

Outlineoffungi.org - Note 1518 *Climacocystaceae*

Web-links: [Index Fungorum](#), [Facesoffungi](#), [MycoBank](#), [GenBank](#)

Climacocystaceae B.K. Cui, Shun Liu & Y.C. Dai

Climacocystaceae was erected to accommodate *Climacocystis* Kotl. & Pouzar as the type genus and *Climacocystis borealis* (Fr.) Kotl. and Pouzar as the type species according to morphological characteristics and phylogeny using the combined sequence dataset of ITS, nLSU, RPB1, RPB2, and TEF1 (Liu et al. 2023). In the family *Gloeoporellaceae*, the basidiomata are annual, displaying a pileate shape and ranging from resupinate to effused-reflexed. When fresh, they appear soft, corky, and watery, while becoming brittle and transitioning to a corky or hard corky texture when dry. The hymenophores are poroid, and the hyphal system is monomitic, dimitic, or trimitic, featuring generative hyphae with clamp connections and skeletal hyphae that are IKI– and CB–. Cystidia may be present or absent, with cystidioles occasionally noted. Basidiospores are broadly ellipsoid to globose-shaped, colorless, thin- to slightly thick-walled, smooth, and are characterized as IKI– and CB–, contributing to the white rot (Liu et al. 2023). Phylogenetically, the family *Climacocystaceae* is closely related to several white-rot fungal families, including *Hyphodermataceae*, *Meripilaceae*, *Podoscyphaceae*, and *Steccherinaceae* (Liu et al. 2023). The family *Climacocystaceae* is classified under *Polyporales*, *Agaricomycetes*, *Agaricomycotina*, and *Basidiomycota* (Liu et al. 2023).

Reference

Liu S, Zhou JL, Song J, Sun YF, Dai YC, Cui BK. 2023 – *Climacocystaceae* fam. nov. and *Gloeoporellaceae* fam. nov., two new families of *Polyporales* (*Basidiomycota*). *Frontiers in Microbiology* 14, 1115761.

Entry by

Maryam Tavakol Noorabadi, Innovative Institute for Plant Health, Zhongkai University of Agriculture and Engineering, Guangzhou 510225, People's Republic of China

(Edited by **Kevin D Hyde**)

Published online 26 August 2024