

***Optunia caesia* sp. nov.**

Plant a spreading shrub with main arms resting on their edges and the secondary ones erect from them, 60 cm. high and 2 m. in spread when fully matured; joints deep, glaucous blue-green, becoming yellowish-green in age, obovate, about 11 to 15 by 20 to 24 cm., gradually narrowed below to a stipitate base; areoles 4 mm. long, brown; spicules dark-brown in a compact tuft in the upper portion of areoles, 4 to 5 mm. long,

except at very apex of joints where in extreme cases they may be 15 mm. in length; spines the first year 2 to 4, dark-brown except the lower downward sloping shorter ones, 15 to 30 mm. long, which are white, the others porrect and the longest often 6 to 8 cm. in length; the second year fading to light-brown or yellow flesh-color, becoming white with age and increasing slightly in numbers, some of those on old wood very much flattened and twisted, annular at the base, especially the second season; flowers yellow with red centres, filaments yellow but greenish at base, style white, stigma large, subglobose, light-green; fruit purplish-red with a deep bloom and much lighter colored within, the rind simply streaked with red and pulp slightly mottled, only at complete maturity is the color of the rind and pulp diffused and light-red, areoles small, elongated, $\frac{1}{2}$ to 2 mm. long when wool is removed but before removing wool 3 mm. long and broadly oval, dull, dark gray, tawney with wool protruding 1 mm. and the brown, unequal spicules 2 mm. longer than the wool, fugacious spines irregular, 6 to 11 mm. long, lighter colored, often brownish to yellowish-white at maturity.

The species is easily recognized by the densely glaucous aspect of plant and fruit and shape of its joints. It has nearly as much bloom as the *O. robusta* group of the Mexican highlands. The type was collected between Crozier and Hackberry, Arizona, the first of May, 1912, under my inventory number 10555. It has been observed in several situations in that general region and one other collection has been made and cultivated.