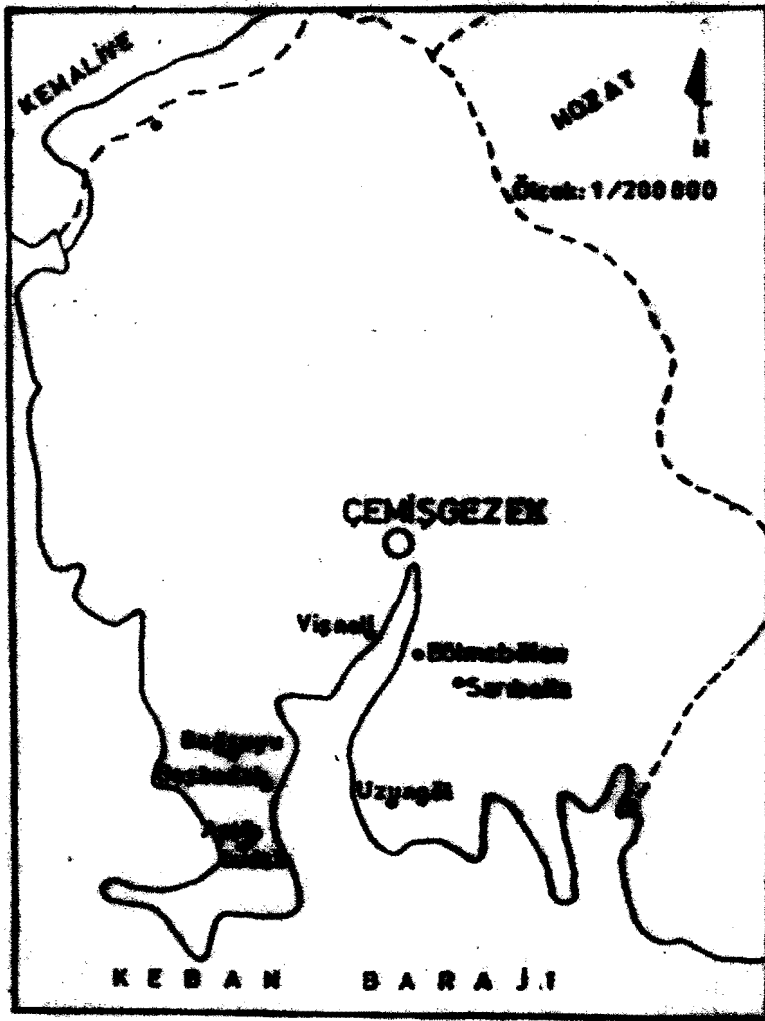


Fig.1. Study area

## Results

At the end of this study, 28 taxa belonging to 2 classes and 16 families have been established. The identified species were listed and short descriptions of newly recorded species were given. In addition, collection site of the samples, habitats, collection date, edibility and personal herbarium number (N=Nacar) of each species have been added.

## ASCOMYCETES

### *Morchellaceae*

1. *Morchella conica* Pers.

Çemişgezek, Bölmebölen Village, under *Populus* trees, 10.05.1996, N. 111. Edible.

2. *Morchella esculenta* Pers. ex St. Amans.

Çemişgezek, Bölmebölen Village, under mixed wood, 5.1996, N.112. Edible.

#### **Helvellaceae**

3. *Helvella lacunosa* Afz. ex Fr.

Çemişgezek, Sakyol Village, under *Populus* trees, 20.05.1995, N. 006. Bölmebölen Village, swamp edge, 24.05.1995, N. 028. Aşağı Budak Village, under *Salix* trees, 05.04.1996, N. 061. Edible.

### **BASIDIOMYCETES**

#### **Astraeaceae**

4. *Astraeus hygrometricus* (Pers.) Morg.

Çemişgezek, around Sakyol Village, brushwood area, 23.11.1995, N. 054. Bölmebölen Village, under *Quercus* trees, 10.09.1996, N. 093. Inedible.

#### **Boletaceae**

5. *Suillus luteus* (Fr.) S.F.Gray.

Çemişgezek, Bölmebölen Village, under coniferous trees, 10.09.1996, N. 092. Around Sakyol Village, under coniferous trees, 20.09.1997, N. 118. Edible.

