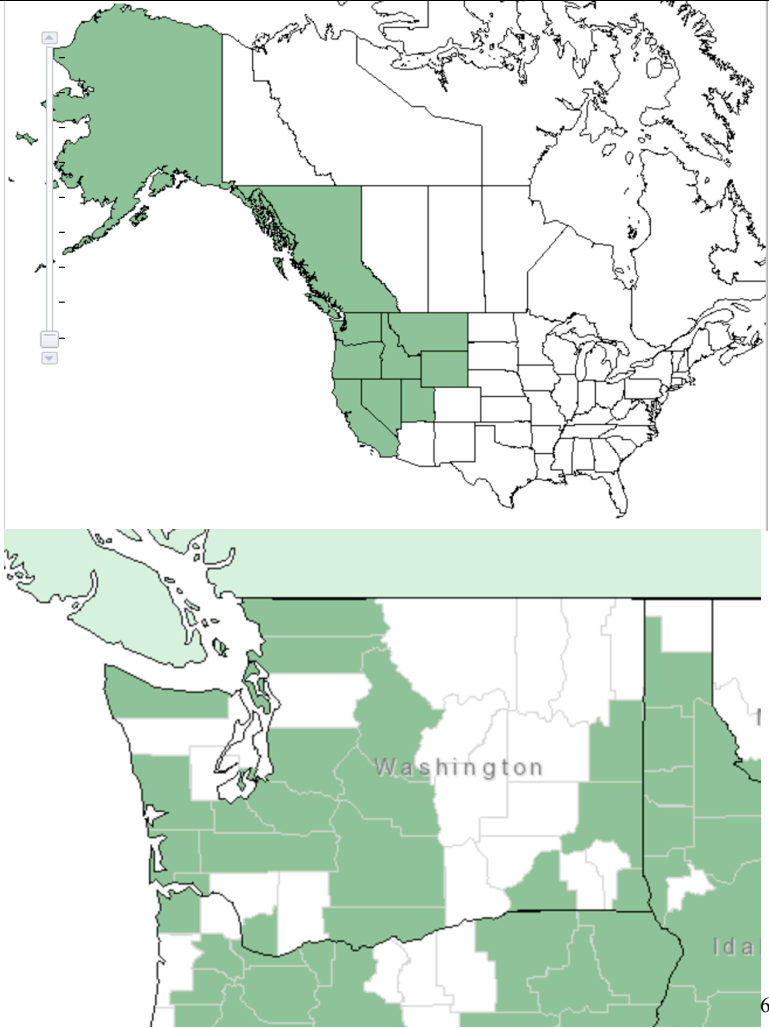


Plant Propagation Protocol for *Ranunculus orthorhynchus*
 ESRM 412 – Native Plant Production
 Protocol URL: <https://courses.washington.edu/esrm412/protocols/RAOR3>

TAXONOMY	
Plant Family	
Scientific Name	Ranunculaceae ⁶
Common Name	Buttercup Family ⁶
Species Scientific Name	
Scientific Name	<i>Ranunculus orthorhynchus</i> Hook. ⁶
Varieties	N/A ⁶
Sub-species	<i>Ranunculus orthorhynchus</i> var. <i>bloomeri</i> Benson <i>Ranunculus orthorhynchus</i> var. <i>orthorhynchus</i> Hook ⁶
Cultivar	N/A ⁶
Common Synonym(s)	N/A ⁶
Common Name(s)	Straightbeak buttercup, Straight beaked buttercup, Bloomer's buttercup ²
Species Code (as per USDA Plants database)	RAOR3 ⁶
GENERAL INFORMATION	
Geographical range	Its geographical range extends along the West coast of North America running from Alaska down through California. It also extends slightly east, reaching as far as Montana. ⁷

	
Ecological distribution	Generally found along streams, beaches, tidal marshes, and forests. ⁸
Climate and elevation range	Found from 12 to 2240 meters elevation. ²
Local habitat and abundance	They thrive in very moist areas. ⁵
Plant strategy type / successional stage	The plant's thick roots require extensive access to water, thus growing in generally moist areas. ¹
Plant characteristics	Stems are nearly erect with basal leaves. Its leaves include mostly shallow lobes and obtuse teeth. It can grow to be around 9 to 18 inches. ³ Its flowers have yellow petals and have sepals that are bent downwards. ⁴
PROPAGATION DETAILS	
Ecotype	N/A
Propagation	Plants ¹

