

Figure 1. *Meliola carissae* Doidge var. *spinari* var. nov. Ch, Capitate hyphopodia; Mh, Mucronate hyphopodia; Ms, Mycelial setae; Sp-Ascospores.

Holotype: On leaves of *Carissa spinarum* L. India, Jan. 5, 1976, Kamal IMI 200122.

Of the *Meliola* taxa reported on the host genus *Carissa*, the present variety is closer to *M. carissae* Doidge var. *indica* Hansf. in having the mucronate hyphopodia borne on a separate mycelial branch¹. However, the new variety differs from it in having subdense colonies, loosely reticulate mycelia, antrorse to recurved capitate hyphopodia and mostly entire but rarely angular to sublobate head cells of the capitate hyphopodia.

Kamal *et al*² have published this taxon as *M. carissae* Doidge and the herbarium material (IMI 200122) was with the host name as *Carissa opaca*. It appears that *Carissa spinarum* L. (as published by Kamal *et al*²) is the correct name of the host plant.

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1. Hansford, C. G., *Sydowia Beih.* 1961, 2, 1.
2. Kamal, Singh, S. and Singh, R. P., *Indian J. Mycol. Plant Pathol.*, 1982, 12, 71.

ENTOLOMA HOCHSTETTERI (AGARICALES): A NEW RECORD FOR INDIA

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THE genus *Entoloma* (Fr.) Kummer, is known in India so far with only two species^{1,2}. A brief illustrated account of another species is provided. The specimen was collected from Orissa during 1983 and is preserved at the Herbarium Cryptogamae Indiae Orientalis, IARI, New Delhi.

Entoloma hochstetteri (Reich.) Stev., Kew Bull 16(2): 233, 1962, (figures A-E)

Pileus up to 42 mm broad, conical; surface indigo-blue with a greenish tinge, silky-fibrillose; margin striate, inflexed and exceed lamellae; fleshy. *Lamellae* adnexed to emarginate, concolorous with pileal surface but with a yellowish tinge, thin, 3-5 mm wide, crowded with lamellulae of three lengths; edge scalloped. *Stipe* up to 45 × 4 mm, centric, cylindrical;

