

Plant Propagation Protocol for *Vaccinium corymbosum*

ESRM 412 – Native Plant Production

Protocol URL: <https://courses.washington.edu/esrm412/protocols/VACO.pdf>



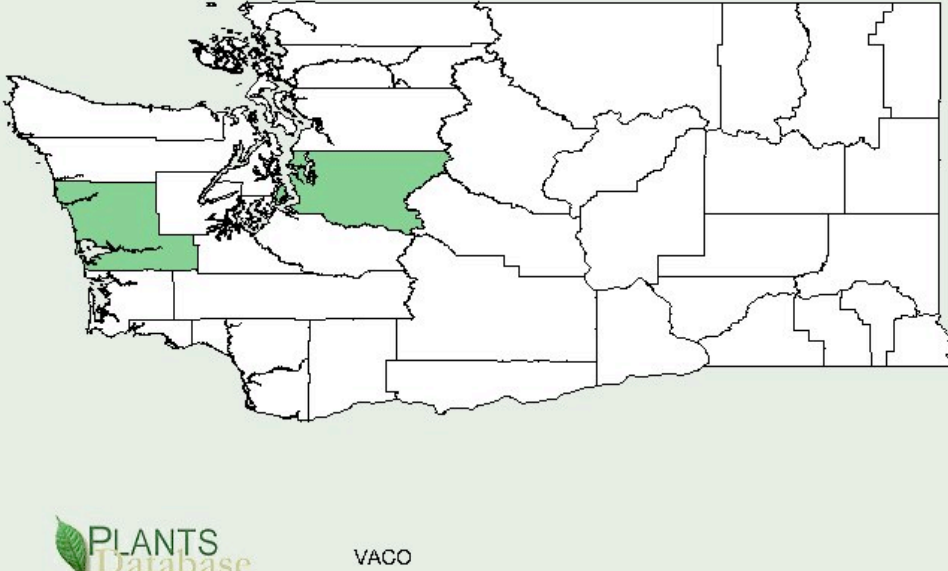
TAXONOMY

Plant Family	
Scientific Name	Ericaceae
Common Name	Heath (Reed).
Species Scientific Name	
Scientific Name	<i>Vaccinium corymbosum</i> L.
Varieties	var. <i>albiflorum</i> (Hook.) Fernald var. <i>glabrum</i> A. Gray
Sub-species	N/A
Cultivar	N/A
Common Synonym(s)	<i>Cyanococcus corymbosus</i> (L.) Rydb. <i>Cyanococcus cuthbertii</i> Small

	<p><i>Vaccinium constablaei</i> A. Gray</p> <p><i>Vaccinium corymbosum</i> L. var. <i>albiflorum</i> (Hook.) Fernald</p> <p><i>Vaccinium corymbosum</i> L. var. <i>glabrum</i> A. Gray (USDA).</p>
Common Name(s)	<p>High-bush blueberry</p> <p>High-bush blueberry</p> <p>Northern high-bush blueberry</p> <p>Tall blueberry</p> <p>Rabbit-eye blueberry (US).</p>
Species Code (as per USDA Plants database)	VACO

GENERAL INFORMATION

Geographical range	<p>The map displays the geographical range of the species across North America. Green shading covers the following areas: Washington, Oregon, California, Nevada, Idaho, Montana, Wyoming, Colorado, Utah, Arizona, New Mexico, Texas, Oklahoma, Missouri, Arkansas, Louisiana, Mississippi, Alabama, Georgia, Florida, South Carolina, North Carolina, Virginia, West Virginia, Maryland, Delaware, Pennsylvania, New Jersey, New York, Connecticut, Massachusetts, Vermont, New Hampshire, Maine, and parts of southern Canada (Ontario, Quebec, and New Brunswick). Insets show Hawaii (HI), Puerto Rico (PR), and the U.S. Virgin Islands (VI). A logo for 'PLANTS Database' is in the top left, and 'VACO' is labeled at the bottom center of the map.</p>
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Ecological distribution	Best grown in acidic (pH of 4.8 to 5.2), medium to wet, well-drained soils in full sun to part shade (Missouri).
Climate and elevation range	Highbush blueberry occupies numerous habitats but seldom occurs as community dominant. Two habitats, where it occurs as a dominant or co-dominant, are open swamps or bogs and high-elevation balds (US).
Local habitat and abundance	N/A
Plant strategy type / successional stage	<p>Not drought tolerant</p> <p>Adapted to fire</p> <p>Medium shade tolerance (Smolka).</p>
Plant characteristics	<p>Deciduous, twiggy shrubs</p> <p>Shape is rounded to irregular</p> <p>Branching is upright-spreading</p>

