

FIGS. 1-14. Serial transverse sections of the young inflorescence of *C. compressus* from base upward. Note the separation of the peduncle of the spikelets in Figs. 5, 8, 10 and 12, and separation of a sterile glume in Fig. 13.

AP—Apex; G—Glume; IA—Inflorescence axis; LVB—Large vascular bundle; LB₁–LB₄—1st, 2nd, 3rd and 4th Leafy bract; P—Prophyll; PS₁–PS₄—Peduncles of the spikelet Nos. 1, 2, 3 and 4; S—Stamen; SA—Spikelet axis; SCL—Sclerenchyma; SG—Sterile glume; SL—Stigmatic lobe; SVB—Small vascular bundle; T—Tannin.

peduncle and first leafy-bract. The second peduncle is also enclosed by a tubular prophyll (Fig. 9) and cuts flowers in the same way (Figs. 10–13).

The peduncle and the leafy-bract of the third spikelet are formed on the third remaining side of the inflorescence axis (Fig. 10) in the same fashion described earlier. However, after the separation of third peduncle, some vascular tissue is left in the inflorescence axis. The peduncle and respective leafy-bract of the fourth spikelet are separated from the inflorescence axis just beneath the origin of the first spikelet (Fig. 12). The third and fourth spikelets also cut flowers in the same way as described for first spikelet

(Figs. 12–13). The spikelets are formed in anti-clockwise direction on the inflorescence axis.

After the formation of four or sometimes more spikelets, the inflorescence axis does not cut more peduncles but itself behaves as a peduncle. It cuts a few sterile glumes at the base (Fig. 13) followed by fertile glumes, each bearing a flower in its axil (Fig. 14) in the usual manner. It terminates at the apex having a few procambial strands.

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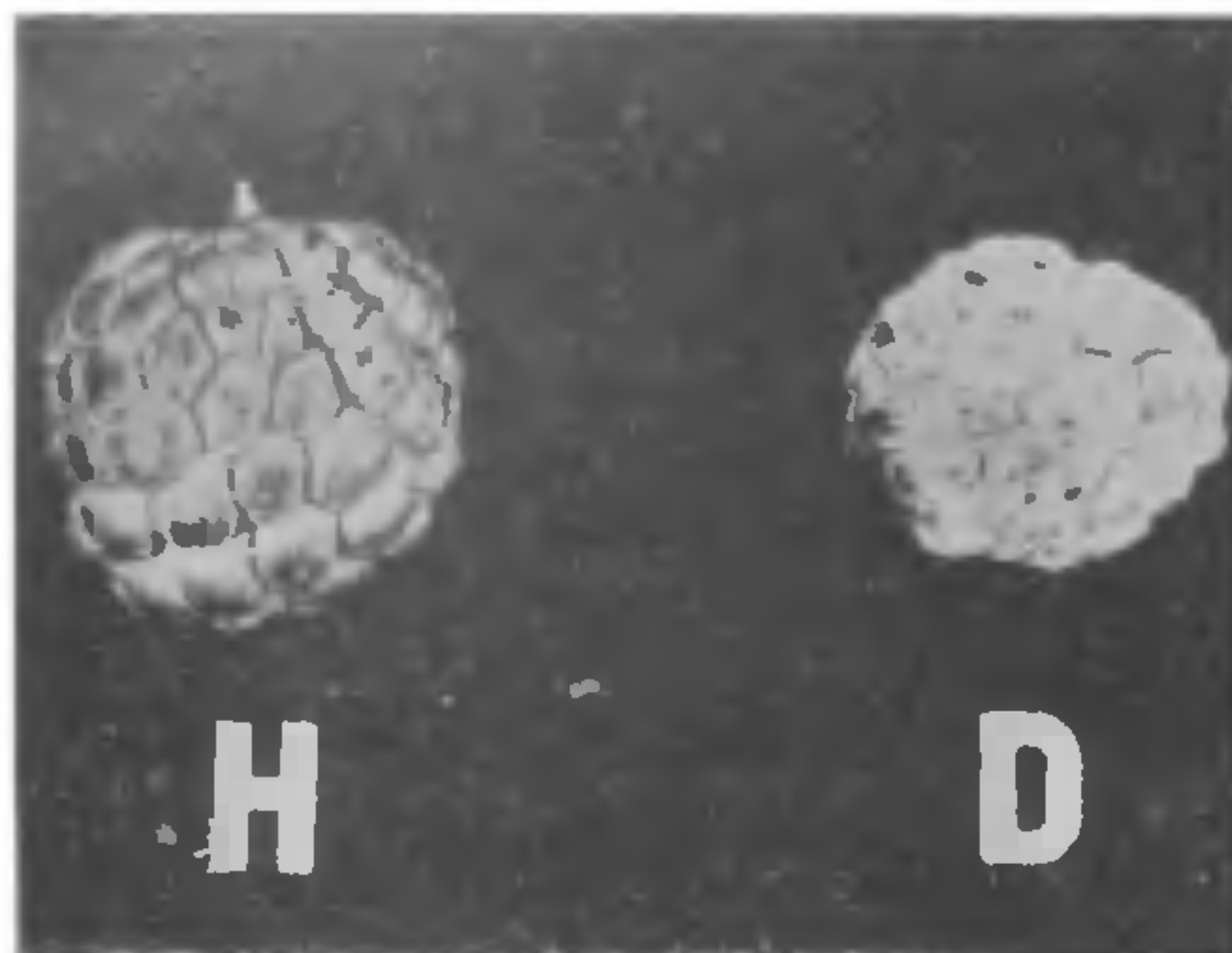
A NEW FRUIT ROT DISEASE OF *ANONA SQUAMOSA* L. FROM INDIA

