

SOME TROPICAL EDIBLE MUSHROOMS OF WEST BENGAL

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In India the popularity of mushroom as a dietary item is increasing gradually, Samajpati *et al* (1977, 1981) and Purkayastha and Chandra (1975) have reported some edible mushrooms from West Bengal. But this is the first report of some edible mushroom of Birbhum district. The basidiocarps of the mushrooms were collected during the rainy season of West Bengal and during collection the soil was carefully digged to track the pseudorhizal connection with the termite nests. The entire basidiocarps were brought into the laboratory and immediately spore deposits were taken aseptically. All the morphological descriptions along with notes on habit and habitat were noted. The anatomical observations were made from free hand sections of the different parts of the basidiocarp. The descriptions and observations were made on the basis of standard methods. All the specimens were dried and kept in the herbarium of the Department of Botany, Viswa Bharati.

Termitomyces striatus (Beeli) Heim

The basidiocarps are found to grow on termite nest. During collection living termites are found within the termite hills. The pseudorhiza originates from the termite nest at a depth of 8-11 cm below the soil level.

Pileus 3.5-5.0 cm in diameter; convex to campanulate; then flattened with maturity; with a slight pointed perforatorium fleshy, surface white to creamish coloured; cuticle smooth, viscid with minute scales, perforatorium deep mouse grey coloured; margin fleshy, thin striated, fissured, Context white thick, 2.0-6.0 mm in depth; Stipe 7.0-9.6 in length and pseudorhiza extends below upto 6.0-9.0 cm; 0.8-1.2 cm in diameter above the 0.3-1.4 cm in diameter below the ground (pseudorhiza), cylindric, fleshy, central, stout, surface white, solid, gradually becoming hollow with a slender central free core of tissues in the pseudorhizal portion; scaly ring adpressed to the surface of the stipe; with annular ring; white to creamish white in colour; brownish minute scales covering the stipe just below the ring; the juncture point of the stipe and pseudorhizal portion slightly enlarged in diameter and pseudorhiza

becomes abruptly tapered and radiciform and ends to a minute holdfast like structure (0.2-0.3 cm in diameter) which ultimately establishes the connection with the termite nest. Lamellae free, close, crowded, 5-6 mm broad, equal in length; whitish to light pink colour with paler edges; Basidia 18.2-28.6 x 7.8-10.4 μ m; cylindric to clavate; thin walled; tetrasterigmatic; Spore 7.8-10.4 x 6.5-7.8 μ m; ellipsoid, thin walled, nonamyloid; Hymenophoral trama regular, homoimerous with parallel thin walled hyphae measuring 7.8-26 μ m in diameter; subhymenium well developed; cellular; interovens; Cheilocystidia numerous forming a sterile lamellar edge; various in shape; puriform; clavate, cylindric with broad and acute apex; sometimes truncate, 26-31.2 x 14.3-18.2 μ m; Pleurocystidia rare, various in shape, clavate to lageniform with broad and acute apex; 23.4-39 x 7.8-10.4 μ m. Pileus trama monomitic with filamentous thin walled hyphae; 7.8-13 μ m in diameter; pileal surface with a thick seperable epicutis of repent parallel hyphae; noninflated hyphae; Spore print light pinkish cream.

Amanita vaginata (Bull. Ex Fr.) Vitt.

Sporophore conic, solitary, 20-25 mm in diam. greyish to whitish in colour. Fleshy, hygrophanous, glabrous, striate. Lamellae free, crowded, brittle, whitish in colour, Stipe centric, concolorous with the pileus, glabrous, hollow 50-60 mm x 5-6 mm, gradually tapering towards the pileus. Volva present but without annulus. Context fleshy, whitish, composed of loosely interwoven hyphae. Sporeprint white colour in mass. Spore globose to subglobose in shape, apiculus glabrous, 7.4 μ -9.25 μ in diamension; Q1. Basidia clavate, tetrasterigmatic. 31.45 μ -27.00 μ (34-41) x 5.55 μ -7.40 μ (6.29) 5.4-Q. value.

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