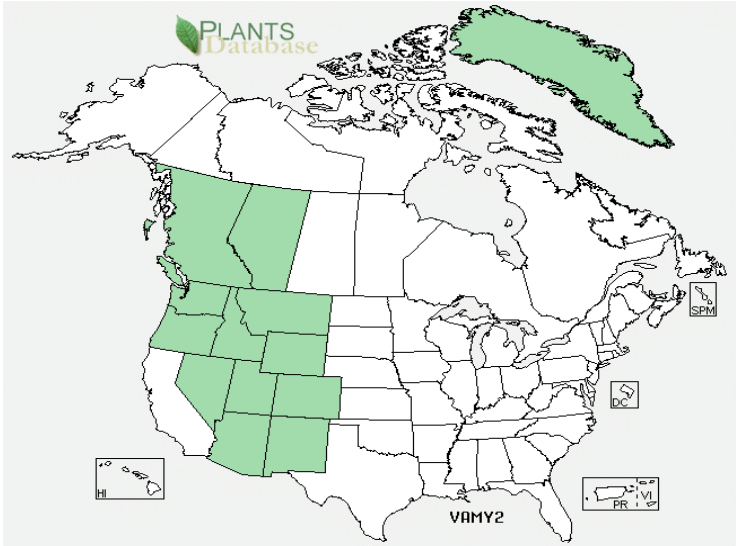
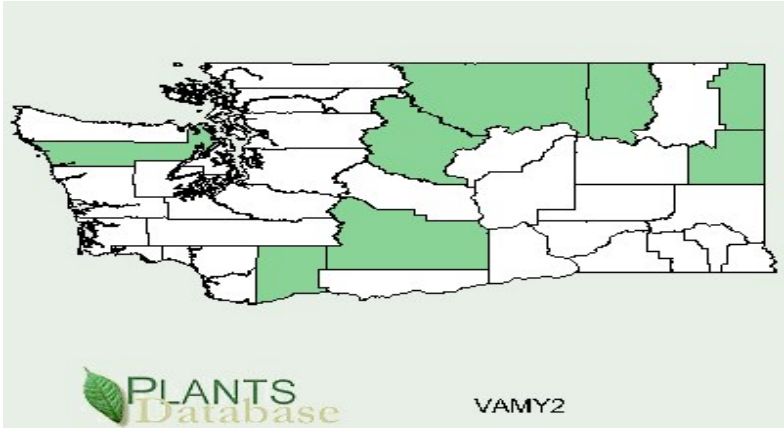


Plant Propagation Protocol for *Vaccinium myrtillus*
ESRM 412 – Native Plant Production



Photo courtesy of http://nadjeeb.files.wordpress.com/2009/11/vaccinium_myrtillus.jpg

TAXONOMY	
Family Names	
Family Scientific Name	Ericaceae (1)
Family Common Name	Heath family (1)
Scientific Names	
Genus	<i>Vaccinium</i> (1)
Species	<i>myrtillus</i> (1)
Species Authority	L. (1)
Variety	<i>Vaccinium myrtillus</i> var. <i>oreophilum</i> (Rydb.) Dorn (2)
Sub-species	
Cultivar	
Authority for Variety/Sub-species	
Common Synonym (s) (include full)	<i>Vaccinium myrtillus</i> L. var. <i>oreophilum</i> (Rydb.) Dorn, <i>Vaccinium myrtillus</i> L. ssp. <i>oreophilum</i> (Rydb.) A. Love & D. Love & Kapoor (1)

scientific names	
Common Name(s)	Myrtle blueberry, Myrtle whortleberry, Whortleberry (2) Dwarf bilberry
Species Code (as per USDA Plants database)	VAMY 2 (1)
GENERAL INFORMATION	
Geographic al range	 <p>See U.S. county distributions (when available) by clicking on the map or the linked states below: USA (AZ, CO, ID, MT, NM, NV, OR, UT, WA, WY), CAN (AB, BC), DEN (GL) (1)</p> 
Ecological	Forest vegetation (3)

