Outlineoffungi.org - Note 1006 Parachytriomycetes

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Parachytriomycetes Caval. Sm

Parachytriomycetes classified into phylum Chytridiomycota and it was established by study of Cavalier-Smith (2022). This class characterized by zoospores with one-to-many cilia. Uni-ciliate species have two types microtubules; (i) a cone of microtubules radiating from its base towards the nucleus (ii) a distal fan of microtubules radiating in the plane orthogonal to the centriolar axis from an arc of dense fibrillar material attached distally to the ciliated centriole. Centrioles not directly attached to nucleus or to mitochondrion, without striated rhizoplast connecting to nucleus. Transition zone type I or short type II, with either nonagonal tube distal or spiral fibre proximal to transition plate; transition helix or distal dense plug absent. Phylogenetically defined as the last common ancestor of Monoblepharis and Neocallimastix, plus all its descendants. Sole orders Monoblepharidales and Neocallimastigales (Cavalier-Smith 2022).

Reference

Cavalier-Smith T. 2022 – Ciliary transition zone evolution and the root of the eukaryote tree: implications for opisthokont origin and classification of kingdoms Protozoa, Plantae, and Fungi. Protoplasma 259, 487–593. https://doi.org/10.1007/s00709-021-01665-7

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