

NEW RECORDS OF THE MACROFUNGI FROM TURKEY

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Abstract

Several macrofungi specimens collected from Bozkır in Konya district, 13 of these species viz., *Collybia hariolorum*, *Collybia succinea*, *Clitocybe foetens*, *Melanoleuca substrictipes*, *Micromphale perforans*, *Mycena latifolia*, *Omphalina rivulicola*, *Coprinus angulatus*, *Conocybe rickenii*, *Pholiota lubrica*, *Tubaria conspersa*, *Inocybe fuscomarginata*, *Inocybe bongardii* are new records for the macrofungi of Turkey.

Introduction

People are interested on macrofungi because of their attractive features in forests, gardens, trees, meadows and that they have been used for food by the people. The present report gives some new records of the macrofungi from Turkey.

Materials and Methods

Fungal specimens were collected between 2000-2001 particularly during the months of autumn and spring seasons. The species were identified with the help of field and laboratory studies with relevant literature; Kreisel (1969), Watling (1973), Moser (1983), Phillips (1981), Michael *et al.*, (1983, 1985, 1986, 1987), Grünert & Grünert (1984, 1991), Breitenbach & Kränzlin (1984, 1986, 1991, 1995), Pegler (1987), Hennig & Kreisel (1987), Dähncke (1988), Bresinsky & Besl (1990), Ellis & Ellis (1990), Tröger (1990), Dähncke (1993), Jordan (1996), Smith (1996), Winkler (1996), Gerhardt (1997), Pace (1998).

The specimens are kept at Selçuk University Mushroom Application and Research Center.

Results

The descriptions of identified species are given below:

Tricholomataceae

1. *Collybia hariolorum* (Bull.) QuéL.

Pileus, 2-5 cm, surface smooth, dull, cream to beige-brown, center dark and reddish-brown. Flesh, brown, watery, whitish when dry, odour unpleasant. Lamellae, white to cream, adnate, edges smooth. Stipe, 3-5.5 x 0.5-1 cm, cylindric, surface floccose, red-brown, base slightly swollen, hollow.

Spores, elliptic, smooth, hyaline, 6-8 x 3-3.5 μ .

Tepelice Village, in oak forests, under woods, 28.11.2000, 1500 m, Kaşik-Sabahlar 10 (Fig. 1).

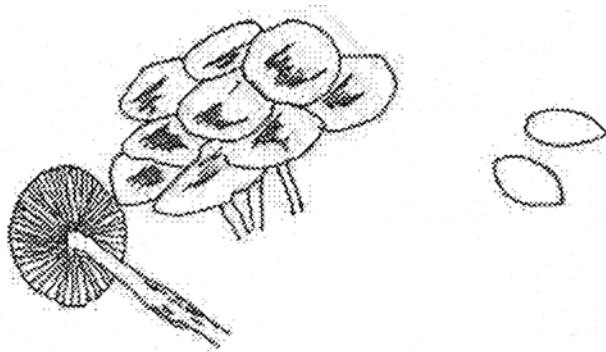


Fig. 1. *Collybia hariolorum*, basidiocarp and basidiospores.

2. *Collybia succinea* (Fr) Quél.

Pileus, 2-4 cm, surface smooth, finely floccose, dull, silky, reddish-chestnut brown to black-brown when moist, red-brown discus on center. Flesh, whitish, thin, odour unpleasant. Lamellae, cream-white when young, later cream-yellow. Stipe, 2-5 x 0.3-0.6 cm, cylindric, thickened toward the base, surface longitudinally fibrillose, dull, silky, dark red-brown, apex pale.

Spores, elliptic, smooth, hyaline, $5.5-8 \times 3.5-4.5 \mu$.

Tepelice Village, in oak forests, on dead stump, 28.11.2000, 1500 m, Kaşik-Sabahlar 9 (Fig. 2).

