

A NEW SPECIES OF *MELIOLA* (ASCOMYCETES: MELIOLALES) FROM KERALA, INDIA

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Abstract

A new species *Meliola abrahamii* is described and compared with other species, *Meliola semecarpi* Sydow, *M. semecarpi-anacardii* Hosag. et al., *M. semecarpicola* Hansf. and *M. travancoricae* Hosag.

Keywords

Fungi, Meliola abrahamii sp. nov., Kerala, new description

Abbreviations

HCIO - Herbarium Cryptogamae Indiae Orientalis TBGT - Tropical Botanic Garden, Thiruvananthapuram

Introduction

During a survey of pathogenic micro fungi in the state of Kerala, the authors collected a Black Mildew Fungus on *Semecarpus anacardium* plant and have described it here as a new species.

Meliola abrahamii sp. nov. (Figs. 1-4)

Coloniae epiphyllae, densae, ad 3mm diameter, confluentes. Hyphae rectae vel leniter flexuosae, plerumque opposite acuteque ramosae, laxae vel dense reticulatae, cellulae 24-32 x 8-10µm. Appressoria alternata, antrorsa vel subantrorsa, 28-40µm longae; cellulae basillares cylindraceae vel cuneatae, 6-16µm longae; cellulae apicales oblongae, rectae vel curvulae, integrae, angularae vel sublobatae, 22-24 x 11-16µm. Phialides appressoriis intermixtae, alternatae vel oppositae, ampulliformes, 19-24 x 6-8µm. Setae myceliales dispersae vel juxta perithecia aggregatae, simplices, rectae, setae juxta perithecia paucae, acutae vel obtusae, ad 300µm longae, setae myceliales acutae, ad 1200µm longae. Perithecia dispersa, ad 175µm diam.; ascospores cylindraceae, 4-septatae, constrictae, 46-50 x 18-20µm.

Materials examined:

26.xii.2000, Kulathupuzha, Kollam, Kerala, India, on leaves of

Semecarpus anacardium L.f. (Anacardiaceae), Coll. G. Rajkumar HCIO 43794 (type).
Isotype: TBGT 394

Distribution

India: Kulathupuzha, Kollam in Kerala.

Etymology

The species is named after the late Professor A. Abraham, Founder and first Director of the Tropical Botanic Garden and Research Institute, Palode.

Diagnostic features

Colonies epiphyllous, dense, ad 3mm in diameter, confluent. Hyphae straight to slightly flexuous, branching mostly opposite at acute angles, loosely to closely reticulate, cells 24-32 x 8-10 µm. Appressoria alternate, antrorse to subantrorse, 28-40µm long; stalk cells cylindrical to cuneate, 6-16µm long; head cells oblong, straight to curved, entire, angular to sublobate, 22-24 x 11-16µm. Phialides mixed with appressoria, alternate to opposite, ampulliform, 19-24 x 6-8µm. Mycelial setae scattered to grouped around perithecia, simple, straight; setae around perithecia are few, acute to obtuse, upto 300µm long; setae on mycelia are acute, up to 1200µm long. Perithecia scattered, up to 175µm in diameter; ascospores cylindrical, 4-septate, constricted, 46-50 x 18-20µm.

