

1-1-2007

## Macrofungi of Honaz Mountain (Denizli)

KUDRET GEZER

MUSTAFA İŞILOĞLU

AZİZ TÜRKOĞLU

HAKAN ALLI

Follow this and additional works at: <https://journals.tubitak.gov.tr/botany>



Part of the [Botany Commons](#)

---

### Recommended Citation

GEZER, KUDRET; İŞILOĞLU, MUSTAFA; TÜRKOĞLU, AZİZ; and ALLI, HAKAN (2007) "Macrofungi of Honaz Mountain (Denizli)," *Turkish Journal of Botany*. Vol. 31: No. 3, Article 6. Available at: <https://journals.tubitak.gov.tr/botany/vol31/iss3/6>

This Article is brought to you for free and open access by TÜBİTAK Academic Journals. It has been accepted for inclusion in Turkish Journal of Botany by an authorized editor of TÜBİTAK Academic Journals. For more information, please contact [academic.publications@tubitak.gov.tr](mailto:academic.publications@tubitak.gov.tr).

## Macrofungi of Honaz Mountain (Denizli)

Kudret GEZER<sup>1</sup>, Mustafa İŞILOĞLU<sup>2</sup>, Aziz TÜRKOĞLU<sup>1,\*</sup>, Hakan ALLI<sup>2</sup>

<sup>1</sup>Pamukkale University, Education Faculty, Science Education Department, İncilipınar Campus, Denizli - TURKEY

<sup>2</sup>Muğla University, Faculty of Science and Arts, Biology Department, 48000 Muğla - TURKEY

Received: 29.09.2006

Accepted: 15.03.2007

**Abstract:** Specimens of macrofungi were collected from localities on Honaz Mountain (Denizli) in 2005 and 2006, particularly during autumn and spring. Field and laboratory studies revealed a total of 109 taxa belonging to 64 genera, 32 families and 2 classes. Six taxa belong to Ascomycetes and 103 to Basidiomycetes.

**Key Words:** Macrofungi, taxonomy, Denizli, Turkey

### Honaz Dağının Makrofungusları (Denizli)

**Özet:** 2005-2006 yılları arasında Honaz Dağına (Denizli) ait lokalitelerden özellikle sonbahar ve ilkbahar aylarında bazı makrofungus örnekleri toplanmıştır. Arazi ve laboratuvar çalışmaları sonucu 2 sınıf, 32 familya ve 64 cinsine ait toplam 109 tür teşhis edilmiştir. 6 taxa Ascomycetes'e 103 taxa Basidiomycetes sınıfına aittir.

**Anahtar Sözcükler:** Makrofunguslar, taksonomi, Denizli, Türkiye

### Introduction

Many taxonomic studies of the macrofungal flora of Turkey have been carried out and many others are in progress. The studies carried out on macrofungi species between 1932 and 2005 have been reviewed, and it was determined that there are approximately 1600 documented macrofungi species in Turkey (Sesli & Denchev, 2005). In these studies, the Mediterranean, Marmara, Black Sea and western part of Turkey have been investigated. Although many taxonomic studies have been performed in the Aegean region, no information is available about Honaz Mountain. Therefore, this area was chosen as a research area.

Honaz Mountain, which is the highest mountain in the Aegean region, is located in Denizli province (Figure 1) and is influenced by Mediterranean and Aegean climates. Trees growing in the study area include *Pinus brutia*, *P. nigra*, *Juglans regia*, *Juniperus excelsa*, *J. foetidissima* and *Quercus ilex*.

### Materials and Methods

Macrofungi carpophores were collected on Honaz Mountain (Denizli) in 2005 and 2006. The field studies were conducted mostly in autumn and spring, since during these periods the climatic conditions are most suitable for carpophore formation. Relevant morphological and ecological characteristics of the macrofungi were recorded and they were photographed in their natural habitats. The local consumption of macrofungi and their local names were recorded by interviews with local people. Then the macrofungi were taken to the laboratory for further investigation. Spore prints were prepared and spores photographed. Some reagents (Melzer's reagent, 5% KOH, H<sub>2</sub>SO<sub>4</sub>, cotton blue, etc.) were used for identification. The specimens were identified by examining their macroscopic and microscopic features, using references by Marchand (1971, 1973, 1975, 1977, 1980, 1982, 1983, 1986), Phillips (1981), Watling (1982), Moser (1983),

