Coprinopsis pseudomarcescibilis
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_Coprinopsis pseudomarcescibilis_ Heykoop, G. Moreno & P. Alvarado, _sp. nov._

**Etymology.** Name reflects its morphological similarity to _Coprinopsis marcescibilis_.

**Classification.** _Psathyrellaceae_, _Agaricales_, _Agaricomycetes_.

Cap 12–50 mm broad, 10–30 mm high, convex to conical convex, with prominent umbo, glabrous, sometimes somewhat wrinkled, orange brown when young, then dark beige brown or date colour, hygrophanous, after drying it becomes first pale greyish beige to ochraceous beige, then greyish white. Margin in some specimens somewhat incurved, faintly striate when moist. Veil white, abundant in young specimens forming a firm collar, connecting margin of cap with stem and in addition a layer of radially arranged fibrils present in a 1–2 mm broad zone along margin; later, while detaching itself from stem, the collar forms an appendiculate belt soon splitting into more or less irregular foci; finally, in older specimens veil evanescent and progressively disappearing. _Gills_ close, ascending, adnate, first greyish, then blackish, with white fimbriate edge; lamellulae present. Stem (25–)65–130 × 2–7 mm, cylindrical, central, hollow, longitudinally striate (more pronounced in the upper part), white with pale ochraceous tinges; apex pruinose, and the lower part covered with small white fibrils. Odour not distinctive. Spores 11–16.5(–17) × 6–8 µm, av. 13.3–14.5 × 6.9–7.2 µm (4 collections), Q₁, 1.86–2.08, ellipsoid, smooth, with apical germ pore, in NH₄OH (10 %) reddish brown to orange brown. _Basidia_ 4-spored, 20–35 × 11–13 µm, clavate, hyaline; pseudoparaphyses often seen. _Pleurocystidia_ not observed. **Marginal cells:** _chelioxystidia_ 25–40 × 11–15 µm, very abundant and densely packed, narrowly utriform, sometimes subcapitate; sphaeropendunculate and clavate cells extremely rare and difficult to observe, e.g. 16 × 12 µm; all cells thin-walled, colourless. _Hymenophoral trama_ in NH₄OH (10 %) consisting of hyaline thin-walled hyphae, without encrustations. _Pileipellis_ a cutis consisting of a layer of thin elongate hyphae 8–18 µm diam, on top of a much thicker layer of more cellular structure consisting of broadly ellipsoid, subglobose or irregularly shaped cells, up to 40 µm diam. _Clamp connections_ present. _Stipitipellis_ a cutis consisting of elongate septate hyphae 5–12 µm diam. _Caulocystidia_ abundant, similar in size and shape to _chelioxystidia_. Veil fibrillose consisting of elongate and septate hyaline hyphae, 3–11 µm diam; many of these hyphae ending in terminal cystidia, 34–60 × 10–18 µm, utriform to subcapitate, or cylindrical, which probably are _caulocystidia_ detached from stem together with veil.

**Habitat & Distribution.** Growing solitary to gregarious on calcareous loamy soil under _Salsola vermiculata_ or different graminaceae. So far known from Spain, Germany, Italy (Sicily), and Finland but probably often mistaken for _Coprinopsis marcescibilis_.


Colour illustrations. Spain, Alcalá de Henares, El Gurugú, calcareous loamy soil with *Salsola vermiculata*, where the holotype was collected; basidiomata; _chelioxystidia_; _chelioxystidia_ basidium and spores; _basidia_; _spores under LM_; _spores under SEM_.


_Notes._ _Coprinopsis pseudomarcescibilis_ is characterised by its moderately large basidiocarps with appendiculate veil splitting into more or less irregular foci, the absence of _pleurocystidia_, and the large and dark spores (11–16.5(–17) × 6–8 µm).

In our ITS phylogeny _Coprinopsis pseudomarcescibilis_ is included in a clade together with _C. marcescibilis_ and _C. musae_, the latter recently described by _Órstadius_ et al. (2015). All three species are psathyrellloid members of _Coprinopsis_ which share the presence of a pileipellis forming a cutis and the absence of _pleurocystidia_. _Coprinopsis musae_ differs from _C. pseudomarcescibilis_ in having smaller and paler spores and smaller basidiomata. _Coprinopsis pseudomarcescibilis_ is genetically close to _C. marcescibilis_ (2.21 % nucleotide differences in the ITS sequence, 11/497), but it differs from the latter by its slightly longer spores, 13.3–14.5 µm (mean values 4 coll.) vs 11.6–12.8 µm (mean values 18 coll.; _Kits van Waveren_ 1985), and the veil splitting into more irregular foci on cap margin instead of triangular denticles. However, _C. pseudomarcescibilis_ and _C. marcescibilis_ seem to be sibling species (i.e., cryptic sister species; _Bickford_ et al. 2008) which are difficult to separate only based on morphology.

Consensus phylogram obtained in MrBayes v. 3.1 from an ITS alignment of genus _Coprinopsis_. Values next to nodes represent Bayesian PP and maximum likelihood BP (RAxML). Only nodes supported by > 0.95 PP or > 70 % BP are annotated. The main group of sequences has been collapsed for publication.

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