

Contributions to the macrofungal diversity of Uşak Province

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Abstract: This study was conducted on the macrofungal specimens collected from Uşak in 2006-2009. In field and laboratory studies, 100 taxa belonging to 30 families and 2 classes were identified. Ten taxa belong to *Ascomycetes* and 90 to *Basidiomycetes*. Seven of them, i.e. *Pseudoplectania sphagnophila* (Pers.) Kreisel, *Conocybe pulchella* (Velen.) Hauskn. & Svrček, *Entoloma polito flavipes* Noordel. & Liiv, *Entoloma saundersii* (Fr.) Sacc., *Entoloma serrulatum* (Fr.) Hesler, *Hygrophorus nemoreus* (Pers.) Fr., and *Rugosomyces ionides* (Bull.) Bon, are new records for Turkey.

Key words: Biodiversity, macrofungi, new records, Uşak, Turkey

Introduction

Uşak is a province located in the western part of Turkey, bordered by Denizli to the south, Kütahya to the north, Manisa to the west, and Afyonkarahisar to the east (Figure 1). The climate of Uşak Province is Mediterranean-alpine and semidry terrestrial type. The annual average temperature is 12.3 °C and the annual rainfall is about 540 mm (<http://www.klimadiagramme.de/Europa/usak.html>). The investigated area is a natural habitat for a number of trees and dominant forest plants, such as *Pinus brutia* Ten., *P. nigra* J.F.Arnold, *P. sylvestris* L., *Juniperus excelsa* M.Bieb., *J. oxycedrus* L., *J. foetidissima* Willd., *Quercus coccifera* L., *Q. ilex* L., and *Platanus orientalis* L.

Currently, 1827 taxa of the macrofungi of Turkey have been reported in more than 400 papers (Solak et al., 2007; Uzun et al., 2009; Sesli & Denchev, 2010; Allı, 2011; Allı et al., 2011). In the present study, many macrofungi samples were collected from

different localities of Uşak that had not been studied before. While 124 taxa were reported before in only one study (Türkoğlu et al., 2008) carried out in a part of Uşak Province, the 224 taxa reported included 100 new recorded taxa with this study.

Materials and methods

The specimens of this study were collected from different localities within Uşak Province between 2006 and 2009 (Figure 1). The field studies were conducted mostly in autumn and spring, since during these periods the climatic conditions are most suitable for carpophores formation. Relevant morphological and ecological characteristics of the macrofungi were recorded and photographed in their natural habitats. The local consumption of macrofungi and their local names were recorded by interviewing local people. Then they were taken to the laboratory for

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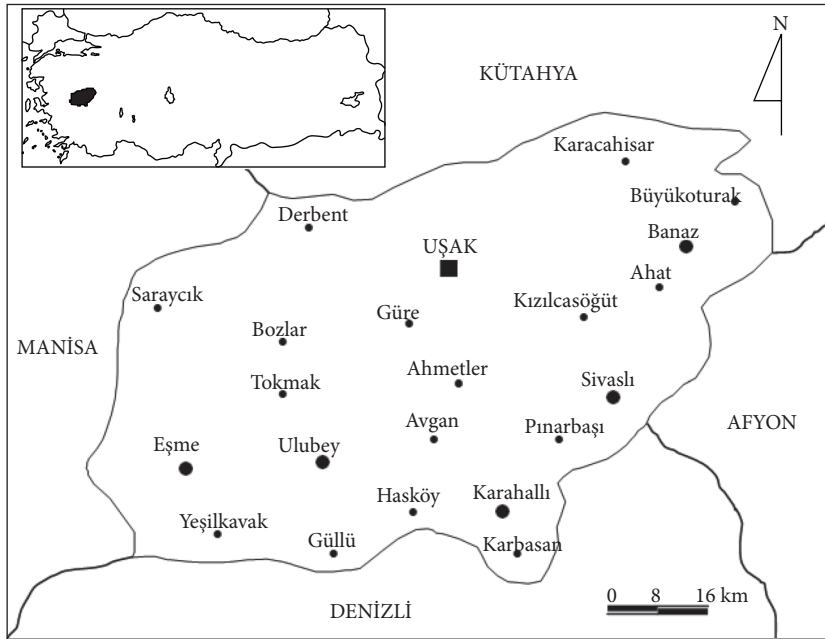


