

New Ascomycete records for the macrofungi of Turkey

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Abstract: *Anthracobia melaloma*, *Scutellinia barlae* (Pyronemataceae), and *Pseudoplectania vogesiaca* (Sarcosomataceae) ascomycetous members of macrofungi collected from Muğla and Antalya provinces are recorded for the first time from Turkey. *Anthracobia* and *Pseudoplectania* are also new records at genus level.

Key words: Fungal biodiversity, Ascomycetous macrofungi, new records, Turkey

Türkiye makrofungusları için yeni Askomiset kayıtları

Özet: Bu çalışmada, Muğla ve Antalya illerinden toplanan askomiset makrofunguslardan olan *Anthracobia melaloma*, *Scutellinia barlae* (Pyronemataceae) ve *Pseudoplectania vogesiaca* (Sarcosomataceae) taksonları Türkiye'den ilk defa kaydedilmiştir. Ayrıca *Anthracobia* ve *Pseudoplectania* cins düzeyinde yeni kayıttır.

Anahtar sözcükler: Fungal biyoçeşitlilik, Askomiset makrofunguslar, yeni kayıtlar, Türkiye

Introduction

In 2008 and 2009, during field trips to Antalya and Muğla, some specimens of macrofungi were collected. After field and laboratory studies, 3 taxa, namely *Anthracobia melaloma* (Alb. & Schwein.) Arnould, *Scutellinia barlae* (Boud.) Maire, and *Pseudoplectania vogesiaca* Seaver, were identified among these specimens. In the light of the literature on Turkish macrofungi (Solak et al., 2007; Aktaş et al., 2009; Sesli and Denchev, 2008; Kaya et al., 2010), these 3 taxa are new records for the Turkish mycota. Two genera (*Anthracobia* and *Pseudoplectania*) are

new at generic level and *Scutellinia barlae* is new at species level. The taxa were identified using literature on ascomycetous macrofungi (Breitenbach & Kränzlin, 1984; Hansen & Knudsen, 2000; Phillips, 2006). The specimens used for this study were collected from Antalya and Muğla provinces. All specimens were examined using their macroscopic features, such as habitat and stipe, and microscopic features, such as paraphyses, ascospores, and asci. Samples for microscopy were mounted in 10% aqueous ammonia. All identified specimens were deposited at the fungarium of Muğla University.

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The Descriptions of the Taxa

Ascomycetes

Pezizales

Pyronemataceae Corda

Anthracobia Boud.

Apothecia often densely gregarious, disc-shaped, 0.2-1.5 cm broad, marginate. Hymenium greyish brown, yellowish, ochraceous, orange, or red. Outside with adnate, short, obtuse, brownish hairs. Spore narrowly ellipsoid, smooth, with 2 guttules. It grows on burnt ground. The whole year.

Anthracobia melaloma (Alb. & Schwein.) Arnould (Figure 1).

Fruiting body 0.2-1.5 cm broad, hemispherical at first, later flat, disc-shaped and without stalk. Hymenium light orange to dark orange, darker when old. Outer surface pale brownish and with brownish hairs, $80 \times 10 \mu$. Paraphyses cylindrical, septate, to 6μ thick. Asci 8 spored, $150-180 \times 9-11 \mu$. Ascospores narrowly elliptical, $15-17 \times 8-9 \mu$, hyaline, smooth, with 2 drops. Growing gregariously on burnt ground and charred wood.

Antalya: Manavgat, Sağırin village, on burnt ground, 27.12.2008, *Allı* 3223.

Scutellinia (Cooke) Lambotte

Apothecia sessile, solitary or gregarious, disc-shaped or low cup-shaped, marginate. Hymenium whitish, orange, red, or scarlet. Outside concolorous

to brownish, pointed, septate, rooting and often furcate hairs, rarely with pale, stellate hairs. Spore hyaline, globose, ellipsoid, with many guttules, ornamentation of delicate or coarse warts, spines, or reticulum. On soil, limestone, and wood.

Scutellinia barlae (Boud.) Maire (Figure 2).

Fruting body 4-10 mm broad, spherical, when young, then conical and saucer-shaped, hymenium red to brownish red. Hairs with unbranched base, dark brown, to 270μ long and $15-20 \mu$ broad. Asci 8 spored, $240-310 \times 10-35 \mu$. Ascospores hyaline, perfectly globose, $19-21 \mu$, with truncate to rounded warts irregularly distributed on spore surface.

Growing singly to gregariously, on rich soil among mosses in forests.

