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[Asperosporus](#) Karlsen-Ayala, Gazis & M.E. Sm.

[Asperosporus](#) is a monotypic truffle genus found associated with ferns but is possibly saprotrophic ([Karlsen-Ayala et al. 2021](#)). Phylogenetic analyses based on ITS, LSU, *rpb2* and *tefl* indicated its phylogenetic position in *Agaricaceae* (*Agaricales*, *Agaricomycetidae*, *Agaricomycetes*, *Agaricomycotina*, *Basidiomycota*) ([Karlsen-Ayala et al. 2021](#)). A sister relationship with *Agaricus* was shown without support from bootstrap or posterior probabilities ([Karlsen-Ayala et al. 2021](#)). The type species of the monotypic genus is [A. subterraneus](#) Karlsen-Ayala, Gazis & M.E. Sm. Compared with other species of *Agaricaceae*, species of this genus are characterized by lacking a stipe or columella, having large, ornamented spores, the fresh sporocarps rapidly stain pink-red when cut or bruised and a rancid smell ([Karlsen-Ayala et al. 2021](#)). The asexual morph is unknown. Further sampling with more collections is needed to examine the monophyly of this genus. More samples could also help to clarify whether it exists in wild since the known samples were collected in an artificial environment (in the soil of nursery production of ferns).

Reference

Karlsen-Ayala E, Gazis R, Smith ME. 2021 – *Asperosporus subterraneus*, a new genus and species of sequestrate *Agaricaceae* found in Florida nursery production. *Fungal systematics and evolution* 8(1), 91–100. <https://doi.org/10.3114/fuse.2021.08.08>

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