

FUNGI FROM TROPICAL MOIST AND MIXED FOREST OF SHAHDOL REGION -I. SOME NEW RECORDS

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ABSTRACT

The present paper reports seven fungi collected from forest of Shahdol. *Tryblidiopycnis pinastri* Hohn. is a new generic record for India; *Dactylaria dioscoreae* M.B. Ellis makes a new addition to the fungi of India and rest viz., *Kendrikomyces indicus* Sutton, Rao & Mhasker, *Chaetospermum carneum* Tassi., *Excipularia narsapurensis* Subram., *Gyothrix cercinata* (Berk. & Curt.) Hughes, and *Triadelphia heterospora* Shearer & Crane constitute combinations on their respective substrates. A brief description of the fungi new to India has been discussed herewith.

INTRODUCTION

The Shahdol forest division lies between latitudes 22°88' and 23°34' North and longitudes 81°11' and 82°12' East. The entire division lies in the catchment of many principal rivers like Narmada, Johila, and Sone, and has vast array of vegetation nurtured under diverse sets of conditions. The high humidity along with medium air temperature of this region are quite ideal for the colonisation and growth of many saprophytic fungi. Since, the mycoflora of the region is unexplored, periodical survey was made which, yielded several saprophytic fungi colonizing dead and decaying substrates of forest trees. The present report deals with the description and illustration of some fungi.

MATERIAL AND METHOD

Periodical survey of different locations of south Shahdol including forests, gardens and nurseries was made. The standard techniques were used to collect and maintain fungi (Savile, 1962; Hawksworth, 1974; Agarwal & Hasija, 1986). The materials were first examined directly under binocular microscope to note the morphological characters of the fungi. Thereafter, thin transverse and longitudinal sections of fruiting bodies, if any, were taken and mounted in distilled water to note the exact colour, shape and size of hyaline structures. The sections or superficial colonies of fungi were also mounted in Lactophenol and cottonblue camera lucida drawings were made in water mounts at 10 x and 40 x magnifications. The colour terminology used in the text are as Rayner (1970).

1. *Tryblidiopycnis pinastri* Hohn. Ibid; 562 (1918).

Mycelium immersed, branched, septate, hyaline to sub-hyaline; conidiomata eustromatic, immersed, becoming erumpent, applanate aggregated, black,

multilocular, thick walled, outer wall composed of pseudoparenchymatous dark brown cells, inner wall is made up of thin walled prosenchymatous cells, non-ostiolate, up to 500 µm wide and 180 µm high; conidiophores simple, hyaline, septate, straight or flexuous, arise from inner most layer of locules, 15-20 x 2.5 µm; conidiogenous cells synchronous, holoblastic, discnetae, integrated, hyaline with 1-2 apical, small, unthickened, scarcely protuberant scars; conidia sickle shaped, hamate, aseptate, hyaline, eguttulate, thin walled, 20-30 x 1.0 µm (Fig. I).

Collected dry twigs of *Mallotus philippensis* Muell. (Euphorbiaceae), November, 1990, Kapildhara, Amarkantak, H.D.B.J. no. 19(b) leg U.S. Patel. This is first report of occurrence of this genus from India and *M. philippensis* is a new host combination.

2. *Dactylaria dioscoreae* M.B. Ellis. (Ellis, 1971).

Mycelium partly immersed, pale olivaceous brown, septate, 1-3 µm thick; conidiophores solitary or fasciculate, straight, septate, brown, paler towards the apex, smooth, upto 350 µm long and 4-5 µm thick; conidiogenous cells integrated, polyblastic, terminal, denticulate, denticles cylindrical, flat topped; conidia straight, cylindrical, ellipsoidal, rounded at the apex, conicotruncate at the base, subhyaline, to mid golden brown, smooth, 1-3 septate, mostly 2 septate, 24-32 x 4-6 µm (Fig. II).

Collected on dry stem of *Dioscorea bulbifera* L. (Dioscoreaceae), September, 1990, Rajendragram, south Shahdol (M.P.) H.D.B.J. no. 114 leg U.S. Patel. It is a new addition as well as new substrate fungus combination from India.

3. *Kendrikomyces indicus* Sutton, Rao & Mhasker. *Trans. Br. Mycol. Soc.* 67:243 (1967).

