NEW SPECIES OF TRETOSPORA (FUNGI IMPERFECTI: HYPHOMYCETES) FROM KERALA, INDIA

V.B. Hosagoudar, P.A. Jose and A.G. Pandurangan

Microbiology Division, Tropical Botanic Garden and Research Institute, Palode, Thiruvananthapuram, Kerala 695562, India

Abstract

Tretospora ochreinaucleae is a new species described and illustrated on an endemic plant Ochreinauclea missionis from Kerala, India.

Keywords

Hyphomycetes, new description, Tretospora ochreinaucleae sp. nov., Kerala, India

Introduction

During the study of reproductive biology of Ochreinauclea missionis, an endemic plant of the Western Ghats of Peninsular India (Ahmedullah & Nair, 1986; Ahmedullah, 1990; Jose et al., 2000), a severe fungal infection was noticed on the leaves. The fungus persisted round the year in its anamorph state and also produced perithecia without asci.

Tretospora ochreinaucleae sp. nov. (Fig.-1)

Material examined

Holotype: 10.x.2000, Tropical Botanic Garden and Research Institute Campus, Palode, Thiruvananthapuram, Kerala, India, coll. Jose, on leaves of Ochreinauclea missionis (Wallich ex G. Don) Ridsd. (Rubiaceae), HCIO 43978. Isotype: TBGT 408

Etymology

Named after the host genus Ochreinaucleea

Diagnostic features

Colonies folicolae, amphigenous, plerumque hypophyllae, nigrae, densae, patentiae, ad 2mm diam., confluentes. Hyphae pallide brunneae, subrectae vel leniter sinuosae, irregulariter ramosae, ad angulum acutum vel latum patentes, laxe reticulatae, cellularae 19-28 x 3-4µm. Appressoria alternata, unilateral, rarely opposite, sessile, globose, deep brown, suboblate to deeply lobate, 7-9 x 6-7µm. Conidiophores produced laterally from the hyphae, numerous, macronematous, mononematous, unicellular, reduced to conidiogenous cells, mostly straight, rarely slightly curved to flexuous, bulbous at the base, black at the tip, 16-24 x 3-6µm. Conidiophores produced laterally from the hyphae, numerous, macronematous, mononematous, unicellular, reduced to conidiogenous cells, mostly straight, rarely slightly curved to flexuous, bulbous at the base, black at the tip, 16-24 x 3-6µm. Conidiophores produced laterally from the hyphae, numerous, macronematous, mononematous, unicellular, reduced to conidiogenous cells, mostly straight, rarely slightly curved to flexuous, bulbous at the base, black at the tip, 16-24 x 3-6µm. Conidiophores produced laterally from the hyphae, numerous, macronematous, mononematous, unicellular, reduced to conidiogenous cells, mostly straight, rarely slightly curved to flexuous, bulbous at the base, black at the tip, 16-24 x 3-6µm. Conidiophores produced laterally from the hyphae, numerous, macronematous, mononematous, unicellular, reduced to conidiogenous cells, mostly straight, rarely slightly curved to flexuous, bulbous at the base, black at the tip, 16-24 x 3-6µm. Conidiophores produced laterally from the hyphae, numerous, macronematous, mononematous, unicellular, reduced to conidiogenous cells, mostly straight, rarely slightly curved to flexuous, bulbous at the base, black at the tip, 16-24 x 3-6µm. Conidiophores produced laterally from the hyphae, numerous, macronematous, mononematous, unicellular, reduced to conidiogenous cells, mostly straight, rarely slightly curved to flexuous, bulbous at the base, black at the tip, 16-24 x 3-6µm. Conidiophores produced laterally from the hyphae, numerous, macronematous, mononematous, unicellular, reduced to conidiogenous cells, mostly straight, rarely slightly curved to flexuous, bulbous at the base, black at the tip, 16-24 x 3-6µm.

Numerous collections of this fungus revealed only conidia and the initials of perithecia. Sivanesan (1981) gave an account of twelve species of the genus Balladynopsis and categorised them into four groups. Of them, the species...
with entire appressoria have *Tretospora* anamorphs. Hence, the present species differs from them in having sublobate to lobate appressoria. *Tretospora himalayana* Chaudhary & S.K. Singh and *T. shoreae* M.K. Khan and Kamal are known on hosts of Thymelaeeaceae and Dipterocarpaceae (Chaudhary & Singh, 1996; Khan et al., 1993). *Tretospora indica* Narayan & Kamal and *T. theitei* Hosag. et al. are known on the members of the family Rubiaceae (Narayan & Kamal, 1986; Hosagoudar et al., 1998) but the present species differs from both in having sublobate to lobate appressoria.

**Acknowledgements**

Thanks are due to Dr. G.M. Nair, Director, and Dr. T.K. Abraham, Deputy Director, TBGRI, Palode for the facilities. Dr. U. Braun is gratefully acknowledged for the review of the manuscript.

**References**


**Figure 1.** *Tretospora ochreinaucleae* sp. nov.

* a - Appressoriate mycelium; b - conidiophores; c - conidia