

Macrofungi of Değirmenboğazı (Balıkesir)

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Abstract: The macrofungi collected during field trips from the Değirmenboğazı picnic area between 1998 and 2001 were investigated taxonomically. As a result of these field and laboratory studies, 54 taxa belonging to 19 families were identified. These species are presented as a list. Eleven of these taxa are new records to the Turkish Macromycota.

Key Words: Macrofungi, Turkish Macromycota, taxonomy

Değirmenboğazı (Balıkesir) Makrofungusları

Özet: Bu çalışmada, Değirmenboğazı piknik alanında 1998-2001 yılları arasında yapılan arazi çalışmalarıyla toplanan makrofunguslar taksonomik açıdan araştırılmıştır. Arazi ve laboratuvar çalışmaları sonucunda 19 familyaya ait 54 takson teşhis edilmiştir. Bu türler liste halinde sunulmuştur. Bu taksonlardan 11 tanesi Türkiye Makromikotası için yeni kayıttır.

Anahtar Sözcükler: Makrofunguslar, Türkiye Makromikota, taksonomi

Introduction

Değirmenboğazı, chosen as the study area, is on the Balıkesir-Bursa highway 10 km from Balıkesir (Figure 1). *Cedrus libani* A.Rich., *Pinus brutia* Ten., *P. pinea* L., *Cupressus sempervirens* L., *Juniperus excelsa* M.Bieb., *Quercus cerris* L., *Salix alba* L., *Morus alba* L., and *Populus nigra* L. are very common in the region. This area is very good ecologically for mushrooms.

From a review of the relevant literature, it appears that no previous studies of the macromycota have been carried out in this area. However, some research has been carried out around Balıkesir (Aşkun & İşiloğlu, 1997; Yılmaz et al., 1997). The aim of this study was to determine the macromycota of the district, to identify edible and poisonous species and to add any new records to the Macromycota of the country.

Materials and Methods

The macrofungi were collected during field trips to Değirmenboğazı between 1998 and 2001. The habitat

and morphological characteristics of the basidiomes found were recorded and photographed for diagnosis before taking them to the laboratory. Spore prints were made and the specimens dried so that they would be suitable herbarium material. Microscopic studies were carried out. As a result of the field and laboratory studies, all the taxa were identified with the help of the relevant literature (Moser, 1983; Philips, 1981; Breitenbach & Kranzlin, 1984). The specimens are now housed in the herbarium at the Department of Biology, Muğla University.

Results

Species found in the research area are listed below. The numbers refer to the herbarium numbers and an asterisk means the taxon is new to the Turkish Macromycota.

Ascomycetes

Helvellaceae

1. *Helvella leucopus* Pers.

North of the children's playground, 19.04.1999, FY. 796.

Pezizaceae

*2. *Tarzetta catinus* (Holmsk.: Fr.) Korf & J.K.Rogers

North of the children's playground, in pine forest, 9.04.1999, FY. 797.

Basidiomycetes

Clavulinaceae

3. *Clavulina rugosa* (Fr.) Schroet.

North of 4th pathway, 3.12.1998, FY. 759.

Corticiaceae

4. *Stereum hirsutum* (Wild.: Fr.) S.F.Gray

North of 8th pathway, 23.11.1998, FY. 771.

Polyporaceae

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

Köteyli stream, on stump of *Salix* sp., 24.10.1998, FY. 235.

6. *Trametes versicolor* (Fr.) Pilat

West of 5th pathway, on *Quercus* sp., 9.11.1998, FY. 703.

Rhizopogonaceae

7. *Rhizopogon luteolus* Fr.

West and east of 5th pathway, 9.11.1998, FY. 227.

Geastraceae

8. *Geastrum sessile* (Sow.) Pouz.

East of 2nd pathway, 9.11.1998, FY. 441; East of 5th pathway, 5.1.1999, FY. 1178.

Lycoperdaceae

9. *Lycoperdon perlatum* Pers.

West and east of 5th pathway, 19.10.2000, FY. 767; FY. 769.

10. *Vascellum pratense* (Pers.) Kreisel

East of Balıkesir-Bursa highway, 24.10.1998, FY.235.

Bolateceae

11. *Suillus bellini* (Inz.) Watl.

West of 5th pathway, 9.11.1998, FY. 452.

12. *Suillus collinitus* (Fr.) O.Kuntze

West of 5th pathway, 9.11.1998, FY. 462.

13. *Xerocomus chrysenteron* (Bull.) Quél.

East of the watch-tower, 9.11.1998, FY. 751.

