

ing toward the base scattered eglandulose bristles; leaves similar in pubescence to the stem, the blades cleft almost to the midrib, the divisions linear-lanceolate and sharply toothed or lobed; peduncles slender, usually thicker just beneath the anthodium; involucre 10 to 12 mm. high, scantily tomentose, bearing a few greenish black or green eglandulose hairs usually 2 to 3 mm. long; achenia 7 to 9 mm. long, fusiform, truncate at the apex, olive-green or sometimes reddish brown in color at maturity, not costate but sometimes marked with lines of paler color in place of costæ.

PLATE XXIV.

Type specimen in the United States National Herbarium, collected August 16, 1893, in the Yellowstone National Park, by J. N. Rose.

This plant is distinguishable from *Crepis occidentalis* by its uniformly deeply cut glabrescent leaves, the eglandulose bristly hairs of its stem and involucreal bracts, and its noncostate achenia. Red achenia have been seen only in Hillman's specimens from Reno, Nevada.

SPECIMENS EXAMINED.

Oregon:

Blue Mountains, *T. T. Howell*, 1885.

Idaho:

Boise City, *A. Isabel Mulford*, 1892.

Montana:

Without definite locality, *F. D. Kelsey*, 1887.

Helena, *F. W. Anderson*, 1887.

Near Jefferson River, *F. Lamson-Scribner*, 1888 (No. 126b).

Beaverhead County, *Frank Tweedy*, 1888 (No. 221).

Deer Lodge, *F. W. Traphagen*, 1888.

Wyoming:

Yellowstone National Park, *J. N. Rose*, 1893 (No. 680); *Frank Tweedy* (No. 736).

Wind River Mountains (?), *J. C. Fremont*, 1843 (No. 680).

Uinta-County, La Barge, *E. Stevenson*, 1894.

Utah:

Wasatch Mountains, *Sereno Watson*, 1869 (No. 715, in part).

Kane County, *A. L. Siler*.

Sevier County, Glenwood, *Lester F. Ward*, 1875 (No. 107).

Nevada:

West Humboldt Mountains, *E. L. Greene*, 1894.

Near Reno, foothills, *F. H. Hillman*, 1894.

CREPIS ROSTRATA Coville, sp. nov.

Plant perennial, 15 to 30 cm. high, with one to three stems from each caudex; stems striate-angulate, with little or no tomentum, sparingly hirsute, especially below, with glandless hairs; leaves with similar pubescence (the bristles often confined to the midrib and petioles), their blades deeply pinnatifid into linear-lanceolate, toothed or pinnatifid divisions; anthodia one to three on each stem, on long, stout peduncles, these slightly contracted just beneath the anthodium; involucre 12 to 15 mm. high, devoid of tomentum (except in some cases at the very base), either densely clothed or only scantily provided with long glandless hairs (of a milk-white color in our freshly dried specimens); achenia 7 to 11 mm. long, not costate, olive-green at maturity and usually marked with lines of fainter color, the upper part contracted into a distinct beak 2 to 3 mm. long.

PLATE XXV.

Type specimen in the United States National Herbarium, collected June 18, 1893, near Crab Creek, Douglas County, Washington, at the altitude of about 750 meters, by J. H. Sandberg and J. B. Leiberger.

This plant differs from *C. occidentalis* in the same characters as those given under *C. scopulorum*, and is a close relative of that species. Its conspicuously beaked achenia, the milk-white color of the involucreal hairs, and the usual absence of tomentum

on the involueral bracts, together with its more scapose character and the thickness of its peduncles, serve to distinguish it from *C. scopulorum*. It may yet be found that intergradation occurs.

SYNONYMY.

Crepis occidentalis crinita Gray, Bot. Cal. i, 435 (1876), not *Crepis crinita* Solander (1831). Type specimen in the Harvard University Herbarium, collected in the year 1841, on the eastern side of the Cascade Mountains, between the Natches (Spipen) and Wenatchee rivers, by the botanists of the Wilkes Expedition. In the type specimen the involueral hairs are unusually dense, and from lying long on herbarium shelves have changed from a milk-white to a dirty yellow color, while the achenia, although beaked, do not show that character so conspicuously as do the mature specimens now collected.

SPECIMENS EXAMINED.

Washington:

Between the Natches (Spipen) and Wenatchee rivers, *Pickering* and *Brackenridge*, 1841.

Douglas County, Crab Creek, *Sandberg* and *Leiberg*, 1893 (No. 225).

Klikitat County, *Joseph Howell*, 1879.

British Columbia:

Spences Bridge, *James Fletcher*, 1885.

CREPIS BARBIGERA Leiberg, sp. nov.

Plant perennial, stout, 40 to 50 cm. high, minutely viscid-pubescent when living, appearing slightly tomentose when dry; basal leaves usually ample, with long petioles, their blades 15 to 30 cm. long, oblong-lanceolate in outline, runcinately toothed to pinnatifid, but seldom deeply parted; cauline leaves mostly small and few, variously pinnatifid or the uppermost even entire; anthodia commonly 10 to 20, fastigiate corymbose; involucre 11 to 15 mm. long, sparingly tomentose, resiniferous; bracts strongly carinately costate from base to apex, the costa setosely barbate with one or two rows of long, stout, yellow or yellowish green, divaricate or even slightly reflexed bristles; corollas more or less deeply and very irregularly five-toothed; achenia acutely 10- to 12-costate, 8 to 10 mm. long, tapering upward, dilated at the apex, olive-green in color when near maturity; pappus rather copious, somewhat shorter than the achenium.

PLATE XXVI.

Type specimen in the United States National Herbarium, collected June 25, 1893, near Alkali Lake, Douglas County, Washington, at an altitude of 400 meters, by J. H. Sandberg and John B. Leiberg (No. 313).

This species is a much larger and more robust plant than *Crepis occidentalis*, and is easily distinguishable from it, in addition to other characters, by the conspicuous nonglandular bristles of the involucre and the scant tomentum of the leaves. It has usually been distributed as *C. occidentalis crinita*. In some of Howell's specimens from eastern Oregon the bristles of the involueral bracts are almost wanting, and the plant then bears a close general resemblance to *Crepis intermedia*.

SPECIMENS EXAMINED.

Washington:

Without definite locality, *E. W. Hilgard*, 1882.

Douglas County, near Alkali Lake, *Sandberg* and *Leiberg*, 1893 (No. 313).

Klikitat County, western part, *W. N. Suksdorf*, 1885 (No. 777).

Klikitat County, *G. R. Vasey*, 1883.

Spokane County, prairies, *W. N. Suksdorf*, 1884 (No. 378).

Kittitass County, Cle Elum, *E. L. Greene*, 1890.

Oregon:

Eastern Oregon, rocky hillsides, *T. T. Howell*, 1881 (No. 139).

Mouth of Hood River, *W. N. Suksdorf*, 1883 (No. 150).



CREPIS ROSTRATA Coville.