

## Outlineoffungi.org - Note 1381 *Microxyphiomyces*

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

*Microxyphiomyces* Bat., Valle & Peres

Xavier-Leite et al. (2023) introduced *Microxyphiomyces* under *Gomphillaceae* (*Graphidales*, *Ostropomycetidae*, *Lecanoromycetes*, *Pezizomycotina*, *Ascomycota*) to accommodate ten lichenized fungal species based on morphological characters and phylogeny using SSU and LSU sequence data. This genus was typified by *Microxyphiomyces manaosensis* Bat., Valle & Peres. In *Microxyphiomyces*, the thallus is continuous and smooth with black setae. The apothecia are sessile, biatorine, rarely erumpent, and chroodiscoid. The ascospores are transversely septate to muriform. The hyphophores are setiform, sometimes branched or hooked, and black. The diaphyphae are filiform to moniliform. The primary distinguishing characteristics include the smooth thallus and delicate setae, contrasting with the rough thallus and sturdy setae of *Tricharia* s. str. It is important to highlight that the current definition of the genus encompasses three distinct morphological forms: *Microxyphiomyces* s. str., characterized by biatorine apothecia and unbranched hydrophores; the *Tricharia lancicarpa* group with chroodiscoid apothecia; and the *Tricharia elegans* cluster exhibiting unique and branched-hooked hyphophores (Sérusiaux 1984). Notably, species within the *Tricharia elegans* group have not undergone sequencing, so their classification under *Microxyphiomyces* is provisional. *Tricharia lancicarpa* differs from *Microxyphiomyces* s. str., like the distinction between *Roselviria* and *Spinomyces*. In our evolutionary analysis, *Tricharia lancicarpa* forms a well-supported sister clade to *Microxyphiomyces* s. str. Therefore, the molecular evidence justifies recognizing *Microxyphiomyces* as a distinct genus (Xavier-Leite et al. 2023).

### References

- Sérusiaux E. 1984 – Three new species of *Tricharia* (Lichenes, *Asterothyriaceae*) from New Guinea. *Mycologia* 76(1), 108–114.
- Xavier-Leite AB, Goto BT, Lücking R, da Silva Cáceres ME. 2023 – New genera in the lichenized family *Gomphillaceae* (*Ascomycota*, *Graphidales*) focusing on neotropical taxa. *Mycological Progress* 22(12), 88.

### 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