



Macrofungi of Datça Peninsula (Turkey)

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Abstract

This aim of this study was to determine of the diversity of macrofungi of Datça Peninsula between the years of 2011 and 2013. A number of 247 macrofungi samples were collected during the field studies, which took place in the spring and autumn seasons. As a result of field and laboratory studies, a number of 99 taxa belonging to 64 genus, 36 family and 2 divisions were identified. While, four of them belong to Ascomycota and the remaining samples are found to be Basidiomycota. Four of these taxa are new records for Turkey.

Key words: macrofungi, biodiversity, taxonomy, Datça Peninsula, Turkey

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Datça Yarımadası'nın Makrofungusları (Türkiye)

Özet

Bu çalışma 2011-2013 yılları arasında Muğla ili Datça Yarımadası makrofungus çeşitliliğini ortaya koymak amacıyla yapılmıştır. Arazi çalışmaları özellikle ilkbahar ve sonbahar aylarında yapılmış olup, 247 makrofungus örneği toplanmıştır. Arazi ve laboratuvar çalışmaları sonucunda 64 cins, 36 familya ve 2 şubeye ait toplam 99 takson belirlenmiştir. Bunlardan 4'ü Ascomycota, 95'i Basidiomycota'ya aittir. Bunlardan 4'ü Türkiye için yeni kayıttır.

Anahtar kelimeler: makrofungi, biyoçeşitlilik, taksonomi, Datça Yarımadası, Türkiye

1. Introduction

The Datça Peninsula is located in the province of Muğla in the Aegean Region. It is located between the 27°40'-28° eastern meridians and the 36°60'-36°75' northern parallels. In the Datça Peninsula, which is a mountainous and hilly ridge, predominantly the species of *Pinus brutia* Ten., *Liquidambar orientalis* Mill., *Eucalyptus camaldulensis* Dehnh. and *Cupressus sempervirens* L. trees are wide-spread. Datça has a typical Mediterranean climate. It ranks second in the world and first in Turkey in terms of oxygen abundance (Figure 1).

In the study area of the Datça Peninsula, there were no comprehensive studies prior to this current one, except that only two parasitic macrofungi species were reported before (Allı and Işıloğlu, 2000). These parasitic species are *Porodaedalea pini* (Brot.) Murrill and *Fomitiporia robusta* (P. Karst.) Fiasson & Niemelä. Therefore, in this study, we aimed to collect and identify the macrofungi of the region in order to contribute to the macrofungal diversity of the area as well as the Turkish macromycota. In recent years, several studies have been carried out on Turkish mycota. Some examples of these studies: Akata and Uzun (2017), Altuntaş et al. (2017), Demirel et al. (2017), Doğan and Kurt (2016), Öztürk et al. (2017), Sesli and Topçu Sesli (2017), Taşkın et al. (2016), Vizzini et al. (2016).

2. Materials and methods

Macrofungi specimens were collected from the region during the field studies conducted in the years 2011 to 2013. After the photographs of the collected samples were taken, their morphological and ecological characteristics were noted. Fresh samples were subjected to chemical tests and the resulting reactions were recorded. Spore prints were taken

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Figure 1. Map of the study area

from the samples brought to the laboratory under appropriate conditions. The microscopic characteristics of the specimens were examined and then dried and conserved in the Fungarium of Muğla Sıtkı Koçman University. The literature used for the purpose of identification included the following: Breitenbach and Kränzlin (1984 - 2000), Buczacki (1989), Dähncke (1993), Ellis and Ellis (1990), Hansen and Knudsen (2000), Kibby (2007), Knudsen and Vesterholt (2008), Noordeloos (1992), Moser (1983), Pacioni (1985), Phillips (1981).

3. Results

The names of the identified species as well as the details including the habitat types, collection locations and the specific dates are given below.

Ascomycota Whittaker

Helvellaceae

Helvella acetabulum (L.) Quél.: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia* Ten., *Liquidambar orientalis* Mill. mixed forest, 14.03.2013, Allı 4684.

