Outlineoffungi.org - Note 1439 *Vamsapriyaceae*
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Vamsapriyaceae Y.R. Sun, Yong Wang bis & K.D. Hyde

Sun et al. (2021) established *Vamsapriyaceae* to accommodate *Vamsapriya* Gawas & Bhat as the type genus based on morphology and phylogeny (a combined dataset of LSU, rpb2, tub2, and ITS sequence data). The genus is typified by *Vamsapriya indica* Gawas & Bhat. *Vamsapriya* species are typically found in tropical and subtropical areas, with the majority living on land as saprobes. Other genera in *Vamsapriyaceae* are *Diabolocovidia*, *Didymobotryum*, *Podosporium*, and *Tretophragmia*. Although molecular data was not available to determine the phylogenetic relationships of *Podosporium* and *Tretophragmia*, their morphological characteristics resemble those of *Didymobotryum* and *Vamsapriya*, showing brown to dark, simple, straight synnemata, conidiogenous cells with a single point of attachment for conidia, and solitary, obclavate, multi-septate, dark brown conidia. As a result, *Podosporium* and *Tretophragmia* are tentatively classified within the *Vamsapriyaceae* due to their similar morphology. Further genetic sequencing is necessary to determine their phylogenetic relationships conclusively. In *Vamsapriyaceae*, ascomata are solitary, scattered, immersed, subglobose, black, and ostiolate. Peridium is thin-walled and brown. Paraphyses are hyaline and septate. Asci are eight-spored, unitunicate, cylindrical, and short pedicellate, with a J+ apical ring. Ascospores are apiosporous, fusiform to broad fusiform, and hyaline. In the asexual morph, colonies on natural substrate effuse, black, and velvety. Mycelium is immersed, septate, and branched. Synnemata are present or absent. When present (*Didymobotryum, Podosporium, Tretophragmia, Vamsapriya*), synnemata are erect, rigid, dark brown, and made of compact parallel conidiophores. These conidiophores are erect, straight or curved, cylindrical, dark brown, and septate. Conidiogenous cells are mono- or polytretic, integrated, terminal, clavate to cylindrical, and brown. Conidia are either catenate or solitary, acrogenous, pigmented, multi-shaped, and septate. When absent (*Diabolocovidia,* adapted from Crous et al. (2020)), conidiophores are micronematous, flexuous, and mainly reduced to a terminal conidiogenous cell. Conidiogenous cells are monoblastic, subcylindrical to clavate, pale brown, and smooth. Conidia are catenate, acrogenous, brown, ellipsoid to obovoid, thin-walled, and aseptate. The taxonomic placement of *Vamsapriyaceae* is in *Sordariomycetes*, *Pezizomycotina*, *Ascomycota* (Sun et al. 2021).

References

Crous PW, Wingfield MJ, Chooi YH, Gilchrist CL, et al. 2020 – Fungal Planet description sheets: 1042–1111. Persoonia: Molecular Phylogeny and Evolution of Fungi 44, 301.

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