Figure 1. Map of the study area.

further investigation. Spore prints were prepared and spores photographed. The specimens were identified by examining their macroscopic and microscopic features, using references by Breitenbach and Kränzlin (1984-2000), Brensinsky and Besl (1990), Cappelli (1984), Ellis and Ellis (1990) Marchand, (1971-1986), Moser (1983), Pacioni (1985), Phillips (1981), Watling (1982), Watling and Gregory (1987, 1989), Kränzlin (2005), and Knudsen and Vesterholt (2008).

Dried specimens were numbered and placed in sealed bags. In addition, they were put into a deep freeze for a week to protect them from internal and external parasite attacks. All collected specimens are now deposited at Muğla University, Science Faculty, Biology Laboratory, in Muğla.

Results

In our study 100 taxa belonging to 30 families were identified. These taxa are presented with their localities, habitats, collection dates, and accession numbers.

ASCOMYCOTA

Discinaceae

1. *Discina melaleuca* Bres.

Banaz, Bahadır village, bank of the Gökkaya stream, in pine forest, 24.04.2009, *Türkoğlu* 4991.

Helvellaceae

2. *Helvella leucomelaena* (Pers.) Nannf.

Ulubey, Dumanlı village, in pine forest, 05.05.2007, *Türkoğlu* 3662; Banaz, Evrendede picnic area, in pine forest, 13.05.2007, *Türkoğlu* 3695; Banaz, Ahatköy, in pine forest, 24.04.2009, *Türkoğlu* 4985.

3. *Helvella queletii* Bres.

Eşme, Güllü town, in pine forest, 04.04.2007, *Türkoğlu* 3566.

4. *Picoa juniperi* Vittad.

Eşme, Kayapınar village, near the road, in calcareous soils associated with *Geranium*, *Helianthemum*, and *Cerastium* sp., 18.04.2008, *Türkoğlu* 4342; Uşak, Eşme, Yaylak, in picnic area, 24.04.2009, *Türkoğlu* 5022.

Morchellaceae

5. *Mitrophora semilibera* (DC.) Lév.

Banaz, Bahadır village, Gökkaya stream, in pine forest, 24.04.2009, *Türkoğlu* 4988.

6. *Morchella deliciosa* Fr.

Sivaslı, Selçikler village, in pine forest, 07.04.2007, *Türkoğlu* 3603; Banaz, Bahadır village, in pine forest, 23.04.2007, *Türkoğlu* 3638; Banaz, Gürtek village, Cihan stream, in pine forest, 12.05.2007, *Türkoğlu* 3690; Eşme, Güllü town, in pine forest, 12.04.2008, *Türkoğlu* 4318; Ulubey, Dumanlı village, in pine forest, 18.04.2008, *Türkoğlu* 4347; Banaz, Ahatköy, in pine forest, 24.04.2009, *Türkoğlu* 4984.

Pezizaceae

7. *Terfezia boudieri* Chatin

Eşme, Güllü town, in grass, 04.04.2007, *Türkoğlu* 3569; Eşme, Kayapınar village, in grass, 18.04.2008, *Türkoğlu* 4343; Eşme, Güllübağ village, in grass, 25.04.2009, *Türkoğlu* 5025.

Pyronemataceae

8. *Otidea alutacea* (Pers.) Masee

Eşme, Tokmak village, in pine forest, 08.12.2008, *Türkoğlu* 4916-4918.

Rhizinaceae

9. *Rhizina undulata* Fr.

Banaz, Bahadır village, in pine forest, 23.04.2007, *Türkoğlu* 3636; Banaz, Ahatköy, in pine forest, 23.04.2007, *Türkoğlu* 3640.

Sarcosomataceae

10. *Pseudoplectania sphagnophila* (Pers.) Kreisel

Fruiting body 1-1.5 cm, sack-like to cup-shaped. Hymenium black, outer surface has black furfuraceous and has a short stalk. Spores round, smooth, hyaline with a large drop, 10-12 µm (Figure 2).

