

A Checklist of Macrofungi of Besni (Adıyaman) District

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Abstract: Field studies were carried out in the Besni district between 2001 and 2002, and macrofungi samples were collected. As a result of laboratory studies, 56 species belonging to 20 families in *Ascomycetes* and *Basidiomycetes* were identified.

Key Words: Macrofungi, taxonomy, Flora, Adıyaman, Turkey.

Besni (Adıyaman) Yöresi Makrofungusları

Özet: Arazi çalışmaları 2001- 2002 yılları arasında Besni (Adıyaman) ilçe sınırları içinde gerçekleştirildi ve makromantar örnekleri toplandı. Laboratuvar incelemeleri sonunda *Ascomycetes* ve *Basidiomycetes* sınıfları içinde yer alan 20 familyaya ait 56 takson belirlendi.

Anahtar Sözcükler: Makrofungus, Flora, Taksonomi, Adıyaman, Türkiye

Introduction

Besni is a district of Adıyaman in south-east Anatolia and, according to the relevant literature, no studies on macrofungal flora have been carried out in the area. Although the forest areas are characterised by species of *Pinus* L., *Quercus* L., *Salix* L., *Populus* L., *Pistacia* L. and *Paliurus* Mill., *Quercus* sp. are the dominant trees in the region. The aim of this study was to determine the macrofungi flora of the district.

Materials and Methods

The materials of this study were collected during field trips carried out in the Besni (Adıyaman) district (Figure 1) between 2001 and 2002. The ecological and morphological characteristics of the fruiting bodies were recorded and they were photographed in their natural habitats. After they were brought into the laboratory, spore prints were obtained. Then they were dried and preserved in polyethylene bags containing thymol

crystals. As a result of macroscopic and microscopic investigations, they were identified with the help of Phillips (1981), Breitenbach & Kränzlin (1984-1995), Buczacki (1989), Ellis & Ellis (1990), Moser (1983) and Jordan (1995). The samples are kept in the Gaziantep University Adıyaman Education Faculty.

Results

Ascomycetes

Pezizaceae

1. *Sarcosphaera crassa* (Santi ex Steud.) Pouz.
Harmanardı village, pine forest, 29 ii 2001, K. 1162.

2. *Sepultaria arenosa* (Fuckel) Boud.
Beşyol village, on damp ground, 13 i 2001, K. 1110.

Helvellaceae

3. *Helvella lacunosa* Afz. ex Fr.

