

(UC) and 1416 (G, UC); Edgewood, 1887, *Curran* (UC); Siskiyou County, 1890, *Edmonds* (UC); along streams in meadows, Parker Creek, Warner Mts., 1650 m. alt., 1910, *Taylor & Bryant* (UC); Goose Lake Valley, 1884, *Austin* (UC); Milford, 1892, *Brandege* (UC); Mormon Bar, 1897, *Congdon 50* (G); Salmon Creek, Tulare Co., 2100 m. alt., *Hall & Babcock 5132* (UC); Nine Mile Creek, Tulare Co., *Culbertson 4537* (G, ISOTYPE OF *C. incana*); Redrock Meadows, Tulare Co., 2610 m. alt., *Hall 8394* (UC). NEVADA: Reno, 1898, *Purpus* (UC); Dog Valley Road, 1895, *Hillman* (UC).

In northwestern United States, where this plant appears to be rather common, it is almost the only species of *Cryptantha* with conspicuous corollas. In the past it has been much confused with *C. ambigua* and *C. Torreyana*, although in fact it seems to be most closely related to *C. intermedia*. In Idaho it tends to intergrade with *C. Torreyana*, but over most of its range it is readily separated by its conspicuous corollas, commonly ternate spikes and usually tuberculate nutlets. Occasional plants are hard to separate from *C. ambigua* although *C. Hendersoni* is for the most part pretty easily recognized by its large-flowered, ternate spikes projected above the leafy mass of the plant. *Cryptantha intermedia* completely intergrades with *C. Hendersoni* in northern California, although the overwhelming mass of material of *C. Hendersoni* is readily distinguished from its relative by its less stiff and scarcely pungent pubescence, and broader tuberculate nutlets. It has been found expedient to admit considerable range of nutlet-variation in *C. Hendersoni*. Among plants quite similar in gross habit, and commonly from within a small natural region, the nutlets frequently (from plant to plant) vary from entirely smooth and shiny, to simply granulate or decidedly tuberculate. Roughly it can be said, however, that more of the northern than southern material is smooth-fruited. *Cryptantha incana* and *C. grandiflora* are names applied to the phase with smooth and shiny nutlets. The other names cited apply to forms with roughened fruit. *Cryptantha scabrella* was based on a phase of *C. Hendersoni* from southern Oregon in which the nutlets are papillate-muricate. *Cryptantha monosperma* has similar though less abundant and less well developed papillae, and appears to be a form in which only 1 or 2 nutlets develop. The aborted nutlets appear to be the abaxial ones.

37. **C. Traskae**, sp. nov., pumila sparse laxaque ramosa 8-10 cm. alta; caulibus gracilibus strigosis ca. 1 mm. crassis; foliis paucis linearibus 1-2 cm. longis 1-1.5 mm. latis acutis strigosis rare hispidis inconspicue pustulatis; spicis solitariis vel geminatis 1-5 cm. longis cum bracteis linearibus 2-5 mm. longis numerosis ornatis; floribus obscure biseriatis maturitate 5-10 mm. separatis; corolla inconspicua ca. 1.5

mm. lata; calycibus fructiferis ovatis subsessilibus deciduis 2-3 mm. longis; lobis calycis maturi lanceolatis saepe acutis in costa cum setis flavescens brevibus horridis et in marginibus adpresso hispidis; nuculis 4 homomorphis ovatis vel anguste ovatis vix 1.5 mm. longis minutissime granulatis apicem versus plus minusve tuberculatis dorso convexis margine obtusis ventre $\frac{3}{4}$ longitudinis ad gynobasim angustam ca. 0.9 mm. longam adfixis; sulcis clausis basi in areolam minutam deltoideam dilatatis; stylo nuculas vix superante.

Known only from San Nicolas Island off the Californian coast.

CALIFORNIA: one locality, bare windswept cliffs, San Nicolas Island, April, 1901, *Trask* (G, TYPE); infrequent on bare windswept heights, April 1897, *Trask 57* (UC).

This endemic of San Nicolas Island was reported by Eastwood, Proc. Calif. Acad. Sci. ser. 3, i. 109 (1898), as *C. Torreyana*. It is evidently quite distinct from that species in its low habit, pubescence, bracteate inflorescence and small tuberculate nutlets. In habit it somewhat suggests *C. leiocarpa*. Its nutlets are about the same size and shape as those of that species, but differ in being tuberculate and in having a broadly forked groove and a small areola.

38. **C. Torreyana** (Gray) Greene. Commonly scantily and more or less strictly branched hispid herb, 1-4 dm. tall; stems solitary or frequently several, usually inconspicuously short-strigose as well as hispid; leaves oblanceolate or linear, strict or ascending, 2-5(-7) cm. long, 3-6(-8) mm. wide, obtuse or rounded, hispid, inconspicuously pustulate if at all so; spikes usually geminate, naked, 4-8(-15) cm. long, more or less projected from the leafy mass of the plant, very elongate and loosely flowered or congested and glomerate; corolla inconspicuous, ca. 1 mm. broad; fruiting calyces oblong-ovate or ovate-lanceolate, 2-7 mm. long, ascending, asymmetrical, base rounded or broadly conic, pedicels ca. 0.5 mm. long; mature calyxlobes lanceolate to lance-linear, connivent above with tips usually spreading, midrib slightly thickened and hispid-hirsute, margins hispid-strigose; nutlets 4 (occasionally 1 or more aborted), usually broadly ovate, 1.5-2.2(-2.5) mm. long, 0.8-1.3 mm. broad, smooth and polished, usually mottled, rarely finely granulate, back very low-convex, sides rounded or obtuse, groove broadly forked below and closed throughout; gynobase about $\frac{1}{2}$ height of nutlets, ca. 1 mm. tall; style reaching to $\frac{2}{3}$ height of nutlets or rarely even to their tips.—*Pittonia* i. 118 (1887).

Var. **genuina**. Fruiting calyx 3.5-8 mm. long; style clearly surpassed by nutlets; plants usually over 2 dm. tall, not conspicuously