Outlineoffungi.org - Note 1361 *Neoleptodontidium*

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Neoleptodontidium Crous & Jurjević

Crous et al. (2023) introduced *Neoleptodontidium* in *Xylariales incertae sedis* (*Xylariomycetidae*, *Sordariomycetes*, *Ascomycota*) to accommodate two species based on morphology and phylogenetic analyses. *Neoleptodontidium aquaticum* Crous & Jurjević was designated as the type species, that was isolated from hydroponic water in the USA. Phylogenetically, *Neoleptodontidium* is closely related to *Leptodontidium aciculare* (Crous et al. 2023), which produces similar phialides (Rao & De Hoog 1986). Therefore, Crous et al. (2023) justified *L. aciculare* within *Neoleptodontidium* and introduced it as *N. aciculare* (V. Rao & de Hoog) Crous (≡ *Leptodontidium aciculare* V. Rao & de Hoog), which was isolated from rotten wood in India. *Neoleptodontidium* has solitary, subcylindrical, medium brown conidiophores, the lower part finely roughened, septate, frequently rejuvenating through terminal phialide, forming a new phialide above the older phialide, where a rosette of conidia remains attached in a mucoid mass. Conidiogenous cells are terminal phialidic openings with flared collarette, at times also with lateral phialidic openings on conidiogenous cells. The conidia are hyaline, smooth, guttulate, aseptate, subcylindrical, apex obtuse, straight to slightly curved, tapering to subobtuse hilum, aggregating in mucoid mass (Crous et al. 2023). Based on phylogenetic analysis of combined ITS-SSU, *Neoleptodontidium* clustered in *Xylariales* and closely related to *Oxydothidaceae*, *Castanediellaceae,* and *Barrmaeliaceae*, however, the familial placement remains unclear (Crous et al. 2023). Future research could focus on collecting additional samples to verify their classification.

References

Crous PW, Akulov A, Balashov S, Boers J et al. 2023 – New and Interesting Fungi. 6. Fungal Systematics and Evolution 11, 109–156.

Rao V, De Hoog GS. 1986 – New of critical hyphomycetes from India. Studies in Mycology 28, 1–84.

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