

Outlineoffungi.org - Note 834 *Unguispora*

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Unguispora T. Ri & Degawa

Unguispora was introduced by Ri et al. (2022) to accommodate a novel *kickxellalean* species, *U. rhapsidophoridarum* T. Ri & Degawa as the type, isolated from the excrement of cave crickets, *Diestrammena japonica* and *D. elegantissima* (*Rhaphidophoridae*) in Japan. Phylogenetic analysis of SSU and LSU nuclear ribosomal RNA coding genes indicated that *Unguispora* is distinct from all known *kickxellalean* genera and placed it next to the genus *Linderina*. The single species of *Unguispora* is a dimorphic taxon, which has a yeast-like form inside the gut of the insect host and a filamentous form outside of the host. Sporangiphores of *Unguispora* are simple or branched, septate with median pores and plugs. Sporocladia are septate, giving rise to lateral sterile filiform appendages, with basal cells bearing three sterile corniform appendages, and terminal cells bearing one sterile corniform appendage. Pseudophialides are lageniform, each producing a single hyaline, cylindrical, one-spored sporangium. Sporangia are immersed in liquid at maturity are ornamented terminally by claw-like minute denticles arranged in transverse rows repeated several times lengthwise. Sporangiospores germinate basally through the production of yeast-like cells (“secondary spores”) under anaerobic conditions. Secondary spores germinate by the production of asexual hyphae under aerobic conditions. Zygosporangia have not been observed. *Unguispora* differs from other *kickxellalean* species by the formation of corniform appendages on the basal and terminal sporocladial cells and filiform lateral appendages of sporocladia, as well as the claw-like ornamentation of sporangia (Ri et al. 2022). The taxonomic placement of *Unguispora* is in *Kickxellaceae*, *Kickxellales*, *Kickxellomycetes*, *Kickxellomycotina*, and *Mucoromycota*.

Reference

Ri T, Suyama M, Takashima Y, Seto K, Degawa Y 2022 – A new genus *Unguispora* in *Kickxellales* shows an intermediate lifestyle between saprobic and gut-inhabiting fungi. *Mycologia* 114(6), 934–946. <https://doi.org/10.1080/00275514.2022.2111052>

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