

Eritrichium oxycaryum Gray, Proc. Am. Acad. 10:58. 1874. Krynitzkia oxycarya Gray, Proc. Am. Acad. 20:269. 1885. (Typification obscure)

Cryptantha multicaulis Howell, Fl. N. W. Am. 487. 1901. C. howellii A. Nels. Bot. Gaz. 34:30. 1902. (Howell 502, Deschutes R. at Sherar's Bridge, Oreg.)

C. lyallii Brand, Fedde Rep. Sp. Nov. 24:57. 1927. (Lyall, Dalles of the Columbia)

C. flaccida var. minor Brand, Pflanzenr. IV. 252 (Heft 97) :61. 1931. (Specimens cited from Wash. and Ida.)

Slender annual, 1-4 dm. tall, simple or branched; herbage strigose; leaves linear, scattered, only the lowermost opposite; spikes naked, tending to be geminate or ternate; calyx appressed to the rachis, closely enveloping the nutlet, swollen only near the base, 3-4 mm. long at maturity, beset below with stout, spreading bristles that tend to be uncinatate or arcuate; corolla 1-2.5 mm. wide; nutlet solitary, 2 mm. long, smooth, lanceolate, acuminate, only slightly, if at all, compressed, with rounded margins, somewhat pointed or very narrowly truncate at the base, the scar closed or nearly so; style not reaching the middle of the nutlet.

Dry, open slopes and flats at lower elevations; c. and s. e. Wash. to s. Calif., and along the w. fringe of Ida., as far e. as Elmore Co. May-June.

Cryptantha intermedia (Gray) Greene, Pitt. 1:114. 1887.

Eritrichium intermedium Gray, Proc. Am. Acad. 17:225. 1882. Krynitzkia intermedia Gray, Proc. Am. Acad. 20:273. 1885. (Nevin, Los Angeles, Calif.)

Allocarya hendersonii A. Nels. Erythea 7:69. 1899. Cryptantha hendersonii Piper ex J. C. Nels. Torrey 20:44. 1920. C. intermedia var. hendersonii Jeps. & Hoover in Jeps. Fl.

Calif. 3:339. 1943. (Henderson, Potlatch R., Ida., May 31, 1895) Rough nutlet phase.

Cryptantha monosperma Greene, Pitt. 5:53. 1902. C. hendersonii var. monosperma Brand, Pflanzenr. IV. 252. (Heft 97) :71. 1931. (Suksdorf 180, Columbia R., w. Klickitat Co., Wash.) Rough nutlet phase.

C. muriculata sensu Piper, Contr. U.S. Nat. Herb. 11:484. 1906, but not (A. DC.) Greene.

CRYPTANTHA INTERMEDIA var. GRANDIFLORA (Rydb.) Cronq. hoc loc. C. grandiflora Rydb.

Bull. Torrey Club 36:679. 1909. C. torreyana var. grandiflora Nels. & Macbr. Bot. Gaz.

61:43. 1916. (Sandberg et al. 10, valley of the Clearwater R., Ida.) Smooth nutlet phase.

C. grandiflora var. annulata Brand, Pflanzenr. IV. 252 (Heft 97) :59. 1931. (Elmer 156, Pullman, Wash.)

C. hispidula var. elmeri Brand, Pflanzenr. IV. 252 (Heft 97) :60. 1931. (Elmer 775, Wawawai, Whitman Co., Wash.)

Annual, 0.5-5 dm. tall, simple or branched, strigose and spreading-hirsute; leaves scattered, linear to narrowly oblong or linear-oblong; spikes naked, tending to be geminate or ternate; fruiting calyx 3-5(6) mm. long, evidently spreading-hispid at least below; corolla relatively large and showy, the limb 4-8 mm. wide, white with a yellow eye; nutlets 1-4, ovate or lance-ovate, 2-3 mm. long, typically minutely granular and sparsely low-tuberculate, less often smooth and shining; style slightly shorter than, to slightly surpassing, the nutlets.

Open, usually dry slopes at lower elevations on both sides of the Cascades from s. B. C. to Calif., extending e. to the w. fringe of Ida. May-Sept.

Our plants, as described above, are var. grandiflora (Rydb.) Cronq. In n. Calif. they pass into the more southern var. intermedia, with larger, sharper, and more numerous tubercles on the nutlets, and with slightly more stiffly hairy calyx. The form of var. grandiflora with smooth, shining, more often only 1 or 2 nutlets is neither geographically nor ecologically segregated from the form with rough and more often 3-4 nutlets, nor is the correlation between texture and number of nutlets very strong. I am fully in agreement with Johnston and with Jepson that no segregation should be attempted here on these bases.