Helvella leucomelaena (Pers.) Nannf.: Çubucak, 0 m (sea level), *P. brutia* forest, 11.03.2012, Allı 3997; Datça, Muğla road 25. km, *P. brutia* - *L. orientalis* mixed forest, 11.03.2012, Allı 4008; Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 14.03.2013, Allı 4678; Çubucak, 0 m, *P. brutia* forest, 14.03.2013, Allı 4692.

Pyronemataceae

Scutellinia umbrorum (Fr.) Lambotte: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, on *P. brutia* cones, 14.03.2013, Allı 4676.

Geopyxis carbonaria (Alb. & Schwein.) Sacc.: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 14.03.2013, Allı 4680.

Basidiomycota R.T. Moore

Agaricaceae

Agaricus campestris L.: Çubucak, 0 m, *P. brutia* forest, 27.12.2012, Allı 4639.

Atractosporocybe inornata (Sowerby) P. Alvarado, G. Moreno & Vizzini: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4591.

Crucibulum laeve (Huds.) Kambly: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, on *P. brutia* needle, 27.12.2012, Allı 4612B.

Lepiota brunneoincarnata Chodat & C. Martín: Çubucak, sea level, *P. brutia* forest, 22.01.2012, Allı 3937.

Lepiota castanea Quél.: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4566, 4576.

Lepiota cristata (Bolton) P. Kumm.: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4606.

Lepiota subgracilis Kühner: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4687.

Lycoperdon lividum Pers.: Çubucak, 0 m, *P. brutia* forest, 27.12.2012, Allı 4634. Çubucak, sea level, *P. brutia* forest, 22.01.2012, Allı 3947; Knidos, *P. brutia* forest, 11.03.2012, Allı 4010.

Lycoperdon perlatum Pers.: Emecik Village, *P. brutia* forest, 22.01.2012, Allı 3985.

Lycoperdon umbrinum Pers.: Aktur Kurucabük around, *P. brutia* - *Cupressus* sp. L.- *Eucalyptus* sp. L'Hér. mixed forest, 147 m, 22.01.2012, Allı 3968.

Macrolepiota mastoidea (Fr.) Singer: Çubucak, sea level, *P. brutia* forest, 22.01.2012, Allı 3950; Allı 3966. Çubucak, 0 m, *P. brutia* forest, 27.12.2012, Allı 4640; Çubucak, 0 m, *P. brutia* forest, 14.03.2013, Allı 4695.

Panaeolus papilionaceus (Bull.) Quél.: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 14.03.2013, Allı 4682.

Rhizocybe vermicularis (Fr.) Vizzini, G. Moreno, P. Alvarado & Consiglio: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 14.03.2013, Allı 4686; Mesudiye, *P. brutia* forest, 14.03.2013, Allı 4707.

Amanitaceae

Amanita mairei Foley: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4586, 4614.

Auriculariaceae

Auricularia auricula-judae (Bull.) Quél.: Değirmenyanı around, *L. orientalis* forest, 10.01.2012, Allı 3934a.

Bolbitiaceae

Bolbitius titubans (Bull.) Fr.: Çubucak, sea level, *P. brutia* forest, 22.01.2012, Allı 3954; Çubucak, *P. brutia* forest, 11.03.2012, Allı 4000; Allı 4002; Çubucak, 0 m, *P. brutia* forest, 14.03.2013, Allı 4688.

Clavulinaceae

Clavulina coralloides (L.) J. Schröt.: Aktur Kovanlık, *P. brutia* forest, 22.01.2012, Allı 3978.

Dacrymycetaceae

Calocera cornea (Batsch) Fr.: Bördübet, *L. orientalis*, *P. brutia* mixed forest, on *L. orientalis* wood piece, 27.12.2012, Allı 4629.

Entolomataceae

Entoloma caesiocinctum (Kühner) Noordel.: Aktur Kurucabük around, *P. brutia* - *Cupressus* sp. - *Eucalyptus* sp. mixed forest, 147 m, 22.01.2012, Allı 3973.