Uşak, Güre town, in pine forest, 07.12.2008, *Türkoğlu* 4858.

BASIDIOMYCOTA

Agaricaceae

11. *Agaricus macrocarpus* (F.H.Møller) F.H.Møller

Banaz, Gürlek village, in pine forest, 25.05.2008, *Türkoğlu* 4466.

12. *Bovista plumbea* Pers

Banaz, Güllü, Yeniköy, in grass, 18.04. 2008, *Türkoğlu* 4341; Güre, in grass, 7.12.2008, *Türkoğlu* 4866; Karahallı, Karbasan town, in grass, 12.05.2008, *Türkoğlu* 4414; Eşme, Culture Park, in grass, 24.04.2009, *Türkoğlu* 5012.

13. *Cystoderma amianthinum* (Scop.) Fayod

Banaz, Evrendede picnic area, in pine forest, 21.11.2008, *Türkoğlu* 4735.

14. *Cystodermella granulosa* (Batsch) Harmaja

Eşme, Culture Park, in grass, 07.12.2008, *Türkoğlu* 4830.

15. *Lycoperdon mammiforme* Pers.

Eşme, Güllü town, in pine forest, 12.04.2008, *Türkoğlu* 4322; Banaz, Hamamboğazı District, in pine forest, 25.05.2008, *Türkoğlu* 4451.

Auriculariaceae

16. *Auricularia auricula-judae* (Bull.) Quél.

Banaz, Evrendede picnic area, on stumps of pine, 04.04.2007, *Türkoğlu* 3572.

Bolbitiaceae

17. *Bolbitius titubans* (Bull.) Fr. var. *titubans*

Eşme, Bozlar village, in grass, 08.12.2008, *Türkoğlu* 4899.

18. *Conocybe apala* (Fr.) Arnolds

Banaz, Bahadır village, Gökkaya stream, in pine forest, 24.04.2009, *Türkoğlu* 4995.

19. *Conocybe pulchella* (Velen.) Hauskn. & Svrček

Uşak, Güre town, in pine forest, 07.12.2008, *Türkoğlu* 4850.

20. *Conocybe rickeniana* P.D.Orton

Banaz, Hamamboğazı District, in pine forest, 26.04.2009, *Türkoğlu* 5035.

Cortinariaceae

21. *Cortinarius cotoneus* Fr.

Banaz, Ahatköy village, in pine forest, 13.11.2006, *Türkoğlu* 3244; Banaz, Hamamboğazı District, in pine forest, 13.11.2006, *Türkoğlu* 3253.

22. *Cortinarius trivialis* J.E.Lange

Sivaslı-Uşak road, 10 km, in pine forest, 07.04.2007, *Türkoğlu* 3609.



Figure 2. Ascocarp (a) and ascospores (b) of *Pseudoplectania sphagnophila*; basidiocarp (c) and basidiospores (d) of *Entoloma politoflavipes*; basidiocarp (e) and basidiospores (f) of *Entoloma saundersii*.

Entolomataceae

23. *Entoloma politoflavipes* Noordel. & Liiv

Cap 1-2 cm across, initially convex, later plane, centre indented, surface satiny, fibrillose, hygrophanous, dark brown when moist, beige-brown when dry. Flesh whitish, thin. Lamellae whitish at first, later pink. Stipe 3-5 × 0.2-0.6 cm, cylindrical, fragile, hollow and enlarged toward to base. Spores 5-7 angled, 7-9.5 × 5-7.5 μm (Figure 2).

Ulubey, Dumanlı village, in pine forest, 12.04.2008, Türkoğlu 4332.

24. *Entoloma saundersii* (Fr.) Sacc.

Cap 4-9 cm, hemispheric-convex at first, later convex to plane, sometimes umbonate and undulate, surface smooth and whitish when young, later cream to grey-beige. Flesh white, thick. Lamellae whitish when young, later pink-brown. Stipe 4-10 × 0.5-2 cm, cylindrical, enlarged toward to base, solid. Spores polygonal, 10-12.5 × 9-11 μm (Figure 2).

