

medium versus longe ascendentem ramosis, pilos 0.5–1.3 mm. longos graciles rigidiusculos caulis basim versus erectos alibi appressos gerentibus; foliis lineari-lanceolatis crassiusculis infimis plus minusve congestis 2–3 cm. longis 2 mm. latis, supremis conspicue reductis, medianis 1–3 cm. distantibus, faciebus laminae pilos 0.7–1.5 mm. longos erectos vel appressos saepe (praesertim faciebus superioribus) e pustulis manifestis erumpentes gerentibus; cymis 3–6 cm. longis solitariis vel geminatis, floribus perspicue uniseriatis inferioribus ad 5–9 mm. distantibus, infimis bracteis subulatis 5–10 mm. longis oppositis; corolla alba, limbo (lobis ascendentibus) 2 mm. diametro, tubo ca. 2 mm. longo quam lobis calycis linearibus 0.5–1 mm. brevioribus; calycibus fructiferis 7–10 mm. longis 1–2 mm. longe pedicellatis; lobis lanceolatis longe attenuatis quam nuculis 2–3-plo longioribus (basim versus usque ad 2 mm. latis, supra medium minus quam 0.6 mm. latis) supra nuculos conniventibus deinde erectis vel curvato-ascendentibus, plus minusve costatis in costa pilis gracilibus 2–3 mm. longis ornatis reliquo pilis numerosis adpressis praesertim marginem versus villosis; nuculis 4 aequalibus triangulari-ovatis ca. 2 mm. latis et 3 mm. longis minute granulatis et conspicue papillatis vel tuberculatis, apice acutis, basi truncatis, dorso convexis, margine angulatis vix incrassatis, ventre obtusis; sulco clauso vel aperto basim versus late furcato; gynobasi apicem nucularum vix attingente; stylo nuculas evidenter superante.

CALIFORNIA: north of Barstow, San Bernardino Co., 2800 ft., April 25, 1935, *I. W. Clokey & E. Ganderson 6859* (TYPE, Gray Herb.).

A very distinct species belonging to the Muricatae and perhaps most closely related to *C. Hooveri* Johnst. of the Sierran foothills of central California. The new species differs in its much coarser habit, elongate cymes of much larger flowers, broad leaves, larger and more elongate nutlets, and protruding style. The gross habit of *C. Clokeyi* suggests a very coarse form of *C. nevadensis* var. *rigida* Johnst. The coarse broad nutlets of *C. Clokeyi*, however, are very different from the slender attenuate nutlets of *C. nevadensis*. The discovery of this unusually distinct new species in the middle Mohave Desert is most unexpected. The plant is probably rare and local since Mr. Clokey has failed to rediscover it along the road north of Barstow where he originally found it.

***Cryptantha fastigiata*, sp. nov.**

Planta herbacea vel suffruticosa annua vel saepissime subpersistens 1–10 dm. alta; caulibus erectis vel ascendentibus solitariis vel pluribus abundanter ascendentem ramosis, pilis antrorse valdeque adpressis 0.5–1 mm. longis et pilis sparsioribus erectis rigidis 1–2 mm. longis e

basi pustulata erumpentibus vestitis; caulibus vetustis basim versus non raro plus minusve duris et lignosis ad 8 mm. crassis; foliis numerosis anguste oblanceolatis vel lineari-oblanceolatis caulis apicem versus gradatim reductis, inferioribus 3–10 mm. latis 4–6.5 mm. longis, supra medium latioribus, basim versus in petiolum 1–10 cm. longum gradatim attenuatis, apice acutis, utrinque sparse hirsutis (pilis 1–1.5 mm. longis e basi plus minusve conspicue pustulata erumpentibus), subtus prominenter mediocostatis sed enervatis; cymis unilateralibus scorpioideis solitariis vel geminatis laxifloris sparse minuteque bracteatis; corolla alba, tubo ca. 1 mm. longo quam lobis calycis tertia parte brevior, limbo 3–4 mm. diametro; calyce fructifero 3 mm. longo 1–2 mm. longe pedicellato, lobis infra medium costatis lineari-oblongis pilos rectos rigidos erectos 1–1.5 mm. longos et pilos 0.5 mm. longos appressos gerentibus haud villosis; ovulis 4; nuculis heteromorphis triangulari-ovatis nigris tuberculis et margine pallidis ornatis compressis, dorso convexis, ventre late obtusis; sulco apicem versus nuculae angustato, infra medium nuculae in areolam conspicuam expanso; nucula abaxiali maxima persistente majore 1.5–1.9 mm. longa; nuculis 3 consimilibus 1–1.5 mm. longis; gynobasi elongato ca. 1 mm. longo; stylo rigido nuculas maximas 0.5–1 mm. longe superante.

