

Two Rare Foliicolous Fungi from the Western Ghats Region of Kerala State, India

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Abstract: *Asterolibertia mangiferae* and *Phyllachora travancorica* are the two fungi re-located after a lapse of fifty years. Both are described and illustrated in detail.

Keywords: Rare fungi, *Asterolibertia*, *Phyllachora*, Kerala.

Taxonomy

Asterolibertia mangiferae Hansf. & Thirum., *Farlowia* 3: 303, 1948. (Fig.1)

Colonies amphigenous, mostly epiphyllous, subdense to dense, up to 3 mm in diameter, confluent. Hyphae straight to substraight, branching opposite to irregular at acute to wide angles, loosely to closely reticulate, cells 8-32 x 3-7µm. Appressoria intercalary, oval to ellipsoidal with a hyaline pore, which indicate the presence of appressoria from the lower surface, 8-18 x 6-8 µm. Thyriothecia scattered to loosely grouped, orbicular, up to 392µm in diameter, stellately dehiscent at the centre, margin fringed, fringed hyphae small; asci not seen; ascospores brown, conglobate, uniseptate, rounded at both ends, constricted at the septum, 16-26 x 11-13 µm, smooth walled.

Material examined: On leaves of *Mangifera indica* L. (Anacardiaceae), TBGRI Campus, Palode, Thiruvananthapuram, Kerala, India, Oct. 16, 2005, Al-Ameen HCIO 46982, TBGT 2199.

Asterolibertia mangiferae Hansf. & Thirum. is the only species of the genus *Asterolibertia* known on *Mangifera indica* from India (Hansford & Thirumalachar, 1948).

This species was collected from Thirthahalli, Western Ghats region of Karnataka, during the year 1945 (Hansford & Thirumalachar, 1948). Since then, it was not located. The present collection forms a new record to Kerala state and the fungus reveals an extended distribution in the Western Ghats of Peninsular India.

Phyllachora travancorica Ramakr., K., *J. Madras Univ.* 26: 364, 1956; Kamat, Seshadri & Pande, *A Monographic*

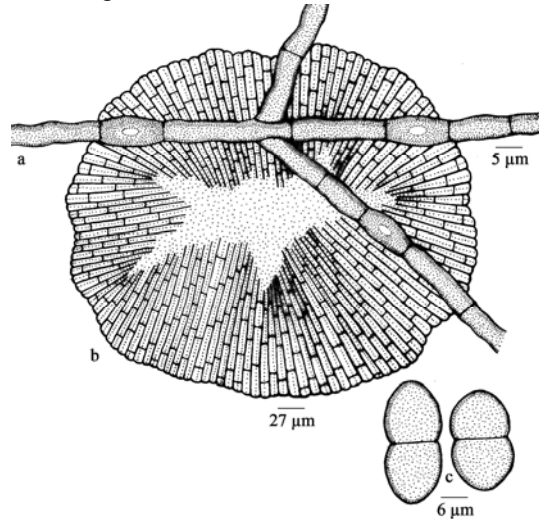


Fig.1. *Asterolibertia mangiferae* Hansf. & Thirum.
a. Mycelium with intercalary appressoria, b. Orbicular thyriothecium, c. Ascospores

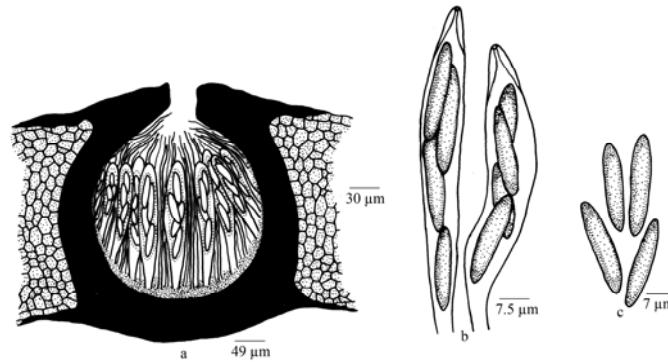


Fig. 2. *Phyllachora travancorica* Ramakr.
a. T.S. showing perithecium, b. Asci, c. Ascospores

study of Indian species of *Phyllachora*, p.80, 1978.

P. tetraspora Ramakr., K. *Proc. Indian Acad. Sci* 38: 123, 19539 (*non chardon*, 1932). (Plate 1, Fig.2)

Infection spots foliicolous, amphigenous, scattered to confluent, up to 2mm in diameter. Stromata amphigenous, black, raised, up to 1mm in diameter, surrounded by yellow haloes keeping the black stromata at the centre, stromata extended up to the opposite epidermis, loculate; perithecia 1-3 per stromata ovate, globose, flask shaped, ostiolate, 98-147 x 88-167 µm, stromata 49-69 µm thick; asci numerous, cylindrical, paraphysate, stipitate, 4-spored, 56-80 x 8-10 µm; apical aperture present, paraphyses hyaline, filiform; ascospores ovate, oblong, hyaline, unicellular, attenuated to broadly rounded at both the ends, 17-22 x 3-5 µm, contents granular, often concentrated horizontally in the middle of the spores.

Material examined: On leaves of *Polyalthia longifolia* (Annonaceae), Govt.

Botanic Garden, Thiruvananthapuram, Kerala, India, June 06, 2006, A.Sabeena & G.R. Archana HCIO 46981, TBGT 2198.

This species was collected during the year 1952 from the Govt. Botanic Garden, Thiruvananthapuram and was described as *Phyllachora tetraspora*. Since this name was pre-occupied, it was re-named as *P. travancorica* (Kamat *et al.* 1978). Since then, it was not reported from any part of Peninsular India and the present collection reveals its re-location after lapse of half a century.

References

- Hansford CG and Thirumalachar MJ (1948) *Fungi of South India. Farlowia* 3. 285-314.
- Kamat MN, Seshadri VS and Pande A (1978) *A Monographic study of Indian species of Phyllachora*. UAS Hebbal, Bangalore. pp:100.



Plate 1. *P. travancorica* Ramakr. on *Polyalthia longifolia*