

# Some Macrofungi From Çanakkale Province

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## Abstract

This study is based on the macrofungi specimens collected from Çanakkale province between 1992-1993. At the end of study, 70 species belonging to 2 classes and 30 families have been identified. Three of these species (*Xylaria hypoxylon* (L.: Hooker) Grev., *Rickenella fibula* (Bull.: Fr.) Raith., *Psilocybe inquilina* (Fr.: Fr.) Bres.) are new records for Turkish Macromycota . All species are listed.

**Key Words:** Macrofungi, Turkish Macromycota, Taxonomy.

## Çanakkale İlinden Bazı Makrofunguslar

## Özet

Bu çalışma 1992-1993 yıllarında Çanakkale ilinden toplanan makrofungus örnekleri üzerinde yapılmıştır. Çalışma sonunda 2 sınıfı ve 30 familyaya ait 70 tür tespit edilmiştir. Bu türlerden 3'ü (*Xylaria hypoxylon* (L.: Hooker) Grev., *Rickenella fibula* (Bull.: Fr.) Raith., *Psilocybe inquilina* (Fr.: Fr.) Bres.) Türkiye Makromikotası için yeni kayıttır. Türlerin tamamı liste halinde verilmiştir.

**Anahtar Kelimeler:** Makrofunguslar, Türkiye Makromikotası, Taksonomi.

## **Introduction**

Many studies on macromycota of Turkey have been carried out (1). However, the macromycota of many provinces have not been determined yet. So far, any investigation have not been carried out in Çanakkale province. The climate of the area is Mediterranean (2). The forest area is mainly characterized *Quercus infectoria* Oliver, *Q. cerris* L., *Q. pubescens* Willd., *Q. coccifera* L., *Pinus brutia* Ten., *P. pinea* L. and *Abies nordmanniana* (Stev) Spach. ssp. *equi-trojani* (Aschers, et Sint. ex Boiss) Coode et Cullen. This area has convenient habitat for mushrooms.

The aim of this study was to determine the macromycota of the district and to add any new records to the macromycota of the country.

## **Material and Method**

The specimens of the study were collected during field trips in Çanakkale province between 1992 and 1993 (Figure 1). The morphological and ecological characteristics of the macrofungi were recorded and were photographed in their natural habitats. The macrofungi specimens were brought to the laboratory. Their spore prints were taken and spores were photographed. Dried specimens were numbered and placed in locked bags. In addition, they have been put in deep freeze to protect to internal and external parasite attacks for a week.

The specimens were identified by their macroscopic and microscopic features and Marchand (3), Phillips (4), Moser (5) and Breitenbach-Kranzlin (6). All specimens have been kept at the herbarium of Muğla University.

## **Results**

The species identified from the research area are listed below. The numbers indicate the herbarium numbers. New species for the Turkish macromycota are indicated with an asterisk.

## **Ascomycetes**

### **Sphaeriaceae**

\*1. **Xylaria hypoxylon** (L.: Hooker) Grev.

Çanakkale, Çan, Terzialan Village, north side of Kazdağı, in *Abies* forest, 25.04.1993, G.3026.

### **Helotiaceae**

2. **Ascocoryne cylindrium** (Tull.) Korf.

Çanakkale, Çan, Terzialan Village, north side of Kazdağı, in *Abies* forest, 25.04.1993, G.3023.

### **Morchellaceae**

3. **Morchella angusticeps** (Peck.) Boud.

Çanakkale, Bayramiç, Çamlıca and Akçeşme Village, in *Pinus* forest forest, 25.04.1993, G.3031.

4. **M. conica** (Pers.) Boud.

Çanakkale, Çan, Terzialan Village, north side of Kazdağı, in *Abies* forest, 25.04.1993, G.3015.

5. **M. costata** (Vent.) Boud.

Çanakkale, Bayramiç, Çamlıca and Akçeşme Village area, in *Pinus* forest, 25.04.1993, G.3029.

6. **M. intermedia** Boud.

Çanakkale, Ayvacık, Hasanlarbaşı Village surrounding, in *Pinus* forest, 25.04.1993, G.3043.

### **Sarcoscyphaceae**

7. **Sarcoscypha coccinea** (Fr.) Lamb.

Çanakkale, Çan, Terzialan Village, north side of Kazdağı, in *Abies* forest, 25.04.1993, G.3025.

## **Basidiomycetes**

### **Tremellaceae**

8. **Tremella mesenterica** Retz. ex Hook

Çanakkale, between Kalkım and Yenice, in *Pinus* forest, 23.12.1992, G.2555.

