

## *Meliola samaderae* sp. nov. from Kerala

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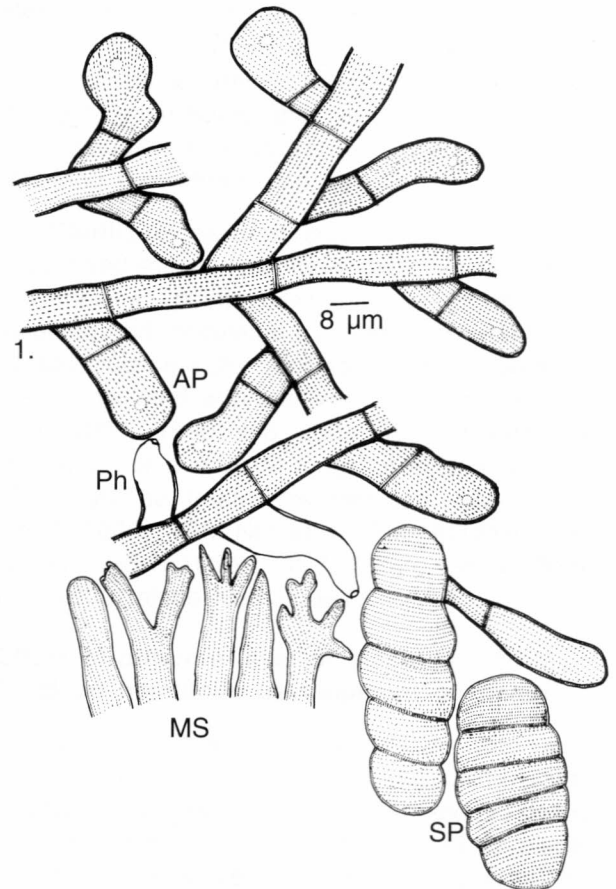
During a survey of the foliicolous biotrophs in Thiruvananthapuram district of Kerala State, authors collected a black mildew fungus. Microscopic examination of the fungus revealed that it is hitherto undescribed species of the genus *Meliola* and hence the report.

***Meliola samaderae*** V.B. Hosagoudar, P. Ponnuswamy et C.K. Biju, sp. nov. (Fig. 1)

Coloniae amphigenae, plerumque epiphyllae, densae, ad 3 mm diam., confluentes. Hyphae rectae, oppositae acutaeque ramosae, laxae vel arte reticulatae, cellulae 19-24 x 6-8  $\mu$ m. Appressoria alternata, ca. 2% opposita, antrorsa, plerumque recta, raro curvula, 20-25  $\mu$ m longa; cellulae basilares cylindraceae vel cuneatae, 6-8  $\mu$ m longae; cellulae apicales ovatae, oblongae vel cylindraceae, integrae, raro angulariae, 14-19 x 9-11  $\mu$ m. Phialides appressoriis intermixtae, alternatae vel oppositae, conoideae vel ampulliformes, 19-22 x 8-10  $\mu$ m. Setae myceliales tenuiter vel dense dispersae, sursum acutae, late rotundatae, uni vel pentadentatae vel unifurcatae et sursum dentatae, ad 445  $\mu$ m longae. Perithecia dispersa, verrucosa, ad 220  $\mu$ m diam.; ascosporae oblongae, ellipsoideae, 4-septatae, constrictae, cellula centralis leniter magniora, 61-63 x 17-19  $\mu$ m.

Colonies amphigenous, predominantly epiphyllous, dense, up to 3 mm in diameter, confluent. Hyphae straight, branching opposite at acute angles, loosely to closely reticulate, cells 19-24 x 6-8  $\mu$ m. Appressoria alternate, about 2% opposite, antrorse, mostly straight, rarely curved,

20-25  $\mu$ m long; stalk cells cylindrical to cuneate, 6-8  $\mu$ m long; head cells ovate, oblong to cylindrical, entire, rarely angular, 14-19 x 9-11  $\mu$ m. Phialides mixed with appressoria, alternate to opposite, conoid to ampulliform, 19-22 x 8-10  $\mu$ m. Mycelial setae thinly to densely scattered, simple, straight, acute, broadly rounded to 1-5 times dentate to



**Fig.1.** *Meliola samaderae* sp. nov.  
Ap-Appressoria, Ms-Mycelial setae,  
Ph-Phialides, Sp-Ascospores

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once furcate and dentate at the apex, up to 445  $\mu\text{m}$  long. Perithecia scattered, verrucose, up to 220  $\mu\text{m}$  in diameter; ascospores oblong to ellipsoidal, 4-septate, constricted at the septa, often the central cell slightly larger, 61-63 x 17-19  $\mu\text{m}$ .

**Specimen examined:** On leaves of *Samadera indica* Gaertn. (= *Quassia indica* (Gaertn.) Nootteboon) (Simaroubaceae), Tropical Botanic Garden and Research Institute, Palode, Thiruvananthapuram, Kerala, India, May 18, 1998, C.K. Biju HClO 43364 (Holotype), *Isotype*: TBGT 263.

The fungus on this host is similar to *Meliola picrasmae* Hansf. and *M. hannaiae* Deight. However, the present new species differs from

both in having acute to broadly rounded and dentate to furcate mycelial setae. It is also distinct from all the *Meliola* species known on Simaroubaceae in having larger and longer ascospores (1,2).

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