

in the Larrea Belt. Most abundant at Wilson's ranch. Wilson's ranch, altitude 1150 meters, *Clokey 8024, 8433*. June.

3. *OPUNTIA ECHINOCARPA* Engelm. & Bigel. Proc. Am. Acad. 3: 305. 1856.

Mohave and Colorado deserts of California, east to Utah and Arizona, south to Lower California. Local habitat, local in the upper Larrea and lower Juniper belts. Most abundant in Kyle Canyon at an elevation of about 1600 meters. Kyle Canyon, *Clokey 7202, 8025*. June.

4. *Opuntia multigeniculata* Clokey sp. nov. E Sect. *Cylindropuntia*, *humilis*, *subadscendens*, *habitu conferta*, plus minusve 0.5 m. alta, ad 1.5 m. lata, ramorum ligno debili, reticulato; ramis majoribus depresso-tuberculatis, ca. 1.5-2 cm. crassis, geniculis lateralibus numerosis, 3-5 cm. longis, ca. 2 cm. crassis, tuberculis confertis 4-6 mm. longis, 2-3 mm. latis, 4-5 mm. altis, apice areola pallide brunneo-lanosa, 4-5 mm. longa, 2-2.5 mm. lata coronatis; aculeis ca. 12, geniculum ipsum fere occultantibus, delicatis, vaginis albidis barbularis; aculeis centralibus 2-4, 15-18 cm. longis, lateralibus gracillimis; foliis teretibus apiculatis ca. 2 mm. longis; glochidiis ex areola summa albidis, 1.5 mm. longis; floribus in apice geniculi aggregatis, ca. 2.5 cm. longis totidemque latis; ovario conferte tuberculato, areolis prominentibus, ellipsoideis, lana pallide brunnea; aculeis paucis, pergracilibus, deciduis; perianthii laciniis pallide viridi-luteis, spatulatis, obtusis apiculatisve, 15-18 mm. longis; stylo cum stigmatibus luteis, stigmatum lobis 6-8; staminibus luteis; fructu globoso, luteo, subcarnoso, ca. 2 cm. longo, tuberculato, exaculeato, profunde umbilicato; hypanthii cavo pulpa incolora farcto; seminibus rotundatis, pallide luteis, haud nitidis, levibus, 2.5-3 mm. diametentibus, commissura brevi, lata, manifesta.

A low, semi-ascending, compact *Cylindropuntia*, 0.5 m. or less high, up to 1.5 m. wide, with stems having a weak, reticulated, woody framework; main stems low tuberculate, about 1.5-2 cm. thick, with crowded lateral joints 3-5 cm. long, about 2 cm. thick; lateral joints with closely placed tubercles, 4-6 mm. long, 2-3 mm. wide, 4-5 mm. high, with the entire upper end of the tubercle occupied by an areole 4-5 mm. long, 2-2.5 mm. wide, filled with light tan-colored wool; spines about 12, almost concealing the surface of the joints, delicate, white-sheathed, barbed; 2 to 4 central spines 15-18 mm. long; lateral spines very slender; leaves terete, apiculate, about 2 mm. long; glochids white, 1.5 mm. long, from the upper end of the areoles; flowers clustered at the tip

of the joints, about 2.5 cm. long and broad; ovary closely tuberculate; areoles prominent, oval, filled with light tan-colored wool; spines few, very delicate, deciduous; perianth-segments light greenish-yellow (Ridgway's Col. Stand. and Nom. plate 5, 25 YG-Y, b), spatulate, obtuse or apiculate, 15-18 mm. long; style and stigmas yellow; stigma lobes 6 to 8; stamens yellow; fruit globose, yellow, with somewhat fleshy walls, about 2 cm. high, tuberculate, spineless, deeply umbilicate; seed cavity filled with colorless jelly; seeds circular, light yellow, dull, smooth, 2.5-3 mm. in diameter; commissure short, broad, distinct.

Definitely known only from the type locality on an open, rocky ridge east of Wilson's ranch, Charleston Mountains, Clark County, Nevada, along road from Blue Diamond mill to the mine, at an elevation of 1400 meters; *Clokey* 8480 (type), 8639, 8760. Flower, May; fruit, July to September.

Mr. Fred Gibson of the Boyce Thompson Southwestern Arboretum states that plants similar to this are found near Prescott, at Congress, and along the Colorado River in Arizona. These have not been examined.

*Opuntia multigeniculata* is intermediate between the series Thurberianae and Echinocarpae. In the Echinocarpae it is closest to *O. echinocarpa* Engelm. & Bigel. It differs from this species in having weaker, less woody, shorter and more crowded stems. The fruit of *O. echinocarpa* is dry. The somewhat fleshy fruit and the seeds resemble *O. Whipplei* Engelm. & Bigel. The joints, however, are thicker, shorter, more crowded and more thickly armed than *O. Whipplei*. In the original description Engelman and Bigelow (Proc. Am. Acad. 3: 307. 1856), state that the color of the flowers of *O. Whipplei* is red. Britton and Rose (Cact. 1: 55-56. 1919) and Benson and Thornber (Cact. Ariz. 36. 1940) give the color of the flowers as yellow.

Neither *O. echinocarpa* nor *O. Whipplei* grow near the type locality of *O. multigeniculata*.

5. *OPUNTIA PARISHII* Orcutt, West. Am. Sci. 10: 81. 1896.

Mohave Desert of California and southern Nevada. Local habitat, locally abundant in sand or gravelly soil in the Larrea Belt at elevations of 1000 to 1200 meters. Cottonwood Springs, *Clokey* 8028; south of Indian Springs, *Clokey* 8027; east of Wilson's ranch, *Clokey* 8484. June.

Drifting sand usually partially covers the old joints. This is a characteristic plant that could not be mistaken for any other *Cylindropuntia* in this region.