### **Cantharellaceae**

**9. Cantharellus cibarius** Fr.

Çanakkale, Çan, Terzialan Village, nort of Kazdağı, *Abies* forest, 25.04.1993, G.3028.

### **Fistulinaceae**

**10. Fistulina hepatica** Schaeff.: Fr.

Çanakkale, Bayramiç, around Evciler Village, north side of Kazdağı, on *Quercus* tree, 31.10.1992, G.2114.

### **Ganodermataceae**

**11. Ganoderma lucidum** (Fr.) Karst.

Çanakkale, between Biga and Çan, around Sarıkaya Village, on *Quercus* root, 30.10.1992, G.2058.

### **Corticaceae**

**12. Stereum hirsitum** (Wild.: Fr.) S.F. Gray

Çanakkale, between Biga and Çan, around Sarıkaya Village, on *Quercus* tree, 24.12.1992, G.2603.

### **Polyporaceae**

**13. Fomes fomentarius** Fr.

Çanakkale, Bayramiç, around Evciler Village, north side of Kazdağı, on *Abies* tree, 31.10.1992, G.2111.

**14. Laetiporus sulphureus** (Fr.) Murr.

Çanakkale, between Kalkım and Edremit, Kazdağı, on *Abies* tree, 01.12.1992, G.2835.

**15. Polyporus arcularius** (Batsch) Fr.

Çanakkale, between Kalkım and Yenice, in *Quercus* forest, 23.11.1992, G.2543.

**16. Trametes versicolor** (Fr.) Pil.

Çanakkale, Biga, Akkayrak Village surrounding, in *Pinus* and *Quercus* forest, 21.11.1992, G.2598; Çan, Terzialan Village, north side of Kazdağı, in *Abies* forest, 25.04.1993, G.3016.

### **Schizophyllaceae**

#### **17. Schizophyllum commune Fr.**

Çanakkale, Bayramiç, around Evciler Village, north side of Kazdağı, in *Abies* forest, 31.10.1992, G.2104.

### **Hymenochaetaceae**

#### **18. Phellinus pini (Brot.: Fr.) Ames**

Çanakkale, Tabyalar, in *Pinus* forest, 30.11.1992, G.2770.

### **Sclerodermataceae**

#### **19. Pisolithus arhizus (Pers.) Rauschert**

Çanakkale, between Kalkım and Edremit, Kazdağı, in *Pinus* and *Abies* forest, 01.12.1992, G.2837.

### **Nidulariaceae**

#### **20. Cyathus olla (Batsch) Pers.**

Çanakkale, between Biga and Çan, in pasture area and near of field, 30.10.1992, G.2045.

### **Lycoperdaceae**

#### **22. Bovista plumbea Pers.**

Çanakkale, between Biga and Çan, in pasture area and near of field, 30.10.1992, G.2044.

#### **22. B. pusilla (Batsch) Pers.**

Çanakkale, between Biga and Çan, Sarıkaya Village surrounding, in pasture area, 30.10.1992, G.2069.

#### **23 Calvatia utriformis (Bull. ex Pers.) Jaap.**

Çanakkale, between Ezine and Bayramiç, in *Quercus* area, 30.10.1992, G.2099.

#### **24. Lycoperdon echinatum Pers.**

Çanakkale, between Kalkım and Yenice, in *Pinus* forest, 23.11.1992, G.2552.

#### **25. L. molle Pers.**

Çanakkale, between Biga and Çan, Sarıkaya Village surrounding, in *Pinus* forest, 30.10.1992, G.2074; between Ezine and Bayramiç, in *Quercus* area, 30.10.1992, G.2095; Bayramiç, around of Evciler, 31.10.1992, G.2119; between Ayvacık and Küçükkyu, *Pinus* and *Quercus* area, 30.11.1992, G.2749; Tabyalar, center of Çanakkale, *Pinus* area, 30.11.1992, G.2764.

**26. L. perlatum** Pers.

Çanakkale, between Çan and Çanakkale, Balaban Village, in *Pinus* area, 30.10.1992, G.2085; Emeşe Village, in *Quercus* area, 24.11.1992, G.2570; between Ayvacık and Küçükkyu, in *Quercus* and pasture area, 30.11.1992, G.2748; between Kalkım and Edremit, Kazdağı, open area in the mixed forest, 01.12.1992, G.2824.

**Rhizopogonaceae**

**27. Rhizopogon luteolus** Fr.

Çanakkale, between Çan and Çanakkale, Balaban Village, in *Pinus* area, 30.10.1992, G.2082; Bayramiç, Evciler surrounding, nort side of Kazdağı, in *Pinus* area, 31.10.1992, G.2102; between Yenice and Balya, 31.10.1992, G.2147; between Kalkım and Edremit, Kazdağı, 01.12.1992, G.2838.