3. *Clitocybe foetens* Melot

Pileus, 1.5-4 cm, plane and infundibiform, beige-brown, margin incurved and undulating. Flesh, whitish, odour raphanoid. Lamellae, gray-beige, broadly adnate and subdecurrent. Stipe, 2-4 x 0.3-0.5 cm, cylindric, flexuous, surface smooth, satiny, longitudinally fibrillose, cream-beige, apex white powdered, base with white mycelium, hollow.

Spores, elliptic, smooth, hyaline, $5.5-8.5 \times 3.5-4.5 \mu$.

From Sorkun to Dere, in fir forests, on needle litter, 29.11.2000, 1280 m, Öztürk-Aktaş 128 (Fig. 3).

4. *Melanoleuca substrictipes* Kühn.

Pileus, 2.5-7 cm, convex to plane, with umbonate, surface smooth, satiny, white to cream-white, cream-brown when moist. Flesh, white, odour grass like. Lamellae, white, later cream, adnexed. Stipe, 4-7 x 0.5-1 cm, cylindric, base bulbous and up to 1 cm thick, surface longitudinally fibrillose, white when young, later yellowish-brown, solid when young, later hollow.

Spores, elliptic, verrucose, hyaline, $8-10 \times 5-6.5 \mu$.

Papuçular Village, under fir woods, among grass, 26.04.2001, 1200 m, Kaşik-Doğan-Sabahlar 36 (Fig. 4).

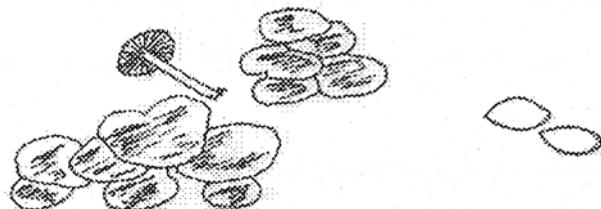


Fig. 2. *Collybia succinea*, basidiocarp and basidiospores.



Fig. 3. *Clitocybe foetens*, basidiocarp and basidiospores.

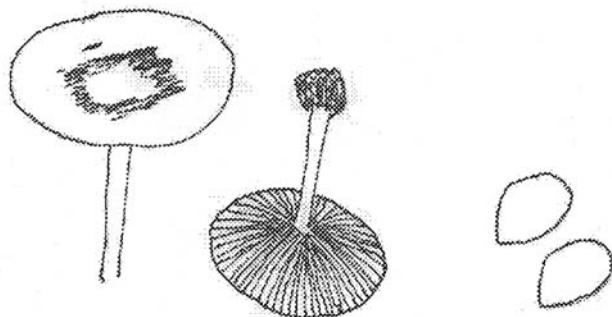


Fig. 4. *Melanoleuca substrictipes*, basidiocarp and basidiospores.

5. *Micromphale perforans* (Hoffm.) Gray

Pileus, 0.8-1.7 cm, convex, center depressed, surface smooth, radially furrowed-striate, beige and dull. Flesh, whitish, thin. Lamellae, beige-cream, broadly adnate. Stipe, 1.3-3 x 0.1-0.2 cm, cylindric, black-brown, hollow.

Spores, elliptic, smooth, hyaline, with drops, 6-8 x 3-4 μ .

From Sorkun to Dere, in fir forests, on needle litter, 29.11.2000, 1280 m, Öztürk-Aktaş 130 (Fig. 5).

6. *Mycena latifolia* (Peck) A. H. Smith

Pileus, 1-2 cm, conic-campanulate to convex, obtuse umbo, surface smooth, gray-brown, center black-brown, margin acute, denticulate, whitish. Flesh, brown, membranous, odour farinaceous. Lamellae, gray-white, broadly adnate and subdecurrent. Stipe, 3-5 x 0.1-0.2 cm, cylindric, flexuous, surface smooth, apex finely pruinose and gray-whitish, gray-brown below, base with whitish mycelium, hollow.

