

of other investigators^{13, 14}. The synthesis of the enzymes is determined not only by the genes but also by the regulation mechanisms.

17 July 1986. Revised 2 December 1986

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ASTEROPHORA LYCOPERDOIDES (AGARICALES): A NEW INDIAN RECORD

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DURING a taxonomic study of the Agarics and
Boletes of Orissa from 1982-84, *Asterophora*

lycoperdoides (Bull ex Merat) Ditmar ex Fr was encountered. This is being reported for the first time from India. For colour terminology Ridgway¹ was followed while for the taxonomic details of the fungus the method described by Watling² was adopted.

Asterophora lycoperdoides (Bull ex Merat) Ditmar ex Fr. *Syst. mycol.* 3: 205, 1829.

Pileus 20-37 mm diam, strongly convex, later expanding; surface creamish with brownish tint (Ochraceous-Buff, Ridgway) darker at disc, with floccose powdery mass; margin whitish, inflexed. Lamellae adnate, white, up to 2 mm broad at centre, thin, soft, crowded with lamellulae of three lengths; edge entire. Stipe 35-45 × 4-6 mm, centric, cylindrical, slightly curved, equal; surface white to cream colour, becoming brownish with age, smooth, glabrous; inner fistulose, white, unchanging. Context white, up to 2 mm thick, soft, of thin-walled, hyaline hyphae 2.2-4.4 μm wide. Spore print white. Basidiospores 3.3-4.4 × 3.3 μm, ovoid-ellipsoid, hyaline, verrucose, thin-walled, apiculus short. Basidia 7.7-11 × 3.3-4.4 μm, broadly clavate to clavate, thin-walled, hyaline, four-sterigmate, sterigmata less than 1 μm long. Lamella-edge undifferentiated. Cystidia not observed. Hymenophoral trama regular, of thin-walled, hyaline hyphae 2.2-3.3 μm wide. Pileal surface of numerous chlamydospores 19.8-26.4 × 17.6-22 μm, ovoid to oblong-ovoid, ornamented with hyaline spines reaching 5.5-6.6 μm in length, thick-walled, with 1-2 refractive guttules. Stipe tissue of thin-walled, hyaline hyphae 5.3-10.6 μm wide. Clamp connections not seen. (figures 1 a-g see next page).

Habitat: as a parasite on *Russula nigricans* Fr under the plantations of *Pinus* sp at Daringbadi, Phulbani District, alt. 1030 m, 24 July 1984. H.C.I.O. No. 36804.

The specimen is deposited at the Herbarium Cryptogamae Indiae Orientalis, Division of Mycology and Plant Pathology, IARI, New Delhi.

One of the authors (SD) is thankful to the NCERT, for a fellowship.

