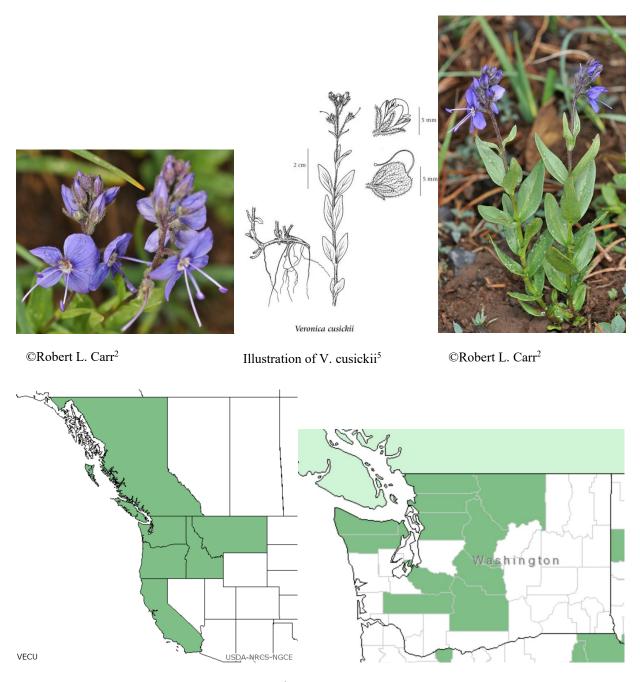
Plant Propagation Protocol for Veronica cusickii

ESRM 412 – Native Plant Production

Protocol URL: https://courses.washington.edu/esrm412/protocols/VECU.pdf



Distribution through BC, WA, OR, CA, ID, MT¹

TAXONOMY		
Plant Family		

Scientific Name	Scrophulariaceae		
Common Name	Figwort Family		
Species Scientific Name			
Scientific Name	Veronica cusickii A. Gray ¹		
Varieties	7 Clother Custom 11. Glay		
Sub-species			
Cultivar			
Common Synonym(s)			
Common Name(s)	Cusick's speedwell ¹		
Species Code (as per USDA Plants database)	VECU ¹		
GENERAL INFORMATION			
Geographical range	Occurring on both sides of the Cascades crest in Washington; British Columbia south to California, east to Idaho and Montana. ² See maps above for distribution through British Columbia and United States (WA, OR, ID, MT, CA).		
Ecological distribution	Open, moist, rocky slopes at high elevations in mountains ² , Forest openings, meadows ³		
Climate and elevation range	<3,000 m³ Grows in zones 1, 2, 3, 4, 5, 6, 7, 15, 16, 17, and 18 (needs special care in all zones)8		
Local habitat and abundance	Requires excellent drainage, moderate summer watering, full/nearly full sun ⁸ Found in Olympic National Park, N Cascades Nation Park, Mt. Rainier National Park, Wallowas Locally common ⁴		
Plant strategy type / successional stage	Shallow rhizomatous ³		
Plant characteristics	Rhizomatous perennial Leaves: 5-25 mm, elliptic to ovate, acute to obtuse, entire, generally glabrous, sessile Inflorescence: terminal, glandular-hairy, pedicels 3-9 mm Flower: sepals 2-3 mm, lanceolate, deep blue Fruit: 5-6mm, longer than wide, deeply notched, glandular-hairy ³ Seed: numerous, flat, about 1mm long ⁵ Blooms June-August ⁹		
PROPAGATION DETAILS			
* indicates reference Ecotype	*Seeds collected from Lane Co., Oregon near Eugene (V. peregrina and V. scutellata) 6,7		

