



### Macrofungal diversity of Hani (Diyarbakır/Turkey) district

İsmail ACAR<sup>1</sup>, Yusuf UZUN<sup>\*2</sup>, Kenan DEMİREL<sup>3</sup>, Ali KELEŞ<sup>4</sup>

<sup>1</sup>Yüzüncü Yıl University, Başkale Vocational High School, Department of Organic Agriculture, 65080, Van, Turkey

<sup>2</sup>Yüzüncü Yıl University, Faculty of Pharmacy, Department of Pharmaceutical Sciences, 65080, Van, Turkey

<sup>3</sup>Yüzüncü Yıl University, Faculty of Science, Department of Biology, 65080, 65080, Van, Turkey

<sup>4</sup>Yüzüncü Yıl University, Faculty of Education, Department of Science and Mathematics Field in Secondary Education, 65080, Van, Turkey

#### Abstract

The current study was based on the macrofungi collected from Hani (Diyarbakır) district between 2009 and 2010. As a result of field and laboratory studies, 102 species belonging to 28 families were identified. Fifteen taxa belong to *Ascomycota* and 87 to *Basidiomycota*. All the species determined except for *Ciboria amentacea* are new records for the study area.

**Key words:** biodiversity, macrofungi, Hani, Turkey

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### Hani (Diyarbakır/Türkiye) ilçesinin makrofungal çeşitliliği

#### Özet

Mevcut çalışma 2009 ve 2010 yılları arasında Hani (Diyarbakır) ilçesinden toplanan makrofunguslar üzerine yapılmıştır. Arazi ve laboratuvar çalışmaları sonucunda 28 familya'ya mensup 102 tür tespit edilmiştir. Belirlenen taksonlardan 15'i *Ascomycota*, 87' si ise *Basidiomycota* bölümünde yer almaktadır. Tespit edilen türlerden *Ciboria amentacea* hariç diğerlerinin tamamı araştırma alanı için yeni kayıttır.

**Anahtar kelimeler:** biyoçeşitlilik, makrofunguslar, Hani, Türkiye

#### 1. Introduction

Hani is a district of Diyarbakır province with a surface area of 415 km<sup>2</sup> and located in the South-East Anatolian part of Turkey. It is surrounded by Lice to the north east, east and southeast, Diyarbakır to the south, Elazığ and Bingöl to the north. Dicle is located in west, Lice is located in north east, east and southeast, Diyarbakır is located in south, Elazığ and Bingöl are located in north of Hani (Figure 1). The district is predominantly influenced by terrestrial climate. In other words, the winter are fairly cold and snowy while the summer are hot and dry. During the year, the mean temperature and rainfall are 15.5 °C and 947.7 mm.

The plant cover of the area is mostly dominated by oak, poplar, willow, walnut and plane. Planted cedar, pine and some fruit trees can also be seen especially in higher elevations (Anonymus, 2005).

Numerous studies on Turkish macrofungal diversity have been conducted and they were given as checklists in different times (Solak et al., 2007; Sesli and Denchev, 2008). New data of recent studies were also added to them which were not included in the above checklists (Akata and Kaya, 2013; Akata et al., 2014; Kaya et al., 2013; Uzun et al., 2013; 2014). There is not any record on macrofungal diversity in Hani district located in Diyarbakır province where a related study was carried out by Yıldız and Ertekin, (1996; 1997). Some investigations on macrofungal diversity around the region were previously conducted by several researchers (Gücin, 1990; Demirel; 1996; Işıloğlu, 1997; Demirel et

\* Corresponding author / Haberleşmeden sorumlu yazar: Tel.: +904324865414; Fax.: +904324865413; E-mail: yusufuzun2004@yahoo.com

al., 2004; Demirel and Nacar, 2000; Yeşil and Yıldız, 2004; Demir et al., 2007; Kaya, 2010; Kaya et al., 2012; Uzun et al., 2009; 2010a; 2010b).

The purpose of this study is to determine the macrofungal diversity of Hani (Diyarbakır) district, and to make contribution to Turkish mycobiota.