#### **Gomphidiaceae**

6. *Gomphidius roseus* L.:Fr.

Çemişgezek, Bölmebölen Village, under coniferous trees, 10.09.1996, N. 094. Edible.

#### **Pleurotaceae**

7. *Lentinus tigrinus* (Bull.: Fr.) Fr.

Çemişgezek, Sakyol Village, on *Salix* stump, 20.05.1995, N. 002. Bölmebölen Village, on *Salix* stumps, 23.05.1995, N. 022. Bağısuyu Village, on *Salix* stumps, 28.10.1995, N. 030. Sakyol Village, on *Populus* stumps, 23.11.1995, N. 050. Vişneli Village, on *Salix* stumps, 23.11.1995, N. 058. Edible.

8. *Pleurotus ostreatus* (Jacq.: Fr.) Kummer.

Çemişgezek, Bölmebölen Village, on *Salix* stumps, 21.05.1995, N. 012. Sarıbalta Village, on *Populus* stumps, 20.09.1997, N. 117. Edible.

#### **Tricholomataceae**

9. *Lepista inversa* (Scop.: Fr.) Pat.

Çemişgezek, Bölmebölen Village, under mixed woods, 21.05.1995, N. 098. Edible.

#### **Amanitaceae**

10. *Amanita ovoidea* (Bull.: Fr.) Quel.

Çemişgezek, Bağısuyu Village, under *Quercus* trees, 28.10.1995, N. 033. Bölmebölen Village, under mixed woods, 22.10.1996, N. 095. Edible.

11. *Amanita submembranacea* (Bon.) Gröger.

Çemişgezek, Sarıbalta Village, under *Quercus* trees, 23.05.1995. N. 016. under *Quercus* trees, 20.05.1996. N. 075. Inedible.

#### *Agaricaceae*

12. *Agaricus campestris* (L.) Fr.

Çemişgezek, Bölmebölen Village, meadows, 16.11.1996. N. 108. Edible.

#### *Coprinaceae*

13. *Coprinus comatus* (Müll.: Fr.) S.F. Gray.

Çemişgezek, Bölmebölen Village, garden, 23.05.1995. N. 019. Edible.

14. *Coprinus atramentarius* (Bull.: Fr.) Fr.

Çemişgezek, Aşağı Budak Village, meadows, 04.04.1996. N. 065. Bölmebölen Village, under *Populus* trees, 10.06.1997. N. 114. Poisonous.

15. *Coprinus micaceus* (Bull.: Fr.) Fr.

Çemişgezek, Bölmebölen Village, on broad-leaved stump, 21.05.1995. N. 015. Edible.

16. *Coprinus stanglianus* Bender & Gröger.

Cap 2-5 cm across, ovoid or cylindrical when young, convex to bell shaped when old, whitish and covered with a woolly veil at first, then becomes covered with silky fibrils, grey-brown when mature. Flesh white and thin. Gills free, white at first, then pink and black at maturity.

Stem 8-15 cm tall, cylindrical, sometimes curved toward the base, hollow and fragile when old, surface smooth, white and have a woolly zone toward the base (Fig 2a). Spores 5-7x 8-10.5  $\mu$ , elliptic to almond shaped (Fig 2b).

Çemişgezek, Aşağı Budak Village, meadows, 05.04.1996. N. 066. under *Populus* trees, 15.05.1996. N. 069. Inedible.

#### *Bolbitiaceae*

17. *Agrocybe molesta* (Lasch.) Sing.

Çemişgezek, Bölmebölen Village, under *Populus* trees, 24.05.1995. N. 025. Edible.



Fig. 2. *Coprinus stanglianus* a) Fruit body b) Spores

18. *Agrocybe paludosa* (Lange.) Kühn & Romagn.

Çemişgezek, Vişneli Village, meadows, 23.11.1995. N. 056. Inedible.

**Strophariaceae**

19. *Pholiota spumosa* (Fr.) Sing.

