


Plant Propagation Protocol for *Rhododendron occidentale*
ESRM 412 – Native Plant Production



Source: USDA PLANTS Database

TAXONOMY	
Plant Family	
Scientific Name	Ericaceae
Common Name	Heath
Species Scientific Name	
Scientific Name	<i>Rhododendron occidentale</i> L.
Varieties	
Sub-species	
Cultivar	
Common Synonym(s)	<i>Rhododendron occidentale</i> (Torr. & A. Gray) A. Gray var. <i>paludosum</i> Jeps. <i>Rhododendron occidentale</i> (Torr. & A. Gray) A. Gray var. <i>sonomense</i> (Greene) Rehder
Common Name(s)	Western azalea, California azalea, Sonoma azalea
Species Code (as per USDA Plants database)	RHOC
GENERAL INFORMATION	
Geographical range	 <p>Found from the southern Oregon Klamath Ranges to the outer North Coast Ranges of California.²</p>
Ecological distribution	Grows in serpentine soils. Found in mountainous soils, stream banks near the coast with abundant soil moisture. ³

Climate and elevation range	0-2700 m. Temperate oceanic climate. ⁶
Local habitat and abundance	Abundant in southern Oregon and Northern California near seepages and streambanks. ⁸
Plant strategy type / successional stage	Can colonize after a fire if the root system is still intact. ⁸
Plant characteristics	Deciduous, perennial shrub, 3-9 cm elliptic leaves, blooms after leaf emergence. Flowers vary from yellow, white, orange, pink, and usually striped flowers. 6-12 flowers per cluster with 5 stamens. Very fragrant flower. ¹ All parts of the plant is poisonous to humans. ⁵
PROPAGATION DETAILS	
Ecotype	
Propagation Goal	Germinants
Propagation Method	Seed
Product Type	Propagules (seeds)
Stock Type	Container
Time to Grow	1 year
Target Specifications	To be outplanted when the first leaves emerge.
Propagule Collection Instructions	Collect capsules as they turn brown to green. Oven dry the capsules 12-24 hours at 35 degrees C. If capsules do not split open, they will require crushing to extract seed. Remove chaff and broken pieces through various sized sieves. ⁴
Propagule Processing/Propagule Characteristics	400 viable seeds per capsule. ⁴ Very small and numerous seeds.
Pre-Planting Propagule Treatments	Store seeds at room temperature with a moisture content of 4-9%. ⁵
Growing Area Preparation / Annual Practices for Perennial Crops	Plant seeds with sphagnum moss and sprinkle 2:1 perlite/peat mixture. ⁵ Use 4 inch pots. ⁷ Soil PH must be acidic, 4-7 PH. ⁹
Establishment Phase	Cover pots with plastic wrap and place 8 inches beneath fluorescent grow lights. Keep temperatures around 70 degrees Fahrenheit. ¹⁰ Seeds must not be buried or covered. They need sunlight to germinate. ⁴
Length of Establishment Phase	1-3 weeks
Active Growth Phase	Transplant to acid soil with high organic matter content. ⁵ Keep plants indoors and away from freezing temperatures until a few months old. ¹¹
Length of Active Growth Phase	3 years
Hardening Phase	Place outside in the autumn and do not encourage growth with fertilizers since new foliage is susceptible

	to frost. Must allow plant to enter dormancy to properly harden the plant. ¹¹
Length of Hardening Phase	From autumn to spring.
Harvesting, Storage and Shipping	Unknown
Length of Storage	Unknown
Guidelines for Outplanting / Performance on Typical Sites	Plant at a site with filtered shade and moist, well drained soil. Do not dig hole deeper than the container. Ensure soil is within desired PH level. Use mulch or a moss to conserve moisture around the roots. ¹² Plants can be sensitive to soils and moisture level making them less successful to grow unless propagated correctly.
Other Comments	The species is crossed with other species very frequently to make fragrant hybrids.
INFORMATION SOURCES	
References	See Below
Other Sources Consulted	
Protocol Author	Jeremy Nygard
Date Protocol Created or Updated	04/30/20

1. Rhododendron occidentale | Landscape Plants | Oregon State (n.d.). Retrieved April 30, 2020, from <https://landscapeplants.oregonstate.edu/plants/rhododendron-occidentale>
2. Hursa, G. F. (n.d.). Morphological and Isoenzyme Variation in Rhododendron ... Retrieved April 30, 2020.
3. Oliver, M. (n.d.). Rhododendron Occidentale and its Habitats. Retrieved April 30, 2020, from <https://scholar.lib.vt.edu/ejournals/JARS/v61n1/v61n1-oliver.htm>
4. A, F., Blazich, & Rowe, B. (n.d.). Rhododendron L. Retrieved April 30, 2020, from <http://www.rhododendron.dk/uk.htm>
5. Plant Database - Lady Bird Johnson Wildflower Center. (n.d.). Retrieved April 30, 2020, from https://www.wildflower.org/plants/result.php?id_plant=RHOC
6. Torrey, & Gray, A. (n.d.). Flora of North America. Retrieved April 30, 2020, from http://www.efloras.org/florataxon.aspx?flora_id=1
7. American Rhododendron Society. (n.d.). Rhododendron & Azalea News - Plant Tips. Retrieved April 30, 2020, from <https://www.rhododendron.org/news/plantstips11n1.htm>
8. Raiche, R. (n.d.). Western Azalea: Beauty and Fragrance (Pacific Horticulture Society, Ed.). Retrieved April 30, 2020, from <https://www.pacifichorticulture.org/articles/western-azalea-beauty-and-fragrance/>
9. Gardenia. (n.d.). Learn How To Plant And Care for Your Azalea or Rhododendron. Retrieved April 30, 2020, from <https://www.gardenia.net/guide/learn-how-to-plant-and-care-for-your-azalea-or-rhododendron>
10. Creel, M. (2005, July 21). Propagating WITH Nature: Simpler Is Better. Retrieved from <https://www.azaleas.org/wp-content/uploads/2016/11/CreelWAY05a.pdf>
11. Man, R. (n.d.). Culture: How To Grow. Retrieved April 30, 2020, from <http://rhodyman.net/rhodyho.html>
12. Starbuck, C. J. (n.d.). Growing Azaleas and Rhododendrons. Retrieved April 30, 2020, from <https://extension2.missouri.edu/g6825>

