

Outlineoffungi.org - Note 1462 *Alloascoideales*

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Alloascoideales M. Groenew., Hittinger, Ofulente & A. Rokas

Alloascoideales was erected to accommodate *Alloascoideaceae* Kurtzman & Robnett as the type family based on morphological characteristics, physiological features, and a concatenation single-model (LG+G4) approach on a data matrix of 1672 taxa (1644 fungi and 28 outgroups) and 290 BUSCO genes (Groenewald et al. 2023). The new order *Alloascoideales* is classified under *Alloascoideomycetes*, *Saccharomycotina*, and *Ascomycota* (Groenewald et al. 2023). The type genus and type species are *Alloascoidea* Kurtzman & Robnett and *Alloascoidea hylecoeti* (L.R. Batra & Francke-Grosz.) Kurtzman & Robnett, respectively (Groenewald et al. 2023). Within the order-specific protein family OG0009556 and OG0024318, phylogenetic analyses have been conducted utilizing DNA sequences encoding LSU rDNA, SSU rDNA, EF-1 α , *Rpb1*, and *Rpb2* (Kurtzman & Robnett, 2013). The characteristic reproductive methods observed in this order include multilateral budding and the formation of pseudohyphae and septate hyphae. Blastoconidia are formed on hyphae and may either be sessile or arise from denticles (Groenewald et al. 2023).

References

- Groenewald M, Hittinger CT, Bensch K, Ofulente DA, et al. 2023 – A genome-informed higher rank classification of the biotechnologically important fungal subphylum *Saccharomycotina*. *Studies in Mycology* 105(1), 1–22.
- Kurtzman CP, Robnett CJ. 2013 – *Alloascoidea hylecoeti* gen. nov., comb. nov., *Alloascoidea africana* comb. nov., *Ascoidea tarda* sp. nov., and *Nadsonia starkeyi-henricii* comb. nov., new members of the *Saccharomycotina* (*Ascomycota*) *FEMS Yeast Research* 13, 423–432.

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