

## Outlineoffungi.org - Note 1100 *Conidiobolaceae*

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

***Conidiobolaceae*** B. Huang, Stajich & K.T. Hodge

*Conidiobolaceae* is established to accommodate the five genera resulting from the division of *Conidiobolus* sensu largo (Gryganskyi *et al.* 2022). *Conidiobolaceae* includes three genera: *Azygosporus* B. Huang & Y. Nie (2 accepted species), *Conidiobolus* sensu stricto (17 accepted species), and *Micronocidiobolus* B. Huang & Y. Nie (3 accepted species). *Conidiobolus* Bref. and *C. utriculosus* Bref are the type genus and species, respectively. *Conidiobolaceae* forms the most basal clade of all sampled *Entomophthoromycotina* in Gryganskyi *et al.* 2022 and Saussure *et al.* (2023). This family, like other basal lineages in *Entomophthoromycotina*, mainly consists of soil-borne saprotrophic species and a few arthropod pathogens with a wide breadth of host ranges (Sacco and Hajek 2023). Indeed, *Conidiobolaceae* is one of the basal families with most species infecting multiple arthropod orders (Sacco and Hajek 2023). For example, *Conidiobolus coronatus* has one of the broadest host ranges of the entire family (Gryganskyi *et al.* 2022; Sacco and Hajek 2023). Recently, two new species from China were described in the genus *Conidiobolus* s.s., namely *C. longiconidiophorus* and *C. polysporus* (Nie *et al.* 2023). According to these authors, *Microconidiobolus* should be placed in a separate family. The lack of genomic or transcriptomic data prevents assigning a higher taxonomic level to *Microconidiobolus* (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>
- 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>
- Nie Y, Cai Y, Zhao H, Zhou Z *et al.* 2023 – Morphological and phylogenetic analyses reveal two new species in *Conidiobolus* s.s. (*Conidiobolaceae*, *Entomophthorales*) from China. *Mycobank* 98, 221–232, <https://doi.org/10.3897/mycokeys.98.103603>
- Sacco NE, Hajek AE. 2023 – Diversity and Breadth of Host Specificity among Arthropod Pathogens in the *Entomophthoromycotina*. *Microorganisms* 11(7), 1658, <https://doi.org/10.3390/microorganisms11071658>
- Saussure S, Jensen AB, Davey ML, Schjøll AF *et al.* 2023 – Entomophthoralean fungi overwinter with the bird cherry-oat aphid on bird cherry trees. *Journal of Invertebrate Pathology* 200, 107971, <https://doi.org/10.1016/j.jip.2023.107971>

### Entry by

**Jonathan Cazabonne**, Groupe de Recherche en Écologie de la MRC Abitibi, Université du Québec en Abitibi-Témiscamingue, Amos, QC, Canada

**Danny Haelewaters**, Research Group Mycology, Ghent University, Ghent, Belgium

(Edited by **Rui-Lin Zhao & Maryam Tavakol Noorabadi**)

Published online 15 May 2023