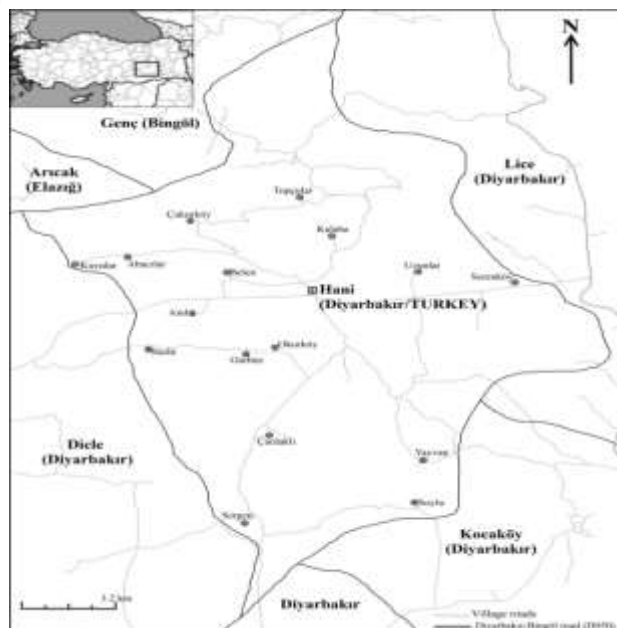


Figure 1. Map of study area

## 2. Materials and methods

The fungi specimens were collected periodically from Hani (Diyarbakır) district between 2009 and 2010. Relevant morphological and ecological characteristics of the samples were noted and they were photographed in their natural habitats. Then the samples were taken to the fungarium. After obtaining necessary macroscopic and microscopic data, they were identified with the help of relevant literature (Phillips, 1981; Buczacki, 1989; Breitenbach and Kränzlin, 1984-2000; Hansen and Knudsen, 1992-2000; Dähncke, 2004; Jordan, 2004). The identified specimens were deposited at Fungarium of Van Yüzüncü Yıl University (VANF).

## 3. Results

As a result of this study, 102 species belonging to 28 families were identified. Among them, 15 belong to *Ascomycota* and 87 to *Basidiomycota*. The systematics of the taxa are in accordance with Cannon & Kirk (2007), Kirk et al. (2008) and Index fungorum (<http://www.indexfungorum.org>: accessed 1 May 2014). All taxa are presented as a list with their localities, habitats, collecting dates and fungarium numbers (İsmail Acar: *Acar*).

### Ascomycota Caval.-Sm.

#### Helotiales

##### Helotiaceae Rehm

1. *Hymenoscyphus scutula* (Pers.) W. Phillips: Centrum, stream edge, on tree remains, 38° 24'680"K, 40° 23'437"D, 880 m, 18.10.2009, A. 31.
2. *Ciboria amentacea* (Balb.) Fuckel: *Salix* sp. Centrum, dicle way, roadside, on tree remains, 38° 24'118"K, 40° 23'709"D, 870 m, 28.03.2010, A. 91; Serenköy, *Salix* sp., on tree remains, 38° 24'258"K, 40° 30'623"D, 864 m, 16.04.2010, A. 104.

#### Pezizales J. Schröt.

##### Discinaceae Benedix

3. *Gyromitra gigas* (Krombh.) Cooke: Okur village, on bried wood, 38° 22' N, 40° 24' E, 823 m, 16.04.2010, *Acar* 143.

##### Helvellaceae Fr.

4. *Helvella acetabulum* (L.) Quél.: Seren village, under fir, 38° 24' N, 40° 30' E, 863 m, 22.05.2010, *Acar* 229.
5. *H. leucopus* Pers.: Topçular village, under poplar., 38° 24' N, 40°30' E, 852 m, 22.05.2010, *Acar* 223.
6. *H. queletii* Bres.: Kalaba village, under oak, 38° 26' N, 40° 25' E, 1169 m, 21.05.2010, *Acar* 214.

##### Morchellaceae Rchb.

7. *Mitrophora semilibera* (DC.) Lév.: Seren village, under poplar, 38° 24'N, 40° 30' E, 872 m, 16.04.2010, *Acar* 113.

