ISSN (print) 0093-4666 ISSN (online) 2154-8889

MYCOTAXON

DOI: 10.5248/114.373

Volume 114, pp. 373–376 *October–December 2010*

A new species of *Minimelanolocus* from Fujian, China

Yi-Dong Zhang, Jian Ma, Li-Guo Ma & Xiu-Guo Zhang*

zhxg@sdau.edu.cn, sdau613@163.com
Department of Plant Pathology, Shandong Agricultural University
Taian, 271018, China

Abstract — *Minimelanolocus chimonanthi* sp. nov. is described and illustrated occurring on dead branches of *Chimonanthus nitens*. The specimen was collected from tropical forests in Fujian Province of China. The type specimen is deposited in HSAUP (Herbarium of the Department of Plant Pathology, Shandong Agricultural University) with an isotype in HMAS (Mycological Herbarium, Institute of Microbiology, Chinese Academy of Sciences).

Key words —anamorphic fungi, taxonomy

Introduction

Castañeda & Heredia established the genus *Minimelanolocus* based on 12 previously described species of *Pseudospiropes* M.B. Ellis, *Helminthosporium* Link, and *Belemnospora* P.M. Kirk with *M. navicularis* (R.F. Castañeda) R.F. Castañeda as the type species. The generic characteristics of *Minimelanolocus* include macronematous, mononematous, dark conidiophores, holoblastic, polyblastic, indeterminate, terminal becoming intercalary, integrated conidiogenous cells with holoblastic sympodial extensions and inconspicuous or slightly prominent, narrow, opaque, refractive to somewhat obscure dehiscence scars, and euseptate conidia; conidial secession is schizolytic (Castañeda et al. 2001).

To date, of the 18 taxa of *Minimelanolocus* accepted worldwide, most are saprobes on rotten leaves or dead twigs, dead wood, and bark. Five species (*M. endospermi*, *M. pterocarpi*, *M. magnoliae*, *M. machili, M. camelliae*) have been reported from China (Ma et al. 2008, Zhang et al. 2009). A survey of the saprobic fungi on dead wood from tropical forest in Fujian Province of China has revealed a previously undescribed species of *Minimelanolocus*. It is proposed herein as new.

*Corresponding author

Fig. 1. *Minimelanolocus chimonanthi*
A. Conidiophores conidiogenous cells with conidia. B. Conidia.

Taxonomy

Minimelanolocus chimonanthi Y.D. Zhang & X.G. Zhang, **sp. nov.** Fig 1

MycoBank MB 518829

Coloniae effusae in substrato naturali, brunneae, pilosae. Mycelium partim superficiale et partim immersum, ex hyphis ramosis, septatis, pallide brunneis, laevibus, 2–3 µm crassis compositum. Conidiophora macronematosa, mononematosa, solitaria, nonramosa, erecta, recta vel flexuosa, laevia, atro-brunnea, apice versus pallidiora, 5–10-septata, 160–250 µm longa, 6.5–10.5 µm crassa, circa apicem 5.5–6.5 µm crassa. Cellulae conidiogenae holoblasticae, polyblasticae, in conidiophoris incorporatae, indeterminatae, sympodialiter extendentes, terminales deinde intercalares, pallide brunneae. Loci conidiogeno inconspicuo vel leviter prominentibus, subobscuro. Conidia late fusiformia, breviter rostrata ad apicem, hyalina, solitaria, acropleurogena, simplicia, brunneae, laevia, 5-7-euseptata, 26–35 µm longa, 6.5–10 µm crassa. Conidiorum secessio schizolytica.

Holotype: on dead branches of *Chimonanthus nitens* Oliv. (*Calycanthaceae*), forest park of Wuyishan, Fujian Province, China, 16 Aug. 2009, Y.D. Zhang, HSAUP H3002 (isotype HMAS 146111).

Etymology: in reference to the host genus, *Chimonanthus*.

Colonies effuse on natural substratum, brown, hairy. Mycelium partly superficial, partly immersed, composed of branched, septate, pale brown, smooth-walled hyphae, 2–3 µm thick. Conidiophores macronematous, mononematous, unbranched, erect, straight or flexuous, smooth, dark brown, paler towards the apex, 5–10-septate, 160–250 µm long, 6.5–10.5 µm thick, near the apex 5.5–6.5 µm thick. Conidiogenous cells polyblastic, integrated, indeterminate, sympodial, terminal becoming intercalary, pale brown. Conidiogenous loci inconspicuous or slightly prominent. Conidia broadly fusiform, shortly rostrate at the apex, hyaline, solitary, acropleurogenous, simple, brown, smooth-walled, 5–7-euseptate, 26–35 µm long, 6.5–10 µm thick in the broadest part. Conidial secession schizolytic.

The conidia of *M. chimonanthi* are similar to those of *M. navicularis* (Castañeda et al. 2001). However, the conidia of *M. chimonanthi* are hyaline and larger than those of *M. navicularis* (26–35 × 6.5–10 µm vs. 20–25 × 6–8 µm). In addition, the conidia of *M. chimonanthi* are 5–7 septate while those of *M. navicularis* are only 3 septate.

Acknowledgments

The authors are grateful to Dr Eric H.C. McKenzie and Dr R.F. Castañeda Ruiz for serving as pre-submission reviewers and for their valuable comments and suggestions. This project was supported by the National Natural Science Foundation of China (No. 30770015, 30499340, 2006FY120100).

Literature cited

Castañeda Ruíz RF, Heredia G, Reyes M, Arias RM, Decock C. 2001. A revision of the genus *Pseudospiropes* and some new taxa. Cryptogamie Mycologie 22: 3–18. doi:10.1016/S0181-1584(01)01057-0

Ma J, Zhang K, Zhang XG. 2008. Two new species of the genus *Minimelanolocus* in China. Mycotaxon 104: 147–151.

Zhang K, Fu HB, Zhang XG. 2009. Taxonomic studies of *Minimelanolocus* from Yunnan, China. Mycotaxon 109: 95–101.