

by a scanty, evanescent veil, 1.5–4 cm. broad, 2–4 cm. tall (FIGS. 9, 10); surface grayish straw-colored to darker, smooth; peridium thin, sometimes breaking away from the stipe below; gleba brown, with variable sized cavities; stipe stout, somewhat bulbous, tapering upward, percurrent above; a few ovoid cystidia present; spores ellipsoid to ovoid, brown, smooth,  $6.5\text{--}8.2 \times 4.9\text{--}5.4 \mu$  (FIG. 11).

**17. *Secotium pingue* sp. nov.**

Fructificationes 5–6 cm. altae, 5 cm. crassae; pileo depresso-globose, firmo, ad basim penitus excavato, superficie laevi, luteo-albida cum maculis brunneo-lutescentibus; stipite concolori, glabro, sursum attenuato, inferne ultra 2 cm. crasso, superne in columellam crassam percurrentem procurrenti, farcto; peridio superne circa 2 mm. crasso, inferne tenuissimo e stipite separabili; gleba fusco-brunnea, locellis parvis, e columella radiantibus; basidiis anguste clavatis, 2- et 4-sporigeris; sporis fusco-brunneis, ovoideo-ellipsoideis, verrucosis,  $12.5\text{--}16.3 \times 8\text{--}9.5 \mu$ .

Fructifications 5–6 cm. tall, 5 cm. broad; cap depressed globose, base excavated  $\frac{1}{3}$  the way up the columella, firm (FIG. 16); surface smooth, buffy whitish with brownish-yellow spots in preservative; stipe concolorous smooth, tapering upward, over 2 cm. in diameter below, percurrent as a stout columella, stuffed; peridium about 2 mm. thick above, very thin below where it separates from the stipe; gleba Dresden brown in preservative; cavities small, radiating from the columella; basidia narrowly clavate, 2- and 4-spored; spores dark brown, ovoid-ellipsoid, verrucose,  $12.5\text{--}16.3 \times 8\text{--}9.5 \mu$  (FIG. 17).

Under duff on *Abies*, grove south of Horse Camp, Mt. Shasta, California, July 25, 1939, *Wm. B. Cooke*, No. 13362, type (in Zeller Herb.).

Under oil immersion the spores are distinctly verrucose, especially so at and near the distal end. In lactophenol-fuchsin-methol-blue the spores show a closely applied gelatinous sheath (utricle). Many spores have a very short papillate remains of the sterigma. Sought out by rodents.

**18. *Secotium polytrichoides* sp. nov.**

Fructificationes 3.5–11 cm. altae, tenuissimae; pileo 6–12 mm. alto, ad basim 3–4 mm. crasso, ellipsoideo vel conico, apice acuto, basi attenuata vel truncata, margine fibrillis albis longis decurrentibus fimbriato, superficie glabra, inferne subrimosa, cremea, siccitate obscuriore; stipite 1–2 mm. crasso, terete, aequo, tenaci, glabro, concolori; gleba fusco-brunnea, locellis

paucis, elongatis, plerumque e stipite radiantibus; sporis fusco-brunneis, laevibus, obovoideis, episporo crasso,  $8.7-10 \times 5.8-6.3 \mu$ .

Fructifications 3.5–11 cm. tall, very slender (FIG. 6); pileus 6–12 mm. long, 3–4 mm. broad at the base, ellipsoid or conical, apex acute, base attenuate or truncate at maturity, margin fimbriate, mostly with long decurrent, whitish fibrils, surface smooth, somewhat rimose below, tan, drying darker; stem 3–9 cm. long below the pileus, 1–2 mm. in diameter, terete, equal, tough, smooth, concolorous; gleba dark-brown, cavities few, elongate, separated by thin anastomosing lamellar partitions (FIG. 8); spores dark-brown, smooth, obovoid with a thick episporium,  $8.7-10 \times 5.8-6.3 \mu$  (FIG. 7).

Scatteringly gregarious, on moist ground among grass and rushes, elevation 8100 ft., Horse Camp, Mt. Shasta, Siskiyou county, California. July and August. Collected by *Wm. B. Cooke*, Nos. 7646 (in Univ. of Calif. Herb. No. 568640), 8612, 8623, 8660, 10276 type, 13313.

The small nodding caps on very slender wire-like stems remind one of the stalked fruiting capsules of the moss, *Polytrichum*, with calyptra closely hugging the capsule and stem; some of them are not much larger.

### **Sedecula** gen. nov.

Fructificationes hypogaeae, pulvinatae, coriaceae, sine basi sterili radicibusque; peridio crasso, superne coriaceo, inferne paene obsoleto dehiscentique; gleba atra, pulveracenta, cum venis crassis albis, a peridio in centrum vergentibus, ceterum ut *Sclerodermatis*; sporis brunneis, ellipsoideis vel irregularibus, laevibus.

Fructifications hypogeous, pulvinate, leathery, without sterile base or radicle; peridium thick, leathery above, almost obsolete below, dehiscing below; gleba black with broad whitish veins extending inward from the peridium, becoming powdery and otherwise as in *Scleroderma*; spores brown, ellipsoid to irregular, smooth.

Type species, *Sedecula pulvinata*.

This odd genus because of its heavy peridium and glebal characters is referred to the *Sclerodermataceae*. Young specimens should be studied to learn the sequence of glebal development. From the 3 mature specimens at hand development of the gleba would appear to be centripetal.