Outlineoffungi.org - Note 1337 *Nothoamylascus*

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Nothoamylascus R.A. Healy & M.E. Sm.

Healy et al. (2023) established the monotypic genus *Nothoamylascus* within *Pezizaceae* (*Pezizales*, *Pezizomycetidae*, *Pezizomycetes*, *Pezizomycotina*, *Ascomycota*) based on morphological characteristics and phylogenetic analyses of 28S, *tef*1α, *rpb*2, and *rpb*1 sequence data. The genus was typified by *Nothoamylascus erubescens* R.A. Healy & M.E. Sm., discovered in Chile and Argentina. In the genus, ascoma is a ptychothecium and hypogeous. The excipulum consists of textura angularis or textura globulosa cells. The gleba is constructed of asci and paraphyses. The asci are cylindrical. Ascospores are globose and ornamented with truncated spines. Mitotic spore mats are found in small clusters either epigeous on soil or hypogeous, appearing white with pinkish-brown areas. The spore mass of *Nothoamylascus erubescens* is pink in its early stage and turns yellow upon maturation. The mitotic spores are predominantly smooth to slightly warty, with a globose to subglobose. The mitotic spore mats of *N. erubescens* are distinct from those created by *Amylascus* due to the reddish-brown strands of hyphae within an otherwise white mitotic spore mat. When mature, the mitotic spores are a light-yellow color, similar to those of the *Amylascus* species. Future collections will be necessary to fully document the variation in *N. erubescens*, especially the visual characteristics of the fresh ascomata, which, like many other taxa mentioned, seem to be uncommon (Healy et al. 2023). Phylogenetically, *Nothoamylascus* formed a distinct clade by using 28S, *tef*1α, *rpb*2, and *rpb*1 sequence data.

Reference

Healy RA, Truong C, Castellano MA, Bonito G et al. 2023 – Re-examination of the Southern Hemisphere truffle genus *Amylascus* (*Pezizaceae*, *Ascomycota*) and characterization of the sister genus *Nothoamylascus* gen. nov. Persoonia-Molecular Phylogeny and Evolution of Fungi 51(1), 125–151.

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