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Anona squamosa L. is commonly called annona in India; in other countries, it is called sweet sop or sugar apple. A severe fruit rot disease of *A. squamosa* was observed during 1979–80 (August–November) in the Horticultural Garden of Agricultural College and also in the Karnatak University Campus, Dharwad, Karnataka. The disease was marked by water-soaked area followed by brown spotting and softening of the fruit tissues which in an advanced stage, turns the fruit brown. The incidence was quite high ranging from 20 to 90%.



Isolation made from the infected fruits yielded consistently a fungal culture. Pathogenicity tests were conducted on all aged fruits by prick method and by spraying spore suspension without mechanical damage. Symptoms appeared from 2 to 4 days both in the field as well as in the laboratory.

The fungus was identified as *Gliocladium roseum* Bain. by C. Booth, Commonwealth Mycological Institute, London (herbarium No. 255764). Literature revealed that fruit rot caused by *G. roseum* on *A. squamosa* has not been reported so far.

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A NEW SPECIES OF *PHOMOPSIS* CAUSING LEAFSPOT DISEASE ON *TECTONA GRANDIS* L.

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DURING the course of studies on leaf surface mycoflora of teak (*Tectona grandis* L.), a new leafspot disease was observed in the early rains of 1976 and 1977. The leafspots were initially circular, later becoming irregular, greyish brown and of varied size. Numerous dot like partially embedded pycnidia developed in old lesions. On examination, the pathogen appeared to be a new species of *Phomopsis* which is described here.

Phomopsis tectonae sp. nov. (Fig. 1)

Pycnidia numerosa, singulata vel aggregata, stromatica, uniloculare, ostiolata, 190.0–210.5 μ m in diametro, parvis multistrata, ex cellulis griseo brunnea.

Conidiophoris simplices, cylindræis, septatis, 6.5–15.0 \times 2.2–3.0 μ m. Cellulae conidiogenae simplices, hyalini, phialidicae, enteroblasticae, 4.5 \times 2.2 μ m. Conidia biforme: Phialosporulis hyalinis, continuis, fusiformis vel ellipsoideae, tenuibus eguttulatis, 2.5–7.0 \times 1.8–2.5 μ m: Stylosporulis longis, gracilibus, flexuosis, filiformis vel sigmoides hyalinis, 9.5–22.5 \times 1.5–2.0 μ m.

Cultura typica postea in C.M.I., Kew, England, under sub numbers IMI 210216.

Colonies on oatmeal agar broadly spreading, floccose, greyish brown with purplish grey margins. Aerial mycelium composed of branched septate, greyish brown hyphae, 2.5–5.5 μ m broad. Pycnidia developing after 10–15 days, numerous, singly or aggregated, stromatic, unilocular, ostiolate, 190.0–210.5 μ m in diameter. Pycnidial wall several layered, composed of greyish brown compressed cells. Conidiophores simple, cylindrical, septate, 6.5–15.0 \times 2.2–3.0 μ m. Conidiogenous cell simple, hyaline, phialidic, enteroblastic, cylindrical, 4.5 \times 2.2 μ m. Conidia of two types: Phialosporules hyaline, unicellular, fusiform to ellipsoid, with acute extremities, non-guttulated, 2.5–7.0 \times 1.8–2.5 μ m: Stylospores long, slender, flexuous, filiform to sigmoid, hyaline, 9.5–22.5 \times 1.5–2.0 μ m.

