

Gomphidius subroseus sp. nov. (Plate 13).

Pileus 3-6 (7) cm. broad, convex-expanded then plane, very obtuse to broadly depressed, with a viscid separable pellicle, glutinous only in rainy weather, varying "salmon-color" to "vinaceous-pink" (Ridg.), disk "ochre-red" to "testaceous," usually fading, becoming slightly blackish on drying, glabrous, even or slightly wrinkled when dry; flesh thick on disk, abruptly thin on margin, white or tinged vinaceous. Gills decurrent, close to subdistant, attenuate at ends, 6-7 (8) mm. broad at middle, soon "pale smoke-gray" to "pale mouse-gray," finally darker and variegated, some forked near margin or towards stem, thickish, edge entire. Stem 3-6 cm. long, 6-12 (15) mm. thick, tapering downwards or subequal, straight or curved, solid, base or lower half "lemon-yellow," "empire-yellow" or "citron-yellow" (Ridg.), apex or upper portion white and silky, covered when fresh up to near the apex by the hyaline, viscid, thin, appressed sheath of the universal veil, at length glabrous and dry, rarely becoming sordid or blackish in age. Spores 14-17 (20) x 5-6 μ , subfusiform-ellipsoid, obtuse at ends, smooth, dark sooty. Cystidia rather abundant, cylindrical above the slender pedicel, hyaline (in fresh plants), 100-140 x 8-15 μ , apex rounded. Odor and taste none.

Type on humus and moss under conifers, near Welch's Post Office, Oregon National Forest, Mt. Hood, Oregon. September 22, 1922. Frequent in this region. Also under pines, Tolland, Colorado, September 14, 1920; and near Copeland, Idaho, September 2, 1922. Collected by C. H. Kauffman. Deposited in the herbarium of the University of Michigan.

This species differs from *G. roseus* (Fr.) Quél. by the distinct yellow base of the stem, by the less rosy-red color of the pileus attributed to the European plant, and perhaps by the cystidia. We apparently have no account of the cystidia of *G. roseus*. Ricken, to be sure, gives cystidia for the plant he places under that name, but Ricken's description departs from the conception of other mycologists, and his plant may be the species here described, or perhaps it is *G. gracilis*. Rea (12) unaccountably copies Ricken's remarks on the cystidia, but Rea's description otherwise applies to the plant with a rosy stem-base, and is therefore to be considered the correct traditional conception of *G. roseus*.

G. gracilis Berk., although it has a yellow stem-base, is described by Berkeley as having a conic-hemispherical pileus and

others agree that it is more or less umbonate; *G. subroseus* has a rounded pileus from the beginning and later becomes plane to depressed. After the specimens were dried they turned somewhat blackish, but when fresh this tendency to blacken—so noticeable a characteristic in some species—is very slight in this western species. From *G. flavipes* it is readily distinguished by its smaller spores, and from *G. maculatus* by the veil on the stem.

GOMPHIDIUS OREGONENSIS Peck (emended).

Pileus 5–10 cm. broad, at first convex, obtuse, becoming plane, glutinous from the universal veil, livid flesh-colored when fresh, becoming black-spotted in age and blackish when dried, glabrous, even; margin at first incurved. Gills short-decurrent, close to subdistant, gray when partly mature, then blackish. Stem 3–8 cm. long, subequal or tapering downwards, rather stout, 8–15 (25) mm. thick, floccose-fibrillose, citron-yellow almost to the apex, sheathed in part by the glutinous veil which sometimes terminates in a glutinous ring near the apex, yellow within at the base, surface becoming black-spotted when handled. Odor and taste mild. Spores narrow, elongated-ellipsoid, 10–13 x 3.5–4.5 μ , smooth, tinged smoky. Cystidia few, subcylindrical, 100–125 x 15–18 μ .

Description drawn from fresh plants collected at Lakeushman, Washington, 1915, by C. H. Kauffman.

This has much the habit and stature of *G. glutinosus*, but is definitely distinct by its relatively small spores, and the somewhat different colors when fresh. The glutinous veil is quite thick on the pileus and especially so on the incurved margin of the young fruit-body. It is reported from all the Pacific coast states.

This species was incompletely described by Dr. Peck, who apparently drew his description from dried plants. Few collections are in the eastern herbaria that I examined. The specimens from California, distributed under this name by C. F. Baker in "Pacific Coast Fungi, No. 155," is not a *Gomphidius*, but probably a *Paxillus* with globose spores—at least this is true of the copy in the Atkinson herbarium. On the printed label of this number, Baker states that the gills are phosphorescent, a statement which is therefore not dependable in its application to *G. oregonensis* (9).



GOMPHIDIUS SUBROSEUS