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Kleopowiella S.Y. Kondr.

Kleopowiella was introduced by Kondratyuk et al. (2022) for the former 'Trapelia' placodioides group. The genus comprised three taxa namely Kleopowiella bisorediata, generic type K. placodioides and Kleopowiella thieleana and show similar characteristics to Trapelia sensu stricto. However, differs in usually two types to numerous soralia, very rare apothecia, yellow pigments, filiform and mostly strongly curved conidia. The taxa are reported on granite and ironstone, flushed or poorly drained bedrock, soil in shrub-steppe and stones from Australia, Northern Hemisphere and North America. Kleopowiella placodioides and Kleopowiella thieleana were nested together in the ITS-based phylogenetic tree constructed by Orange (2018). Further, K. thieleana was assumed as a fertile, non-sorediate morph of K. placodioides. However, wider geographical sampling with additional gene sequences are required to resolve this (Orange 2018). Kleopowiella formed a monophyletic clade within Trapeliaceae based on combined ntITS, nrLSU and mtSSU sequences. However, several strains of K. placodioides (=T. placodioides) including KY797799, KY797810, KY797818, and KU672619 assumed to belong to Kleopowiella thieleana based on mtSSU analysis and the genus formed a sister clade to Gallowayiopsis in the mtSSU analysis. The taxonomic placement of Kleopowiella is in Trapeliaceae, Baeomycetales, Ostropomycetidae, Lecanoromycetes, Pezizomycotina and Ascomycota.

References

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(Edited by Kevin D. Hyde & Maryam Tavakol Noorabadi)

Published online 2 April 2024