distribution	
Climate and elevation range	High altitudes (4)
Local habitat and abundance; may include commonly associated species	<p>Common in the understory of coniferous forests of the Rocky Mountains. Occurs in abundance in stands made up of Subalpine fir, Douglas fir, Engelmann spruce and the White fir (3)</p> <p>Commonly associated plants include Thimbleberry, Northern twinflower, Kinnikinnick, Mountain snowberry (3)</p> <p>Grows abundantly in damp, acidic soils, damp woods and sandy or rocky soil surfaces (4)</p> <p>Grows in forest openings, mid-elevations in the mountains (5)</p>
Plant strategy type / successional stage	Perennial species (1)
Plant characteristics	<p>Small shrub with blue-black colored berries (4)</p> <p>Deciduous with many branches. Leaves are ovate to elliptic-lanceolate, light green, serrulate with veins on the bottom of the leaf. Flowers are 5-lobed corolla with pink, urn-shaped petals (5)</p>
PROPAGATION DETAILS	
Ecotype	Lodgepole pine forest, Marias Pass, 5250 ft (6)
Propagation Goal	Plants (6)
Propagation Method	Vegetative (6)
Product Type	Container (plug) (6)
Stock Type:	800 ml container (6)
Time to Grow	15 months (6)
Target Specifications	<p>Stock type: Container cutting</p> <p>Height: 6cm</p> <p>Caliper: 4mm</p> <p>Root system: firm plug in 800 ml container (6)</p>
Propagule Collection	Pre-rooting using softwood stem cuttings collected in mid June (6)

Propagule Processing/Propagule Characteristics	Keep cuttings moist and in refrigeration (6)
Pre-Planting Propagule Treatments	Re-cut softwood cuttings and remove terminal buds. Place in fungicide for couple minutes and place in bed with at least 2 nodes below the surface of the rooting medium (6)
Growing Area Preparation / Annual Practices for Perennial Crops	Outdoor mistbed with frequency adjusted to outdoor temperature and wind (6) Rooting medium is 50% perlite and 50% peat. After cutting are potted, move to outdoor shadehouse for 4 weeks and then full sun exposure (6)
Establishment Phase	15 weeks (6)
Length of Establishment Phase	15 weeks (6)
Active Growth Phase	6 weeks 1 st year, 12 weeks 2 nd year (6)
Length of Active Growth Phase	6 weeks 1 st year, 12 weeks 2 nd year (6)
Hardening Phase	Cuttings are irrigated prior to winterization (6)
Length of Hardening Phase	4 weeks (6)
Harvesting, Storage and Shipping	Harvest in September and store overwinter in outdoor nursery under insulating foam cover and snow for 5 months (6)

(of seedlings)	
Length of Storage	1.3 years (6)
Guidelines for Outplanting / Performance on Typical Sites	Respond well to nursery cultivation, rooting %: 48% in 14 weeks (6)
Other Comments	Fruit collected in August and seeds are cleaned by macerator and screened (6) Store seeds for up to 12 years in sealed containers, physiological dormancy (6)
INFORMATION SOURCES	
References	<p>(1). Vaccinium myrtillus L. USDA Plant Database. May 17, 2010 http://www.plants.usda.gov/java/stateSearch?searchTxt=Vaccinium+myrtillus&searchType=Sciname&searchOrder=1&imageField.x=0&imageField.y=0.</p> <p>(2). Vaccinium myrtillus L. Integrated Taxonomic Information System. May 17, 2010 http://www.itis.gov/index.html.</p> <p>(3). Species: Vaccinium myrtillus. Index of Species Information. May 17, 2010 http://www.fs.fed.us/database/feis/plants/shrub/vacmyr/all.html.</p> <p>(4). Bilberry: Vaccinium myrtillus. May 17, 2010 http://www.herbs.2000.com/herbs/herbs_bilberry.htm.</p> <p>(5). Vaccinium myrtillus. The Burke Museum of Natural History and Culture. May 17, 2010 http://biology.burke.washington.edu/herbarium/imagecollection.php?Genus=Vaccinium&Species=myrtillus.</p> <p>(6). Protocol Information. Native Plant Network. May 17, 2010 http://www.nativeplantnetwork.org/network/ViewProtocols.aspx?ProtocolID=105,1438.</p>
Other Sources	
Protocol Author	Chelsey Jay

Date Protocol Created or Updated	05/17/10
--	----------

Note: This template was modified by J.D. Bakker from that available at:
<http://www.nativeplantnetwork.org/network/SampleBlankForm.asp>