

A Conservation Plant Released by the Natural Resources Conservation Service
 LOCKEFORD Plant Materials Center, Lockeford, CA

'Cuesta'

Flexible ceanothus

Ceanothus x flexilis McMinn



Figure 1 'Cuesta' flexible ceanothus planting two years after transplanting. ©Lockeford Plant Materials Center.

'Cuesta' flexible ceanothus (*Ceanothus x flexilis* McMinn) is a cultivar released in 1991 in cooperation with the California Agricultural Experiment Station.

Description

Ceanothus x flexilis is a native, evergreen, semi-erect shrub that grows 2 to 4 feet high and spreads to 2 to 8 feet wide. This shrub is very dense, compact, spreading and much branched. The leaves are opposite and oval or elliptically shaped, 0.4 in long and 0.2 in wide. They may be 3-toothed, coarsely toothed around half the leaf or the entire leaf margin. Flower clusters are small with white to bluish, umbellate flowers. The flowering period is April and May. Seeds are produced but they are not viable. The plant is a naturally occurring hybrid between buckbrush (*Ceanothus cuneatus*) and squawcarpet (*Ceanothus prostrates*). The plants are in the Buckthorn Family (Rhamnaceae).

Source

'Cuesta' flexible ceanothus was initially collected from a native stand near the Grass Valley airport, Nevada County, California in 1974. The elevation at this site is 2,100 feet with an annual precipitation of 35 inches. Stem cuttings were collected from mature plants on this site and used to grow container plants for experimental plantings for the Sierra Nevada foothills.

'Cuesta' was initially selected for its possible use on CALTRANS revegetation projects. Through a series of trials it was compared to about 60 different species of shrubs in the Sierra Nevada foothills. The plant was further trialed at twenty locations throughout California and plantings failed at only two locations: a site in Tehama County, and the City of Ventura, due to too much water. 'Cuesta' showed superior performance in establishment, maintenance and ornamental value.

Conservation Uses

'Cuesta' is used as a ground cover to provide erosion control and is helpful for restoration projects due to its low and wide growth pattern. Its maintenance is low and it is used for ornamental value on road slopes revegetation and landscaping slopes around rural and mountain homes. Established plants suppress weeds and are good cover for wildlife, such as birds and small mammals. Browsing by deer occurs at some location areas. During flowering the plants are heavily visited by a variety of native bees and honey bees. 'Cuesta' is an excellent pollinator plant during the flowering season, but this is relatively short.



Figure 2 Flower cluster on 'Cuesta' plant. ©Lockeford Plant Materials Center.

Area of Adaptation and Use

'Cuesta' flexible ceanothus requires full sunlight for growth. It grows well on silt loam and sandy loam soils. Once established it is drought tolerant and does not require watering over the summer. Overwatering will kill these plants and they cannot tolerate 'wet feet'. It is considered to be adapted to MLRAs 14, 17, 18, 20 and 22, in California the valleys of the Central Coast and Sacramento and San Joaquin, the Sierra Nevada Foothills and the mountains of the Sierra Nevada and Southern California..

Establishment and Management for Conservation Plantings

'Cuesta' plants must be established from stem cuttings. Container plants may be available from local nurseries. To transplant: dig a hole two to three times the diameter of the root ball and at least six inches deeper and backfill the hole with six inches of native soil. Make a few $\frac{1}{8}$ inch deep vertical cuts in the root ball, or carefully "tease" roots away from the root ball to encourage roots to grow into the new soil. Set the plant into the hole with 8 feet spacing between each plant and fill in around roots, firm the soil until the hole is half full. Fill the hole with water and allow to drain to settle the silt and eliminate air pockets around the roots. Backfill with enough planting mix so the plant will set at the same level it was growing in the container. Water to allow soil to settle and add more soil if necessary. Build a berm of soil to form a watering basin around the outer edge of the hole. Break the basin down after two or three years. New plants should be watered occasionally until they are well established. Fully established plants are drought tolerant. Provide the plant with weed control measures during the first year.

Ecological Considerations

There are no known insect or disease problems with 'Cuesta'. The plant is native and will suppress invasive weeds once established. Browsing by wildlife was reported at some locations for trial plantings.

Seed and Plant Production

Ceanothus x flexilis is a hybrid cross and does not produce seed. It is propagated by stem cuttings. Cuttings are trimmed to about 6" with sterile shears leaving one pair of leaves at the top. Cut ends are dipped in a 1:10 solution of rooting hormone and placed, two nodes deep, into a germination flat filled with a 1:1 mixture of vermiculite to perlite. Place flats in the greenhouse, under mist until rooting occurs, this may take several weeks.

Rooted cuttings may be transplanted into D-40 containers using Sunshine mix #4 soil and set in the lath house with irrigation. After growth of a third pair of leaves they can be transplanted individually to larger $\frac{1}{2}$ to 1 gallon containers. The young plants will be ready for their permanent location in 18 months to 2 years.

Availability

For conservation use: Limited availability from specialized growers.

For seed or plant increase: Cuttings can be obtained for the purpose of large-scale increase, through the California Crop Improvement Association and the USDA-NRCS Lockeford Plant Materials Center.

For more information, contact:
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Citation

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For additional information about this and other plants, please contact your local USDA Service Center, NRCS field office, or Conservation District <<http://www.nrcs.usda.gov/>>, and visit the PLANTS Web site <<http://plants.usda.gov/>> or the Plant Materials Program Web site <<http://www.plant-materials.nrcs.usda.gov/>>

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