

3. *Inocybe chelanensis*, sp. nov. (FIG. 5-7)

Pileus 2-4 cm. latus, e campanulato convexo-expansus, siccus, centro sericeo-fibrillosus, pallide luteus vel cremeus vel fere albidus, margine fibrilloso-subrimosus, brunneo-vinaceus; caro alba, immutabilis; odor nullus vel vix raphaneus; lamellae rotundato-adnexae, subconfertae, latae, ex albis brunneo-olivaceae; stipes 1.5-4 cm. longus, 4-12 mm. crassus, equalis vel deorsum subattenuatus, solidus, glaber, longitudinaliter striatus, salmoneus vel brunneo-vinaceus; sporae 5.5-8 \times 13-19 μ , crasse 4-5-tuberculatae, apice prae-longus; pleurocystidia et cheilocystidia fusioidea vel subclavata, 13-20 \times 50-90 μ . Specimen typicum legit prope Chesapeake Saddle, Chelan County, Wash., July 8, 1938, D. E. Stuntz n. 659, pars in Herb. Univ. Wash., pars in Herb. Univ. Mich., conservatum.

PILEUS 2-4 cm. broad, convex to campanulate, becoming shallowly convex, finally almost plane; surface of young pileus completely covered with an appressed, pallid, silky coat which as the pileus expands remains at the center but disappears outward, revealing the lacerate-fibrillose, subrimose cuticle; color of center cinnamon buff (R) to pinkish buff (R), nearly white or pale cremeous in some, margin various shades of vinaceous brown, such as Rood's brown (R) or Mikado brown (R); in age the pileus tends to become discolored to shades of tawny olive (R); context thick (4 mm.) clear to the margin, there abruptly thin, firm, brown under the cuticle, elsewhere white, unchanging; odor almost none, very faintly raphanoid, taste mild. LAMELLAE adnexed to narrowly adnate, sinuate to deeply emarginate, rounded at both ends, ventricose, broad, 5 \times 12 mm., edges convex, scarcely or not at all white-fimbriate; somewhat distant, rather thick, rigid; color at first white, becoming Dresden brown (R). STIPE 1.5-4 cm. long, 4-12 mm. thick, usually flattened, rarely cylindrical, equal or tapering downward a little, the apex dilated; solid, rigid, firm, the context white or with an incarnate tinge from the very first, slowly turning a little reddish where bruised; surface satiny, rather markedly longitudinally grammate, with superficial white silky fibrils below, the apex sparingly white-pruinose; color at first buff pink (R) to light vinaceous cinnamon (R), becoming vinaceous cinnamon (R) to orange cinnamon (R), tinged cacao brown (R) in age. CORTINA white, silky, very sparse and evanescent. SPORES 5.5-8 \times 13-19 μ , most frequently 6.5 \times 16 μ , distally prolonged into a smooth, bullet-shaped apex, bearing one to five large rounded nodules at the basal end, rarely with the entire outline angular or nodulose. PLEUROCYSTIDIA 12.5-19.5 \times 50-90 μ , fusiform to clavate, thin-walled, not abundant, deeply embedded in the hymenium, from which they project only 20-25 μ . CHEILOCYSTIDIA same size and shape as the pleuro-