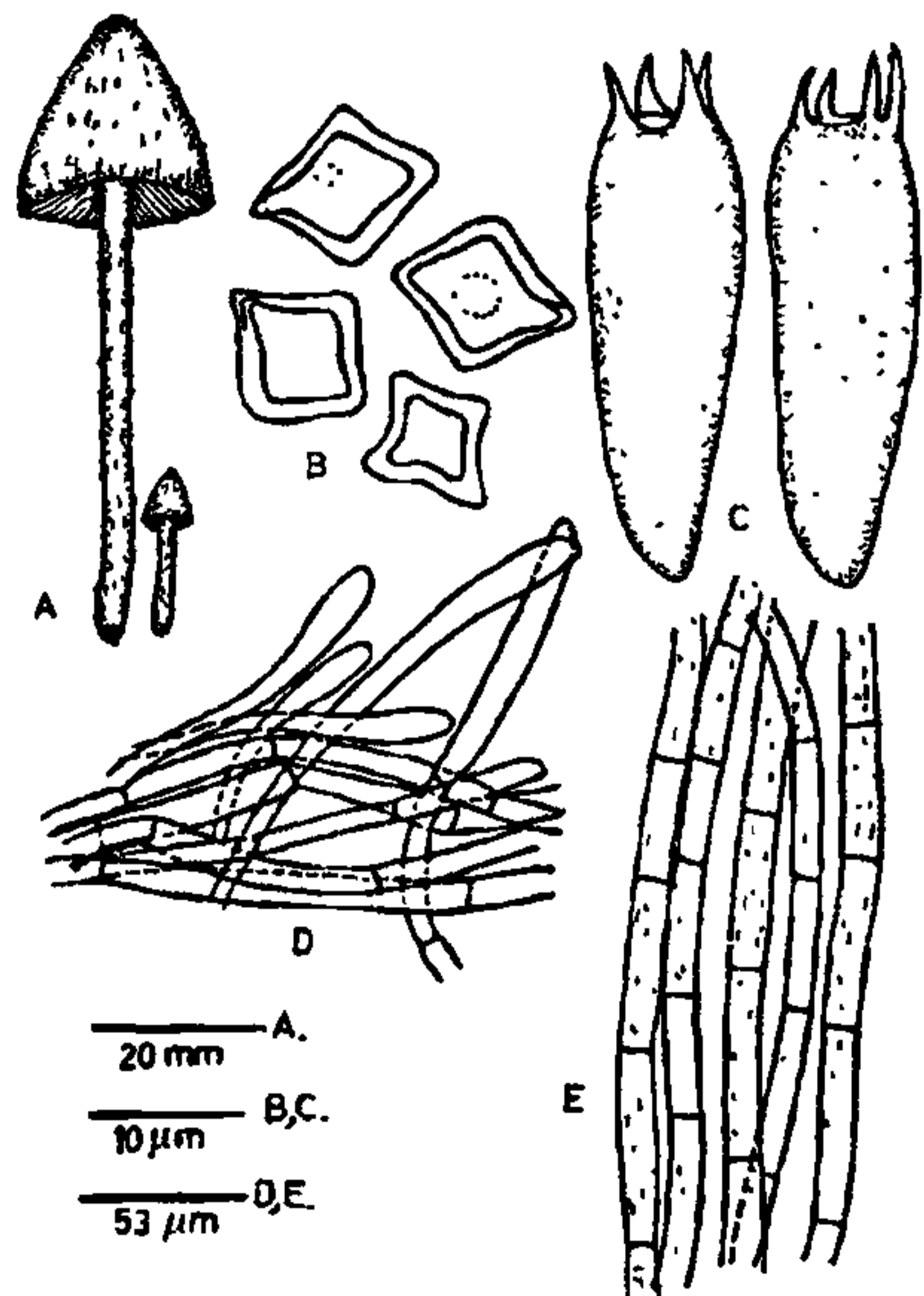


Figure 1A-E. *Entoloma hochstetteri*. A. Basidiocarp; B. Spores; C. Basidia; D. Pileipellis, and E. Stipe tissue.

surface concolorous with pileus, fibrillose, rugulose; stuffed. *Context* thin, indigo, changing pale yellowish-orange when bruised. Spore print reddish-pink. Spores $9.9\text{--}13.2 \times 11.8\text{--}13.2 \mu\text{m}$, tetrahedrally angular, often twinned tetrahedrons (one behind the other), hyaline, smooth, thin-walled, guttulate. *Basidia* $35.2\text{--}44.2 \times 8.8\text{--}13.2 \mu\text{m}$, clavate, hyaline, two-four-sterigmate. *Lamella-edge* fertile. Cystidia not seen. *Hymenophoral trama* irregular with narrow mediostratum, of thin-walled, hyaline hyphae $7.7\text{--}11 \mu\text{m}$ diameter. *Pileipellis* of repent, hyaline to pale brownish hyphae $7.7\text{--}16.2 \mu\text{m}$ diameter. *Stipe tissue* of moderately thin-walled hyphae $6.6\text{--}21.6 \mu\text{m}$ diameter with few refractive contents. Clamp connections lacking.

Basidiomata solitary among leaf litter under *Bambusa arundinacea* Willd. and *Dendrocalamus strictus* Nees, Kalinga, alt. 940 m, 2nd August 1983, HCIO No. 36811. The species hitherto unrecorded from India. The twinned tetrahedric spores are characteristic of it. The species also forms the first record of the genus from Orissa.

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1. Berkeley, M. J., *Hooker J. Bot.*, 1852, 4, 105.
2. Sathe, A. V. and Kulkarni, S. M., *Curr. Sci.*, 1979, 48, 1042.

OCCURRENCE OF DRY ROOT ROT OF *CARICA PAPAYA* L. CAUSED BY *MACROPHOMINA PHASEOLINA* (TASSI) GOID. IN TAMIL NADU, INDIA

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MACROPHOMINA PHASEOLINA (Tassi) Goid. causes the disease commonly referred to as dry root rot or charcoal rot under conditions of high temperature and drought stress¹. In many cases, the disease develops in plants with poor vigour or at flowering and seed development stages. Many economically important plants, including cereal, legume, vegetable, fruit and fibre crops are attacked by this anamorphic fungus¹. During January 1988, *Carica papaya* (var. Co 2), a well-known fruit crop of our country, affected by dry

root rot following natural infection, was observed at the University Orchard, Coimbatore. Nearly 35.5% of the plants at full bearing stage were affected and suffered significant yield losses of up to 60%. Total damage occurred in plants that were subjected to moisture stress.

The first symptom of the disease was yellowing of leaves. Within a day or two, such leaves dropped off (figure 1). Dramatically sudden and more or less complete lodging observed in the field seemed to be a typical disease trait. Infection occurred exclusively on the secondary and tertiary roots; the fungus then moved into the primary root and then into the crown region. A red to black wet rot developed just before death and rapidly disappeared. Thereafter sclerotial formation took place, and measured $105\text{--}132 \mu\text{m}$ in diameter. In all severe cases, disintegration of the tissues in the lower stem portion, especially near the soil level, was noticed. On such plants, pycnidia developed at the collar and on the stem 0.5–1 inch above ground level. Pycnidia



Figure 1. Severely affected plant whose leaves have dropped off.