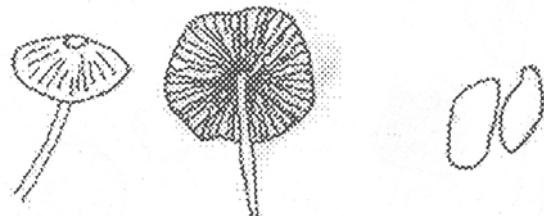


Fig. 5. *Micromphale perforans*, basidiocarp and basidiospores.

Spores, elliptic, smooth, hyaline, $6-8 \times 3.5-4 \mu$.

From Sorkun to Dere, in fir forests, on mossy, 29.11.2000, 1280 m, Öztürk-Aktaş 136 (Fig. 6).

7. *Ompholina rivulicola* Lamouré

Pileus, 0.7-2.4 cm, infundibuliform-umbilicate, margin crenate, rust-brown, translucent-striate. Flesh, membranous, odourless. Lamellae, pale red-brownish, long-decurrent, forked. Stipe, $1.5-3 \times 0.1-0.3$ cm, thick, hollow, rust-brown, longitudinally fibrillose, glabrescent.

Spores, broadly elliptic, smooth, hyaline, with drops, $7.5-10 \times 5-7 \mu$.

From Sorkun to Dere, in fir forests, on mossy, 29.11.2000, 1280 m, Öztürk-Aktaş 133; Hisarlık Village, in oak forests, on mossy, 1500 m, 28.11.2000, Kaşık-Sabahlar 12 (Fig. 7).

Coprinaceae

8. *Coprinus angulatus* Peck.

Syn.: *Coprinus boudieri* Quél.

Pileus, $0.5-3 \times 0.5-2$ cm, cylindric when young, later campanulate, surface smooth, gray-beige to pale chestnut-brown, center dark. Flesh, brown, thin, odourless. Lamellae, cream when young, later black, adnexed, edges white floccose. Stipe, $1.5-5 \times 0.1-0.3$ cm, cylindric, hollow, fragile, pale cream, finely whitish fibrillose.

Spores, mitriform in frontal view, elliptical in side view, smooth, black, with a germ pore, $9-11.5 \times 5.5-6.5 \mu$.

Papuçular Village, among grass, 26.04.2000, 1200 m, Kaşık-Doğan-Sabahlar 35 (Fig. 8)

Bolbitiaceae

9. *Conocybe rickenii* (J. Schäff.) Kühn.

Syn.: *Galera pygmaeo-affinis* (Fr.) Quél.

Pileus, 1-1.5(2.5) cm, campanulate to conic-campanulate, surface smooth, shiny when moist, ocher-brown, pale ocher when dry, margin slightly undulating, crenate. Flesh, gray-beige, thin, odour raphanoid. Lamellae, deep ocher-brown, narrowly adnate, edges white floccose. Stipe, $2.5-5.5 \times 1.5-2$ cm, cylindric, bent, base bulbous, hollow, surface smooth, satiny, whitish, brownish toward the base.

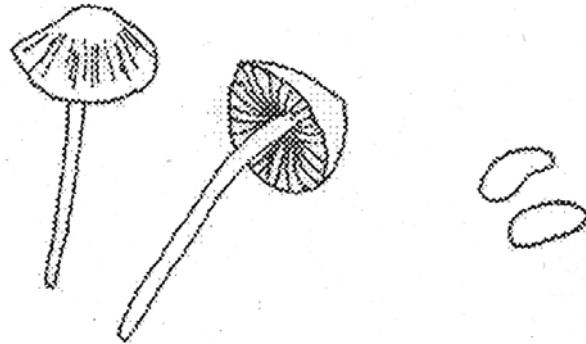


Fig. 6. *Mycena latifolia*, basidiocarp and basidiospores.

