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## The checklist of macrofungi of Karaman province

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## Karaman ili makromantarlarının kontrol listesi

**Abstract:** This study was based on the findings of macrofungal studies performed within the boundaries of Karaman province between 2000 and 2023. Tracing the researches carried out in the region, a list of 380 taxa belonging to 180 genera, 75 families, 20 orders and 8 classes within *Ascomycota* and *Basidiomycota* have been compiled.

**Key words:** Biodiversity, macrofungi, Türkiye

**Özet:** Bu çalışma 2000 ve 2023 yılları arasında Karaman il sınırları içinde makromantarlar üzerinde gerçekleştirilmiş çalışmaların bulgularına dayanmaktadır. Bölgede gerçekleştirilen çalışmalar taranarak *Ascomycota* ve *Basidiomycota* bölgeleri içinde yer alan 8 sınıf, 20 takım, 75 familya ve 180 cinsde ait 380 taksonu içeren bir liste oluşturulmuştur.

**Anahtar Kelimeler:** Biyoçeşitlilik, makromantarlar, Türkiye

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### 1. Introduction

Karaman is a province of Türkiye within Central Anatolian region and is among the studied regions of Türkiye in terms of macrofungal biodiversity. In Karaman, the first mycological study related to macrofungi was carried out by Kaşik et al. (2000). Five local list (Kaşik et al., 2000; Öztürk et al., 2001; Doğan and Öztürk, 2006; İleri et al., 2020; Çetinkaya et al., 2021) were presented. Seventeen papers (Doğan and Işıloğlu, 2002; Kaşik et al., 2002; Öztürk, 2002; Doğan et al., 2003, 2007, 2011a,b; Intini et al., 2003; Öztürk et al., 2003; Doğan and Karadelev, 2009; Doğan and Aktaş, 2010; Türkoğlu et al., 2015; İleri et al., 2019; Çetinkaya et al., 2020; Çetinkaya and Uzun, 2021; Kaplan et al., 2021; Kaya and Uzun, 2023) had also been published to present new species, new records or new distributions. The current study was based on the findings of the above mentioned studies carried out within the boundaries of Karaman province. Some of the presented taxa were included in a country-wise checklist prepared by Sesli et al. (2020). Though 23 publication have been presented regarding the macrofungi of Karaman, none of them have clear information about total species that have so far been determined within the boundaries of Karaman province. The aim of the study is to present the macrofungi of Karaman province as a complete list and to contribute to the mycobiota of Türkiye.

### 2. Materials and Method

The researches presented on macrofungi of Karaman province were traced and a list of the macrofungi taxa was prepared together with their citations. Only the taxa presented in a peer reviewed article were included in the list. The taxa existing in unpublished theses and conference papers which were not presented as a full text were not

considered. The authors names of fungal taxa are abbreviated according to Kirk & Ansell (1992) and Kirk et al. (2004). The systematic of the taxa follows Cannon and Kirk (2007), Kirk et al. (2008), and Index Fungorum (accessed 15 July 2024).

### 3. Results

The list of the taxa, reported from the region within the boundaries of Karaman province are listed in alphabetical order together with the references they were presented in.

**Fungi** R.T. Moore

**Ascomycota** Caval.-Sm.

**Dothideomycetes** O.E. Erikss. & Winka

**Patellariales** D. Hawksw. & O.E. Erikss.

**Patellariaceae** Corda

1. **Patellaria atrata** (Hedw.) Fr.: (İleri et al., 2020; Çetinkaya et al., 2021).

**Leotiomycetes** O.E. Erikss. & Winka

**Helotiales** Nannf.

**Incertae Sedis**

2. **Stamnaria americana** Massee & Morgan: (Kaplan et al., 2021).

**Lachnaceae** Raity.

3. **Brunnipila clandestina** (Bull.) Baral: (İleri et al., 2020).

4. **Lachnellula arida** (W. Phillips) Dennis: (Kaşik et al., 2002).

5. **Lachnellula subtilissima** (Cooke) Dennis: (Doğan and Öztürk, 2006).

6. *Lachnum sulphureum* (Fuckel) P. Karst.: (Çetinkaya et al., 2021).

7. *Lachnum virginicum* (Batsch) P. Karst.: (İleri et al., 2020).

**Helotiaceae** Rehm

8. *Hymenoscyphus calyculus* (Fr.) W. Phillips: (İleri et al., 2020).

9. *Hymenoscyphus caudatus* (P. Karst.) Dennis: (Çetinkaya and Uzun, 2021).

10. *Hymenoscyphus lutescens* (Hedw.) W. Phillips: (Doğan and Aktaş, 2010).

**Mollisiaceae** Rehm

11. *Mollisia hydrophila* (P. Karst.) Sacc.: (Çetinkaya et al., 2021).

12. *Mollisia melaleuca* (Fr.) Brunaud: (İleri et al., 2020).

**Orbilliomycetes** O.E. Erikss. & Baral

**Orbilliales** Baral, O.E. Erikss., G. Marson & E. Weber

**Orbilliaceae** Nannf.

13. *Orbilia auricolor* (A. Bloxam) Sacc.: (Çetinkaya et al., 2021).

**Pezizomycetes** O.E. Erikss. & Winka

**Pezizales** J. Schröt.

**Ascobolaceae** Boud. ex Sacc.

14. *Ascobolus behnitziensis* Kirschst.: (İleri et al., 2020).

15. *Ascobolus furfuraceus* Pers.: (İleri et al., 2020).

16. *Thecotheus lundqvistii* Aas: (Çetinkaya et al., 2020).

**Caloscyphaceae** Harmaja

17. *Caloscypha fulgens* (Pers.) Boud.: (Doğan and Öztürk, 2006).

**Discinaceae** Benedix

18. *Gyromitra esculenta* Pers. ex Fr.: (Öztürk et al., 2001).

**Helvellaceae** Fr.

19. *Dissingia leucomelaena* (Pers.) K. Hansen & X.H. Wang: (Öztürk et al., 2001; Çetinkaya et al., 2021).

20. *Helvella acetabulum* (L.) Quél.: (Kaşik et al., 2000; Doğan and Öztürk, 2006; İleri et al., 2020; Çetinkaya et al., 2021).

21. *Helvella ephippium* Lév.: (Kaşik et al., 2000).

22. *Helvella fusca* Gillet: (Çetinkaya et al., 2021).

23. *Helvella lacunosa* Afzel.: (Çetinkaya et al., 2021).

24. *Helvella latispora* Boud.: (İleri et al., 2020).

25. *Helvella solitaria* P. Karst.: (Çetinkaya et al., 2021).

26. *Helvella spadicea* Schaeff.: (Öztürk et al., 2001; Doğan and Öztürk, 2006).

27. *Paxina queletii* (Bres.) Stangl: (Doğan and Öztürk, 2006).

**Morchellaceae** Rchb.

28. *Morchella deliciosa* Fr.: (İleri et al., 2020; Çetinkaya et al., 2021).

29. *Morchella esculenta* (L.) Pers.: (Kaşik et al., 2000; Öztürk et al., 2001; Doğan and Öztürk, 2006; İleri et al., 2020).

30. *Morchella semilibera* DC.: (Doğan and Öztürk, 2006).

**Pezizaceae** Dumort.

31. *Iodophanus carneus* (Pers.) Korf: (İleri et al., 2020).

32. *Paragalactinia succosa* (Berk.) Van Vooren: (Çetinkaya et al., 2021).

33. *Peziza arvernensis* Roze & Boud.: (Kaşik et al., 2002).

34. *Peziza domiciliana* Cooke: (Kaşik et al., 2002).

35. *Peziza fimeti* (Fuckel) E.C. Hansen: (İleri et al., 2020).

36. *Peziza varia* (Hedw.) Alb. & Schwein.: (Öztürk et al., 2001).