\* E-mail: azizturkoglu@yahoo.com

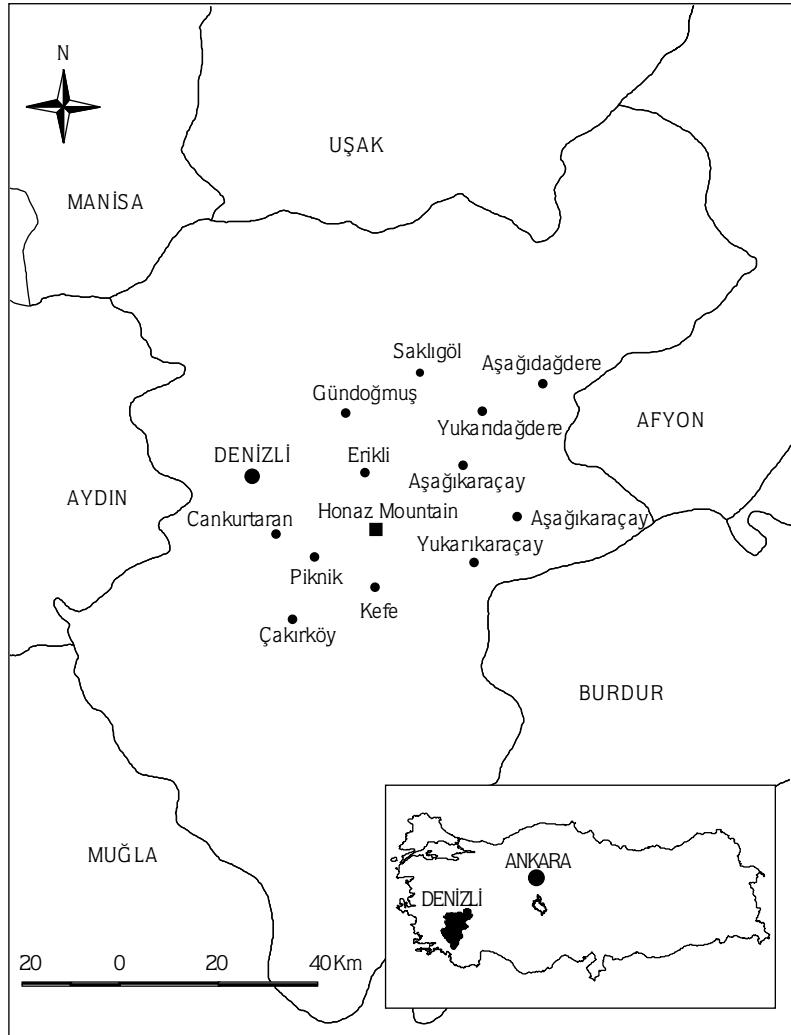


Figure 1. Collection areas.

Breitenbach & Kränzlin (1984, 1986, 1991, 1995, 2000), Capelli (1984), Pacioni (1985), Watling & Gregory (1987, 1989), Bresinsky & Besl (1990) and Ellis & Ellis (1990). The taxa are arranged according to Kirk et al. (2001). Dried specimens were numbered and placed in sealed bags. In addition they were kept in a deep freeze for a week to protect them from internal and external parasite attacks. All collected specimens are now deposited at Pamukkale University, Education Faculty, Science Department Laboratory, in Denizli.

## Results

In our study 109 taxa belonging to 32 families were identified. These taxa are presented with their localities, habitats, altitudes, collection dates and accession numbers.

### ASCOMYCETES

#### Helvellaceae

1. *Helvella acetabulum* (L.) Qué.

Honaz Mountain, Döngeltepe district, in *Pinus brutia* forest, 1250 m, 15.04.2005, Türkoğlu 1011.

2. *Helvella lacunosa* Afzel.

Cankurtaran district, in *Pinus brutia* forest, 910 m, 15.04.2005, Türkoğlu 1007.

**Morchellaceae**3. *Morchella elata* Fr.

Arpacık area, in *Pinus nigra* forest, under *Cistus salvifolius*, 1250 m, 15.04.2005, Türkoğlu 1019.

4. *Morchella esculenta* (L.) Pers.

Honaz National Park, in *Pinus brutia* forest, under *Cistus salvifolius*, 1050 m, 15.04.2005, Türkoğlu 1022.

5. *Morchella vulgaris* (Pers.) Bound.

Döngeltepe district, in *Pinus brutia* forest, under *Cistus salvifolius*, 1300 m, 15.04.2005, Türkoğlu 1015.

**Pezizaceae**6. *Sarcosphaera coronaria* (Jacq.) J.Schröt.

Honaz National Park, in *Pinus brutia* forest, 1050 m, 15.04.2005, Türkoğlu 1030.

**BASIDIOMYCETES****Agaricaceae**7. *Agaricus bisporus* (J.E.Lange) Pilát

Çayıralanı district, in field area, 1300 m, 14.05.2006, Türkoğlu 1665.

8. *Agaricus campestris* L.

Saklıgöl, Akbaş village, in *Pinus brutia* forest, 1100 m, 23.10.2005, Türkoğlu 1263. Döngeltepe district, in grass, 1300 m, 02.07.2005, Türkoğlu 1141.

9. *Agaricus xanthodermus* Genev.

Menteşe village, in *Pinus nigra* forest, 1200 m, 10.05.2005, Türkoğlu 1113.

10. *Coprinus atramentarius* (Bull.) Fr.

Cankurtaran, near stream, on buried wood, 910 m, 15.04.2005, Türkoğlu 1020.

11. *Coprinus comatus* (O.F.Mull.) Pers.

Cankurtaran, in riverbed, 910 m, 15.04.2005, Türkoğlu 1013.

12. *Coprinus disseminatus* (Pers.) Gray.