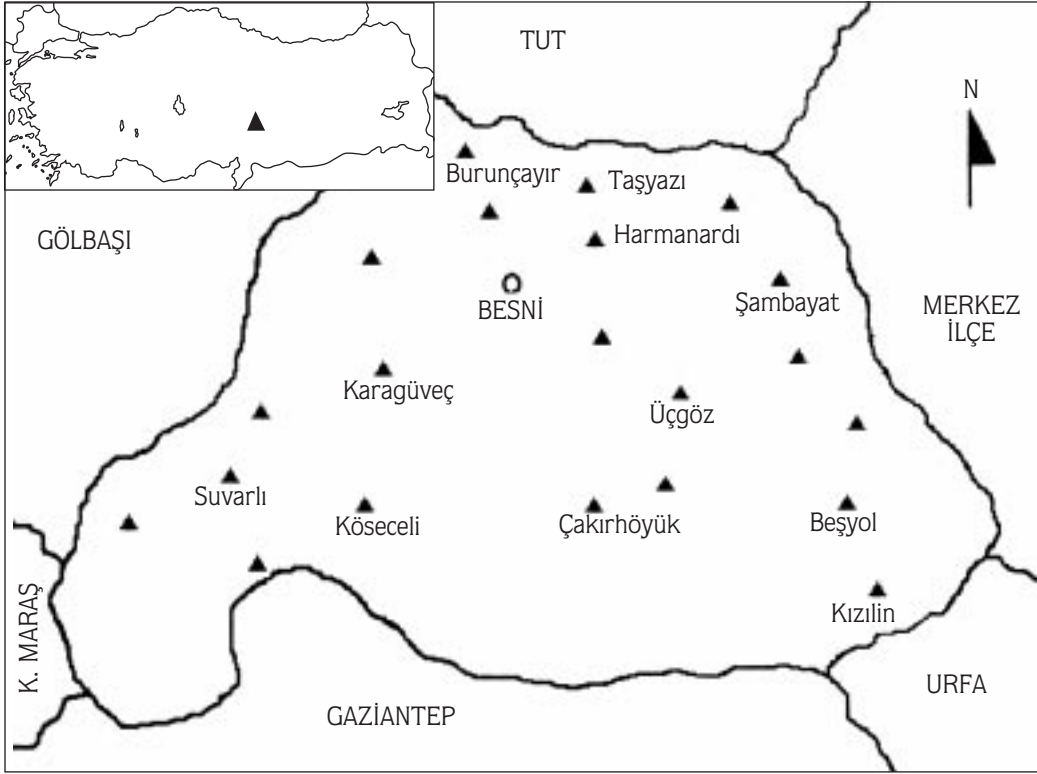


Figure 1. Macrofungi collecting sites.

Şambayat, under *Populus* sp., 07 iv 2001, K. 1372.
Suvarlı village, 20 iv 2002, K. 1620.

4. *H. leucopus* Pers.

Şambayat, under *Populus* sp., 07 iv 2001, K. 1373.
Köseceli village, 21 v 2001, K. 1478. Suvarlı village, 20 iv 2002, K. 1619.

5. *Paxina leucomelas* (Pers.) O.Kuntze

Taşlyazı village, pine forest, 28 ii 2001, K.1158.

6. *P. costifera* (Nannf.) Stangl

Taşlyazı village, pine forest, 28 ii 2001, K.1159.

Morchellaceae

7. *Morchella deliciosa* (Fr.) Boud.

Güneykaş village, forest edge, 01 iii 2002, K. 1503.

8. *M. esculenta* (L.) Pers.

Sayören village, stream bank, 13 i 2001, K. 1111.
Suvarlı village, 20 iv 2002, K. 1618.

9. *M. elata* (Fr.) Boud.

Şambayat, field edge, among short grasses, 07 iv 2001, K. 1368.

Basidiomycetes

Polyporaceae

10. *Fomes fomentarius* (L.: Fr.) Fr.

Atmalı village, on *Populus* stump, 23 i 2001, K. 1130. Şambayat, on *Salix* sp., 07 iv 2001, K. 1371.

11. *Funalia troqii* (Berk.) Bond & Sing.

Burunçayır village, on *Populus* stump, 17 iv 2001, K. 1426. Suvarlı village, 17 iv 2001, K. 1426.

12. *Polyporus rhizophilus* (Pat.) Sacc.

Kurugöl village, steppe, 20 iv 2002, K. 1606.

13. *P. squamosus* (Huds.) Fr.

Burunçayır village, on *Salix* sp., 17 iv 2001, K. 1430.

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

Şambayat, on fallen dead branch, 07 iv 2001, K. 1365.

Schizophyllaceae

15. *Schizophyllum commune* Fr.

Kızılhisar village, 23 i 2001, K. 1135.

Ganodermataceae

16. *Ganoderma lucidum* (Fr.) Karst.Çöplü village, on *Quercus* sp., 29 ii 2001, K. 1165.17. *G. applanatum* (Pers. ex Wallr.) Pat.Kızılhisar village, on *Salix* stump, 23 i 2001, K. 1139.

Nidulariaceae

18. *Crucibulum leave* (Bull. ex Fr.) Kumm.Pınarbaşı village, on decomposing *Vitis* twigs, 28 iv 2002, K. 1662.19. *Cyathus olla* Batsch: Pers.

Şambayat, on wet sandy ground, 07 iv 2001, K. 1374.

Lycoperdaceae

20. *Bovista plumbea* Pers.: Pers.

