## Plant Propagation Protocol for Ribes bracteosum

ESRM 412 – Native Plant Production

 $Protocol\ URL:\ https://courses.washington.edu/esrm412/protocols/RIBR.pdf$ 

	TAXONOMY	
Plant Family		
Scientific Name	Grossulariaceae (1)	
Common Name	Currant	
Species Scientific		
Name		
Scientific Name	Ribes bracteosum Douglas ex. Hook (1)	
Varieties	None.	
Sub-species	None.	
Cultivar	None.	
Common Synonym(s)	None.	
Common Name(s)	Stink currant, California black currant, stinking black currant, skunk	
	currant, blue currant (2)	
Species Code (as per	RIBR	
USDA Plants		
database)	CENTED AT INTEGRALATION	
0 1: 1	GENERAL INFORMATION	
Geographical range	PLANTS PLANTS RIBR RIBR	

	Company First Colors  First Co
	Both maps (1)
Ecological distribution	Moist woods, shorelines, streambanks, avalanche tracks, floodplains
Zeological distribution	(4)
Climate and elevation	Moist to wet places, low to subalpine elevations (4)
range	
Local habitat and	Abundant (3).
abundance	Associations: Alnus rubra, Rubus spectabilis, Sambucus racemosa, Thuja plicata (5)
Plant strategy type /	Pioneer species in newly disturbed sites due to long seed dormancy.
successional stage	(6)
	Important note: all references for (6) are for <i>R. sanguineum</i> .
Plant characteristics	Erect or straggly unarmed shrub, 1.5 – 3 m tall. (3)
	PROPAGATION DETAILS:
Seed P	Propagation from Garry Oak Recovery Team (for Ribes sanguineum) (6)
Ecotype	(=====================================
Propagation Goal	Seeds
Propagation Method	Seed
Product Type	Propagules
Stock Type	
Time to Grow	
Target Specifications	
Propagule Collection	Flowers in May, berries ripen July – September. (2)
Instructions	Collect fruit by hand when fully black. (6)
Propagule Processing/ Propagule	Processing: Add water to seeds and macerate in a blender. Float off pulp and spread seeds to dry.
Characteristics	Storage: Store dry seeds at low humidity in sealed containers. Seeds viable for long periods and do not appear to be affected by temperature. Fall sowing produces good results.
	Seeds per pound: 58,600. (0.45 oz. seeds/pound of berries)
	Viability: 60-65%
Pre-Planting Propagule	It is preferable to sow seeds in fall. Or cold-stratify at freezing (32F)