Muğla: Fethiye, Yeşilüzümlü, Dikencik area, among mosses on ground in *Pinus brutia* forests, 14.03.2009, *Allı* 3385.

Sarcosomataceae Kobayasi

Pseudoplectania Fuckel

Apothecia solitary or in groups, cup-shaped to disc-shaped, 0.5-6 cm broad, marginate; sessile or with a short stalk. Hymenium dark brown to black, glistening when young, dull when mature. Outside glabrous to tomentose, black. Spore globose, hyaline, with small guttules. On needles and twigs of coniferous trees, decaying wood, or on *Sphagnum*. Autumn, winter-spring to early summer.

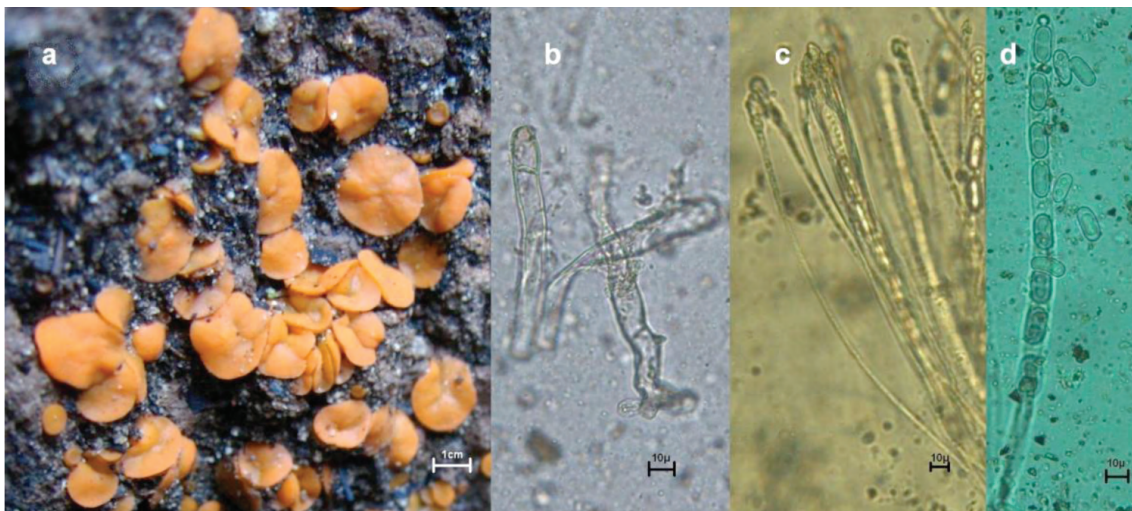


Figure 1. *Anthracobia melaloma*: a- ascocarps, b- hairs, c- paraphyses, d- ascus and ascospores.