BAJA CALIFORNIA: Puerto Refugio, Angel de la Guardia Island, 1921, *Johnston 3374* (G); Las Animas Bay, 1921, *Johnston 3505* (TYPE, Gray Herb.); San Esteban Island, 1921, *Johnston 3175* (G); South San Lorenzo Island, 1921, *Johnston 4192* (G); 5–6 m. west of Barril, March 1935, *Wiggins 7828* and *Shreve 6992* (G); 40 mi. east of San Ignacio, March 1935, *Shreve 7055* (G); Santa Rosalia, 1889 and 1938, *Palmer 188* and *Gentry 3779* (G); San Marcos Island, 1921, *Johnston 3621* (G); Carmen Island, 1890 and 1931, *Palmer 846* and *Collins, Kearney & Kempton 238* (G).

This species ranges in the middle third of the peninsula of Baja California and on the adjacent islands in the Gulf of California. It has passed as a form of *C. racemosa* (Wats.) Greene and was so treated in my monograph of the genus, *Contr. Gray Herb.* 74: 32–3 (1925), and in my report on the flora of the islands in the Gulf of California, *Proc. Calif. Acad.*, ser. 4, 12: 1147 (1924). Notes on the habit of the plant may be found in the latter report. This plant is most certainly not a form of *C. racemosa*! That latter species has a very different range. From the northernmost part of Baja California *C. racemosa* extends through the hottest and driest parts of the Colorado and Mohave deserts in eastern California, western Arizona and southern Nevada. It becomes a loosely and repeatedly much branched small bush and bears its slenderly long-

pedicellate flowers in a unique type of loose sympodium that is very much more racemose than scorpioid. The well developed biseriate scorpioid cymes, the shorter pedicels, and the long fastigiate stems quickly distinguish *C. fastigiata* from *C. racemosa*. In habit and in most details *C. fastigiata* is very similar to *C. holoptera* (Gray) Macbr., but that latter has larger, very broadly winged, homomorphic nutlets. The closest relative of *C. fastigiata* is *C. inaequalis* Johnst., of southernmost Nevada and adjacent California. In all details, save range and growth-form, it is remarkably similar to *C. fastigiata*. However, *C. inaequalis* is a slender herbaceous annual 1–3 dm. tall with the stems proportionately better branched. The young stems in the inflorescence are clothed with very slender, 0.5–1 mm. long, loosely appressed hairs. In the peninsular species the younger parts of the stem are covered with coarser shorter closely appressed hairs and the hairs are more conspicuously encrusted and hence duller than in *C. inaequalis*.

Cryptantha Rattani Greene, *Pittonia* 1: 760 (1888).

CALIFORNIA (Monterey Co.): along the Carmel River 20 mi. southeast of Carmel, July 1929, *Wolf* 3772 (G); right bank of the Carmel River 3 mi. above the Mission, April 1903, *Heller* 6587 (G); Soledad, May 1881, *Congdon* 72 (G); "Monterey County," 1887, *Hickman* (TYPE, Herb. Greene).

When he published *C. Rattani*, Greene stated that he had received his first material of the species from Rattan, who thought it was undescribed. This material came from near San Jose and Greene then considered it "a state of the common *C. flaccida* with larger corollas and more spreading habit, for the specimens were young and only beginning to flower." Subsequently Hickman sent Greene "a plant in good fruit" which revealed the characters of the species. There is no collection from Rattan, labeled "*C. Rattani*," in the Greene Herbarium at Notre Dame University, though the Hickman plant, so labeled, is preserved there. I suspect that Rattan's immature specimens were not preserved by Greene and that his identification of the Rattan and Hickman collections was based on his recollection of the former. In any case the description of *C. Rattani* was based upon the fruiting plants supplied by Hickman and, despite the name of the species, the Hickman plant from Monterey County must be taken as type. The few specimens of this interesting species, at hand, all come from the country just inland from Monterey, California, and suggest that it may be endemic in that area. Perhaps after all Rattan's plant from San Jose may not have been conspecific with the plant of Hickman. The species has the gross aspect of a plant of