

Article



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A new species of Roseodiscus (Ascomycota, Fungi) from tropical China

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Abstract

A new species, *Roseodiscus sinicus* is described and illustrated. The fungus, collected on stems of an unknown monocotyledon, is characterized by dirty white apothecia, large and thin-walled ectal excipulum cells, *Calycina*-type ascus apical ring, and ellipsoid, multiguttulate ascospores. The placement of the new species in *Roseodiscus* was also supported by ITS rDNA sequence analysis. The distinctions between the new species and related taxa are discussed.

Key words: helotiaceous fungi, morphology, sequence analysis, taxonomy

Introduction

The genus *Roseodiscus* Baral in Baral & Krieglsteiner (2006: 16) was established and typified by *R. rhodoleucus* (Fr.) Baral in Baral & Krieglsteiner (2006: 17) to accommodate three species segregated from *Hymenoscyphus*, and featuring a mainly rosy hymenium surface and amyloid apical ring of *Calycina*-type (Baral & Krieglsteiner 2006). An additional bryophilous species was later added to the genus (Wieschollek *et al.* 2011). *Roseodiscus* is characterized by pale rose-lilaceous hymenium, ectal excipulum of large-celled, thin-walled and non-gelatinized textura prismatica, externally covered by a loose network of hyphae, asci arising from croziers and with an amyloid apical ring of *Calycina*-type, and parasitic to saprophytic on Bryophyta and *Equisetum* (Baral & Krieglsteiner 2006).

The rosy tint is not uniformly present in all species of *Roseodiscus* although the generic name refers to the rosy hymenium surface. In *R. equisetinus* (Velen.) Baral in Baral & Krieglsteiner (2006: 17), the hymenium surface is dirty white according to Velenovský (1934). Presence of croziers at ascus base was stated in the generic description, but many genera of Helotiaceae include species with asci arising either from croziers or from simple septa. Substrates of saprophytic species are critical and often variable among species of a genus or even collections of a same species. This is true in the genus *Roseodiscus*, e.g. *R. subcarneus* (Sacc.) Baral in Baral & Krieglsteiner (2006: 17) is both bryicolous (parasitic on living mosses) and lignicolous (growing on log of *Picea abies*).

During a survey of helotiaceous fungi from tropical China, the morphology of a collection on an unknown monocotyledon plant fits well the concept of *Roseodiscus*, except for its dirty white hymenium surface. The fungus is treated as new to *Roseodiscus* based on morphological and ITS rDNA sequence data.

Material and methods

The specimen examined was collected from Yunnan Province, China and deposited in the Mycological Herbarium, Institute of Microbiology, Chinese Academy of Sciences (HMAS). ITS rDNA sequences used for analysis are listed in Table 1.