

most southerly ranging of the North American species, but it is the only North American species which appears to have its immediate relationships in the continent to the south. *Cryptantha albida* is very closely related to *C. argentinica* Brand of northern Argentina, if indeed it is not the same species.

Ser. IV. MARITIMAE. Nutlets 1-4, tuberculate or muricate, usually dark with pale roughenings, lanceolate to triangular-ovate, with rounded or obtuse sides, decidedly heteromorphous with odd nutlet (sometimes alone developing) axial and larger as well as occasionally less roughened than others; style surpassed by the nutlets or reaching their tips or rarely surpassing them.

Calyx most hirsute on axial side, conspicuously recurved or deflexed.

Ovules 2; nutlet 1, bent; style reaching to about 1/2 height of nutlet.....12. *C. recurvata*.

Ovules 4; nutlets 4, straight; style reaching to about the tips of the nutlets.....13. *C. echinosepala*.

Calyx most hirsute on abaxial side, spreading to strict.

Calyx strictly and closely appressed to the flattened rhachis, gibbous on axial side due to basal prolongation of rough odd nutlet.....14. *C. dumetorum*.

Calyx ascending or spreading, not at all gibbous; odd nutlet rather smooth.

Nutlets triangular-ovate, 0.7-0.9 mm. long; mature calyx subglobose, minute, with lobes scarcely surpassing the nutlets.....15. *C. micromeres*.

Nutlets oblong-lanceolate, 1-2 mm. long; mature calyx oblong, medium-sized, with lobes surpassing the nutlets.

16. *C. maritima*.

12. *C. recurvata* Cov. Ascendingly branched rather slender herb 1-3 dm. high; root frequently dye-stained; stems usually strigose, rarely appressed-hispid; leaves remote, oblanceolate or linear-oblanceolate, 1-2(-3.2) mm. long, 2-4(-5) mm. broad, rounded or obtuse, appressed-hispid, densely and minutely pustulate; spikes naked, slender, loose, 2-10 cm. long, solitary or geminate; corolla inconspicuous, subtubular, ca. 2 mm. long, not exerted, lobes short; fruiting calyces slender, subdistichously biseriata, very asymmetrical, characteristically bent and recurved, 3-4 mm. long, tardily deciduous, sessile; mature calyx-lobes linear, midrib somewhat thickened and hirsute, rarely merely strigose, axial lobe longest thickest and most hirsute; ovules 2; nutlet 1, subpersistent, oblong-lanceolate, inwardly curved, brownish, dull, granulate-muriculate, next the axial calyx-lobe, edges obtusish; groove somewhat oblique, narrow or closed, opening into a small basal areola; gynobase slender, ca. 1/2 length of

the matured nutlet, slightly exceeded by aborted one; style commonly much surpassed by nutlet.—Contr. U. S. Nat. Herb. iv. 165, t. 16 (1893).

Eastern Oregon to Utah and the Inyo Region of California.

OREGON: Alword Desert, 1600 m. alt., *Leiberg 2425* (G, UC). NEVADA: in open sand along water-pipe, Candelaria, 1950 m. alt., *Shockley 260* (G); sandy soil, Palmetto Range, 1800-2100 m. alt., *Purpus 5856* (UC). UTAH: sandy places, Grand River Canyon, 1230 m. alt., *Purpus 6488* (UC); Dugway, 1891, *Jones* (UC). CALIFORNIA: Surprise Canyon, Panamint Mts., 800 m. alt., *Coville & Funston 713* (G, UC, ISOTYPES); Silver Canyon in White Mts., east of Laws, *Heller 8221* (G, UC); Silver Canyon, 1913, *K. Brandegee* (G, UC); Fish Lake Valley, 1897, *Purpus*.

One of the most distinct and interesting species in the genus. It may be readily recognized by its biovulate fruit and spreading, recurved fruiting calyces.

13. *C. echinosepala* Macbr. Loosely branched herb 1-2 dm. high; stems usually reddish, strigose as well as somewhat hirsute; leaves 2-4.5 cm. long, 2-5 mm. wide, linear to linear-lanceolate, below pustulate and short villous-hirsute, above subglabrate or minutely strigose; spikes geminate or solitary, usually 2-5 cm. long, naked or rarely with a single bract; corolla inconspicuous, tube shorter than calyx, limb ca. 1 mm. broad; fruiting calyx ovate, 2-3 mm. long, sessile or subsessile, spreading or even reflexed, asymmetrical; mature calyx-lobes very unequal, lance-linear, strigose and usually hirsute along the thickened midrib, axial lobe the longest and most hirsute; nutlets heteromorphous, usually 4, pallid, groove narrow and scarcely dilated below; odd nutlet minutely muriculate-tuberculate, ovate, acute, 1.2-1.5 mm. long, subpersistent, next the axial calyx-lobe, margin angulate; consimilar nutlets ca. 1 mm. long, minutely tuberculate, lance-ovate; gynobase evidently shorter than consimilar nutlets, oblong; style longer than consimilar nutlets, equalling or just surpassed by the odd nutlet.—Contr. Gray Herb. n. s. lvi. 57 (1918); Johnston, Proc. Calif. Acad. Sci. ser. 4, xii. 1147 (1924).

Southern Lower California.

LOWER CALIFORNIA: Santa Agueda, *Palmer 242* (G); Magdalena Bay, *Lung* (UC), *Bryant* (UC), *Brandegee* (UC); Magdalena Island, *Orcutt 15* (G, TYPE); La Paz, *Palmer 26* (G).

At once distinguishable from nearly all other species of the genus by having its fruiting calyces deflexed and most heavily hirsute on the axial side. It is probably most related to *C. angustifolia*.

14. *C. dumetorum* Greene. Laxly branched closely strigose herb; stems at first erect but later commonly much elongated and sprawling