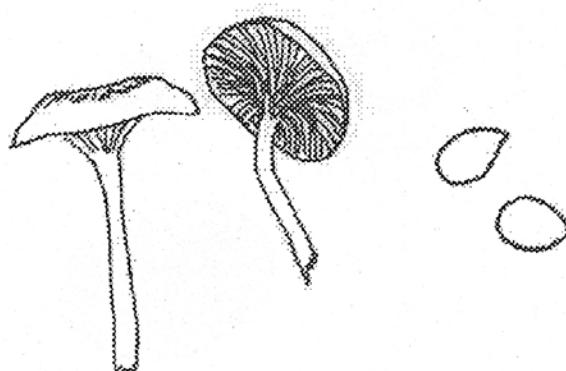


Fig. 7. *Omphalina rivulicola*, basidiocarp and basidiospores.

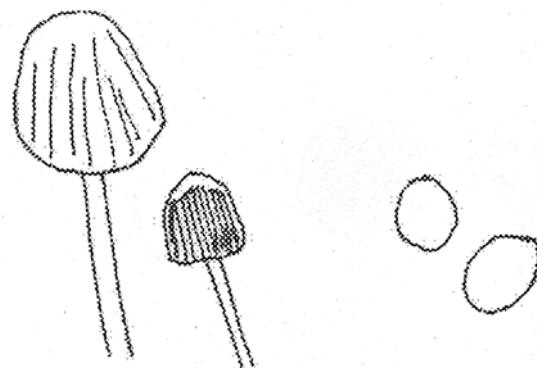


Fig. 8. *Coprinus angulatus*, basidiocarp and basidiospores.

Spores, elliptic, smooth, rust-brown, thick walled, with a germ pore, $14-17 \times 8-10 \mu$.
Papuçular Village, near the stream, among grass, 26.04.2001, 1200 m, Kaşık-
Doğan-Sabahlar 32 (Fig. 9).

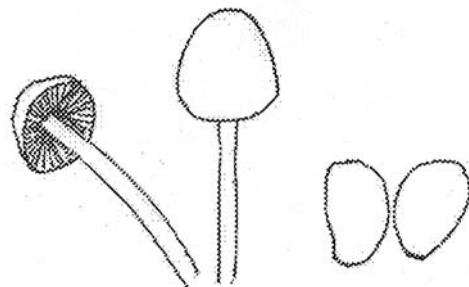


Fig. 9. *Conocybe rickenii*, basidiocarp and basidiospores.

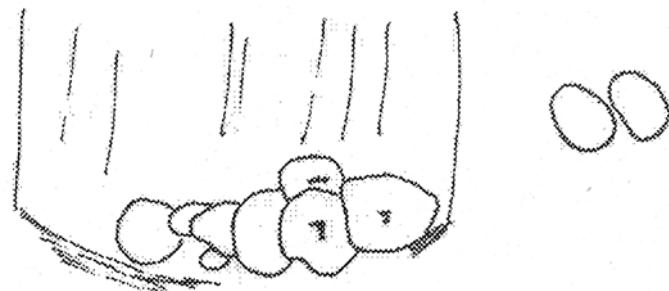


Fig. 10. *Pholiota lubrica*, basidiocarp and basidiospores.

Strophariaceae

10. *Pholiota lubrica* (Pers.: Fr.) Sing.

Pileus, 4-8 cm, hemispherical to convex, surface slimy, ocher-yellow, center darker, whitish to brownish squamules, margin incurved, with whitish veil remnants. Flesh, yellowish, thin, odour faint. Lamellae, greenish-yellowish, notched and broadly adnate. Stipe, 5-7 x 0.6-1.2 cm, cylindric, hollow, with the annulus, brownish squamose on a whitish background below.

Spores, elliptical, smooth, light lemon-yellow, thick-walled, $6-7 \times 3-4 \mu$.

Pinarcık Village, on rotten stumps of poplar, near the canal, 29.04.2000, 1100 m, Öztürk-AktAŞ 25 (Fig. 10).

11. *Tubaria conspersa* (Pers.: Fr.) Fay.

Syn: *Tubaria pseudoconspersa* Romagn.

