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## **Brodiaea Taxa Listed For Southern California**

South of San Luis Obispo & Kern Counties to the Mexican Border

W.P. Armstrong, 16 February 2007

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Taxon	Jepson 1923	Hoover 1939	Munz 1959	Munz 1974	Niehaus 1971 Jepson 1993	Flora of North America 2003	Armstrong & Chester 2006		
B. capitata	X			The section of the se					
B. pulchella			X	Transferred to the genus Dichelostemma					
B. clementina			X						
B. ixioides	X								
B. laxa			X	Transferred to the genus Triteleia					
B. lugens			X						
B. coronaria	X	X	X						
B. coronaria var. kernensis		X	X						
B. elegans		X	X						
B. jolonensis		X	X	X	X	X			
B. synandra	X								
B. terrestris	X								
B. terrestris ssp. kernensis				X	X	X	X		
B. elegans ssp. elegans						X	X		
B. filifolia	X	X	X	X	X	X	X		

B. filifolia var. orcuttii	X						
B. orcuttii		X	X	X	X	X	X
B. kinkiensis			X	X	X	X	X
B. santarosae							X

Note: The red boxes include all taxa synonymous with **Brodiaea terrestris** ssp. **kernensis**. **B. elegans** var. **australis** named by Hoover in 1957 is listed as a synonym of **B. terrestris** ssp. **kernensis** in Niehaus (1971) & Jepson (1993).

Many of these names are valid and occur elsewhere in the state; however, citations in southern California for the species shown in red are synonymous with **Brodiaea terrestris** ssp. kernensis (BTK). This is a large and variable species extending north into Kern and Tulare Counties of central California. Collections of B. jolonensis in southern California, Baja California and some offshore islands are also BTK. B. jolonensis appears to be endemic to the Coast Ranges of Monterey and possibly San Luis Obispo Counties. Coastal southern California populations of BTK generally have hooded staminodes compared with mountain populations where staminodes are usually inrolled along the margins. This undoubtedly explains the confusion of coastal BTK with **B. jolonensis** which also has hooded staminodes; however, both types of staminodes have been observed in populations of BTK on the Santa Rosa Plateau of Riverside County and Cuyamaca Lake in San Diego County. In addition, corms from populations with inrolled staminodes in the Laguna Mountains developed hooded staminodes when grown in pots in Escondido. Coastal and Mountane populations of BTK have a V-shaped or U-shaped notch in the anther connective, although some individuals in coastal populations have a minute dentate lobe at the base of the notch. Populations in Kern County vary from a V-shaped or U-shaped notch to a distinct dentate lobe in the connective. This trait is unreliable for separating populations of BTK. Based on vascular patterns of inner perianth segments, BTK appears to be the species on Santa Catalina and San Miguel Islands. Niehaus (1971) reported a diploid chromosome number of 48 for BTK in Kern County. Preliminary studies of San Diego coastal and montane BTK by Dale McNeal (personal communication, 2006) indicate diploid chromosome counts greater than 40. It is interesting to note that Niehaus' chromosome count for **B. jolonensis** at its type locality in Monterey County was 2n=12.

Does Brodiaea jolonensis Occur In San Diego County?

Staminode Variation in BTK at Santa Rosa Plateau

Staminode Variation in BTK at Cuyamaca Lake

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