

Figures 1 & 2. T. S. and L. S. of guard cells from AT treated (*Rhoeo discolor*) leaf showing intact green chloroplasts (G. C) $\times 800$.

ments with unicellular algal chloroplasts (unpublished work) have shown that these chloroplasts in well-aerated situations exhibit resistance to AT treatment. In sublethal concentrations AT affects not only differentiation of chloroplasts but it has been observed¹⁻³ that all the plastid elements are destroyed except the nucleic acid components of the proplastids. This is in contrast with the naturally white areas of

white or mosaic leaves which did contain colourless plastids (undifferentiated). It may be argued that the intracellular concentration of O_2 is not so low as to stop oxidation of the AT absorbed. In that case there should not have been a gradation in the degradation and depletion of chloroplasts in mesophyll cells near and away from the stomatal opening. All these findings further point to a generalised conclusion; that is, 'breathe more fresh air to live longer'.

Thanks are due to Dr C. A. Ninan and the University of Kerala for facilities.

25 May 1983

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A NEW HYPHOMYCETES— *PHAEOSARIOPSIS CHONEMORPHAE* SP. NOV. FROM INDIA.

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THE authors describe here a new species, *Phaeoisariopsis chonemorphae* causing leaf spot disease of *Chonemorpha macrophylla* growing in the campus of Suman bungalow, Pachmarhi.

P. chonemorphae sp. nov. (figure 1)

Leaf spots 3–8 mm, quadrangular to irregular, reddish brown, becoming ash-coloured at maturity, surrounded by yellowish halo.

Stroma partly immersed, compact, bulbous, dark brownish black, 40–50 μm in diam.; conidiophores macronematous, caespitose or forming loose to compact synnemata, up to 230 μm long, 3.8 μm thick at the base, septate, olivaceous brown to brown, simple, geniculate, lighter at tips; conidia solitary, dry, acropleurogenous, mostly obclavate, olivaceous to olivaceous brown, end cells subhyaline, conicotruncate at the base, broader in the middle, smooth, 3–8 septate, septa sometimes thick and dark, 30–50 \times 3.8–7 μm .

On the living leaves of *C. macrophylla* G. Don. (*Apocynaceae*), Pachmarhi (Madhya Pradesh), India,

