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Pleurocordyceps Y.J. Yao, Y.H. Wang, S. Ban, W.J. Wang, Yi Li, Ke Wang & P.M. Kirk

Wang et al. (2021) introduced Pleurocordyceps under Polycephalomycetaceae (Hypocreales, Sordariomycetes, Ascomycota) to accommodate ten entomopathogenic species based on morphology and phylogenetic analyses (Chen et al., 1984; Wang et al., 2021; Xiao et al., 2023). This genus was typified by Pleurocordyceps sinensis (Q.T. Chen, S.R. Xiao & Z.Y. Shi) W.J. Wang, X.L. Wang, Y. Li, S.R. Xiao & Y.J. Due to its lateral fertile pulvinate stromata near the tip of the sexual morph and its two types of phialides and conidia in the asexual morph, Pleurocordyceps differs from other similar genera (Wang et al., 2021; Xiao et al., 2023). Commonly reported associations with *Pleurocordyceps* include one fungus genus (Ophiocordyceps) and six insect orders (Coleoptera, Hymenoptera, Hemiptera, Lepidoptera, Orthoptera, and Homoptera) (Xiao et al., 2023). With 16 accepted species, Pleurocordyceps is the most diverse genus in the family Polycephalomycetaceae (Wang et al., 2021; Xiao et al., 2023). Molecular analyses of the multi-locus dataset (ITS, SSU, LSU, tef1, rpb1, and rpb2) have confirmed that the genus belongs to a monophyletic clade that is basal to the Polycephalomycetaceae (Wang et. al., 2021). Future research could focus on amassing additional samples to describe the diversity of polycephalomyces-like fungi (Xiao et al., 2023).

References

- Wang YH, Ban S, Wang WJ, Li Y, Wang K, Kirk PM et al. 2021 *Pleurocordyceps* gen. nov. for a clade of fungi previously included in Polycephalomyces based on molecular phylogeny and morphology. Journal of Systematics and Evolution 59, 1065–1080. https://doi.org/10.1111/jse.12705
- Chen QT, Xiao SR, Shi ZY 1984 *Paecilomyces sinensis* sp. nov. and its connection with *Cordyceps sinensis*. Acta Mycologica 24–28.
- Wang WJ, Wang XL, Li Y, Xiao SR, Kepler RM, Yao YJ 2012 Molecular and morphological studies of *Paecilomyces sinensis* reveal a new clade in clavicipitaceous fungi and its new systematic position. Systematics and Biodiversity 10(2), 221–232. https://doi.org/10.1080/14772000.2012.690784
- Xiao YP, Wang YB, Hyde KD et al in prep *Polycephalomycetaceae*, a new family of clavicipitoid fungi segregates from *Ophiocordycipitaceae*. https://www.researchsquare.com/article/rs-1478509/v1

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