

A NEW SPECIES OF BLENNOSPERMA FROM CALIFORNIA

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Blennosperma Bakeri sp. nov. Herba annua, aliquid succulenta, 15–30 cm. alta; foliis inferioribus integris vel 3-lobatis, ad 15 cm. longis, foliis superioribus 3–5 (raro 7-) lobatis, lobis ca. 1 mm. latis; involucri lobis 6–8, 6–8 mm. longis, 3–4 mm. latis, non reflexis; ligulis 12–14, 5–7 mm. longis, 2–3 mm. latis, luteis supra et saepe fulvis infra; stigmatibus ramis rubris; disci floribus 35–50; achaeniis 3–4 mm. longis, 1–2 mm. latis, 4–6 angulatis.

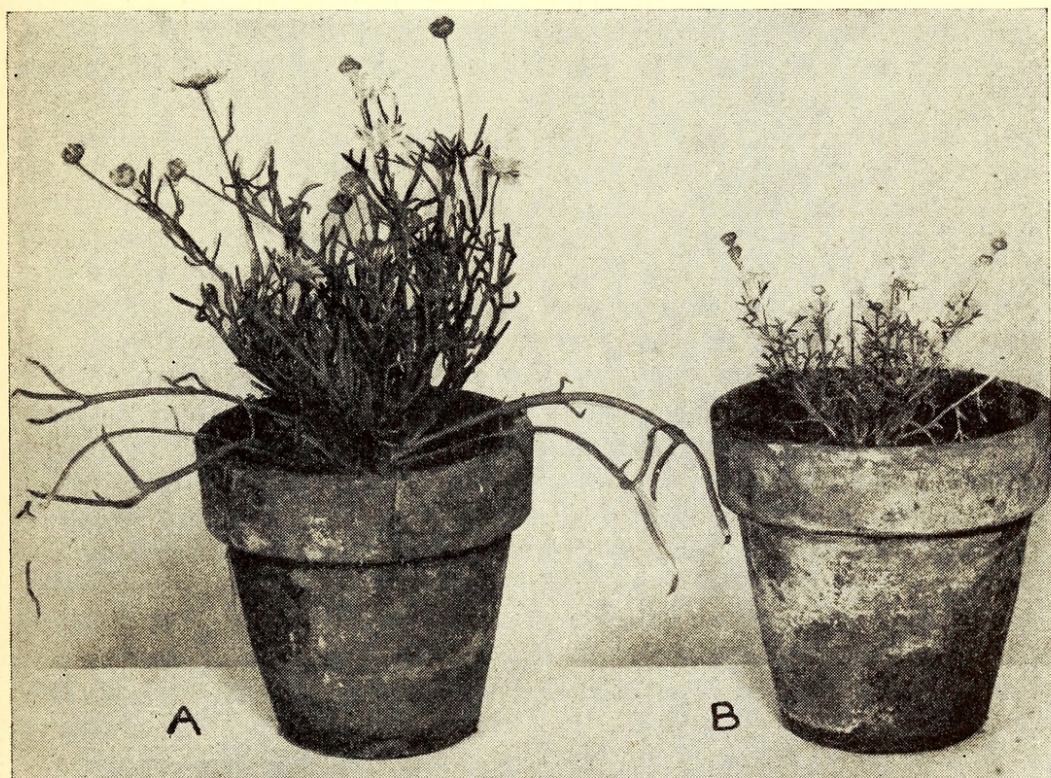


FIG. 1. California species of *Blennosperma*: A, *B. Bakeri*; B, *B. californicum*. (Growing in four-inch pots.)

Annual herb, somewhat succulent, 15–30 cm. tall; lowermost leaves entire or 3-lobed up to 15 cm. long; upper leaves 3–5 (rarely 7-) lobed, lobes about 1 mm. wide; lobes of the involucre 6–8, 6–8 mm. long, 3–4 mm. wide, curved over fruits at maturity, not at all reflexed; ligules 12–14, 5–7 mm. long, 2–3 mm. wide, yellow above and somewhat brown below, drying pinkish at times; branches of the stigma red, dark purple on drying; disk-flowers 35–50; achenes 3–4 mm. long, 1–2 mm. wide, 4–6 angled.

Type. Western outskirts of Sonoma in "hog wallow" about 0.25 mile south of Napa Street in field on east side of street, Sonoma County, California, April 2, 1946, *M. S. Baker 11307* (Her-

barium of the University of California no. 725276; isotypes are to be widely distributed).

The genus *Blennosperma* was previously considered to consist of only two species: our local *B. californicum* Torr. and Gray [*B. nanum* (Hook.) Blake] and the South American *B. chilense* Less. A new species in this genus, then, is of considerable interest. It is a great pleasure to name it after its collector, Milo S. Baker, who has made many contributions to our knowledge of the flora of California.

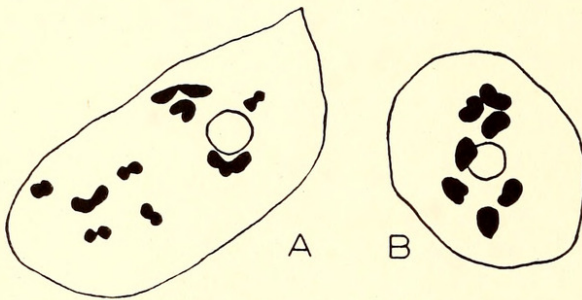


FIG. 2. Chromosomes of *Blennosperma*: A, *B. Bakeri*; B, *B. californicum*. $\times 1200$.

The new species is readily distinguished from *B. californicum* first by its much larger size (text fig. 1). In addition to this the leaves of *B. Bakeri* are generally three-parted into large lobes, whereas those of *B. californicum* are more finely divided. The branches of the stigma are red in *B. Bakeri*, yellow in *B. californicum*. The achenes of *B. californicum* are, as a rule, less conspicuously angled. Mr. Baker has also called my attention to another difference which he noted during his field observations. The involucre bracts of *B. californicum* are reflexed at maturity and those of *B. Bakeri* are curved over the mature achenes. In all probability there are also differences in ecological preferences between the two species inasmuch as *B. Bakeri* was found growing in standing water in a low marshy pasture and *B. californicum* commonly grows on moist hillsides. The new species because of its apparently restricted distribution and its occurrence in aquatic habitats is another of the vernal pool endemics of California alluded to by Mason (Madroño 8: 241-257. 1946).

Cytological investigation of *Blennosperma Bakeri* revealed the haploid chromosome number from the microsporocytes to be nine (text fig. 2, A). Dr. G. L. Stebbins, Jr. (oral communication) has found that *B. californicum* has the haploid chromosome number of seven and the diploid number fourteen. This haploid number for *B. californicum* has also been obtained by the writer (text fig. 2, B). Specimens on which these chromosome numbers are based are to be deposited in the Herbarium of the University of California. No filled achenes have resulted from the attempts to cross the two species. No chromosome number has as yet been reported for *B. chilense* which, on the basis of morphology, is closely related to, if not conspecific with, *B. californicum*.

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