

Outlineoffungi.org - Note 1515 *Umbellaceae*

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Umbellaceae Xue W. Wang & L.W. Zhou

The monotypic family *Umbellaceae* was erected to accommodate *Umbellus* Xue W. Wang & L.W. Zhou and *Umbellus sinensis* Xue W. Wang & L.W. Zhou based on morphology and phylogeny using SSU, ITS, LSU, mt-SSU, and RPB2 sequence data (Wang & Zhou 2023). The family is classified under under *Umbellaceae*, *Hymenochaetales*, *Agaricomycetidae*, *Agaricomycetes*, and *Basidiomycota* (Wang & Zhou 2023). Morphologically, *Umbellaceae* is similar to *Chaetoporellaceae*, *Hyphodontiaceae*, and *Schizoporaceae*, characterized by resupinate basidiomes and a light-hued hymenophoral surface. However, it uniquely possesses capitate cystidia featuring large umbrella-shaped crystalline heads. In the family *Umbellaceae*, basidiomes are annual, adnate and resupinate. The hymenophore varies from smooth to grandinioid, odontoid, or hydroid, with a color range from white to cream. The margin thins out and has an arachnoid texture, being concolorous or paler than the subiculum. The hyphal system is monomitic, exhibiting generative hyphae with clamp connections. Cystidia are dimorphic, 1: originating from the subhymenium and may be either more or less enclosed in the hymenium or project strongly for most of their length. They are cylindrical, unevenly thick-walled with narrow or wide lumens, rooted at the base, tapering gradually, and broadly rounded at the apex, topped with a large umbrella-shaped crystalline head. 2: originating laterally on subicular hyphae exhibit similar morphology to those from the subhymenium, albeit smaller and with slightly thick-walled stalks. The basidia are subclavate to clavate-cylindrical, barrel-shaped, or suburniform, featuring a basal clamp connection and four sterigmata. Basidiospores are oblong-ellipsoid or broadly ellipsoid, hyaline, smooth, thin-walled, indextrinoid, inamyloid, and acyanophilous (Wang & Zhou 2023).

Reference

Wang XW, Zhou LW. 2023 – *Umbellaceae* fam. nov. (*Hymenochaetales*, *Basidiomycota*) for *Umbellus sinensis* gen. et sp. nov. and Three New Combinations. *Journal of Fungi* 10(1), 22.

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Published online 26 August 2024