



## A New *Mycena* Record for the Mycobiota of Turkey

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### Türkiye Mikobiyotası İçin Yeni Bir *Mycena* Kaydı

**Abstract:** The mycenoid species, *Mycena pterigena* (Fr.) P. Kumm. (Mycenaceae) is given as new record from Turkey. A brief description of the species and photographs related to its macro and micromorphologies are provided.

**Key words:** New record, *Mycena*, Trabzon, Turkey

**Özet:** Mycenoid bir tür olan *Mycena pterigena* (Fr.) P. Kumm. Türkiye'den yeni kayıt olarak verilmiştir. Türün kısa betimlemesi ve makro ve mikromorfolojilerine ilişkin fotoğrafları verilmiştir.

**Anahtar Kelimeler:** Yeni Kayıt, *Mycena*, Trabzon, Türkiye

#### 1. Introduction

*Mycena* (Pers.) Roussel is a large genus of the family *Mycenaceae* Underw., with about five hundred known species worldwide (Kirk et al., 2008). The members of the genus are generally small mushrooms rarely exceeding a few centimeters in diameter and are characterised by very fragile and thin, membranous, conical to campanulate pileus; adnate to arcuate or decurrent lamellae; 1-4-spored basidia; intricate cystidia; white spore print; and smooth, hyaline spores. Almost all the members of the genus are saprotrophic and play a vital role in litter decomposition especially in forests and woodlands. Species of the genus have cosmopolitan distribution, and are usually determined on the debris of conifers, other woody plants and rarely on or among the debris of grasses, mosses, ferns (Pegler, 1986; Singer, 1986).

On 8 October 2016 some small pinkish mycena samples were collected from Uzungöl Nature Park within the Çaykara district of Trabzon province and identified as *Mycena pterigena* (Fr.) P. Kumm. Tracing the current checklists (Sesli and Denchev, 2014; Solak et al., 2015) and the latest macrofungal studies (Akata et al., 2016; Denğiz and Demirel, 2016; Kaya et al., 2016; Öztürk et al., 2016; Sesli et al., 2016; Taşkın et al., 2016; Uzun and Acar, 2016; Kaya et al., 2017; Uzun and Kaya, 2017; Uzun et al., 2017a; 2017b, 2017c), it was founded that the taxon has not been recorded from Turkey before.

The work aims to contribute to the mycobiota of Turkey.

#### 2. Materials and Method

Macrofungi specimens were collected from Uzungöl Nature Park within the Çaykara district of Trabzon province during field trips in 2016 Morphological and ecological characteristics of the samples were recorded and they were photographed in their natural habitats. Then the specimens were transferred to the fungarium. Necessary microscopic investigations were carried out within the fungarium. Photographs related to micromorphology were also obtained during these investigations. The samples were identified with the help of Redhead (1984) and Miller (2004).

The specimens are kept at Karamanoğlu Mehmetbey University, Kamil Özdağ Science Faculty, Department of Biology.

#### 3. Results

*Basidiomycota* R.T. Moore

*Agaricales* Underw.

*Mycenaceae* Roze

*Mycena pterigena* (Fr.) P. Kumm.

**Synonym:** *Agaricus pterigenus* Fr., *Agaricus pterigenus* Fr. var. *pterigenus*, *Agaricus rubeolarius* With., *Mycena pterigena* (Fr.) P. Kumm. var. *pterigena*.

**Macroscopic features:** Pileus 2-4 mm across, cylindrical when young then conical to campanulate, slightly sulcate, translucent-striate, glabrescent to somewhat pruinose, pale salmon to pale pink, somewhat pale brownish at the centre. Flesh membranous, odor mild. Lamellae broadly adnate, decurrent, whitish to pale rose. Stem 10-35 × 0.2-0.3 mm, cylindrical, threadlike, concolorous with the cap or paler when young, then becomes transparent and grayish brown when mature, thicker at the base or somewhat bulbous (Fig. 1).

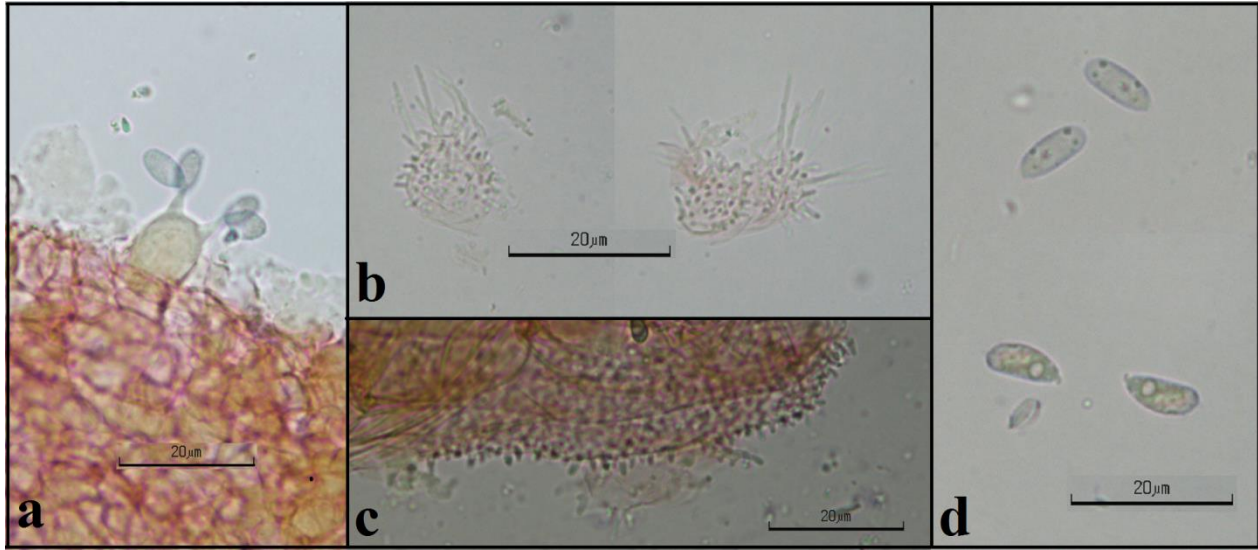


Figure 1. Basidiocarps of *Mycena pterigena*.

**Microscopic features:** Basidia 20-25 × 8-10 µm, broadly clavate, 4-spored (Fig. 2a). Cheilocystidia abundant, 19-24 × 11-15 µm, clavate to almost spherical, covered apically with fairly numerous, simple, rarely furcate, cylindrical projections up to 11 µm long (Fig. 2b). Pileipellar hypha also covered with warts or short cylindrical excrescences

(Fig. 2c). Spores 7-10 × 3-5 µm, narrowly to broadly elliptic, hyaline, smooth (Fig. 2d).

**Specimen examined:** Trabzon, Çaykara, Uzungöl Nature Park, roadside on dead *Pteridium* sp. stem, 40°36'N-40°19'E, 1470 m, 08.10.2016, Yuzun 5275.



**Figure 2.** A four spored basidium (a), cheilocystidia (b), pileipellar hypha (c) and basidiospores (d) of *Mycena pterigena*.

#### 4. Discussions

Current checklists on Turkish macromycota (Sesli and Denchev, 2014; Solak et al., 2015) indicate that 62 *Mycena* species have so far been recorded from Turkey. With this addition of *Mycena*, current species number of the genus *Mycena* increased to 63.

Like *Mycena pterigena*, *M. lohwegii* also determined from fern associated habitats, but it has a greyish pileus when young, has a larger fruit body, shorter projections on its cheilocystidia, larger spores and colonizes rhizomes (Miller, 2004).

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