Pileus 5-40 mm, hemispherical or conical-convex, then convex or low convex, with depressed to umbilicate centre, deeply translucently striate, brown, yellow brown or red brown (Figure 2a). **Lamellae** adnate-emarginate, medium spaced, white, then grey pink, with blue-black, serrulate edge (Figure 2b). **Stipe** 20-50 x 1-5 mm, glabrous or with scattered fibrils, grey brown or yellow brown with distinct blue tinge when fresh, base white tomentose (Figure 2b). **Basidiospores** 8.5-11.5(-12.5) x 6.5-7(-8) μm , 5-7-angled (Figure 2c) **Cheilocystidia** 20-120 x 7-20 μm , cylindrical to clavate with blue, intra cellular pigment (Figure 2d).

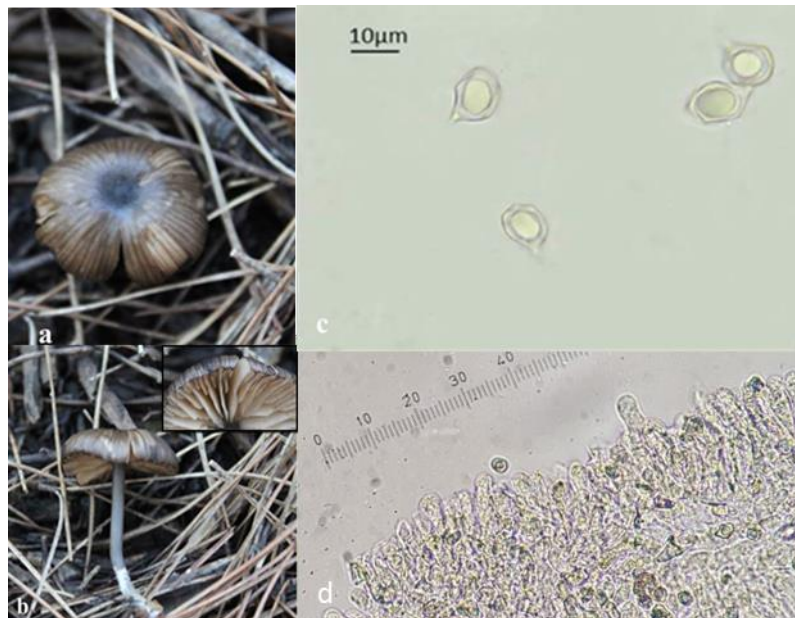


Figure 2. *Entoloma caesiocinctum*, a, b. basidiocarps, c. basidiospores, d. cheilocystidia

Entoloma pleopodium (Bull.) Noordel.: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4605.

Pileus 10-30 mm in diameter, central part dimpled and dark brown-black, surface striate, olive-yellow, yellowish grey tones (Figure 3a). **Lamellae** white at first, then turning yellow to brownish pink. **Stipe** 20-60 x 1,5-3 mm, cylindrical, hollow, olive brown, base is white hairy (Figure 3b). **Basidiospores** 8-11,9 x 6,1-8,7 μm , 5-6 angled (Figure 3c). **Cheilocystidia** absent.



Figure 3. *Entoloma pleopodium*, a, b. basidiocarps, c. basidiospores

Entoloma scabiosum (Fr.) Quél.: Çubucak, 0 m, *P. brutia* forest, 14.03.2013, Allı 4693.

Pileus 15-80 mm, conico-convex then expanding to plano-convex, usually with distinct umbo, not hygrophanous, not translucently striate, dark red-brown to blackish brown fibrillose finely scaly on an almost white background (Figure 4a).

Lamellae fairly crowded, deeply emerginate, ventricose, white or grey then pinkish grey finally brownish pink with serrate or fimbriate, concolorous edge. **Stipe** 20-80 x 2-15 mm, fi brilliose striate, paler than pileus, white tomentose at base (Figure 4b).

Basidiospores 7-8(-9) x 5.5-7 µm, heterodiametrical, 5-7-angled in side-view (Figure 4c).

