# **Propagation**

Leelanau Germplasm can be propagated from softwood, hardwood cuttings, and seeds. Softwood cuttings are typically more successful than hardwood cuttings and should be taken from the first flush of growth. Cuttings should be treated with a rooting hormone. Since American *V. opulus* and European *V. opulus* will cross, propagation from seed is not often used unless species are adequately separated. Nevertheless, stratifying decorticated (endocarp removed) seed for 8 weeks at temperatures of 20<sup>o</sup>C and 20<sup>o</sup>C, alternated weekly, has produced high germination rates.

# Availability

Commercial producers may obtain rooted cuttings from the Rose Lake Plant Materials Center for increase purposes. For a list of commercial producers of Leelanau Germplasm highbush cranberry contact the Center.



## **For More Information**

Visit the Plant Materials website at <u>http://Plant-Materials.nrcs.usda.gov</u> to find more information on using plants to solve conservation problems.

USDA/ NRCS Rose Lake Plant Materials Center 7472 Stoll Road East Lansing, MI 48823 phone: (517) 641-6300 fax: (517) 641-4421

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# Leelanau Germplasm highbush cranberry



An improved conservation plant selected by:

Rose Lake Plant Materials Center East Lansing, Michigan

# Leelanau Germplasm highbush cranberry

Leelanau Germplasm highbush cranberry (*Viburnum opulus* var. *americanum* Aiton) is a native shrub intended for use as a windbreak species on organic or wet soils. It was selected from a comparative evaluation with 68 other accessions due to its greater overall survival, vigor, foliage abundance, density, and superior uniformity. It also has application as an alternative to introduced shrub species for landscaping, aesthetics and wildlife use.

Leelanau Germplasm was released by the USDA Natural Resources Conservation Service, the Michigan Association of Conservation Districts and the Michigan Department of Natural Resources.

## Description

Leelanau Germplasm highbush cranberry (accession no. 9031863) is a tall, native shrub that grows to 13 feet high. Although taller than it is wide, Leelanau Germplasm has multiple stems and a rounded growth form. Leaves are paired, deeply 3-lobed, palmately veined and coarsely toothed. Flowers bloom in May forming flat, white clusters with wider (15 – 25 mm) sterile flowers about the perimeter. The ripe fruit is red, 10 – 15 mm long, single stoned and persistent. Although similar to the European V. opulus, 'Leelanau' has convex petiole glands associated with the American variety.

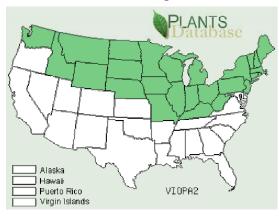
# Origin

Leelanau Germplasm highbush cranberry originated from a native stand in Leelanau County, Michigan. Seeds collected from the stand were used to produce a cutting block at Rose Lake PMC. All other propagation has been from cuttings from this block.

## Adaptation

Highbush cranberry is found throughout northern North America. The anticipated area of use for Leelanau Germplasm is in the Great Lakes region, well within the species range. It is best adapted to moist or organic soils, performing poorly on dry sites. Leelanau Germplasm is a selection from naturally occurring germplasm. It does not meet the assessment of a plant that could become invasive based on the guidelines adopted by the NRCS Plant Materials Program.

## **Area of Adaptation**



# Hardiness

USDA Zones 3b to 6a



# Establishment

Leelanau Germplasm can be successfully established using 1-0 or 2-0 container-grown stock and following normal planting procedures. It is best to plant in early spring or late fall when plants are dormant. Heaving actions often lift seedlings from the ground before the roots become established. On heavy or organic soils where frost heave may become a problem fall planting is discouraged. Minimum plant-to-plant spacing for windbreaks is 3 to 6 feet, and 12 feet between rows. In wildlife plantings, the spacing should be further apart. Deer browse has not been a limiting factor.

## Maintenance

Competing vegetation should be controlled. Mulch or geotextile materials must allow for water infiltration and air movement. Organic mulches should be kept at least 6 inches away from the stem to discourage rodent feeding. Irrigation may be required during establishment under conditions of high drought stress. No major disease or pest problems have been observed. Once established minimal maintenance will be required.