

COPRINUS PARVULUS, A NEW COPRINUS FROM THE NETHERLANDS

C.B. ULJE+ & P.-J. KEIZER Kruisweg 23,
3513 CS Utrecht, The Netherlands

A new *Coprinus* species in subsection *Setulosi*, *Coprinus parvulus* is described and illustrated.

During an inventory of fungi in a coniferous forest in the Netherlands, in the autumn of 2001, a very small species of *Coprinus* was found on dung. Incubated dung produced more carpophores, which made it possible to complete the description. On account of the presence of lageniform to fusiform pileocystidia it belongs in the subsection *Setulosi* J. E. Lange of section *Pseudocoprinus* P. D. Orton & Watling. In addition spherical cells of veil are present on the pileus. This *Coprinus* could not be assigned to any species in literature and is therefore described as new.

Coprinus parvulus P. - J. Keizer & Ulje, *spec. nov.* — Fig. 1

Pileus primo ovoideus 0.3-1 mm, non striatus, deinde expansus 0.5-2(-3) mm, primo albus mox cinereo-albidus, maturus griseus leviter deliquescens, in statu iuveni velo albo granuloso contextus, quod in statu maturo in medio pileo tantum remanet. Lamellae L = 3-8, 1 = 0-1, distantes, late ad-nexae, segmentiformes, primo albae, mox purpurascens, acie alba. Stipes 3-7 x 0.2-0.5 mm, cylindraceus, subbulbosus, hyalinus, leviter pilosus, ad basim cum squamis veli. Odor nullus, sapor non perquisitus. Sporae depositae purpureo-fuscae.

Sporae [40, 2, 1] 5.7-7.2 x 2.7-3.7 µm, Q = 1.75-2.30, cylindraceo-ellipsoideae, ellipsoideae vel ovoideae, laeves, fusco-badiae, cum poro germinativo medio, c. 0.6 µm lato. Basidia 10-20 x 5.5-6.5 µm, tetraspora, a 4-5 pseudoparaphysibus cincta. Pleurocystidia absentes. Cheilocystidia 15-25 x 5-8.5 x 1.2-3 µm, fusiformia vel lageniformia. Pileipellis (sub)globosis hyphis instructa, pileocystidiis et velo contexta. Velum hyphis clavatis vel (sub)globosis 15-35 µm latis compositum, connexis cellulis hypchoideis, saepe distortis, 2.5 - 6 µm latis. Pileocystidia 25 - 45 x 6 - 11 x 1.5 - 3 µm, lageniformia vel fusiformia. Caulocystidia 22-40 x 6-12.5 x 1.5-3.5 µm, lageniformia vel fusiformia. Fibulae nullae.

In excremento in pineto invenitur.

Holotypus: The Netherlands, Prov. Gelderland, Forest 'Planken Wambuis', on dung in *Pinus sylvestris* forest on fixed drift sand, 21.IX.2001, P.-J. Keizer (LJ).

Etymology: parvulus, diminutive of Latin parvus = small, referring to the small size of the carpophores.

Pileus 0.3 -1 mm when young, expanding to 0.5-2(-3) mm, young ovoid, then conico-convex, finally applanate, not translucently striate, when young white, then very pale greyish cream, with age greyish and only slightly deliquescent; when young covered with white fine-granular veil, with age granular velar remnants only present at centre. Lamellae, L=3-8, 1 = 0-1, distant, broadly adnate, emarginate, sometimes with decurrent tooth, segmentiform, up to 0.5 mm broad, whitish when young, then purplish with