Banaz-Afyon road, 10 km, under *Populus* sp., 23.04.2007, Türkoğlu 3637.



Figure 3. Basidiocarps (a) and basidiospores (b) of *Entoloma serrulatum*; basidiocarp (c) and basidiospores (d) of *Hygrophorus nemoreus*; basidiocarps (e) and basidiospores (f) of *Rugosomyces ionides*.

25. *Entoloma serrulatum* (Fr.) Hesler

Cap 1-4 cm, conic-campanulate when young, later campanulate-convex to plane, centre umbilicate, surface appressed squamose, blue black at first, later dark violet-brown, margin acute, incurved. Flesh grey-blue to pale violet. Lamellae whitish when young, later grey violet to pink-brownish. Stipe 0.2-6 × 0.1-0.5 cm, cylindrical, solid at first, later hollow. Spores 5-7 angled, 8.5-12 × 6-8.5 µm (Figure 3).

Eşme, Culture Park, in grass, 08.12.2008, *Türkoğlu* 4929.

Fistulinaceae

26. *Fistulina hepatica* (Schaeff.) With.

Eşme, Güllü town, in pine forest, on stumps of pine, 22.11.2008, *Türkoğlu* 4770.

Fomitopsidaceae

27. *Laetiporus sulphureus* (Bull.) Murrill

Eşme, Güllü town, Kavaklıdere District, on *Populus* sp., 22.11.2008, *Türkoğlu* 4757; Uşak, Subaşı Park, on *Populus* sp., 07.12.2008, *Türkoğlu* 4840.

Hygrophoraceae

28. *Hygrophorus erubescens* (Fr.) Fr.

Banaz, Ahatköy village, in pine forest, 21.11.2008, *Türkoğlu* 4705.

29. *Hygrophorus latitabundus* Britzelm

Banaz, Hamamboğazı District, in pine forest, 21.11.2008 *Türkoğlu* 4720.

30. *Hygrophorus nemoreus* (Pers.) Fr.

Cap 5-10 cm, hemispheric when young, later plane with a slight umbo, surface dry, dull, radially fibrillose, reddish to orange-brown. Flesh white, orange-brownish under the cuticle, thick. Lamellae cream coloured when young, later salmon coloured tones. Stipe 0.5-1 × 0.8-1 cm, cylindrical, tapering toward the base. Spores elliptic, smooth, hyaline, with drops, 7-7.5 × 4-5 µm (Figure 3).

Banaz, Ahatköy village, in pine forest, 21.11.2008, *Türkoğlu* 4719.

31. *Hygrophorus olivaceoalbus* (Fr.) Fr.

Banaz, Ahatköy village, in pine forest, 02.12.2006, *Türkoğlu* 3371.

Hymenochaetaceae

32. *Fuscoporia torulosa* (Pers.) T.Wagner & M.Fisch.

Banaz, Ahatköy village, in pine forest, 02.12. 2006, *Türkoğlu* 3369.

Inocybaceae

33. *Inocybe amethystina* Kuyper

Banaz, Hamamboğazı District, in pine forest, 26.04.2009, *Türkoğlu* 5034.

34. *Inocybe fuscidula* Velen.

Uşak, Karaağaç village, in pine forest, 07.12.2008, *Türkoğlu* 4838; Uşak, Subaşı Park, under pine, 07.12.2008, *Türkoğlu* 4841.

35. *Inocybe geophylla* (Pers.) P.Kumm. var. *geophylla*

Banaz, Derbent village, in pine forest, 20.11.2008, *Türkoğlu* 4715.

36. *Inocybe geophylla* var. *lilacina* Gillet

Banaz, Evrendede picnic area, in pine forest, 21.11.2008, *Türkoğlu* 4751.

37. *Inocybe lacera* var. *rhacodes* (J.Favre) Kuyper

Uşak, Karaağaç village, in pine forest, 07.12.2008, *Türkoğlu* 4834; Sivaslı, Uzunoluk District, in pine forest, 26.04.2009, *Türkoğlu* 5031; Banaz, Hamamboğazı District, in pine forest, 26.04.2009, *Türkoğlu* 5039.