8. *Morchella deliciosa* Fr.: Abacılar village, under willow, 38° 26' N, 40° 18' E, 1034 m, 19.04.2010, *Acar* 174.
9. *M. elata* Fr.: Okur village, under poplar, 38° 22' N, 40° 24' E, 812 m, 16.04.2010, *Acar* 154; Seren village, under willow, 38°24'N, 40°30' E, 856 m, 16.04.2010, *Acar* 108.
10. *M. esculenta* (L.) Pers.: Okur village, under willow, 38°22' N, 40°24' E, 807 m, 16.04.2010, *Acar* 124.
11. *Verpa bohemica* (Krombh.) J. Schröt.: Kalaba village, under poplar, 38° 26' N, 40° 25' E, 1170 m, 19.04.2010, *Acar* 163.
12. *V. conica* (O.F. Müll.) Sw.: Hani centre- Bahçeler street, under poplar, 38° 24' N, 40° 23' E, 876 m, 28.03.2010, *Acar* 092.

**Pezizaceae** Dumort.

13. *Peziza phyllogena* Cooke: Okur village, on rotting wood remains, 38° 22' N, 40° 24' E, 846 m, 16.04.2010, *Acar* 142.
14. *P. varia* (Hedw.) Fr.: Abacılar village, on rotting wood remains, 38° 26' E, 40° 18' E, 1034 m, 19.04.2010, *Acar* 178.

**Pyronemataceae** Corda

15. *Geopora arenicola* (Lév.) Kers: Seren village, under poplar, 38° 24' N, 40° 30' E, 874 m, 16.04.2010, *Acar* 109.

**Basidiomycota** Whittaker ex Moore**Agaricales** Underw.**Agaricaceae** Chevall.

16. *Agaricus bitorquis* (Quél.) Sacc.: Seren village, pastureland, 38° 24' N, 40° 30' E, 862 m, 14.11.2009, *Acar* 063.
17. *A. moelleri* Wasser: Hani Centre, under, near poplar, 38° 24' N, 40° 23' E, 884 m, 17.10.2009, *Acar* 016.
18. *Bovista pila* Berk. & M.A. Curtis: Seren village, in meadow, 38° 24' N, 40° 30' E, 868 m, 22.05.2010, *Acar* 232.
19. *B. plumbea* Pers.: Belen village, in meadow, 38° 25' N, 40° 21' E, 892 m, 14.05.2010, *Acar* 198.
20. *Coprinus comatus* (O.F. Müll.) Pers.: Seren village, in meadow, 38° 24' N, 40° 30' E, 869 m, 16.04.2010, *Acar* 118; Belen village, 38° 24' N, 40° 21' E, 946 m, 14.05.2010, *Acar* 200.
21. *Cyathus olla* (Batsch) Pers.: Hani Centre, on wood remains, 38° 24' N, 40° 23' E, 881 m, 13.05.2010, *Acar* 185.
22. *Lepiota cristata* (Bolton) P. Kumm.: Seren village, in meadow, 38° 24' N, 40° 30' E, 855 m, 14.11.2009, *Acar* 056.
23. *L. oreadiformis* Velen.: Seren village, under oak, 38° 24' N, 40° 30' E, 862 m, 14.11.2009, *Acar* 063.
24. *L. subincarnata* J.E. Lange: Seren village, stream edge, under willow, 38° 24' N, 40° 30' E, 866 m, 14.11.2009, *Acar* 055.
25. *Leucoagaricus leucothites* (Vittad.) Wasser: Hani centre, in meadow, 38° 24' N, 40° 23' E, 879 m, 18.10.2009, *Acar* 027.
26. *Lycoperdon marginatum* Vittad.: Kalaba village, in meadow, 38° 26' N, 40° 25' E, 1172 m, 22.05.2010, *Acar* 222.
27. *Macrolepiota excoriata* (Schaeff.) Wasser: Abacılar village, in meadow, 38° 26' N, 40° 18' E, 1029 m, 19.04.2010, *Acar* 177.