Cheilocystidia 25-90 x 5-20 µm, lecithiform to tibiiform, neck often moniliform, capitulum often mucronate (Figure 4d).

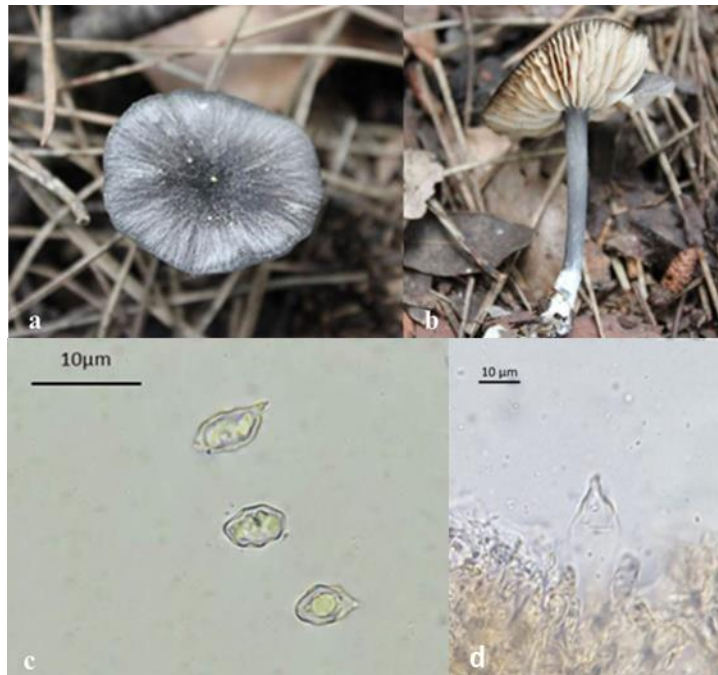


Figure 4. *Entoloma scabiosum*, a, b. basidiocarps, c. basidiospores, d. cheilocystidia

Entoloma subradiatum (Kühner & Romagn.) M.M. Moser: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4593.

Entoloma rusticoides (Gillet) Noordel.: Kovanlık mevki, *L. orientalis* forest, 01.05.2012, Allı 4139.

Ganodermataceae

Ganoderma lucidum (Curtis) P. Karst.: Değirmenyani around, *L. orientalis* forest, on *L. orientalis*, 25.10.2011, Allı 3935b; Değirmenyani around, *L. orientalis* forest, on *L. orientalis* root, 10.01.2012, Allı 3934b – Allı 3934d; Datça – Muğla road 25. km, *P. brutia* - *L. orientalis* mixed forest, on *L. orientalis* root, 11.03.2012, Allı 4007; Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, on *L. orientalis* root, 01.05.2012, Allı 4122.

Geastraceae

Myriostoma coliforme (Dicks.) Corda: Çubucak, 0 m, *P. brutia* forest, 10.04.2012, Allı 4021.

Gomphaceae

Ramaria gracilis (Pers.) Quél.: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, on *L. orientalis* wood piece, 27.12.2012, Allı 4590.

Gomphidiaceae

Chroogomphus helveticus (Singer) M.M. Moser: Çubucak, *P. brutia* forest, 22.01.2012, Allı 3958; Bördübet, *L. orientalis*, *P. brutia* mixed forest, 27.12.2012, Allı 4620.

Chroogomphus rutilus (Schaeff.) O.K. Mill.: Çubucak, *P. brutia* forest, 22.01.2012, Allı 3936; Çubucak, 0 m, *P. brutia* forest, 10.04.2012, Allı 4019; Çubucak, 0 m, *P. brutia* forest, 27.12.2012, Allı 4636; Çubucak, 0 m, *P. brutia* forest, 14.03.2013, Allı 4691.

Hydnangiaceae

Laccaria laccata (Scop.) Cooke: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4597.

Hygrophoraceae

Hygrocybe conica (Schaeff.) P. Kumm.: Aktur Kurucabük around, *P. brutia* - *Cupressus* sp. - *Eucalyptus* sp. mixed forest, 147 m, 22.01.2012, Allı 3971; Bördübet, *L. orientalis* forest, 01.05.2012, Allı 4129.

