

***Pseudocoprinus lacteus* Smith sp. nov.**

Pileus 10–15 mm. altus, 8–10 mm. latus, conicus, glaber, plicatostriatus, ad discum levis, lacteus vel “pinkish buff” (pallide argillaceus), demum lividus; lamellae adnatae, confertae, angustae, lacteae demum fuscae; stipes 3–5 cm. longus, 1 mm. crassus, aequalis, albidus, glaber, fragilissimus; sporae 8.4–10.5 x 5–6.3 x 7–8.4  $\mu$ ; cheilocystidia distinctissima, 22–36 x (8) 10–16  $\mu$ .

*Pileus* 10–15 mm. high, 8–10 mm. across the base, obtusely conic when young and remaining conic till old age when stipe collapses, surface glabrous, soon plicate-striate to the smooth not sharply delimited disc, glabrous at all stages, color “tilleul buff” but disc gradually becoming “pale pinkish buff” and striate area pallid to livid (but pallid again after spores are discharged); *flesh* very delicate and membranous, no odor; *lamellae* adnate to apex of stipe or nearly free, close, narrow, equal or only a few lamellulae present, whitish, evenly dusted with black spores, merely pallid in age after spores have been discharged; *stipe* 3–5 cm. long, 1 mm. thick, equal, white, glabrous or only slightly frosted, very fragile.

*Spores* black in deposit, 8.4–10.5 x 5–6.3 x 7–8.4  $\mu$ , flattened, subtriangular and slightly apiculate at flattened base in face view, subellipsoid and with a slightly eccentric pore in side view, some merely obscurely angular-ovate in face view, blackish in KOH; *basidia* two- and four-spored, dimorphic; *paraphyses* coprinoid; *pleurocystidia* rare to absent or bunched near gill edges toward margin of cap, 28–36 x 10–16  $\mu$ , ventricose with rounded apices, content hyaline and homogeneous; *cheilocystidia* clavate to pedicellate-vesiculose and when revived in KOH with a highly refractive granular amorphous content, 22–36 x (8) 10–16  $\mu$ , content subhyaline to yellowish in KOH; gill trama narrow and hyaline in KOH; *pileus trama* with a cuticle formed by a hymeniform layer of clavate pedicellate to subcylindric cells 30–44 (60) x 9–14  $\mu$ , content as in the cheilocystidia, flesh proper hyaline in KOH.

Habit, habitat and distribution: Gregarious to scattered on bare soil in an oak woods, Ann Arbor, Mich. Sept. 12, 1945, A. H. Smith 20520-type.

Discussion: In stature and coloration this species is similar to *P. disseminatus*, but is at once recognized by its habitat and lack of hairs on the stipe. Under the microscope the two have only the generic characters in common. The flattened spores with the eccentric pore are distinctive enough even if one disregards the contents of the cheilocystidia and cuticular cells of the pileus. Nothing unusual was noted in regard to the contents of these cells when the fresh material was studied, but when revived in KOH they are very distinctive and somewhat similar to that which characterizes the cystidia of *Naematoloma*. The most unusual feature, of course, is that the cells forming the cuticle of the pileus should show similar contents. As far as the author of this species is aware, this is the only one in which this situation is encountered. The spores resemble those of *Coprinus plicatilis* in shape, color and pore characters, but the fungus cannot under any circumstances be referred to *Coprinus*. In moist weather there were no signs of deliquescing even on specimens so old the spores had all been shed and the stipes had collapsed. In *Coprinus*, however, it would appear to be close to *C. hiascens* sensu Lange, which deliquesces tardily. This *Coprinus*, however, differs in having a brownish pileus and differently shaped spores. *Coprinus hemerobius* of some authors is described as having gills which become dark with the spores and then become pallid when the spores have been

discharged, a situation which indicates that they were dealing with a *Pseudocoprinus* instead. However, both Ricken and Bresadola describe the spores of *C. hemerobius* as much larger than in *P. lacteus*, and other differences are also evident when descriptions of the two are compared. *Psathyrella crenata* sensu Konrad & Maublanc appears to be closely related but differs in having larger spores with a truly apical pore. All of these apparently also differ in the type of cheilocystidia and cuticular cells of the pileus.

*Psilocybe acadensis* Smith sp. nov. Fig. 2; H. 3, A, D.

Pileus 1–2.5 cm. latus, obtuse conicus demum campanulatus vel umbonatus, albo-floccosus, glabrescens, viscidus, hygrophanus, subferrugineus dein argillaceus; lamellae angustae, confertae, late adnatae, pallidae demum fusco-purpureae, albo-fimbriatae; stipes 2–4 cm. longus, 2–2.5 mm. crassus, deorsum incrassatus, floccoso-fibrillosus, sursum sericeus; sporae 5–6 x 4–4.5  $\mu$ ; cheilocystidia 28–40 x 5–6  $\mu$ , demum 50–70 x 3–5  $\mu$ .

*Pileus* 1–2.5 cm. broad, obtusely conic becoming obtusely campanulate to plane or expanded-umbonate, the margin incurved at first, surface with scattered white flecks of fibrils left from the universal veil or with a zone of flecks near the margin, glabrescent, viscid, hygrophanous, dark rusty brown when fresh ("Mars brown" to "Verona brown"), fading to ochraceous or clay color ("clay color"), fading on umbo first, margin striate when moist; *flesh* thin and fragile, odor and taste not distinctive; *lamellae* rather narrow, close to crowded, broadly adnate, whitish when young, becoming purplish brown, dull dark cinnamon brown when dried, edges white-fimbriate; *stipe* 2–4 cm. long, 2–2.5 mm. thick, equal above an enlarged base, tubular, flesh within dark brown like the cap, surface more or less covered by the copious remnants of the white veil causing it to appear white or whitish, with a median to superior evanescent fibrillose annulus but surface silky fibrillose with white fibrils above it, the somewhat enlarged base surrounded by an extensive mat of appressed white mycelium.

*Spores* 5–6.2 x 4–4.5  $\mu$ , smooth, in side view subellipsoid to slightly inequilateral, pore apical and small but distinct and apex appearing slightly truncate, in face view broadly ovate to subglobose with the sides slightly angled (some appearing almost triangular), dull yellowish brown when revived in KOH, purplish brown when fresh; *basidia* four-spored, hyaline in KOH (12) 14–18 x 4–6.5  $\mu$ ; *pleurocystidia* none; *cheilocystidia* very abundant and conspicuous, when young narrowly ventricose to subcylindric, 28–40 x 5–6  $\mu$ , the apex often capped with mucilage, in age becoming filamentous and 50–70 x 3–6  $\mu$ , flexuous or straight and with a clamp connection at the cross wall at the base, content hyaline and homogeneous in KOH; *gill trama* parallel to subparallel, pale cinnamon brown in KOH but darker along the subhymenium; *pileus trama* with a well differentiated gelatinous pellicle of hyaline hyphae 1.5–3  $\mu$  in diameter and bearing clamp connections; the flesh proper compactly interwoven and pale cinnamon brown in KOH, the pigment incrusting on the hyphae.

Habit, habitat and distribution: Scattered on decaying stems of *Epilobium*, Upper Brookside, Colchester County, Nova Scotia, July 13, 1931 (Wehmeyer no. 618-type).

Discussion: This species is very easily recognized by its filamentous cheilocystidia, viscid pileus, copious veil, and habitat. The spores and gill attachment are typical of the genus *Deconica* as recognized by some authors, but the cheilo-