**Amanitaceae** R. Heim ex Pouzar

28. *Amanita verna* (Bull.) Lam.: Seren village, under fir, 38° 24' N, 40° 30' E, 870 m, 22.05.2010, *Acar* 228.

**Bolbitiaceae** Singer

29. *Conocybe apala* (Fr.) Arnolds: Seren village, in meadow, 38° 24' N, 40° 30' E, 867 m, 14.11.2009, *Acar* 048.
30. *C. aporos* Kits van Wav.: Abacılar village, in meadow, 38° 26' N, 40° 18' E, 1034 m, 19.04.2010, *Acar* 173.
31. *C. arrhenii* (Fr.) Kits van Wav.: Hani centre, in meadow, 38° 24' N, 40° 23' E, 881 m, 17.10.2009, *Acar* 014.
32. *C. filaris* (Fr.) Kühner: Hani-Dicle main road, in meadows, 38° 24' N, 40° 23' E, 870 m, 28.03.2010, *Acar* 090.
33. *Conocybe pulchella* (Velen.) Hauskn.: Meadow, centrum, stream edge, 38° 24'684"K, 40° 23'562"D, 874 m, 15.11.2009, A. 79.
34. *C. semiglobata* Kühner & Watling: Okur village, in meadow, 38° 22' N, 40° 24' E, 844 m, 16.04.2010, *Acar* 130.
35. *C. tenera* (Schaeff.) Fayod: Okur village, in meadow, 38° 22' N, 40° 24' E, 774 m, 16.04.2010, *Acar* 137.

**Cortinariaceae** R. Heim

36. *Hebeloma leucosarx* P.D. Orton: Okur village, in meadows, near willow, 38° 22' N, 40° 24' E, 822 m, 16.04.2010, *Acar* 141.
37. *H. populinum* Romagn.: Hani centre, under poplar, 38° 24' N, 40° 23' E, 879 m, 18.10.2009, *Acar* 032.

**Entolomataceae** Kotl. & Pouzar

38. *Entoloma clypeatum* (L.) P. Kumm.: Seren village, in meadow, 38° 24' N, 40° 30' E, 861 m, 14.11.2009, *Acar* 061.
39. *Entoloma saepium* (Noulet-Dassier) Richon & Roze: Topçular village, meadow, 38° 27'581"K, 40° 24'168"D, 976 m, 15.05.2010, A. 205.

**Hydnangiaceae** Gäum. & C.W.Dodge

40. *Laccaria laccata* (Scop.) Cooke: Belen village, under oak, 38° 25' N, 40° 21' E, 942 m, 24.05.2010, *Acar* 250.

**Inocybaceae** Jülich

41. *Inocybe dulcamara* (Alb. & Schwein.) P. Kumm.: Abacılar village, under poplar, 38° 26' N, 40° 18' E, 1036 m, 19.04.2010, *Acar* 170.
42. *I. flocculosa* (Berk.) Sacc.: Okur village, under oak, 38° 22' N, 40° 24' E, 842 m, 16.04.2010, *Acar* 150.

