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 macrofunga 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 macrofunga 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 macrofunga 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

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

Basidiomycetes
Clavulinaceae
3. *Clavulina rugosa* (Fr.) Schroet.
Corticiaceae
4. *Stereum hirsitum* (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.
Geastraceae
8. *Geastrum sessile* (Sow.) Pouz.

Lycoperdaceae
West and east of 5th pathway, 19.10.2000, FY. 767; FY. 769.
10. *Vasceullum pratense* (Pers.) Kreisel

Bolateceae
West of 5th pathway, 9.11.1998, FY. 452.
12. *Suillus collinitus* (Fr.) O.Kuntze
West of 5th pathway, 9.11.1998, FY. 462.

Gomphidiaceae
14. *Chroogomphus rutilus* (Schff.: Fr.) O.K.Miller
East of 1st barrier, 11.11.1998, FY. 557

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

Tricholomataceae
16. *Clitocybe alexandri* (Gill.) Konr.
17. *C. dealbata* (Sow.: Fr.) Kummer
18. *C. subspadicea* (Lge.) Bon & Chewassut
19. *Collybia butyracea* (Fr.: Fr.) Kumm. var. aserna Fr.
20. *C. butyracea* (Bull.: Fr.) var. butyracea Fr.
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
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.


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

28. *Melanoleuca stridula* (Fr.) Sing.
North of 1st pathway, 28.11.1998, FY. 753.


30. *Tricholoma stans* (Fr.) Sacc.


33. *L. clypeolaria* (Bull.: Fr.) Kummer

34. *L. cystophoroides* Joss.
East of 3rd pathway, 12.01.2001, FY. 1137.

35. *L. eriophora* Peck


37. *Leucoagaricus cinerascens* QuéL

38. *Leucoagaricus macrorhizus* (Locq.) Sing.


40. *A. placiomyces* Peck

41. *A. silvicola* (Vitt.) Sacc.
West of 2nd pathway, 11.11.98, FY. 720.

42. *A. subperonatus* (Lge.) Sing.

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.

45. *Agrocybe paludosa* (Lge.) Kühn. & Romagn.
West of 8th pathway, 10.11.2000, FY. 760.

46. *Hypholoma fasciculare* (Huds.: Fr.) Kümmer
East of the guard hut, 25.11.1998, FY. 859.

47. *Stropharia coronilla* (Bull.: Fr.) Quél.
East of Balıkesir-Bursa highway, 24.10.2000, FY. 772; West of 1st barrier, FY. 773.

West of 8th pathway, 25.11.1999, FY. 274.

49. *Inocybe fastigiata* (Schff.: Fr.) Quél.
Edge of the pool, 11.11.1998, FY. 762.

50. *Inocybe geophylla* (Sow.: Fr.) var. violaca Pat.

51. *Lactarius deliciosus* Fr.

52. *L. sanguifluus* (Paulet: Fr.) Fr.

53. *L. semisanguifluus* Heim & Lecl.
West of 5th pathway, 11.11.1998, FY. 597; 23.11.1998, FY. 786.

North of 1st pathway, 23.11.1998, FY. 793
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 (Aşıkun & İşlioğlu, 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. ignivolvata, 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.

References


