

Outlineoffungi.org - Note 724 *Tricholyophyllum*

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Tricholyophyllum Qing Cai, G. Kost & Zhu L. Yang

This genus is described from southwestern China based on both morphological and molecular phylogenetic evidence ([Cai et al. 2020](#)). Phylogenetic analyses based on nrLSU, ITS, *tef1*, *rpb1* and *rpb2* sequences indicated that the sample of *Tricholyophyllum* collected from China is included in the core *Lyophyllaceae*, and forms a well-supported clade with other known isolates corresponding to clade XI in [Bellanger et al. \(2015\)](#) ([Cai et al. 2020](#)). [Cai et al. \(2020\)](#) reconfirmed that this clade represents a discrete generic lineage and it was introduced as a new genus. The type species is *Tricholyophyllum brunneum* Qing Cai, G. Kost & Zhu L. Yang. This genus differs phenotypically from the other genera of the family by a trichodermal pileipellis, a discontinuous trichodermal stipitipellis, presence of cheilocystidia, and elongate to cylindrical basidiospores ([Cai et al. 2020](#)). Species from this genus are characterized by small to medium-sized, stipitate-pileate basidiomes with lamellate hymenophore, convex to applanate, tomentose-squamulose pileus, whitish context, sinuate lamellae, central, solid, subcylindrical, covered with squamules stipe, basidia with siderophilous granulation and, smooth, thin-walled, non-amyloid, elongate to cylindrical basidiospores ([Cai et al. 2020](#)). The pileipellis is a trichoderm while stipitipellis is a discontinuous trichoderm ([Cai et al. 2020](#)). *Tricholyophyllum* species lack pleurocystidia and they produce cheilocystidia ([Cai et al. 2020](#)). Clamp connections are present ([Cai et al. 2020](#)). The asexual morph is unknown. *Tricholyophyllum* is currently placed in *Lyophyllaceae*, *Agaricales*, *Agaricomycetes*, *Basidiomycota*.

References

- Bellanger JM, Moreau PA, Corriol G, Bidaud A, Chalange R, Dudova Z, Richard F, 2015 – Plunging hands into the mushroom jar: a phylogenetic framework for *Lyophyllaceae* (*Agaricales*, *Basidiomycota*). *Genetica* 143, 169–194. <https://doi.org/10.1007/s10709-015-9823-8>
- Cai Q, LvLi YJ, Kost G, Yang ZL. 2020 – *Tricholyophyllum brunneum* gen. et. sp. nov. with bacilliform basidiospores in the family *Lyophyllaceae*. *Mycosystema* 39(9), 1728–40. <https://doi.org/10.13346/j.mycosystema.200231>

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Published online 14 December 2022