Collected on dead leaves and twigs of *Shorea*

Self
attested
U.S. Patel

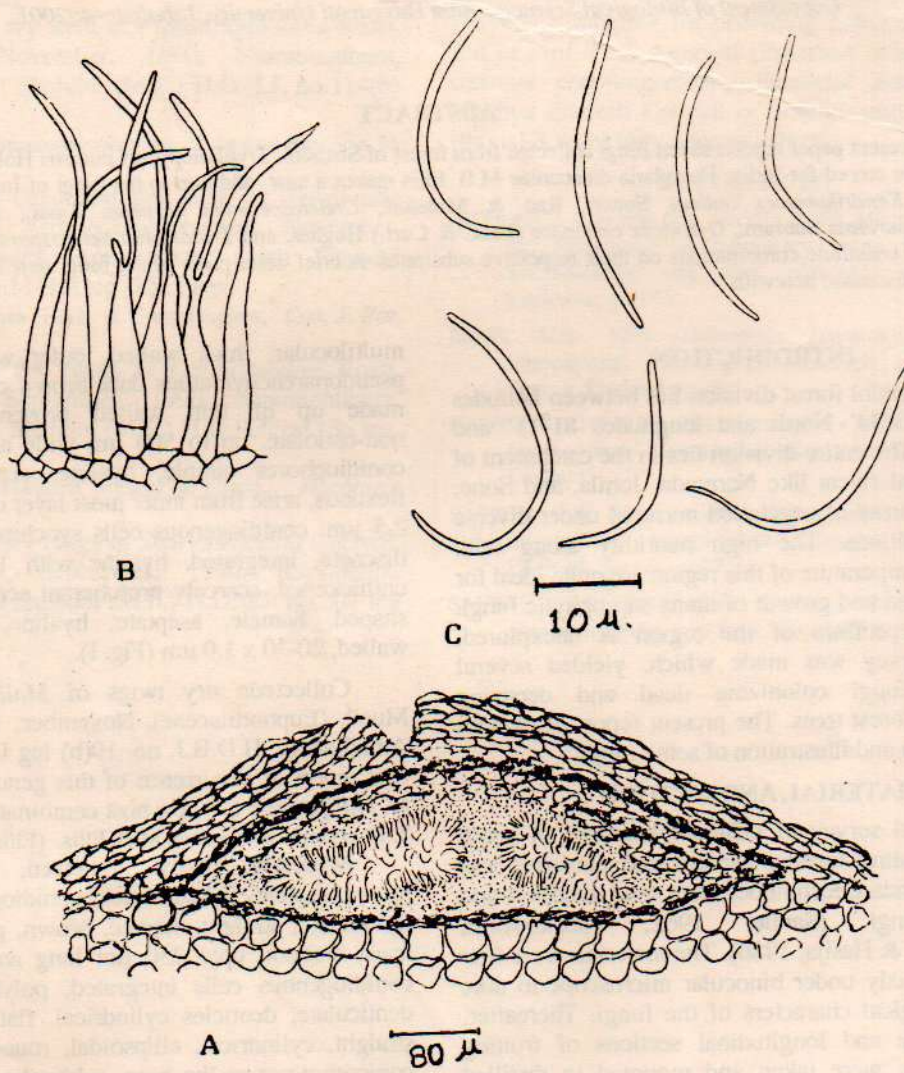


Fig 1. *Tryblidiopycnis pinastri* Hohn
A. Vertical section of a conidiomata
B. Conidiophores and developing conidia
C. Conidia

