

***Brickellia californica* (Torr. & Gray) Gray**  
ASTERACEAE

California brickellbush

Synonyms: *Bulbostylis californica* Torr. & Gray  
*Brickellia wrightii* A. Gray  
*Coleosanthus californicus* Kuntze  
*Coleosanthus albicaulis* Rydb.  
*Brickellia tenera* A. Gray



**General Description.**—California brickellbush is a suffruticose shrub 0.5 to 1.2 m in height. Stem bases reach a maximum diameter of about 2 cm, and clumps may reach a diameter of 1 m. Plants usually have multiple stems arising from the root crown or short, near-surface horizontal stems. The branches are slender, upright, with even finer twigs. Current-year branches, which annually die back to a few cm from the ground-line, have a white to silver-gray bark, and older branches are fine-furrowed gray or gray-brown. The wood is yellowish white, medium density, and brittle with annual rings. California brickellbush shrubs are supported by tap and lateral roots that are covered by corky brown, finely-furrowed bark. The

alternate aromatic, gray-green leaves are deltoid-ovate with a rounded or cordate base and a short-acute tip and a crenate-dentate margin. They are 1 to 5 cm long and almost as wide with petioles 4 to 20 mm long. Inflorescences are heads in terminal clusters on small lateral branches of leafy panicles. The fragrant heads are 7 to 10 mm long and contain eight to 18 greenish-cream florets. The olive green achenes are 3 mm long tipped with a white to brownish pappus. There is a base number of  $n = 9$  chromosomes (author's observation, Abrams and Ferris 1960, Harrington 1964, Munz 1974).

**Range.**—California brickellbush occurs in two varieties. Variety *californica* grows in Oregon, Idaho, California (including Santa Catalina, Anacapa, and Santa Cruz Islands), Nevada, Utah, Colorado, Arizona, New Mexico, Oklahoma, Texas, and at least Chihuahua State in Mexico. Variety *jepsonii* B.L. Robins is found only in California (Abrams and Ferris 1960, Munz 1974, Natural Resources Conservation Service 2003). Although the species is planted as an ornamental, it has not been reported to have naturalized outside its native range.

**Ecology.**—California brickellbush is intolerant of shade and does not grow under tree or closed shrub canopies. Stands observed by the author were along trails, intermittent streams, and steep, north-facing colluvial slopes. Abrams and Ferris (1960) say that California brickellbush grows in dry canyons and streambeds. It grows in soils derived from a wide range of parent materials, through the whole range of textures, and with pH's of 5 to 8. California brickellbush grows in habitat that receives annual rainfall amounts ranging from 220 to 640 cm (Las Pilitas Nursery 2003). The species grows at between 915 and 2,290 m in elevation in Arizona (Dittman 2003). It grows in coastal and island vegetation types in California (Munz 1974) and therefore at low elevations.

Disturbance is probably required for establishment.

**Reproduction.**—California brickellbush flowers August through October (Tarweed Native Plants 2003). The species flowers abundantly and potentially produces vast numbers of seeds. Air-dried seeds collected in Utah averaged 3.525 million/kg. Hand-sorted seeds placed without any pretreatment on moist blotter paper germinated at 71 percent beginning between 5 and 14 days after sowing. Germination is epigeal (author's observation). Seed will have to be harvested by hand because wild plants are scattered. Stems layer (root) when covered by soil or colluvial material. The seeds are wind-dispersed. Seedlings probably appear and survive only when conditions are nearly ideal.

**Growth and Management.**—Save for a few centimeters of caudex, California brickellbush adds and loses its entire height (0.5 to 1.0 m) each growing season. The aerial portion of the caudex also dies back about every 3 to 5 years while others are produced each year. Plant may live for one to several decades, renewing themselves with suckers. The species is rarely abundant and probably does not require control. Management experience has not been published.

**Benefits.**—California brickellbush helps protect the soil and furnishes food and cover for wildlife. It has been reported to be a larval food plant for the tiger moth, *Dysschema howardi* Hy. Edwards (Walsh 2003). The species has been planted as an ornamental, particularly for the floral fragrance, in natural landscaping (Oklahoma Biological Survey 2003). Native Americans used infusions of the leaves as a ceremonial emetic, as a lotion to treat infant skin sores, and for coughs and fevers (Moerman 1986).

## References

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