Suvarlı village, meadow, 22 iv 2001, K. 1433. 28 iv 2002, K. 1647. Güneykaş village, 01 iii 2002, K. 1502.

21. *Lycoperdon molle* Pers.: PersAround Köseceli village, *Quercus* sp., 21 v 2001, K. 1478.

Rhizopogonaceae

22. *Rhizopogon luteolus* Fr.

Harmanardı village, pine forest, 17 iv 2001, K. 1428.

Boletaceae

23. *Suillus luteus* (L.) S.F.Gray

Harmanardı village, pine forest, 17 iv 2001, K. 1429.

24. *Xerocomus chrysenteron* (Bull.) Quel.Çöplü village, around *Quercus* sp., 29 ii 2001, K. 1167.

Tricholomataceae

25. *Lepista nuda* (Bull.: Fr.) Cke.

Harmanardı village, pine forest, 29 ii 2001, K. 1163.

26. *Lepista personata* (Fr.: Fr.) Cke.

Üçgöz village, meadow, 16 ii 2001, K. 1148.

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

Pınarbaşı village, pasture, 28 iv 2002, K. 1692.

28. *Melanoleuca excissa* (Fr.) Sing.

Suvarlı village, meadow, 17 iv 2001. K. 1427.

29. *M. stridula* (Fr.) Sing.

Başlı village, pathside, 21 iii 2001, K. 1278. Suvarlı, 28 iv 2002, K. 1649.

30. *Mycena galericulata* (Scop.: Fr.) GraySuvarlı village, under *Quercus* sp., 28 iv 2002, K. 1654.31. *Omphalina velutipes* Ort.

Sayören village, on sparse grasses, 13 i 2001, K. 1112.

Pleurotaceae

32. *Lentinus tigrinus* (Bull.: Fr.) Fr.Taşlıyazı village, on *Populus* stump, 29 ii 2001, K.1164. Şambayat, 07 iv 2001, K. 1375. Güneykaş village, 17 iv 2001, K. 1424.33. *Pleurotus ostreatus* (Jacq.: Fr.) KummerKöseceli village, on *Populus* sp., 03 iv 2002, K. 1530. Üçgöz village, 21 iv 2002, K. 1625.

Entolomataceae

34. *Entoloma sinuatum* (Bull. ex Fr.) Kumm.Suvarlı village, under *Quercus* sp., 28 iv 2002, K. 1644.

Amanitaceae

35. *Amanita vaginata* (Bull. : Fr.) Vitt.Şambayat village, around *Quercus* sp., 01 iv 2001, K. 1364.

Pluteaceae

36. *Volvariella speciosa* (Fr.: Fr.) Sing.

Kızılın village, meadow, 13 i 2001, K. 1106.

37. *Pluteus romelli* (Britz.) Sacc.Üçgöz village, aronud *Populus* sp., 21 iv 2002, K. 1626. Pınarbaşı village, 28 iv 2002, K. 1678.38. *P. salicinus* (Pers. Fr.) Kumm.

Güneykaş village, flood plain, on dead branches, 17 iv 2001, K. 1425.

Agaricaceae

39. *Agaricus campestris* L.: Fr.

Kızılın village, meadow, 13 i 2001, K. 1108.

40. *A. xanthodermus* Genevier var. *lepiotoides* Mre.

Güneykaş village, in garden, 11 iii 2002, K. 1514.

Coprinaceae

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

Pınarbaşı village, under *Populus* sp., 28 iv 2002, K. 1670.

42. *C. comatus* (Müll.: Fr.) S.F. Gray

Şambayat, steppe, 07 iv 2001, K. 1366. Karagüveç village, 20 iv 2002, K. 1623.

43. *C. cinereus* (Schaeff.: Fr.) Gray

Çakırhöyük village, on manure-enriched straw, 21 iv 2002, K. 1629.

44. *C. disseminatus* (Pers.:Fr.) S.F.Gray

Kızılın village, around *Salix* stump, 13 i 2001, K. 1104. Şambayat, 07 iv 2001, K. 1367.