37. *Sarcopeziza sicula* (Inzenga) Agnello, Loizides & P. Alvarado (Kaya and Uzun, 2023).

38. *Sarcosphaera coronaria* (Jacq.) J. Schröt.: (Öztürk et al., 2001).

39. *Terfezia albida* Ant. Rodr., Muñ.-Moh. & Bordallo: (Çetinkaya et al., 2021).

40. *Terfezia boudieri* Chatin: (Doğan and Öztürk, 2006; İleri et al., 2020; Çetinkaya et al., 2021).

41. *Terfezia claveryi* Chatin: (Türkoğlu et al., 2015; İleri et al., 2020; Çetinkaya et al., 2021).

**Pyronemataceae** Corda

42. *Genea lobulata* (Mor.-Arr., J. Gómez & Calonge) P. Alvarado & Mor.-Arr.: (İleri et al., 2020).

43. *Geopora arenicola* (Lév.) Kers: (Öztürk et al., 2001; Doğan and Öztürk, 2006; Çetinkaya et al., 2021).

44. *Geopora summeriana* (Cooke ex W. Phillips) M. Torre: (Çetinkaya et al., 2021).

45. *Humaria hemisphaerica* (F.H. Wigg.) Fuckel: (Kaşik et al., 2000).

46. *Inermisia gyalectoides* (Svrček & Kubička) Dennis & Itzert: (İleri et al., 2020).

47. *Octospora axillaris* (Nees) M.M. Moser: (İleri et al., 2020).

48. *Octospora musci-muralis* Graddon: (İleri et al., 2020).

49. *Octospora polytrichi* (Schumach.) Caillet & Moyne: (İleri et al., 2020).

50. *Parascutellinia violacea* (Velen.) Svrček: (Çetinkaya et al., 2021).

51. *Picoa juniperi* Vittad.: (Çetinkaya et al., 2021).

52. *Picoa lefebvrei* (Pat.) Maire: (İleri et al., 2020; Çetinkaya et al., 2021).

53. *Pyronema domesticum* (Sowerby) Sacc.: (Çetinkaya et al., 2021).

54. *Pyronema omphalodes* (Bull.) Fuckel: (Çetinkaya et al., 2021).

55. *Scutellinia crinita* (Bull.) Lambotte: (İleri et al., 2020).

56. *Scutellinia scutellata* (L.) Lambotte: (Doğan and Öztürk, 2006).

57. *Trichophaeopsis bicuspis* (Boud.) Korf & Erb: (Çetinkaya et al., 2021).
- Sarcoscyphaceae* Le Gal ex Eckblad
58. *Pithya vulgaris* Fuckel: (Doğan and İşiloğlu, 2002).
- Tuberaceae* F. Berchtold & J. Presl
59. *Tuber nitidum* Vittad.: (İleri et al., 2020).
- Sordariomycetes* O.E. Erikss. & Winka
- Diaporthales* Nannf.
- Valsaceae* Tul. & C. Tul.
60. *Cytopspora chrysosperma* (Pers.) Fr.: (Çetinkaya et al., 2021).
- Hypocreales* Lindau
- Nectriaceae* Tul. & C. Tul.
61. *Hydropisphaera peziza* (Tode) Dumort.: (İleri et al., 2020; Çetinkaya et al., 2021).
62. *Nectria cinnabarinina* (Tode) Fr.: (Öztürk et al., 2001; Doğan and Öztürk, 2006).
- Xylariales* Nannf.
- Diatrypaceae* Nitschke
63. *Diatrype stigma* (Hoffm.) Fr.: (İleri et al., 2020; Çetinkaya et al., 2021).
- Xylariaceae* Tul. & C. Tul.
64. *Kretzschmaria deusta* (Hoffm.) P.M.D. Martin: (Çetinkaya et al., 2021).
65. *Nemania serpens* (Pers.) Gray: (Çetinkaya et al., 2021).
- Basidiomycota* R.T. Moore
- Agaricomycetes* Doweld
- Agaricales* Underw.
- Incertae Sedis**
66. *Calyptella capula* (Holmsk.) Quél.: (Çetinkaya et al., 2021).
67. *Cyathus olla* (Batsch) Pers.: (Çetinkaya et al., 2021).
68. *Cyathus stercoreus* (Schwein.) De Toni: (İleri et al., 2020).
69. *Cystodermella ambrosii* (Bres.) Harmaja: (Doğan et al., 2007).
70. *Lepista nuda* (Bull.) Cooke: (Öztürk et al., 2001; Doğan and Öztürk, 2006).
71. *Melanoleuca arcuata* (Bull.) Singer: (Kaşik et al., 2000).
72. *Melanoleuca cognata* (Fr.) Konrad & Maubl.: (Doğan and Öztürk, 2006).
73. *Melanoleuca excissa* (Fr.) Singer: (Doğan and Öztürk, 2006).
74. *Melanoleuca humilis* (Pers.) Pat.: (Doğan and Öztürk, 2006).
75. *Melanoleuca luteolosperma* (Britzelm.) Singer: (Doğan and Öztürk, 2006).
76. *Melanoleuca melaleuca* (Pers.) Murrill: (Öztürk et al., 2001; Doğan and Öztürk, 2006).
77. *Melanoleuca paedida* (Fr.) Kühner & Maire: (Doğan and Öztürk, 2006).
78. *Melanoleuca polioleuca* (Fr.) Kühner & Maire: (Doğan and Öztürk, 2006).
79. *Melanoleuca schumacheri* (Fr.) Singer: (Doğan and Öztürk, 2006).
80. *Melanoleuca stridula* (Fr.) Singer: (Doğan and Öztürk, 2006).
81. *Melanoleuca subalpina* (Britzelm.) Bresinsky & Stangl: (Doğan and Öztürk, 2006).
82. *Melanoleuca substrictipes* Kühner: (Doğan and Öztürk, 2006).
83. *Melanoleuca turrita* (Sacc.) Singer: (Kaşik et al., 2000).
84. *Panaeolina foeniseccii* (Pers.) Maire: (İleri et al., 2020).
- Agaricaceae* Chevall.
85. *Agaricus arvensis* Schaeff.: (Doğan and Öztürk, 2006).
86. *Agaricus bresadolanus* Bohus: (Doğan and Öztürk, 2006).
87. *Agaricus campestris* L.: (Doğan and Öztürk, 2006; İleri et al., 2020; Çetinkaya et al., 2021).
88. *Agaricus heimii* Bon: (Öztürk et al., 2003).
89. *Agaricus langei* (F.H. Møller) F.H. Møller: (Doğan and Öztürk, 2006).
90. *Agaricus luteomaculatus* F.H. Møller: (Öztürk et al., 2003).
91. *Agaricus sylvicola* (Vittad.) Peck: (Kaşik et al., 2000).
92. *Coprinus comatus* (O.F. Müll.) Pers.: (Kaşik et al., 2000; Doğan and Öztürk, 2006; İleri et al., 2020; Çetinkaya et al., 2021).
93. *Coprinus sterquilinus* (Fr.) Fr.: (Doğan and Öztürk, 2006).
94. *Lepiota clypeolaria* (Bull.) P. Kumm.: (Doğan and Öztürk, 2006).
95. *Lepiota cristata* (Bolton) P. Kumm.: (Doğan and Öztürk, 2006).
96. *Lepiota erminea* (Fr.) P. Kumm.: (Doğan and Öztürk, 2006).
97. *Lepiota oreadiformis* Velen.: (Doğan and Öztürk, 2006).
98. *Lepiota subincarnata* J.E. Lange: (Öztürk et al., 2003).
99. *Lepiota wasseri* Bon: (Öztürk et al., 2003).
100. *Leucoagaricus badhamii* (Berk. & Broome) Singer: (Doğan and Öztürk, 2006).
101. *Leucocoprinus leucothites* (Vittad.) Redhead: (Kaşik et al., 2000; İleri et al., 2020; Çetinkaya et al., 2021).
102. *Macrolepiota excoriata* (Schaeff.) Wasser: (Doğan and Öztürk, 2006; Çetinkaya et al., 2021).
103. *Macrolepiota mastoidea* (Fr.) Singer: (Doğan and Öztürk, 2006).
104. *Macrolepiota procera* (Scop.) Singer: (Doğan and Öztürk, 2006).

