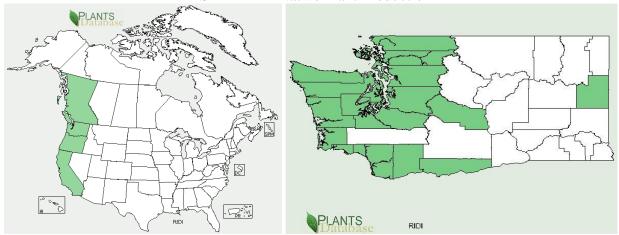
Plant Propagation Protocol for $\it Ribes\ divaricatum$

ESRM 412 – Native Plant Production



US and Canada Distribution

Washington State Distribution

From PLANTS Database

From PLANTS Database		
TAXONOMY		
Plant Family		
Scientific Name	Grossulariaceae	
Common Name	Currant/Gooseberry Family	
Species Scientific Name		
Scientific Name	Ribes divaricatum Douglas	
Varieties	var. divaricatum	
	var. parishii (A. Heller) Jeps.	
0.1	var. pubiflorum Koehne	
Sub-species	None	
Cultivar	None	
Common Synonym(s)	None	
Common Name(s)	Spreading gooseberry, straggly gooseberry, pariah's gooseberry, wild gooseberry (USDA, Pojar).	
Species Code (as per USDA	RIDI	
Plants database)		
	GENERAL INFORMATION	
Geographical range	See above maps for distribution.	
Ecological distribution	Found in moist woodlands and forests throughout the coastal	
	mountain ranges from British Columbia to California and the foothills of the Cascades mountain range. (USDA, WSU) Var.	
	parishii is found only in Southern California, mostly in riparian zones (OSU).	
Climate and elevation range	Found at sub-montane to montane elevations in maritime or cool mesothermal climates (Klinka). Only at low elevation according to Pojar.	
Local habitat and abundance	Found in shade to partly shade in moist woodlands and forests	

	(WSU). Found throughout Western Washington (USDA). Found in semi-open Douglas Fir communities and will continue to survive in clearcut areas (Klinka).	
Plant strategy type / successional stage	Early seral species growing on forest edges. (Klinka) Insect pollinated and seeds spread by animals (PFAF).	
Plant characteristics	Shrub up to 9 ft tall and 6 ft wide with loose multi-stem form (WSU). Alternate, palmately compound leaves with 3 lobes and pubescence on top of the leaf. 0-3 spines emerging from each node (Klinkenberg), spines only when leaves attached (Pojar). Has perfect flowers arranged in racemes with white-red petals with four or fewer flowers per raceme (PFAF, Pojar, OSU). Purple to purple green sepals and long extending stamens are characteristic (Pojar, OSU). Fruits are black, smooth, round berries 6-10 mm in diameter (Pojar, OSU).	
PROPAGATION DETAILS		
Ecotype		
Propagation Goal	Plants	
Propagation Method	Seed	
Product Type	Container	
Stock Type	N/A	
Time to Grow	Roughly 14-18 months from seed to outplanting (PFAF).	
Target Specifications	N/A	
Propagule Collection Instructions	Seeds ripen from July to August (PFAF). Fruits will be soft and black and need to be collected quickly before they are eaten by birds (PFAF). Seeds of <i>Ribes lacustre</i> , a closely related species, are cleaned by macerating and washing (Rose).	
Propagule	Seeds can be stored up to 17 years in cold dry storage (PFAF).	
Processing/Propagule Characteristics	Seeds per pound not available for <i>Ribes divaricatum</i> , however, Rose lists <i>Ribes lacustre</i> at ~514,990 seeds per pound.	
Pre-Planting Propagule Treatments	Dormant seeds requires 0-9° C cold stratification for 4 to 5 months. Seeds should be stored in cold dry storage (PFAF). The germination of seeds of <i>Ribes lacustre</i> , is improved by 5 minutes of 2-10% sulfuric acid scarification (Rose).	
Growing Area Preparation / Annual Practices for Perennial Crops	Seed into cold frame in fall if not dormant, otherwise in mid-winter, move into pots once large enough in spring (PFAF).	
Establishment Phase Details	N/A	
Length of Establishment Phase	N/A	
Active Growth Phase	N/A	
Length of Active Growth Phase	N/A	
Hardening Phase	N/A	
Length of Hardening Phase	N/A	
Harvesting, Storage and	N/A	