Honaz National Park, on buried wood, in riverbed, 910 m, 15.04.2005, Türkoğlu 1006.

13. *Coprinus micaceus* (Bull.) Fr.

Cankurtaran, in riverbed, on buried wood, 910 m, 22.05.2006, Türkoğlu 1930.

14. *Lepiota alba* Beeli

Cankurtaran district, near the stream, 900 m, 15.04.2005, Türkoğlu 1002.

15. *Lepiota cristata* (Bolton) P.Kumm.

Cankurtaran district, near the stream, 900 m, 15.04.2005, Türkoğlu 1012; Saklıgöl, near the lake, 1150 m, 18.06.2005, Türkoğlu 1134; Cankurtaran district, near the stream, 900 m, 02.07.2005, Türkoğlu 1158.

16. *Lepiota griseovirens* Maire

Cankurtaran district, near the stream, 900 m, 15.04.2005; Türkoğlu 1025, Cankurtaran district, near the stream, 900 m, 15.04.2006, Türkoğlu 1650.

17. *Lepiota oreadiformis* Velen.

Cankurtaran district, near the stream, 900 m, 23.04.2006, Türkoğlu 1385.

18. *Lepiota subincarnata* J.E.Lange

Cankurtaran district, near the stream, 910 m, 23.04.2006, Türkoğlu 1399.

19. *Macrolepiota procera* (Scop.) Singer

Honaz National Park, in *Pinus brutia* forest, under *Cistus salvifolius*, 1050 m, 12.10.2005, Türkoğlu 1211; Atalanı district, in *Pinus nigra* forest, 1300 m, 12.10.2005, Türkoğlu 1219.

20. *Macrolepiota rhacodes* (Vittad.) Singer

Honaz National Park, in *Pinus brutia* forest, under *Cistus salvifolius*, 1100 m, 12.10.2005, Türkoğlu 1200; Atalanı district, in *Pinus nigra* forest, 1300 m, 12.10.2005, Türkoğlu 1201.

**Asteraceae**21. *Astraeus hygrometricus* (Pers.) Morgan

Honaz National Park, Denizli-Antalya old road, 15 km, in *Pinus brutia* forest, 1050 m, 02.05.2006, Türkoğlu 1990.

**Bankeraceae**22. *Hydnellum auratile* (Britzelm.) Maas Geest.

Honaz National Park, picnic area, in *Pinus brutia* forest, 1050 m, 13.11.2005, Türkoğlu 1339.

23. *Sarcodon glaucopus* Maas Geest. & Nannf.

Honaz National Park, picnic area, in *Pinus brutia* forest, 1050 m, 13.11.2005, Türkoğlu 1323.

#### **Bolbitiaceae**

##### 24. *Agrocybe cylindracea* (DC.) Gillet

Arpacık district, on poplar, 1250 m, 27.04.2005, Türkoğlu 1070. Cankurtaran district, on *Salix alba*, in riverbed, 900 m, 10.05.2005, Türkoğlu 1114.

##### 25. *Agrocybe praecox* (Pers.) Fayod

Karateke village, on poplar, 910 m, 10.05.2005, Türkoğlu 1119.

##### 26. *Conocybe siennophylla* (Berk. & Broome) Singer

Döngeltepe, in meadows, 1250 m, 04.05.2005, Türkoğlu 1090; Cankurtaran district, near stream, in meadows, 910 m, 23.04.2006, Türkoğlu 1381.

##### 27. *Hebeloma eburneum* Malençon

Akçaalan district, in *Pinus nigra* forest, 1300 m, 10.05.2005, Türkoğlu 1102.

##### 28. *Hebeloma mesophaeum* (Pers.) Fr.

Akçaalan district, in *Pinus nigra* forest, 1300 m, 10.05.2005, Türkoğlu 1101.

##### 29. *Panaeolus ater* (J.E.Lange) Kühner & Romagn.

Göktepe village, near garden, in field area, 900 m, 22.05.2006, Türkoğlu 1960.

##### 30. *Panaeolus campanulatus* (L.) Quél.

Arpacık district, in field area, 1250 m, 25.05.2006, Türkoğlu 1961.

##### 31. *Panaeolus papilionaceus* (Bull.) Quél.

Cankurtaran district, near garden, in field, 920 m, 22.05.2006, Türkoğlu 1935.

#### **Boletaceae**

##### 32. *Boletus chrysenteron* Bull.

Cankurtaran, road side, in *Pinus brutia* forest, 910 m, 20.10.2005, Türkoğlu 1257.

##### 33. *Boletus edulis* Bull.

Honaz National Park, in *Quercus ilex* forest, 1300 m, 27.04.2005, Türkoğlu 1078.

##### 34. *Chalciporus piperatus* (Bull.) Bataille

Kefe plateau, camping area, in *Pinus nigra* forest, 1280 m, 19.05.2006, Türkoğlu 1901.

35. *Strobilurus stephanocystis* (Kühner & Romagn. ex Hora) Singer

Kefe plateau, camping area, in *Pinus nigra* forest, 1280 m, 19.05.2006, Türkoğlu 1925.

