Notes on some inconspicuous Pyrenomycetes of India — I

By Tilak, S. T., Kale, S. B. & Sou. V. S. Kale,

Bot. Dept. M. U. Aurangabad India and Bot. Dept. J. E. S. College, *Parli* Dist. Bhir. India

With two textfigures

The pyrenomycetes have extensively studied in the recent years. In our collections of the pyrenomycetes from this region some members were observed as growing on the fructifications of other fungi. Munk (1966) had studied such pyrenomycetes and considered the ecological succession of the group and he describes them as saprophytes of second and third incidence. These observations suggest that these secondary saprophytes were growing on empty fructifications. Our collections however showed that the saprophytes of second incidence, sensu Munk, were growing on the mature and developed fructifications. The present report deals with the description of *Boerlagella indica* sp. nov. and *Nectaria munkii* sp. nov. growing on *Ophioceras petrakii* Tilak & Kale and *Haplosporella* sp. respectively.

It may be mentioned that the detail observations showed that the hyphal branches of the fungi of second incidence were penetrating in the wall cells of the ascocarps of the first incidece. The penetration of hyphal branches inside the growing and developing fructifications however is possibly suggestive of the parasitism rather than saprophytism.

1. **Boerlagella indica** sp. nov.

Perithecia in groups, seated on the stroma or subiculum, brown to black, globoid, setose, ostiolate; ostiole compressed; setae very long septate, pointed at the tip, rigid, brown, forming spirally-coiled bundle when dry and measuring from 225—300 × 7—8 µ. Perithecia measuring from 270—330 × 300—330 µ. The fungus growing parasitically on the neck of a saprophytic pyrenomycetes named *Ophioceras petrakii* Tilak & Kale. The fungus produces fine hyphal branches which penetrate the fungal host tissue. The wall of the perithecium externally brown to dark brown, internally light coloured, many cells in thickness. Asci elliptical to clavate, sessile to sub-sessile, bitunicate, 8-spored, 32—40 × 14—16 µ, paraphysate; paraphyses filiform, equaling the asci, very minute. Ascospores greenish hyaline, elliptical, muriform, only

middle septum is straight, remaning transverse as well as longitudinal septa are oblique, irregularly biseriate, 16—19 × 6—8 µ. Periphyses present in the neck.

Perithecia gregaria, stromati vel subiculo brunneo vel nigrescenti insidentia, 270—330 × 300—330 µ, ostiolo compresso, periphysato praedita, setis longis, septatis, acuminatis, rigidiusculis, 225—300 × 7—8 µ, brunneis obtecta; pariete extus brunneo vel obscure brunneo, intus pallide colorato, pseudoparenchymatico; asci oblongo-clavati, crassiuscule tunicati, antice rotundati, postice attenuati, sessiles vel brevissime stipitati, 8-spori, 32—40 × 14—16 µ; sporae ellipsoideae, viridulae, transverse oblique 3- longitudinaliter incomplete 1-septatae, 16—19 × 6—8 µ; paraphyses filiformes, ascos subaecquantes.

Collected on dead decorticated stem of *Vitex negundo* L. at Awarad, growing on *Ophioceras petrakii* Tilak and Kale in the month of December 1967 Leg. S. B. Kale and deposited in the herbarium of I. A. R. I. New Delhi under Acc. No. 29405.

2. **Nectaria munkii** sp. nov.

Stroma bright coloured, orange to red, growing on the stroma of *Haplosporella* sp., erumpent; perithecia in clusters, in a stroma, small, sub-globose, ostiolate; ostiole periphysate and slightly compressed; perithecia measuring from 171—200 × 95—133 µ. The stroma gives out small hyphae which penetrate the tissue of *Haplosporella* sp. The wall of the perithecia made up of outer thick-walled and inner thin-walled cells, many cells in thickness. Asci cylindrical to clavate, stalked, unitunicate, 8-spored, 48—56 × 6—7 µ, paraphysate; paraphyses filiform, unbranched. Ascospores hyaline, 2-celled, eliptical, uniseriate to subbiseriate, with thin mucous sheat and oil drop in each cell, 8—10 × 5—6 µ.

