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Dendrodontia hyphopaxillosa (Basidiomycota, Polyporaceae), a new species with dense hyphal pegs from southern China

MENG-JIE LI[1, 2] & HAI-SHENG YUAN[1]*

[1] *State Key Laboratory of Forest and Soil Ecology, Institute of Applied Ecology, Chinese Academy of Sciences, Shenyang 110164, P. R. China*
[2] *University of Chinese Academy of Sciences, Beijing 100049, China*
Corresponding author: e-mail: hsyuan@iae.ac.cn; tel. & fax number: +86-24-83970348

Abstract

Dendrodontia hyphopaxillosa, a new epithelioid species from southern China in Polyporaceae is described and illustrated. The species is characterized by resupinate, adnate, effused basidiocarps, densely distributed cylindrical hyphal pegs, frequently branched contorted dendrohyphidia and small ellipsoid to subcylindrical basidiospores. Discriminating characters between the new species and closely related species are discussed, and an identification key to the species of *Dendrodontia* is provided.

Key words: epithelioid, taxonomy, wood-inhabiting fungi

Introduction

Dendrodontia Hjortstam & Ryvarden is a small genus hitherto known to consist of four species (Hjortstam & Ryvarden 1980, Boidin & Gilles 1998, Wang & Wu 2010, Rodrigues & Guerrero 2012) and is typified by *Grandinia bicolor* P.H.B. Talbot (Wakefield 1948). The genus is mainly characterized by resupinate, adnate, effused basidiocarps, dimitic hyphal system, abundant dendrohyphidia, and thin-walled ellipsoid to subcylindrical inamyloid basidiospores (Hjortstam & Ryvarden 1980). Although *Dendrodontia* relates to *Epithele* (Pat.) Pat. in macroscopic features by having resupinate basidiocarps with sterile hyphal pegs, most species in *Epithele* have monomitic hyphal system and rather large basidia and basidiospores than the other species in Polyporaceae (Eriksson & Ryvarden 1975). *Dendrodontia* is also related to *Dentocorticium* (Parmasto) M.J. Larsen & Gilb., but the former can be well distinguished in possessing tuberculate to odontioid hymenial surface, dimitic hyphal system, and brownish skeletal hyphae (Larsen & Gilbertson 1974).

Wood-inhabiting fungi are important components of forest ecosystems. Various ecological environments and climate conditions in China have led to high mycodiversity, and more than 1200 poroid, hydnoid, and corticioid taxa have been recorded in China (Dai 2011, 2012, Dai *et al.* 2009, 2007). During the studies of wood-inhabiting fungi in Guangxi Autonomous Region, southwest of China, two specimens of a wood-inhabiting fungus with hyphal pegs were collected on fallen angiosperm branches. Morphological characters suggested an affinity with *Dendrodontia*, but the fungal specimens could not be assigned to any one of the four species of this genus. Therefore, we propose *D. hyphopaxillosa* as a new *Dendrodontia* species. The new species is described and illustrated, and its relationship with the other species is discussed.

Materials and methods

The studied specimens are deposited at the biological herbarium of Institute of Applied Ecology, Chinese Academy of Sciences (IFP). The microscopic procedure follows Dai (2010). The microscopic studies were made from

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- Basidiospores ellipsoid to subcylindrical 4
4. Hyphal pegs crowded, 100–130 per mm^2, basidiospores 5.5–6.7 × 2.2–3 µm ..... *D. hyphopaxillosa*
- Hyphal pegs sparse, 30–40 per mm^2, basidiospores 7–8.5 × 2.8–3.5 µm..... *D. bicolor*

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