

## Outlineoffungi.org - Note 691 [Schizotheciaceae](#)

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### [Schizotheciaceae](#) Y. Marin & Stchigel

*Superfluous synonym: Neoschizotheciaceae* S.K. Huang & K.D. Hyde

[Marin-Felix et al. \(2020\)](#) established [Schizotheciaceae](#) raising *Schizothecium* as its type genus, which is typified by *S. fimicola* Corda. However, [Huang et al. \(2021\)](#) erroneously changed its name to *Neoschizotheciaceae* based on previous study of [Wang et al. \(2019\)](#). [Wang et al. \(2019\)](#) designated an incorrect epitype for *Schizothecium fimicola* and therefore, based on morphology and phylogenetic affiliation of this epitype, [Huang et al. \(2021\)](#) considered younger name *Schizothecium* as a synonym of *Podospora*. Thus, the new genus [Neoschizothecium](#) was introduced with *N. curvisporum* S.K. Huang & K.D. Hyde as its type species to accommodate species of *Schizothecium* that distantly grouped from the *Podosporaceae* ([Huang et al. 2021](#)). Then, a new family *Neoschizotheciaceae* was introduced for species in [Schizotheciaceae](#) and *Neoschizothecium* designated as the type genus ([Huang et al. 2021](#)). However, *Podospora* and *Schizothecium* have two distinct type specimens representing two different type species for each genus (Lundqvist 1972; [Ament-Velásquez et al. 2020](#); [Vogan et al. 2021](#)). This segregation was clarified based on morphology (Lundqvist 1972) and molecular data ([Cai et al. 2005](#)).

[Wang et al. \(2019\)](#) was not aware of the conserved type of *Podospora*, *P. fimiseda* (Ces. & De Not.) Niessl. (≡ *Sordaria fimiseda*) and incorrectly cited *Schizothecium fimicola* as the type species. Furthermore, [Wang et al. \(2019\)](#) designated an epitype specimen (CBS H-24048) for *Schizothecium fimicola*, but morphologically and genetically this epitype represents *Podospora fimiseda*. Thus, the type species of *Schizothecium* should be conserved as *S. fimicola* and then, *Podospora* and *Schizothecium* are not synonyms as [Huang et al. \(2021\)](#) thought. Thus, *Neoschizotheciaceae* is invalid as it is a superfluous synonym of [Schizotheciaceae](#) ([Marin-Felix & Miller 2022](#)).

[Schizotheciaceae](#) includes 11 genera viz., *Apodus*, *Cercophora*, *Echria*, *Immersiella*, *Jugulospora*, *Lundqvistomyces*, *Pseudoechria*, *Pseudoschizothecium*, *Rinaldiella*, *Schizothecium* and *Zygopleurage* and it is morphologically characterized by ostiolate ascomata, cylindrical to clavate asci and ellipsoidal ascospores, sometimes with long or short cylindrical or lash-like gelatinous appendages ([Marin-Felix et al. 2020](#)). [Schizotheciaceae](#) species, such as *Schizothecium aloides*, *S. glutinans* and *S. vesticola*, have been reported mainly from dung ([Cai et al. 2005](#)). Some species have been collected from soil, e.g. *Jugulospora antarctica* and *J. rotula*, and as saprobes on dead plant parts, e.g. *Cercophora caudata*, *Echria gigantospora* and *Immersiella immersa* ([Mirza & Cain 1969](#), [Luo et al. 2019](#), [Marin-Felix et al. 2020](#)).

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Published online 13 December 2022