105. *Mycenastrum corium* (Guers.) Desv.: (İleri et al., 2020).

106. *Tulostoma brumale* Pers.: (Kaşik et al., 2000; İleri et al., 2020).

107. *Tulostoma fimbriatum* Fr.: (Kaşik et al., 2000; Doğan and Öztürk, 2006).

#### *Amanitaceae* E.-J. Gilbert

108. *Amanita citrina* Pers.: (Öztürk et al., 2001).

109. *Amanita ovoidea* (Bull.) Link: (Doğan and Öztürk, 2006).

#### *Bolbitiaceae* Singer

110. *Conocybe apala* (Fr.) Arnolds: (İleri et al., 2020; Çetinkaya et al., 2021).

111. *Conocybe deliquescens* Hauskn. & Krisai: (İleri et al., 2020; Çetinkaya et al., 2021).

112. *Conocybe pygmaeoaffinis* (Fr.) Kühner: (Doğan et al., 2003).

113. *Conocybe rickeniana* P.D. Orton: (Kaşik et al., 2000).

114. *Conocybe rickenii* (Jul. Schäff.) Kühner: (Doğan and Öztürk, 2006).

115. *Conocybe semiglobata* Kühner & Watling: (Doğan et al., 2003).

116. *Conocybe siennophylla* (Berk. & Broome) Singer ex Chiari & Papetti: (Doğan et al., 2003).

117. *Conocybe subovalis* Kühner & Watling: (Doğan et al., 2003).

#### *Chromocyphellaceae* Knudsen

118. *Chromocyphella muscicola* (Fr.) Donk: (İleri et al., 2020).

#### *Clitocybaceae* Vizzini, Consiglio & M. Marchetti

119. *Clitocybe bresadolana* Singer: (Doğan and Öztürk, 2006).

120. *Clitocybe dryadicola* (J. Favre) Harmaja: (Doğan and Öztürk, 2006).

121. *Clitocybe phyllophila* (Pers.) P. Kumm.: (Öztürk et al., 2001).

122. *Collybia cookei* (Bres.) J.D. Arnold: (Doğan and Öztürk, 2006).

#### *Cortinariaceae* Singer

123. *Calonarius elegantior* (Fr.) Niskanen & Liimat.: (Öztürk, 2002; Doğan and Öztürk, 2006).

124. *Calonarius splendens* (Rob. Henry) Niskanen & Liimat.: (Doğan and Öztürk, 2006).

125. *Calonarius sulfurinus* (Quél.) Niskanen & Liimat.: (Doğan and Öztürk, 2006).

126. *Cortinarius duracinus* Fr.: (Öztürk et al., 2001).

127. *Cortinarius psittacinus* M.M. Moser: (Doğan and Öztürk, 2006).

128. *Cortinarius subvalidus* Rob. Henry: (Öztürk et al., 2001; Doğan and Öztürk, 2006).

#### *Crepidotaceae* (S. Imai) Singer

129. *Crepidotus caspari* Velen.: (Öztürk et al., 2003).

130. *Crepidotus luteolus* Sacc.: (Kaşik et al., 2000).

131. *Crepidotus mollis* (Schaeff.) Staude: (Öztürk et al., 2001; Çetinkaya et al., 2021).

132. *Crepidotus variabilis* (Pers.) P. Kumm.: (Çetinkaya et al., 2021).

133. *Pleuroflammula tuberculosa* (Schaeff.) E. Horak: (Doğan and Öztürk, 2006).

#### *Cyphellaceae* Burnett

134. *Chondrostereum purpureum* (Pers.) Pouzar: (Doğan and Öztürk, 2006; Çetinkaya et al., 2021).

#### *Entolomataceae* Kotl. & Pouzar

135. *Entoloma cetratum* (Fr.) M.M. Moser: (Doğan and Öztürk, 2006).

136. *Entoloma niphoides* Romagn. ex Noordel.: (Öztürk et al., 2003).

137. *Entoloma sepium* (Noulet & Dass.) Richon & Roze: (Doğan and Öztürk, 2006).

138. *Entoloma sinuatum* (Bull.) P. Kumm.: (Doğan and Öztürk, 2006).

139. *Entoloma subradiatum* (Kühner & Romagn.) M.M. Moser: (Öztürk et al., 2003).

#### *Galeropsidaceae* Singer

140. *Panaeolus ater* (J.E. Lange) Kühner & Romagn. ex Bon: (Öztürk et al., 2001; Doğan and Öztürk, 2006; İleri et al., 2020).

141. *Panaeolus fimicola* (Pers.) Gillet: (Öztürk et al., 2001; Doğan and Öztürk, 2006; İleri et al., 2020).

142. *Panaeolus olivaceus* F.H. Möller: (Doğan and Öztürk, 2006).

143. *Panaeolus papilionaceus* (Bull.) Quél.: (Doğan and Öztürk, 2006).

144. *Panaeolus semiovatus* (Sowerby) S. Lundell & Nannf.: (Doğan and Öztürk, 2006).

145. *Panaeolus subbalteatus* (Berk. & Broome) Sacc.: (Öztürk et al., 2001; Doğan and Öztürk, 2006).

#### *Hygrophoraceae* Lotsy

146. *Ampulloclitocybe clavipes* (Pers.) Redhead, Lutzoni, Moncalvo & Vilgalys: (Doğan and Öztürk, 2006).

147. *Arrhenia obscurata* (D.A. Reid) Redhead, Lutzoni, Moncalvo & Vilgalys: (Doğan et al., 2007).

148. *Hygrophorus erubescens* (Fr.) Fr.: (Öztürk et al., 2003).

149. *Hygrophorus marzuolus* (Fr.) Bres.: (Doğan and Öztürk, 2006).

150. *Galerina clavata* (Velen.) Kühner: (Doğan and Öztürk, 2006).

151. *Galerina marginata* (Batsch) Kühner: (Öztürk et al., 2001; Doğan and Öztürk, 2006).

152. *Lichenomphalia umbellifera* (L.) Redhead, Lutzoni, Moncalvo & Vilgalys: (Doğan and Öztürk, 2006).

#### *Hymenogastraceae* Vittad.

153. *Hebeloma crustuliniforme* (Bull.) Quél.: (Doğan and Öztürk, 2006).

154. *Hebeloma mesophaeum* (Pers.) Quél.: (Doğan and Öztürk, 2006).

155. *Hymenogaster bulliardii* Vittad.: (Çetinkaya et al., 2021).

156. *Hymenogaster olivaceus* Vittad.: (Çetinkaya et al., 2021).

157. *Naucoria pampeana* (Speg.) Rick: (Doğan and Öztürk, 2006).

158. *Psilocybe coronilla* (Bull.) Noordel.: (Doğan and Öztürk, 2006).

#### *Inocybaceae* Jülich

159. *Inocybe abietis* Kühner: (Doğan and Öztürk, 2006).

160. *Inocybe dulcamara* (Pers.) P. Kumm.: (Öztürk et al., 2001; Doğan and Öztürk, 2006).

161. *Inocybe fraudans* (Britzelm.) Sacc.: (Kaşik et al., 2000).

162. *Inocybe hirtella* Bres.: (Öztürk et al., 2001).

163. *Inocybe lacera* (Fr.) P. Kumm.: (Öztürk et al., 2001; Doğan and Öztürk, 2006; İleri et al., 2020).

