

OPUNTIA CACANAPA 'ELLISIANA'

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Synonyms of *Opuntia cacanapa*

Opuntia cacanapa Griffiths & Hare — *Bull. Agric. Exp. Sta. New Mex. Coll. Agric. Mech. Arts* **60**: 47. (1906)

Opuntia tricolor Griffiths — *Rep. (Annual) Missouri Bot. Gard.* **20**: 85, pl. 4. (1909) [name given to plants with dark spine base from south Texas]

Opuntia ellisiana Griffiths — *Rep. (Annual) Missouri Bot. Gard.* **21**: 170 (1910) [name given to spineless cultivated plant (originally found in Corpus Christi, TX)]

Opuntia lindheimeri var. *tricolor* (Griffiths) L. Benson — *Cact. Succ. J.* **41**:125 (1969)

Opuntia lindheimeri var. *ellisiana* (Griffiths) K.Hammer — *Kulterpflanze* **24**: 268. (1976)

Opuntia cacanapa Griffiths and Hare, 1906 grows in Texas primarily on the Stockton/Edwards Plateau and western South Texas Plains (approximately Cameron to Brewster, Crockett, and Bandera Counties), and southward in Mexico to Hidalgo. It is a large plant from about 3 to 10 feet tall; shrubby to tree-like and usually growing one to few trunks; with glaucous blue-green pads that are usually



Figure 1: *Opuntia cacanapa* Cladode showing pyriform and spineless fruit, one spine per areole, and enlarged glochids at the edge.

circular, but varying to obovate or sometimes ovate; mostly 5 to 8 inches in diameter (occasionally to 12 inches). Spines are slender, usually terete, yellow and up to 2 inches long (rarely with a dark base); usually only one (or none) per areole, but occasionally up to two or three. Glochids mostly delicate, usually few and short in a tight cluster in small areoles, but sometimes more, stouter, and longer near pad edges or on old pads (Figure 1). The plant has a distinctive appearance due to its usually bluish colour, usually round pads, and distinct spine arrangement. It can typically be distinguished from other co-occurring species even from a moving vehicle. Some plants have only a few spines or vestigial spines; however, these plants still have a typical accompaniment of glochids. The style is white and the stigma is pale to bright green, and the filaments are pale. The flowers are bright yellow (rarely orange or red in Mexico) but sometimes fade to orange. The fruits are pyriform, glabrous, spineless, and the areoles are typically crowded near apex. Seeds are tiny (approximately 1/8 inch or a little more). The leaves of *O. cacanapa* are essentially unique



Figure 2: *Opuntia cacanapa* Cladodes, showing recurved leaves, spines, and glaucous pads.



Figure 3: *Opuntia cacanapa* 'Ellisiana' showing recurved leaves, lack of spines, and glaucous pads.

because they are strongly recurved, often almost forming circles (Figure 2), a trait shown by only a few species of *Opuntia*. The species is mostly seen growing on calcareous soils in broken terrain, but the largest plants are often in nearly level areas with relatively deep soils. *O. cacanapa* can be a very large plant that may reach 10 feet or more in height with a massive trunk up to 14 inches thick and a crown spread almost equaling the height. Most large plants have been destroyed by land clearing or livestock, and existing plants in nature are typically only three to four feet tall.

David Griffiths described *O. ellisiana* in 1910. It is a large plant with glaucous blue-green pads that are circular to ovate or obovate. The style is white and the stigma is pale or bright green, and the filaments are pale. The flowers are bright yellow. The fruits are pyriform, glabrous, spineless, and the areoles are typically crowded near apex. Like *O. cacanapa*, the leaves are also strongly recurved (Figure 3; Figure 4). In form, overall shape, flowers, fruit, seeds, and leaves, *O. ellisiana* resembles *O. cacanapa* though it is not known to reach the same height. *O. ellisiana* was described from a plant growing in a garden in Corpus Christi, Texas and has not since been duplicated from Nature.

Unusually, *O. ellisiana* is entirely without spines and essentially without glochids. Pads may be handled with impunity. Like *O.*

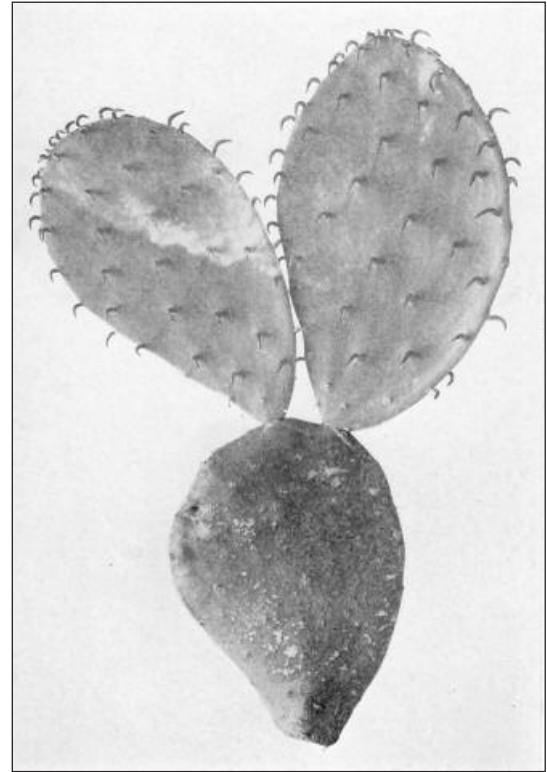


Figure 4: *Opuntia cacanapa* 'Ellisiana' *Annual Report of the Missouri Botanical Garden* (1910) **21**, plate 25.

cacanapa, *O. ellisiana* is relatively cold hardy (Griffiths, 1915 and personal observation).

Because it is not found in nature, and because of its similarities with *O. cacanapa*, we consider *O. ellisiana* to be a garden form of *O. cacanapa*. It is not known where it was originally found in nature (the most similar wild plants known, with normal spines and glochids, occur on the Stockton Plateau in Texas). Thus, *O. ellisiana* is actually *O. cacanapa* cultivar 'Ellisiana'.

This plant is often confused with, and mislabeled as, "Burbank's Spineless" pricklypear, which are actually multiple selections of *O. ficus-indica*, a much bulkier plant with larger pads, and different areoles, fruits, flowers, seeds, and spines (if present). *O. ficus-indica* is also much less cold tolerant than *O. cacanapa* and has glochids (Griffiths, 1909).

References

- GRIFFITHS, D. & HARE, R.F. (1906). *New Mexico Agricultural Experiment Station Bulletin* **60**: 47.
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