

Outlineoffungi.org - Note 997 *Aquatisphaeria*

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

Aquatisphaeria W.L. Li, N.G. Liu & Jian K. Liu

Li et al. (2021) introduced the genus *Aquatisphaeria* based on a combined analysis of LSU, ITS, and SSU sequence data and morphological characteristics. The type species, *Aquatisphaeria thailandica* W.L. Li, D.F. Bao & Jian K. Liu, was isolated from submerged decaying wood in a freshwater habitat in Thailand, where it functions as a saprobe. It exhibits distinctive characteristics such as branched, septate, sub-hyaline to light brown mycelium; macronematous or mononematous, cylindrical, septate, unbranched conidiophores; monoblastic, integrated, terminal conidiogenous cells with a truncated apex; and acrogenous, muriform, subglobose or turbinate, olive green to dark brown conidia with cylindrical appendages. The sexual morph of *Aquatisphaeria* was not observed (Li et al. 2021). *Aquatisphaeria* can be differentiated from certain genera in *Tetraplospora* family, such as *Pseudotetraploa*, *Quadricrura*, *Tetraploa*, and *Triplospora*, primarily due to the presence of conidiophores. Phylogenetically, *Aquatisphaeria* is closely related to *Ernakulamia* and *Shrungabeeja*, as inferred from the study by Li et al. (2021). However, morphological differences separate *Ernakulamia* (with monotretic conidiogenous cells) (Delgado et al. 2017), and *Shrungabeeja* (with longer conidiophores) (Zhang et al. 2009, Dong et al. 2020) from *Aquatisphaeria*. The taxonomic placement of *Aquatisphaeria* is in *Tetraplospora* family, *Pleosporales*, *Dothideomycetes*, *Ascomycota*.

References

- Delgado G, Koukol O, Cáceres O, Piepenbring M. 2017 – The Phylogenetic Placement of *Ernakulamia cochinchinensis* within *Pleosporales* (*Dothideomycetes*, *Ascomycota*). *Cryptogamie, Mycologie* 38 (4) 435–451. <https://doi.org/10.7872/crym/v38.iss4.2017.435>
- Dong W, Wang B, Hyde KD, McKenzie EHC et al. H 2020 – Freshwater *Dothideomycetes*. *Fungal Diversity* 105, 319–575. <https://doi.org/10.1007/s13225-020-00463-5>
- Li WL, Bao DF, Liu NG, Hyde KD, Liu JK. 2021 – *Aquatisphaeria thailandica* gen. et sp. nov. (*Tetraplospora* family, *Pleosporales*) from freshwater habitat in Thailand. *Phytotaxa* 513(2), 118–128. <https://doi.org/10.11646/phytotaxa.513.2.3>
- Zhang K, Ma LG, Zhang XG. 2009 – New species and records of *Shrungabeeja* from southern China. *Mycologia* 101(4), 573–578. <https://doi.org/10.3852/09-006>

Entry by

Dhanushka N. Wanasinghe, Center for Mountain Futures, Kunming Institute of Botany, Chinese Academy of Sciences, Honghe 654400, China

(Edited by **Maryam Tavakol Noorabadi & Kevin D. Hyde**)

Published online 5 April 2024