

Outlineoffungi.org - Note 713 *Mystinarius*

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Mystinarius Niskanen & Liimat.

To resolve the higher-level classification of *Cortinariaceae*, both targeted capture sequencing and shallow whole genome sequencing were adopted to produce data. Based on the phylogenomic analyses of 75 single-copy genes from 19 species and 5-locus analysis (*rpb1*, *rpb2*, *mcm7*, *gpd* and *tef1*) of 245 species, a classification of *Cortinariaceae* with ten genera including seven new genera were established. *Mystinarius* is one of the new genera with one subgenus *Mystinarius*. The type species is *Mystinarius lustrabilis* (Moëgne-Loec.) Niskanen & Liimat. The species of this small, bihemispheric genus have medium-sized, stipitocarpic, agaricoid (myxacioid/ phlegmacioid) basidiomata with a yellow to reddish brown, somewhat viscid to almost dry pileus and a white to yellow, dry stipe ([Liimatainen et al. 2022](#)). The basidiospores are medium-sized and the pileipellis is duplex ([Liimatainen et al. 2022](#)). The asexual morph is unknown. The species of this genus resemble morphologically most of those in *Thaxterogaster* subgenus *Multiformes*, *T.* sect. *Pinophili* or *T.* sect. *Vibratiles* ([Liimatainen et al. 2022](#)). However, they are not closely related to *Thaxterogaster* or other genera of *Cortinariaceae* ([Liimatainen et al. 2022](#)). The species of this genus are distributed in the Southern Hemisphere in forests of Nothofagaceae ([Liimatainen et al. 2022](#)). *Mystinarius* is currently placed in *Cortinariaceae*, *Agaricales*, [Agaricomycetes](#), [Basidiomycota](#).

References

Liimatainen K, Kim JT, Pokorny L, Kirk PM, Dentinger B, Niskanen T. 2022 – Taming the beast: a revised classification of *Cortinariaceae* based on genomic data. *Fungal Diversity* 112(1), 89–170. <https://doi.org/10.1007/s13225-022-00499-9>

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