Stroma aurantiacum vel rubrum in stromate *Haplosporella* spec. evolutum; perithecia aggregata, subglobosa, ostiolo periphysato, leniter compresso praedita; pariete pseudoparenchymatico, contextu e cellulis exterioribus crassiuscule, interioribus tenuiter tunicatis composito, asci cylindracei vel cylindraceo-elavati, antice late rotundati, postice in stipitem longum attenuati, tenuiter tunicati, 8-spori, 48—56 × 6—7 µ; sporae monostichae vel incomplete distichae, ellipsoideae, utrinque rotundatae, rectae, medio septatae, vix constrictae, hyalinae 8—10 × 5—6 µ, guttulis oleosis praeditae et muco tenuissimo obvolutae.

Collected on dead stem of *Butea monosperma* (Lam.) Kuntze. at Ramling growing on *Haplosporella* sp. in the month of January 1968 Leg. S. B. Kale and deposited in the herbarium of I. A. R. I. New Delhi under Acc. No. 29416.

The species has been described after Dr. Prof. Anders Munk, Denmark, for his valuable contribution to the world pyrenomycetes.

Acknowledgements

Grateful thanks are due to Marathwada University, Aurangabad for Laboratory facilities, to University Grants commission New Delhi for the financial assistance, to Dr. F. Petrak for Latin diagnosis of the new species, to Principal S. K. Teturkar, J. E. S. College, Parli for Laboratory and other facilities.

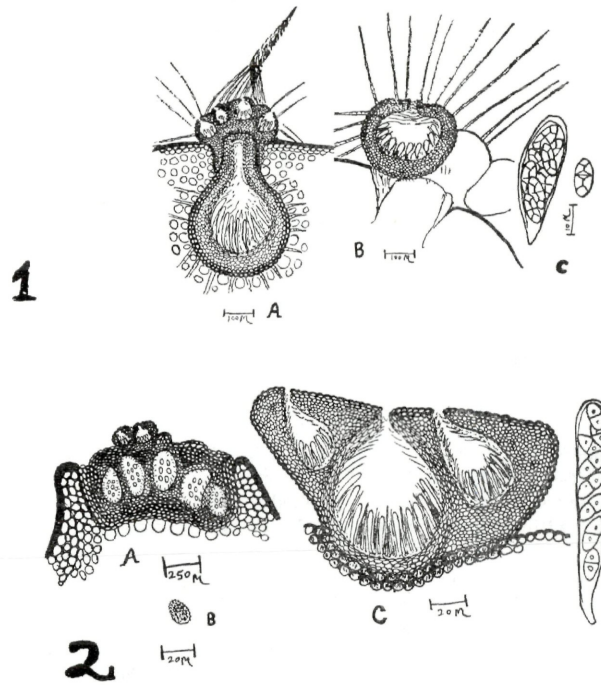

Fig. 1. *Boerlagella indica* sp. nov. A. V. S. of the two associated fungual frutifications. B. V. S. of perithecium. C. Ascus and ascospores. — 2. *Nectria munkii* sp. nov. A. V. S. of two associated fungi. B. Spores of *Haplosporella* sp. C. V. S. of perithecium magnified. D. Ascus and ascospores.

Literature cited

Booth, C., 1964: Studies of Pyrenomycetes, 7. Mycol. Papers. C. M. I., 94.
Müller, E. & von Arx, J. A., 1962: Die Gattungen der didymosporen Pyrenomyceten. Beiträge zur Krypto. fl. der Schweiz. 11. 2.
Munk, A., 1957: Danish Pyrenomycetes. Dansk Botanisk Arkiv. 17.
— 1966: Three new species of Inconspicuous Pyrenomycetes. Botaniska Notiser 119, 2: 177—184.