Shipping		
Length of Storage	N/A	
Guidelines for Outplanting /	Outplant the late spring the year following germination (PFAF).	
Performance on Typical	Ribes lacustre begin flowering after 3-5 years, likely similar (Rose).	
Sites	Easy to grow on moist but well drained loamy soil (PFAF).	
Other Comments	May serve as a host for White Pine Blister Rust (Worrell).	
PROPAGATION DETA	ILS	
Ecotype	N/A	
Propagation Goal	Cuttings	
Propagation Method	Vegetative	
Product Type	Container	
Stock Type	N/A	
Time to Grow	1-2 years for <i>Ribes lacustre</i> (Rose), likely similar.	
Target Specifications	N/A	
Propagule Collection	Take semi hardwood heel cuttings in July or August with 10 - 15cm	
Instructions	(PFAF).	
	Take hardwood heel cuttings of new growth from November to	
	February (PFAF).	
Propagule	N/A	
Processing/Propagule		
Characteristics		
Pre-Planting Propagule	N/A	
Treatments		
Growing Area Preparation /	Grow under cold frame or sheltered bed outdoors (PFAF). For <i>Ribes</i>	
Annual Practices for	lacustre, use well draining soil medium, likely similar needs (Rose).	
Perennial Crops	N/A	
Establishment Phase Details	N/A	
Length of Establishment Phase	N/A	
Active Growth Phase	N/A	
Length of Active Growth	N/A	
Phase	IV/A	
Hardening Phase	N/A	
Length of Hardening Phase	N/A	
Harvesting, Storage and	N/A	
Shipping Shipping		
Length of Storage	N/A	
Guidelines for Outplanting /	N/A	
Performance on Typical		
Sites		
Other Comments	Layering is also possible (Rose).	
INFORMATION SOURCES		
References	Klinka, K. Indicator Plants of Coastal British Columbia.	
	Vancouver: U of British Columbia, 1989. Print. 203 p.	
	Klinkenberg, Brian. "Ribes divaricatum Dougl. Subsp.	

	Divaricatum." E-Flora BC: Electronic Atlas of the Flora of British Columbia. Web. 21 May 2014.
	http://linnet.geog.ubc.ca/Atlas/Atlas.aspx?sciname=Ribes%20divaricatum%20ssp.%20divaricatum .
	Oregon State University. "Ribes divaricatum, Landscape Plants
	Images, Identification, and Information." Oregon State Univ.
	Department of Horticulture. Web. 20 May 2014.
	http://oregonstate.edu/dept/ldplants/ridiv.htm .
	PFAF. "Ribes divaricatum Coastal Black Gooseberry" PFAF Plant
	Database. Ribes Divaricatum Coastal Black Gooseberry
	PFAF Plant Database. Web. 20 May 2014.
	http://www.pfaf.org/user/Plant.aspx?LatinName=Ribes+div
	aricatum>. Daion Tim and Mackingan Andry Plants of the Pacific Northwest
	Pojar, Jim and MacKinnon, Andy. Plants of the Pacific Northwest Coast: Washington, Oregon, British Columbia & Alaska.
	Vancouver: Lone Pine Pub., 2004. Print. 85 p.
	Rose, Robin, Caryn E. C. Chachulski, and Diane L. Haase.
	Propagation of Pacific Northwest Native Plants. Corvallis:
	Oregon State UP, 1998. Print. 143 p.
	Worrell, Jim. "White Pine Blister Rust." Forest Pathology. Web. 20
	May 2014.
	http://www.forestpathology.org/dis_wpbr.html >
	WSU Clark County Extension." Straggly Gooseberry. Web. 20 May
	2014. http://www.pnwplants.wsu.edu/PlantDisplay.aspx?PlantID=680>.
Other Sources Consulted	Baskin, Carol C., and Jerry M. Baskin. Seeds: Ecology,
	Biogeography, and Evolution of Dormancy and
	Germination. San Diego, CA: Academic, 2001. Print. Dirr, M.A., and C.W. Heuser Jr. The reference manual of woody
	plant propagation: from seed to tissue culture. Varsity Press,
	Athens, GA, 1987. Print.
	Deno, Norman C. "First Supplement to the Second Edition of Seed
	Germination Theory and Practice." Self-published, March 1996. Print. 71 p.
	Harper-Lore, Bonnie, and Maggie Wilson. Roadside Use of Native
	Plants. Washington, D.C.: Island, 2000. Print.
	"King Conservation District." Personal interview. 2 May 2014.
	Kruckeberg, Arthur R. Gardening with Native Plants of the Pacific
	Northwest. Seattle: U of Washington, 1996. Print. 113 p. Leigh, Michael. Grow Your Own Native Landscape – A Guide to
	Identifying, Propagating & Landscaping with Western
	Washington Native Plants. Native Plant Salvage Project,
	Washington State University Cooperative Extension,
	Thurston County, revised edition June 1999.
	Pettinger, April, and Brenda Costanzo. Native Plants in the Coastal
	Garden: A Guide for Gardeners in the Pacific Northwest.

	Portland, Or.: Timber, 2003. Print. 56-57 p. Potash, L.,C. Aubry, B. Busse, W. Hamilton, G. Ketcheson, J. Henderson, and R. Mace. 1994. Mt. Baker-Snoqualmie National Forest Native Plant Notebook, Mt. Baker-Snoqualmie National Forest, Mountlake Terrace, Washington. "Propagation Protocol Database." Propagation Protocol Database. Web. 20 May 2014. http://www.nativeplantnetwork.org/Network/ Schopmeyer, C.S. Seeds of Woody Plants in the United States. Washington, D.C.: United States Department of Agriculture. Forest Service, 1974. Print. USDA. Range Plant Handbook. New York: Dover Publications, 1988. Print. "WNPS." Personal interview. 5 May 2014. Young, James A., and Cheryl G. Young. Seeds of Woody Plants in North America. Portland, Or.: Timber, 1992. Print. 301 p. Young, James A., and Cheryl G. Young. Collecting, Processing and Germinating Seeds of Wildland Plants. Timber, 1986. Print. 197 p.
Protocol Author	Ben Saari
Date Protocol Created or Updated	05/21/14