Outlineoffungi.org - Note 933 *Astathelohaniidae*

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Astathelohaniidae C.E. Stratton, L.S. Reisinger, D.C. Behringer & J. Bojko

Stratton et al. (2022) introduced this family to accommodate a novel microsporidian genus, *Astathelohania* C.E. Stratton, L.S. Reisinger, D.C. Behringer & J. Bojko. This family was typified by the genus *Astathelohania* Stratton, Reisinger, Behringer, Bojko and the species *Astathelohania virili* Stratton, Reisinger, Behringer, Bojko *Astathelohania* has been reported as freshwater parasitic species of crayfish which are phylogenetically distinct from the marine crayfish parasitic genus, *Thelohania*. Historically, *Thelohania* species have been recognized as parasites of crayfish, but Stratton et al. (2022) confirmed that freshwater *Thelohania* species show a distinct phylogenetic lineage. The *Astathelohania* are genetically different from other known microsporidian genera with SSU rRNA gene sequence. Currently, *Astathelohaniidae* comprises four species (Index Fungorum 2023). Stratton et al. (2022), further carried out pathological and histological studies to confirm the pathogenicity and the impact on crayfish tissues respectively. The members of this family are binucleate and uninucleate, and parasites within sporophorous vesicles in freshwater hosts. The shapes of spores are ellipsoidal, oval, or pear-shaped. The taxonomic placement of this family is in *Opisthosporidia* and *Rozellomycota* and the order is undetermined.

Reference

Stratton CE, Reisinger LS, Behringer DC, Bojko J. 2022 – Revising the freshwater *Thelohania* to *Astathelohania* gen. et comb. nov., and description of two new species. Microorganisms 10(3), 636. https://doi.org/10.3390/microorganisms10030636

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