#### **Cortinariaceae**

##### 36. *Gymnopilus penetrans* (Fr.) Murrill

Saklıgöl, Akbaş village, in *Pinus brutia* forest, on stumps, 1100 m, 18.06.2005, Türkoğlu 113; Cankurtaran district, in *Pinus brutia* forest, on stumps, 900 m, 02.07.2005, Türkoğlu 1151.

##### 37. *Inocybe rimosa* (Bull.) P.Kumm.

Honaz National Park, Acıpayam old road, 15 km, in *Pinus brutia* forest, 1000 m, 04.05.2005, Türkoğlu 1082.

#### **Entolomataceae**

##### 38. *Entoloma scabrosum* (Fr.) Noordel.

Erikli district, in *Pinus nigra* forest, 1400 m, 25.05.2006, Türkoğlu 1962.

#### **Ganodermataceae**

##### 39. *Ganoderma lucidum* (Curtis) P.Karst.

Karateke village, on *Pinus nigra*, 1200 m, 17.11.2005, Türkoğlu 1340; Cankurtaran district, on *Pinus brutia*, 910 m, 14.05.2006, Türkoğlu 1656.

#### **Geastraceae**

##### 40. *Geastrum elegans* Vittad.

Karateke village, in *Pinus brutia* forest, 1200 m, 12.10.2005, Türkoğlu 1218.

##### 41. *Geastrum fimbriatum* Fr.

Cankurtaran district, in *Pinus brutia* forest, 910 m, 13.11.2005, Türkoğlu 1324.

##### 42. *Geastrum pectinatum* Pers.

Karateke village, in *Pinus brutia* forest, 1200 m, 12.10.2005, Türkoğlu 1216; Honaz National Park, in *Pinus brutia* forest, 1000 m, 14.04.2005, Türkoğlu 1658.

##### 43. *Geastrum rufescens* Pers.

Cankurtaran district, in *Pinus brutia* forest, 910 m, 13.11.2005, Türkoğlu 1322.

#### **Gomphidiaceae**

##### 44. *Chroogomphus rutilus* (Schaeff.) O.K.Miller

Aşağıkaraçay village, 110 m, 23.04.2005, Türkoğlu 1042; Kefe plateau, in *Pinus brutia* forest, 1280 m, 17.11.2005, Türkoğlu 1346.

#### Hapalopilaceae

45. *Bjerkandera adusta* (Willd.) P.Karst

Cankurtaran district, on *Populus nigra*, 910 m, 05.06.2006 Türkoğlu 1991.

#### Hymenochaetaceae

46. *Inonotus radiatus* (Sowerby) P.Karst.

Yukarıdağdere village, on *Pinus brutia*, 1100 m, 18.06.2005, Türkoğlu 1131.

47. *Phellinus pini* (Brot.) Bondartsev & Singer

Gündoğmuş district, on *Pinus nigra*, 1250 m, 23.11.2005, Türkoğlu 1315.

48. *Phellinus pomaceus* (Pers.) Maire

Menteşe village, on *Pistacia lentiscus*, 1200 m, 23.04.2006, Türkoğlu 1395.

49. *Phellinus robustus* (P.Karst.) Bourdot & Galzin

Yukarıdağdere village, on *Pinus brutia*, 1100 m, 18.06.2005, Türkoğlu 1133.

50. *Phellinus torulosus* (Pers.) Bourdot & Galzin

Aşağıdağdere village, on *Quercus ilex*, 1100 m, 18.06.2005, Türkoğlu 1337.

51. *Phellinus vorax* (Harkn.) Cerny

Honaz National Park, on *Salix alba*, 950 m, 15.04.2005, Türkoğlu 1021.

#### Lycoperdaceae

52. *Langermannia gigantea* (Batsch) Rostk

Honaz National Park, Çayıralanı district, in *Pinus nigra* forest, 1300 m, 14.05.2006, Türkoğlu 1700.

53. *Lycoperdon lividum* Pers.

Akbaş village, in *Pinus brutia* forest, 1150 m, 18.06.2005, Türkoğlu 1130.

54. *Lycoperdon molle* Pers.

Akbaş village, in *Pinus brutia* forest, 1150 m, 18.06.2005, Türkoğlu 1129.

55. *Lycoperdon perlatum* Pers.

Akbaş village, *Pinus brutia* forest, 1150 m, 18.06.2005, Türkoğlu 1122; Honaz National Park, Çayıralanı district, in *Pinus nigra* forest, 1300 m, 14.05.2006, Türkoğlu 1655.

56. *Lycoperdon pyriforme* Schaeef.

Honaz National Park, Çayıralanı district, in *Pinus nigra* forest, on stumps, 1300 m, 14.05.2006, Türkoğlu 1656.

57. *Lycoperdon umbrinum* Pers.

Honaz National Park, Çayıralanı district, in *Pinus nigra* forest, on stumps, 1300 m, 14.05.2006, Türkoğlu 1657.

#### Marasmiaceae

58. *Armillaria mellea* (Vahl) P.Kumm.

