



## Planting Guide

### Southern Arrow-wood

*Viburnum dentatum L.*

Plant symbol = VIDE

Contributed by: USDA, NRCS, Plant Materials Program

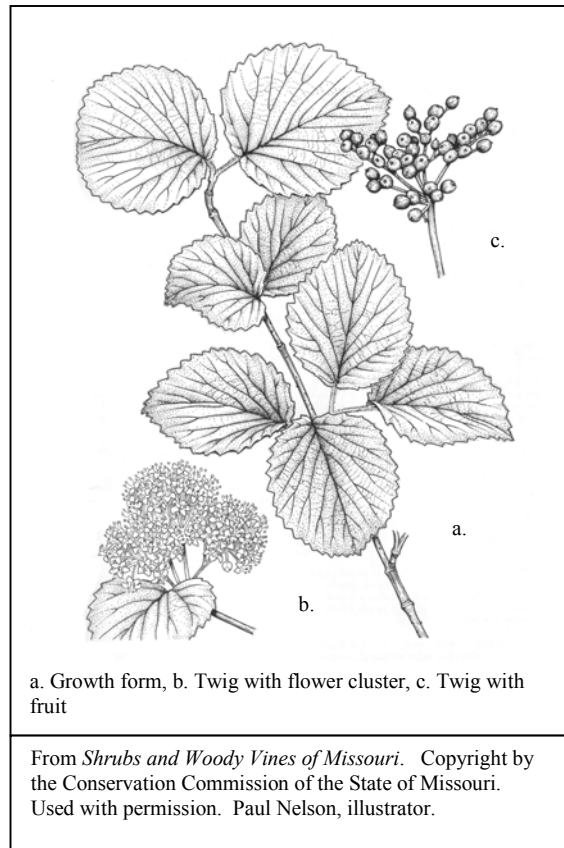
#### Description

Southern arrow-wood, *Viburnum dentatum L.* is an attractive multi-stemmed shrub with its showy clusters of white flowers turning to bluish-black fruit and strongly veined leaves. Occurs in low alluvial wood on terraces and wooded slopes. The height of this species can attain 15 feet with slender, elongate and ascending branches. This shrub flowers in May-June in clusters at the end of branches or on short side branches, cluster 1 ¼ to 4 ½ inches broad.

Flowers are white, small numerous; lobes 5, spreading; stamen 5, extending beyond the petals.

This species fruits August-November, bluish-black, about ¼ inch across, globe-to egg-shaped, pulp soft;

single-seeded, seed encased in a hard covering that is deeply grooved on one side. The leaves are opposite, simple, blade length and width from 1 to 4 ½ inches, circular to broadly egg-shaped tip pointed or rounded, base rounded to near heart-shaped, margin with teeth pointed to rounded; upper surface smooth or nearly so or with star-shaped hairs on the lower surface of the leaves. Twigs are slender, elongate, straight or arching, young ones hairy, older ones smooth. The bark on the trunk is tight, smooth, and gray to grayish-brown or reddish-brown.



#### Source

Accession 9062310 was collected from Floyd County, Iowa near Charles City, Iowa.

## Uses

Arrow-wood is an excellent species for wildlife food and habitat, landscape, and beautification. The *Viburnums* form a minor, but important segment of the diet of many birds and mammals. The fruits are eaten by many species of birds, including cardinal, cedar waxwing, robin, ruffed grouse and wild turkey, and mammals such as white-tailed deer, rabbits, chipmunk, squirrel, skunk, and mice. White-tailed deer and beavers eat the twigs, bark and leaves.

## Adaptation

Southern arrow-wood can be found occurring in low alluvial woods on terraces and wooded slopes. This species prefer moist, well-drained soils. It ranges from Florida to Louisiana and east Texas, north to Massachusetts, Pennsylvania, Tennessee and Missouri.

## Establishment

*Seedlings:* may be planted by hand or with a tree planter. Soaking roots in water an hour or so just prior to planting usually increases survival. If planted in rows where equipment can be used, allow enough room to mow or cultivate for weed control. According to 'Shrubs and Woody Vines of Missouri', arrow-wood can attain a height of up to 15 feet. Space plants six feet within rows and 16 feet between rows for farmstead and feedlot windbreak plantings.

*Seed:* This is a Northern seed source, from Iowa, may require 12 to 17 months of warm stratification at 68 to 86 degrees F followed by 15 to 30 days cold stratification at 41 degrees F. Picking the fruit just prior to ripening and sown directly in August, germination will occur the following spring for the northern sources.

## Management

Weed control is necessary for good establishment and uniform growth. Control weeds the first years by tilling or suppression of vegetation with herbicides before planting; with the addition of mulch/weed barrier mat for weed control. Selective approved herbicides provide good weed control after establishment year; follow the instructions on the label. Protect from 2,4-D type sprays, fires, grazing and trampling by livestock. Plastic netting, irritants or similar protective devices could be used to prevent deer and rodent damage the first five years.

The viburnum leaf beetle is a pest that can effect many viburnums. The woodland viburnum, like arrow-wood, is more susceptible because they can tolerate and occur in low-light situations. More damage to foliage can occur in shaded locations compared to those that receive full sunlight.

## **Environmental Concerns**

Southern arrow-wood can spread by seed and if it does spread, the rate of spread is not alarming or cause great concern. It is not considered “weedy” or an invasive species and has not been noted spreading from original planting. Southern arrow-wood is cross-pollinated.

## **Fruit Production**

Fruit production of southern arrow-wood has been very successful in a spaced plant nursery. In 100 pounds of fruit of *dentatum* there is an average of 28 pounds of seed. Cleaned seeds per pound averages 20,400. A matured southern arrow-wood shrub can produce approximately five pounds of seed (cleaned).

Seedlings are available in limited number from the Elsberry Plant Materials Center, Elsberry, Missouri.

## **References:**

*Shrubs and Woody Vines of Missouri*; pp. 282-283; Kurz, Don; The Missouri Department of Conservation, Jefferson City, Mo., 1977.

*A Field Guide to Trees and Shrubs*; pp. 93, 118; Peterson, R. T. and McKenny; M. Houghton Mifflin Company, Boston, Mass., 1968.

*Seeds of Woody Plants in the United States*; pp. 844-849; Schopmeyer, C. S.; Forest Service, U. S. Department of Agriculture, Washington, DC, 1974.

*Flora of Missouri*; pp. 1416-1417; Steyermark, Julian A; The Iowa State University Press, Ames, Ia., 1963.

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