**28. R. roseolus** (Corda) Thore Fries

Çanakkale, between Kalkım and Edremit, Kazdağı, in *Pinus* area, 01.12.1992, G.2081.

**Boletaceae**

**29. Suillus bellinii** (Inz.) Watling

Çanakkale, Bayramiç, around of Evciler, nort side of Kazdağı, Pinus forest, 31.10.1992, G.2113; between Kalkım and Yenice, 10. km, 23.11.1992, G.2549; between Ayvacık and Küçükkyu, in *Pinus* area, 30.11.1992, G.2745.

**30. S. bovinus** (L.: Fr.) O. Kuntze

Çanakkale, between Ayvacık and Küçükkyu, in *Pinus* area, 30.11.1992, G.2747.

**Paxillaceae**

**31. Omphalotus olearius** (DC.: Fr.) Singer

Çanakkale, around of Tabalar, in *Pinus* area, 30.11.1992, G.2769.

**Gomphidiaceae**

**32. Chroogomphus rutilus** (Fr.) O. K. Miller

Çanakkale, between Ayvacık and Küçükkyu, in *Pinus* area, 30.11.1992, G.2546; between Kalkım and Edremit, Kazdağı, 01.12.1992, G.2810.

**Pleurotaceae**

**33. Lentinus tigrinus** (Bull.) Fr.

Çanakkale, Biga, Akkayrak Village, on *Prunus* tree, 24.11.1992, G.2596.

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

Çanakkale, between Çan and Biga, Kapanbelen Village, on *Platanus* trees, 24.11.1992, G.2575.

**Tricholomataceae**

**35. *Armillaria mellea* (Vahl.: Fr.) Kummer**

Çanakkale, between Çan and Biga, Emeşe Village, on *Quercus* trees, 24.11.1992, G.2067; Çanakkale, between Çan and Çanakkale, Balaban Village, in *Pinus* area, 30.10.1992, G.2080.

**36. *A. tabescens* (Scop.) Emel**

Çanakkale, Bayramiç, around of Evciler, nort side of Kazdağı, on the stump of *Prunus* tree, 31.10.1992, G.2100.

**37. *Clitocybe geotropa* (Bull. ex Merat) Quél.**

Çanakkale, between Çan and Çanakkale, Balaban Village, in open area of *Pinus* forest, 30.11.1992, G.2782.

**38. *C. odora* (Bull. : Fr.) Kummer**

Çanakkale, between Kalkım and Yenice, in *Quercus* area, 23.10.1992, G.2542; between Ayvacık and Küçükkyuzu, in *Pinus* and *Quercus* area, 30.11.1992, G.2750;

**39. *Collybia butyracea* (Fr.: Fr.) Kumm.**

Çanakkale, Çan, Kirazlı, around of Balaban, in *Pinus* area, 30.11.1992, G.2784; between Kalkım and Edremit, Kazdağı, in *Pinus* forest, 30.10.1992, G.2814.

**40. *C. marasmoides* (Britz.) Bresinsky & Stangl**

Çanakkale, Tabyalar, in *Pinus* area, 30.11.1992, G.2771; Çan, Kirazlı, around of Balaban, in *Pinus* area, 30.11.1992, G.2776.

**41. *Laccaria laccata* (Scop. ex Fr.) Bk.& Br.**

Çanakkale, between Biga and Çan, around Sarıkaya Village, *Pinus* forest, 30.10.1992, G.2059; between Çan and Yenice, 10 km, 31.10.1992, G.2131.

**42. *Marasmius oreades* (Bolt.: Fr.) Fr.**

Çanakkale, between Biga and Çan, around Sarıkaya Village, in *Pinus* forest, 30.10.1992, G.2047.

**43. *Mycena rosea* (Bull.) Gramberg**

Çanakkale, between Çan and Biga, Emeşe Village, in *Quercus* trees, 24.11.1992, G.2559; between Kalkım and Edremit, Kazdağı, in *Abies* forest, 01.12.1992, G.2832.

**44. *M. strobilicola* Favre & Kuhner**

Çanakkale, Bayramiç, Evciler Village, in *Platanus* trees and pasture area, 31.10.1992, G.2117; between Kalkım and Yenice, 10 km, in *Pinus* area, 23.11.1992, G.2548; Tabyalar, in *Pinus* area, 30.10.1992, G.2762.

**\*45. *Rickenella fibula* (Bull.: Fr.) Raith.**

Çanakkale, between Çan and Biga, Kapanbelen Village, in *Quercus* area, 24.11.1992, G.2581.

