

EDIBLE MUSHROOMS OF WEST BENGAL—X. *LEPIOTA*
HOLOSPILOTA (BERK. & BR.) SACC.

BY

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One new edible mushroom viz. *Lepiota holospilota* (Berk. & Br.) Sacc. is reported for the first time from India.

The popularity of mushroom as a dietary item is increasing progressively in Indian Society. The present paper is the tenth in the series to prepare a scientific account of the naturally growing common edible mushrooms of West Bengal which are utilised by the common people during the rainy season only.

The basidiocarps of the mushroom were collected during the monsoon from Mallickpore, 24-Parganas district of West Bengal and all descriptions are based on the observations on fresh material and anatomical descriptions were made on Melzer's Iodine or in 1% aniline blue in 50% Lactic acid after an initial soaking in 10% KOH soln. Colour terminology used according to the R.B.G., Edinburgh, colour identification chart for 'Flora of British Fungi'. All materials are preserved in dry condition in the Mycology Herbarium, Mushroom Research Centre, Botany Department, University of Calcutta, Calcutta-700019.

Lepiota holospilota (Berk. & Br.) Sacc.

Syll. Fung. 5 : 53 (1887).

Syn. *Agaricus holospilotus* Berk. & Br.

= *A. biornatus* Berk. & Br.

= *L. biornatus* (Berk. & B.) Sacc.

= *Leucocoprinus biornatus* (Berk. & Br.) Lockquin.

Description of the species :

Pileus—30-40 mm in diameter; subglobose to broadly campanulate with maturity; fleshy; tough and leathery surface silky white to umber brown in mature specimens; and becomes darker on drying, surface covered with small, fibrillose, purplish brown squammules arranged concentrically, very crowded at the disk and sparsely arranged at the margin; *Margin*—straight, entire; *Lamellae*—free from the stem; cream coloured, ventricose moderately crowded with lamellulae of 2 lengths; upto 6 mm wide; edge entire, concolours or becomes orange on brushing. *Context*—fleshy, thick at the disk (upto 4 mm) and thin (upto 1 mm) towards the lamellae. *Stipe*—60-120 mm x 4-10 mm; central; cylindric, equal or slightly attenuated below, hollow; surface covered with minute, scattered, purplish, brown squammules just above and below the annulus. *Annulus*—white with fine brown squammules at the margin, fibrillose, descendent, sheathing the stipe at its mid-way zone. *Basidia*—bearing short 4 sterigmata; broadly clavate; 15.6-20.8 x 10.4-11.7 μ m; *Basidiospores*—ovoid to ellipsoid; hyaline, thin-walled; dextrinoid; 7.8-9.1 x 5.2-6.5 μ m (8.6 x 5.6) μ m; Q=1.5. *Spore print*—pure white; *Hymenophoral trama*—regular, homiomorous constitute filamentous hyphal cells 3.9-5.2 μ m in diameter; *Cheilocystidia*—numerous; forming a sterile gill edge; cylindric to clavate; sometimes mucronate; 23.4-31.2 μ m x 7.8-10.4 μ m; thin-walled; *Pleurocystidia* not found. *Pileal surface*—an epicutis of radially arranged repent hyphae mixed with the terminal elements forming a disrupted trichodermium; the individual elements clavate to fusoid, thin-walled with a brown vacuolar pigment; all hyphae bear clamp connections.

The fungus is found to grow in clusters on soil near bamboo thickets, in Mallickpore, 24 Parganas during July-August. M. H. No. 66/76.

Lepiota (Pers ex.) S. F. Grey is a well recommended genus of the family Agaricaceae under the tribus Lepioteae comprising of 68 species so far described (Pegler, 1972).

From India, 33 species of *Lepiota* have so far been reported (Berkeley, 1856; Massee, 1901, 1906, 1912; Hennings, 1901; Bose, 1919, 1920; Butler & Bisby, 1931; Uppal et al., 1935; Sathe and Rahalkar, 1975; Roy and Samajpati, 1978, 1979) from different corners of the country. From the literature it reveals that the fungus *L. holospilota* (Berk. & Br.) Sacc. is a new report from India. In order to exploit the edible members of *Lepiota*, extensive research works are in progress in the Laboratory and five species of *Lepiota* have already been reported earlier (Roy and Samajpati 1978, 1979, 1980).

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