NOTICE OF RELEASE OF LEELANAU GERMPLASM HIGHBUSH CRANBERRY SELECTED CLASS OF NATURAL GERMPLASM

by

UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE EAST LANSING, MICHIGAN

MICHIGAN ASSOCIATION OF CONSERVATION DISTRICTS LAKE CITY, MICHIGAN

and

MICHIGAN DEPARTMENT OF NATURAL RESOURCES LANSING, MICHIGAN

The Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture, Michigan Association of Conservation Districts (MACD) and the Michigan Department of Natural Resources (MDNR) announce the release of a selected ecotype of highbush cranberry (Viburnum opulus var. americanum Aiton) for the Great Lakes region.

As a selected release, this plant will be referred to as Leelanau Germplasm highbush cranberry to document its original collection location. It has been assigned the NRCS accession number 9031863.

This alternative release procedure is justified because existing cultivars of highbush cranberry have originated from Minnesota sources and there is an immediate need for locally native shrubs as alternatives for non-native species.

Collection Site Information: Seed was collected in 1981 by Dorian Carroll at R 11 W, T 28 N in Leelanau County, Michigan. The original plants were grown from this seed, however all other propagation has been from cuttings from these original plants.

Description: Leelanau Germplasm highbush cranberry is a native tall shrub, growing up to 4 meters tall. It has multiple stems and a rounded growth form, although it is taller than it is wider. The description is consistent with the literature. The leaves are paired, deeply three lobed, palmately veined and coarsely toothed. The flowers are white, in flat clusters with larger (15 to 25 mm. wide) sterile flowers around the margins. It blooms in late May. The ripe fruit is red, 10 to 15 mm. long, with a single stone and is persistent. There are various opinions as to how distinct this species is from the European V. opulus. There is considerable variation in both species and they do cross. The Leelanau Germplasm has the convex petiole glands associated with the American variety. Some of these glands are stalked which is a further indication that it is the New World variety. The Agricultural Research Service has identified it as such.

Method of Selection: Fifty-eight collections made within the Rose Lake PMC Service Area were initially evaluated from 1985 to 1987 for survival, vigor, foliage abundance and density, growth characteristics, disease and insect resistance. Leelanau Germplasm and two other top accessions were chosen for further evaluation.

In advanced evaluations from 1988 to 1995, the Leelanau collection outperformed the other two accessions in survival, vigor, foliage abundance, foliage density and rooting success from cuttings.

See the attached Data to Support Release of Leelanau Germplasm Highbush Cranberry for additional information.

Environmental Impact Assessment: Leelanau Germplasm highbush cranberry is a selection of naturally occurring germplasm and has been unaltered. Leelanau Germplasm did not meet the assessment of a plant which could become invasive based on the guidelines adopted by the NRCS Plant Materials Program.

Anticipated Conservation Use: Leelanau Germplasm is intended for use as a windbreak species on organic or wet soils. It may have some value for wildlife, as an alternative to introduced shrub species. However, as with the taxonomy, opinions differ as to how much use wildlife makes of the fruit. The American variety is generally considered more palatable than the European.

Adaptation: The species range is throughout northern North America. The anticipated area of use is within the Great Lakes region, which is well within the species range. Leelanau Germplasm grows best on moist or organic soils. It does not do well on dry sites.

Availability of Plant Materials: The USDA-Natural Resources Conservation Service, Rose Lake Plant Materials Center, 7472 Stoll Road, East Lansing, Michigan 48823, will maintain a Generation 0 cutting block (equivalent to Breeder Class) of Leelanau Germplasm highbush cranberry. Hardwood cuttings and rooted cuttings will be made available to commercial producers for increase purposes.

References:

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Wood T. Zelinka Nursery, Grand Haven, MI, personal communication

Wyman D. 1970. Shrubs and Vines for American Gardens. New York: Macmillan Company. 613 pp.

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Signatures for release of:

Lake City, MI

Leelanau Germplasm highbush cranberry (Viburnum opulus var. americanum Aiton)

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Jane H. Hardisty, State Conservationist	
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East Lansing, Michigan	
K. Cool, Director Michigan Department of Natural Resources Lansing, Michigan	Date / C
Marc Safley (acting)	7/22/99
Diane Gelburd, Ecological Sciences Division Director	Date
United States Department of Agriculture	
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Washington, D.C.	
Manlyn Shy	10/14/99
Marilyn Shy, Executive Director	Date
Michigan Association of Conservation Districts	

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