

SHORT COMMUNICATIONS

New *Meliola* species from West Bengal

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One new species of *Meliola* Fr. collected from Jalpaiguri district of West Bengal (India), viz. *M. micromelii* sp. nov. causing leaf spot on *Micromelum* sp. is described and illustrated in this paper. The type specimen has been deposited in the Herbarium, CAB, International Mycological Institute (IMI 225661), UK.

Key words: Mycotaxonomy, *Meliola*, new species, Jalpaiguri, West Bengal

During mycological survey in 1983-1989, several interesting meliolaceous fungi have been collected from Jalpaiguri district of West Bengal. This paper deals with description of one new meliolaceous fungus.

One plant, *Micromelum* sp. (Family-Rutaceae) collected from Targhera forest of the district Jalpaiguri, West Bengal was found infected with meliolaceous fungus. The fungus was worked out from fresh and preserved material and preparation was stained in lactophenol-cotton blue. Critical microscopic study of this fungus was done. The type specimen had been deposited in the Herbarium, CAB, International Mycological Institute, UK.

***Meliola micromelii* T. K. Jana et. S. N. Ghosh sp. nov (Fig. 1)**

Coloniae amphigenae, tenuis vel sub-densae, dispersae, ad 4.5 mm diam. Hyphae flexuosae, oppositae, raro unilaterall acuteque vel laxae ramosae, laxae reticulatae, cellulae $14.8 - 23.3 \times 6.4 - 8.8 \mu\text{m}$. Appressoria alternata, raro unilateralis antrorsa subantrorsa, $15.7 - 23.3 \mu\text{m}$ longa; cellulae basilares cylindratae vel cuneatae, $3.5 - 7.6 \times 7.2 - 8 \mu\text{m}$; cellulae apicales globosae vel ovatae, integrae, $11.4 - 15.3 \times 9.5 - 10.7 \mu\text{m}$. Phialides appressoriis intermixtae, unilateralis vel oppositae, ampulliformes, $18.4 - 19.8 \times 7.3 - 8 \mu\text{m}$. Setae myceliales dispersae vel plerumque juxta perithecia aggregatae, rectae vel leniter curvulae, dichotoma ramosae, ad $220 \mu\text{m}$ longae ad ramificans, ramuli primus ad $27 \mu\text{m}$ longae ad secundarius ad $9 \mu\text{m}$ longae, obtusae ad apicem, ramuli reflexae.

Perithecia dispersa vel aggregata, globosa, verrucosa, $129.8 - 286.5 \mu\text{m}$ diam. Asci ovalis vel elliptici, 2 – 4 spori. Ascosporae cylindratae, 4 – septatae, constrictae, $35 - 38.5 \times 11.8 - 17.6 \mu\text{m}$.

Colonies amphigenous, thin to subdense, scattered, up to 4.5 mm in diameter. Hyphae flexuous, branching opposite, rarely unilateral at acute to wide angles, loosely reticulate, cells $14.5 - 23.3 \times 3 \mu\text{m}$ long; stalk cells cylindrical to cuneate, $3.5 - 7.6 \times 7.2 - 8 \mu\text{m}$; head cells globose to ovate, entire, $11.4 - 15.3 \times 9.5 - 10.7 \mu\text{m}$. Phialides mixed with appressoria, unilateral to opposite, ampulliform, $18.4 - 19.8 \times 7.3 - 8 \mu\text{m}$. Mycelial setae scattered to mostly grouped around perithecia, straight to slightly curved, dichotomously branching, up to $222 \mu\text{m}$ long till the branching, up to $27 \mu\text{m}$ long till the primary branch and the secondary branches up to $9 \mu\text{m}$ long, tip sub-acute to obtuse, branchlets reflexed. Perithecia scattered to aggregated, globose, verrucose, $129.8 - 286.5 \mu\text{m}$ diam. Asci oval to elliptical, 2 – 4 spored. Ascospores cylindrical, 4 septate, constricted at the septa, $35 - 38.6 \times 11.8 - 17.6 \mu\text{m}$.

Material examined : On leaves of *Micromelum* sp. (Family-Rutaceae), Targhera forest, Jalpaiguri, West Bengal, India, S. N. Ghosh, 27.02.1984, IMI 225661 (Holotype).

Etymology : From the name of the host genus.

A number of species of *Meliola* have been reported from India (Hosagoudar *et al.*, 2006; Jamaluddin *et al.*, 2004; Jana *et al.*, 2005 a–e 2007, 2008). Review

of literature (Crane and Jones, 2001; Hansford, 1961; Mibey and Hawksworth, 1997; Sanchez and Carrion, 1992) reveals that no species of *Meliola* has yet been reported on the present host *Micromelum* sp. of the family Rutaceae.

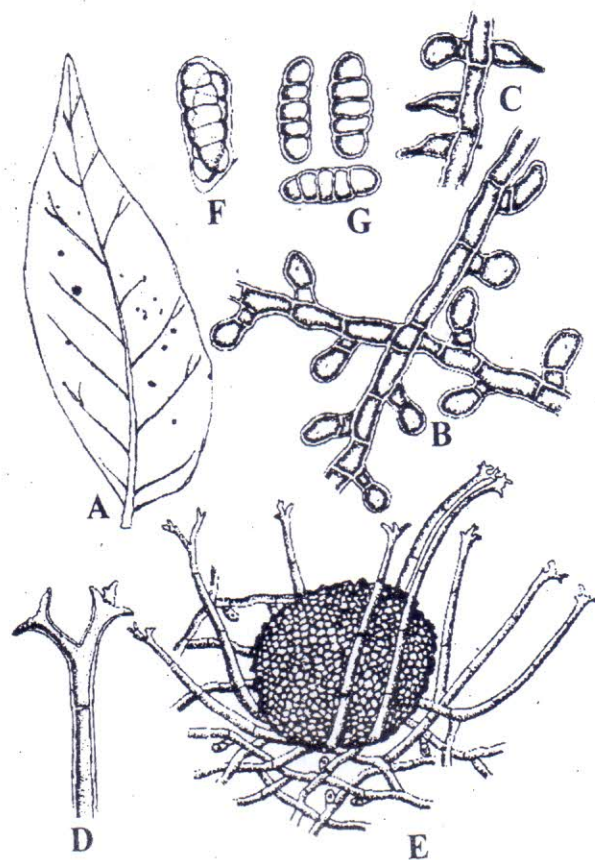


Fig. 1. *Meliola micromelii* sp. nov. : A. leaf showing patches of infection; B. hyphae with appressoria; C. phialides; D. tip of a mycelial seta; E. perithecium associated with mycelium and mycelial setae; F. ascus; G. ascospores. A $\times 1/2$, E $\times 165$ and rest $\times 500$.

Based on the Beeli formula 31413231, *Meliola micromelii* sp. nov. is close to *M. tenella* Pat. var. *atalantiicola* Hosag reported on *Atalantia monophylla* (L.) Correa from Andhra Pradesh (Hosagoudar, 1996) but differs from it in having smaller appressoria with globose to ovate head cells (Appressoria 15-25 μ m long; head cells versiform,

cylindrical in *M. tenella* Pat. var. *atalantiicola* Hosag); longer mycelial setae till the branching (up to 217 μ m till branching in *M. tenella* Pat. var. *atalantiicola* Hosag); larger perithecial diameter and smaller ascospores (perithecia up to 220 μ m in diam; ascospores 40 – 46.5 \times 15.5 – 18.5 μ m in *M. tenella* Pat. var. *atalantiicola* Hosag.)

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