Remarks

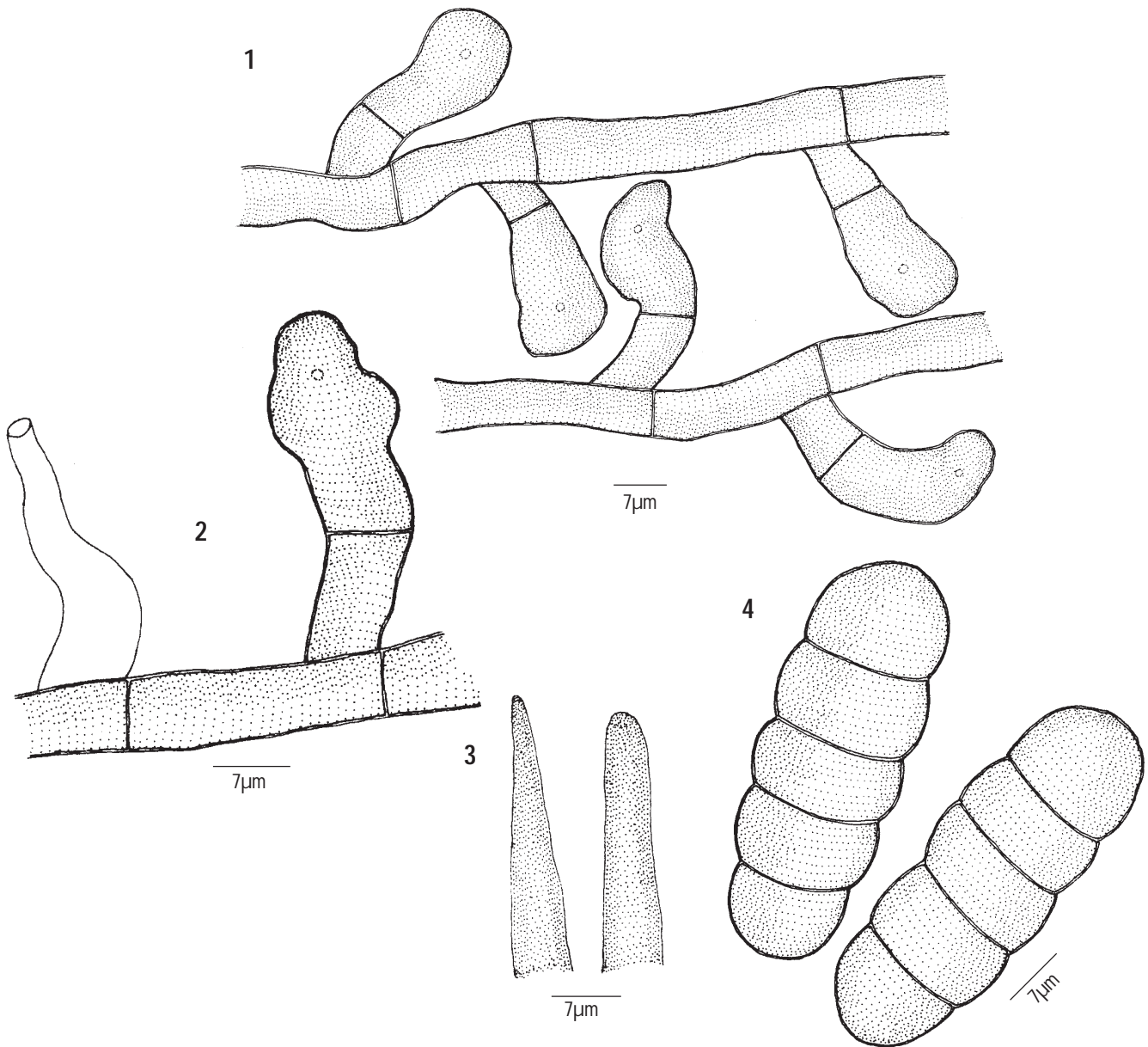
Based on the host and Beeli formula (3111. 4224), the present species can be compared with *Meliola semecarpi* Sydow, *Meliola semecarpi-anacardii* Hosag. et al., *Meliola semecarpicola* Hansf. and *Meliola travancoricae* Hosag. However, *Meliola abrahamii* differs from all these in having shorter and obtuse setae around perithecia and longer and acute setae on the mycelia; oblong, entire, angular to sublobate head cells of appressoria are distinct for this species (Hansford, 1961; Hosagoudar, 1996).

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References

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Figures 1-4. *Meliola abrahamii* sp. nov.
 1 - Appressorium; 2 - Phialide; 3 - Mycelial setae; 4 - Ascospores