

Lepiota rubella Bres., an unusual tropical American agaric from Turkey

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Mycologists have presented some new records of macrofungi in recent years from Turkey (Solak et al., 2009; Baş Sermenli & Işiloğlu, 2009). In 2004 an exceedingly small, reddish brown lepiotaceous agaric was found with whitish cream-coloured appendiculate, floccose marginal cortina on the pileus, tomentose-lanose stipe below a poorly developed ring-zone; it was found growing in association with *Codiaeum* (Euphorbiaceae) in a plant-pot. Microscopically the fungus appeared quite unique in its combination of small size of the basidiome, relatively small, elongate-ellipsoid basidiospores with no or at most vague dextrinoid reaction, and small projections on the hyphae of the suprapellis with the end cells clavate. This new record of interesting macrofungi was described as *Lepiota rubella* Bres.

Illustrations and the original description of *Lepiota bettinae* Doerfelt (1982) agree in all ways with our material and it too was growing in a pot in a Botanical Garden. Bon (1993) transferred the fungus to *Echinoderma*, now incorporated in a restricted concept of *Lepiota*, but Vellinga et al. (1998) demonstrated Doerfelt's fungus was in fact a synonym of *Lepiota rubella* originally described from Berlin Botanic Garden based on material collected by P. Henning in the palmhouse there (Bresadola, 1890). This latter agaric is known from

several European botanical gardens in hot houses associated with pot plants, although considered native to tropical America. Apparently it is recorded over the whole year. The coloured photograph (Plate 215 as aff. *bettinae*) in Breitenbach and Kränzlin (1995) is not totally in agreement with our material and we would support these authors' suggestion that their material is not strictly identifiable as *L. bettinae* = *L. rubella*. We bow to the experience of Vellinga et al. (1998) and name our collection *L. rubella*.

L. rubella belongs in the *L. helveola* consortium for which the subsect. *Helveolinae* of sect. *Ovisporae* was proposed, where the basidiospores are ellipsoid. The subsection was erected by Bon and Boiffard (1974) based on the constituent members possessing a pileus covering made of elongate, erect to suberect elements with long, constituent cells and no short-celled units intermixed; the end-cells are tapered in much the same way as a torpedo and not club-shaped.

L. rubella was collected in a pod with *Codiaeum*, Cryptogams laboratory, Dept. of Biology, Faculty of Science & Arts, Muğla University, 30 November 2004, H.Baş 208 & Işiloğlu 8081.

References

- Baş Sermenli H & Işiloğlu M (2009). A new gasteromycete genus record for Turkey. *Turk J Bot* 33: 323-324.
- Bon M (1993). Novitates 4. famille lepiotaceae roze ex overeen. *Documents Mycologiques* 22 (88): 287-232.
- Bon M & Boiffard J (1974). Lépiotes de vendee et de la cote atlantique française (1). *Bull Soc Mycol France* 90: 287-306.
- Breitenbach J & Kränzlin F (1995). *Fungi of Switzerland Vol. 4. Mykologia PO* Box 165, CH 6000, Lucerne, Switzerland.
- Bresadola G (1890). In Henning, p. die in der umgebung berlins bisher beobachteten hymenomyceten. *Verh Bot Ver Prov Brandenburg* 31: 143-178.
- Doerfelt M (1982). *Lepiota bettinae*-ein pteridophiler Warmhauspilz. *Z Mykol* 48: 245-251.
- Solak MH, Allı H, Işiloğlu M, Kalmış E (2009). Some new records of *Inocybe* (Fr.) Fr. from Turkey. *Turk J Bot* 33: 65-69.
- Vellinga EC, Franco-Molano AE & Bas C (1998). Studies on *Lepiota* II *Lepiota rubella*. *Sydowia* 50: 272-278.

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