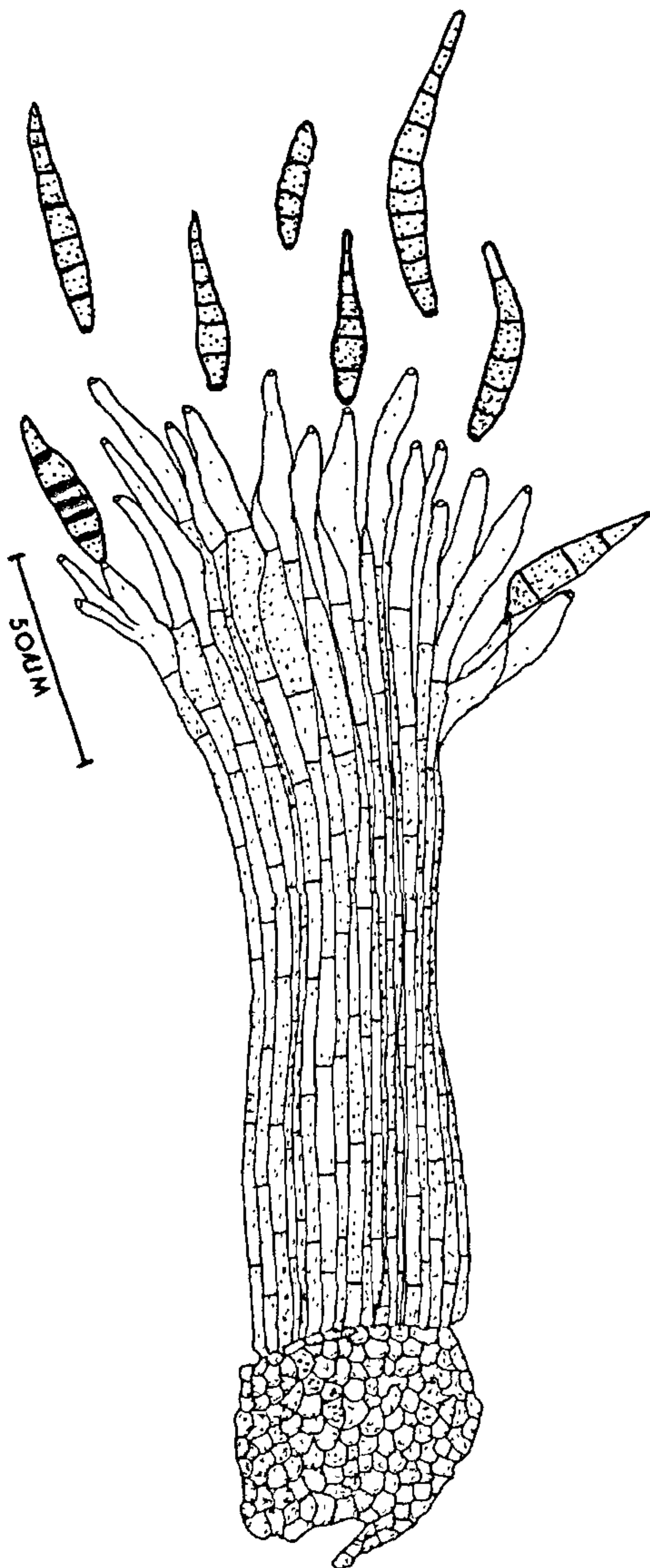


Figure 1. *P. chonemorphae* stroma, conidiophores and conidia.

October, 1982, Leg A. K. Pandey.

Type specimen has been deposited in Herb. IMI, Kew, No. 274613.

The fungus is described and named here as a new species *P. chonemorphae* sp. nov. on the basis of host character in accordance with the species concept in the genus.

Stroma parte immersum, compactum, bulbosum, alba brunneonigra, 40–50 μm . in dia.; conidiophori macronemati, caespitosi vel synnemata laxa vel compacta efformantes, ad 230 μm . longi, 3.8 μm . diametro juxta basim, septatis, olivaceo brunneis vel brunneis, simplicia, geniculatae, apicem versus pallidiores; conidia solitari, sicca, acropleurogena, simplicia, plerumque obclavata, olivaceo vel olivaceo brunnea, cellulis terminalibus pallide olivaceo, ad basim conicotruncata, incrassatus ad medius, levia, 3–8 septata, septatis incrassis vel fuscis, 30–50 \times 3.8–7 μm .

In follis viventibus *C. macrophylla* G. Don. (Apocynaceae), Pachmarhi (Madhya Pradesh), India, October, 1982, Leg. A. K. Pandey.

Typus positus in herb. IMI, Kew No. 274613.

The authors are grateful to Prof. G. P. Agarwal, for encouragement and to Dr B. C. Sutton, Chief mycologist, CMI., Kew, England, for confirming the identity of the fungus.

10 August 1983.

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ISCHAEMUM JAYACHANDRANII—A NEW SPECIES OF POACEAE FROM KERALA, INDIA

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ISCHAEMUM JAYACHANDRANII R. Ansari, V. S. Ramachandran et P. V. Sreekumar, sp. nov.

Ischaemum commutatum Hack. affinis sed articulis racemorum turbinatis coriaceis glabris, callis glabris, spicula sessili numquam manifeste aristata, glumis superis spicularum sessilium dorsaliter carinatis, lemmate supero spiculae sessilis plerumque integro et mutico, pedicellis spicularum pedicellarum minus quam 1/3 longitudinum spicularum sessilium obtegentibus (c. 1 mm), carinis glabris differt.

Stoloniferous perennials. Culms 30–50 cm high,