**46. *Tricholoma fracticum* (Britz.) Kreisel**

Çanakkale, between Kalkım and Hamdibey, in *Pinus* area, 01.12.1992, G.2858.

**Amanitaceae**

**47. *Amanita codinae* (Maire) Sing.**

Çanakkale, between Ezine and Bayramiç, in *Quercus* and pasture area, 30.10.1992, G.2094.

**48. *A. gemmata* (Fr.) Gill.**

Çanakkale, Biga, Akkayrak Village, in *Pinus* area, 24.11.1992, G.2588.

**Lepiotaceae**

**49. *Macrolepiota kondradii* (Huijsman ex Orton) Mos.**

Çanakkale, between Kalkım and Yenice, 10 km, in *Pinus* forest, 23.11.1992, G.2550.

**50. *M. procera* (Scop.) Sing.**

Çanakkale, between Kalkım and Edremit, Kazdağı, in *Abies* forest, 01.12.1992, G.2800.

**51. *M. rhacodes* (Vitt.) Sing.**

Çanakkale, Çan, Kirazlı Village, Balaban area, in *Pinus* trees, 30.10.1992, G.2078; between Kalkım and Edremit, Kazdağı, in *Abies* forest, 01.12.1992, G.2826.

**Agaricaceae**

**52. *Agaricus arvensis* Schaeff.: Fr.**

Çanakkale, between Çan and Yenice, 10 km, in pasture, 31.10.1992, G.2127.

**53. A. campestris (L.) Fr.**

Çanakkale, between Ezine and Bayramiç, in open area of *Quercus* forest, 30.10.1992, G.2095.

**54. A. cupreobrunneus (Schaeff. & Steer) Möller.**

Çanakkale, between Ezine and Bayramiç, in open area of *Quercus* forest, 30.10.1992, G.2098; between Yenice and Balya, in pasture area, 31.10.1992, G.2137.

**55. A. semotus Fr.**

Çanakkale, between Küçükkyu and Ayvacık, in open area of *Pinus* forest, 30.11.1992, G.2748.

**Coprinaceae**

**56. Coprinus disseminatus (Pers.: Fr.) S.F.Gray**

Çanakkale, between Biga and Çan, in pasture area, 30.10.1992, G.2054.

**57. C. galericuliformis Losa ex Watl.**

Çanakkale, between Biga and Çan, Sarıkaya Village, under *Pinus* trees, 30.10.1992, G.2066.

**58. C. micaceus (Bull.) Fr.**

Çanakkale, between Biga and Çan, Sarıkaya Village, under *Pinus* trees, 30.10.1992, G.2574.

**59. C. picaceus (Bull.) Fr.**

Çanakkale, between Çan and Biga, *Quercus* area, 24.11.1992, G.2565; Kapanbelen Village, in *Quercus* area, 24.11.1992, G.2577.

**Bolbitiaceae**

**60. Agrocybe cylindracea (DC.: Fr.) Maire**

Çanakkale, between Çan and Biga, in *Quercus* area, 24.11.1992, G.2056.

**Strophariaceae**

**61. Hypholoma fasciculare (Huds.: Fr.) Kumm.**

Çanakkale, between Kalkım and Edremit, Kazdağı, in *Abies* forest, 01.12.1992, G.2808.

**62. Pholiota mutabilis (Schaeff.: Fr.) Kumm.**

Çanakkale, Çan, Kirazlı Village, Balaban area, in *Pinus* trees, 30.10.1992, G.2790.

\*63. ***Psilocybe inquilina*** (Fr.: Fr.) Bres.

Çanakkale, Çan, Kirazlı Village, Balaban area, in *Pinus* trees, 30.10.1992, G.2077.

64. ***Stropharia aeruginosa*** (Curtis : Fr.) Quél.

Çanakkale, between Kalkım and Edremit, Kazdağı, in *Abies* forest, 01.12.1992, G.2828; between Kalkım and Hamdibey, in *Pinus* area, 01.12.1992, G.2864.

65. ***S. coronilla*** (Bull.: Fr.) Quél.

Çanakkale, between Biga and Çan, around Sarıkaya Village, in *Pinus* forest, 30.10.1992, G.2052.

#### **Crepidotaceae**

66. ***Crepidotus mollis*** (Schaeff.: Fr.) Kummer

Çanakkale, Bayramiç, Evciler Village, nort side of Kazdağı, Karanlıkdere area, in coniferous forest, 31.10.1992, G.2101; Biga, Akkayrak Village, in mixed forest, 24.11.1992, G.2584.

