

NOTES AND NEWS

SPECIFIC STATUS FOR *Encelia californica* var. *asperifolia* (COMPOSITAE: HELIANTHEAE).—In 1913, S. F. Blake described a collection (*Anthony 292*; lectotype here designated: GH!; isotypes, F!, US!) from Cedros Island, Baja California Sur, as *Encelia californica* var. *asperifolia*. It is unclear to us why he chose to assign it varietal status under *E. californica* rather than specific status, as he listed a number of characters by which it was distinct from *E. californica*: bushier habit, smaller capitula and leaves, rougher pubescence on stems, leaves, and involucre bracts, and shorter involucre. To this we can add that it has more slender peduncles and, whereas the petioles of var. *californica* are stiff, straight, and diverge from the stem at an ascending 45° angle, those of var. *asperifolia* are more lax, curved, and diverge at nearly a 90° angle. In addition, preliminary evidence indicates substantial differences in the flavonoid aglycones of the two taxa.

The habitat differences are even more striking. Variety *californica* occurs in coastal sage and chaparral from Santa Barbara Co., California, south to El Rosario, Baja California. Variety *asperifolia* is found in the central desert of the Lower California peninsula, south to the Sierra Vizcaíno. The taxa marginally come in contact in the region just south and east of El Rosario; this region also marks the southernmost extent of the coastal sage and the beginning of the desert (Axelrod, *Amer. J. Bot.* 65:1117–1131. 1978; Shreve and Wiggins, *Veg. and fl. Sonoran Desert.* 1964). In this region of contact the two taxa interact in a manner like that observed for other well-differentiated species of *Encelia*. There is no gradual transition between the taxa in either morphological or ecogeographic features. Their area of sympatry consists of a very narrow zone (no more than 500 m wide on Mex. hwy 1, 8.4 mi (13.4 km) e. of El Rosario). Within this zone the taxa hybridize; the hybrid individuals (F₁'s and recombinants) are essentially confined to areas of natural and man-made disturbance. We have not found any other plants having morphology intermediate between the taxa.

Considering all available information against the background of variation within the genus as a whole, we believe that the variety *asperifolia* is best treated as a distinct species.

Encelia asperifolia (S. F. Blake) Clark & Kyhos, stat. nov.

Based on *Encelia californica* Nuttall var. *asperifolia* S. F. Blake, *Proc. Amer. Acad. Arts* 49:368. 1913.—CURTIS CLARK and DONALD W. KYHOS, Department of Botany, University of California, Davis 95616. (Received 12 Oct 1979; revision received and accepted 19 Oct 1979.)