

outer oblong-lanceolate, the inner lanceolate, all dark-purple except as to the green margins: achenes fusiform, purple, stoutly short-beaked, the pappus long, not very delicate, yellowish-white.

Strongly marked low glaucous species known only as collected by Mr. F. V. Coville, 14 Sept., 1902, "on a slope of firm pumice gravel," in the Crater Lake National Park, Oregon.

**AGOSERIS COVILLEI.** Size of the preceding, but caudex mostly simple: leaves linear to lanceolate, acutish, not gland-tipped, glabrous, some entire, others variously somewhat crisped and irregularly toothed: scapes little surpassing the leaves, sparsely curled-hairy throughout: involucre broad, its outer bracts ovate-lanceolate and short, the others gradually narrower, all sparsely curled-hairy on the back, naked or nearly so marginally: flowers large, yellow: mature achenes unknown, but without doubt short-beaked.

Collected by Mr. Coville at the same place and date as the foregoing, this one in full flower, the other in fruit only; the two species notably dissimilar.

**AGOSERIS DECUMBENS.** Low perennial with depressed leaves and decumbent scapes resting on a simple taproot without definite intermediary caudex: leaves glaucous, entire, linear but above the middle tapering to a long acute apex, glabrous except as showing a few long loose marginal hairs near the base: scapes stoutish, not notably striate, the longest 4 or 5 inches long, loosely hairy at base and to above the middle: involucre  $\frac{3}{4}$  inch high, glabrous, the bracts in about 3 series, all lanceolate, the inner series not narrower than the outer, those of no series acute, not yet notably obtuse: achenes whitish, narrowly fusiform, with distinct but very short white beak, this supporting a copious firm shining-white pappus that is longer than the achene as a whole.

Fir glade on east bank of Diamond Lake, Douglas Co., Oregon, 6 Aug., 1897, by Messrs. Coville and Applegate.

Species most distinct both in habit and character from *A. angustissima* which is of the same locality.

AGOSERIS PRIONOPHYLLA. Size and habit of the last, except that the foliage equals or even surpasses the scapes, the herbage similarly rather arachnoid-hairy: leaves when entire narrowly linear, most of them broader, the margin beset with rather remote broad and short two-fold teeth, or toward the apex smaller but very salient simple teeth: involucre little more than  $\frac{1}{2}$  inch high, its bracts broadly lanceolate, those of the outer series and of the middle one appressed-villous on the back and strongly villous-ciliate, the pubescence all straight and fuscous: achenes with short stout beak, and short firm dull-whitish pappus.

Mount Hood, Oregon, Aug., 1893, T. J. Howell; his n. 1939 as in my herbarium.

Very distinct from the last by its involucre and achenes; also very peculiar as to the double dentation of the leaves which seem beset with broad short teeth each broadly and deeply notched, as one sees the teeth in the large crosscut saws, so called, of the lumbermen.

AGOSERIS HOWELLII. Low and probably subalpine, the crown of the root often parted but not subligneous; scapes slender, 4 to 7 inches high, not greatly surpassing the suberect foliage; herbage deep-green, barely glaucescent, sparsely somewhat cobwebby-hairy: leaves broadly linear, attenuate-acute, entire or with few and remote elongated subfalcate segments; scapes tomentose under the involucre, this  $\frac{3}{4}$  inch high, few-flowered and narrow, the bracts all lance-linear, obtusish, the outer series shorter and relatively broader, glabrous on the back, marginally short-woolly, the inner altogether glabrous: achenes nearly cylindric and linear, tapering quite abruptly to a not slender beak longer than the body: pappus not long, dull-white, rather firm.

Mount Hood, Oregon, Aug., 1881, T. J. Howell, his n. 142 as in U. S. Herb.; the species remarkable for the abruptness