Outlineoffungi.org - Note 1519 *Gloeoporellaceae*

Web-links: Index Fungorum, Facesoffungi, MycoBank, GenBank

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

Gloeoporellaceae was erected to accommodate *Gloeoporellus* Zmitr. and *Gloeoporellus merulinus* (Berk.) Zmitr. according to morphological characteristics and phylogeny using the combined sequence dataset of ITS, nLSU, RPB1, RPB2, and TEF1 (Liu et al. 2023). In *Gloeoporellaceae*, basidiomata are annual, either resupinate or effused-reflexed, exhibiting a soft corky texture when fresh and becoming corky to fragile upon drying. The hymenophores are poroid, and the hyphal system is dimitic, consisting of generative hyphae with clamp connections, binding hyphae IKI–, and CB+. Cystidia are absent, while cystidioles are present. The basidiospores are allantoid, colorless, thin-walled, smooth, and are IKI–, CB–, associated with white rot (Liu et al. 2023). *Gloeoporellaceae* is classified under *Polyporales*, *Agaricomycetes*, *Agaricomycotina*, and *Basidiomycota* (Liu et al. 2023). Phylogenetically, *Gloeoporellaceae* formed a sister clade with the family *Fragiliporiaceae*. Morphologically, *Fragiliporiaceae* closely resembles *Gloeoporellaceae*, sharing characteristics such as an annual growth habit, resupinate basidiomata, clamped generative hyphae, and thin-walled basidiospores. However, distinct differences emerge: *Fragiliporiaceae* features brittle basidiomata, a pore surface that ranges from grayish-buff to lavender when fresh, transitioning to vinaceous gray or grayish-brown upon drying. It possesses larger pores, a monomitic hyphal system, and comparatively larger allantoid basidiospores (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 Auguest 2024