Honaz National Park, Acıpayam road, 15 km, on stumps of *Populus alba*, 1100 m, 23.04.2005, Türkoğlu 1053; Göbeciktepe area, on stumps of *Populus alba*, 09.10.2005, Türkoğlu 1187; Döngeltepe area, 1250 m, 14.05.2006, Türkoğlu 1666.

59. *Omphalotus olearius* (DC.) Singer

Saklıgöl, on *Styrax officinalis*, 1100 m, 27.10.2005, Türkoğlu 1289.

60. *Strobilurus tenacellus* (Pers.) Singer

Aşağıdağdere village, on cones of *Pinus brutia*, 1100 m, 18.06.2005, Türkoğlu 1139.

#### Meripilaceae

61. *Grifola frondosa* (Dicks.) Gray

Honaz National Park, in *Pinus brutia* forest, 1050 m, 04.05.2005, Türkoğlu 1073.

#### Nidulariaceae

62. *Cyathus olla* (Batsch) Pers.

Kefe plateau, in *Pinus nigra* forest, 1300 m, 17.11.2005, Türkoğlu 1352.

#### Pisolithaceae

63. *Pisolithus arrhizus* (Scop.) Rauschert

Denizli-Antalya old road, 15 km, roadside, 1000 m, 20.10.2005, Türkoğlu 1241; Aşağıdağdere village, in *Pinus brutia* forest, 1100 m, 05.06.2006, Türkoğlu 2000.

#### Pleuroteaceae

64. *Pleurotus ostreatus* (Jacq.) P.Kumm.

Honaz National Park, on *Juniperus excelsa* forest, 1400 m, 20.10.2005, Türkoğlu 1246; Akbaş village, on *Morus alba*, 1100 m, 23.10.2005, Türkoğlu 1268; Döngeltepe, on stump of *Pinus brutia*, 1350 m, 10.11.2005, Türkoğlu 1289.

### Pluteaceae

#### 65. *Amanita ovoidea* (Bull.) Link

Saklıgöl, Akbaş village, in *Pinus brutia* forest, 1100 m, 07.07.2005, Türkoğlu 1166.

#### 66. *Amanita solitaria* (Bull.) Fr.

Saklıgöl, Akbaş village, in *Pinus brutia* forest, 1100 m, 07.07.2005, Türkoğlu 1173.

#### 67. *Amanita vaginata* (Bull.) Lam.

Acıpayam old road, 20 km, in *Pinus brutia* forest, 1000 m, 15.04.2005, Türkoğlu 1014; Acıpayam old road, 20 km, in *Pinus brutia* forest, 1000 m, 23.04.2006, Türkoğlu 1400.

#### 68. *Volvariella gloiocephala* (DC.) Boekhout & Enderle

Cankurtaran district, in field area, 950 m, 15.04.2005, Türkoğlu 1009; Göktepe village, 900 m, 04.11.2005, Türkoğlu 1362.

### Polyporaceae

#### 69. *Fomes fomentarius* (L.) J.J.Kickx

Honaz National Park, on *Populus nigra*, 930 m, 23.04.2005, Türkoğlu 1047; Cankurtaran district, on *Juglans regia*, 900 m, 04.12.2005, Türkoğlu 1360.

#### 70. *Funalia trogii* (Berk.) Bondartsev & Singer

Honaz National Park, near stream, on *Populus nigra*, 920 m, 23.04.2005, Türkoğlu 1031; Göktepe village, road side, on *Platanus orientalis*, 890 m, 14.05.2006, Türkoğlu 1652.

#### 71. *Laetiporus sulphureus* (Bull.) Murrill

Honaz National Park, Kabaardıç area, on *Quercus ilex*, 1300 m, 27.04.2005, Türkoğlu 1068.

#### 72. *Lentinus tigrinus* (Bull.) Fr.

Denizli-Antalya old road 20 km, on *Populus brutia*, 950 m, 07.07.2005 Türkoğlu 1169; Göktepe village, road side, on *Populus brutia*, 900 m, 14.05.2006 Türkoğlu 1653.

### Psathyrellaceae

#### 73. *Lacrymaria lacrymabunda* (Bull.) Pat.

Karateke village, on rotten wood, 1200 m, 22.05.2006, Türkoğlu 1930.

#### 74. *Psathyrella bifrons* (Berk.) A.H.Sm.

Akbaş village, in field area, 1100 m, 18.06.2005, Türkoğlu 1125.

#### 75. *Psathyrella candolleana* (Fr.) Maire

Gökpinar village, near the stream, 800 m, 04.05.2005, Türkoğlu 1081.

#### 76. *Psathyrella obtusata* var. *aberrans* Kits van Wav.

Gökpinar village, near the stream, 850 m, 10.05.2005, Türkoğlu 1088.

### Rhizopogonaceae

#### 77. *Rhizopogon luteolus* Fr.

Honaz National Park, Göbeciktepe area, in *Pinus nigra* forest, 1250 m, 15.04.2005, Türkoğlu 1003; Honaz National Park, picnic area, in *Pinus brutia* forest, 1050 m, 15.04.2005, Türkoğlu 1018.

