

United States Department of Agriculture

Natural Resources Conservation Service Plant Materials Program

'Mason' western redosier dogwood

Cornus sericea ssp. occidentalis (Torr. & A. Gray) Fosberg

A Conservation Plant Release by USDA NRCS Corvallis Plant Materials Center, Corvallis, Oregon



Leaves and flower cluster of 'Mason' western redosier dogwood. Photo by Doug Bishop.

'Mason' western redosier dogwood (*Cornus sericea* ssp. *occidentalis*), also known as western dogwood, is a woody plant cultivar released in 1992 in cooperation with the Oregon Agricultural Experiment Station and the Washington Agricultural Research Center. It is intended for use in streambank stabilization and wildlife habitat improvement at lower elevations in western Oregon, western Washington, and northwestern California.

Description

Mason western redosier dogwood is a multi-stemmed, upright, moderately open deciduous shrub that grows 10 to 16 ft in height. The broadly branching, rounded crown may reach a width of 13 ft. Plants can spread vegetatively from horizontal lower limbs that root where they contact moist ground (known as layering). Flat-topped clusters of small white flowers appear from April until June while the white berry-like fruit are present over summer and may persist into fall. The leaves are in opposite pairs on the stem, 2 to 4 inches long, 1 to 2 inches wide, tapered to a point, and conspicuously parallel veined with smooth margins. They are medium to dark green above and slightly hairy beneath, turning red in fall and dropping by late November. Young twigs are yellow-green in spring and summer, turning red by late summer and fall. The bark of older limbs is grey or brown.

Source

Mason western redosier dogwood (PI-540382, 9019459) originates from cuttings taken from a single plant growing near Shelton in Mason Co., WA, at an elevation of 30 ft. While not bred or hybridized, it was selected as the best performer in a common garden study of 56 redosier

dogwood clones and three cultivars evaluated at the Corvallis Plant Materials Center from 1985 to 1989. It was chosen for its rapid growth rate, greater plant vigor, higher stem density, and better foliage appearance (fewer disease and insect signs and symptoms, but not necessarily greater pest resistance).

Conservation Uses

Mason is recommended for stabilizing the banks of lowvelocity streams and improving fish and wildlife habitat. The fruit is eaten by many song and game birds as well as small mammals, and the twigs are browsed by deer, elk. beaver, and rabbits. Although the limbs are predominantly upright, the ability of this clone to spread slowly by the layering of lower branches improves its potential for erosion control. Dormant limbs and stems can also be used for certain stream and slope protection measures such as live stakes, live posts, fascines, brush mats, or branch packing; they may be installed alone or with traditional hard treatments such as rock riprap (refer to publications on soil bioengineering for further explanation of these practices). It is recommended that Mason be inter-planted with a mixture of other riparian shrub species such as willows in order to create a complex, stable riparian habitat with better erosion control capabilities. Mason may also be used for screens, windbreaks, hedgerows, or ornamental landscaping.

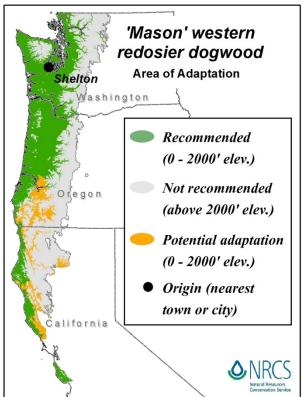
Area of Adaptation and Use

Mason western dogwood is best adapted to moist, moderately acid to neutral, well-drained, medium to coarse textured soils. However, it will tolerate fine textured, poorly drained, or temporarily ponded soils in seasonal wetlands and along lakeshores and riparian areas. The species grows best in sun or partial shade. Mason can be planted on upland sites if the average annual precipitation exceeds 35 inches or if supplemental water is applied. This cultivar is recommended for use in western Oregon, western Washington, and northwestern California below an elevation of 2,000 ft (see map below).

Establishment and Management for Conservation Plantings

For highest survival, plant Mason in the fall or early winter using vegetatively propagated bare root stock, container stock, or dormant hardwood cuttings (slips, live stakes) 18 to 30 inches long and at least ½ inch in diameter. For cuttings, make a pilot hole with a steel bar or water drill and insert or tap two thirds or more of the length of the cutting into the soil. At least two nodes

(buds) should remain exposed above ground. Tamp the soil firmly around each slip to remove air pockets. Live posts up to 2 inches in diameter and 36 inches long can also root and establish. Minimum spacing of live stakes for most streambank rehabilitation plantings is 2 by 2 ft, beginning at the waterline and proceeding up the bank. Mulch, irrigation, animal damage control, livestock exclusion, and weed control the first few years may be needed for maximum growth and survival on some sites.



Area of adaptation and recommended use for 'Mason' western redosier dogwood. Map by Ian Reid.

Ecological Considerations

Redosier dogwood can be a host to insects such as oyster scale and aphids, and can be infected by various diseases causing canker, leaf spot, twig blight, wood rots, and decays. While the susceptibility of Mason to these pests is unknown, none were notable during the evaluation period. The berries may be slightly toxic to humans. Mason is not considered weedy within the recommended area of use.

Seed and Plant Production

Mason western redosier dogwood is a vegetatively propagated cultivar. Carefully weeded, fertilized, and irrigated mother plants or "cutting blocks" are the best source of healthy cuttings for direct planting on revegetation sites, container production, and bareroot nursery culture. Untreated hardwood cuttings that are 6 to 8 inches long with a least two nodes will root at a rate of 90 to 100% in moist potting medium under greenhouse

conditions. However, root development can be hastened using a quick dip of IBA rooting hormone, with or without a fungicide. The solution should consist of 50% alcohol and 50% water with 5,000 ppm of IBA. For bare root production, larger 12-inch or longer treated cuttings can be inserted directly into irrigated nursery beds in the spring and dug for transplanting the following year.



Red fall foliage and white berries of 'Mason' western redosier dogwood.

Availability

For conservation use: Planting stock of Mason western redosier dogwood for conservation use is available from a limited number of commercial nurseries in the Pacific Northwest.

For seed or plant increase: The NRCS Corvallis Plant Materials Center maintains foundation equivalent stock of Mason western redosier dogwood for distribution to commercial nurseries, arboretums, scientists, and research organizations.

For more information, contact:
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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