

Outlineoffungi.org - Note 1101 *Capillidiaceae*

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Capillidiaceae Y. Nie, Stajich & K.T. Hodge

The monogenetic family *Capillidiaceae* originated from the rank elevation of the genus *Capillidium* B. Huang & Y. Nie to the family level by [Gryganskyi et al. \(2022\)](#) using phylogenetic analyses based on molecular and genomic data. Initially, [Nie et al. \(2019\)](#) erected the genus *Capillidium* to accommodate species previously placed in *Conidiobolus* sensu lato (*Conidiobolaceae*). [Gryganskyi et al. \(2022\)](#) placed one genus and ten species in *Capillidiaceae*, with *Capillidium* and *C. heterosporum* (Drechsler) B. Huang & Y. Nie as the type genus and species, respectively. *Capillidiaceae* occupies a sister position to a clade encompassing *Batkoaceae*, *Entomophthoraceae*, and *Neoconidiobolaceae* in the phylogenetic reconstruction based on 18S, 28S, EF-1 α , SSU, and genome-scale data ([Gryganskyi et al. 2022](#)). Conversely, the family was placed sister to *Neoconidiobolaceae* in [Saussure et al. \(2023\)](#) with a phylogenetic tree based solely on LSU sequences. Members of *Capillidiaceae* are easy to culture on artificial nutrient media, are no insect pathogens, and their shared ancestors with other basal lineages of entomophthoralean fungi were probably saprotrophic ([Gryganskyi et al. 2022](#)).

References

- Gryganskyi AP, Nie Y, Hajek AE, Hodge KT et al. 2022 – The Early Terrestrial Fungal Lineage of *Conidiobolus* – Transition from Saprotroph to Parasitic Lifestyle. *Journal of Fungi* 8(8), 789. <https://doi.org/10.3390/jof8080789>
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