

Outlineoffungi.org - Note 1367 *Pseudotubeufia*

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

Pseudotubeufia J. Ma & Y.Z. Lu

Ma et al. (2023) introduced *Pseudotubeufia* under *Tubeufiaceae* (*Tubeufiales*, *Pleosporomycetidae*, *Dothideomycetes*, *Pezizomycotina*, *Ascomycota*) to accommodate *P. hyalospora* J. Ma & Y.Z. Lu as the type species based on morphology and phylogenetic analyses using *tef*, *rpb2*, and ITS sequence data. *Pseudotubeufia laxispora* J. Ma & Y.Z. Lu is the other accepted species in the genus. The members of this genus have been found on decaying wood in a freshwater stream in China. Only the asexual morph has been observed. In the asexual morph (helicosporous hyphomycetes), the hyphae are septate, branched, and smooth. The conidiophores are macronematous, mononematous, cylindrical in shape, and septate. The conidiogenous cells are integrated, sympodial, irregularly cylindrical, and denticulate. The conidia are solitary, helicoid, rounded at the tip, coiled 2–3 times, septate, guttulate, and hyaline. The conidiophores, conidiogenous cells, and conidia are smooth-walled. In terms of morphology, *Pseudotubeufia* shares similarities with *Tubeufia* due to its flexuous, cylindrical conidiophores, cylindrical and denticulate conidiogenous cells that are hyaline to pale brown, and the presence of hyaline helicoid. Despite their morphological similarities, phylogenetic analysis using *tef*, *rpb2*, and ITS sequence data reveals that *Pseudotubeufia* is more closely related to species in *Dematiohelicoma* and *Helicomycetes* than to those in *Tubeufia*. *Dematiohelicoma* is distinguishable from *Pseudotubeufia* by its erect conidiophores and multi-septate conidia, which are brown to dark brown. In contrast, *Pseudotubeufia* differs from *Helicomycetes* by having distinctively repeatedly geniculate conidiogenous cells (Ma et al. 2023).

Reference

Ma J, Xiao XJ, Liu NG, Boonmee S et al. 2023 – Morphological and multi-gene phylogenetic analyses reveal *Pseudotubeufia* gen. nov. and two new species in *Tubeufiaceae* from China. *Journal of Fungi* 9(7), 742.

Entry by

Maryam Tavakol Noorabadi, Innovative Institute for Plant Health, Zhongkai University of Agriculture and Engineering, Guangzhou 510225, People's Republic of China

(Edited by **Subodini N. Wijesinghe**)

Published online 31 May 2024