Gomphidiaceae

14. *Chroogomphus rutilus* (Schff.: Fr.) O.K.Miller

East of 1st barrier, 11.11.1998, FY. 557

Hygrophoraceae

15. *Hygrophorus hypothejus* (Fr.: Fr.) Fr.

East of 2nd pathway, 2.12.1998, FY. 911.

Tricholomataceae

16. *Clitocybe alexandri* (Gill.) Konr.

North of 4th pathway, 5.1.1999, FY. 1184.

17. *C. dealbata* (Sow.: Fr.) Kummer

North of 4th pathway, 2.12.1998, FY. 919; West of 8th pathway, 3.12.1998, FY. 953.

18. *C. subspadicea* (Lge.) Bon & Chewassut

North of 4th pathway, 3.12.1998, FY. 958.

*19. *Collybia butyracea* (Fr.: Fr.) Kumm. var. *asema* Fr.

North and east of 4th pathway, 9.11.1998, FY: 494; East of 3rd pathway, 11.11.1998, FY. 576.

*20. *C. butyracea* (Bull.: Fr.) var. *butyracea* Fr.

East of 3rd pathway, 23.11.1998, FY. 710; East of 4th pathway, 8.1.1999, FY. 1195.

21. *C. dryophila* (Bull.: Fr.) Kummer

West of 8th pathway, 23.11.2000. FY. 712.

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

North of 5th pathway, 10.11.1998, FY. 545.

23. *L. sordida* (Fr.) Sing.

East of the guard hut, 12.01.2001, 1101; East of 3rd pathway, 12.01.2001, FY. 1133

24. *L. nuda* (Bull.: Fr.) Cke.

East of the guard hut, 13.01.2001, FY. 1102.

25. *L. personata* (Fr.: Fr.) Cke.
East of the guard hut, 13.01.2001, FY. 1103; 1104; 1105.
26. *Marasmius ramealis* (Bull.: Fr.) Sing.
End of 6th pathway, 11.11.1998, FY. 804.
27. *Melanoleuca excissa* (Fr.) Sing.
Side of 3rd pathway, 9.11.1998, FY. 512.
28. *Melanoleuca stridula* (Fr.) Sing.
North of 1st pathway, 28.11.1998, FY. 753.
29. *Pseudoclitocybe cyathiformis* (Bull.: Fr.) Sing.
West of 4th barrier, 9.11.1998, FY. 722.
30. *Tricholoma stans* (Fr.) Sacc.
North of 4th pathway, 9.11.1998, FY. 507.
31. *T. terreum* (Schaeff.: Fr.) Kumm.
South of the watch-tower, 3.12.1998, FY. 961.
- Lepiotaceae**
32. *Lepiota alba* (Bres.) Sacc.
North of the watch-tower, 9.11.1998, FY. 529.
33. *L. clypeolaria* (Bull.: Fr.) Kummer
South of 6th pathway, 11.11.1998, FY. 589.
- *34. *L. cystophoroides* Joss.
East of 3rd pathway, 12.01.2001, FY. 1137.
- *35. *L. eriophora* Peck
North of the watch-tower, 9.11.1998, FY. 751.
- *36. *L. ignivolata* Bousset-Joss.
East of 3rd pathway, 9.11.1998, FY. 538.
- *37. *Leucoagaricus cinerascens* Quéf
East of 2nd pathway, 9.11.1998, FY. 529.
- *38. *Leucoagaricus macrorrhizus* (Locq.) Sing.
East of 2nd pathway, 9.11.1998, FY. 470.
- Agaricaceae**
- *39. *Agaricus altipes* (Moell.) Moell.
West of 2nd pathway, 9.11.1998, FY. 755.
40. *A. placomyces* Peck
East of 3rd pathway, 9.11.1998, FY. 448.
41. *A. silvicola* (Vitt.) Sacc.
West of 2nd pathway, 11.11.98, FY. 720.
- *42. *A. subperonatus* (Lge.) Sing.
West of 2nd pathway, 9.11.1998, FY. 481; 2.12.1998, FY.921.
- Coprinaceae**
43. *Coprinus atramentarius* (Bull.: Fr.) Fr.
Köteyli stream, on *Salix* sp., 27.10.1998, FY.743.
44. *C. comatus* (Müll.: Fr.) S.F.Gray
North of 3rd barrier, 9.11.98, FY. 703.
- Bolbitiaceae**
45. *Agrocybe paludosa* (Lge.) Kühn. & Romagn.
West of 8th pathway, 10.11.2000, FY. 760.
- Strophoriaceae**
46. *Hypholoma fasciculare* (Huds.: Fr.) Kummer
East of the guard hut, 25.11.1998, FY. 859.
47. *Strophoria coronilla* (Bull.: Fr.) Quéf.
East of Balıkesir-Bursa highway, 24.10.2000, FY. 772; West of 1st barrier, FY. 773.
- Cortinariaceae**
48. *Hebeloma sinapizans* (Paulet: Fr.) Gill.
West of 8th pathway, 25.11.1999, FY. 274
49. *Inocybe fastigiata* (Schff.: Fr.) Quéf.
Edge of the pool, 11.11.1998, FY. 762.
50. *Inocybe geophylla* (Sow.: Fr.) var. *violacea* Pat.
East of 6th pathway, 3.12.1998, FY. 972; South of the watch-tower, 28.11.1998, FY. 873.
- Russulaceae**
51. *Lactarius deliciosus* Fr.
West of 5th pathway, 23.11.1998, FY. 725; 28.11.1998, FY. 882.
52. *L. sanguifluus* (Paulet: Fr.) Fr.
West of 5th pathway, 25.11.1998, FY. 865; West of 6th pathway, 24.12.1998, FY. 1063.
53. *L. semisanguifluus* Heim & Lecl.
West of 5th pathway, 11.11.1998, FY. 597; 23.11.1998, FY. 786
- *54. *Russula vinosa* Lindbl.
North of 1st pathway, 23.11.1998, FY. 793

