

A NEW *ASTERINA* SPECIES FROM KERALA, INDIA

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ABSTRACT

A new species of the genus *Asterina* has been described and illustrated in detail from Kerala

KEYWORDS

Asterina phyllanthigena, fungi, new species, Kerala, India

During a survey of the foliicolous micromycetes in the Western Ghats region of Kerala State, a shrubby *Phyllanthus* plant, bearing edible fruits, was found infected with a black mildew disease. Microscopic details revealed that it was an undescribed species of the genus *Asterina*. Hence the note.

Asterina phyllanthigena sp. nov.

Material examined

Type: 27.xii.2001, Sankili forest, Kollam, Kerala, coll. V.B. Hosagoudar, on leaves of *Phyllanthus* sp. (Euphorbiaceae), HCIO 42888.

Isotype: TBGT 206.

Diagnosis

Coloniae epiphyllae, tenues vel subdensae, ad 1mm diam., confluentes. Hyphae flexuosae, formis laxe reticulatae, cellulae 16-20x3-4µm. Appressoria pauca, dispersa, bicellula, recta vel curvula, 9-11µm longa; cellulae basilares cylindratae vel cuneatae, 2-3µm longae; cellulae apicales ovatae vel oblongae, ad apicem leniter attenuatae vel late rotundatae, integrae, 4-6x4-5µm. Thyriothechia dispersa, orbicularis, ad 80 µm diam., stellato dehiscentes ad centrum, margine crenatae; asci pauci, globosi, octospori, ad 30µm diam.; ascospores oblongae, conglobatae, brunneae, uniseptatae, leniter constrictae, 12-14x6-8µm, parietus glabrus. Pycnothyria thyriothechiis similis, breviter; pycnothyriosporae oblongae vel piriformis, apiculatae, brunneae, 9-18x8-10µm, parietus glabrus.

Colonies epiphyllous, thin to subdense, up to 1mm in diameter, confluent. Hyphae flexuous, form a loose net of hyphae, cells 16-20 x 3-4µm. Appressoria few, scattered, two-celled, straight to curved, 9-11µm long; stalk cells cylindrical to cuneate, 2-3µm long; head cells ovate to oblong, slightly attenuated and broadly rounded at the apex, entire, 4-6 x 4-5µm. Thyriothechia scattered, orbicular, up to 80µm in diameter, stellately dehiscent at the centre, margin crenate; asci few, globose, octosporous, up to 30µm in diameter; ascospores oblong, conglobate, brown, uniseptate, slightly constricted, 12-14x6-8µm, wall smooth. Pycnothyria similar to thyriothechia, smaller; pycnothyriosporae oblong, pyriform, often apiculate, brown, 9-18 x 8-10µm, wall smooth.

Remarks

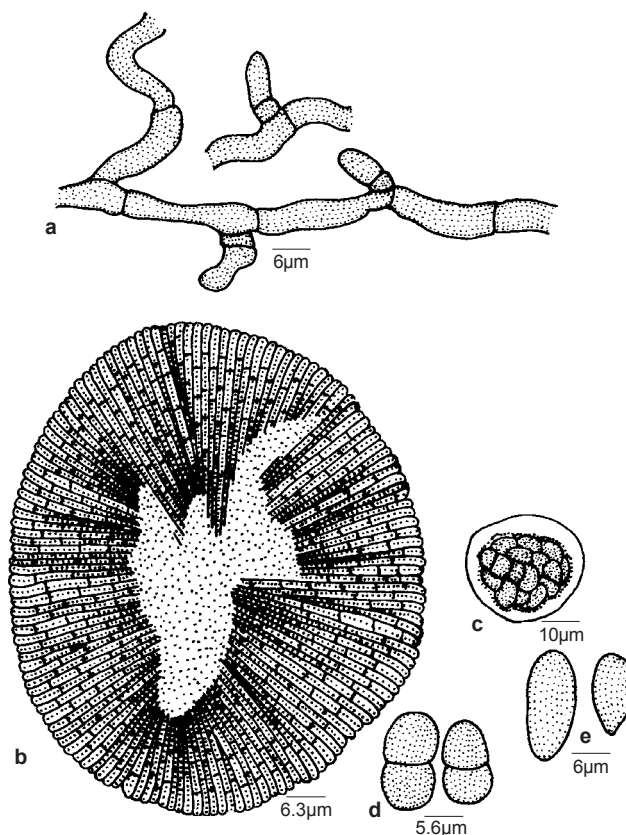
Asterina phyllanthicola Singh is known on the genus *Phyllanthus* from the Himalayan region of Uttar Pradesh (Hosagoudar & Abraham, 2001; Singh, 1980). However, *A. phyllanthigena* differs from it in having loosely net forming hyphae, remotely placed shorter appressoria and smaller ascospores.

REFERENCES

- Hosagoudar, V.B. and T.K. Abraham (2000). A list of *Asterina* Lev. species based on the literature. *Journal of Economic and Taxonomic Botany* 24: 557-587.
Singh, S. (1980). *Asterina phyllanthicola* sp. nov. from India. *Transactions of the British Mycological Society* 74: 204-205.

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Asterina phyllanthigena sp. nov.
a - Appressariate mycelium; b - Thyriothecium; c - Ascus;
d - Ascospores; e - Pycnothyriosporae