Hymenochaetaceae

Fuscoporia torulosa (Pers.) T. Wagner & M. Fisch.: Kovanlık around, *L. orientalis* forest, on *L. orientalis*, 01.05.2012, Allı 4140; Emecik Village, *P. brutia* forest, 14.03.2013, Allı 4705.

Phellinus igniarius (L.) Quél.: Değirmenyanı *Eucalyptus* sp. - *P. brutia* – *L. orientalis* mixed forest, on *L. orientalis* stump, 11.03.2012, Allı 3992.

Trichaptum fuscoviolaceum (Ehrenb.) Ryvarden: Emecik Village, *P. brutia* forest, on *P. brutia* stump, 22.01.2012, Allı 3981.

Porodaedalea pini (Brot.) Murrill: Mesudiye, *P. brutia* forest, 11.03.2012, Allı 4011. Marmaris – Datça road 13.km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, on *P. brutia*, 01.05.2012, Allı 4125.

Hymenogastraceae

Deconica coprophila (Bull.) P. Karst.: Çubucak, 0 m, *P. brutia* forest, 14.03.2013, Allı 4689.

Hebeloma birrus (Fr.) Sacc.: Aktur Kovanlık, *P. brutia* forest, 22.01.2012, Allı 3974; Çubucak, *P. brutia* forest, 22.01.2012, Allı 3953.

Hebeloma laterinum (Batsch) Vesterh.: Bördübet, *P. brutia* forest, 14.03.2013, Allı 4698.

Hebeloma stenocystis J. Favre: Çubucak, *P. brutia* forest, 22.01.2012, Allı 3967.

Inocybaceae

Crepidotus mollis (Schaeff.) Staud.: Değirmenyanı around, *L. orientalis* forest, on *L. orientalis*, 10.01.2012, Allı 3934c; Bördübet, *L. orientalis*, *P. brutia* mixed forest, 27.12.2012, Allı 4622; Çubucak, 0 m, *P. brutia* forest, 27.12.2012, Allı 4653.

Crepidotus variabilis (Pers.) P. Kumm.: Bördübet, *L. orientalis*, *P. brutia* mixed forest, 27.12.2012, Allı 4627.

Inocybe amethystina Kuyper: Çubucak, 0 m, *P. brutia* forest, 22.01.2012, Allı 3962.

Inocybe catalaunica Singer: Çubucak, 0 m, *P. brutia* forest, 22.01.2012, Allı 3941.

Inocybe cookei Bres.: Çubucak, *P. brutia* forest, 11.03.2012, Allı 3996.

Inocybe erubescens A. Blytt: Çubucak, *P. brutia* forest, 22.01.2012, Allı 3945; Çubucak, 0 m, *P. brutia-Quercus* sp. mixed forest, 27.12.2012, Allı 4652.

Inocybe fuscidula Velen.: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4577.

Inocybe geophylla (Bull.) P. Kumm.: Çubucak, *P. brutia* forest, 22.01.2012, Allı 3960; Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4568; 4569; 4589; 4608; Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 14.03.2013, Allı 4677.

Inocybe godeyi Gillet: Çubucak, *P. brutia* forest, 22.01.2012, Allı 3959.

Inocybe hystris (Fr.) P. Karst.: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4573.

Inocybe lacera (Fr.) P. Kumm.: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4582.

Inocybe lanuginosa (Bull.) P. Kumm.: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 14.03.2013, Allı 4681.

Inocybe maculata Boud.: Çubucak, *P. brutia* forest, 22.01.2012, Allı 3944.

Inocybe nitidiuscula (Britzelm.) Lapl.: Çubucak, *P. brutia* forest, 22.01.2012, Allı 3939; Çubucak, 0 m, *P. brutia* forest, 22.01.2012, Allı 3940.