43. *Inocybe glabripes* Ricke: Serenköy, sandy area, on tree remains, 38° 24'246"K, 40° 30'596"D, 864 m, 23.05.2010, A. 245.
44. *I. rimosa* (Bull.) P. Kumm.: Hani centre, under poplar, 38° 24' N, 40° 23' E, 886 m, 13.05.2010, *Acar* 180.
45. *I. subcarpta* Kühner & Boursier: Topçular village, in meadow, 38° 27' N, 40° 24' E, 974 m, 21.05.2010, *Acar* 213.
- Marasmiaceae** Roze ex Kühner
46. *Macrocystidia cucumis* (Pers.) Joss: Serenköy, in meadow, 38° 24' N, 40° 30' E, 780 m, 22.05.2010, *Acar* 231.
47. *Marasmius oreades* (Bolton) Fr.: Serenköy, in meadow, 38° 24' N, 40° 30' E, 866 m, 23.05.2010, *Acar* 247.
48. *M. rotula* (Scop.) Fr.: Hani centre, on plant remains, 38° 24' N, 40° 23' E, 880 m, 18.10.2009, *Acar* 33.
- Mycenaceae** Overeem
49. *Mycena leptocephala* (Pers.): Seren village, among leaves, 38° 24' N, 40° 30' E, 861 m 14.11.2009, *Acar* 47.
- Omphalotaceae** Bresinsky
50. *Gymnopus dryophilus* (Bull.) Murrill: Serenköy, under fir, 38° 24' N, 40° 30' E, 840 m, 22.05.2010, *Acar* 235.
51. *Gymnopus ocior* (Pers.) Antonín & Noordel.: Serenköy, stream edge, under oak, 38° 24' N, 40° 30' E, 843 m, 14.11.2009, *Acar* 64.
- Physalacriaceae** Corner
52. *Armillaria borealis* Marxm. & Korhonen: Hani centre, on poplar stump, 38° 24'548"K, 40° 23'502"D, 881 m, 17.10.2009, *Acar* 10.
- Pleurotaceae** Kühner
53. *Pleurotus eryngii* (DC.) Quél: Okur village, on root, 38° 22' N, 40° 24' E, 844 m, 16.04.2010, *Acar* 129.
54. *P. ostreatus* (Jacq.) P. Kumm.: Hani centre, on willow stump, 38° 24' N, 40° 23' E, 885 m, 18.10.2009, *Acar* 028; Seren village, on poplar stump, 38° 24' N, 40° 30' E, 875 m, 23.05.2010, *Acar* 241.
- Pluteaceae** Kotl. & Pouzar
55. *Pluteus cervinus* (Schaeff.) P. Kumm.: Seren village, on wood remains, 38° 24' N, 40° 30' E, 865 m, 23.05.2010, *Acar* 239.
56. *P. petasatus* (Fr.): Abacılar village, on wood remains, 38° 26' N, 40° 18' E, 1036 m, 19.04.2010, *Acar* 179.
57. *P. podospileus* Sacc. & Cub.: Seren village, on wood remains, 38° 24' N, 40° 30' E, 871 m, 14.11.2009, *Acar* 052.
58. *P. salicinus* (Pers.) P. Kumm.: Hani centre, stream edge, on rotten wood, 38° 24' N, 40° 23' E, 881 m, 17.10.2009, *Acar* 021.
59. *Volvopluteus gloiocephalus* (DC.) Vizzini, Contu & Justo: Belen village, in meadow, 38° 25' N, 40° 21' E, 943 m, 24.05.2010, *Acar* 248.
- Psathyrellaceae** Vilgalys, Moncalvo & Redhead
60. *Coprinellus disseminatus* (Pers.) J.E. Lange: Seren village, on willow stump 38° 24' N, 40° 30' E, 867 m, 14.11.2009, *Acar* 054.
61. *C. domesticus* (Bolton) Vilgalys, Hopple & Jacq. Johnson: Belen village, on plant remains, 38° 24' N, 40° 21' E, 949 m, 13.11.2009, *Acar* 043.
62. *C. micaceus* (Bull.) Vilgalys, Hopple & Jacq. Johnson: Hani centre, Anka park, on poplar stump, 38° 24' N, 40° 23' E 883 m, 03.05.2009, *Acar* 002.
63. *C. xanthothrix* (Romagn.) Vilgalys, Hopple & Jacq. Johnson: Hani centre, on wood remains, 38° 24' N, 40° 23' E, 882 m, 17.10.2009, *Acar* 012.
64. *Coprinopsis atramentaria* (Bull.) Redhead, Vilgalys & Moncalvo: Topçular village, in meadow, 38° 27' N, 40° 24' E, 968 m, 20.05.2010, *Acar* 210.
65. *C. friesii* (Quél.) P. Karst.: Belen village, on plant remains, 38° 24' N, 40° 21' E, 947 m, 14.05.2010, *Acar* 192.
66. *C. nivea* (Pers.) Redhead, Vilgalys & Moncalvo: Seren village, in meadow, on dung, 38° 24' N, 40° 30' E, 887 m, 16.04.2010, *Acar* 117.
67. *Parasola kuehneri* (Ulje & Bas) Redhead, Vilgalys & Hopple: Dicle highway, on roadside, under poplar, 38° 24' N, 40° 23' E, 870 m, 28.03.2010, *Acar* 89.
68. *Psathyrella candolleana* (Fr.): Hani centre, Anka park, on poplar stump, 38° 24' N, 40° 23' E, 882 m, 03.05.2009, *Acar* 001.
69. *P. marcescibilis* (Britzelm.) Singer: Abacılar village, under poplar, 38° 26' N, 40° 18' E, 1039 m, 19.04.2010, *Acar* 176.
70. *P. spadiceogrisea* (Schaeff.) Maire: Hani centre, on wood remains, 38° 24' N, 40° 23' E, 886 m, 13.05.2010, *Acar* 181.
71. *P. tephrophylla* (Romagn.) M.M. Moser: Belen village, in meadow, 38° 25' N, 40° 21' E, 981 m, 14.11.2009, *Acar* 034.
72. *Panaeolus foeniseccii* (Pers.) J. Schröt.: Topçular village, in meadow, 38° 27' N, 40° 24' E, 960 m, 15.05.2010, *Acar* 209.
73. *P. papilionaceus* (Bull.) Quél.: Okur village, in meadows, on dung, 38° 22' N, 40° 30' E, 842 m, 16.04.2010, *Acar* 135.
- Schizophyllaceae** Quél.
74. *Schizophyllum commune* Fr.: Hani centre, on plum stump, 38° 24' N, 40° 23' E, 873 m, 31.03.2010, *Acar* 100.

