



A new *Inocybe* (Fr.) Fr. record for Turkish macrofungi

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Türkiye Makrofungusları için Yeni Bir *Inocybe* (Fr.) Fr. Kaydı

Abstract: *Inocybe* (Fr.) Fr. is a very complicated and mostly mycorrhizal genus with a large number of species. A typical member of the genus, *Inocybe decipiens* Bres., was collected from Hani (Diyarbakır) district and recorded for the first from Turkey. Short description and the photographs of the determined taxon was given and discussed briefly.

Key words: Macrofungus, *Inocybe decipiens*, New record, Hani

Özet: *Inocybe* (Fr.) Fr. çoğunlukla mikorizal ilişkide bulunan oldukça karmaşık ve geniş tür sayısına sahip bir cinstir. Cinsin tipik bir üyesi olan *Inocybe decipiens* Bres. Hani (Diyarbakır) yöresinden toplanmış ve Türkiye'den ilk kez rapor edilmiştir. Tespit edilen türün fotoğrafları ve kısa deskripsiyonu verilmiş ve kısaca tartışılmıştır.

Anahtar Kelimeler: Makrofungus, *Inocybe decipiens*, Yeni kayıt, Hani

1. Introduction

The genus *Inocybe* (Fr.) Fr. (*Inocybaceae*, *Agaricales*) is a prominent genus of lamellate macrofungi. The majority of the members of the genus have toxic properties beside the mycorrhizal relationships. *Inocybe* species are generally characterized by Brown, lilac and sometimes purplish coloured basidiomata, squamose to fibrillate pileus and stipe, brownish lamellae, brown spore print and the growing mode on soil. Some members have cystidia with crystalline and ornamentations at the apex. *Inocybe* species have a distinctive and significant odour (Deepna Latha ve Manimohan, 2016).

In Turkey, many significant studies are being carried on macrofungi especially in last three to four decades. Regarding the diversity of the country, it can easily be understand that there are lots of macrofungi which are waiting to be determined. Some Turkish mycologist have periodically presented the studies which were carried out on Turkish macrofungi as checklists. Latest checklists were prepared by Solak et al. (2015) and Sesli and Denchev (2014).

Some studies were also carried out after the presentation of latest checklist. According to the checklists and the previous studies (Acar and Uzun, 2016; Akata and ark., 2016; Demirel and ark., 2016; Doğan and Kurt, 2016; Kaya et al., 2016; Sesli et al., 2016; Acar and Uzun, 2017; Allı et al., 2017; Demirel et al., 2017; Uzun et al., 2017a; Uzun et al., 2017b) 83 *Inocybe* species have been determined.

This study aims to make a contribution to the mycobiota of Turkey.

2. Materials and Method

Macrofungi specimens were collected within the boundaries of Hani (Diyarbakır) district in 2010. General and ecological properties of the samples were recorded to field notebook and they were photographed with a digital photograph machine. Later on the samples were

transferred to the laboratory. Macroscopic and microscopic data related to the identification of macrofungi were traced and the identification of the taxon were performed with the help of the relevant literature (Moser, 1983; Hoiland, 1978; Breitenbach ve Kränzlin, 2000). The identified sample is kept in the fungarium of Yüzüncü Yıl University, Science Faculty, Department of Biology.

3. Results

The macroscopic and microscopic properties and the photographs of basidiocarps and basidiospores are provided.

Basidiomycota R.T. Moore

Agaricomycetes

Agaricales Underw.

Inocybaceae Jülich

Inocybe decipiens Bres.

Syn: *Astrosporina decipiens* (Bres.) Zerova, *Inocybe decipiens* Bres. var. *decipiens*, *Inocybe decipiens* var. *megacystis* J. Favre, *Inocybe decipiens* var. *mundula* J. Favre, *Inocybe favrei* var. *mundula* (J. Favre) Bon.

Macroscopic and microscopic features: Pileus 15-35 mm in diameter, conical or convex, eccentrically umbonate, with radial fibrils, waxy when young, with vellar remnants at the margin, light Brown to dark brown or slightly reddish brown. Lamellae wide, dark whitish to light yellow when young, greyish brown when mature, adnately to adnexely connected to the stipe. Flesh thin, whitish, odour distinct. Stipe 17-40 × 4-7 mm, cylindrical, surface whitish when young, smooth or covered with white longitudinal fibrils on a brownish background, whitish at the base and distinctly bulbous. Spores 10-13.5 × 5.5-7.8 µm, elliptical to slightly reticulate with slight tubercles, yellowish brown. Basidia 4-spored. Cheilocystidia 30-60 × 10-23 µm, usually urticoid. Pleurocystidia similar to Cheilocystidia (Figure 1).