Inocybe phaeoleuca Kühner: Çubucak, 0 m, *P. brutia* forest, 22.01.2012, Allı 3935; Allı 3964; Bördübet, *P. brutia* forest, 14.03.2013, Allı 4697.

Inocybe whitei (Berk. & Broome) Sacc.: Çubucak, 0 m, *P. brutia* forest, 22.01.2012, Allı 3946.

Marasmiaceae

Gymnopus ocior (Pers.) Antonín & Noordel.: Kovanlık around, *P. brutia* forest, 11.03.2012, Allı 4005.

Marasmius rotula (Scop.) Fr.: Çubucak, 0 m, *P. brutia* forest, 27.12.2012, Allı 4647.

Mycenaceae

Mycena galopus (Pers.) P. Kumm.: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4578.

Mycena pura (Pers.) P. Kumm.: Aktur Kurucabük Around, *P. brutia* - *Cupressus* sp. - *Eucalyptus* sp. mixed forest, 147 m, 22.01.2012, Allı 3970.

Mycena stipata Maas Geest. & Schwöbel: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4600.

Mycena strobilicola J. Favre & Kühner: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4603.

Xeromphalina caudicinalis (Fr.) Kühner & Maire: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4580.

Phallaceae

Clathrus ruber P. Micheli ex. Pers.: Bördübet, *P. brutia* forest, 14.03.2013, Allı 4699.

Pleurotaceae

Hohenbuehelia tremula (Schaeff.) Thorn & G.L. Barron: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4579.

Pluteaceae

Volvariella caesiotincta P.D. Orton

Emecik Village, *L. orientalis* mixed forest, 22.01.2012, Allı 4143.

Volvopluteus gloiocephalus (DC.) Vizzini, Contu & Justo: Çubucak, 0 m, *P. brutia* forest, 27.12.2012, Allı 4633.

Polyporaceae

Daedaleopsis tricolor (Bull.) Bondartsev & Singer: Emecik Village, *P. brutia*-*Eucalyptus* sp. mixed forest, on *Eucalyptus* sp. stump, 22.01.2012, Allı 3982.

Basidiocarp 40-100 (150) mm in diameter, attached to the substrate, fan-shaped, three different colored layers at the surface (Figure 5a). Grey-ocher brown margin and more interior It was stratification in reddish brown and light brown tones. **Hymenium** like a lamellae (especially this structure is separated from the *Daedaleopsis confragosa*), reddish brown (Figure 5b). **Basidiospores** 6,5-8,5 x 2,5 µm, hyalin, cylindrical and slightly virgule shaped, sometimes droplets, smooth (Figure 5c).



Figure 5. *Daedaleopsis tricolor*, a, b. basidiocarps, c. basidiospores (with congo red)

Fomes fomentarius (L.) Fr.: Değirmenyamı around, *L. orientalis* forest, on *L. orientalis*, 25.10.2011, Allı 3935c.

Lentinus tigrinus (Bull.) Fr.: Değirmenyamı around, *L. orientalis* forest, on *L. orientalis*, 10.01.2012, Allı 3934e. Hisarönü, *L. orientalis* forest, 01.05.2012, Allı 4148.

Trametes versicolor (L.) Lloyd: Değirmenyamı around, *L. orientalis* forest, on *L. orientalis*, 25.10.2011, 3935d; Bördübet, *L. orientalis* forest, 01.05.2012, Allı 4133; Allı 4126; Bördübet, *L. orientalis*, *P. brutia* mixed forest, 27.12.2012, Allı 4626.

Porothelaceae

Phloeomana hiemalis (Osbeck) Redhead: Bördübet, *L. orientalis*, *P. brutia* mixed forest, 27.12.2012, Allı 4624.

Psathyrellaceae

Psathyrella candolleana (Fr.) Maire: Kovanlık around, *L. orientalis* forest, 01.05.2012, Allı 4136.

Psathyrella clivensis (Berk. & Broome) P.D. Orton: Bördübet, *L. orientalis* forest, on *L. orientalis*, 01.05.2012, Allı 4134.

Psathyrella obtusata (Pers.) A.H. Sm.: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4615.