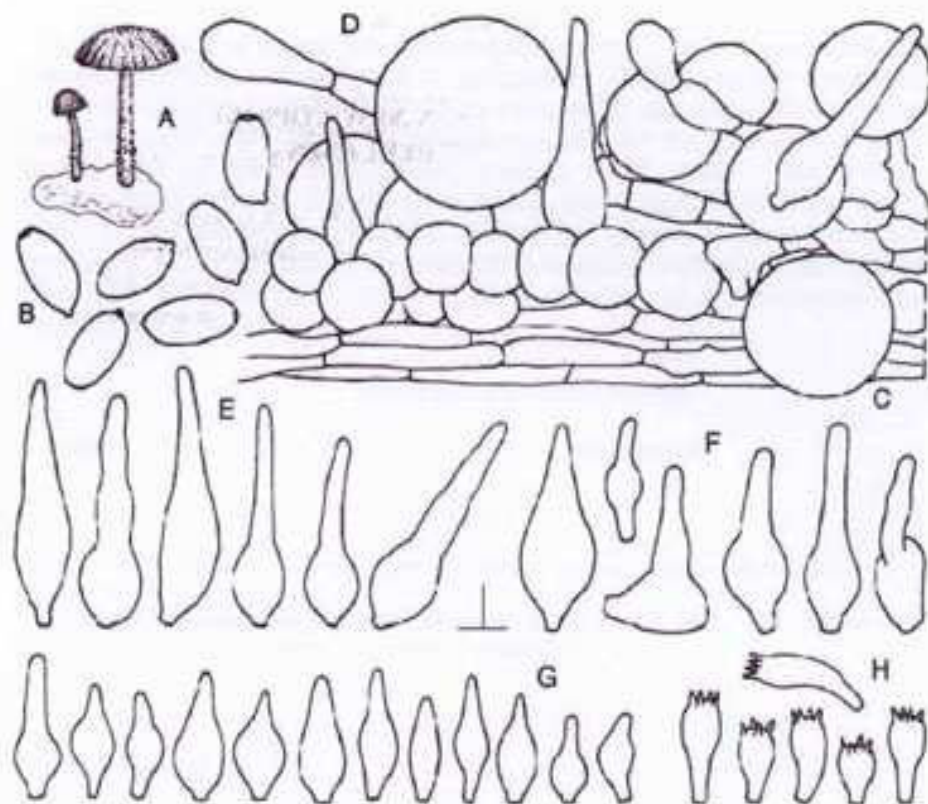


Fig. 1. A. *Coprinus parvulus*. B. spores; C. pileipellis; D. veil; E. pileocystidia; F. caulocystidia; G. cheilocystidia; H. basidia; (A = x 7; B = x 2000; C-H = x 800.)

white edge. Stipe 3-7 x 0.2-0.5 mm, cylindrical, subbulbose at base, greyish hyaline, minutely hairy, in lower part with sparse remnants of veil in form of small white squamules. Smell indistinct, taste not tested. Spore print dark purplish brown.

Spores [40, 2.1] 5.7-7.2 x 2.7-3.7 μm , Q = 1.75-2.30, av. Q = 1.90-2.05, av. L = 6.1-6.8, av. B = 3.1-3.4 μm , cylindrical to ellipsoid or ovoid, medium red-brown, with central, c. 0.6 μm wide germ pore. Basidia 10-20 x 5.5-6.5 μm , 4-spored, surrounded by 4 or 5 pseudoparaphyses. Pleurocystidia absent. Cheilocystidia 15-25 x 5-8.5 x 1.2-3 μm , fusiform or lageniform. Pileipellis a layer of (sub)globose elements, covered with pileocystidia and veil. Veil made up of (sub)globose to clavate cells; the globose ones 15-35 μm wide, connected by hyphoid, often irregular, 2.5-6 μm wide elements. Pileocystidia 25 - 45 x 6 - 11 x 1.5-3 μm , lageniform or fusiform. Caulocystidia 22-40 x 6-12.5 x 1.5-3.5 μm , lageniform or fusiform. Clamp-connections absent.

Habitat — On old dung, presumably from Wildboar (*Sus scrofa*), covered with algae, in pine forest.

Collection examined: THE NETHERLANDS: Prov. Zuid-Holland, Ede, Planken Wambuis, 21 IX.2001, on dung, P. -J. Keizer (holotype, L).

The presence of lageniform pileocystidia places *C. parvulus* in subsection *Setulosi*. In that subsection only *C. pellucidus* P. Karst, another small dung inhabiting *Coprinus* species, is rather close to *C. parvulus*. That species, however, lacks veil consisting of sphaerocysts on the pileus, has larger spores and globose cheilocystidia. Cacialli et al. (1999: 234) mention another taxon close to *C. pellucidus*, having some lageniform cheilocystidia between the globose ones, but with much larger spores similar to these in *C. pellucidus*. Other species of the subsection have considerably larger spores, often with eccentric germ pores, larger fruit-bodies or a non-coprophilous habitat (Ulje & Bas, 1991).

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