

Outlineoffungi.org - Note 1447 *Neoschizothecium*

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Neoschizothecium S.K. Huang & K.D. Hyde

Huang et al. (2021) established *Neoschizothecium* based on morphology (only with sexual morph) to accommodate ten species and phylogenetic analyses based on combined LSU, SSU, RPB2, and TEF sequence data of *Sordariomycetes*. The genus was typified by *Neoschizothecium curvisporum* (Cain) S.K. Huang & K.D. Hyde. (Huang et al. 2021). In the new genus *Neoschizothecium*, ascomata are perithecial, solitary, scattered or gregarious, superficial to semi-immersed, pyriform-shaped, olivaceous-brown to dark brown-colored, and semi-transparent. Peridium consists of membranaceous, pale brown cells of textura angularis. Paraphyses are cylindrical-shaped and septate. Asci are eight–multi-spored, unitunicate, cylindrical-shaped, and evanescent. Ascospores are ellipsoidal to broadly fusiform-, aseptate, slender, hyaline pedicel, umbonate apex, and verrucose, with an apical germ pore (Huang et al. 2021). The new genus *Neoschizothecium* is classified under *Neoschizotheciaceae*, *Sordariales*, *Sordariomycetidae*, *Sordariomycetes*, *Pezizomycotina*, and *Ascomycota* (Huang et al. 2021; Marin-Felix & Miller, 2022). *Neoschizothecium*, with *Neoschizothecium curvisporum* as its type species, was established to accommodate *Schizothecium* species outside the *Podosporaceae*. *Neoschizothecium* was erected as the type genus of the new family *Neoschizotheciaceae* by Huang et al. (2021). Based on Marin-Felix & Miller (2022), the introduction of *Neoschizothecium* to house former *Schizothecium* species is deemed unnecessary due to the invalidity of the *Neoschizotheciaceae* family. Additionally, introducing *Neoschizothecium minicauda* to replace *Podospora minicauda* is questionable since the strain used in the phylogenetic study was not studied for its morphology and does not represent the type material. Further research is needed before transferring this species to *Schizothecium*. The nine new combinations proposed under *Neoschizothecium* for former *Schizothecium* species are also considered unnecessary for the same reasons that the *Neoschizotheciaceae* family is invalid (Marin-Felix & Miller, 2022). Although Huang et al. (2021) referred to *Neoschizothecium curvisporum* as a new combination of *Schizothecium curvisporum* (Cain) N. Lundq., Marin-Felix & Miller, 2022 mentioned that *Neoschizothecium curvisporum* is the superfluous synonym of *Schizothecium curvisporum* (Cain) N. Lundq.

References

- Huang SK, Hyde KD, Mapook A, Maharachchikumbura SS et al. 2021 – Taxonomic studies of some often over-looked *Diaporthomycetidae* and *Sordariomycetidae*. *Fungal Diversity* 111, 443–572.
- Marin-Felix Y, Miller AN. 2022 – Corrections to recent changes in the taxonomy of the *Sordariales*. *Mycological Progress* 21(8), 69.

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