a soil organism causing also rot of *Phyllanthus emblica* L fruits

The organism (*P. islandicum*), was grown as stationary culture at 28 C (+2) in Richards' medium containing CMC (carboxymethyl cellulose) along with one of the various test sugars (*viz.* arabinose, xylose, fructose, glucose, galactose, mannose, sorbose, cellobiose, maltose and raffinose at 0.1 M concentration) The 8th day culture filtrates were used as enzyme samples after dialysis against distilled water containing 0 02 % sodium azide and reduced to 1/10 of its original volume in a flash evaporator at room temperature (30 ±2 C) under vacuum. The effect of cAMP was checked by adding 20 μM to the medium on 8th day (when maximum inhibition was recorded) and the impact on enzyme synthesis was seen by assaying various enzymes on 10th day.

Endo-glucanase (EC 3.2.1.4) and exo-glucanase (EC 3 2 1.91) were assayed according to methods of Mandels[3]. (In preliminary assay for endo-glucanase, pH 3.0 was found to be the optimum). β-glucosidase (EC 3.2.1.21) was assayed by the method earlier described[4]. The enzyme activities were recorded in International Units *viz* amount of enzyme necessary to hydrolyse 1 μmol of substrate per min under defined conditions.

The data (table 1) suggest no enzyme activity in the media containing various sugars at 0.1 M concentration. The inhibition of the enzyme production ranged from 95–98 %. All the enzymes of cellulase complex showed similar repression in the presence of the test sugars. Addition of cAMP (20 μM) into the medium released the repression and the original values of enzyme synthesis were restored in all cases.

The results suggest that cAMP can be used to overcome problems arising out of catabolite repression of cellulase synthesis in fermentors.

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OCCURRENCE OF SCAB OF WHEAT IN THE NILGIRI HILLS

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IN 1984 wheat earheads showed drying up symptoms and became scabby due to tufty pinkish mycelial outgrowth from the glume. Affected earheads produced much shrivelled grains. The disease appeared in experimental plots of this station in the late milky or dough stage when moist weather conditions prevailed for a few days. It was observed on varieties like Sonalika, Agra Local, HW 517, HW 741, HW 1042, E 9382, E 2670, C 306.

The causal organism of the disease was isolated from the initially infected glume and kernel on PDA at 22 ± 3° C. The organism was identified as *Fusarium graminearum* Schw.

Pathogenicity tests were conducted on Sonalika variety at dough stage in the field. Bleached symptom on glumes of all the inoculated earheads was followed by a delicate covering of whitish cottony mycelia in 5–7 days after inoculation. Affected earheads got covered later with tufty pinkish mycelial outgrowth containing innumerable conidia and the earheads finally became scabby. Shrivelled grains yielded conidial mass of *F. graminearum*.

Gibberella zeae (Schw) Petch, a perfect stage of *F. graminearum*, is known to cause scab of wheat in some European countries like Ireland and in North America[1]. The pathogen is also known to cause seedling blight or foot rot[1]. As no perithecia were observed here, *G. zeae* does not appear to be involved in the disease under the Nilgiris conditions. In India scab of wheat caused by *G. zeae* (Schw) Petch, has been reported from Along area of Arunachal Pradesh[2]. The disease is favoured by a temperature ranging from 10°C and above with moist environment[3]. Similar weather condition prevails during kharif season in the Nilgiris. Therefore, the occurrence of the perfect stage of the fungus also cannot be ruled out.

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A NEW SPECIES OF *ASCOCHYTA* ON *LAGERSTROEMIA*

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THIS note describes an *Ascochyta* species occurring in the family *Lythraceae*. The host genus *Lagerstroemia* is the first member of this family which has been found susceptible to any *Ascochyta* sp resulting in leaf spots, while the remaining three common and well-known plants (*Lawsonia, Rotata* and *Woodfordii*) do not host any fungi of coelomycetes The other two new fungi of coelomycetes have already been recorded[1]. The holotype material of this new fungus has been deposited in *Herbarium cryptogame Indiae Orientalis*, IARI, New Delhi having the following taxon.

Ascochyta lagerstroemiae sp nov

Leaf spots amphigenous, circular, yellowish brown with brown margin, 0.5–4 mm in diam., coalesce to form larger infected zones extending upto 30 mm in length and 15 mm in width. Pycnidia amphigenous, mostly hypophyllous, scattered, subglobose, 42–120 μm in diam., erumpent with a circular ostiole of 8–20 μm in diam. Texture thin, pale brown, pseudoparenchymatous, darker around the ostiole. Conidiogenous cells short, hyaline. Conidia oblong, broadly rounded apically, rarely curved, hyaline, guttulate, 1-septate, 4–7 × 1–1.5 μm (figures a–d).

On living leaves of *Lagerstroemia indica* L, Bhubaneshwar (Orissa), Nov. 1983, D. Gupta; H C.I O, 32868 (Holotype).

