

Nos. 6241 and 7782.

OPUNTIA CHLOROTICA **SANTA RITA** *n. var.*

An erect, open branching prickly pear of woody texture, with a distinct trunk, 4 to 6 in. in diameter; joints mostly subcircular but sometimes ovate and pointed (No. 7783 D. G.) or obovate (No. 8156 D. G.), 5 to 7 in. in diameter, glaucous or in spring purplish around areoles and edges of joints especially; leaves about 1-16x $\frac{3}{8}$ in., subulate, early deciduous from the young purplish joints; areoles $\frac{3}{4}$ to $\frac{1}{2}$ in. apart, obovate to subcircular, $\frac{1}{8}$ in. or more in longest diameter on one and two-year-old joints but increasing in size and prominence with age giving rise to columnar structures $\frac{1}{4}$ to $\frac{1}{2}$ in. long upon old trunks; wool tawny but brown outwardly, giving a brown appearance to areole; spicules varying from light yellow to brown and always dirty brown with age; spines nearly absent in these numbers, sometimes 1 to 3 on edges of joints only, $\frac{3}{4}$ to 1 $\frac{1}{2}$ in. long, yellow to reddish-brown; flowers yellow with white filaments and style and white or yellowish, 7 parted stigma; fruit oval, depressed at apex, with very rough flower scar formidably protected with prominent spicules, purplish outwardly and greenish within, pleasantly acid.

We have not seen this form of the species in the northern highlands of the Territory where the typical form grows abundantly but in the southern mountains of Arizona this is the most common form. All gradations of spine characters may be found between this and the typical, very spiny *Opuntia chlorotica*. One very conspicuous character is the proliferation of tissue in the areoles upon old stems of this and the other form, giving a prominent papillum or small columnar projection $\frac{1}{4}$ to $\frac{1}{2}$ in. long covered with wool and formidable spicules. When the fruit ripens it falls to the ground and remains in good condition for a long time, not being molested by birds or animals. The pulp is comparatively small in amount and the rind thin, approaching the dry fruited forms to some extent in this respect. The botanical type of this variety is No. 8157 D. G. collected in Celero mountains, Arizona, October 8, 1905.

No. 6241 collected upon steep, rocky canyon sides in **Santa**

PRICKLY PEAR AND OTHER CACTI

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Rita Mountains, Arizona, April 30, 1904, sample represented by formula 2-3-2, from one plant.

No. 7782 collected from same locality April 19, 1905, sample represented by formula 1-1-1-1, from 4 plants.