

Some New Host Records of Fungi from India

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| Received: 21 July 2015 | Accepted: 16 August 2015 |

ABSTRACT

New Host Records for 5 species of fungi in India were documented during the course of investigative mycological studies. The present input to Indian mycota deals with a project for the investigation of microfungi from Maharashtra.

Key Words: New host records, Maharashtra, microfungi.

INTRODUCTION

In course of mycological survey in Maharashtra state of India, the authors came across several collections of fungi during 2012 to 2014, several of which were found to be new records not reported earlier on their respective hosts. The paper deals with some of the new host records on the basis of morphological studies and review of pertinent literature. The results are based on a revision of pertinent literature (Bilgrami et al, 1971, 1981, 1991; Jamaluddin, 2004, Maheswari et al, 2012). The cited fungi were identified using Ellis, 1971, 1976; Subramanian 1971.

MATERIAL AND METHODS

The morphological description is based on an examination of material mounted in hydrous lacto phenol and cotton blue. For morphotaxonomic studies and photomicrographs Nikon eclipse 50 i microscope was used. The host specimens have been housed in Botanical

Survey of India, Western Regional Centre, Pune with appropriate collection no.

1. Helicomyces hydrabadense Rag. Rao & Rao. Mycopath. Mycol. Appl. 24: 28 (1964) (Fig. 1 A & B)

Colonies effuse to arachnoid or tuberculate, white to pinkish, or becoming brownish in age. Mycelium immersed or superficial composed of branched, septate, hyaline to dilute fuscous hyphae. Conidiophores lacking or formed as short, lateral branches of the repent mycelium, size $10 - 27 \times 3.5 - 7 \mu m$. Conidiogenous cells mono or polyblastic, producing conidia from the apex, or synchronously and / or successively from short denticles. Conidia hyaline, dry, hygroscopic, frequently uncoiling in water, diameter of conidia 19 - 25 µm, number of coils in conidia 1½ - 3½, width of conidial filament 1.8 - 2.8 µm. Conidial filament coiled 1 - 8 times, usually in one plane to form a disk-like body, but sometimes

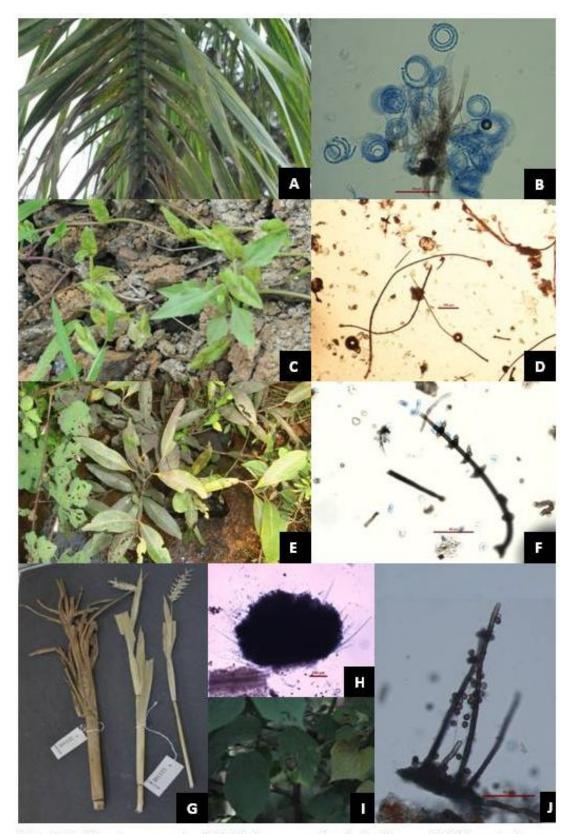


Fig. (A) Roystonea regia, (B) Helicomyces hydrabadense, (C) Eupatorium sp. (D) Periconia byssoides, (E) Eugenia sp. (F) Moorella speciosa (G) Cois lacryma-jobi, (H). Myrothecium gramineum, (I) Helicteres isora (J Virgariella globigera.

in three planes and resembling a loosely coiled spring; basal cell attached eccentrically; conidial secession schizolytic.