164. *Inocybe muricellata* Bres.: (Doğan and Öztürk, 2006).

165. *Inocybe praetervisa* Quél.: (Kaşik et al., 2000).

166. *Inocybe queletii* Konrad: (Doğan and Öztürk, 2006).

167. *Mallocybe fuscomarginata* (Kühner) Matheny & Esteve-Rav.: (Doğan and Öztürk, 2006).

168. *Pseudosperma rimosum* (Bull.) Matheny & Esteve-Rav.: (Kaşik et al., 2000; Doğan and Öztürk, 2006; Çetinkaya et al., 2021).

#### *Lycoperdaceae* F. Berchtold & J. Presl

169. *Bovista plumbea* Pers.: (Doğan and Öztürk, 2006; İleri et al., 2020).

170. *Bovistella utriformis* (Bull.) Demoulin & Rebriev: (Doğan and Öztürk, 2006).

171. *Calvatia cyathiformis* (Bosc) Morgan: (Öztürk et al., 2003; İleri et al., 2020).

172. *Calvatia gigantea* (Batsch) Lloyd: (Doğan and Öztürk, 2006).

173. *Lycoperdon lividum* Pers.: (Doğan and Öztürk, 2006).

174. *Lycoperdon marginatum* Vittad.: (Öztürk et al., 2003).

175. *Lycoperdon molle* Pers.: (İleri et al., 2020).

176. *Lycoperdon nigrescens* Pers.: (Doğan and Öztürk, 2006).

177. *Lycoperdon perlatum* Pers.: (Öztürk et al., 2001; Doğan and Öztürk, 2006).

178. *Lycoperdon pratense* Pers.: (Doğan and Öztürk, 2006).

179. *Lycoperdon umbrinum* Pers.: (Doğan and Öztürk, 2006).

#### *Lyophyllaceae* Jülich

180. *Calocybe gangraenosa* (Fr.) V. Hofst., Moncalvo, Redhead & Vilgalys: (Doğan et al., 2007).

181. *Lyophyllum infumatum* (Bres.) Kühner: (Doğan et al., 2007).

182. *Lyophyllum semitale* (Fr.) Kühner: (Doğan et al., 2007).

#### *Macrocystidiaceae* Kühner

183. *Macrocytidia cucumis* (Pers.) Joss.: (Doğan et al., 2007).

#### *Marasmiaceae* Roze ex Kühner

184. *Marasmius epiphyllus* (Pers.) Fr.: (Öztürk et al., 2001).

185. *Marasmius epodius* Bres.: (İleri et al., 2020).

#### *Mycenaceae* Overeem

186. *Mycena acicula* (Schaeff.) P. Kumm.: (Çetinkaya et al., 2021).

187. *Mycena amicta* (Fr.) Quél.: (Doğan et al., 2007).

188. *Mycena metata* (Fr.) P. Kumm.: (Doğan and Öztürk, 2006).

189. *Mycena silvae-nigrae* Maas Geest. & Schwöbel: (Öztürk et al., 2001; Doğan and Öztürk, 2006).

190. *Mycena xantholeuca* Kühner: (Doğan et al., 2007).

191. *Xeromphalina campanella* (Batsch) Kühner & Maire: (Kaşik et al., 2000).

192. *Xeromphalina cauticinalis* (Fr.) Kühner & Maire: (Doğan and Öztürk, 2006).

#### *Niaceae* Jülich

193. *Merismodes anomala* (Pers.) Singer: (Çetinkaya et al., 2021).

#### *Omphalotaceae* Bresinsky

194. *Gymnopus dryophilus* (Bull.) Murrill: (Doğan and Öztürk, 2006; İleri et al., 2020).

195. *Gymnopus foetidus* (Sowerby) P.M. Kirk: (Doğan and Öztürk, 2006).

196. *Gymnopus fusipes* (Bull.) Gray: (Doğan and Öztürk, 2006).

197. *Gymnopus hariolorum* (Bull.) Antonín, Halling & Noordel.: (Doğan and Öztürk, 2006).

198. *Rhodocollybia prolixa* (Fr.) Antonín & Noordel.: (Doğan et al., 2007).

#### *Physalacriaceae* Corner

199. *Armillaria cepistipes* Velen.: (Doğan et al., 2007).

200. *Armillaria mellea* (Vahl) P. Kumm.: (Öztürk et al., 2001; Doğan and Öztürk, 2006; Çetinkaya et al., 2021).

201. *Flammulina velutipes* (Curtis) Singer: (Öztürk et al., 2001).

202. *Hymenopellis hygrophoroides* (Singer & Clémençon) R.H. Petersen: (Doğan et al., 2007).

203. *Oudemansiella melanotricha* (Dörfelt) M.M. Moser: (Öztürk et al., 2001; Doğan and Öztürk, 2006).

204. *Strobilurus stephanocystis* (Kühner & Romagn. ex Hora) Singer: (Öztürk et al., 2001; Doğan and Öztürk, 2006).

205. *Xerula pudens* (Pers.) Singer: (Doğan and Öztürk, 2006).

**Pleurotaceae** Kühner

206. *Hohenbuehelia atrocoerulea* (Fr.) Singer: (Doğan and Öztürk, 2006).

207. *Pleurotus dryinus* (Pers.) P. Kumm.: (Öztürk et al., 2001; İleri et al., 2020).

208. *Pleurotus eryngii* (DC.) Quél.: (Öztürk et al., 2001).

209. *Pleurotus ostreatus* (Jacq.) P. Kumm.: (Öztürk et al., 2001; Doğan and Öztürk, 2006; İleri et al., 2020; Çetinkaya et al., 2021).

210. *Pleurotus pulmonarius* (Fr.) Quél.: (Doğan and Öztürk, 2006).

**Pluteaceae** Kotl. & Pouzar

211. *Pluteus cervinus* (Schaeff.) P. Kumm.: (İleri et al., 2020).

212. *Pluteus granularis* Peck: (İleri et al., 2020).

213. *Pluteus nanus* (Pers.) P. Kumm.: (Öztürk et al., 2003).

214. *Pluteus podospileus* Sacc. & Cub.: (Öztürk et al., 2003).

215. *Pluteus romellii* (Britzelm.) Lapl.: (Doğan and Öztürk, 2006; Çetinkaya et al., 2021).

216. *Pluteus satur* Kühner & Romagn.: (Doğan and Öztürk, 2006).

217. *Volvariella media* (Schumach.) Singer: (Doğan and Öztürk, 2006).

218. *Volvariella pusilla* (Pers.) Singer: (İleri et al., 2020).

219. *Volvopluteus gloiocephalus* (DC.) Vizzini, Contu & Justo: (Kaşik et al., 2000).

**Porothelaceae** Murrill

220. *Phloeomana hiemalis* (Osbeck) Redhead: (Doğan et al., 2007).

**Psathyrellaceae** Vilgalys, Moncalvo & Redhead

221. *Candolleomyces candolleanus* (Fr.) D. Wächt. & A. Melzer: (Doğan and Öztürk, 2006; İleri et al., 2020; Çetinkaya et al., 2021).

222. *Candolleomyces typhae* (Kalchbr.) D. Wächt. & A. Melzer: (İleri et al., 2019; 2020).

223. *Coprinellus disseminatus* (Pers.) J.E. Lange: (Doğan and Öztürk, 2006; İleri et al., 2020; Çetinkaya et al., 2021).

224. *Coprinellus domesticus* (Bolton) Vilgalys, Hopple & Jacq. Johnson: (Doğan and Öztürk, 2006).

225. *Coprinellus micaceus* (Bull.) Vilgalys, Hopple & Jacq. Johnson: (Doğan and Öztürk, 2006; İleri et al., 2020; Çetinkaya et al., 2021).