Rhizopogonaceae

Rhizopogon luteolus Fr.: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4588.

Rhizopogon roseolus (Corda) Th. Fr.: Çubucak, *P. brutia* forest, 22.01.2012, Allı 3949; Allı 3956; Bördübet, *L. orientalis* forest, 01.05.2012, Allı 4133; Allı 4135; Çubucak, 0 m, *P. brutia* forest, 27.12.2012, Allı 4641; Bördübet, *P. brutia* forest, 14.03.2013, Allı 4696.

Russulaceae

Lactarius deliciosus (L.) Gray: Aktur Kovanlık, *P. brutia* forest, 22.01.2012, Allı 3979; Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4610; Bördübet, *L. orientalis*, *P. brutia* mixed forest, 27.12.2012, Allı 4618; Emecik Village, *P. brutia* forest, 14.03.2013, Allı 4702.

Russula xerampelina (Schaeff.) Fr.: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4602; Çubucak, 0 m, *P. brutia* forest, 27.12.2012, Allı 4650.

Schizophyllaceae

Schizophyllum commune Fr.: Değirmenyanı around, *L. orientalis* forest, on *L. orientalis*, 25.10.2011, 3935e; Değirmenyanı around, *L. orientalis* forest, on *L. orientalis*, 10.01.2012, 3934f.

Sclerodermataceae

Pisolithus arhizus (Scop.) Rauschert: Çubucak, *P. brutia* forest, 09.11.2012, Allı 4455.

Scloderma bovista Fr.: Çubucak, *P. brutia* forest, 22.01.2012, Allı 3949; Allı 3955.

Stereaceae

Stereum hirsutum (Willd.) Pers.: Aktur Kurucabük around, *P. brutia* - *Cupressus* sp. - *Eucalyptus* sp. mixed forest, on *Eucalyptus* sp., 147 m, 22.01.2012, Allı 3972; Çubucak, 0 m, *P. brutia* forest, 10.04.2012, Allı 4020; Emecik Village, *P. brutia* forest, 14.03.2013, Allı 4706.

Strophariaceae

Agrocybe praecox (Pers.) Fayod: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 01.05.2012, Allı 4119.

Cyclocybe cylindracea (DC.) Vizzini & Angelini

Bördübet, *L. orientalis* forest, on *L. orientalis* stump, 01.05.2012, Allı 4130.

Suillaceae

Suillus collinitus (Fr.) Kuntze: Aktur Kurucabük around, *P. brutia* - *Cupressus* sp. - *Eucalyptus* sp. mixed forest, 147 m, 22.01.2012, Allı 3969; Aktur Kovanlık, *P. brutia* forest, 22.01.2012, Allı 3976.

Thelephoraceae

Thelephora terrestris Ehrh.: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4595.

Tricholomataceae

Clitocybe costata Kühner & Romagn.: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4596; 4616.

Infundibulicybe geotropa (Bull.) Harmaja: Aktur Kovanlık, *P. brutia* forest, 22.01.2012, Allı 3980.

Lepista multiformis (Romell) Gulden: Emecik Village, *P. brutia* forest, 22.01.2012, Allı 3983.

Lepista nuda (Bull.) Cooke: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4617.

Melanoleuca brevipes (Bull.) Pat.: Çubucak, 0 m, *P. brutia* forest, 11.03.2012, Allı 3998.

Melanoleuca strictipes (P. Karst.) Jul. Schäff.: Bördübet, *L. orientalis*, *P. brutia* mixed forest, 27.12.2012, Allı 4631b; Çubucak, 0 m, *P. brutia* forest, 14.03.2013, Allı 4690.

Resupinatus applicatus (Batsch) Gray: Bördübet, *L. orientalis*, *P. brutia* mixed forest, 27.12.2012, Allı 4630.

Tricholoma terreum (Schaeff.) P. Kumm.: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4584.

Tubariaceae

Tubaria furfuracea (Pers.) Gillet: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4575.

