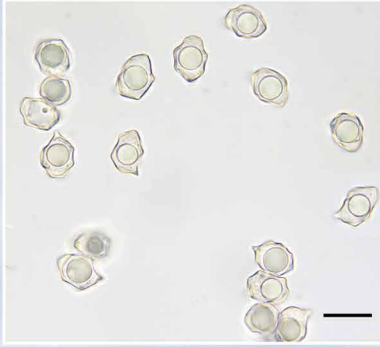


Entoloma ammophilum



Fungal Planet 1240 – 13 July 2021

Entoloma ammophilum G.M. Jansen, Dima, Noordel. & Vila, *sp. nov.*

Etymology. Referring to the habitat on sandy soil (from ἄμμος, Greek, – sand, and φιλέω, Greek, – to like).

Classification — *Entolomataceae*, *Agaricales*, *Agaricomycetes*.

Basidiomata medium-sized, collybioid. *Pileus* 10–20(–35) mm diam, convex to convex flattened, umbilicate, not distinctly hygrophanous, dark brown or grey brown with blackish brown centre, deeply translucently striate up to centre, minutely squamulose at centre, more or less glabrous towards margin. *Lamellae*, L = about 30, l = 3–5, deeply emarginate, ventricose, pink with eroded, concolorous edge. *Stipe* 30–50 × 1–2 mm, cylindrical, bicolored, steel-blue in lower part, brown above, polished. *Smell* and *taste* not noted. *Spores* heterodiametrical, 9.5–11.5 × 7–8.5 μm, av. 10.4 × 7.8 μm, Q = 1.1–1.55, Q_{av} = 1.25, regularly 5–7-angled. *Basidia* 4-spored, clavate, up to 45 × 15 μm, clampless. *Lamella edge* fertile, cystidia absent. *Pileipellis* a cutis at margin, trichoderm-like at centre, made up of clavate terminal elements, up to 20 μm wide. *Pigment* intracellular-granular, brown. *Clamp connections* absent in all tissues.

Habitat & Distribution — Terrestrial on sandy soil, in small groups in moist dune valley with *Salix repens* on calcareous sandy-clayey soil, or in sandy soil of riverbanks, under *Populus nigra* and *Alnus glutinosa*. Known from the Netherlands and Spain.

Typus. THE NETHERLANDS, Prov. Zeeland, Dreischor, 22 Oct. 2016, G.M. Jansen C160-4418 (holotype L0608224, ITS sequence GenBank MW934591, MycoBank MB 839221).

Additional material examined. SPAIN, Barcelona, Vallès Oriental, Can Romegosa, Sant Fost de Campsentelles, alt. 140 m, 24 Oct. 2010, under *Populus nigra* and *Alnus glutinosa*, on sandy soil, F. Caballero & J. Vila, SFC 101024-05 (L0607606, ITS sequence GenBank MW934592).

Colour illustrations. The Netherlands, Prov. Zeeland, Dreischor (type locality). Spores and pileipellis (from holotype); basidiomata *in situ* (holotype). Scale bars = 1 cm (basidiomata), 10 μm (spores and microstructures).

Notes — *Entoloma ammophilum* has a characteristic dark brown or brown grey pileus and a polished, bicoloured stipe. It differs from *E. glaucobasis*, which frequently occurs in the same habitat, by the polished nature of the stipe, and fertile lamellae edge. Furthermore, *E. glaucobasis* is phylogenetically rather distant in the /Griseocyaneum clade. Within the /Sarcitulum clade, this species resembles *E. montanum*, which may superficially look similar, but differs clearly in having a sterile, often brown coloured lamella edge, and alpine or boreal distribution.

Supplementary material

FP1240 Phylogenetic tree derived from Maximum Likelihood analysis based on nrITS1-5.8S-ITS2 data. Analysis was performed in PhyML v. 3.0 (Guindon et al. 2010) using the non-parametric Shimodaira-Hasegawa version of the approximate likelihood-ratio test (SH-aLRT) and the GTR+I+Γ model of evolution. ML bootstrap support values are shown at the nodes (BS > 50 %).

Gerrit M. Jansen, 6703 JC Wageningen, The Netherlands; e-mail: mail@4k2.nl
 Bálint Dima, Department of Plant Anatomy, Institute of Biology, Eötvös Loránd University, Pázmány Péter sétány 1/C,
 H-1117, Budapest, Hungary; e-mail: cortinarius1@gmail.com
 Machiel E. Noordeloos, Naturalis Biodiversity Center, section Botany, P.O. Box 9517,
 2300 RA Leiden, The Netherlands; e-mail: m.noordeloos@mac.com
 Jordi Vila, Passatge del Torn, 4, 17800 Olot, Spain; e-mail: micocistus@hotmail.com