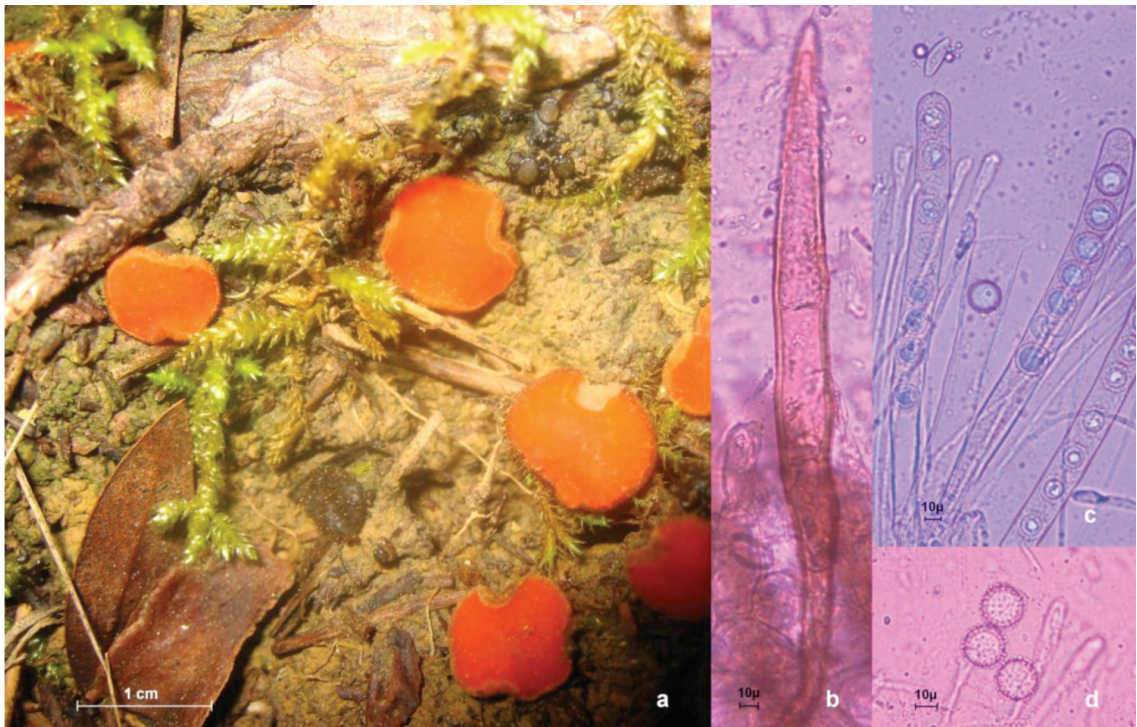


Figure 2. *Scutellinia barlae*: a- ascocarps, b- hair, c- asci and paraphyses, d- ascospores.

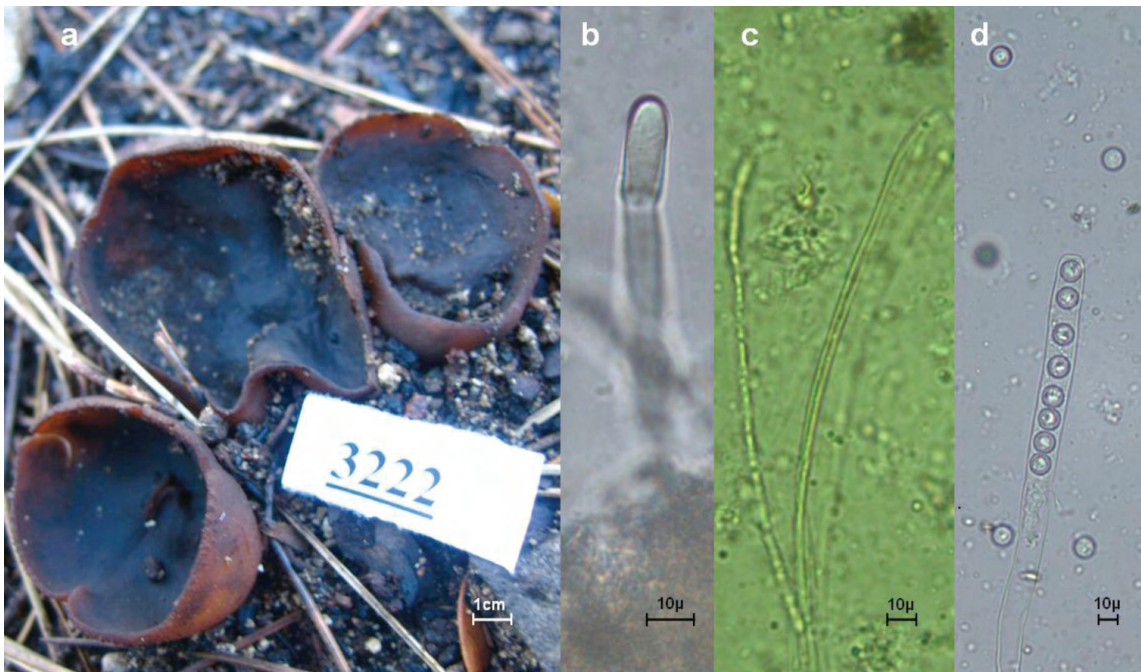


Figure 3. *Pseudoplectania vogesiaca*: a- ascocarps, b- hair, c- paraphyses, d- ascus and ascospores.

Pseudoplectania vogesiaca Seaver (Figure 3).

Fruting body 2-5 cm broad, goblet shaped when young, then saucer to cup-shaped with a short stalk. Hymenium dark olive when young, later reddish dark brown. Outer surface reddish dark brown to black and glabrous to tomentose. Margin incurved when young, then irregular. Hairs black-brown, cylindrical, smooth, with few septa, to $120 \times 7 \mu$. Paraphyses filiform, with few septa, to 3μ thick. Asci 8 spored $280-300 \times 10-15 \mu$. Ascospores globose, $9-11 \mu$, smooth, hyaline, with 1 drop.

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Growing singly to gregariously on rotting and branches of lying conifers on the ground, also on buried wood.

Antalya: Manavgat, Sağırın village, on buried wood, 27.12.2008, *Allı* 3222.

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