Goal	
Propagation Method	Vegetative ¹
Product Type	Propagules ³
Stock Type	Pot ³
Time to Grow	5 months ⁴
Target Specifications	Seedlings should be 6 inches before moving to an outdoor position. ³
Propagule Collection Instructions	Seeds often have a difficult time germinating, so plants are best grown from root division after the plant has grown to a size of about 9 inches. ³
Propagule Processing/ Propagule Characteristics	N/A
Pre-Planting Propagule Treatments	N/A
Growing Area Preparation / Annual Practices for Perennial Crops	The plants require moist media that can also drain well. ³
Establishment Phase Details	N/A
Length of Establishment Phase	N/A
Active Growth Phase	A mature growth takes about 5 months while being cared for in a nursery. ⁴
Length of Active Growth Phase	3 months ⁴
Hardening Phase	N/A
Length of Hardening Phase	N/A
Harvesting, Storage and	Seedlings should be immediately out planted after growing in a pot in nurseries. ⁴

Shipping	
Length of Storage	N/A
Guidelines for Outplanting / Performance on Typical Sites	Seedlings must have been growing for 5 months in a nursery before being outplanted. The plant should be at least 6 inches. ⁴
Other Comments	N/A
INFORMATION SOURCES	
References	<p>Brayshaw, T. C. <i>Buttercups, Waterlilies, and Their Relatives: (the Order Ranales) in British Columbia</i>. Victoria: Royal British Columbia Museum, 1989. Print.¹</p> <p>"Calflora: Ranunculus Orthorhynchus." <i>Calflora: Ranunculus Orthorhynchus</i>. N.p., n.d. Web. 20 May 2016. <http://www.calflora.org/cgi-bin/species_query.cgi?where-taxon=Ranunculus%2Borthorhynchus>.²</p> <p>Jepson, Willis Linn. <i>A Manual of the Flowering Plants of California</i>. Berkeley, CA: Associated Students Store, U of California, 1925. Print.³</p> <p>Larrison, Earl J. <i>Washington Wildflowers</i>. Seattle: Seattle Audubon Society, 1974. Print.⁴</p> <p>Mason, Georgia. <i>Guide to the Plants of the Wallowa Mountains of Northeastern Oregon</i>. Eugene: U of Oregon, 1975. Print.⁵</p> <p>"Plants Profile for Ranunculus Orthorhynchus (straightbeak Buttercup)." <i>Plants Profile for Ranunculus Orthorhynchus (straightbeak Buttercup)</i>. N.p., n.d. Web. 20 May 2016. <http://plants.usda.gov/core/profile?symbol=RAOR3>.⁶</p> <p>"Ranunculus Orthorhynchus in Flora of North America @ Efloras.org." <i>Ranunculus Orthorhynchus in Flora of North America @ Efloras.org</i>. N.p., n.d. Web. 20 May 2016. <http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=233501188>.⁷</p> <p>Turner, Mark, and Phyllis Gustafson. <i>Wildflowers of the Pacific Northwest</i>. Portland, Or.: Timber, 2006. Print.⁸</p>
Other Sources Consulted	<p>Biek, David, and Susan McDougall. <i>The Flora of Mount Adams, Washington</i>. Seattle, WA: Sound, 2007. Print.</p> <p>Biek, David. <i>Flora of Mount Rainier National Park</i>. Corvallis: Oregon State UP, 2000. Print.</p> <p>John, Harold St. <i>Flora of Southeastern Washington and Adjacent Idaho</i>. Pullman: Students Book Corporation, 1937. Print.</p> <p>Jolley, Russ. <i>Wildflowers of the Columbia Gorge: A Comprehensive Field Guide</i>. Portland, Or.: Oregon Historical Society, 1988. Print.</p> <p>Peck, Morton Eaton. <i>A Manual of the Higher Plants of Oregon</i>. 2nd ed. Portland, Or.: Binfords & Mort, 1941. Print.</p>
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Date Protocol Created or Updated	05/25/16