

BLADDERPOD

Peritoma arborea

Plant Symbol = CLIS

Contributed by: USDA NRCS California State Office and California Plant Materials Center



Figure 1: *Peritoma arborea* shrub with yellow flowers and bladder shaped seed pods © J.S. Peterson@plants.usda.gov

Alternate Names

Common Alternate Names: bladderpod, bladderpod spiderflower, bladderbush, burro-fat

Scientific Alternate Names:

Synonyms

Cleome isomeris Greene [= *Peritoma arborea* var. *arborea*]

Isomeris arborea Nutt. [≡ *Peritoma arborea* var. *arborea*]

Isomeris arborea var. *angustata* Parish [≡ *Peritoma arborea* var. *angustata*]

Isomeris arborea var. *globosa* Coville [≡ *Peritoma arborea* var. *globosa*]

Subspecies

Peritoma arborea (Nutt.) H. H. Iltis var. *angustata* (Parish) H. H. Iltis

Peritoma arborea var. *arborea* H.H. (Nutt.) Iltis

Peritoma arborea (Nutt.) H. H. Iltis var. *globosa* (Coville) H. H. Iltis

Uses

Wildlife: Bladderpod is used by upland game and songbirds, including quail for cover and forage (seeds) (CDFA, 1976). Flowers bloom for much of the year and

are visited by native and introduced bees, making this a good pollinator and hedgerow plant.

Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g., threatened or endangered species, state noxious status, and wetland indicator values).

Description

Bladderpod is member of the Capparaceae (Caper Family) and native to California (FNA, 2011; Hickman, 1993). It is a spherical shaped evergreen shrub 2-7 feet tall. The stems are profusely branched with corky bark on primary branches and smooth twigs. The alternate leaf is compound with petioles supporting three leaflets. The flowers are perfect, with green sepals half the length of the inflorescence, yellow petals and six stamens. The fruits are inflated capsules containing 5 – 25 seeds, which are obovoid, dark brown and smooth.

The three subspecies are differentiated by the shape of the capsules. *P. arborea* var. *angustata* capsules are narrowly fusiform. *P. arborea* var. *arborea* has inflated capsules that are obovoid, while *P. arborea* var. *globosa* has subglobose strongly inflated capsules (Iltis & Cochrane, 2007).

Ethnobotany

The Diegueno Indians used the seeds and flowers for food (Hinton, 1975). The flowers were eaten boiled or sun-baked by the Kawaiisu (Zigmund, 1981)

Distribution:

Bladderpod's native range is southern California, Baja California, and Arizona from 200 to 4,000 feet in elevation. In California, it is found as far north as Fresno and Monterey counties. In the Bakersfield and Tehachapi regions, it can be found to an elevation of 4,000 feet. *P. arborea* var. *angustata* has a more southerly distribution, as far north as Kern and San Bernadino counties. *P. arborea* var. *arborea* is reported as far north as Fresno and Inyo counties. *P. arborea* var. *globosa* is more westerly to Monterey and Madera counties. (CalFlora, 2012)

For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site.

Habitat:

Bladderpod often grows on coastal bluffs, hilly terrain, desert washes, and disturbed areas.

Adaptation

Bladderpod is drought tolerant, well adapted to desert conditions and alkaline soils. It has a wide range of temperature tolerance from below freezing to over 100 degrees F. In cultivated plantings, *P. arborea* var *arborea* has been grown as far north as southern Butte County.

Management

This shrub requires mechanical or chemical weed control during establishment. Elimination of weed competition on the planting site prior to direct seeding is essential for good stand establishment. Spring rains are sufficient to establish seedlings when directly seeded on deep soils. Plug and potted plants often require some summer water depending on the locality and planting date.

Pests and Potential Problems

There are no known disease problems with bladderpod. This shrub must have good weed during early establishment.

Environmental Concerns

There are no known environmental concerns with bladderpod.

Seeds and Plant Production

Seed may be collected from wild plants and propagation plantings by stripping pods from plants and extracting seed. Seed should be cleaned using an air-screen cleaner with a No. 14 screen on top and No.8 bottom screen. There are approximately 4,500 seeds per pound. Plants are usually propagated by direct seeding into containers in a greenhouse. The seedlings develop at a rapid rate and should be moved into larger containers as they develop. Seedling plugs or one gallon container stock can be transplanted to the field at a 4-6 ft spacing in either the spring or fall. Irrigation may be required at transplanting, but once the plants are established for 1 or 2 years irrigation is no longer required.

Cultivars, Improved, and Selected Materials (and area of origin)

'Dorado' (*Peritoma arborea* var. *arborea*) is a cultivar developed by Lockeford Plant Materials Center, Lockeford, CA. The plant material used to develop 'Dorado' was first collected in August 1966 near Gorman, CA at an elevation of 3800 feet. 'Dorado' grows best in soils with well-drained deep to moderately deep, medium to finely textured soils with a pH of 6.5 or higher.

'Dorado' is drought-tolerant and is able to survive extreme temperatures ranging from below freezing to over 100 F. Although it is best adapted to Southern California, 'Dorado' has been successful established in the Sacramento valley. 'Dorado' has shown excellent performance as a conservation plant on critical areas, upland game cover and food, and for environmental enhancement.

References

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