



GLOBAL JOURNAL OF SCIENCE FRONTIER RESEARCH
BIOLOGICAL SCIENCE

Volume 13 Issue 3 Version 1.0 Year 2013

Type : Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals Inc. (USA)

Online ISSN: 2249-4626 & Print ISSN: 0975-5896

Two New Black Mildews from Western Ghats of Peninsular India

By V.B. Hosagoudar & A. Sabeena

Jawaharlal Nehru Tropical Botanic Garden and Research Institute, Kerala, India

Abstract - This note gives an account of two new species of black colony forming fungi, namely, *Meliola scleropyricola* and *Prillieuxina memecylonis* collected on *Scleropyrum penta-ndrum* and *Memecylon umbellatum*, respectively, and are one each from Kerala and Karnataka States. Both these species are described and illustrated in detail.

Keywords : india, new species, meliola, asterina, kerala, Karnataka.

GJSFR-C Classification : FOR Code: 060799



Strictly as per the compliance and regulations of :



Two New Black Mildews from Western Ghats of Peninsular India

V.B. Hosagoudar^a & A. Sabeena^σ

Abstract - This note gives an account of two new species of black colony forming fungi, namely, *Meliola scleropyricola* and *Prillieuxina memecylonis* collected on *Scleropyrum pentandrum* and *Memecylon umbellatum*, respectively, and are one each from Kerala and Karnataka States. Both these species are described and illustrated in detail.

Keywords : india, new species, meliola, asterina, kerala, Karnataka.

I. DESCRIPTION OF SPECIES

a) *Meliola Scleropyricola*

V.B. Hosagoudar and A. Sabeena **sp.nov.**

(Fig.1)

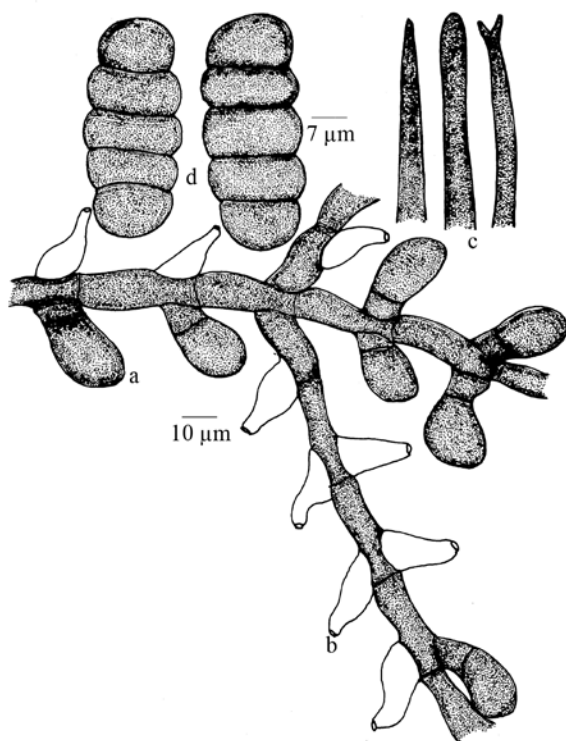


Figure 1 : *Meliola Scleropyricola*

a. Appressorium, b. Phialide, C. Apical portion of mycelia setae, d. Ascospores.

Colonies amphigenous, subdense to dense, velvety, up to 4 mm in diam., confluent. Hyphae substraight to flexuous, branching opposite to unilateral at acute to wide angles, loosely to closely

reticulate, cells 17-30 × 7-10 μm. Appressoria alternate, up to 5% opposite, rarely unilateral, antrorse, subantrorse to retrorse, straight to curved, 20-30 μm long; stalk cells cylindrical to cuneate, 5-12 μm long; head cells broadly ovate, globose, oblong, entire, 15-17 × 10-15 μm. Phialides mixed with appressoria, opposite, ampulliform, 15-22 × 5-12 μm. Mycelial setae simple, straight, obtuse to dentate at the tip, up to 950 μm long. Perithecia scattered, up to 150 μm in diam.; ascospores cylindrical to oblong, 4-septate, constricted at the septa, 47-57 × 17-22 μm.

