

11. *RUSSULA ALUTACEA* Fries, Epicr. Myc. 362. 1838

Agaricus alutaceus Fries, Syst. Myc. I: 55. 1821.

Tacoma, Washington, *Murrill* 721.

These specimens which I am referring to *Russula alutacea* differ from the description in two respects; the pruinose gills and the unfading pileus. Upon comparison with better foreign material than I have yet been able to obtain, it may be possible to clear away any doubt. They were abundant along the border of a lake in deciduous and evergreen forests. The pileus is broad, depressed, slimy, with separable pellicle, very dark purple-black, up to 15 or more cm. broad, with an even margin; the gills are cream-colored, avellaneous when dry and dusted with spores, sinuate; stipe equal, rose-colored, 10 cm. long, 2.5–3 cm. thick; spores yellow, broadly ellipsoid, echinate; taste mild, odor none.

12. *RUSSULA FLAVICEPS* Peck, Ann. Rep. N. Y.

State Mus. 53: 843. 1900

Near Searsville Lake, California, *McMurphy* 20, December 28, 1902.

14. *Russula crenulata* sp. nov.

Pileus broadly convex, then plane to depressed, up to 9 cm. broad; surface milk-white or slightly yellow, viscid when moist, pellicle easily separable, glabrous; margin thin, slightly tuberculate-striate with age; context fragile, white, taste very acid; lamellae white, equal, adnate, plane, edges appearing under the lens finely notched or crenate, not forking, rounded at the outer end, narrowed at the inner, pruinose, close; stipe white, spongy, nearly equal or enlarged below, glabrous, 10 cm. long, 2 cm. thick; spores white, mostly globose, echinulate, 10 μ in diameter.

Type collected at Glen Brook, Oregon, in a dense fir forest with a few oaks, November, 1911, *W. A. Murrill* 762. This species differs from *Russula albidula* Peck in its larger size; crenulate gills, which are broader and adnate rather than decurrent; in the absence of forking gills; and in the slightly tuberculate-striate margin.

15. *Russula Murrillii* sp. nov.

Pileus convex, becoming plane then depressed, up to 5 cm. broad; surface violaceous or darker in the center or entirely

darker, pruinose, becoming floccose-pruinose, evidently viscid when wet but soon dry; margin even; context white, thin, taste not noted; lamellae ochroleucous when fresh, becoming deeper yellow, equal, venose connected, rarely forking next to the stipe, rounded at the outer end, narrowly adnate at the inner end, subdistant, rather broad; stipe chalk-white, unchanging in drying, nearly equal, firm, stuffed, then tending to become hollow, glabrous; spores pale-yellow, echinulate, some globose, but many ellipsoid, $10 \times 7 \mu$.

Type collected in fir forests with scattered specimens of oak, birch, willow, and maple, November 6, 1911, Corvallis, Oregon, *W. A. Murrill* 965. This species resembles *Russula azurea* Bres., but differs in the color of the pileus and the lamellae, which in *R. azurea* are white and remain white. It is a beautiful plant, characterized by its violet cap and pure-white stem. It is to be hoped that other collections of this species will soon be made and the taste recorded.

15. *Russula bicolor* sp. nov.

Pileus broadly convex, soon nearly plane, up to 8 cm. broad; surface coppery-red intermixed with pale-yellow or ocher, viscid when moist, pellicle separable on the margin, glabrous; margin even, becoming striate when mature; context white, subfragile, acrid to the taste; lamellae white, drying yellowish, equal, broad at the outer end, narrowed at the inner end but not free, interveined, subclose; stipe white, spongy, becoming hollow, 4.5 cm. long, 1.5 cm. thick or smaller; spores white, subglobose, echinulate.

Type collected under yellow birch in mixed woods, Newfane, Vermont, *Burlingham* 39-1911. Number 807, *Murrill*, Oregon, seems to be the same.

16. *RUSSULA PECTINATA* (Bull.) Fries, Epicr. Myc. 358. 1838

Seattle, Washington, *Murrill* 407.

NEW YORK BOTANICAL GARDEN.