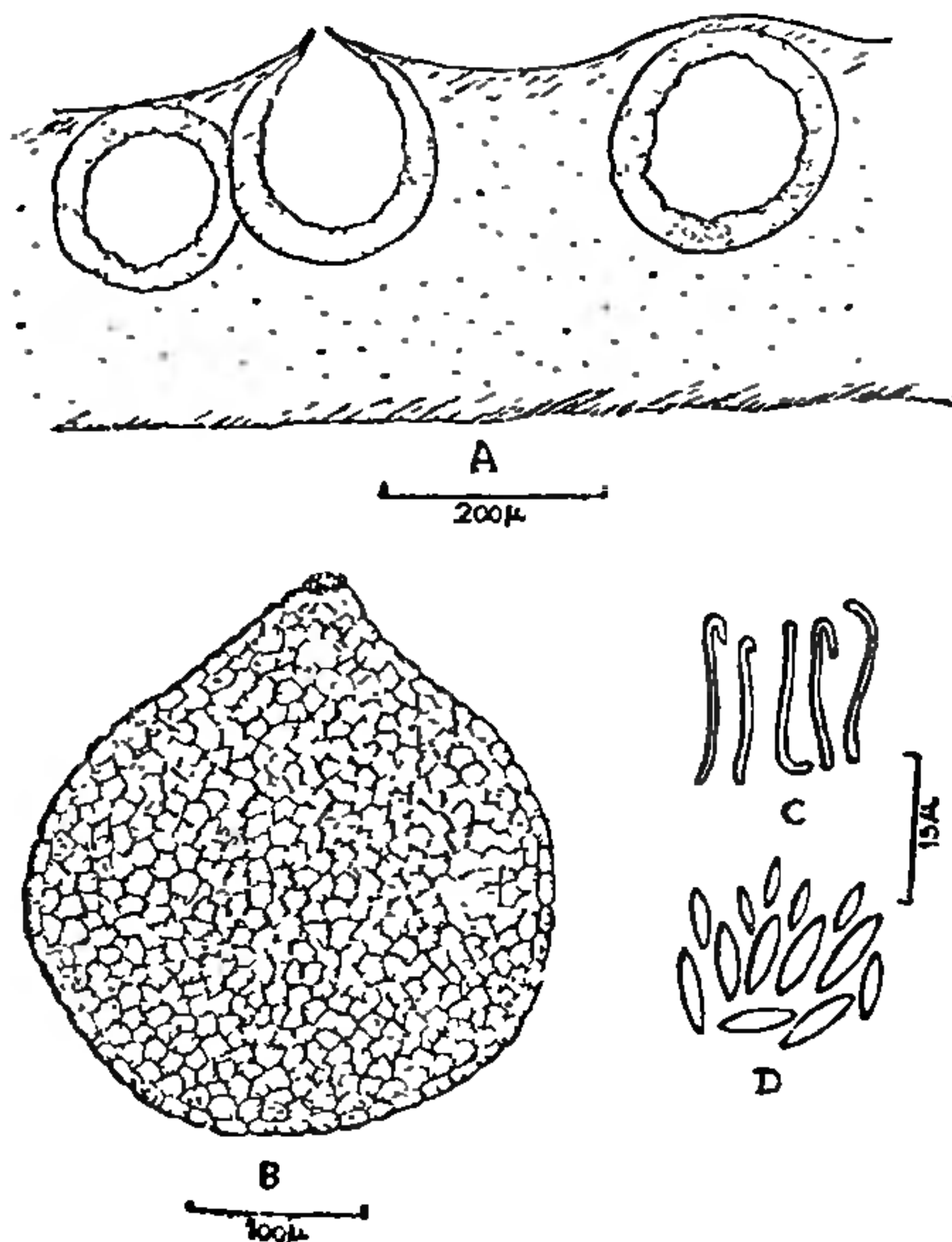


FIG. 1