

## Outlineoffungi.org - Note 1457 *Neotainosphaeria*

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*Neotainosphaeria* W.P. Wu & Y.Z. Diao

Wu & Diao (2022) introduced the monotypic genus *Neotainosphaeria* under *Chaetosphaeriaceae* (*Chaetosphaeriales*, *Sordariomycetes*, *Ascomycota*) to accommodate *Neotainosphaeria microsperma* W.P. Wu & Y.Z. Diao based on morphological characters and phylogenetic analyses using LSU and ITS sequence data. The type species was found on dead branches of unidentified plants in China. In *Neotainosphaeria*, colonies are effuse, hairy, and dark brown. The mycelium is partly superficial and partly immersed, constructed of pale brown to brown, branched, and septate hyphae. In the asexual morph, conidiophores are macronematous, simple, erect, dark brown to reddish brown, and four–six-septate. The conidiogenous cells are integrated, terminal, monophialidic, cylindrical, thick- and rough-walled. Conidia are holoblastic, acrogenous, solitary, globose to subglobose, and hyaline with two–three slender appendages. The sexual structure of the genus *Neotainosphaeria* has not been seen. Morphologically, *Neotainosphaeria* shows similarities to certain species of *Codinaeella* and *Tainosphaeria* in terms of their globose to ellipsoidal conidia. However, it differs by producing rough-walled, monophialidic conidiogenous cells with inconspicuous collarette, and globose to subglobose-shaped, rough, and thick-walled conidia that have two-three setulae. It also has resemblances to *Calceispora* and *Bahusutrabeeja* s. lat, but can be set apart from them by its monophialidic conidiogenous cells with narrower sporulation loci that have inconspicuous collars, as well as rough and thick-walled conidia featuring setulae on the sides (Wu & Diao, 2022). *Brachydictyochaeta* formed a sister clade based on a combined sequence of ITS and LSU sequence data. Morphologically, *Neotainosphaeria microsperma* shows similarities to *Bahusutrabeeja dwaya*, *Bahusutrabeeja globosa*, and *Bahusutrabeeja bunyensis*, but it can be identified by the presence of a smooth-walled conidiogenous cell with a wide sporulation loci and conidia with multiple appendages in *Bahusutrabeeja dwaya* and *Bahusutrabeeja globosa*. Additionally, it can be distinguished by its smaller conidia in *Bahusutrabeeja bunyensis* (Wu & Diao, 2022).

### Reference

Wu W, Diao Y. 2022 – Anamorphic chaetosphaeriaceous fungi from China. *Fungal Diversity* 116(1), 1– 546.

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Published online 21 June 2024