b) Material Examined

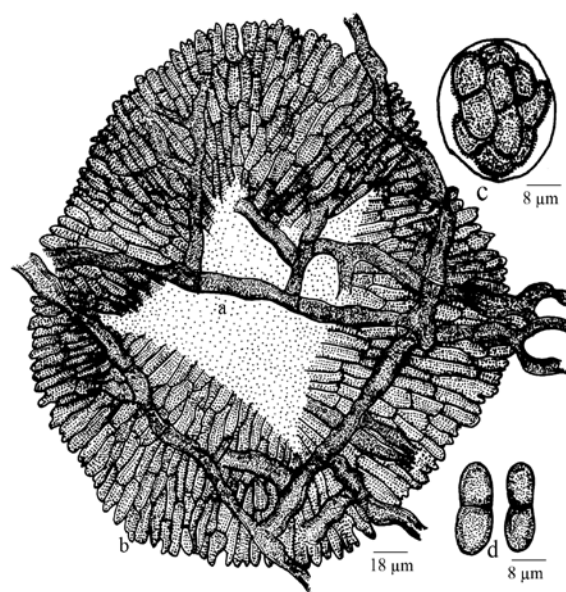
On leaves of *Scleropyrum pentandrum* (Dennst) Mabb. (Santalaceae), November 23, 2012, Jawaharlal Nehru Tropical Botanic Garden & Research Institute, Palode, Thiruvananthapuram, Kerala, A. Sabeena & al TBGT 6592 (holotype).

Meliola scleropyri is the only known species on this host from the Southern Western Ghats (Hosagoudar, 1996). However, *Meliola scleropyricola* differs from it in having 5% opposite appressoria and having notably larger ascospores (47-57 × 17-22 vs 32-36 × 11-12).

c) *Prillieuxina Memecylonis*

V.B. Hosagoudar and A. Sabeena, **sp. nov.**

(Fig. 2)



Prillieuxina Memecylonis

a. Mycelium, b. Thyriothecium, c. Ascus, d. Ascospores

Author α σ : Jawaharlal Nehru Tropical Botanic Garden and Research Institute, Palode 695 562, Thiruvananthapuram, Kerala, India.

E-mail : vbhosagoudar@rediffmail.com

Colonies hypophyllous, subdense, up to 3 mm in diameter, confluent. Hyphae flexuous to crooked, branching irregular at acute to wide angles, loosely to closely reticulate, cells 25-42 x 3-5 μ m. Appressoria absent. Thyriothecia scattered, orbicular, up to 250 μ m in diameter, stellately dehiscent at the centre; asci globose, octosporous, up to 20 μ m in diameter; ascospores conglobate, oblong, 1-septate, constricted at the septum, 17-20 x 7-10 μ m, wall smooth. Pycnothyria similar to thyriothecia; pycnothyriospores ovate, globose, unicellular, 12-17 x 7-10 μ m.

d) *Materialexamined*

On leaves of *Memecylon umbellatum* Burm.f. (Melastomataceae), Madikeri, Kodagu, Karnataka, December 31, 2002, V.B. Hosagoudar TBGT 6593 (holotype).

This is the first species of the genus *Prillieuxina* on this host genus (Stevens, & Ryan, 1939).

ACKNOWLEDGEMENTS

We thank Dr. P.G. Latha, Director, JNTBGRI, Palode for the facilities.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Hosagoudar, V.B. 1996. *Meliolales of India*. Botanical Survey of India, Calcutta, pp. 363.
2. Stevens, F.L. and Ryan, M.H. 1939. The Microthyriaceae. *Illinois Biological Monographs* 17: 1-138.