#### 78. *Rhizopogon roseolus* (Corda) Th. Fr.

Cankurtaran district, in field area, 910 m, 23.04.2005, Türkoğlu 1049; Akbaş village, in *Pinus brutia* forest, 1050 m, 18.06.2005, Türkoğlu 1124; Aşağıdağdere village, in *Pinus brutia* forest, 1100 m, 18.06.2005, Türkoğlu 1132.

### Russulaceae

#### 79. *Lactarius deliciosus* (L.) Gray

Gündoğmuş district, in *Pinus nigra* forest, 1250 m, 13.11.2005, Türkoğlu 1321.

#### 80. *Russula cyanoxantha* (Schaeff.) Fr.

Gündoğmuş district, in *Pinus nigra* forest, 1250 m, 13.11.2005, Türkoğlu 1340.

#### 81. *Russula delica* Fr.

Honaz National Park, in *Pinus brutia* forest, 1050 m, 20.10.2005, Türkoğlu 1249.

#### 82. *Russula foetens* (Pers.) Pers.

Çayıralanı district, in *Pinus nigra* forest, 1300 m, 04.05.2006, Türkoğlu 1669.

#### 83. *Russula olivacea* (Schaeff.) Fr.

Cankurtaran, near the road, in *Pinus brutia* forest, 1000 m, 13.05.2006, Türkoğlu 1612.

#### 84. *Russula sardonica* Fr.

Cankurtaran, near the road, in *Pinus brutia* forest, 1000 m, 13.05.2006, Türkoğlu 1601.

#### 85. *Russula torulosa* Bres.

Cankurtaran, near the road, in *Pinus brutia* forest, 1000 m, 23.04.2005, Türkoğlu 1044.

86. *Russula vinosa* Lindblad  
Cankurtaran, near the road, in *Pinus brutia* forest, 1000 m, 23.04.2005, Türkoğlu 1043.
- Schizophyllaceae**
87. *Schizophyllum commune* Fr.  
Cankurtaran district, near the stream, on *Juglans regia*, 910 m, 17.11.2005, Türkoğlu 1359.
- Stereaceae**
88. *Stereum hirsutum* (Willd) Pers.  
Honaz National Park, Erikli district, 1400 m, on *Quercus ilex*, 15.04.2005, Türkoğlu 1029; Çayıralanı area, on *Quercus ilex*, 1300 m, 23.04.2005, Türkoğlu 1058; Yukarıdagdere village, on *Quercus, ilex* 1100 m, 10.05.2005, Türkoğlu 1129; Çayıralanı area, on *Quercus, ilex* 1300 m, 14.05.2005, Türkoğlu 1660.
89. *Stereum ocraceoflavum* (Schwein.) Fr.  
Honaz National Park, Döngeltepe area, on *Quercus ilex*, 1300 m, 23.04.2005, Türkoğlu 1031.
- Strophariaceae**
90. *Hypholoma fasciculare* (Huds.) P.Kumm.  
Göbeciktepe area, on stumps, 1250 m, 04.05.2005, Türkoğlu 1095.
91. *Stropharia coronilla* (Bull.) Fr.  
Kabaardıç area, in *Pinus nigra* forest, 1300 m, 04.05.2005, Türkoğlu 1096.
- Suillaceae**
92. *Suillus bovinus* (Pers.) Roussel  
Saklıgöl, Akbaş village, in *Pinus brutia* forest, 1100 m, 07.07.2005, Türkoğlu 1164.
93. *Suillus collinitus* (Fr.) Roussel  
Honaz National Park, in *Quercus ilex* forest, 1300 m, 27.04.2005, Türkoğlu 1079.
94. *Suillus granulatus* (L.) O.Kuntze  
Saklıgöl, Akbaş village, in *Pinus nigra* forest, 1100 m, 07.07.2005, Türkoğlu 1162.
95. *Suillus luteus* (L.) Roussel  
Çukurköy village, in field area, 1100 m, 09.10.2005, Türkoğlu 1196.
- Tricholomataceae**
96. *Clitocybe costata* Kühner & Romagn.  
Honaz National Park, Gündoğmuş area, in *Pinus nigra* forest, 1250 m, 13.11.2005, Türkoğlu 1336.
97. *Clitocybe vermicularis* (Fr.) Quéf.  
Honaz National Park, Arpacık area, in *Pinus nigra* forest, 1250 m, 12.10.2005, Türkoğlu 1202; Honaz National Park, Gündoğmuş area, in *Pinus nigra* forest, 1250 m, 13.11.2005, Türkoğlu 1340; Honaz National Park, Gündoğmuş area, in *Pinus nigra* forest, 1250 m, 25.05.2006, Türkoğlu 1963.
98. *Gymnopus confluens* (Pers.) Antonín, Halling & Noordel.  
Saklıgöl, Akbaş village, in *Pinus brutia*, 1100 m, 23.10.2005, Türkoğlu 1271.
99. *Gymnopus dryophilus* (Bull.) Murrill  
Honaz National Park, Göbeciktepe area, in *Pinus nigra* forest, 1250 m, 20.10.2005, Türkoğlu 1244-1256.
100. *Hygrocybe nivea* (Scop.) P.D.Orton & Watling  
Honaz National Park, in *Pinus brutia* forest, 1050 m, 23.04.2006, Türkoğlu 1382.
101. *Laccaria laccata* (Scop.) Fr.  
Atalanı district, in field area, 1300 m, 23.04.2006, Türkoğlu 1410.
102. *Lepista nuda* (Bull.) Cooke  
Cankurtaran district, near stream, 900 m, 23.04.2005, Türkoğlu 1059; Saklıgöl, Aşağıdagdere village, in grass, 1050 m, 18.06.2005, Türkoğlu 1135; Cankurtaran district, near stream, 900 m, 20.10.2005, Türkoğlu 1253.
103. *Lepista sordida* (Fr.) Singer  
Kefe plateau, in grass, 1300 m, 04.12.2005, Türkoğlu 1140.
104. *Melanoleuca excissa* (Fr.) Singer  
Honaz National Park, picnic area, under *Quercus ilex*, 13.11.2005, 1050 m, Türkoğlu 1234.
105. *Mycena strobilicola* J.Favre & Kühn.  
Saklıgöl, Aşağıdagdere village, on cones of *Pinus brutia*, 1100 m, 18.06.2005, Türkoğlu 1126; Honaz National Park, Akçaalanı district, on cones of *Pinus nigra*, 1300 m, 20.10.2005, Türkoğlu 1252; Karateke village, on cones of *Pinus nigra*, 1200 m, 10.11.2005, Türkoğlu 1318; Çayıralanı district, on cones of *Pinus nigra*, 1300 m, 14.05.2006, Türkoğlu 1651.