15 November 1986

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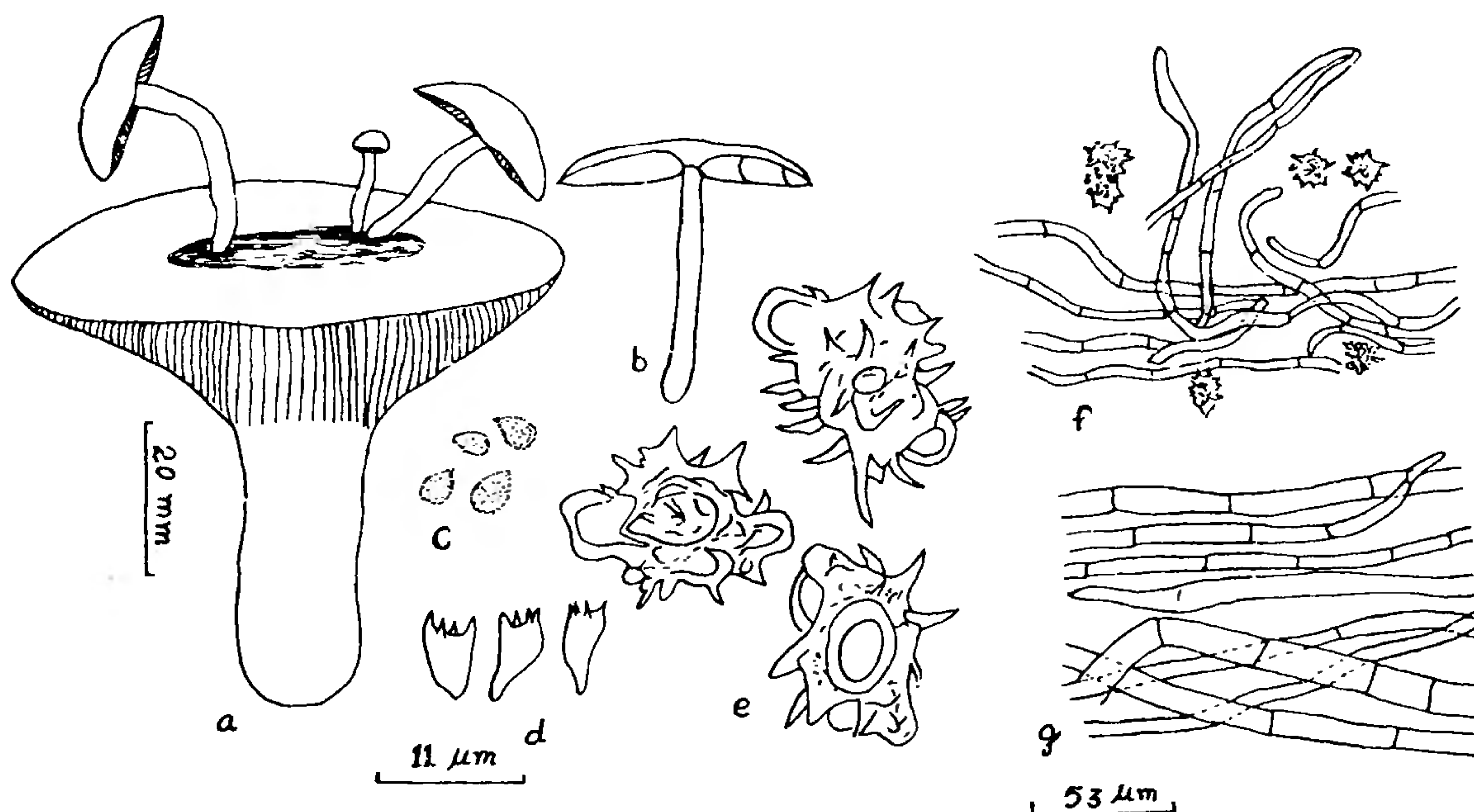


Figure 1a-g *Asterophora lycoperdoides*. a. Habit ($\times 1$); b. Longitudinal section ($\times 1$); c. Basidiospores ($\times 900$); d. Basidia ($\times 900$); e. Chlamydospores ($\times 900$); f. Pileal surface ($\times 200$); and g. Stipe tissue ($\times 200$).