**Strophariaceae** Singer & A.H. Sm.

75. *Agrocybe cylindracea* (DC.) Maire: Deregen, on poplar stump, 38° 24' N, 40° 23' E, 882 m, 03.05.2009, *Acar* 003.  
 76. *A. paludosa* (J.E. Lange) Kühner & Romagn. ex Bon: Abacılar village, on wood remains, 38° 26' N, 40° 18' E, 1038 m, 19.04.2010, *Acar* 175.  
 77. *A. pediades* (Fr.) Fayod: Seren village, in meadow, 38° 24' N, 40° 30' E, 765 m, 22.05.2010, *Acar* 233.  
 78. *A. praecox* (Pers.) Fayod: Seren village, under poplar, 38° 24' N, 40° 30' E, 861 m, 23.05.2010, *Acar* 243.  
 79. *Hypholoma fasciculare* (Huds.) P. Kumm.: Kalaba village, on rotting root, 38° 26' N, 40° 25' E, 1172 m, 22.05.2010, *Acar* 227.  
 80. *Pholiota gummosa* (Lasch) Singer: Hani centre, under poplar, 38° 24' N, 40° 23' E, 879 m, 18.10.2009, *Acar* 025.  
 81. *P. lucifera* (Lasch) Quéf.: Hani centre, on root, 38° 24' N, 40° 23' E, 880 m, 18.10.2009, *Acar* 24.  
 82. *P. tuberculosa* (Schaeff.) P. Kumm.: Belen village, on wood remains, 38° 25' N, 40° 21' E, 988 m, 15.05.2010, *Acar* 203.  
 83. *Psilocybe montana* (Pers.) P. Kumm.: Topçular village, in grass, 38° 27' N, 40° 24' E, 971 m, 15.05.2010, *Acar* 207.  
 84. *Stropharia coronilla* (Bull.) Quéf.: Belen village, in meadow, 38° 25' N, 40° 21' E, 940 m, 14.05.2010, *Acar* 197.  
 85. *S.semiglobata* (Batsch) Quéf.: Okur village, on dung, 38° 22' N, 40° 24' E, 832 m, 16.04.2010, *Acar* 155.