	6' to 12' tall with equal width (University of Connecticut).
PROPAGATION DETAILS	
Ecotype	N/A
Propagation Goal	Cuttings (Core).
Propagation Method	Vegetative (Core).
Product Type	Seeds (Core).
Stock Type	N/A
Time to Grow	N/A
Target Specifications	Hardwood cuttings (Farrell).
Propagule Collection Instructions	<p>Spring – typically March (Farrell).</p> <p>Select disease and pest free mother plant. Once it is found, a branch should be taken that is from the previous year's growth that is solid and woody. The branch should be cut from the basal area of the plant, should have few leaf buds, and if preferably no fruit buds, as they will interfere with vegetative growth. Select a branch that has a width of about 0.6 – 07 cm, or about the width of a pencil. Use sharp sterile shears to make a clean cut through the plant tissue, being careful not to damage the tissue by crushing it because this would interfere with root formation or maybe even prevent it. Cuts should be made so that the cutting is 12 – 30 inches (Farrell).</p>
Propagule Processing/Propagule Characteristics	Produce cuttings in early summer (Royal).
Pre-Planting Propagule Treatments	Cuttings can be stored from 35-40 F with a very high humidity for several months. Hardwood cuttings of <i>Vaccinium corymbosum</i> have

	proved to be relatively unresponsive to auxin rooting hormone (Farrell).
Growing Area Preparation / Annual Practices for Perennial Crops	Cuttings can be directly potted about one inch deep into a moistened soil medium that has adequate water and nutrient capacity with an acidic pH (Farrell).
Establishment Phase Details	N/A
Length of Establishment Phase	Fall to winter (PFAF). About 6 months (PFAF).
Active Growth Phase	N/A
Length of Active Growth Phase	Spring to summer (PFAF). About 6 months (PFAF).
Hardening Phase	N/A
Length of Hardening Phase	Fall to winter (PFAF). About 6 months (PFAF).
Harvesting, Storage and Shipping	Store in a very humid, 35-40F location (Farrell).
Length of Storage	Several months (Farrell).
Guidelines for Outplanting / Performance on Typical Sites	Allow 4-5ft between Blueberry plants (White).
Other Comments	Best to remove flowers from plants in the year of planting and in the following year so as to prevent fruit set and to encourage new vegetative growth. Prune as needed in late winter beginning in the third year after planting (Missouri).
INFORMATION SOURCES	
References	<p>- Royal Horticultural Society. "Vaccinium Corymbosum." <i>RHS Home Page / RHS Gardening</i>. N.p., 2014. Web. 21 May 2014.</p> <p>- Reed College. "Family: Ericaceae." Family: Ericaceae. Web. 21 May 2014.</p>

	<p>- US Forest Service. "Vaccinium Corymbosum." <i>Index of Species Information</i>. Web. 21 May 2014.</p> <p>- Missouri Botanical Garden. "Vaccinium Corymbosum." <i>Vaccinium Corymbosum - Plant Finder</i>. Web. 21 May 2014.</p> <p>- University of Connecticut. "Vaccinium Corymbosom." <i>Vaccinium Corymbosom</i>. N.p., n.d. Web. 21 May 2014.</p> <p>- PFAF. "Vaccinium Corymbosum L." <i>Vaccinium Corymbosum High-Bush Blueberry PFAF Plant Database</i>. Web. 21 May 2014.</p> <p>- Farrell, Liam. "Vaccinium Corymbosum Propagation by Cutting." <i>Deciduous Shrub Cutting Propagation Blueberry Bush.</i>, 9 Feb. 2014. Web. 21 May 2014.</p> <p>- Smolka, Alexander. "Vaccinium Corymbosum: Lowbush Blueberry." <i>Vaccinium Corymbosum: Lowbush Blueberry</i>. Clemson University, 2014. Web. 21 May 2014.</p> <p>- Core, D. Brian. "Cultivation Notes: Highbush Blueberry." The Rhothe Island Wild Plant Society, March 1996. Web. 21 May 2014.</p> <p>- White Flower Farm. "Growing Guide Blueberries (Vaccinium)." Web. 21 May 2014.</p>
Other Sources Consulted	<p>- Genome Database for Vaccinium. "Vaccinium corymbosum." North Carolina State University and Washington State University. Web. 21 May 2014.</p> <p>- USA National Phenology Network. "Vaccinium corymbosum." Web. 21 May 2014.</p>
Protocol Author	Sakura Shibata
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