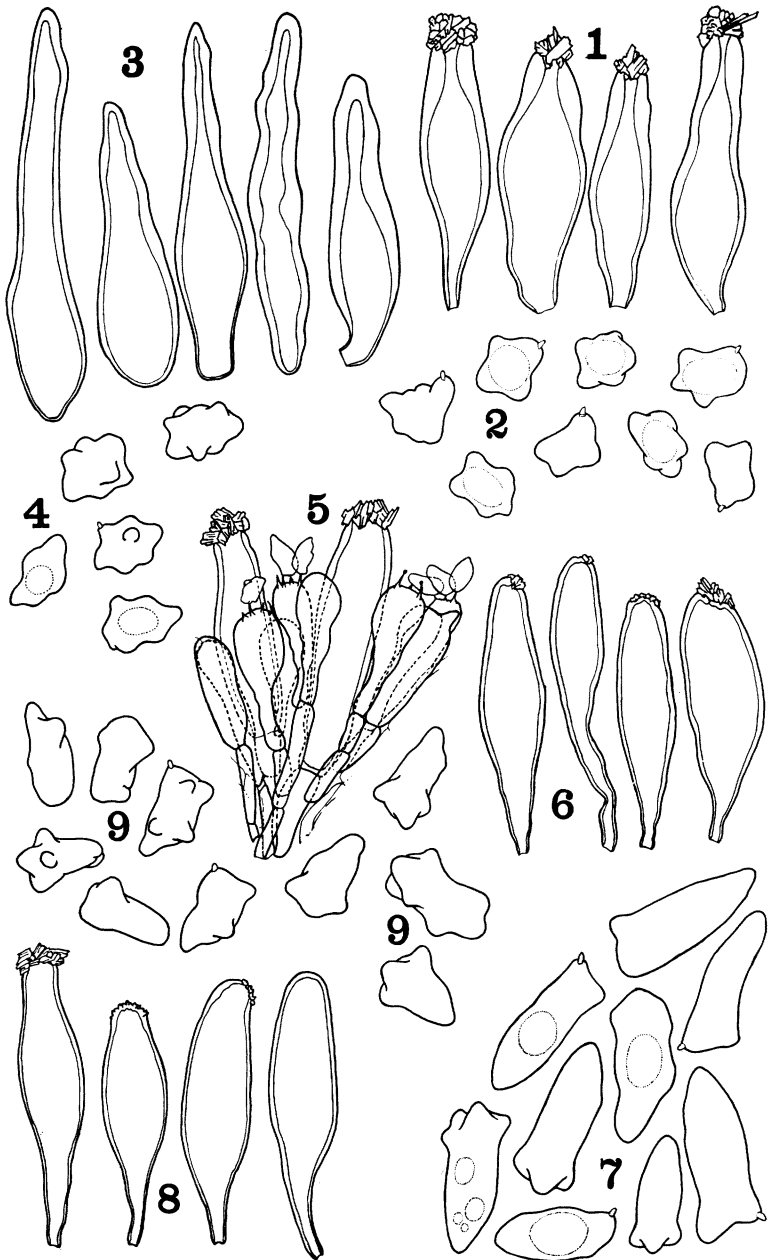
cystidia, not abundant, deeply embedded in the edge of the lamella. STERILE CELLS lacking, the edge of the lamellae fertile, composed of normal hymenial elements. TRAMA OF LAMELLAE very compact, homogeneous, of long, narrow cells which are cylindrical to narrowly fusiform, predominantly the latter. No lactifers seen. Subhymenium deep, cellular.

Gregarious on needles and mineral soil under *Abies* spp. and *Pinus contorta* Loud., Chesapeake Saddle, Chelan County, elevation 6000 ft., July 8, 1938 (659, type).

Unique spores distinguish this species from other *Inocybes*. In the course of their development, the distal half becomes greatly prolonged, remaining smooth, while a few large, round, low nodules develop subsequently at the basal end only. Occasionally the spore develops no nodules, but acquires a sinuous or angular outline, and rarely nodules are developed over the whole surface. Other than its spores, the distinguishing characteristics of *Inocybe chelanensis* are the vinaceous-brown pileus with buff or cream colored center, and the stout, salmon colored to brownish vinaceous stipe. As far as I am able to determine, there are no other species of *Inocybe* to which *I. chelanensis* is closely related. Certain of the specimens of *I. brunnea* Quél. figured by Heim (5, pl. XV, fig. 1) look not unlike my plant, but the resemblance is purely superficial. The spores of *Inocybe Rennyi* Berk. & Br. resemble those of *I. chelanensis* in fundamental nature and course of development, but in other respects the two species are quite dissimilar.

4. INOCYBE CICATRICATA Ellis & Ev. (FIGS. 8, 9)

PILEUS up to 2.5 cm. broad, campanulate, becoming obtusely campanulate, umbonate, margin rounded, surface innately radially silky, with a rather thick cuticle, remaining smooth; color when young otter brown (354) t.-4, becoming raw umber (301) t.-1 in age; context 3 mm. at the center, hygrophamous, brown under the cuticle, elsewhere yellowish, odor faintly spermatic. LAMELLAE broadly adnate, decurrent by a short tooth, shallowly sinuate, rounded at the margin, convex, broad, about 5×11 mm., subdistant, of two lengths; color smoke grey (363) t.-1, becoming snuff brown (303) t.-1. STIPE 4 cm. long, 5 mm. thick, cylindrical, equal, the base not bulbous, solid; surface satiny, with a few superficial fibrils at the apex (which is not pruinose) and base, color brownish terra cotta (322) t.-1 above, shading into raw



FIGS. 1-9. Species of *Inocybe*.