**Tricholomataceae** R. Heim ex Pouzar

86. *Clitocybe rivulosa* (Pers.) P. Kumm.: Hani centre, under poplar, 38° 24' N, 40° 23' E, 885 m, 13.05.2010, *Acar* 183.  
 87. *Collybia cookei* (Bres.) J.D. Arnold: Serenköy, stream edge, under oak, 38° 22' N, 40° 24' E, 822 m, 14.11.2009, *Acar* 069.  
 88. *Melanoleuca excissa* (Fr.) Singer: Hani centre, under poplar, 38° 24' N, 40° 23' E, 882 m, 18.10.2009 *Acar* 26; Belen village, in pasteurland, 38° 25' N, 40° 21' E, 940 m, 14.05.2010, *Acar* 197.  
 89. *M. grammopodia* (Bull.) Murrill: Deregen, in meadow, 38° 26' N, 40° 25' E, 1171 m, 19.04.2010, *Acar* 165.  
 90. *M. polioleuca* (Fr.) G. Moren: Belen village, in meadow, 38° 24' N, 40° 21' E, 947 m, 13.11.2009, *Acar* 036.  
 91. *M. subalpina* (Britzelm.) Bresinsky & Stangl: Okur village stream edge, in meadow, 38° 22' N, 40° 30' E, 856 m, 16.04.2010, *Acar* 134.  
 92. *Tricholoma populinum* J.E. Lange: Hani centre, under poplar, 38° 24' N, 40° 23' E, 879 m, 18.10.2009, *Acar* 023.

**Tubariaceae** Vizzini

93. *Tubaria conspersa* (Pers.) Fayod: Seren village, in meadow, on plant remains, 38° 24' N, 40° 30' E, 856 m, 14.11.2009, *Acar* 059.

**Atheliales** Jülich**Atheliaceae** Jülich

94. *Athelia neuhoffii* (Bres.) Donk: Hani-Dicle highway, on roadside, on plant remains, 38° 24' N, 40° 23' E, 881 m, 28.03.2010, *Acar* 094.

**Boletales** E.-J. Gilbert**Paxillaceae** Lotsy

95. *Paxillus involutus* (Batsch) Fr.: Seren village, in meadow, 38° 24' N, 40° 30' E, 871 m, 14.11.2009, *Acar* 050.

**Phallales** E. Fisch.**Phallaceae** Corda

96. *Phallus hadriani* Vent: Topçular village, in meadow, 38° 27' N, 40° 24' E, 979 m, 21.05.2010, *A.* 218.

**Polyporales** Gäum.**Polyporaceae** Fr. ex Corda

97. *Fomes fomentarius* (L.) J. Kickx: Hani centre, on walnut, 38° 24' N, 40° 23' E, 878 m, 17.10.2009, *Acar* 020.  
 98. *Lentinus tigrinus* (Bull.) Fr.: Deregen, on poplar stump, 38° 24' N, 40° 23' E, 884 m, 03.05.2009, *Acar* 005; Kalaba village, on willow stump, 38° 26' N, 40° 25' E, 1170 m, 19.04.2010, *Acar* 167.  
 99. *Trametes hirsuta* (Wulfen) Lloyd: Topçular village, on poplar stump, 38° 27' N, 40° 24' E, 971 m, 15.05.2010, *Acar* 204.  
 100. *T. trogii* Berk.: Hani-Dicle highway, near road, on poplar stump, 38° 24' N, 40° 23' E, 867 m, 28.03.2010, *Acar* 088.  
 101. *T. versicolor* (L.) Lloyd: Hani centre, on plum, 38° 24' N, 40° 23' E, 873 m, 31.03.2010, *Acar* 099.  
*Tyromyces chioneus* (Fr.) P. Karst.: Seren village, on poplar stump, 38° 24' N, 40° 30' E, 886 m, 23.05.2010, *Acar* 244..

**4. Conclusions**

*Ascomycota* (*Helotiaceae* 2, *Discinaceae* 1, *Helvellaceae* 3, *Morchellaceae* 6, *Pezizaceae* 2, *Pyronemataceae* 1) and 84 *Basidiomycota* (*Agaricaceae* 12, *Atheliaceae* 1, *Amanitaceae* 1, *Bolbitiaceae* 7, *Cortinariaceae* 2, *Entolomataceae* 2, *Hydnangiaceae* 1, *Inocybaceae* 5, *Marasmiaceae* 3, *Mycenaceae* 1, *Omphalotaceae* 2, *Paxillaceae* 1, *Phallaceae* 1, *Physalacriaceae* 1, *Pleurotaceae* 2, *Pluteaceae* 5, *Polyporaceae* 6, *Psathyrellaceae* 14, *Schizophyllaceae* 1, *Strophariaceae* 11, *Tricholomataceae* 7 and *Tubariaceae* 1).

