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Two New Records of *Phallales* for the Mycoflora of Turkey

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Abstract: The macrofungi species *Phallus hadriani* Vent.: Pers. and *Mutinus caninus* (Hud.: Pers.) Fr. (*Phallaceae*) have been recorded for the first time from Turkey. Descriptions based on their macroscopic and microscopic features are given.

Key Words: New records, *Phallaceae*, Mycoflora, Turkey

Türkiye Mantar Florası İçin İki Yeni *Phallales* Kaydı

Özet: Makrofunguslardan *Phallus hadriani* Vent.: Pers ve *Mutinus caninus* (Hud.: Pers.) Fr. (*Phallaceae*) Türkiye'den ilk defa kaydedilmiştir. Onların makroskobik ve mikroskobik özelliklerini içeren betimleri verilmiştir.

Anahtar Sözcükler: Yeni Kayıtlar, *Phallaceae*, Mantar Florası, Türkiye

Introduction

Turkey has a very diverse flora, and many studies have been carried out concerning the phanerogamic component. However, the cryptogamic flora has not been studied extensively.

In 2001, some macrofungi specimens were collected in the Artvin and Iğdır provinces of Turkey. After field and laboratory studies, 2 species belonging to *Phallaceae* were identified with the help of the relevant literature (Breitenbach & Kränzlin, 1986; Buczacki, 1989; Jordan, 1995). These species are new records for the macrofungi flora of Turkey. The identified species with their description, distributions, collection dates and individual herbarium numbers are given below. Identified species are kept in the herbarium of Yüzüncü Yıl University in Van.

The aim of this study is to contribute to the macrofungal flora of Turkey by introducing new records.

Taxonomy and description of the species

Kingdom: *Fungi*

Division: *Amastigomycota*

Subdivision: *Basidiomycotina*

Class: *Basidiomycetes*

Series: *Gasteromycetes*

Order*:* *Phallales*

Family: *Phallaceae*

Phallus hadriani Vent.: Pers. Synopsis Methodica Fungorum (1801).

Macroscopic and microscopic features: Fruit body 3-6 cm across, at first subspherical, pear-shaped (Figure 1a), part buried, smooth-warty, at first white, then pinkish, elongating to 12-15 cm high, with conical white honeycombed head covered with glebal mass and stout, white, hollow, spongy stem-like portion. Gleba at first pale then olive-green, gelatinous, then darker olive and slimy as fruit body elongates. Smell when mature faint, pleasant. Spores yellowish, ellipsoid, smooth, 4-5 x 1-2 µm. Basidia cylindrical, 20-25 x 3-4 µm, with 8 sterigmata and basal clamp (Figure 1b).

Habitat: On sandy soil in gardens.

Distribution: Iğdır, Küllük village, under willow trees, 30.10.2001. U. 2281.

This species can be confused with *Phallus impudicus* L.: Pers, *although the* young fruit body colour and smell are different.

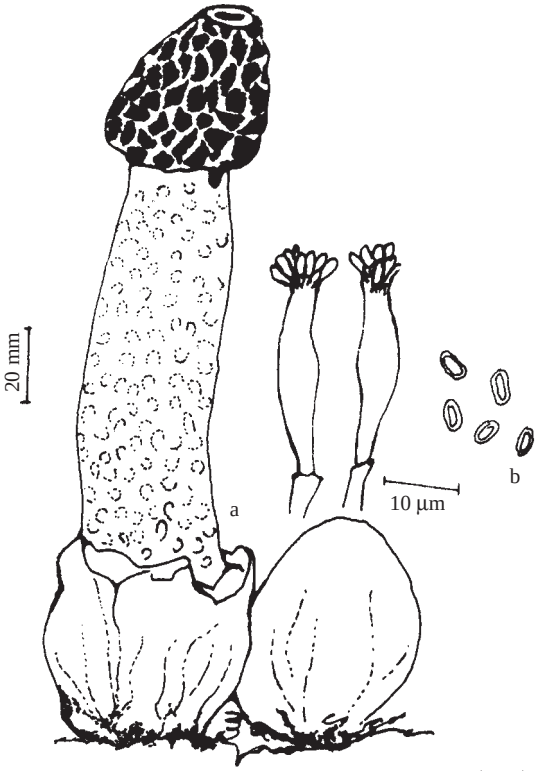

Fig. 1. *Phallus hadriani* a) Fruit body b) Basidium and Basidiospores.

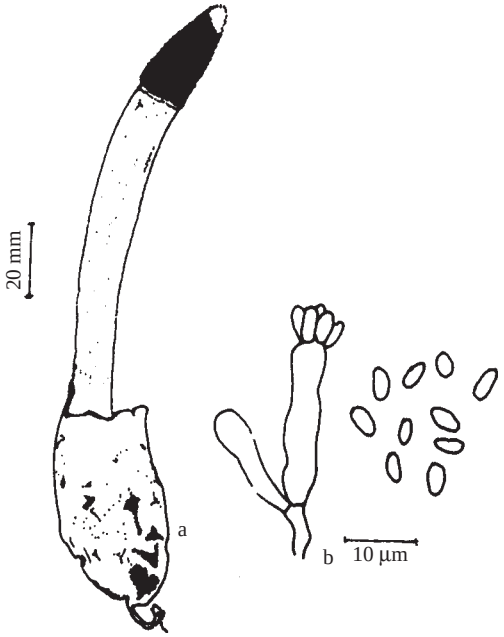

Fig. 2. *Mutinus caninus* a) Fruit body b) Basidium and Basidiospores.

Mutinus caninus (Hud.: Pers.) Fr. Systema Mycologicum, vol. 1 (1821).

Macroscopic and microscopic features: Fruit body 1-2 cm across and more cylindrical in shape, whitish-yellow, finally rupturing when the hollow pitted receptacle extends. **Stem** 10-12 cm high, pale yellow-buff to bright orange, surmounted by a narrow conical orange-red head covered in dark olive slime which contains the spores and has a very slight sickly smell. (Figure 2a). Attached to the substrate by a mycelial cord. Taste not distinctive. Spores pallid yellow, smoth, ellipsoid, 4-5 x 1-2 µm. Basidia cylindrical, 20 x 5 µm, 6-spored, without basal clamp (Figure 2b). Not edible.

Habitat: in leaf litter in woods.

Distribution: Artvin, Karçal Mountains, under mixed woods, 10.08.1997, D. 1001.

Mutinus caninus fruit body initially a semi-submerged egg as in *Phallus impudicus,* but much smaller.

References

Breitenbach J & Kränzlin F (1986). *Fungi of Switzerland.* Volume 2. Lucerne: Verlag Mykologia, Switzerland.

Buczacki S (1989). *Fungi of Britain and Europe.* Glasgow: William Collins Sons & Co. Ltd.

Jordan M (1995). *The Encyclopedia of Fungi of Britain and Europe.* U.K.: David & Charles Book Co.