106. *Tricholoma arvernense* Bon  
 Honaz National Park, in *Pinus brutia* forest, 1050 m,  
 09.10.2005, Türkoğlu 1184.
107. *Tricholoma imbricatum* (Fr.) P.Kumm.  
 Honaz National Park, in *Pinus brutia* forest, 1050 m,  
 09.10.2005, Türkoğlu 1181.
108. *Tricholoma myomyces* (Pers.) J.E.Lange

Saklıgöl, Yukarıdağdere village, in *Pinus brutia* forest,  
 1100 m, 18.06.2005, Türkoğlu 1137; Honaz National  
 Park, in *Pinus brutia* forest, 1100 m, 23.04.2006,  
 Türkoğlu 1380.

**Tulostomataceae**

109. *Tulostoma squamosum* Pers.  
 Cankurtaran district, in field area, 910 m,  
 15.04.2005, Türkoğlu 1024.

Table 1. Distribution species according to families.

Families	İşiloğlu & Öder 1995	Solak et al. 1999	Gezer 2000	Köse et al. 2006	Honaz
<i>Morchellaceae</i>	3	6	3	3	3
<i>Helvellaceae</i>	3	5	1	5	2
<i>Pezizaceae</i>	1	1	2	1	1
<i>Pisolithaceae</i>	1		1		1
<i>Hymenochaetaceae</i>		3	4	1	6
<i>Tulostomataceae</i>		1		1	1
<i>Nidulariaceae</i>		1		1	1
<i>Meripilaceae</i>					1
<i>Schizophyllaceae</i>	1		1	1	1
<i>Polyporaceae</i>	5	5	3	5	4
<i>Ganodermataceae</i>	1		1	1	1
<i>Geastraceae</i>		2	1	2	4
<i>Hapalopilaceae</i>					1
<i>Lycoperdaceae</i>	3	6	4	2	6
<i>Rhizopogonaceae</i>	2	2	2	2	2
<i>Suillaceae</i>				2	4
<i>Boletaceae</i>	11	2	3	3	4
<i>Gomphidiaceae</i>	1	1	1	1	1
<i>Pleuroteaceae</i>	3	1	1	3	1
<i>Tricholomataceae</i>	24	35	21	6	13
<i>Pluteaceae</i>	1	1	1	2	4
<i>Astraeaceae</i>					1
<i>Agaricaceae</i>	13	2	8	8	14
<i>Stereaceae</i>		2	1		2
<i>Bolbitiaceae</i>	3	2	1	1	8
<i>Strophariaceae</i>	7	5	4	1	2
<i>Cortinariaceae</i>	7	2	2	2	2
<i>Psathyrellaceae</i>					4
<i>Marasmiaceae</i>	3	4			3
<i>Bankeraceae</i>	2				2
<i>Entolomataceae</i>	1				1
<i>Russulaceae</i>	16	5	7	3	8
Total	112	94	73	57	109