Tubaria romagnesianae Arnolds: Marmaris – Datça road 13. km. İçmeler Stream, *P. brutia*, *L. orientalis* mixed forest, 27.12.2012, Allı 4567; 4607; Bördübet, *L. orientalis*, *P. brutia* mixed forest, 27.12.2012, Allı 4621.

4. Conclusions and discussion

In this study, 36 families, 64 genera and 99 taxa belonging to 2 (Ascomycetes and Basidiomycetes) class were identified. Out of all the identified taxa, four of them are new records for Turkey. These species are *Daedaleopsis tricolor*, *Entoloma caesiocinctum*, *Entoloma pleopodium* and *Entoloma scabiosum* (Sesli and Denchev, 2008; Solak et al., 2015). The statistical analysis of the 99 species indicates that 32% are edible, 21% are poisonous and 47% are inedible (Figure 6).

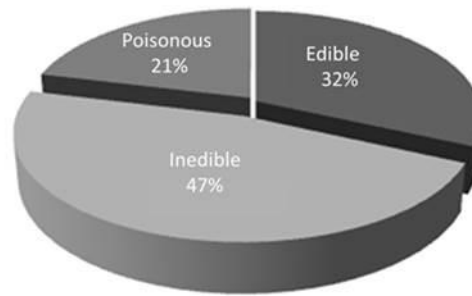


Figure 6. Edibility of the macrofungi of Datça Peninsula

In the study area, the most predominant families were found to be Inocybaceae followed by Agaricaceae, Tricholomataceae, Mycenaceae and Entolomataceae (Figure 7).

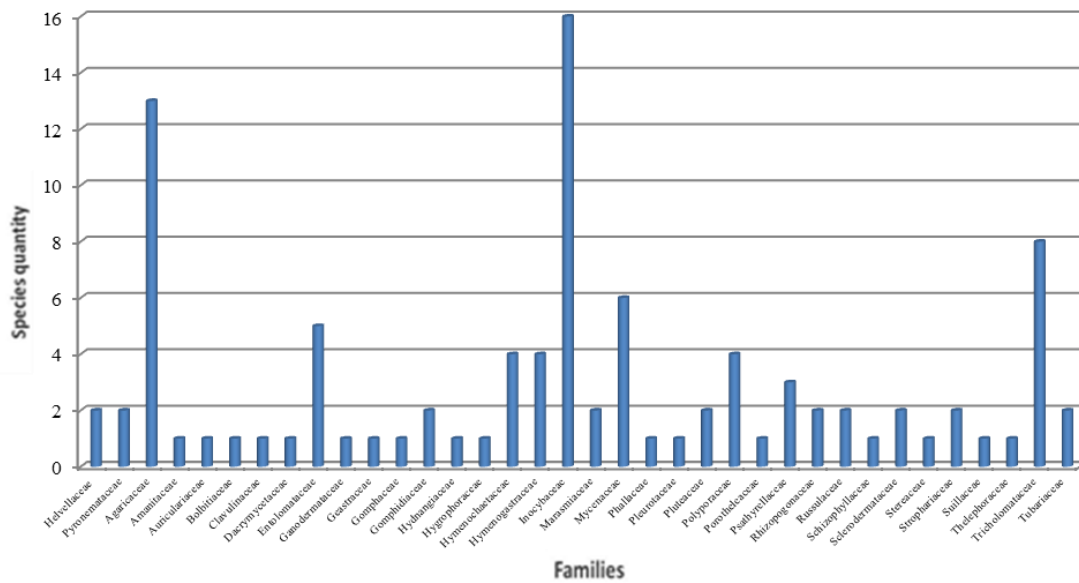


Figure 7. The graph illustrating the number of species in the specific families identified in the study

Similarity ratios obtained from the similar studies in the near vicinity of this current study are given in Table 1.

Table 1. Similarity percentages of neighbouring studies with Datça Peninsula

Investigations	Number of identical taxa	Total taxa	Similarity percentage
Solak & Yılmaz Ersel (2005)	37	178	20.7
Güngör et al. (2016)	35	211	16,5

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