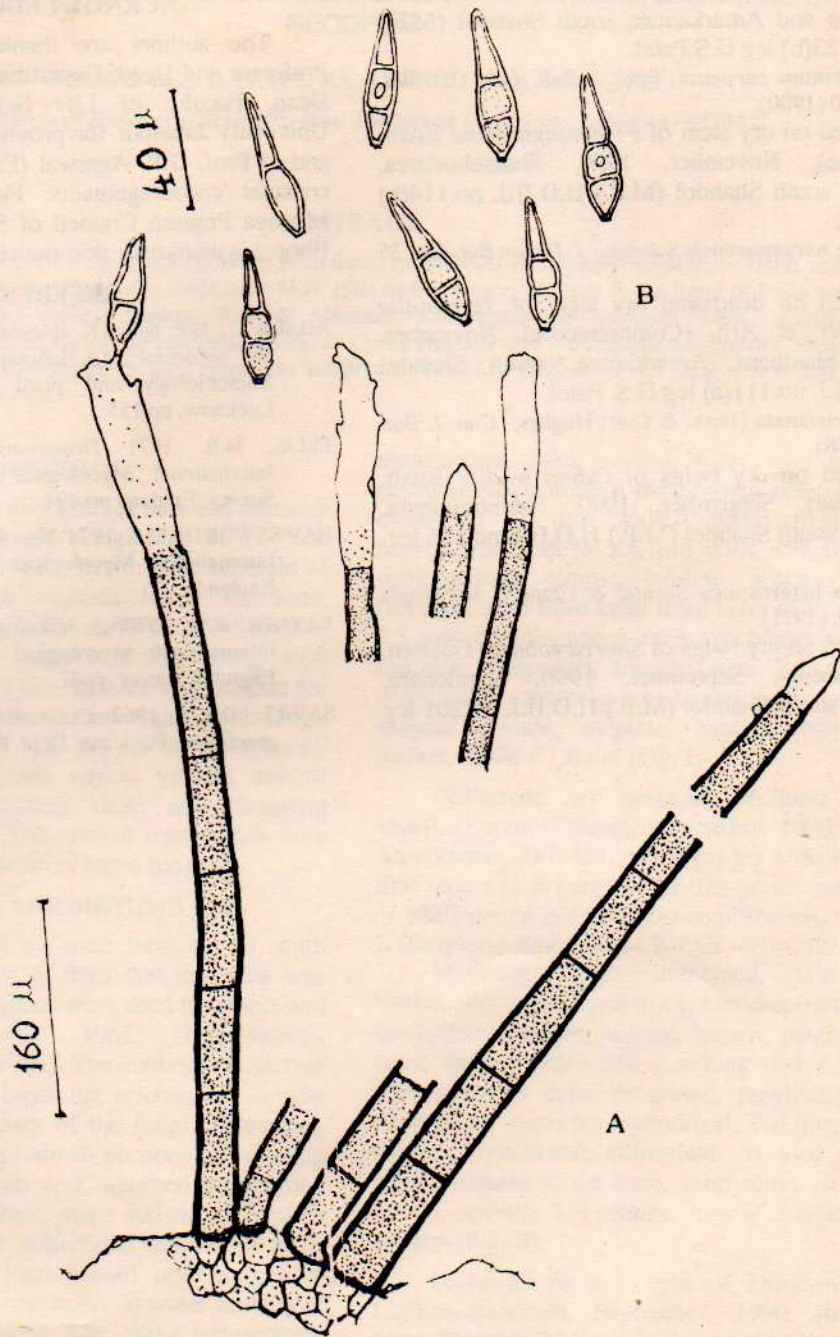


Fig II. *Dactylaria dioscoreae* M.B. Ellis
A. Conidiophores B. Conidia

robusta Gaerten. (Dipterocarpaceae), September, 1990, Rajendragram and Amarkantak, south Shahdol (M.P.) H.D.B.J. no. 23(b) leg U.S.Patel.

4. *Chaetospermum carneum* Tassi. * *Bull. Lab. Ort. Bot. Siena*. 3:130 (1900).

Collected on dry stem of *Flemmingia nana* Roxb. (Leguminosae), November, 1990, Shambhudhara, Amarkantak, south Shahdol (M.P.) H.D.B.J. no.114(b) leg U.S.Patel.

5. *Excipularia narsapurensis* Subram. * *J. Indian Bot. Soc.* 35 :56 (1956).

Collected on dead and dry stem of *Terminalia tomentosa* Wt. et Arn. (Combretaceae), November, 1990, Shambhudhara, Amarkantak, south Shahdol (M.P.) H.D.B.J. no.111(a) leg U.S. Patel.

6. *Gyrothrix circinata* (Berk. & Curt) Hughes, * *Can. J. Bot.* 36:771 (1958).

Collected on dry twigs of *Odina wodier* Roxb. (Anacardiaceae), September, 1990, Shambhudhara, Amarkantak, south Shahdol (M.P.) H.D.B.J. no.136 leg. U.S.Patel.

7. *Triadelphia heterospora* Shearer & Crane. * *Mycologia* 63:247- 249, (1971).

Collected on dry twigs of *Shorea robusta* Gaerten. (Dipterocarpaceae), September, 1990, Kapildhara, Amarkantak, south Shahdol (M.P.) H.D.B.J. no.201 leg U.S.Patel.

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* New host record.