226. *Coprinellus silvaticus* (Peck) Gminder: (İleri et al., 2020).

227. *Coprinellus truncorum* (Scop.) Redhead, Vilgalys & Moncalvo: (Doğan et al., 2003).

228. *Coprinopsis atramentaria* (Bull.) Redhead, Vilgalys & Moncalvo: (İleri et al., 2020; Çetinkaya et al., 2021).

229. *Coprinopsis cinerea* (Schaeff.) Redhead, Vilgalys & Moncalvo: (Doğan et al., 2003).

230. *Coprinopsis cothurnata* (Godey) Redhead, Vilgalys & Moncalvo: (Doğan et al., 2003).

231. *Coprinopsis episcopalis* (P.D. Orton) Redhead, Vilgalys & Moncalvo: (Doğan et al., 2003).

232. *Coprinopsis lagopus* (Fr.) Redhead, Vilgalys & Moncalvo: (İleri et al., 2020).

233. *Coprinopsis marcescibilis* (Britzelm.) Örstadius & E. Larss.: (Doğan et al., 2003).

234. *Coprinopsis nivea* (Pers.) Redhead, Vilgalys & Moncalvo: (İleri et al., 2020; Çetinkaya et al., 2021).

235. *Coprinopsis stangliana* (Enderle, Bender & Gröger) Redhead, Vilgalys & Moncalvo: (İleri et al., 2020).

236. *Homophron spadiceum* (P. Kumm.) Örstadius & E. Larss.: (Doğan and Öztürk, 2006).

237. *Lacrymaria lacrymabunda* (Bull.) Pat.: (Kaşik et al., 2000; İleri et al., 2020).

238. *Narcissea patouillardii* (Quél.) D. Wächt. & A. Melzer: (Doğan et al., 2003).

239. *Parasola auricoma* (Pat.) Redhead, Vilgalys & Hopple: (İleri et al., 2020).

240. *Parasola plicatilis* (Curtis) Redhead, Vilgalys & Hopple: (Doğan and Öztürk, 2006).

241. *Psathyrella artemisiae* (Pass.) Konrad & Maubl.: (Doğan and Öztürk, 2006).

242. *Psathyrella bipellis* (Quél.) A.H. Sm.: (Doğan et al., 2003).

243. *Psathyrella cotonea* (Quél.) Konrad & Maubl.: (Doğan et al., 2003).

244. *Psathyrella fatua* (Fr.) Konrad & Maubl.: (Öztürk et al., 2001).

245. *Psathyrella lutensis* (Romagn.) Bon: (Doğan et al., 2003).

246. *Psathyrella ochracea* (Romagn.) M.M. Moser ex Kits van Wav.: (Doğan et al., 2003).

247. *Psathyrella pseudogracilis* (Romagn.) M.M. Moser: (Doğan et al., 2003).

248. *Psathyrella sphagnicola* (Maire) J. Favre: (Doğan et al., 2003).

249. *Psathyrella tephrophylla* (Romagn.) Bon: (Doğan and Öztürk, 2006).

250. *Tulosesus ephemerus* (Bull.) D. Wächt. & A. Melzer: (Doğan et al., 2003).

**Schizophyllaceae** Quél.

251. *Schizophyllum amplum* (Lév.) Nakasone: (İleri et al., 2020; Çetinkaya et al., 2021).

252. *Schizophyllum commune* Fr.: (Öztürk et al., 2001; Doğan and Öztürk, 2006; İleri et al., 2020; Çetinkaya et al., 2021).

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

253. *Agrocybe dura* (Bolton) Singer: (Öztürk et al., 2001; İleri et al., 2020).
254. *Agrocybe molesta* (Lasch) Singer: (Doğan and Öztürk, 2006; İleri et al., 2020).
255. *Agrocybe paludosa* (J.E. Lange) Kühner & Romagn. ex Bon: (Doğan and Öztürk, 2006; İleri et al., 2020).
256. *Agrocybe pediades* (Fr.) Fayod: (Doğan and Öztürk, 2006; İleri et al., 2020).
257. *Agrocybe praecox* (Pers.) Fayod: (Doğan and Öztürk, 2006).
258. *Agrocybe putaminum* (Maire) Singer: (Doğan et al., 2003).
259. *Agrocybe vervacti* (Fr.) Singer: (Doğan and Öztürk, 2006; İleri et al., 2020).
260. *Deconica coprophila* (Bull.) P. Karst.: (Çetinkaya et al., 2021).
261. *Hypholoma fasciculare* (Huds.) P. Kumm.: (Doğan and Öztürk, 2006).
262. *Pholiota conissans* (Fr.) M.M. Moser: (Doğan and Öztürk, 2006).
263. *Pholiota gummosa* (Lasch) Singer: (Doğan and Öztürk, 2006).
264. *Pholiota limonella* (Peck) Sacc.: (Çetinkaya et al., 2021)
265. *Pholiota lucifera* (Lasch) Quél.: (Öztürk et al., 2001).
266. *Pholiota pudica* (Bull.) Gillet: (Doğan and Öztürk, 2006).
267. *Pholiota spumosa* (Fr.) Singer: (Doğan and Öztürk, 2006).
268. *Pholiota squarrosa* (Vahl) P. Kumm.: (Doğan and Öztürk, 2006).
269. *Protostropharia semiglobata* (Batsch) Redhead, Moncalvo & Vilgalys: (Doğan and Öztürk, 2006).
270. *Stropharia aeruginosa* (Curtis) Quél.: (Doğan and Öztürk, 2006).
- Tricholomataceae** R. Heim ex Pouzar
271. *Tricholoma album* (Schaeff.) P. Kumm.: (Doğan and Öztürk, 2006).
272. *Tricholoma anatomicum* H.H. Doğan & Intini (Intini et al., 2003; Doğan and Akata, 2011).
273. *Tricholoma apium* Jul. Schäff.: (Doğan et al., 2007).
274. *Tricholoma aurantium* (Schaeff.) Ricken: (Öztürk et al., 2001).
275. *Tricholoma caligatum* (Viv.) Ricken: (Öztürk et al., 2001).
276. *Tricholoma columbetta* (Fr.) P. Kumm.: (Öztürk et al., 2001).
277. *Tricholoma equestre* (L.) P. Kumm.: (Doğan and Öztürk, 2006).
278. *Tricholoma imbricatum* (Fr.) P. Kumm.: (Doğan and Öztürk, 2006).
279. *Tricholoma orirubens* Quél.: (Doğan and Öztürk, 2006).
280. *Tricholoma pardalotum* Herink & Kotl.: (Doğan and Öztürk, 2006).
281. *Tricholoma populinum* J.E. Lange: (Doğan and Öztürk, 2006).
282. *Tricholoma portentosum* (Fr.) Quél.: (Doğan and Öztürk, 2006).
283. *Tricholoma radotinense* Pilát & Charvát: (Doğan et al., 2007).
284. *Tricholoma sculpturatum* (Fr.) Quél.: (Öztürk et al., 2001; Doğan and Öztürk, 2006).
285. *Tricholoma stans* (Fr.) Sacc.: (Doğan and Öztürk, 2006).
286. *Tricholoma virgatum* (Fr.) P. Kumm.: (Öztürk et al., 2001; Doğan and Öztürk, 2006).
- Tubariaceae** Vizzini
287. *Tubaria furfuracea* (Pers.) Gillet: (Öztürk et al., 2001; İleri et al., 2020).
288. *Cyclocybe cylindracea* (DC.) Vizzini & Angelini: (Doğan and Öztürk, 2006; İleri et al., 2020; Çetinkaya et al., 2021).
- Auriculariales** Bromhead
- Incertae Sedis**
289. *Pseudohydnum gelatinosum* (Scop.) P. Karst.: (Öztürk et al., 2001).
- Boletales** E.-J. Gilbert
- Boletaceae** Chevall.
290. *Cyanoboletus pulverulentus* (Opat.) Gelardi, Vizzini & Simonini: (Doğan and Öztürk, 2006).
291. *Hemileccinum impolitum* (Fr.) Šutara: (Doğan and Öztürk, 2006).
292. *Suillellus queletii* (Schulzer) Vizzini, Simonini & Gelardi: (Doğan and Öztürk, 2006).
293. *Xerocomellus chrysenteron* (Bull.) Šutara: (Doğan and Öztürk, 2006).
294. *Xerocomus subtomentosus* (L.) Quél.: (Doğan and Öztürk, 2006).
- Diplocystidiaceae** Kreisel
295. *Astraeus hygrometricus* (Pers.) Morgan: (Doğan and Öztürk, 2006; İleri et al., 2020; Çetinkaya et al., 2021).
- Gomphidiaceae** Maire ex Jülich
296. *Chroogomphus rutilus* (Schaeff.) O.K. Mill.: (Öztürk et al., 2001; Doğan and Öztürk, 2006; Çetinkaya et al., 2021).
297. *Gomphidius glutinosus* (Schaeff.) Fr.: (Öztürk et al., 2001).
- Paxillaceae** Lotsy
298. *Paxillus involutus* (Batsch) Fr.: (Doğan and Öztürk, 2006).
- Rhizopogonaceae** Gäum. & C.W. Dodge
299. *Rhizopogon luteolus* Fr.: (Öztürk et al., 2001; Çetinkaya et al., 2021).

