

*Amanita suberis* Migl. & Donato, sp. nov.

IF 559432

Holotype TR gmb1491

Diagnosis: Pileus 6-12 cm diam., initially bell-shaped, then subglobose and finally flattened, characterised by a pronounced umbo. Cap colour varying from olive-brown to greyish-brown, the umbo darker olive-blackish, surrounded by a less intensely coloured halo, cap surface without dimples or hollows and does not bear any volval remnant, margin concolorous, striate for 12–15 mm. Lamellae free, up to 10 mm broad, whitish at first, then pale ivory and finally, in mature specimens, brown with a cream-coloured edge. Lamellulae present but not numerous. Stipe 10–16 × 1.6 (–2.0) cm, cylindrical and slightly enlarged toward the base, white to whitish then, in mature specimens, with greyish shades as if covered by a fine pruina, without distinct scales or zig-zag bands. Partial veil not forming a ring. Volva not much developed (type III according to the scheme by Fraiture, 1993), persistent, sheathing at the base and then becoming separated from the stem, initially white in colour, then pale ivory, on close examination, showing, at the extreme base, some inconspicuous ochre-orange or rusty spots. Flesh whitish, soft in the cap, fibrous in the stem. Smell and taste indistinct. Spore print: white. Spores (9.5–) 10–12 µm, Q = 1.0–1.05, nearly globose, with an evident apiculus, hyaline, smooth, with a large central guttula and a distinctly thickened wall. Basidia 55–70 × 12–16 µm, tetrasporic, club-shaped, with short sterigmata. Subhymenial tree branched, consisting of chains of elongated elements. Marginal cells usually abundant, pyriform to club-shaped, sometimes sphaeropendunculate. Oleiferous hyphae present in the subhymenium. Pileipellis an ixocutis with an upper gelatinized layer, composed of confusingly intertwined elongated hyphae, up to 8 µm diam. Universal veil with a mixed structure consisting of cylindrical, inflated and subglobose cells, with highly variable dimensions of 30–90 × 15–60 µm. Oleiferous hyphae present. Clamp connections absent.

Ecology: observed under *Quercus suber*, *Quercus ilex* and *Quercus* sp. in the Sughereta of Pomezia in a thermophilic Mediterranean environment, less than six kilometers from the sea.

Specimen examined: Italy, on soil, associated with *Quercus suber*, Parco Regionale dei Castelli Romani, Pomezia, IT-RM, 11 Nov. 2020, V. Migliozi (GenBank OP297211).

Etymology: *suberis*; because of the preferential host tree, *Quercus suber*.