## Discussion and Conclusion

In this study, 109 macrofungi taxa belonging to 32 families collected from Honaz Mountain were reported. Six of these belong to Ascomycetes and 103 to Basidiomycetes. Of those taxa, 5% of the macrofungi belong to Ascomycetes, while 95% belong to Basidiomycetes. The distribution of the taxa and their families are as follows: Agaricaceae 14, Tricholomataceae 13, Russulaceae 8, Bolbitiaceae 8, Hymenochaetaceae 6, Lycoperdaceae 6, Geastraceae 4, Boletaceae 4, Pluteaceae 4, Polyporaceae 4, Psathyrellaceae 4, Suillaceae 4, Marasmiaceae 3, Morchellaceae 3, Bankeraceae 2, Cortinariaceae 2, Entolomataceae 1, Helvellaceae 2, Pleurotaceae 1, Rhizopogonaceae 2, Stereaceae 2, Strophariaceae 2, Asteraceae 1, Ganodermataceae 1, Gomphidiaceae 1, Hapalopilaceae 1, Meripilaceae 1, Nidulariaceae 1, Pezizaceae 1, Schizophyllaceae 1, Pisolithaceae 1 and Tulostomataceae 1.

When compared, the macrofungi of Honaz were found to have similarities with the findings of studies conducted in other, neighbouring regions (İşiloğlu & Watling, 1992; Solak et al., 2000; Gezer, 2000; Köse et al., 2006) (Table 1). This may have been because of similarities in vegetation, climate and plant flora. Thirty-five of the 109 taxa are edible, but only *Morchella*

*esculenta*, *M. conica*, *M. elata*, *Rhizopogon roseolus*, *R. luteus*, *Lactarius deliciosus*, *Pleurotus ostreatus*, *Lepista nuda*, *Tricholoma myomyces*, *Macrolepiota procera*, *Agaricus campestris*, *A. bisporus* and *Russula delica* are known as edible mushrooms by local people. It was also found that the carpophores of *Morchella esculenta*, *M. conica*, *M. elata*, *Tricholoma myomyces*, *Macrolepiota procera* and *Lactarius deliciosus* were collected and sold by villagers.

Nine percent (10 species) of the taxa are poisonous and 57% (62 species) are inedible but none of them are recognised by local people. No poisoning incidents were recorded from the area.

Lignicolous macrofungi represented 26% of the species (28 species) in the area. Some live as parasites on live trees and cause organic product loss and structural damage to the host trees. The most common taxa were *Armillaria*, *Fomes*, *Ganoderma*, *Inonotus*, *Tremetes*, *Stereum*, *Phellinus* and *Schizophyllum commune*.

## Acknowledgement

We would like to thank the Scientific Research and Application Centre of Pamukkale University, Denizli, for its financial support.

## References

- Breitenbach J & Kränzlin F (1984-2000). *Fungi of Switzerland*. (Vol 1-5). Luzern: Verlag Mykologia.
- Brensinsky A & Besl HA (1990). *Colour Atlas of Poisonous Fungi*. London: Wolfe Publishing.
- Capelli A (1984). *Fungi Europaei, Agaricus* L.: Fr. Karsten: Libreria editrice Biella Giovanna, Italy.
- Ellis B & Ellis JP (1990). *Fungi without Gills (Hymenomycetes and Gasteromycetes)*. London: Chapman and Hill.
- Gezer K (2000). Contribution to the Macrofungi Flora of Antalya Province. *Turk J Bot* 24: 293-296.
- İşiloğlu M & Watling R (1992). Macromycetes of Mediterranean Turkey. *Edinb J Bot* 49: 99-121.
- Kirk PM, Cannon PF, David JC & Stalfers JA (2001). *Ainsworth & Bisby's Dictionary of the Fungi*, London: CABI Publishing. Electronic version: <http://www.speciesfungorum.org/AuthorsoffungalNames.htm>
- Köse S, Gezer K, Gökler I & Türkoğlu A (2006). Macrofungi of Bekilli District (Denizli). *Turk J Bot* 30: 267-272.
- Marchand A (1971-1986). *Champignons du nord et du midi*. (1-9). Perpignan: Société Mycologique des Pyrénées Méditerranéennes.
- Moser M (1983). *Keys to Agarics and Boleti*. Stuttgart: Gustav Fischer Verlag.
- Pacioni G (1985). *Mushrooms and Toadstools*. London: MacDonald and Co. Ltd.
- Phillips R (1981). *Mushrooms and Other Fungi of Great Britain and Europe*. London: Pan Books Ltd.
- Sesli E & Denchev CM (2005). Checklist of the Myxomycetes and Macromycetes in Turkey. *Mycol Balc* 2: 119-16.
- Solak MH, İşiloğlu M, Gücin F & Gökler İ (1999). Macrofungi of İzmir Province. *Turk J Bot* 23: 383-390.
- Watling R (1982). *British Fungus Flora. Bolbitaceae 3: Agrocybe, Bolbitius Conocybe*. 1-139. Edinburgh: Royal Botanic Garden.
- Watling R & Gregory NM (1987). *British Fungus Flora 5: Strophariaceae & Coprinaceae*. Edinburgh: Royal Botanic Garden.
- Watling R & Gregory NM (1989). *British Fungus Flora. Agarics and Boleti 6: Crepidotaceae, Pleurotaceae and other pleurotoid agarics*. Edinburgh: Royal Botanic Garden.