

Specimen typicum in Herb. Univ. Mich. conservatum: legit prope Papoose Creek, Seven Devil's Mts., Hell's Canyon area, Idaho, Aug. 23, 1954, Smith n. 46580.

Pileus 2—3.5 cm. broad, broadly convex with an incurved margin, becoming plane to shallowly depressed, margin often uplifted in age, surface moist and hygrophanous, "russet" over all when young, fading out to various shades of tawny, margin opaque to faintly striate, surface obscurely innately squamulose at first (before fading), when faded obscurely to distinctly furfuraceous; flesh concolorous with surface, no distinctive odor or taste, no color change.

Lamellae close, 3 tiers of lamellulae, narrow to moderately broad, depressed-adnate to bluntly adnate, rich dark cinnamon when young, nearly concolorous with the pileus in age; edges even at first but becoming wavy to eroded in age.

Stipe 3—4.5 cm. long, 1.5—2.5 mm. thick, equal, fragile, tubular, concolorous with pileus, evenly faintly silky fibrillose but no pruina present and no veil, base darkening to blackish brown in age, coated at and near attachment with white mycelium.

Spores  $8-9.5 \Rightarrow 5.5-6.5 \Rightarrow 6.5-8 \mu$ , broadly ellipsoid in side view, broadly oval to subcircular in outline in face view, apical pore present but inconspicuous, outer wall yellowish to nearly hyaline and warty-wrinkled, inner wall thickened and rich rusty cinnamon in KOH, the outer wall tending to slough off irregularly; basidia 4-spored,  $22-24 \Rightarrow 7-8 \mu$ , hyaline in KOH; pleurocystidia none; cheilocystidia  $16-20 \Rightarrow 9-13 \mu$ , clavate to nearly globose, mostly with ochraceous content (in KOH), smooth, thin-walled; gill trama yellowish in  $H_2O$  and KOH, somewhat interwoven; pileus trama floccose-interwoven, yellowish except for the bay-brown cuticular region, with fascicles of hyphae having ellipsoid to elongate heavily encrusted cells; clamp connections present.

Habit, habitat and distribution: Scattered to gregarious on wet soil, Papoose Creek, Seven Devil's Mts., Idaho, August 23, 1954, Bigelow and Smith - 46580.

Observations: The distinctive features are the practically imbedded cheilocystidia, the roughened spores, and the silky stipe which in age darkens at the base. The color of the spores when fresh is that of the section *Flammula* in *Pholiota*, in other words, typical of the rusty-brown spored group.

***Kuehneromyces carbonicola* sp. nov.**

Pileus 1—3(4) cm. latus, convexus, obscure cinnamomeo-brunneus, hygrophanus, demum fulvus, lubricus, glaber; lamellae latae, adnatae, pallide fulvae demum fulvae; stipes 3—5 cm. longus, 2.5—3.5 mm. crassus, sericeus, deorsum obscure brunneus; sporae  $8-11.5 \Rightarrow 6-6.5 \Rightarrow 7-9 \mu$ , ferrugineo-fulvae, crasso-tunicatae, subtruncatae;

cheilocystidia 20—26  $\Rightarrow$  8—13  $\mu$ , fusoid-ventricosa, subacuta; hyphae fibulatae.

Specimen typicum in Herb. Univ. Mich. conservatum: legit prope Lick Creek Summit, 7000 ft., Payette National Forest, Idaho, July 5, 1954, S m i t h n. 44640.

Pileus 1—3(4) cm. broad, broadly convex with an incurved margin, expanding to plane or nearly so, color "natal brown" at first but gradually becoming paler (to "warm sepia"), hygrophanous, fading to a bright or a dingy tawny, lubricous, glabrous or with a faint marginal zone of pallid fibrils from the thin veil; flesh fragile, watery brown fading to buff, odor and taste none.

Lamellae broad, adnate, seceding at times,  $\pm$  ochraceous tawny (paler when young, darker in age) edges somewhat fimbriate.

Stipe 3—5 cm. long, 2.5—3.5 mm. thick above, lower three fourths silky from the remnants of a thin veil and at first with a superior fibrillose zone where the veil breaks, apex naked and shining, watery brown above, darker brown below and becoming bister from the base upward in age.

Spores 8—11.5  $\Rightarrow$  6—6.5  $\Rightarrow$  7—9  $\mu$ , elliptic in side view, angular-ovate to broadly oval in face view or some almost kite-shaped, smooth in KOH, with a very thick wall (0.5—0.8  $\mu$ ) rich reddish cinnamon in KOH, apical pore present and apex more or less truncate; basidia 23—26  $\Rightarrow$  8—10(11)  $\mu$ , clavate, hyaline in KOH; pleurocystidia none; cheilocystidia present, abundant but readily collapsing and not easily demonstrated on old gills, 20—26  $\Rightarrow$  8—13  $\mu$ , fusoid-ventricose with short necks and obtuse to subacute apices, hyaline, smooth, thin-walled; gill trama parallel, pale cinnamon in KOH, hyaline in H<sub>2</sub>O when fresh but with hyaline incrusting particles along the walls; pileus trama floccose-interwoven; cuticle of compactly appressed enlarged hyphal cells with ochraceous walls in H<sub>2</sub>O when fresh and dark rusty brown revived in KOH, the cells  $\pm$  ellipsoid (10—18  $\mu$  in diam.) and hyphae radial, pigment mostly in the wall, encrustations not conspicuous; clamp connections present.

Habit, habitat and distribution: Densely gregarious on burned soil, Lick Creek Summit, Payette National Forest, Idaho, July 5, 1954, H. V. & A. H. S m i t h (Sm-44640).

Observations: The lubricous pileus, dull reddish brown color and mild taste distinguish it. In KOH the color of the spore would seem to suggest a relationship with *Conocybe* but the other characters do not bear this out. The relationship as I see it at present is with the section *Flammula* of *Pholiota*. For a time I considered erecting a new genus for this species on the basis of spore characters, but I am now convinced that it is better to place it in *Kuehneromyces*. This opinion was influenced in a large measure by a collection Wm. Bridge Cooke made of a third species apparently belonging to

this same group which has the gelatinous subhymenium and pleurocystidia of section *Flammula*. I have not described it here for lack of certain data needed to completely characterize it.