Host examined - on leaves of *Roystonea regia* (Kunth) O. F. Cook. (Fam. Arecaceae), BSI Garden, Pune, B.S.I. (W.C) - 194113, 29.7.2013, Leg. Rashmi .Dubey.

Periconia byssoides Pers. Ex Merat, 1821,
Nouv. FI. Environs Paris, Ed. 2, 1: 1- 19. (Fig
1. C & D)

Colonies effuse, olivaceus brown, mycelium mostly immersed. Conidiophores macronematous with a stipe and a spherical head, $300-1100~\mu m$ long, 10 - $20~\mu m$ thick at the base, 10 - $15~\mu m$ immediately below the head; subhyaline apical cell 12 - $25~\times~10$ - $26~\mu$. Heads 40 - $120~\mu$ diam. Conidia spherical, brown, verrucose, 10 - $15~\mu$ diam.

Host examined: on leaves of *Eupatorium sp*. (Fam. Asteraceae), Akeri, Sawantwadi, Dist. Sindhudurg (MH), B.S.I. (WC) 200004, 20.01.2012, Leg. Rashmi Dubey.

3. *Moorella speciosa* P. Raghuveer Rao & Dev Rao, 1964, Mycopath. Mycol. appl. 22: 50 - 52. (**Fig. I - E & F**)

Colonies effuse dark blackish brown to black, velvety. Mycelium partly superficial partly immersed. Stroma none. Setae and Hyphopodia absent. Conidiophores up to 400 μ long, 8 - 10 μ thick at the base, 5 - 6 μ at the apex. Conidia 1 - 1.5 times coiled, 4 - 6 septate, 10 - 15 μ diam., with filament 4 - 6 μ m thick.

Host examined: on leaves of *Eugenia sp.* (Fam. Myrtaceae), B.S.I. (WC) -194125, 16.10.2012, Wada, Thane (MH). Leg. Rashmi Dubey.

4. *Myrothecium gramineum* lib., 1837, PI. Crypt. Ard. 380. (**Fig. I- G & H**).

Sporodochia sessile, mycelia all immersed, Setae colourless & subulate, thick - walled, usually 0- septate, up to 410 μ long, 9 - 20 μ thick at the rounded base, tapering to a point. Conidia ellipsoidal or cylindrical rounded at the apex, often truncate at the base, hyaline or pale olivaceous, 7 - 10 \times 2 - 2.5 μ m.

Host examined: on leaves of *Coix lacryma-jobi* L. (Poaceae), B.S.I. (WC) 201125, 18.10.2012, Thane (MH). Leg. Rashmi Dubey.

5. *Virgariella globigera* (Sacc. & Ellis) Hughes (Fig. I- I & J).

Colonies effuse dark brown to black, often hairy. Mycelium partly superficial but mostly immersed. Setae and hyphopodia absent. Conidiophores macronematous, mononematous, scattered, erect, unbranched, straight or flexuous, dark brown, smooth, thick – walled. Conidiogenous cells polyblastic, integrated, terminal, sympoidal, cylindrical. Conidia solitary, dry, acropleurogenous, simple, broadly ellipsoidal, subspherical or spherical, dark brown, smooth, thick – walled, 0- septate.

Host examined: on leaves of *Helictores isora* L. (Malvaceae), Coll No. B.S.I. (W.C) 196409, 25.09.2013, Sanjay Gandhi National Park (MH), Leg. Rashmi Dubey.

ACKNOWLEDGEMENTS

Authors are indebted to the Director, Botanical Survey of India for his inspiration and for providing technical facilities. They are also thankful to the Head of the office, Botanical Survey of India, Western Regional Centre, Pune for his kind support. Ministry of Environment, Forest and Climate Change, New Delhi is also thankfully acknowledged for providing financial assistance.

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