

Outlineoffungi.org - Note 712 *Hygronarius*

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Hygronarius 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 was established. *Hygronarius* is one of the new genera with two subgenera, viz., *Hygronarius* and *Visincisi*. The type species is *Hygronarius renidens* (Fr.) Niskanen & Liimat. This genus includes small- to medium-sized, stipitocarpic, agaricoid (telamonioid) species with yellow-brown to red-brown ([Liimatainen et al. 2022](#)). The stipe is dry and the pileus is dry or viscid and hygrophanous ([Liimatainen et al. 2022](#)). The basidiospores are subglobose or ellipsoid and the pileipellis is duplex with a more or less developed hypoderm ([Liimatainen et al. 2022](#)). The asexual morph is unknown. The species are morphologically reminiscent of those in *Cortinarius* subgenus *Iodolentes* and *Telamonia* but are genetically distinct from them ([Garnica et al. 2005](#); [Stensrud et al. 2014](#); [Niskanen et al. 2022](#)). *Hygronarius* species are distributed in the Northern and Southern Hemisphere with deciduous and coniferous trees ([Liimatainen et al. 2022](#)). This genus is currently placed in *Cortinariaceae*, *Agaricales*, [Agaricomycetes](#), [Basidiomycota](#).

References

- Garnica S, Weiß M, Oertel B, Oberwinkler F. 2005 – A framework for a phylogenetic classification in the genus *Cortinarius* (*Basidiomycota*, *Agaricales*) derived from morphological and molecular data. *Botany* 83, 1457–1477. <https://doi.org/10.1139/b05-107>
- Stensrud Ø, Orr RJS, Reier-Røberg K, Schumacher T, Høiland K. 2014 – Phylogenetic relationships in *Cortinarius* with focus on North European species. *Karstenia* 54, 57–71. <https://doi.org/10.29203/ka.2014.464>
- 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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