

Studies on foliicolous fungi - XXVII

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Abstract: Two new species, namely, *Asterina psychotriicola* on *Psychotria* sp. and *Lembosia salaciae* on *Salacia* sp. collected from the Western Ghats of Peninsular India are described and illustrated in detail.

Keywords: *Asterina*, *Lembosia*, new species, Western Ghats, India

***Asterina psychotriicola* sp. nov.** (Fig.1)

Coloniae epiphyllae, subdensae vel densae, ad 3 mm diam., saepe confluentes. Hyphae flexuosae, irregulariter acuteque vel laxe ramosae, formans laxe rete, cellulae 9-35 x 3-5 µm. Appressoria ovata, clavata, leniter stipitata, unicellularis, ad apicem attenuatae et late rotundatae, integrae, 8-13 x 6-10 µm. Thyriothechia dispersa, orbicularis, ad 400 µm diam., stellatim dehiscentes ad centro, margine plerumque crenatae; asci globosi, octospori, ad 30 µm diam.; ascosporae oblongae, brunneae, conglobatae, uniseptatae, constrictae ad septatae, 20-24 x 9-13 µm, parietus fortiter tuberculatus.

Colonies epiphyllous, subdense to dense, up to 3 mm in diameter, often confluent. Hyphae flexuous, branching irregular at acute to wide angles, form a loose net, cells 9-35 x 3-5 µm. Appressoria ovate, clavate, slightly stipitate, unicellular, attenuated and broadly rounded at the apex, entire, 8-13 x 6-10 µm. Thyriothechia scattered, orbicular, up to 400µm in diameter, stellately dehisced at the centre, margin mostly crenate; asci globose, octosporous, up to 30 µm in diameter; ascospores oblong, brown, conglobate, uniseptate, constricted at the septum, 20-24 x 9-13 µm, wall strongly tubercled.

Material examined: On leaves of *Psychotria* sp. (Rubiaceae), Kukke Subramanya, South Canara, Mangalore, Karnataka, India, Nov. 15, 2003, V.B.Hosagoudar & al HClO 46689 (type), TBGT 2030 (isotype).

Asterina psychotriiae Ryan is known on this host genus from Puerto Rico (Stevens & Ryan, 1939). *A. psychotriicola* differs from it in having longer appressoria and ascospores.

***Lembosia salaciae* sp. nov.** (Fig.2)

Coloniae amphigenae,

subdensae, ad 2 mm diam., confluentes. Hyphae libero ramosae,

flexuosae vel anfractuae, opposite, alternate vel irregulariter acuteque vel laxe ramosae, laxe vel dense reticulatae, cellulae 16-32 x 4-8 µm. Appressoria pauca, bicellula, unilateralis vel alternata, recta vel curvula, 9-18 µm longa; cellulae basillares cylindratae vel cuneatae, 3-6 µm longae; cellulae apicales ovatae, oblongae, rectae, curvulae, integrae vel leniter angularis, 4-11 x 4-10 µm. Thyriothechia dispersa vel aggregata, ad initio orbicularis, elongata ad maturitatem, 500-640 x 250-300 µm diam., dehiscentes longitudinalis ad centro, margine crenatae vel fimbriatae; hyphae fringiorum flexuosae vel anfractuae; asci globosi vel ovati, octospori, 32-42 x 26-35 µm.; ascosporae ovatae, oblongae, brunneae, conglobatae, uniseptatae, constrictae ad septatae, 28-35 x 12-18 µm, parietus glabrus.

Colonies amphigenous, subdense, up to 2 mm in diameter, confluent. Hyphae profusely branched, flexuous to crooked, branching opposite, alternate to irregular at acute to wide angles, loosely to closely reticulate, cells 16-32 x 4-8 µm. Appressoria few, 2-celled, unilateral to alternate, straight, curved, 9-18 µm long; stalk cells cylindrical to cuneate, 3-6µm long; head cells ovate, oblong, straight, curved, entire to slightly angular, 4-11 x 4.8-10 µm. Thyriothechia scattered to grouped, initially rounded, elongated at maturity, 500-640 x 250-300 µm, longitudinally fissured at the centre, margin crenate to fimbriate, fringed hyphae flexuous to crooked; asci globose to ovate, octosporous, 32-42 x 26-35 µm; ascospores ovate, oblong, conglobate, brown, uniseptate, constricted at the septum, 28-35 x 12-18 µm, smooth walled.

Material examined: On leaves of *Salacia* sp. (Hippocrataceae), Sairandhiri, Silent Valley National Park, Palakkad, Kerala, India, Dec. 13, 2003, V.B. Hosagoudar & al HClO 46307 (type), TBGT 1953 (isotype). This forms the first report of the genus *Lembosia* on the members of the family Hippocrataceae (Song & Hosagoudar, 2003). Hence, it is described here as a new species.

References

1. Song B and Hosagoudar VB (2003) A list of *Lembosia* species based on the literature. *Guizhou Science* 21, 93-101.
2. Stevens FL and Ryan MH (1939) The Microthyriaceae. *Illinois Biol. Monographs* 171-138.

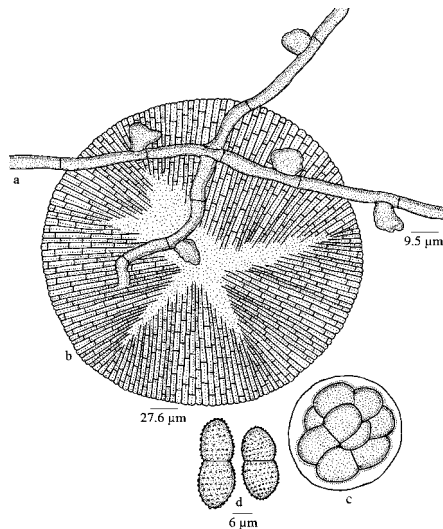


Fig.1. *Asterina psychotriicola* sp. nov. a- Appressoriolate mycelium, b-Thyriothecium, c- Ascus, d-Ascospores

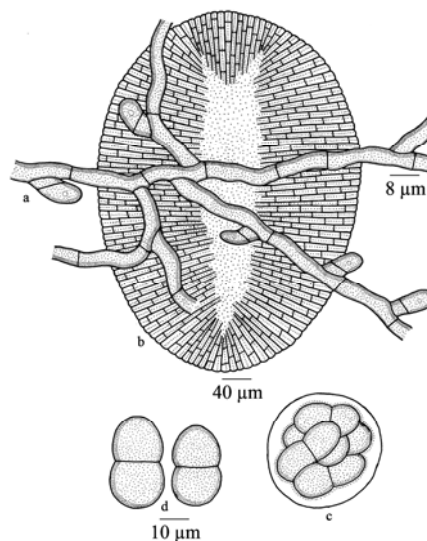


Fig.2. *Lembosia salaciae* sp. nov. a- Appressoriolate mycelium, b-Thyriothecium, c- Ascus, d-Ascospores