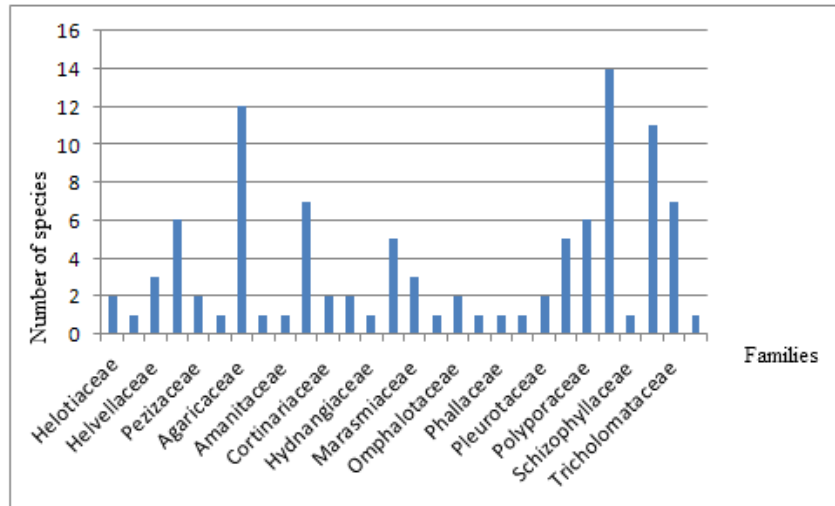


Figure 2. Distribution of macrofungi according to the family.

Thirty-seven of the determined taxa are edible (Figure3) but only *Morchella deliciosa*, *M. elata*, *M. esculenta* and *Pleurotus eryngii* are collected and consumed by local people. There are also 12 poisonous species in the region. These are; *Agaricus moelleri*, *Lepiota cristata*, *L. subincarnata*, *Amanita verna*, *Conocybe filaris*, *Entoloma clypeatum*, *Inocybe dulcamara*, *I. flocculosa*, *I. glabripes*, *I. rimosa*, *Hypholoma fasciculare* and *Psilocybe montana*. There is not any record of poisoning event in the region, because the local people are keen on collecting only well-known edible mushrooms.

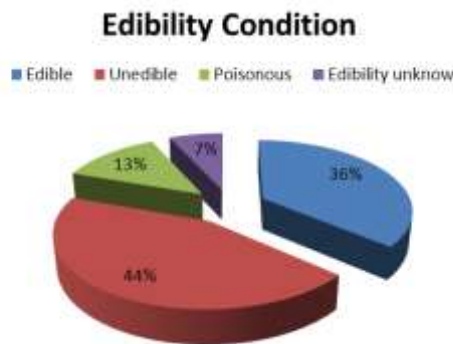


Figure 3. Edibility condition of macrofungi

The taxa determined in the district reflect similarity with those of the investigations conducted in its close environs. These investigations and the similarity percentages are given in Table 1. The reason of the similarity may be common vegetation and climate.

With the present study, the macrofungal composition of the district was determined and a contribution was made to the Turkish mycobiota.

Table 1. Similarity percentage of the results to the studies completed neighbouring districts.

Studies completed on neighbouring districts	Total taxa	Number of identical taxa	Similarity percentage (%)
Elazığ (Gücin, 1990)	58	18	32
Van (Demirel, 1996)	50	21	42
Diyarbakır (Yıldız ve Ertekin, 1996; 1997)	33	16	49
Çemişgezek/Tunceli (Demirel and Nacar, 2000)	30	11	37
Batman (Yeşil and Yıldız, 2004; Demir et al., 2007)	76	29	38
Genç/Bingöl (Uzun et al., 2009)	78	27	35

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