A MODIFIED MULTIPURPOSE DETACHED LEAF TECHNIQUE FOR RICE SHEATH BLIGHT INVESTIGATIONS

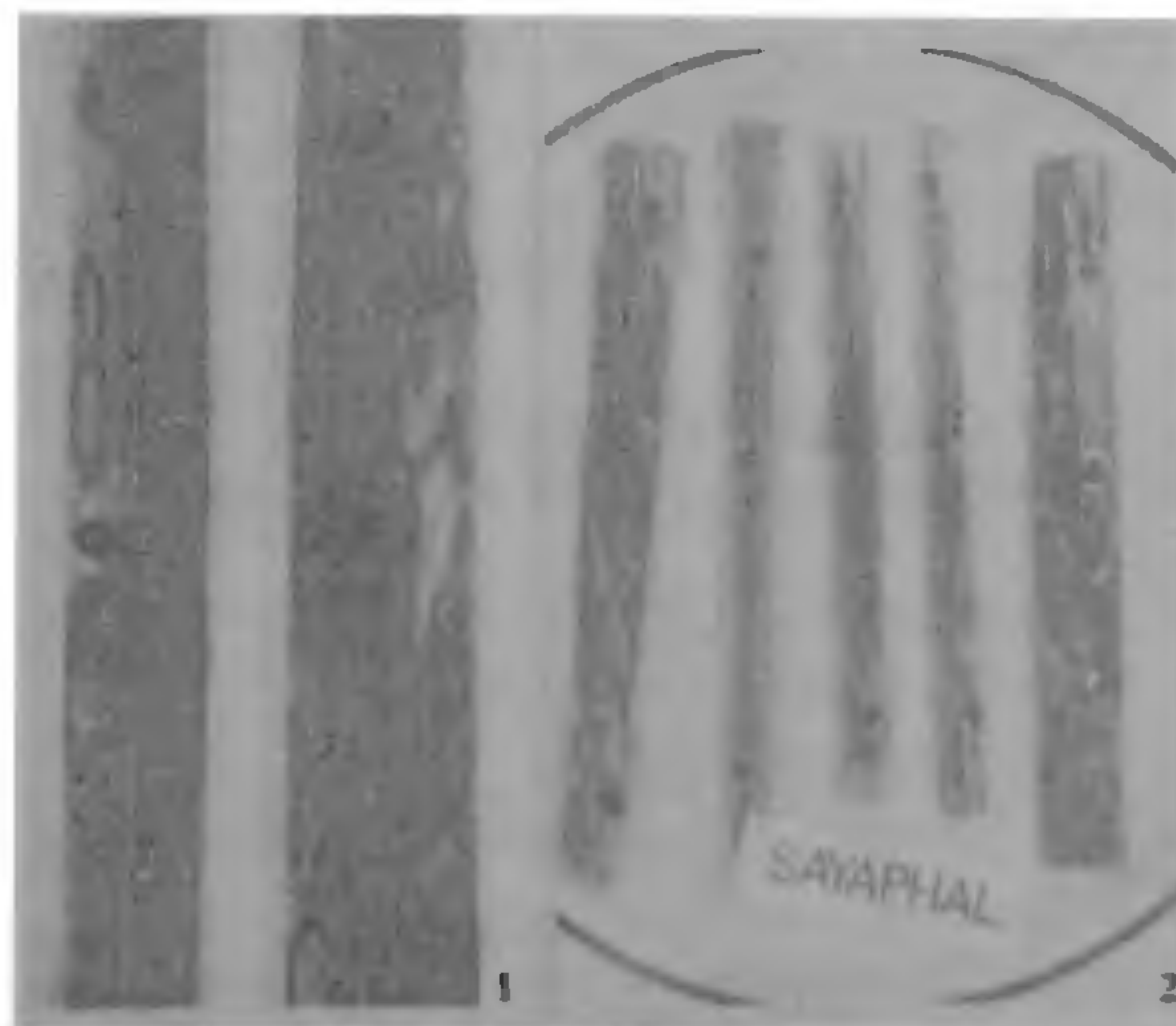
A. PREMALATHA DATH

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AHUJA and Payak¹ described a laboratory method for evaluating maize germplasm to banded leaf and sheath blight. This method has been modified to suit the requirement of rice sheath blight investigations.

The technique in brief was as follows: Leaves of HPU 8201, a highly susceptible rice cultivar to leaf infection of *Rhizoctonia solani* Kuhn [*Thanatephorus cucumeris* (Frank) Donk], the sheath blight pathogen were collected from 50-day-old plants. The cut ends of the leaves were immediately kept under water in a flask and brought to the laboratory. The leaves were then cut into desirable size (6-12 cm) depending upon the size of the petri plate. Seven to 10-day-old sclerotial or mycelial inoculum was placed on the adaxial surface of the leaf between the mid-rib and margin and the plates were incubated in the laboratory at 26-28°C, preferably near a window. High humidity was maintained by

incubating the plates in a desiccator containing water at the bottom. Within 24 hr, water-soaked areas were seen on the inoculated leaf pieces which culminated into clear-cut greyish green lesions by 48 hr (figure 1). On the third day, most of the



Figures 1 and 2. 1. Lesions developed on the susceptible cultivar (HPU 8201), 48 hr after inoculation. 2. Mild symptoms on the tolerant cultivar (middle 3 leaf pieces) and severe symptoms on the susceptible check (leaf pieces on either side), 48 hr after inoculation.