300. *Rhizopogon obtexus* (Spreng.) R. Rauschert: (Kaşik et al., 2000).  
301. *Rhizopogon roseolus* (Corda) Th. Fr.: (Kaşik et al., 2000; Doğan and Öztürk, 2006; İleri et al., 2020; Çetinkaya et al., 2021).

**Sclerodermataceae** Corda

302. *Pisolithus arhizus* (Scop.) Rauschert: (İleri et al., 2020).  
303. *Scleroderma areolatum* Ehrenb.: (Çetinkaya et al., 2021).

**Suillaceae** Besl & Bresinsky

304. *Suillus collinitus* (Fr.) Kuntze: (İleri et al., 2020; Çetinkaya et al., 2021).  
305. *Suillus granulatus* (L.) Roussel: (Doğan and Öztürk, 2006).  
306. *Suillus grevillei* (Klotzsch) Singer: (Öztürk et al., 2001; Doğan and Öztürk, 2006).  
307. *Suillus luteus* (L.) Roussel: (Doğan and Öztürk, 2006).

**Cantharellales** Gäum.

**Hydnaceae** Chevall.

308. *Cantharellus cibarius* Fr.: (Kaşik et al., 2000).  
309. *Membranomyces spurius* (Bourdot) Jülich: (Öztürk et al., 2003).

**Gastrales** K. Hosaka & Castellano

**Gastraceae** Corda

310. *Gastrum fimbriatum* Fr.: (Doğan and Öztürk, 2006; İleri et al., 2020).  
311. *Gastrum pectinatum* Pers.: (Doğan and Öztürk, 2006).  
312. *Gastrum rufescens* Pers.: (Doğan and Öztürk, 2006).  
313. *Gastrum striatum* DC.: (Doğan and Öztürk, 2006).  
314. *Gastrum triplex* Jungh.: (Doğan and Öztürk, 2006).

**Gloeophyllales** Thorn

**Gloeophyllaceae** Jülich

315. *Gloeophyllum abietinum* (Bull.) P. Karst.: (Öztürk et al., 2001).  
316. *Gloeophyllum sepiarium* (Wulfen) P. Karst.: (Öztürk et al., 2001; Doğan and Öztürk, 2006).  
317. *Gloeophyllum trabeum* (Pers.) Murrill: (Öztürk et al., 2001; Doğan and Öztürk, 2006).

318. *Neolentinus lepideus* (Fr.) Redhead & Ginns: (Öztürk et al., 2001).

**Gomphales** Jülich

**Gomphaceae** Donk

319. *Gomphus clavatus* (Pers.) Gray: (Kaşik et al., 2000; Doğan and Öztürk, 2006).  
320. *Phaeoclavulina abietina* (Pers.) Giachini: (Öztürk et al., 2003).

321. *Ramaria flava* (Schaeff.) Quél.: (Öztürk et al., 2001; Doğan and Öztürk, 2006).

322. *Ramaria obtusissima* (Peck) Corner: (Öztürk et al., 2003).

**Hymenochaetales** Oberw.

**Incertae Sedis**

323. *Trichaptum abietinum* (Pers. ex J.F. Gmel.) Ryvarden: (Kaşik et al., 2000; Doğan and Öztürk, 2006).  
324. *Trichaptum fuscoviolaceum* (Ehrenb.) Ryvarden: (Doğan and Öztürk, 2006).

**Hymenochaetaceae** Donk

325. *Coniferiporia sulphurascens* (Pilát) L.W. Zhou & Y.C. Dai: (Doğan and Karadelev, 2009; Doğan et al., 2011a).

326. *Fomitiporia punctata* (P. Karst.) Murrill: (Doğan and Öztürk, 2006).

327. *Fomitiporia robusta* (P. Karst.) Fiasson & Niemelä: (Doğan and Öztürk, 2006).

328. *Inocutis rheades* (Pers.) Fiasson & Niemelä: (Öztürk et al., 2001; Doğan and Öztürk, 2006).

329. *Inocutis tamaricis* (Pat.) Fiasson & Niemelä: (Doğan and Öztürk, 2006).

330. *Inonotus hispidus* (Bull.) P. Karst.: (Öztürk et al., 2001; Doğan and Öztürk, 2006; İleri et al., 2020).

331. *Phellinus hartigii* (Allesch. & Schnabl) Pat.: (Doğan and Öztürk, 2006).

332. *Phellinus igniarius* (L.) Quél.: (Öztürk et al., 2001; Doğan and Öztürk, 2006; İleri et al., 2020; Çetinkaya et al., 2021).

333. *Phellinus laevigatus* (P. Karst.) Bourdot & Galzin: (Doğan and Öztürk, 2006).

334. *Phellinus pomaceus* (Pers.) Maire: (Kaşik et al., 2000; Doğan and Öztürk, 2006).

335. *Phellinus viticola* (Schwein.) Donk: (Öztürk et al., 2001; Öztürk et al., 2003).

336. *Phellinus vorax* Harkn. ex Černý: (Doğan and Öztürk, 2006).

337. *Xanthoporia radiata* (Sowerby) Tura, Zmitr., Wasser, Raats & Nevo: (Doğan and Öztürk, 2006).

**Hypodontiaceae** R.T. Moore

338. *Hypodontia arguta* (Fr.) J. Erikss.: (Doğan et al., 2011a).

**Polyporales** Gäum.

**Incetae Sedis**

339. *Amaropostia stipitica* (Pers.) B.K. Cui, L.L. Shen & Y.C. Dai: (Doğan and Öztürk, 2006).

340. *Rhodonia placenta* (Fr.) Niemelä, K.H. Larss. & Schigel: (Öztürk et al., 2003).

**Cerrenaceae** Miettinen, Justo & Hibbett

341. *Cerrena unicolor* (Bull.) Murrill: (Öztürk et al., 2001).

**Dacryobolaceae** Jülich

342. *Postia tephroleuca* (Fr.) Jülich: (Doğan and Öztürk, 2006).

**Fomitopsidaceae** Jülich

343. *Brunneoporus juniperinus* (Murrill) Zmitr.: (Doğan et al., 2011a).

344. *Fomitopsis officinalis* (Vill.) Bondartsev & Singer: (Doğan and Öztürk, 2006).