38. *Tubaria furfuracea* (Pers.) Gillet

Eşme, Tokmak village, in pine forest, 08.12.2008, *Türkoğlu* 4909.

Lyophyllaceae

39. *Rugosomyces ionides* (Bull.) Bon

Cap 2-4 cm across, convex at first, later expanded with a slight umbo, surface smooth, dull, fibrous-tomentose, lilac, lilac-brown, centre darker, margin paler. Flesh whitish to slightly lilac, thin. Lamellae white or cream-coloured. Stipe 3-5 × 0.5-0.7 cm, cylindrical, surface violet to lilac-brown. Spores elliptic, smooth, hyaline, with drops, 4.5-6 × 2-3 µm (Figure 3).

Banaz, Hamamboğazı District, in pine forest, 26.11.2006, *Türkoğlu* 3138.

Marasmiaceae

40. *Gymnopus ocior* (Pers.) Antonín & Noordel.

Banaz, Hamamboğazı District, in pine forest, 21.11.2008, *Türkoğlu* 4733.

41. *Omphalotus olivascens* var. *olivascens* H.E.Bigelow, O.K.Mill. & Thiers var. *olivascens*

Banaz, Ahatköy village, in pine forest, 21.11.2008, *Türkoğlu* 4711.

42. *Marasmius oreades* (Bolton) Fr.

Eşme, Ahatköy village, in pine forest, 18.04.2008, *Türkoğlu* 4339.

43. *Marasmius rotula* (Scop.) Fr.

Uşak, Güre town, in pine forest, 07.12.2008, *Türkoğlu* 4870.

Mycenaceae

44. *Mycena alnetorum* J.Favre

Uşak, Güre town, in pine forest, 08.12.2008, *Türkoğlu* 4889.

45. *Mycena epipterygia* var. *pelliculosa* (Fr.) Maas Geest.

Banaz, Evrendede picnic area, in pine forest, 21.11.2008, *Türkoğlu* 4740.

46. *Mycena galericulata* (Scop.) Gray

Uşak, Güre town, in pine forest, 07.12.2008, *Türkoğlu* 4857.

47. *Mycena galopus* (Pers.) P.Kumm. var. *galopus*

Banaz, Hamamboğazı District, in pine forest, 21.11.2008, *Türkoğlu* 4727.

48. *Mycena polygramma* (Bull.) Gray

Banaz, Hamamboğazı District, in pine forest, 13.11.2006, *Türkoğlu* 3240; 21.11.2008, *Türkoğlu* 4728.

49. *Xeromphalina caudicinalis* (With.) Kühner & Maire

Banaz, Hamamboğazı District, in pine forest, 21.11.2008, *Türkoğlu* 4729.

Phallaceae

50. *Clathrus ruber* P.Micheli ex Pers.

Eşme, Güllü town, in pine forest, 22.11.2008, *Türkoğlu* 4767.

51. *Phallus impudicus* L. var. *impudicus*

Banaz, Bahadır village, Gökkaya stream, in pine forest, 24.04.2009, *Türkoğlu* 4996.

Physalacriaceae

52. *Flammulina velutipes* (Curtis) Singer var. *velutipes*

Eşme, Tokmak village, under *Populus* sp., 08.12.2008, *Türkoğlu* 4913.

53. *Strobilurus tenacellus* (Pers.) Singer

Banaz, Bahadır village, in pine forest, 23.04.2007, *Türkoğlu* 3628; Banaz, Bahadır village, Gökkaya stream, in pine forest, 24.04.2009, *Türkoğlu* 4987.

Pluteaceae

54. *Amanita muscaria* (L.) Lam. var. *muscaria*

Eşme, Güllü town, in pine forest, 22.11.2008, *Türkoğlu* 4771.

55. *Amanita phalloides* (Vaill. ex Fr.) Link

Eşme, Güllü town, in pine forest, 22.11.2008, *Türkoğlu* 4766.

56. *Pluteus phlebophorus* (Ditmar) P.Kumm.