Specimen examined: Diyarbakır, Hani, city centre, along stream side, under *Populus-Salix* sp. trees, 38° 24'584"K, 40° 23'612"D, 881 m, 13.05.2010, A. 189.

4. Discussions

With this study, *Inocybe decipiens* was added to the mycobiota of Turkey as the 84th member of the genus *Inocybe*. Seventy nine of them were compiled within the checklists prepared by Sesli and Denchev (2014) and Solak et al. (2015). The other four taxa were recorded by

Afyon et al. (2014), Solak et al. (2014) and Öztürk et al (2016).

Morphologically *Inocybe decipiens* show similarities with *I. dunensis*. But the habitat and the spore shapes of the two species differentiates them from each other (Breitenbach ve Kränzlin, 2000; Moser, 1983).

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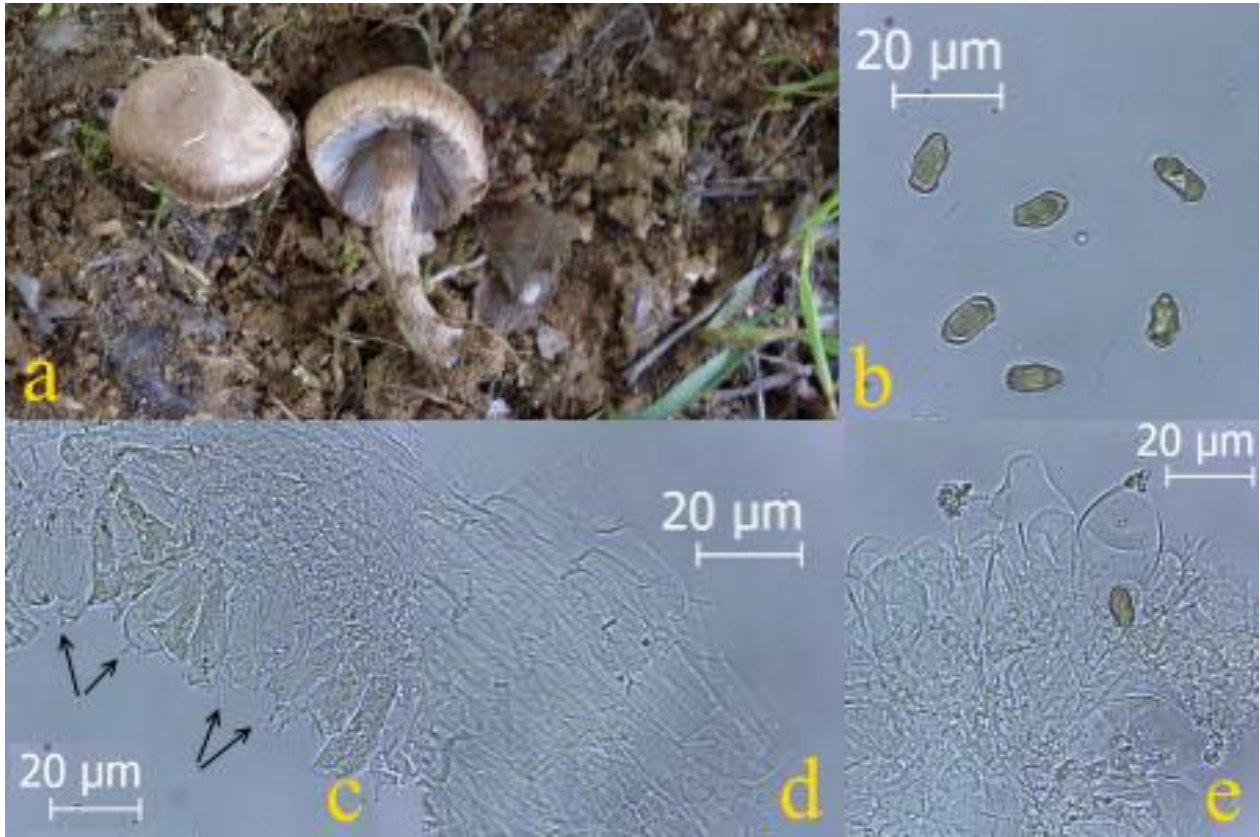


Figure 1. *Inocybe decipiens*, a. basidiocarps, b. basidiospores, c. basidia, d. hypae, e. cheilocystidia

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