**Laetiporaceae** Jülich

345. *Laetiporus sulphureus* (Bull.) Murrill: (İleri et al., 2020; Çetinkaya et al., 2021).

**Meruliaceae** Rea

346. *Physisporinus vitreus* (Pers.) P. Karst.: (Öztürk et al., 2003).

**Phanerochaetaceae** Jülich

347. *Bjerkandera adusta* (Willd.) P. Karst.: (Doğan and Öztürk, 2006; Çetinkaya et al., 2021).

**Polyporaceae** Fr. ex Corda

348. *Fomes fomentarius* (L.) Fr.: (Doğan and Öztürk, 2006; İleri et al., 2020; Çetinkaya et al., 2021).

349. *Ganoderma applanatum* (Pers.) Pat.: (Doğan and Öztürk, 2006).

350. *Ganoderma lucidum* (Curtis) P. Karst.: (İleri et al., 2020).

351. *Lentinus tigrinus* (Bull.) Fr.: (Kaşik et al., 2000; Doğan and Öztürk, 2006; İleri et al., 2020; Çetinkaya et al., 2021).

352. *Pachykytospora tuberculosa* (Fr.) Kotl. & Pouzar: (Öztürk et al., 2003).

353. *Perenniporia medulla-panis* (Jacq.) Donk: (Öztürk et al., 2003).

354. *Pyrofomes demidoffii* (Lév.) Kotl. & Pouzar: (Öztürk et al., 2001; Doğan and Öztürk, 2006; Doğan et al., 2011a).

355. *Trametes gibbosa* (Pers.) Fr.: (Doğan and Öztürk, 2006).

356. *Trametes hirsuta* (Wulfen) Lloyd: (Çetinkaya et al., 2021).

357. *Trametes ochracea* (Pers.) Gilb. & Ryvarden: (Doğan and Öztürk, 2006).

358. *Trametes suaveolens* (L.) Fr.: (Öztürk et al., 2001).

359. *Trametes trogii* Berk.: (İleri et al., 2020; Çetinkaya et al., 2021).

360. *Trametes versicolor* (L.) Lloyd: (Doğan and Öztürk, 2006; Çetinkaya et al., 2021).

**Russulales** Kreisel ex P.M. Kirk, P.F. Cannon & J.C. David**Hericiaceae** Donk

361. *Hericium cirratum* (Pers.) Nikol.: (Doğan and Öztürk, 2006).

**Peniophoraceae** Lotsy

362. *Peniophora aurantiaca* (Bres.) Höhn. & Litsch.: (İleri et al., 2020).

363. *Peniophora quercina* (Pers.) Cooke: (İleri et al., 2020).

**Russulaceae** Lotsy

364. *Boidinia furfuracea* (Bres.) Stalpers & Hjortstam: (Doğan et al., 2011b).

365. *Lactarius acerrimus* Britzelm.: (Doğan and Öztürk, 2006).

366. *Lactarius deliciosus* (L.) Gray: (Doğan and Öztürk, 2006).

367. *Russula chloroides* (Krombh.) Bres.: (Doğan and Öztürk, 2006).

368. *Russula emetica* (Schaeff.) Pers.: (Doğan and Öztürk, 2006).

369. *Russula ochroleuca* Fr.: (Öztürk et al., 2001; Doğan and Öztürk, 2006).

370. *Russula pallidospora* J. Blum ex Romagn.: (Kaşik et al., 2000; Doğan and Öztürk, 2006).

371. *Russula vesca* Fr.: (Doğan and Öztürk, 2006).

**Stereaceae** Pilát

372. *Stereum hirsutum* (Willd.) Pers.: (Doğan and Öztürk, 2006; İleri et al., 2020; Çetinkaya et al., 2021).

373. *Stereum sanguinolentum* (Alb. & Schwein.) Fr.: (Doğan and Öztürk, 2006).

**Thelephorales** Corner ex Oberw.**Bankeraceae** Donk

374. *Boletopsis leucomelaena* (Pers.) Fayod: (Öztürk et al., 2001; Doğan and Öztürk, 2006).

375. *Hydnellum glaucopus* (Maas Geest. & Nannf.) E. Larss., K.H. Larss. & Köljalg: (Doğan and Öztürk, 2006).

376. *Sarcodon imbricatus* (L.) P. Karst.: (Öztürk et al., 2001; Doğan and Öztürk, 2006).

**Thelephoraceae** Chevall.

377. *Thelephora caryophyllea* (Schaeff.) Pers.: (Öztürk et al., 2003).

**Dacrymycetes** Doweld**Dacrymycetales** Henn.**Dacrymycetaceae** J. Schröt.

378. *Dacrymyces capitatus* Schwein.: (İleri et al., 2020).

379. *Dacrymyces variisporus* McNabb: (Doğan and Öztürk, 2006).

**Tremellomycetes** Doweld**Tremellales** Fr.**Tremellaceae** Fr.

380. *Tremella mesenterica* (Schaeff.) Pers.: (Çetinkaya et al., 2021).

**4. Discussions**

Compiling the overall macrofungal taxa that had been presented so far, Karaman was determined to hosts a total of 380 species within *Ascomycota* and *Basidiomycota*. Sixty five (%17.11) of them belong to *Ascomycota* while 315 (%82.89) belong to *Basidiomycota*.

**Table 1.** Distribution of the determined taxa in classes.

Division	Class	# of taxa
Ascomycota	<i>Pezizomycetes</i>	46
	<i>Leotiomycetes</i>	11
	<i>Sordariomycetes</i>	6
	<i>Dothideomycetes</i>	1
	<i>Orbiliomycetes</i>	1
Basidiomycota	<i>Agaricomycetes</i>	312
	<i>Dacrymycetes</i>	2
	<i>Tremellomycetes</i>	1

The macrofungi species determined in Karaman were found to distribute in eight classes (Table 1) and 20 orders (Table 2). The most crowded class and the order were found to be *Agaricomycetes* and *Agaricales* respectively.

Seventy five macromycete families were represented in Karaman. Thirty of the compiles species are currently not assigned in a family and are in Incertae Sedis position. *Psathyrellaceae*, *Agaricaceae*, *Strophariaceae*, *Pyronemataceae* and *Tricholomataceae* are the first 5 most crowded families in the region with 30, 23, 18, 16 and 16 species respectively. The most crowded genus is *Tricholoma* (Fr.) Staude with 16 taxa. It was followed by *Melanoleuca* Pat., *Psathyrella* (Fr.) Quél., *Conocybe* Fayod and *Coprinopsis* P. Karst. with 13, 9, 8 and 8 species respectively.

According to the presented data and the literatural data, 91 of the 380 species are edible, 258 are inedible and 31 are poisonous. Twenty four of them (*Agaricus campestris*, *Bovista plumbea*, *Chroogomphus rutilus*, *Gomphus clavatus*, *Lactarius deliciosus*, *Langermannia gigantea*, *Lepista nuda*, *Macrolepiota excoriata*, *M. procera*, *Melanoleuca schumacheri*, *Mitrophora semilibera*, *Morchella deliciosa*, *M. esculenta*, *Picoa juniperi*, *P. lefebvrei*, *Pleurotus ostreatus*, *Ramaria flava*, *Rhizophogon roseolus*, *Terfezia albida*, *T. boudieri*, *T. claveryi*, *Tricholoma populinum*, *T. terreum*, *Xerula melanotricha*) are collected and consumed by local public. *Terfezia* spp.