Uşak, Güre town, in pine forest, 07.12.2008, *Türkoğlu* 4849.

Polyporaceae

57. *Coriolopsis gallica* (Fr.) Ryvarden

Sivaslı, Selçikler village, on *Populus* sp., 07.04.2007, *Türkoğlu* 3605.

58. *Polyporus brumalis* (Pers.) Fr.

Ulubey, Avgan town, bank of the Banaz stream, on *Populus* sp., 22.11.2008, *Türkoğlu* 4754.

59. *Polyporus ciliatus* Fr.

Eşme, Yaylak plateau, in grass, 25.04.2009, *Türkoğlu* 5013.

60. *Trametes hirsuta* (Wulfen) Lloyd

Eşme, Güllü town, Kekikli District, on stumps of *Populus* sp., 18.04.2008, *Türkoğlu* 4338; Karahallı, Karbasan town, on stumps of *Populus* sp., 12.05.2008, *Türkoğlu* 4423.

Psathyrellaceae

61. *Coprinellus domesticus* (Bolton) Vilgalys, Hopple & Jacq. Johnson

Banaz, Büyükturak town, in grass, 05.05.2007, *Türkoğlu* 3655.

62. *Coprinopsis episcopalis* (P.D.Orton) Redhead, Vilgalys & Moncalvo

Uşak-İzmir road 20 km, 07.12.2008, *Türkoğlu* 4878, 4879; Eşme, Bozlar village, 08.12.2008, *Türkoğlu* 4903.

63. *Coprinopsis lagopides* (P.Karst.) Redhead, Vilgalys & Moncalvo

Uşak-İzmir road 20 km, in grass, 07.12.2008, *Türkoğlu* 4842.

64. *Coprinopsis picacea* (Bull.) Redhead, Vilgalys & Moncalvo

Eşme, Bozlar village, in grass, 08.12.2008, *Türkoğlu* 4904.

65. *Parasola leiocephala* (P.D.Orton) Redhead, Vilgalys & Hopple

Banaz, Paşacık village, in grass, 05.05.2007, *Türkoğlu* 3660.

66. *Psathyrella bipellis* (Quél.) A.H. Sm

Banaz, Hamamboğazı District, in pine forest, 26.04.2009, *Türkoğlu* 5033.

67. *Psathyrella leucotephra* (Berk. & Broome) P.D.Orton

Uşak, Güre town, in grass, 08.12.2008, *Türkoğlu* 4897; Eşme, Bozlar village, in grass, 08.12.2008, *Türkoğlu* 4905.

68. *Psathyrella spadiceogrisea* (Schaeff.) Maire

Sivashi, Uzunoluk District, in grass, 26.04.2009, *Türkoğlu* 5032.

69. *Psathyrella tephrophylla* (Romagn.) M.M.Moser

Banaz, Hamamboğazı District, in grass, 23.04.2007, *Türkoğlu* 3635.

Russulaceae70. *Lactarius sanguifluus* (Paulet) Fr.

Banaz, Ahatköy village, in pine forest, 21.11.2008, *Türkoğlu* 4710.

71. *Russula queletii* Fr.

Banaz, Ahatköy village, in pine forest, 13.11.2006, *Türkoğlu* 3252.

72. *Russula xerampelina* (Schaeff.) Fr.

Banaz, Hamamboğazı District, in pine forest, 21.11.2008, *Türkoğlu* 4724; Banaz, Evrendede picnic area, in pine forest, 21.11.2008, *Türkoğlu* 4736; Uşak, Karaağaç village, in pine forest, 07.12.2008, *Türkoğlu* 4833.

Sclerodermataceae73. *Pisolithus arhizus* (Scop.) Rauscher

Eşme, Tokmak village, in pine forest, 08.12.2008, *Türkoğlu* 4920.

Strophariaceae74. *Hebeloma fragilipes* Romagn.

Banaz, Ahatköy village, in pine forest, 26.11.2006, *Türkoğlu* 3182.

75. *Hebeloma sinapizans* (Fr.) Sacc.

Banaz, Ahatköy village, in pine forest, 21.11.2008, *Türkoğlu* 4703.