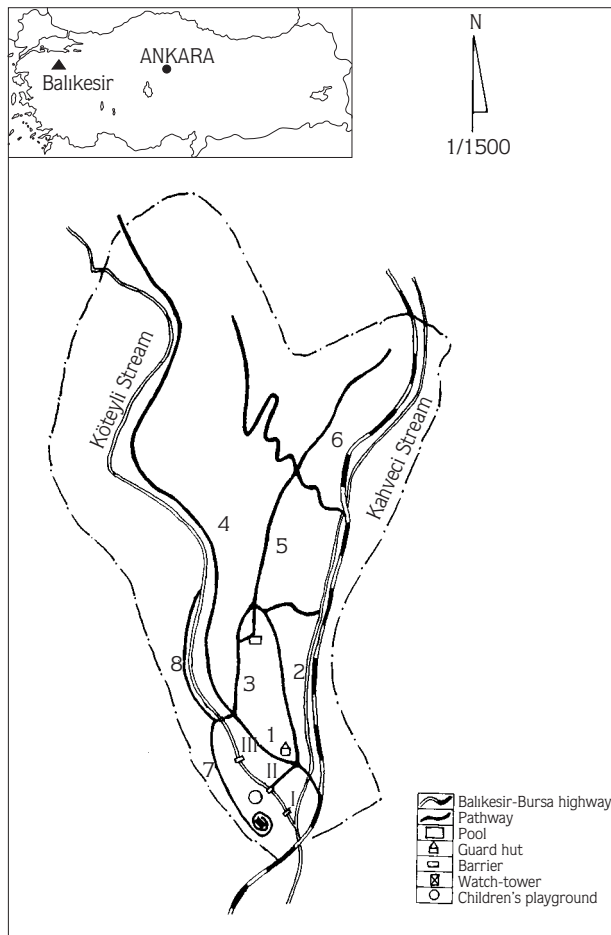


Figure 1. Map of the study area.

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Discussion and Conclusion

In this study, 54 macrofungi were identified, 2 of which belonged to Ascomycetes and 52 to Basidiomycetes. In comparison with other studies in the area (Aşkun & Işıloğlu, 1997; Yılmaz et al., 1997), the Macromycota of Değirmenboğazı appears to be fairly similar. This is perhaps because of similarities in vegetation, climate and especially flora.

Twenty-three of the 54 macrofungus species found in the area are edible, but only *Lactarius deliciosus*, *L. sanguifluus*, *L. semisanguifluus*, *Lepista inversa* and *Agaricus subperonatus* are commonly eaten. The *Lactarius* species are sold in local markets. Six species of the taxa are poisonous and 15 species are inedible. The local people do not have enough knowledge about poisonous mushrooms.

With this study, 9 species (*Tarzetta catinus*, *Lepiota cystophoroides*, *L. eriophora*, *L. ignivolata*, *Leucoagaricus cinerascens*, *L. macrorhizus*, *Agaricus altipes*, *A. subperonatus*, and *Russula vinosa*) and 2 varieties (*Collybia butyracea* var. *asema*, *C. butyracea* var. *butyracea*) were added to the Turkish Macromycota.