Propagation Goal	Plants
Propagation Method	Seed
Product Type	
Stock Type	*Cone-tainer (V. peregrina) ⁶
Time to Grow	
Target Specifications	*Grow plugs to be transplanted into a field covered with weed fabric for seed increase (V. peregrina) ⁶
	*Grow plugs to be transplacted into raised beds for seed increase (V. scutellata) ⁷
Propagule Collection Instructions	*Seeds shatter on the weed fabric and are vaccuumed up using battery-powered hand vacs (V. peregrina) ⁶
Propagule Processing/Propagule Characteristics	*Seeds were cleaned using a small air screen machine (V. peregrina and V. scutellata) ^{6,7}
Pre-Planting Propagule Treatments	
Growing Area Preparation / Annual Practices for Perennial Crops	*Seeds were sown into cone-tainers filled with Sunshine#1 (a soil-less, peat-based media) amended with micro-nutrients (Micromax) and a slow-release fertilizer (Osmocote 14-14-14). Flats of cone-tainers were placed in a heated greenhouse (V. peregrina and V. scutellate) ^{6,7}
Establishment Phase Details	*Seeds germinated readily with no treatment (V. peregrina and V. scutellate) ^{6,7}
Length of Establishment Phase	
Active Growth Phase	
Length of Active Growth Phase	
Hardening Phase	
Length of Hardening Phase	
Harvesting, Storage and Shipping	
Length of Storage	
Guidelines for Outplanting /	
Performance on Typical Sites	
Other Comments	Seeds sown in December, plants are ready for transplant into field in mid-March (V. peregrina) ⁶
	Seeds germinate well. Division is another propagation method. ⁹

INFORMATION SOURCES		
References	See below	
Protocol Author	Jacob Stephens	
Date Protocol Created or Updated	04/30/19	

References:

¹Veronica cusickii A. Gray. (n.d.). Retrieved May 30, 2019, from https://plants.usda.gov/core/profile?symbol=VECU

²WTU Herbarium, Burke Museum, & University of Washington. (n.d.). Retrieved May 30, 2019, from

http://biology.burke.washington.edu/herbarium/imagecollection/taxon.php?Taxon=Veronica cusickii

³SCROPHULARIACEAE. (n.d.). Retrieved May 30, 2019, from http://ucjeps.berkeley.edu/cgibin/get JM treatment.pl?7177,7600,7608

⁴Veronica cusickii | Cusick's speedwell | Wildflowers of the Pacific Northwest. (n.d.). Retrieved May 30, 2019, from https://www.pnwflowers.com/flower/veronica-cusickii

⁵ "Flora BC: Electronic Atlas of the Flora of British Columbia." E. Accessed May 30, 2019. http://linnet.geog.ubc.ca/Atlas/Atlas.aspx?sciname=Veronica cusickii.

⁶Bartow, Amy. 2007. Propagation protocol for production of Propagules (seeds, cuttings, poles, etc.) *Veronica peregrina* L. seeds USDA NRCS - Corvallis Plant Materials Center Corvallis, Oregon. In: Native Plant Network. URL: http://NativePlantNetwork.org (accessed 2019/06/01). US Department of Agriculture, Forest Service, National Center for Reforestation, Nurseries, and Genetic Resources.

⁷ Bartow, Amy. 2007. Propagation protocol for production of Propagules (seeds, cuttings, poles, etc.) *Veronica scutellata* L. seeds USDA NRCS - Corvallis Plant Materials Center Corvallis, Oregon. In: Native Plant Network. URL: http://NativePlantNetwork.org (accessed 2019/06/01). US Department of Agriculture, Forest Service, National Center for Reforestation, Nurseries, and Genetic Resources.

⁸ "Entry from Jepson Horticultural Database for Veronica Cusickii." UCJEPS. Accessed May 30, 2019. http://ucjeps.berkeley.edu/cgi-bin/get_hort.pl?taxon=Veronica cusickii.

⁹ "Plant Database." Lady Bird Johnson Wildflower Center - The University of Texas at Austin. Accessed May 30, 2019. https://www.wildflower.org/plants/result.php?id_plant=vecu

¹⁰ "Veronica Cusickii Gray." EWU. Accessed May 30, 2019. http://web.ewu.edu/ewflora/Plantaginaceae/Veronica cusickii.html.