

Outlineoffungi.org - Note 992 *Paradictyocheirospora*

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Paradictyocheirospora Rajeshk., R. K. Verma, Boonmee, K. D. Hyde, Chandrasiri & Wijayaw

The monotypic genus *Paradictyocheirospora* was recently erected by Rajeshkumar et al. (2021) with *P. tectonae* as the type which was found associated with the bark of *Tectona grandis* from India. Multi-gene phylogenetic analysis of ITS, LSU and *tef1- α* sequence data showed that *Paradictyocheirospora tectonae* formed a distinct lineage basal to *Dictyocheirospora* and *Digitodesmium*. *Paradictyocheirospora* is morphologically similar to *Dictyocheirospora* in having cheiroid, digitate, with or without complanate conidia (Boonmee et al. 2016, Rajeshkumar et al. 2021). However, *Paradictyocheirospora tectonae* can be distinguished from *Dictyocheirospora* in having sporodochial conidiomata with micronematous conidiophores, 3–6 compactly arranged rows of light to dark pigmented cells with non-complanate conidia with globose, bubble-like, hyaline appendages at the base (Boonmee et al. 2016; Hyde et al. 2020). *Digitodesmium* differs from *Paradictyocheirospora tectonae* in having punctiform, sporodochial conidiomata and acrogenous, euseptate, cheiroid, digitate conidia with an apical gelatinous cap (Kirk 1981; Boonmee et al. 2016; Hyde et al. 2020). Therefore, a new genus, *Paradictyocheirospora* was introduced to accommodate *P. tectonae* based on morphological characters and phylogenetic analysis. However, Rajeshkumar et al. (2021) did not include all the species of *Digitodesmium* in their phylogenetic analyses. Shen et al. (2022) showed that *Digitodesmium* is polyphyletic and formed two distinct clades within *Dictyosporiaceae*, where *Paradictyocheirospora tectonae* clustered with *Digitodesmium chiangmaiense* and *D. polybrachiatum* in a monophyletic clade. The members within these clades were reported as saprobic on dead wood submerged in a stream or from terrestrial habitats (Hyde et al. 2019). Thus, *Paradictyocheirospora* needs further revision as to whether it should be placed under *Digitodesmium* or not. However, there are also problems with the classification of *Digitodesmium*, as the type species, *D. elegans* lacks sequence data in the GenBank and the genus is polyphyletic within the *Dictyosporiaceae*. Therefore, further analysis is required to solve this taxonomic problem.

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