

Outlineoffungi.org – Note 1574 *Terresporidia*

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Terresporidia Vossbrinck & Debrunner-Vossbrinck

The first revision of molecular phylogenetics of the phylum *Microsporidia* based upon data available at the time was reported by Vossbrinck, Debrunner-Vossbrinck (2005). It showed that groups or clades are formed based largely on habitat and host. It was proposed to allocate the five major clades into three classes: *Aquasporidia* (paraphyletic basal group, infecting mostly aquatic hosts), *Marinosporidia* (infecting mostly marine hosts), and *Terresporidia* (the crown of the *Microsporidia* tree of life, infecting mostly terrestrial hosts). However, this division was not widely accepted and more recent studies have demonstrated that each “class” include parasites from different habitats and switching between marine, aquatic and terrestrial hosts (both invertebrate and vertebrate) occurs frequently (Tokarev et al., 2018; Stentiford et al., 2016). Accumulation of data on diversity of *Microsporidia*, including multiple barcoding sequences for the newly described and previously known taxa, showed complex nature of host and habitat distribution. The most comprehensive taxonomic division of *Microsporidia* is based upon molecular phylogenetics while incorporating the classical taxonomic nomenclature, as presented by Bojko et al. (2022).

References

- [Bojko J, Reinke AW, Stentiford GD, Williamset B et al. 2022 – Microsporidia: a new taxonomic, evolutionary, and ecological synthesis. Trends in Parasitology 38, 642–659.](#)
- [Stentiford GD, Becnel JJ, Weiss LM, Keeling PJ et al. 2016 – Microsporidia - Emergent pathogens in the global food chain. Trends Parasitol 34\(4\), 336–348.](#)
- [Tokarev YS, Sokolova YY, Vasilieva AA, Issi IV. 2018 – Molecular and morphological characterization of *Anncaliia azovica* sp. n. \(Microsporidia\) infecting *Niphargogammarus intermedius* \(Crustacea, Amphipoda\) from the Azov Sea. Journal of Eukaryotic Microbiology, 65\(3\), 296–307.](#)
- [Vossbrinck CR, Debrunner-Vossbrinck BA. 2005 – Molecular phylogeny of the Microsporidia: ecological, ultrastructural and taxonomic considerations. Folia parasitologica, 52\(1/2\), 131.](#)

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(Edited by **Kevin D Hyde**)

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