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[Longistriata](#) Sulzbacher, Orihara, Grebenc, M.P. Martín & Baseia

The type species of this monotypic genus, [Longistriata flava](#) was found, hypogeous to subhypogeous, solitary or scattered, in a nutrient-poor white sand habitat or under fallen leaves, associated with plant genera *Guapira* (*Nyctaginaceae*) and *Coccoloba* (*Polygonaceae*) in Brazil's Atlantic rainforest ([Sulzbacher et al. 2020](#)). These two plant genera are potential ectomycorrhizal host symbionts ([Sulzbacher et al. 2020](#)). Phylogenetic analyses based on ITS, LSU, and *tefl* indicated its phylogenetic position in Boletaceae (*Boletales*, *Agaricomycetidae*, *Agaricomycetes*, *Agaricomycotina*, *Basidiomycota*) ([Sulzbacher et al. 2020](#)). This genus is distinguished from other genera in *Boletaceae* by hypogeous to subhypogeous, sequestrate, subglobose basidiocarps with a short stipe; bright yellow, smooth peridium with a cutis of gelatinized and interwoven inflated hyphae; the presence of a short stipe; loculate gleba white when immature, yellowish brown at maturity, older basidiocarps turning to dark green to black upon cutting, and absence of columella ([Sulzbacher et al. 2020](#)). The asexual morph is unknown.

[Longistriata](#) is phylogenetically sister to the African genus *Mackintoshia* in *Boletaceae* but [Longistriata](#) can be differentiated from *Mackintoshia* due to its well-developed, sterile short stipe, lageniform cystidia with rounded apices, basidiospores with persistent sterigmal attachments that are covered by thin longitudinal striations and associated with ectomycorrhizal plants in *Nyctaginaceae* and *Polygonaceae* ([Sulzbacher et al. 2020](#)). Even [Longistriata](#) was hypothesized as ectomycorrhizal in this study, the ectomycorrhizal status was not yet confirmed using the molecular techniques of root tips from native Brazilian trees ([Sulzbacher et al. 2020](#)).

Reference

Sulzbacher MA, Orihara T, Grebenc T, Wartchow F, Smith ME, Martín MP, Giachini AJ, Baseia IG. 2020 – *Longistriata flava* (*Boletaceae*, *Basidiomycota*) – a new monotypic sequestrate genus and species from Brazilian Atlantic Forest. *MycoKeys* 62, 53–73. <https://doi.org/10.3897/mycokeys.62.39699>

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Published online 2 December 2022