Treatments	for three months an	d sow in spring.	
Growing Area			
Preparation / Annual			
Practices for			
Perennial Crops			
Establishment Phase			
Details			
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	Vegetative propagation	on table: (6)	T
	Method	Success Rate	Collection Time
	Method  Softwood cuttings	Excellent. 4" cuttings treated with 0.3-0.5% IBA and planted under a mist rooted in 4-6 weeks.	
		Excellent. 4" cuttings treated with 0.3-0.5% IBA and planted under a mist rooted	Time
	Softwood cuttings	Excellent. 4" cuttings treated with 0.3-0.5% IBA and planted under a mist rooted in 4-6 weeks.  Good. 6" cuttings treated	Time  May-July.
	Softwood cuttings  Hardwood	Excellent. 4" cuttings treated with 0.3-0.5% IBA and planted under a mist rooted in 4-6 weeks.  Good. 6" cuttings treated with 0.8% IBA	Time  May-July.  Late winter  Spring-
	Softwood cuttings  Hardwood  Root cuttings	Excellent. 4" cuttings treated with 0.3-0.5% IBA and planted under a mist rooted in 4-6 weeks.  Good. 6" cuttings treated with 0.8% IBA  Good	Time  May-July.  Late winter  Spring- summer
Veget	Softwood cuttings  Hardwood  Root cuttings  Suckers  Plant division	Excellent. 4" cuttings treated with 0.3-0.5% IBA and planted under a mist rooted in 4-6 weeks.  Good. 6" cuttings treated with 0.8% IBA  Good  Moderate  Good	Time  May-July.  Late winter  Spring- summer  Spring Spring
	Softwood cuttings  Hardwood  Root cuttings  Suckers  Plant division  ative Propagation 1	Excellent. 4" cuttings treated with 0.3-0.5% IBA and planted under a mist rooted in 4-6 weeks.  Good. 6" cuttings treated with 0.8% IBA  Good  Moderate  Good  Trom Native Plant Network	Time  May-July.  Late winter  Spring- summer  Spring Spring
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Ecotype Propagation Goal	Softwood cuttings  Hardwood  Root cuttings  Suckers  Plant division  ative Propagation for Ribes sanguineu  Plants	Excellent. 4" cuttings treated with 0.3-0.5% IBA and planted under a mist rooted in 4-6 weeks.  Good. 6" cuttings treated with 0.8% IBA  Good  Moderate  Good  Trom Native Plant Network	Time  May-July.  Late winter  Spring- summer  Spring Spring
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Ecotype Propagation Goal Propagation Method	Softwood cuttings  Hardwood  Root cuttings  Suckers  Plant division  ative Propagation for Ribes sanguineu  Plants  Vegetative  Container (plug)	Excellent. 4" cuttings treated with 0.3-0.5% IBA and planted under a mist rooted in 4-6 weeks.  Good. 6" cuttings treated with 0.8% IBA  Good  Moderate  Good  Trom Native Plant Network	Time  May-July.  Late winter  Spring- summer  Spring Spring
Ecotype Propagation Goal Propagation Method Product Type Stock Type Time to Grow	Softwood cuttings  Hardwood  Root cuttings  Suckers Plant division  ative Propagation for Ribes sanguineu  Plants  Vegetative Container (plug) Deepot 16	Excellent. 4" cuttings treated with 0.3-0.5% IBA and planted under a mist rooted in 4-6 weeks.  Good. 6" cuttings treated with 0.8% IBA  Good  Moderate  Good  Trom Native Plant Network war. glutinosum) (7)	Time  May-July.  Late winter  Spring- summer  Spring Spring
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Instructions	
Propagule Processing/	Keep cuttings moist and cool.
Propagule	
Characteristics	
Pre-Planting Propagule	Dip cuttings in mild bleach solution for 30 seconds. Treat cuttings
Treatments	with Hormex (1000 ppm IBA) rooting powder. Strike 1.5" deep in
	deep flats of 3:1 Perlite: Vermiculite.
Growing Area	Keep flats in a fully controlled greenhouse and water with an
Preparation / Annual	automatic mist system until roots are fully developed.
Practices for	
Perennial Crops	
Establishment Phase	After 90 days, transplant cuttings to 2x7 Deepot 16 tubes containing
Details	standard potting mix (peat moss, fir bark, perlite, sand). Place cuttings
	in shade house.
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	
	INFORMATION SOURCES
References	(1) Ribes bracteosum Douglas ex. Hook, retrieved 2014-04-13
	from <a href="http://plants.usda.gov/core/profile?symbol=RIBR">http://plants.usda.gov/core/profile?symbol=RIBR</a>
	(2) Jacobson, A.L. "Wild Plants of Greater Seattle," 2008. Self-
	published, Seattle, WA.
	(3) Giblin, D., "Ribes Bracteosum." Retrieved 2014-04-15 from
	http://biology.burke.washington.edu/herbarium/
	imagecollection.php?ID=2119
	(4) Pojar, J. and A. MacKinnon, "Plants of the Pacific Northwest
	Coast," 2004 (2 <sup>nd</sup> . Ed). Lone Pine Publishers, Auburn, WA
	(5) Kunze, L.M., "Preliminary Classification of Native, Low
	Elevation, Freshwater, Wetland Vegetation in Western
	Washington," 1994. WA Department of Natural Resources

