

Opuntia Fosbergii C. B. Wolf, sp. nom. nov. (Figure 22)

Opuntia Bigelovii var. *Hoffmannii* Fosberg, Bull. South. Calif. Acad. 32: 121. 1933, not *O. Hoffmannii* H. Bravo, An. Inst. Biol. Mex. 1: 89. 1930.

This plant described by Fosberg from Cane Brake Canyon, eastern San Diego County, California, is in our opinion a hybrid between *O. Bigelovii* and *O. echinocarpa*. However, the plant occupies an extensive area in eastern San Diego County and certainly requires a name, but we feel that to continue to regard it as a variety of *O. Bigelovii* is not advisable, nor can it be raised to specific rank under the name of *O. Hoffmannii*, since that name has been used for a Mexican species. We, therefore, propose the name *O. Fosbergii* in honor of its discoverer.

We have twice visited the region where *O. Fosbergii* grows and have noted that it has a remarkably uniform growth habit, a distribution from near Vallecito to the head of Mason Valley and that it is associated not only with *O. Bigelovii*, but also with *O. echinocarpa* and *O. acanthocarpa Ganderi*. The plants of *O. Fosbergii* are vigorous in vegetative growth and appear to make far greater growth per year than any of the other species with which they grow. Very few flowers or fruits are borne on the plants (we estimated in the field that in 1938 less than one plant in a hundred had fruit) and what fruits we have been able to examine are all sterile. These two features (vigorous growth and sterility) indicate a hybrid nature.

The features in which *O. Fosbergii* resembles *O. Bigelovii* are: somewhat similar growth habit; readily disarticulating joints; and fruits. It resembles *O. echinocarpa* in its spines and in the shape of the tubercles, which are definitely elongated rather than quadrangular as in *O. Bigelovii*. The uniformity of the plants of *O. Fosbergii* suggest that they are all first generation hybrids that have spread over the present area by vegetative means in much the same way as suggested under *O. Munzii*, which is similar in general appearance and which is believed to be a closely related hybrid of partly different parentage.

In addition to examining the type of *O. Fosbergii* (Fosberg 8602, Pomona College Herb.) we have made the following collections, all of which were accompanied by propagation material (cuttings) for growth at the Garden: SAN DIEGO CO.: mouth of Cane Brake Canyon, C. B. Wolf 9392 (RSA, 2-4), 9394 (RSA, 2), 9425 (RSA, 2-7).

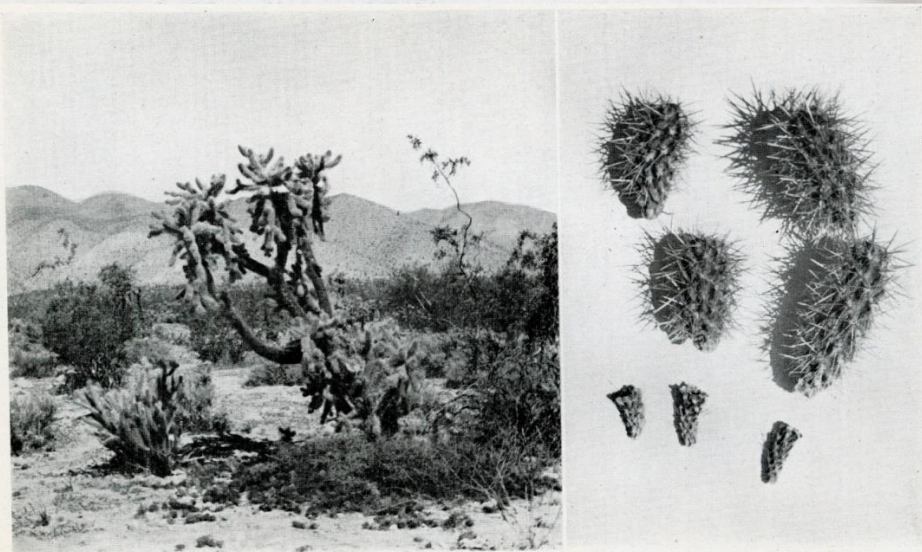


FIGURE 22. *Opuntia Fosbergii*. LEFT. Plant at Cane Brake Canyon, 2.5 m. high, C. B. Wolf 9425, June 12, 1938. RIGHT. Joints and fruits of same. One-third size.