Cap 2-5 cm across, orange yellow or reddish brown, at first convex, then flattened-slightly depressed, smooth, very sticky. Flesh greenish-yellow, more reddish in stem. Gills at first bright-yellow then brownish-grey, crowded, adnate. Stem 4-7 cm tall, lemon yellow, brownish at the base, equal or tapering slightly downwards, slender, finely fibrous (Fig. 3a). Spores ellipsoid, smooth, greyish-yellow, 3-4.5x5.5-7.8  $\mu$  (Fig. 3b).

Çemişgezek, Aşağı Budak Village, under coniferous trees, 20.11.1995. N. 048. Inedible.

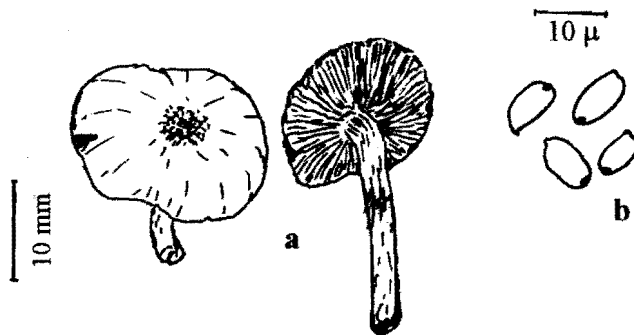


Fig. 3. *Pholiota spumosa* a) Fruit body b) Spores

**Cortinariaceae**

20. *Inocybe fastigiata* (Schaeff.: Fr.) Quel.

Çemişgezek, Bölmebölen Village, under mixed woods, 24.05.1995. N. 026.

Poisonous.

**Hymenochaetaceae**

21. *Inonotus dryadeus* (Pers.: Fr.) Murr.

Çemişgezek, Sarıbalta Village, on *Salix* wood, 22.10.1996. N. 097. Inedible.

22. *Phellinus robustus* (Karst.) Boourd.&Galz.

Çemişgezek, Bağısuyu Village, on *Quercus* wood, 10.09.1996. N. 088. Bağısuyu Village, on *Morus* wood, 10.09.1996. N. 089. Inedible.

23. *Phellinus tuberculatus* (Baumg.) Niemala.

Çemişgezek, Uzungöl Village, on *Prunus* wood, 23.05.1995. N. 018. Vişneli Village, on *Prunus* wood, 23.15.1995. N. 055. Inedible.

**Polyporaceae**

24. *Funalia troqii* (Berk.) Bond. et Sing.

Çemişgezek, Sakyol Village, on *Populus* stumps, 20.05.1995. N. 002. Bölmebölen Village, on *Populus* stumps, 10.06.1997. N. 115. Inedible.

**Russulaceae**

25. *Russula betularum* Hora.

Çemişgezek, Sarıbalta Village, under *Quercus* trees, 20.05.1996. N. 078. Poisonous.

26. *Russula delica* Fr.

Çemişgezek, Sarıbalta Village, under *Quercus* trees, 10.06.1996. N. 081. Sarıbalta Village, in mixed woods, 05.06.1996. N. 083. Bölmebölen Village, under *Quercus* woods, 12.08.1997. N. 116. Edible.

27. *Russula ochroleuca* (Pers.) Fr.

Çemişgezek, Sarıbalta Village, under *Quercus* woods, 20.05.1996. N. 073. Edible.

28. *Lactarius piperatus* (L.:Fr.) S.F. Gray

Çemişgezek, Bağısuyu Village, under *Quercus* woods, 05.06.1996. N. 085. Edible.

**Discussions**

As a result of this study 28 taxa belonging to 16 families which take place in Ascomycetes and Basidiomycetes were identified. Among 28 species 14 are edible, 11 are inedible and 3 are poisonous. While *Morchella conica*, *M. esculenta*, *Pleurotus ostreatus*, *Agaricus campestris*, *Russula delica*, *R. ochroleuca* and *Lactarius piperatus* were found to be known and eaten, the other species are not known in the area.

The presence of similarities between the result of this study and the studies which were carried out by Gücin (2,3), Işıloğlu and Öder (4), Demirel (5), Demirel and Uzun (6), may be due to the climatic and floristic similarities of the study areas.

On the other hand, as a result of literature survey, it is found that *Coprinus stanglianus* and *Pholiota spumosa* were recorded for the first time from Turkey. With the addition of 2 macrofungi species it has been contributed to the richness of macrofungi flora of our country.

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