

Outlineoffungi.org - Note 1075 *Zyzygomyces*

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Zyzygomyces Diederich, Millanes & Wedin

Liu et al. (2015) introduced a phylogenetic classification system for yeasts and closely related filamentous taxa within the *Tremellomycetes*. They constructed this framework using a comprehensive seven-gene phylogeny, incorporating sequences from 5.8S, D1D2, SSU, *rpb1*, *rpb2*, *tef1*, and CYTB genes. In the *Filobasidiales* clade, there are species belonging to *Cryptococcus* (such as *C. arrabidenensis* Á. Fonseca, Scorzetti & Fel, along with five undescribed *C. sp.*) and *Syzygospora* (including *S. bachmannii* Diederich & M.S. Christ and *Syzygospora physciacearum* Diederich). Liu et al. (2015) initially classified them under the name *Heterocephalacria*. Primarily due to morphological resemblances between *Heterocephalacria solida* Berthier (the type species of *Heterocephalacria*) and the two *Syzygospora* species. However, *Heterocephalacria* lacked molecular data at that time. Subsequently, Diederich et al. (2023) sequenced species of *Heterocephalacria solida* and discovered that it does not belong to *Filobasidiales* but rather falls within *Tremellales* based on ITS and LSU sequences. Consequently, the proposed genus *Zyzygomyces* is suggested to accommodate the two *Syzygospora* species, with *Syzygospora bachmannii* designated as the type species (Diederich & M. S. Christ.) Diederich & Millanes (Diederich et al. 2023). Species from this genus are all lichenicolous. There are 12 species accepted in this genus including four unnamed species that remained as “sp.” according Diederich et al. (2023).

References

- Diederich P, Millanes AM, Flakus A, Rodriguez-Flakus P et al. 2022 – Class *Tremellomycetes*, order *Filobasidiales*. In: Diederich et al. (eds.), *Flora of Lichenicolous Fungi*, Vol. 1, *Basidiomycota*. National Museum of Natural History, Luxembourg: 83–104. <https://doi.org/10.35535/pfsyst-2022-0010>
- Liu XZ, Wang QM, Göker M, Groenewald M et al. 2015 – Towards an integrated phylogenetic classification of the Tremellomycetes. *Studies in Mycology*. 81(1), 85–147.

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