

Outlineoffungi.org - Note 758 *Brunneofissuraceae*

Web-links: [Index Fungorum](#), [Facesoffungi](#), [Mycobank](#)

Brunneofissuraceae Marasinghe, Hongsanan & K.D. Hyde

Brunneofissuraceae was introduced as a distinct family in *Asterinales* (*Dothideomycetes*) to accommodate *Brunneofissura* Marasinghe, Hongsanan & K.D. Hyde as the type genus ([Marasinghe et al. 2022](#)). Species of this family have superficial, X-, Y-, or star-shaped thyriothecia with free dark brown hyphae and appressoria at the margin, dark brown to pale brown cells of *textura prismatica*, trabeculate pseudoparaphyses, oblong to clavate asci and hyaline, ovoid to clavate ascospores ([Marasinghe et al. 2022](#)). The ascus pedicel can be present or absent, and are short and rounded ([Marasinghe et al. 2022](#)). The family was reported from the dried leaves of a deciduous tree ([Marasinghe et al. 2022](#)). Members of *Asterinales* have biotrophic lifestyles ([Marasinghe et al. 2022](#)). *Brunneofissuraceae* formed a closely related clade with *Cylindrohyalosporaceae* based on the supportive phylogenetic results of LSU and 5.8S part of the ITS region, however, only the sexual morph with unique thyriothecia characters are present in *Brunneofissuraceae* while the latter is only represented by asexual morph character ([Hongsanan et al. 2014](#); [Marasinghe et al. 2022](#); [Tennakoon et al. 2022](#)). Further collections are needed to determine the lifestyle of the species of this family.

References

- Hongsanan S, Li YM, Liu JK, Hofmann T et al. 2014 – Revision of genera in *Asterinales*. Fungal Diversity 68, 1–68. <https://doi.org/10.1007/s13225-014-0307-4>
- Marasinghe DS, Hongsanan S, Wanasinghe DN, Boonmee S et al. 2022 – Morpho-molecular characterization of *Brunneofissuraceae* fam. nov., *Cirsosia mangiferae* sp. nov., and *Asterina neomangiferae* nom. nov. Mycological Progress 21, 279–295. <https://doi.org/10.1007/s11557-021-01767-9>
- Tennakoon DS, Kuo CH, Maharachchikumbura SS Thambugala KM et al. 2021 – Taxonomic and phylogenetic contributions to *Celtis formosana*, *Ficus ampelas*, *F. septica*, *Macaranga tanarius* and *Morus australis* leaf litter inhabiting microfungi. Fungal diversity 108, 1–215. <https://doi.org/10.1007/s13225-021-00474-w>

Entry by

Chayanard Phukhamsakda, ¹Engineering Research Center of Chinese Ministry of Education for Edible and Medicinal Fungi, Jilin Agricultural University, Changchun City, Jilin Province, P.R. China, 130118; ²Center of Excellence in Fungal Research, Mae Fah Luang University, Chiang Rai 57100, Thailand

(Edited by **Kevin D. Hyde & Rekhani Hansika Perera**)

Published online 15 March 2023