Naucoria escharoides (Fr.: Fr.) Kumm.

Naucoria furfuracea (Pers.: Fr.) Kumm.

Pileus, 1-2 cm, convex to plane, slightly umbonate, surface smooth, fibrillose from the white veil, chocolate-brown, margin crenate, with white velar flocci. Flesh, whitish, odour waste. Lamellae, orange-brown, broadly adnate. Stipe, 2-3 x 0.1-0.25 cm, cylindric, bent, base slightly bulbous, hollow, fragile, surface longitudinally whitish fibrillose-floccose on a dark brown, base white tomentose.

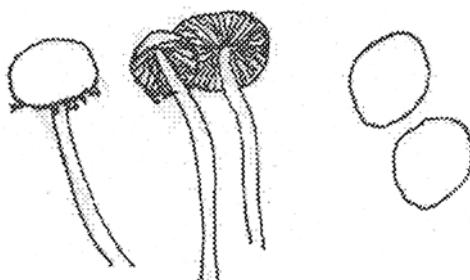


Fig. 11. *Tubaria conspersa*, basidiocarp and basidiospores.

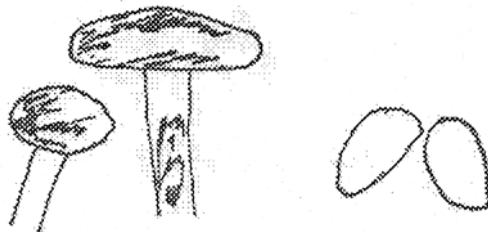


Fig. 12. *Inocybe fuscomarginata*, basidiocarp and basidiospores.

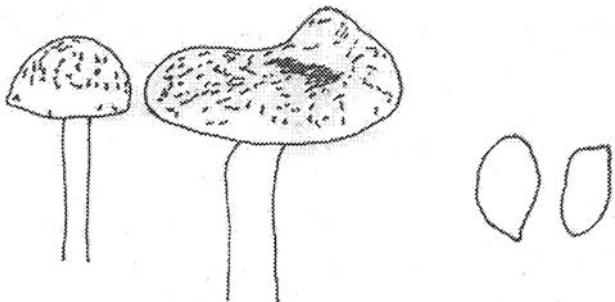


Fig. 13. *Inocybe bongardii*, basidiocarp and basidiospores.

Spores, elliptical, smooth, light gray-yellow, $6-9 \times 4-5.5 \mu$.

From Sorkun to Dere, in fir-oak mixed forests, on branches of wood, 29.11.2000, 1260 m, Öztürk-Aktaş 133 (Fig. 11).

Cortinariaceae

12. *Inocybe fuscomarginata* Kühn.

Syn.: *Inocybe relicina* ss. Heim

Pileus, 1-3 cm, convex-campanulate, center with umbo, surface yellowish-brown with brown scaly. Flesh, white, thin, odourless. Lamellae, yellow, later cinnamon-brown, adnate. Stipe, 2-4 x 0.3-0.5 cm, cylindric, base thick, surface brown with finely scaly.

Spores, elliptic to almond-shape, gray-brown, $8-12 \times 5-7 \mu$.

Üçpinar Town, in pine forests, on mossy, 10.05.2001, 1700 m, Kaşik-Doğan-Sabahlar 40 (Fig. 12).

13. *Inocybe bongardii* (Weinm.) Quelet

Pileus, 3-5 cm, domed-campanulate, whitish, scaly, margin incurved. Flesh, whitish, odour Inocybic. Lamellae, olive-brown, adnate. Stipe, 6-7 x 1 cm, cylindric, apex whitish, fibrous-brownish, flexuous, base bulbous.

Spores, elliptic, smooth, yellow, 10-14 x 6-8 μ .

From Sarıoğlan to Boyalı, among poplar woods, 29.04.2000, 1350 m, Öztürk-Aktaş 1-3 (Fig. 13).

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