76. *Hebeloma stenocystis* J.Favre

Banaz, Ahatköy village, in pine forest, 26.11.2006, *Türkoğlu* 3165.

77. *Hypholoma marginatum* J.Schröt.

Eşme, Culture Park, in grass, 23.11.2008, *Türkoğlu* 4810.

78. *Pholiota astragalina* (Fr.) Singer

Ulubey, Aksaz village, on stumps of *Populus* sp., 23.11.2008, *Türkoğlu* 4815.

79. *Pholiota lucifera* (Lasch) Quél.

Banaz-Afyon road, 5 km, in grass, 26.04.2009, *Türkoğlu* 5045.

80. *Stropharia coronilla* (Bull.) Quél.

Eşme, Güllü town, in pine forest, 22.11.2008, *Türkoğlu* 4763; Eşme, Culture Park, in grass, 22.11.2008, *Türkoğlu* 4803; Eşme, Tokmak village, in grass, 08.12.2008, *Türkoğlu* 4917; Eşme, Culture Park, in grass, 08.12.2008, *Türkoğlu* 4924.

Thelephoraceae81. *Thelephora terrestris* Ehrh.

Eşme, Güllü town, in pine forest, 04.04.2007, *Türkoğlu* 3571; 12.04.2008, *Türkoğlu* 4321; Uşak, Eşme, Culture Park, in grass, 07.12.2008, *Türkoğlu* 4828.

Tricholomataceae

82. *Ampulloclitocybe clavipes* (Pers.) Redhead, Lutzoni, Moncalvo & Vilgalys

Uşak, Güre town, in pine forest, 08.12.2008, *Türkoğlu* 4894.

83. *Clitocybe brumalis* (Fr.) Quél.

Uşak, Güre town, in pine forest, 08.12.2008, *Türkoğlu* 4896.

84. *Clitocybe gibba* (Pers.) P.Kumm.

Banaz, Evrendede picnic area, in pine forest, 21.11.2008, *Türkoğlu* 4738.

85. *Clitocybe inornata* (Sowerby) Gillet

Banaz, Hamamboğazı District, in pine forest, 21.11.2008, *Türkoğlu* 4713.

86. *Clitocybe phyllophila* (Pers.) P.Kumm.

Banaz, Ahatköy village, in pine forest, 13.11.2006, *Türkoğlu* 3260.

87. *Clitocybe vibecina* (Fr.) Quél.
Eşme, Culture Park, in grass, 22.11.2008, *Türkoğlu* 4806.
88. *Infundibulicybe geotropa* (Bull.) Harmaja
Banaz, Ahatköy village, in pine forest, 21.11.2008, *Türkoğlu* 4718; Banaz, Hamamboğazı District, in pine forest, 21.11.2008, *Türkoğlu* 4732; Uşak, Güre, in pine forest, 07.12.2008, *Türkoğlu* 4846; Sivashlı, Uzunoluk District, pine forest, 09.12.2008, *Türkoğlu* 4936.
89. *Lepista glaucocana* (Bres.) Singer
Uşak, Güre town, in pine forest, 08.12.2008, *Türkoğlu* 4892.
90. *Lepista personata* (Fr.) Cooke
Uşak, Güre town, in pine forest, 07.12.2008, *Türkoğlu* 4848, 4860.
91. *Leucopaxillus gentianeus* (Quél.) Kotl.
Banaz, Evrendede picnic area, in pine forest, 21.11.2008, *Türkoğlu* 4739; Banaz, Ahatköy village, in pine forest, 08.12.2008, *Türkoğlu* 4976.
92. *Melanoleuca arcuata* (Bull.) Singer
Banaz, Ahatköy village, in pine forest, 13.11.2006, *Türkoğlu* 3250.
93. *Melanoleuca cognata* (Fr.) Konrad & Maubl.
var. *cognata*
Banaz, Ahatköy village, in pine forest, 26.11.2006, *Türkoğlu* 3127.
94. *Melanoleuca humilis* (Pers.) Pat
Banaz, Evrendede picnic area, in grass, 12.05.2007, *Türkoğlu* 3693.
95. *Melanoleuca paedida* (Fr.) Kühner & Maire
Eşme, Tokmak village, in pine forest, 08.12.2008, *Türkoğlu* 4914.
96. *Melanoleuca substrictipes* Kühner
Eşme, Culture Park, in grass, 22.11.2008, *Türkoğlu* 4809.
97. *Myxomphalia maura* (Fr.) Hora
Uşak, Güre town, in pine forest, 07.12.2008, *Türkoğlu* 4854.
98. *Pseudoclitocybe cyathiformis* (Bull.) Singer
Uşak-İzmir road, 20 km, in pine forest, 08.12.2008, *Türkoğlu* 4886; Uşak, Güre town, in pine forest, 08.12.2008, *Türkoğlu* 4895.

