Release Notice of New Cultivar

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

and

CALIFORNIA AGRICULTURAL EXPERIMENT STATION
Davis, California

NOTICE OF THE NAMING AND RELEASE OF 'DURO' CALIFORNIA BUCKWHEAT FOR CONSERVATION USE ON CRITICALLY ERODED AREAS

The United States Department of Agriculture, Soil Conservation Service and the California Agricultural Experiment Station announce the release of 'Duro' California buckwheat, *Eriogonum fasciculatum* Benth. 'Duro' was developed at the SCS Plant Materials Center, Lockeford, California.

'Duro' is a blend of six accessions of California buckwheat. In 1964 seed was collected from six native stands in Kern, San Luis Obispo and Modoc counties. Container plants of these accessions were planted together in three rows at the Pleasanton PMC and all subsequent plantings of 'Duro' were made with blended seed collected from these rows. Number T-19947 was assigned to the blend. Container plants were planted at the new Lockeford PMC as well as 16 off-center sites. Direct seedings were made at eight off-center sites. 'Duro' California buckwheat has performed better than most other native California shrubs in both container plantings and direct seedings on critically eroded areas.

California buckwheat is a native evergreen shrub about .3-1.0 m (12-39 inches) high and .7-1.3 m (28-51 inches) wide. Branches are numerous, slender and flexible; the outer bark is thin and exfoliates in thin strips. Leaves are sessile, in alternate fascicles, oblong-linear to linear oblanceolate, 0.6-1.5 cm (1.5-3.8 inches) long and less than .2 cm (0.51 inches) wide, glabrous or white tomentose above and white tomentose beneath. Flowers are in umbels born at the end of 3-10 cm (7.6-25.4 inches) long peduncles. Calyx is white or pink. Flowering period is from May through October. Achenes are light brown, angled and about 2 mm (0.005 inches) long.

'Duro' California buckwheat has shown excellent performance for use as a conservation plant on critically eroded areas and for environmental enhancement on sandy to clay loam, moderately to well-drained soils. This species occurs abundantly in southern California but is also adapted to parts of California within the Mediterranean climate up to 825 meters (2700 feet) elevation where the mean annual precipitation (MAP) ranges from 18-50 cm (7-20 inches).

'Duro' California buckwheat produces about 145 kg/ha (300 lbs/ac) of seed. Seed dries on the plant which allows some leeway in harvesting. Fruits can be hand stripped from dried clusters and run through a hammermill for cleaning. Achenes with calyx attached are handled as seed. The calyx can be separated by rubbing the achenes through a number 6 screen. Without the calyx removed there are about 735,000 seeds per kilogram (334,000 seeds/lb.). Seed germination is approximately 25%.

Plants are propagated by seeding directly into containers in the greenhouse. Seedlings in the early stages of growth are somewhat susceptible to "damp-off" and quite sensitive to cold. Only "hardened" material should be used in plantings.

Breeder seed will be maintained by the Soil Conservation Service Plant Materials Center, Lockeford, California. Foundation seed as well as a limited number of container plants for seed source nurseries will be available in 1984.

L. M. Lewis — 9-15-83

Director — Date
California Agricultural Experiment Station

Eugene E. Cardenecith — Sept 9, 1983

California State Conservationist — Date
Soil Conservation Service

Thomas N. Shiflet — Oct 19, 1983

Director, Ecological Sciences and Technology Division — Date
United States Department of Agriculture
Soil Conservation Service
Washington, D.C.