#### **Cortinariaceae**

67. ***Hebeloma crustuliniforme*** (Bull.: Fr.) Quél.

Çanakkale, between Yenice and Balya, Hamdibey area, in mixed forest, 31.10.1992, G.2145.

#### **Russulaceae**

68. ***Lactarius chrysorrheus*** Fr.

Çanakkale, Çan, Kirazlı Village, Balaban area, in *Pinus* trees, 30.10.1992, G.2793.

69. ***L. deliciosus*** (Fr.) S. F. Gray

Çanakkale, between Kalkım and Edremit, Kazdağı, in *Abies* forest, 01.12.1992, G.2781.

70. ***L. deterrimus*** Groeger

Çanakkale, between Çan and Yenice, 10 km, 31.10.1992, G.2132.

## **Conclusion and Discussion**

In this study, 70 macrofungi were identified, 7 of which belonged to *Ascomycetes* and 63 to *Basidiomycetes*.

When comparisoned with the studies carried out in Balıkesir by Yılmaz et al. (7) and Aşkun (8), there are similarities among species. The reason for this is that Çanakkale and Balıkesir have similar climates and habitats. Especially *Omphalotus olearius*, *Fomes fomentarius*, *Laetiporus sulphureus* and *Stereum hirsutum* have been seen in many places. These species have a some demages on different trees. Although *Chroogomphus rutilus* and *Rhizopogon roseolus* are eaten according to the literature, the local people do not eat them. *Morchella* and *Lactarius* species have been collected, and eaten by local people and exported to the European Countries.

With this study, 3 species (*Xylaria hypoxylon*, *Rickenella fibula*, *Psilocybe inquilina*) were added to the Turkish Macromycota.

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<i>Agaricus arvensis</i>
<i>Agaricus campestris</i>
<i>Agaricus cupreobrunneus</i>
<i>Agaricus semotus</i>
<i>Agrocybe cylindracea</i>
<i>Amanita codinae</i>
<i>Amanita gemmata</i>
<i>Armillaria mellea</i>
<i>Armillaria tabescens</i>
<i>Ascocoryne cylichnium</i>
<i>Bovista plumbea</i>
<i>Bovista pusilla</i>
<i>Calvatia utriformis</i>
<i>Cantharellus cibarius</i>
<i>Chroogomphus rutilus</i>
<i>Clitocybe geotropa</i>
<i>Clitocybe odora</i>
<i>Collybia butyracea</i>
<i>Collybia marasmioides</i>
<i>Coprinus disseminatus</i>
<i>Coprinus galericuliformis</i>
<i>Coprinus micaceus</i>
<i>Coprinus picaceus</i>
<i>Crepidotus mollis</i>
<i>Cyathus olla</i>
<i>Fistulina hepatica</i>
<i>Fomes fomentarius</i>
<i>Ganoderma lucidum</i>
<i>Hebeloma crustuliniforme</i>
<i>Hypholoma fasciculare</i>
<i>Laccaria laccata</i>
<i>Lactarius chrysorrheus</i>
<i>Lactarius deliciosus</i>
<i>Lactarius deterrimus</i>
<i>Laetiporus sulphureus</i>
<i>Lentinus tigrinus</i>
<i>Lycoperdon echinatum</i>
<i>Lycoperdon molle</i>
<i>Lycoperdon perlatum</i>
<i>Macrolepiota kondradii</i>
<i>Macrolepiota procera</i>
<i>Macrolepiota rhacodes</i>
<i>Marasmius oreades</i>
<i>Morchella angusticeps</i>
<i>Morchella conica</i>
<i>Morchella costata</i>

<i>Morchella intermedia</i>
<i>Mycena rosea</i>
<i>Mycena strobilicola</i>
<i>Omphalotus olearius</i>
<i>Phellinus pini</i>
<i>Pholiota mutabilis</i>
<i>Pisolithus arhizus</i>
<i>Pleurotus ostreatus</i>
<i>Polyporus arcularius</i>
<i>Psilocybe inquilina</i>
<i>Rhizopogon luteolus</i>
<i>Rhizopogon roseolus</i>
<i>Rickenella fibula</i>
<i>Sarcoscypha coccinea</i>
<i>Schizophyllum commune</i>
<i>Stereum hirsitum</i>
<i>Stropharia aeruginosa</i>
<i>Stropharia coronilla</i>
<i>Suillus bellinii</i>
<i>Suillus bovinus</i>
<i>Trametes versicolor</i>
<i>Tremella mesenterica</i>
<i>Tricholoma fracticum</i>
<i>Xylaria hypoxylon</i>

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