99. *Tricholoma caligatum* (Viv.) Ricken.

Banaz, Hamamboğazı District, in pine forest, 21.11.2008, *Türkoğlu* 4726; Banaz, Evrendede picnic area, in pine forest, 21.11.2008, *Türkoğlu* 4749; Banaz, Derbent village, in pine forest, 10.12.2008, *Türkoğlu* 4968.

100. *Tricholoma fracticum* (Britzelm.) Kreisel

Banaz, Ahatköy village, in pine forest, 21.11.2008, *Türkoğlu* 4706; Uşak, Karaağaç village, in pine forest, 07.12.2008, *Türkoğlu* 4836.

Discussion and conclusion

In this study, 100 macrofungi taxa belonging to 30 families collected in Uşak Province were reported. Ten of these belong to *Ascomycetes* and 90 to *Basidiomycetes*. All of them are new for the macrofungus taxa of Uşak Province. Some taxa for some families (*Rhizinaceae*, *Auriculariaceae*, *Cortinariaceae*, *Fistulinaceae*, *Fomitopsidaceae*, *Phallaceae*, *Physalacriaceae*, *Sarcosomataceae*, *Sclerodermataceae*, *Thelephoraceae*) were found for the first time in Uşak. Moreover, our findings support previous research (Türkoğlu et al., 2008) and increased the number of taxa in many families. In some families (*Bolbitiaceae*, *Entolomataceae*, *Inocybaceae*, *Marasmiaceae*, *Psathyrellaceae*, *Strophariaceae*, *Tricholomataceae*) taxa numbers dramatically increased. In addition, the following 7 taxa are new records for Turkey: *Pseudoplectania sphagnophila*, *Conocybe pulchella*, *Entoloma politoflavipes*, *Entoloma saundersii*, *Entoloma serrulatum*, *Hygrophorus nemoreus*, and *Rugosomyces ionides*. The distribution of the taxa and their families is as follows: *Discinaceae* 1, *Helvellaceae* 3, *Morchellaceae* 2, *Pezizaceae* 1, *Pyronemataceae* 1, *Rhizinaceae* 1, *Sarcosomataceae* 1, *Agaricaceae* 5, *Auriculariaceae* 1, *Bolbitiaceae* 4, *Cortinariaceae* 2, *Entolomataceae* 3, *Fistulinaceae* 1, *Fomitopsidaceae* 1, *Hygrophoraceae* 4, *Hymenochaetaceae* 1, *Inocybaceae* 6, *Lyophyllaceae* 1, *Marasmiaceae* 4, *Mycenaceae* 6, *Phallaceae* 2, *Physalacriaceae* 2, *Pluteaceae* 3, *Polyporaceae* 4, *Psathyrellaceae* 8, *Russulaceae* 3, *Sclerodermataceae* 1, *Strophariaceae* 7, *Thelephoraceae* 1, and *Tricholomataceae* 19. In comparison with earlier studies carried out near our research area, there were some similarities in terms on the species growing in the regions (Solak et al., 1999; Öner &

Gezer, 2004; Köse et al., 2006). This may have been because of similarities in vegetation, climate, and plant flora. Most of the determined species belong to the families *Tricholomataceae* (19%), *Psathyrellaceae* (9%), and *Strophariaceae* (7%), with the families *Inocybaceae*, *Mycenaceae*, and *Agaricaceae* following.

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