

### United States Department of Agriculture Natural Resources Conservation Service

Natural Resources Conservation Service Plant Materials Program

# 'Duro' California buckwheat

Eriogonum fasciculatum Benth.

A Conservation Plant Release by USDA NRCS Lockeford Plant Materials Center, Lockeford, CA



'Duro' California buckwheat (*Eriogonum* fasciculatum) is a cultivar released in 1983 in cooperation with the California Agricultural Experiment Station ©Lockeford Plant Materials Center.

### **Description**

'Duro' California buckwheat is a native evergreen shrub 1 – 3 feet in height and 2 – 4 feet wide. Branches are numerous, slender and flexible. In recent plantings at the Lockeford Plant Materials Center (PMC), two morphologies are expressed within 'Duro'. Leaves are blue-green or bright green, under-rolled leaves are woolly below, and either smooth or fuzzy above. Flowers are whitish pink and organized into either tight or loose umbels. The plants flower from May through October. Seeds are light brown, angled and very small.



'Duro' plant with whitish-pink flowers in compact umbel morphology. © Lockeford Plant Materials Center.

### Source

'Duro' is a blend of six accessions of California buckwheat collected from six native stands in Kern. Modoc and San Luis Obispo counties in 1964. Container plants of these accessions were planted together in three rows at Pleasanton PMC and all subsequent plantings of 'Duro' were made with blended seed collected from these rows. Trials were conducted with container plants at 16 off-center sites and the Lockeford PMC. In addition direct seeding trials were conducted at eight off-center sites. 'Duro' California buckwheat performed better than most other native California shrubs in both container plantings and direct seedings on critically eroded areas. It appears that the multiple source collections with minimal selection provide 'Duro' with broad genetic variability that can cause the plant to exhibit two very distinct morphologies, likely expressing a combination of traits from two or more of the recognized varieties of Eriogonum fasciculatum; selections from Eriogonum fasciculatum var. foliolosum and E. fasciculatum var. polifolium.



'Duro' plant flowers are arranged in a looser more complex umbel morphology. © Lockeford Plant Materials Center.

### **Conservation Uses**

'Duro' California buckwheat was released as a conservation plant for use on critically eroded areas. Although best adapted to moderately well drained sandy to clay loam soils, it also performs well on problem soils including Serpentine, decomposed granites and high pH soils. Once established the plant is tolerant to drought. 'Duro' provides good wildlife habitat. Its long bloom period from May to October makes it a great insectory and pollinator plant.

### Area of Adaptation and Use

The species of *Eriogonum fasciculatum* is distributed in Arizona, California, Nevada and Utah.

'Duro' was collected from diverse locations in California and is adapted to areas with a Mediterranean climate and elevations to 3000 feet. The plant flourishes on a variety of soil types from sandy to clay loams, and requires moderately to well-drained soils. It flourishes in a range of rainfall regimes from 7 – 20 inches. The release was tested in the Lockeford PMC and a total of 22 off-center sites through California.

## **Establishment and Management for Conservation Plantings**

'Duro' can be established either from container grown plants or by direct seeding into critically eroded areas. Plants can be propagated by seeding directly into containers in the greenhouse. Once germinated the plants grow rapidly and should be transplanted into larger containers or the field as growth progresses. Container grown plants should be hardened off prior to transplanting to the field in fall or spring. Transplants require some irrigation until they become established. 'Duro' can be direct seeded into areas with good weed control at rates of 9 lb/acre drilled and 14 lb/acre broadcast. Fall planting is recommended.

### **Ecological Considerations**

There are no known insect and disease problems although seedlings in the early stages of growth are somewhat susceptible to 'damping-off' and sensitive to cold. The species is not considered weedy.

### **Seed and Plant Production**

'Duro' California buckwheat plantings for seed were established with container grown plants with a spacing of 10 feet between rows and 4 feet within the row. Seed production plantings produced about 300 lb/acre. Seeds dry on the plant in the fall and can be stripped from the plants by hand. There are about 740,000 seeds/lb and seed germination is approximately 25%.

### **Availability**

For conservation use: Plants and seed of California buckwheat is available from specialized growers is available from seed companies and nurseries in California.

For seed or plant increase: Foundation seed is maintained by the USDA-NRCS Plant Material Center in Lockeford, California and small amounts are available to interested parties for increase purposes. Long-term preservation of seed is stored at the National Plant Germplasm System (NPGS).

For more information, contact:
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http://plant-materials.nrcs.usda.gov/capmc

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