

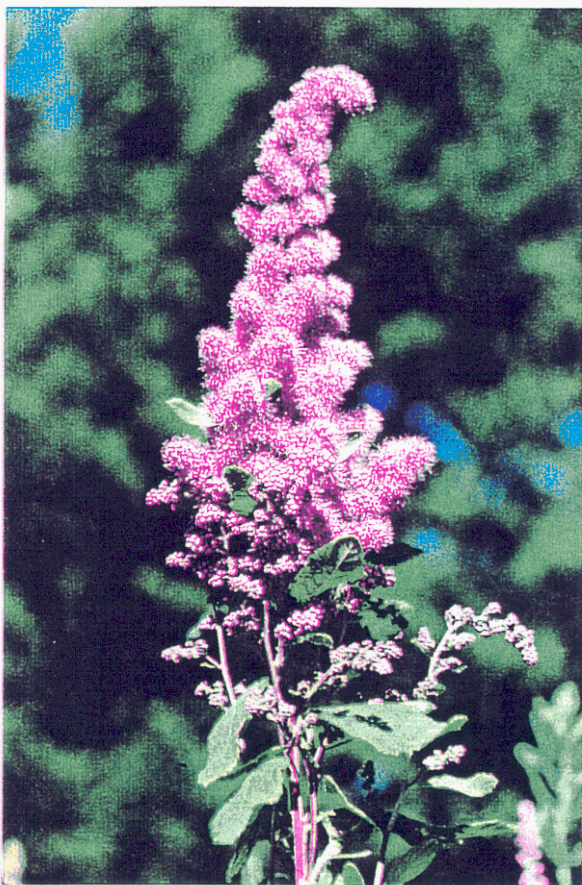
United States Department of Agriculture

 Natural Resources Conservation Service

Corvallis, Oregon

'Bashaw'

Douglas spirea



December 1995

'Bashaw' Douglas spirea

Douglas spirea, or hardhack, is a small, freely branching, suckering shrub that is native to western North America from Alaska to northern California and east to Idaho. This species frequently inhabits hogs, marshes, damp meadows, lake margins, and stream borders below 6,000 feet (1,800 m). Although found in forested wetlands, this species is more common in moist, open areas where it often forms dense thickets.

Bashaw is a cultivar of Douglas spirea that is especially useful for streambank stabilization, rehabilitation of riparian areas, and restoration of freshwater wetlands. It can thrive on wet, fine textured soils under severe grass competition where other shrubs might fail. Large, pyramidal-shaped panicles of pink flowers increase its value for naturalized landscaping.

Bashaw was cooperatively released in 1990 by the U.S. Department of Agriculture, Natural Resources Conservation Service: the Oregon Agricultural Experiment Station, Corvallis, Oregon; and the Washington Agricultural Research Center, Pullman, Washington.

Description

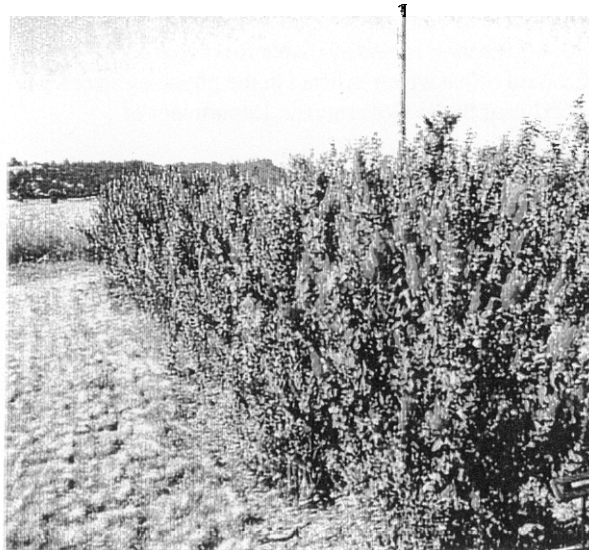
A multistemmed dense shrub, Bashaw Douglas spirea (*Spiraea douglasii* Hook.) has cane-like branches, reddish brown twigs, and a spreading or suckering habit. It grows to a height of 6 feet (2 m). Dense panicles of rose-pink flowers occur from late June through early August. The most vigorous and attractive regrowth and flowering is associated with new, single-stemmed basal branches. Seed heads are brown and persistent. Leaves are deciduous, hairy beneath, oblong, and toothed above the middle.

