Outlineoffungi.org - Note 1156 *Pseudogeomyces*

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Pseudogeomyces Zhi Y. Zhang & Y.F. Han

Zhang et al. (2023) introduced *Pseudogeomyces* (*Incertae sedis, Thelebolales*, *Leotiomycetes*) to accommodate *Pseudogeomyces lindneri* Zhi Y. Zhang & Y.F. Han as the type species based on the comparison of micromorphological features and DNA sequence data . The sexual morph has not been observed. In the asexual morph, the hyphae are branched, septate, and smooth. Conidiophores are solitary, occasionally branched, hyaline, and smooth. Conidia are hyaline, verrucose, solitary, and globose to obovoid with a short basal frill. Intercalary conidia are hyaline, verrucose, globose to subglobose, with both ends truncate. Chlamydospores have not been seen. Species of~~.~~ The genus is distinguished from other *Thelebolales* in possessing short, irregularly branched conidiophores bearing two to four conidiogenous cells and verrucose ~~aleuro~~conidia separated by connective cells. The type species, *Pseudogeomyces lindneri* is represented by three isolates from China that form a strongly supported clade in the phylogeny inferred from ITS, ITS, LSU, *ef1A*, *mcm7*, and *rpb2* sequences. Four additional isolates obtained from the soil in bat hibernacula in the USA (12NJ08, 17WV09, 23WI08, and 23WI14) do not comprise a single clade and are not described as a new species in *Pseudogeomyces*. These unnamed isolates were divided between two well-supported clades in the multi-locus phylogeny presented by Minnis & Lindner (2013) but the positions of these clades and *Geomyces* were not resolved completely. Future research could focus on naming undescribed members of *Thelebolaceae* (=*Pseudoeurotaiceae fide;* Ekanayaka et al. 2019) and resolving relationships among lineages basal to *Pseudogymnoascus* (Minnis & Lindner 2013).

References

Ekanayaka AH, Hyde KD, Gentekaki E, McKenzie EHC et al. 2019 – Preliminary classification of *Leotiomycetes*. Mycosphere 10, 310–489.

Minnis AM, Lindner DL. 2013 – Phylogenetic evaluation of *Geomyces* and allies reveals no close relatives of *Pseudogymnoascus destructans*, comb. nov, in bat hibernacula of eastern North America. Fungal Biology 117, 638–649.

Zhang ZY, Han YF, Chen WH, Tao G. 2023 – Additions to *Thelebolales* (*Leotiomycetes, Ascomycota*): *Pseudogeomyces lindneri* gen. et sp. nov. and *Pseudogymnoascus campensis* sp. nov. MycoKeys 95, 47.

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