

Outlineoffungi.org - Note 726 *Volvanarius*

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Volvanarius 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 system of *Cortinariaceae* with ten genera including seven new genera was established. *Volvanarius* is one of the genera, and it currently accommodates two subgenera, viz., *Thaumasti* and *Volvanarius*. The type species is *Volvanarius chlorosplendidus* (Furci, Niskanen, San-Fabian, Liimat. & Salgado Salomón) Niskanen & Liimat. Species of this group can easily be identified in the field by the small and phlegmacium-like basidiomata with a bulbous stipe, and the universal veil that in most species forms a distinct volva at the base of the stipe ([Liimatainen et al. 2022](#)). This genus also possesses citriform to amygdaloid, rarely ellipsoid basidiospores and pileipellis duplex ([Liimatainen et al. 2022](#)). A few species produce balloon-shaped cheilocystidia ([Liimatainen et al. 2022](#)). The asexual morph is unknown. *Volvanarius* species are distributed in the southern Hemisphere with species of Nothofagaceae ([Liimatainen et al. 2022](#)). *Volvanarius* is currently placed in *Cortinariaceae*, *Agaricales*, [Agaricomycetes](#), [Agaricomycotina](#), [Basidiomycota](#).

Reference

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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Published online 14 December 2022