Outlineoffungi.org - Note 914 Schizothecium

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Schizothecium Corda

Schizothecium was introduced and typified by S. fimicola Corda, which has membranaceous ascomata and ascospores with agglutinated hairs (Corda 1838). Later Schizothecium and its type species were erroneously synonymized under *Podospora* (Cesati 1856). Lundqvist (1972) resurrected <u>Schizothecium</u> discussing its nomenclatural legitimacy and recognized 17 species. Lundqvist (1972) also discussed the phenotypic uniqueness of Schizothecium and suggested that the perithecia adorned with swollen agglutinated hairs or prominent protruding peridial cells are characteristic of <u>Schizothecium</u>. Kirk et al. (2001) treated Schizothecium as a synonym of Podospora based on their morphological similarity of asci and ascospores. However, ascomatal morphology is a better taxonomic predictor than ascospore morphology within Sordariales (Miller and Huhndorf 2005). As the perithecial morphologies of Schizothecium species are prominent and easily recognizable, Cai et al. (2005) resuscitated Schizothecium as a valid genus in Sordariales. The combined gene analysis of ITS, LSU, and tub2 by Cai et al. (2005) showed that Schizothecium species form a well-supported, monophyletic clade and this phylogenetic stability of Schizothecium was confirmed in later studies (Marin-Felix et al. 2020; Huang et al. 2021). The type material of Schizothecium fimicola has been lost and the illustration in the protologue was designated as the lectotype of S. fimicola (Wang et al. 2019). Wang et al. (2019) also designated an epitype for Schizothecium fimicola with strain CBS 482.64 as the ex-epitype culture. However, morphologically and phylogenetically this epitype fits to *Podospora fimiseda* not to lectotype of S. fimicola. Thus, the synonymization of Schizothecium fimicola under Podospora fimiseda is not correct. Therefore, the introduction of a new generic name Neoschizothecium by Huang et al. (2021) for Schizothecium species, which was performed based on the epitypification error done by Wang et al. (2019), was also not correct. Marin-Felix and Miller (2022) resurrected the generic name Schizothecium explaining the taxonomic and nomenclatural mistakes made by Wang et al. (2019) and Huang et al. (2021). The taxonomic placement of Schizothecium is in Schizotheciaceae, Sordariales, and Sordariomycetes.

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