

Outlineoffungi.org - Note 921 *Neophysopellaceae*

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Neophysopellaceae P. Zhao & L. Cai, in Zhao et al.

Neophysopellaceae was introduced by Zhao et al. (2021) based on analysis of ITS, LSU and SSU sequence data to accommodate *Neophysopella* Jing X. Ji & Kakish as the type genus. Ji et al. (2019) showed that species of *Phakopsora* were separated into two phylogenetically distant groups and established the genus *Neophysopella* for one of these groups with *N. ampelopsidis* (Dietel & P. Syd.) Jing X. Ji & Kakish. (\equiv *Phakopsora ampelopsidis* Dietel & P. Syd.) as the type species. A further eight species were transferred into *Neophysopella*. Previous phylogenetic studies had confirmed the distinction of *Neophysopella* from *Phakopsora* and other genera in *Phakopsoraceae* and *Pucciniales* (Zhao et al. 2020, Aime & McTaggart 2021). *Neophysopella* also differs from other genera in *Phakopsoraceae* in the morphology of uredinia, telia and teliospores. *Neophysopellaceae* is a heteroecious monotypic family that produces spermogonia, aecia, uredinia and telia. The genus is characterized by group VI (type 7) spermogonia, aecidium-type aecia with well-developed peridia and catenate aeciospores, physopella-type uredinia with peripheral, incurved and dorsally thick-walled paraphyses. The telia comprise crusts of laterally adherent teliospores two or more cells deep; teliospores are catenate, aseptate, composed of 2–5 layers, with an obscure apical germ pore. The evidence of Zhao et al. (2021) clearly establishes the newly described family *Neophysopellaceae* with taxonomic placement in *Raveneliineae*, *Pucciniales* and *Pucciniomycetes*.

References

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