Cuttings taken in 1980 from several specimens growing near a roadside in Snohomish County, Washington, served as the source for Bashaw. However, Bashaw probably represents a single clone.

Performance

Bashaw Douglas spirea (9019297. PI-540383) was evaluated in a common garden nursery: at Corvallis, Oregon, against 30 other clones or sources from western Oregon and Washington. It was chosen for its greater vigor, stem density, and diameter of stem regrowth, as well as large flower heads and ability to sucker. On an upland site with no irrigation (40-inch precipitation zone), Bashaw obtained a maximum height of 4.8 feet (1.5 m) after 5 years.

In field tests, Bashaw demonstrated good establishment and rapid initial growth. Data from 32 low maintenance streambank and wetland plantings in western Oregon and Washington indicated an overall survival rate of 50 percent after 1 to 6 years. In one experiment on a fine textured, wet soil where competition from grasses was severe, survival and performance exceeded that of seven willows and redosier dogwood. Disease and insects were not considered a problem during the evaluation period. However, chlorosis of the foliage is not uncommon on certain sites late in the growing season.



Adaptation

Bashaw Douglas spirea is adapted to moist, acid, well drained to poorly drained, medium to fine textured soils. Under natural conditions, it thrives best in wetlands or on temporarily ponded sites that remain dry: near the surface for at least 6 weeks. If planted on upland sites, average annual precipitation should exceed 50 inches (127 cm) unless the area is a natural drainageway or supplemental water is applied.

Known area of adaptation for Bashaw includes wetlands and streambanks west of the Cascade Mountain ridge in western Oregon, western Washington, and northwestern California below an elevation of 2,000 ft (600 m). Recommended USDA plant hardiness zones are I a to 9b. However, potential area of adaptation includes the species native range and other areas of similar climate and soils.

Uses

Bashaw Douglas spirea is recommended for stabilizing the banks of low velocity streams and wetland restoration plantings. Its ability to spread by suckering creates thickets, which helps control soil erosion. This species is less desirable as browse than other wildlife plants. Potential uses also include highway beautification, natural area landscaping, screens, windbreaks, and recreational area plantings. It performs well in wet, grassy meadows less suitable for other woody species. Bundles of large branches may be useful for wattling, branch packing, and other bioengineering or slope protection measures.

Establishment

Direct field planting of untreated, dormant cuttings has yielded mixed results. Material no less than 0.3 inch (8 mm) in diameter and 12 inches (30 cm) in length should be obtained from healthy mother

plants. When unrooted cuttings or slips are inserted, at least two-thirds of the stem should be below ground and in contact with moist soil. Tamp the soil firmly around each slip to eliminate air pockets. March or early in April is usually the best time to plant in western Oregon and Washington. Three-foot (1 m) whips, 1-year-old containerized stock, or bare root plants may survive better, especially late in spring plantings or on drier sites where water tables are receding or rainfall is diminishing.

Minimum spacing for most rehabilitation plantings is 2 by 2 feet (60 by 60 cm). Planting should begin at water level and proceed up the bank. Long-term stabilization and the most desirable fish and wildlife habitat may require a combination of mechanical treatments, such as rock riprap, and a mixture of species including willows, dogwood, and other riparian shrubs. Weed control, before and after establishment, good soil moisture and proper

planting techniques are among the most important factors for maximum growth and survival.

Propagation

Bashaw Douglas spirea is a vegetatively propagated cultivar. Taken in January, a high percentage of 6- to 8-inch (15- to 20-cm) long hardwood cuttings will root in moist potting medium under greenhouse conditions. Root development can be hastened by treatment with a quick dip of 5,000 ppm IBA, a plant hormone. Larger treated cuttings may be planted in nursery beds in March or April. Both types of material can be made ready for shipment the following spring. If unrooted cuttings are to be planted directly into the field, they should be stored in a cooler until insertion.

Availability

The Natural Resources Conservation Service, Plant Materials Center, Corvallis, Oregon, maintains foundation stock of Bashaw Douglas spirea for distribution to commercial nurseries, arboreturns, scientists, and research organizations. Planting stock for conservation use is available from commercial nurseries in the Pacific Northwest.

For more information on where you can buy Bashaw Douglas spirea, contact the Corvallis Plant Materials Center, 3415 NE Granger Avenue, Corvallis, Oregon 97330. Information is also available from your local NRCS field office which is listed in the phone directory under "United States Government, Department of Agriculture."

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