## References

- Berber O, Uzun Y, Kaya A (2022). Macrofungi determined in Ulukışla (Niğde-Turkey) district. KSU J. Agric Nat. 25 (5): 1007-1015.
- Cannon PF, Kirk PM (2007). Fungal Families of the World. Wallingford, CAB International.
- Çelik A, Uzun Y, Kaya A (2020). Macrofungal Biodiversity of Güneysimir District (Konya-Turkey). Mantar Dergisi 11(1): 75-83.
- Çetinkaya A, Uzun Y (2021). *Hymenoscyphus caudatus*, a new ascomycete record for the mycoflora of Turkey. Anatolian Journal of Botany 5(1): 19-22.
- Çetinkaya A, Uzun Y, Kaya A (2020). *Thecotheus lundqvistii*, a new coprophilous ascomycete record for Turkey. Mantar Dergisi 11(2): 138-141.
- Çetinkaya A, Uzun Y, Kaya A (2021). Macrofungi Determined in Ayrancı and Yeşildere (Karaman) Districts. Mantar Dergisi 12(1): 42-49.
- Çevik FT, Uzun Y, Kaya A (2021). Macrofungi determined in Ereğli (Konya) district. The Journal of Fungus 12(2): 138-147.
- Doğan HH, Akata I (2011). Ecological features of *Tricholoma anatolicum* in Turkey. African Journal of Biotechnology 10(59): 12626-12668.
- Doğan HH, Aktaş S (2010). Two new Ascomycetes records from Mediterranean part of Turkey. Biological Diversity and Conservation 3(1): 83-86.
- Doğan HH, İşıloğlu M (2002). A new and interesting ascomycete genus (*Pithya* Fuckel) record for the fungi flora of Turkey. Turkish Journal of Botany 26(5): 403-404.

are heavily collected and consumed in Central Anatolian parts of Karaman and surrounding regions (Doğan and Öztürk, 2006; Çelik et al., 2020; İleri et al., 2020; Çetinkaya et al., 2021; Çevik et al., 2021; Berber et al., 2022).

**Table 2.** Distribution of the determined taxa in orders.

Division	Class	# of taxa
Ascomycota	<i>Pezizales</i>	46
	<i>Helotiales</i>	11
	<i>Xylariales</i>	3
	<i>Hypocreales</i>	2
	<i>Diaporthales</i>	1
	<i>Orbiliiales</i>	1
	<i>Patellariales</i>	1
Basidiomycota	<i>Agaricales</i>	223
	<i>Polyporales</i>	22
	<i>Boletales</i>	18
	<i>Hymenochaetales</i>	16
	<i>Russulales</i>	13
	<i>Gastrales</i>	5
	<i>Gloeophyllales</i>	4
	<i>Gomphales</i>	4
	<i>Thelephorales</i>	4
	<i>Cantharellales</i>	2
	<i>Dacrymycetales</i>	2
	<i>Auriculariales</i>	1
	<i>Tremellales</i>	1

Among the determined taxa, 107 are lignicolous, 16 are coprophilous, 7 are bryophilous, 7 are herbicolous, 2 are pyrophilous and the rest of the taxa are terricolous. Fifteen of them were determined as hygrophilous.

## Conflict of Interest

The author has declared no conflict of interest.

- Doğan HH, Karadelev M (2009). *Phellinus sulphurascens* (Hymenochaetaceae, Basidiomycota): A very rare wood-decay fungus in Europe collected in Turkey. Turkish Journal of Botany 33(3): 239-242.
- Doğan HH, Karadelev M, Işıloğlu M (2011a). Macrofungal diversity associated with the scale – leaf juniper trees, *Juniperus excelsa* and *J. foetidissima*, distributed in Turkey. Turkish Journal of Botany 35(2): 219-237.
- Doğan HH, Karadelev M, Rusevska K, Aktaş S (2011b). New records of corticioid fungi in Turkey. Mycotaxon 116: 421-430.
- Doğan HH, Kaşık G, Öztürk C, Aktaş S (2003). New records in Coprinaceae and Bolbitiaceae from Karaman province. The Herb Journal of Systematic Botany 10(1): 111-141.
- Doğan HH, Öztürk C (2006). Macrofungi and their distribution in Karaman Province, Turkey. Turkish Journal of Botany 30(3): 193-207.
- Doğan HH, Öztürk C, Kaşık G, Aktaş S (2007). New Records in Karaman Province for Macrofungi Flora of Turkey. Afyon Kocatepe Üniversitesi Fen Bilimleri Dergisi 7(1): 355-379.
- Index Fungorum (2024). <http://www.indexfungorum.org/Names/Names.asp> / [accessed 15 July 2024].
- Intini M, Doğan HH, Alfredo R (2003). Tricholoma anatolicum Spec Nov A New Member of The Matsutake Group. Micologia e Vegetazione Mediterranea 18(2): 135-142.
- İleri R, Uzun Y, Kaya A (2019). *Psathyrella typhae*, a new macrofungus record for Turkey. Mantar Dergisi 10(2): 87-90.
- İleri R, Uzun Y, Kaya A (2020). Macromycetes of Karadağ (Karaman) and its Environs. Mantar Dergisi 11(1): 57-63.
- Kaplan D, Uzun Y, Kaya A (2021). *Stammaria Fuckel*: A New Discomycete Genus Record for Turkish Mycobiota. KSÜ Tarım ve Doğa Dergisi 24(5): 1100-1103.
- Kaşık G, Doğan HH, Öztürk C, Aktaş S (2002). New records of Ascomycetes for Turkish mycoflora. Selçuk Üniversitesi Fen Edebiyat Fakültesi Fen Dergisi 20: 75-81.
- Kaşık G, Öztürk C, Doğan HH (2000). Macrofungi of Ermenek (Karaman) District. Selçuk Üniversitesi Fen Edebiyat Fakültesi Fen Dergisi 1(16): 61-65.
- Kaya A, Uzun Y (2023). New locality records in Türkiye for two rare members of *Ascomycota*. Türler ve Habitatlar 4(2): 91-97.
- Kirk PM, Ansell AE (1992). Authors of fungal names. International Mycological Institute, Wallingford: CABI.
- Kirk PM, Cannon PF, David JC, Stalpers JA (2004). Authors of fungal names. CABI Bioscience, Wallingford. Electronic version: <http://www.indexfungorum.org/Names/Names.asp> / [15 July 2024].
- Kirk PM, Cannon PF, Minter DW, Stalpers JA (2008). Dictionary of the Fungi (10th ed.). Wallingford: Cab International.
- Öztürk C (2002). Türkiye makrofungus florası için iki yeni kayıt. The Herb Journal of Systematic Botany 9(1): 117-120.
- Öztürk C, Doğan HH, Kaşık G (2001). Additions to the macrofungus flora of Ermenek (Karaman). Selçuk Üniversitesi Fen Edebiyat Fakültesi Fen Dergisi 18: 61-66.
- Öztürk C, Doğan HH, Kaşık G, Aktaş S (2003). Türkiye mikoforası için Karaman yöresinden yeni kayıtlar. The Herb Journal of Systematic Botany 10(2): 213-248.
- Sesli E, Asan A, Selçuk F (eds.) Abacı Günyar Ö, Akata I, Akgül H, Aktaş S, Alkan S, Allı H, Aydoğdu H, Berikten D, Demirel K, Demirel R, Doğan HH, Erdoğu M, Ergül C, Eroğlu G, Giray G, Halık Uztan A, Kabaktepe Ş, Kadaifçiler D, Kalyoncu F, Karaltı İ, Kaşık G, Kaya A, Keleş A, Kırbağ S, Kıvanç M, Ocak İ, Ökten S, Özkal E, Öztürk C, Sevindik M, Şen B, Şen İ, Türkekul, İ, Ulukapı M, Uzun Ya, Uzun Yu, Yoltaş A (2020). The Checklist of Fungi of Turkey, Ali Nihat Gökyigit Vakfı Yayınevi, İstanbul.
- Türkoğlu A, Castellano MA, Trappe JM, Yaratantanakul Güngör M (2015). Turkish truffles I: 18 new records for Turkey. Turkish Journal of Botany 39(2): 359-376.