	<ul> <li>(6) Garry Oak Ecology Recovery Team, "Native Plant Propagation Guidelines: Ribes sanguineum (Red-flowering currant)." Downloaded 2014-04-18 from <a href="http://www.goert.ca/propagation_guidelines/shrubs/ribes_sanguineum">http://www.goert.ca/propagation_guidelines/shrubs/ribes_sanguineumm</a></li> <li>(7) Young, Betty 2001. Propagation protocol for vegetative production of container <i>Ribes sanguineum</i> Pursh <i>glutinosum</i> (Benth.) Loud. plants (Deepot 16); San Francisco, CA. In: Native Plant Network. URL: <a href="http://www.nativeplantnetwork.org">http://www.nativeplantnetwork.org</a> (accessed 23 April 2014). Moscow (ID): University of Idaho, College of Natural Resources, Forest Research Nursery.</li> </ul>
Other Sources Consulted	Darris, D., "Ability of Pacific Northwest Native Shrubs to Root from Hardwood Cuttings (with Summary of Propagation Methods for 22 Species)," 2002. USDA NRCS Portland, OR
	Rose, R., C.E.C. Chachulski, D.L. Haase, "Propagation of Pacific Northwest Native Plants," 1998. Oregon State University Press, Corvallis, OR
	Strik, B.C. and A.D. Bratsch, "Growing Currants and Gooseberries in Your Home Garden," 1993. Oregon State University Extension Bulletin, EC 1361
	UBC eFlora: <a href="http://www.geog.ubc.ca/biodiversity/eflora/">http://www.geog.ubc.ca/biodiversity/eflora/</a>
	USDA FS Agriculture Handbook 727 – The Woody Plant Seed Manual. 2008.
Protocol Author	Luke McGuff
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	http://depts.washington.edu/propplnt/Plants/Ribes%20bracteosum.htm

# **Appendix: Previous Protocol**



## Stinky currant / Ribes bracteosum

## Range

Alaska to California, mostly west Cascades but occasionally in the east Cascades (1)

## Climate, Elevation

Moist to wet locations, low to subalpine elevations (2)

#### Local occurrence

Stream banks, floodplains, shorelines, thickets, avalanche tracks (3)

### **Habitat preferences**

Moist forests (1)

## Plant strategy type/successional stage

Seral stages, dappled shade

## **Associated species**

Rubus spectablis, Rubus parviflorus, Sambucus racemosa, Vaccinium spp., Alnus rubra, Acer macrophyllum, Tsuga heterophylla and Pseudotsuga menziesii

### **Collection restrictions or guidelines**

Flowers in May (4), sown soon as it is ripe in the autumn in a cold frame (4)

### **Seed germination**

3 months cold stratification at  $2-5^{\circ}$  C (4)

## Vegetative regeneration

Cuttings (4)
Seed life
Under "normal" storage conditions, can be viable for 17 years or more (4)
Recommended seed storage conditions
Cold storage
Propagation recommendations
For seedlings, put seedlings into individual pots, grow in a cold frame for first winter, plant out in late spring of following year. For cuttings, 10-15 cm. of mature wood of current year's growth, preferably with a heel of previous year's growth, November to February in a cold frame or sheltered bed outdoors (4)
Soil or medium requirements
Sandy, loamy and clay soils, moist soil; prefers acidic soil (4)
Installation form
Containerized plants from seed or cuttings
Recommended planting density

Care requirements after installed (water weekly, water once etc.)

Should be planted in moist soil

# Normal rate of growth or spread; lifespan

# **Sources cited**

- (1) Tuason, T. 2003. Central Washington Native Plants. *Ribes bracteosum*, Stink Currant. http://www.cwnp.org/photopgs/rdoc/ribracteosum.html
- (2) Turner, S. 2001. Washington State Department of Transportation. Environmental Affairs, *Ribes bracteosum*. http://www.wsdot.wa.gov/eesc/environmental/programs/culres/ethbot/q-s/Ribes.htm
- (3) Pojar, J. and MacKinnon, A. 1994. Plants of the Pacific Northwest Coast. Lone Pine Publishing, Redmond, WA, USA.
- (4) Fern, K. 1999. Plants for a Future. Ribes bracteosum. <a href="http://www.scs.leeds.ac.uk/cgibin/pfaf/arr\_html?Ribes+bracteosum&CAN=LATIND">http://www.scs.leeds.ac.uk/cgibin/pfaf/arr\_html?Ribes+bracteosum&CAN=LATIND</a>

Data compiled by: Lizbeth Seebacher June 5, 2003