Ascochyta largerstroemiae sp nov

Maculae foliares amphigenae, rotundae, brunneae flavidae cum margine bruneo, 0 5–4 mm in diametro, coalescunt formare zonas grandioras infectas extendentes usque ad 30 mm in longitudine atque 15 mm in latitudinem. Pycnidia amphigenae, plerumque

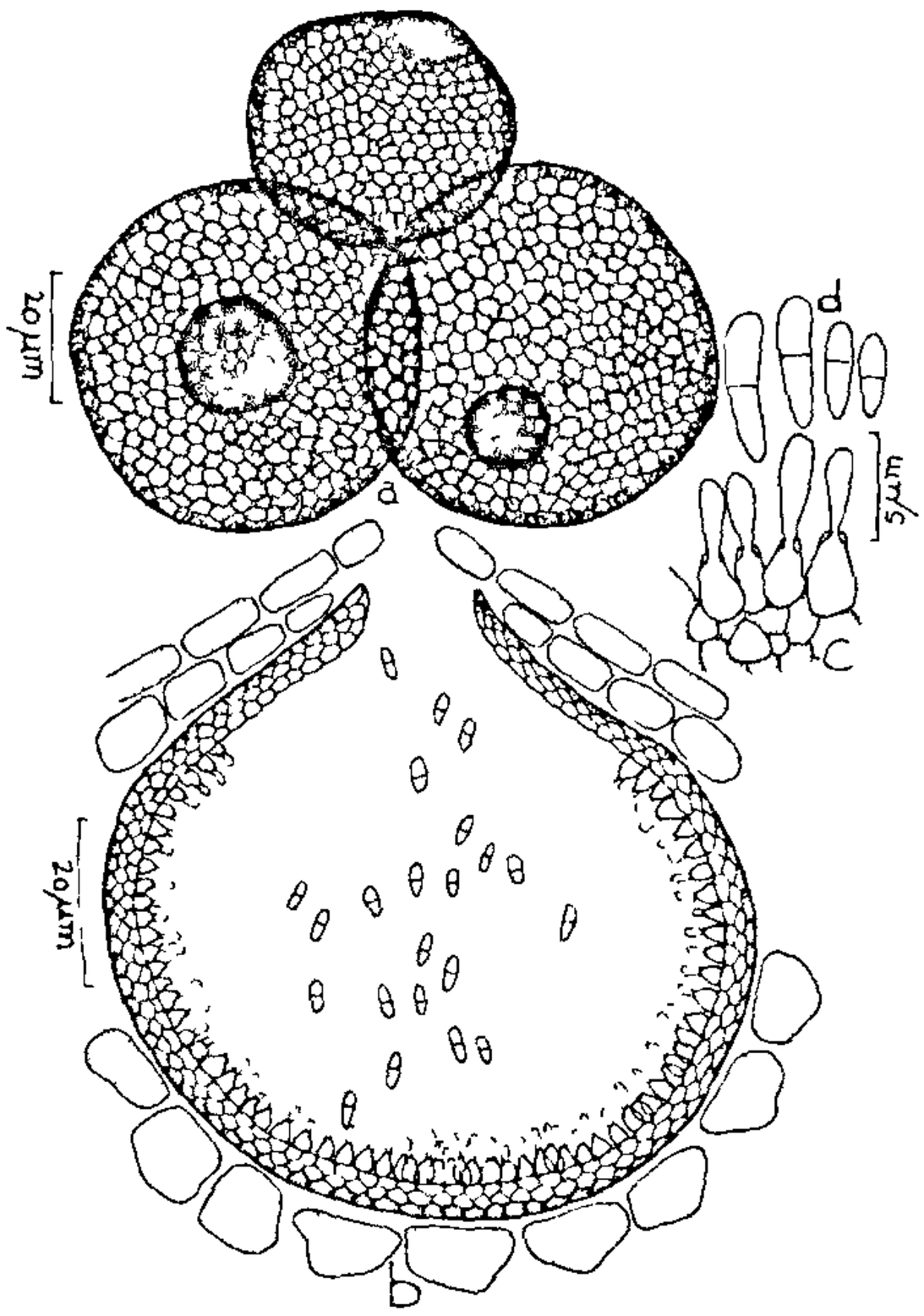

Figure 1. *Ascochyta lagerstroemiae* sp. nov. **a.** Habit sketch, **b.** V.S. through pycnidia, **c.** Conidiogenous cells and **d.** Conidia.

hypophylla, disseminata, subglobosa, 40–120 μm in diametro, erumpent, rotundo cum ostiolo de 8–20 μm in diametro. Textura tenuis, brunneo pallido, pseudoparenchymatico, obscuriora circa ostiolum. Conidiogenae cellae breves, hyalinae. Conidiae oblongatae, late rotundatae apicaliter, hyalinae, raro curvatae, guttulatae, 1-Septatae, 4–7 × 1–1.5 μm (figures a–d).

In foliis vividis de *Lagerstroemiae indicae* L, Bhubaneswar (Orrissa), Nov. 1983, D. Gupta, H.C.I O. 32868 (Holotypus).

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