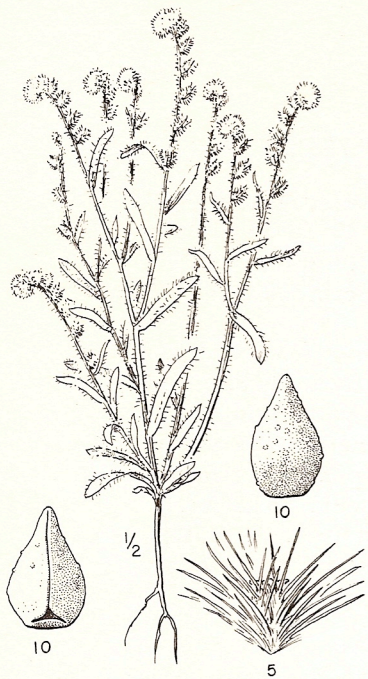
Cryptantha interrupta (Greene) Pays. Ann. Mo. Bot. Gard. 14:296. 1927.

Oreocarya interrupta Greene, Pitt. 3:111. 1896. (Greene, e. of Wells, Nev., July 16, 1896)

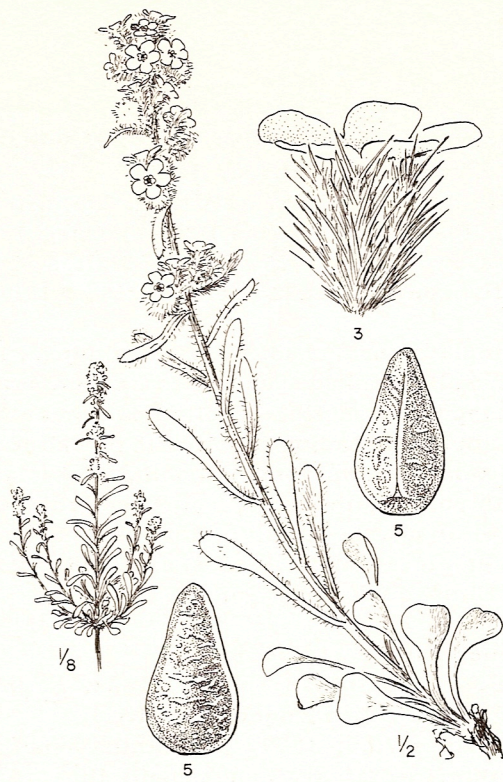
O. spiculifera Piper, Contr. U.S. Nat. Herb. 11:481. 1906. Cryptantha spiculifera Pays.

Ann. Mo. Bot. Gard. 14:298. 1927. (Sandberg & Leiberger 164, Ritzville, Wash.)

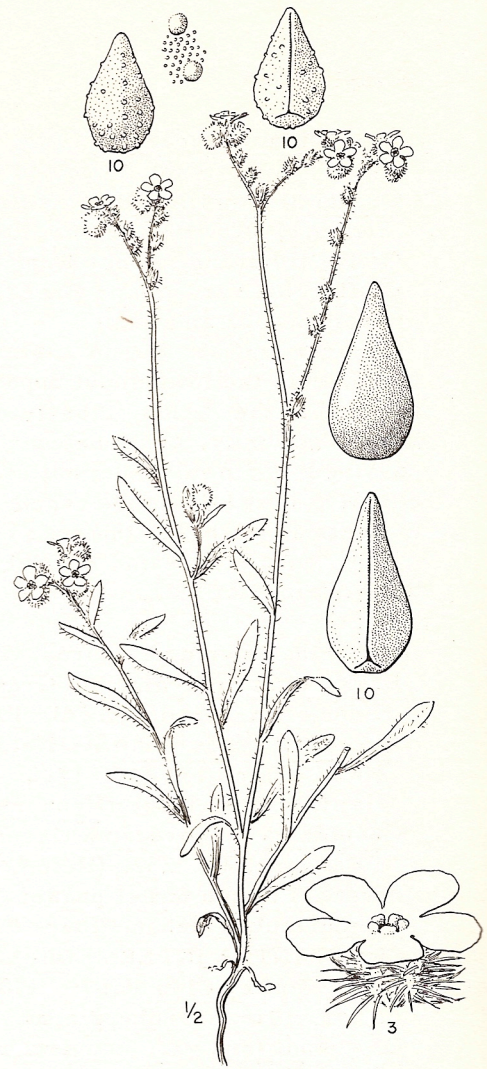
Oreocarya cilio-hirsuta Nels. & Macbr. Bot. Gaz. 55:378. 1913. (Nelson & Macbride 1799, Minidoka, Ida.)



