



Article

***Hymenochaete* (Hymenochaetales, Basidiomycota) in China. 6. *H. fissurata* sp. nov. from Yunnan and Sichuan Provinces**

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Abstract

A new species, *Hymenochaete fissurata* is reported from Yunnan and Sichuan Provinces, Southwestern China. It is characterized by hard and densely cracked basidiocarps, presence of a distinct cortex and hyphal layer (in section *Hymenochaete*), compacted and cemented hyphae, relatively short setae, which is compared morphologically with similar species. A key to all the 31 species of *Hymenochaete* recorded in Yunnan and Sichuan Provinces is provided.

Key words: Hymenochaetales, new species, taxonomy, wood-inhabiting fungi

Introduction

Hymenochaete Lév. is an ecologically important genus of wood-inhabiting Basidiomycota. It is widespread with more than 120 species known in the world (Léger 1998, He & Dai 2012). Traditionally, species of this genus are characterized by red, brown, umber-brown to dark brown and resupinate, effused-reflexed to pileate basidiocarps, smooth hymenophore, abundant hymenial setae, simple septate generative hyphae, and the ability to cause white rot (Parmasto 1995, 2001, Dai 2010). However, the results of molecular phylogenetic studies of *Hymenochaete* and allied genera show that species of *Hymenochaete* with narrowly cylindrical basidiospores and encrusted setae belong to the genus *Pseudochaete* T. Wagner & M. Fisch., and some species of *Cyclomyces* Kunze ex Fr. and *Hydnochaete* Bres. with hydroid, lamellate or poroid hymenophores were embedded among *Hymenochaete* species in the phylogenetic trees (Wagner & Fisher 2002, He & Dai 2012).

The area of Yunnan, Sichuan and the adjacent provinces in the Southwestern China is a hotspot of biodiversity rich in vascular plants and wood-inhabiting fungal species. Although many reports on polypores in the region have been published in the last decade (Dai *et al.* 2007, 2009, 2011, Yuan & Dai 2008a, b, Cui *et al.* 2011, Dai 2012), other groups of wood-inhabiting fungi are understudied (Dai 2011).

In 2011 and 2012, several intensive surveys of *Hymenochaete* in Yunnan and Sichuan Provinces were carried out, and about 280 specimens were collected. Two new species and five new Chinese records were discovered within these specimens (He & Li 2011, 2012; He & Dai 2012). Recently, an unknown species collected in both Yunnan and Sichuan Provinces at altitudes of more than 3000 m was brought to our attention. This species has hard and densely cracked basidiocarps, a distinct cortex and hyphal layer (in section *Hymenochaete*), compacted and cemented hyphae, relatively short setae, and small basidiospores. We describe and illustrate it as the new species *Hymenochaete fissurata* in the present paper.