45. *C. micaceus* (Bull.: Fr.) Fr.

Üçgöz village, 21 iv 2002, K. 1625.

46. *C. niveus* (Pers.: Fr.) Fr.

Yayıklı village, on cow manure, 20 iii 2002, K. 1613.

47. *Psathyrella candolleana* (Fr.: Fr.) Mre.

Şambayat, on dead wood, 07 iv 2001, K. 1370. Güneykaş village, 17 iv 2001, K. 1423.

48. *Panaeolus papilionaceus* (Bull.: Fr.) Qué!

Suvarlı village, manure-enriched meadow, 08 v 2001, K. 1444. Kurugöl, 20 iv 2002, K. 1606.

49. *P. sphinctrinus* (Fr.) Quel.

Yayıklı village, manure enriched meadow, 20 iv 2002, K. 1615. Pınarbaşı village, 28 iv 2002, K. 1675.

Bolbitiaceae

50. *Agrocybe pediades* (Fr.) Sing.

Başlı village, in grass, 21 iii 2001, K. 1279.

51. *A. cylindraceae* (DC.:Fr.) Mre.

Beşyol village, on *Populus* stump, 21 iv 2002, K. 1631.

52. *Conocybe lactea* (Lge.) Mét.

Pınarbaşı village, on manured meadow, 28 iv 2002, K. 1661.

Strophariaceae

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

Pınarbaşı village, on *Quercus* stump, 28 iv 2002, K. 1676.

54. *Pholiota squarrosa* (Pers.: Fr.) Kumm.

Şambayat village, at the base of *Juglans* sp., 17 xi 2001, K. 1497.

55. *Stropharia coronilla* (Bull.: Fr.) Quel.

Kızılın village, meadow, 13 i 2001, K. 1105. Çöplü village, in pastures, 17 iv 2001, K.1420. Köseceli village, 21 v 2001, K. 1482. Konuklu village, steppe, 21 iv 2002, K. 1627.

Cortinariaceae

56. *Inocybe fastigiata* (Schaeff.. Fr.) Quel.

Pınarbaşı village, around *Quercus* sp., 28 iv 2002, K. 1674.

Discussion

In this study, 56 macrofungi taxa, in 20 families and 39 genera, were identified. Nine of them belonged to *Ascomycetes* and 47 to *Basidiomycetes*. As a result of comparisons, the macrofungi of Besni were found to have similarities with the findings of studies carried out in nearby regions (İşiloğlu, 1995; Yıldız & Ertekin, 1997).

Twenty-eight of the 56 species are edible, but the level of local consumption is very low. Only 4 species, *Coprinus comatus*, *Agaricus campestris*, *Bovista plumbea* and very rarely *Pleurotus ostreatus* were found to be eaten by local residents. According to some of the villagers, the poisoning of a child in Suvarlı in 1977 had decreased the mushroom consumption rate in the area. Twelve species of the taxa are poisonous and 17 species are inedible.

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References

- Breitenbach J & Kränzlin F (1984-1995). *Fungi of Switzerland* vols 1-4 Lucerne: Verlag Mykologia.
- Buczacki S (1989). *Mushrooms and Toadstools of Britain and Europe*. London: W. Collins Sons & Co. Ltd.
- Ellis MB & Ellis JB (1990). *Fungi without Gills (Hymenomyces and Gasteromyces)*, London: Chapman and Hall.
- Işılođlu M & Öder N (1995). Malatya Yöresinin Makrofungusları. *Tr. J. of Botany* 19: 321-324.
- Jordan M (1995). *The Encyclopaedia of Fungi of Britain and Europe*. UK: David & Charles Book Co.
- Moser M (1983). *Keys to Agarics and Boleti*. Stuttgart: Gustav Fischer Verlag.
- Phillips R (1981). *Mushrooms and other fungi of Great Britain & Europe*. London: Pan Books.
- Yıldız A & Ertekin AS (1997). Contributions to the Macrofungal Flora of Diyarbakır. *Tr. J. of Botany* 21: 119-122.