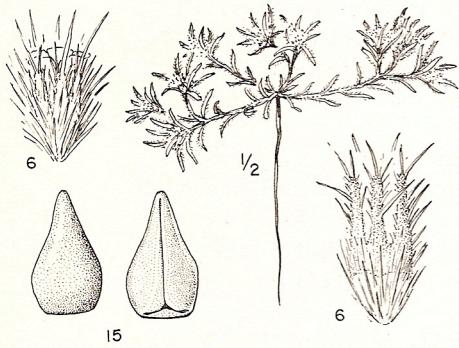
*Cryptantha ambigua*



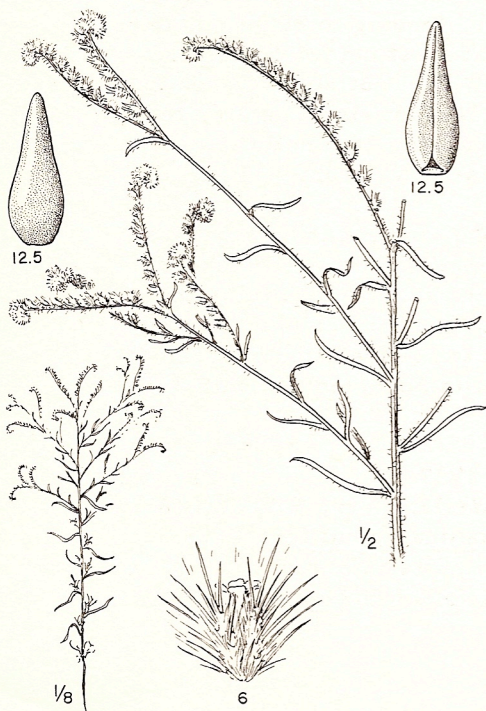
*C. celosioides*



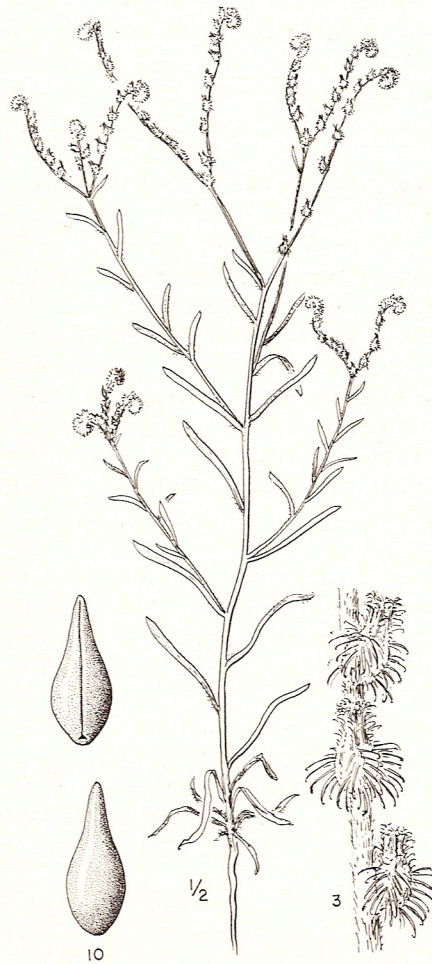
*C. intermedia* var. *grandiflora*



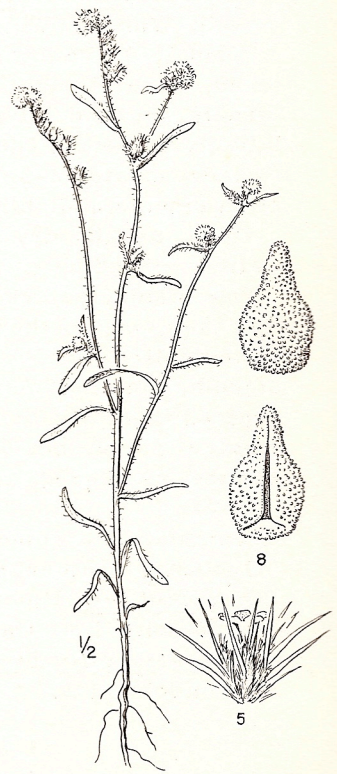
*C. circumscissa*



*C. fendleri*



*C. flaccida*



*C. echinella*

JRJ