

Plant Propagation Protocol for *Menziesia ferruginea* Sm.

ESRM 412 – Native Plant Production

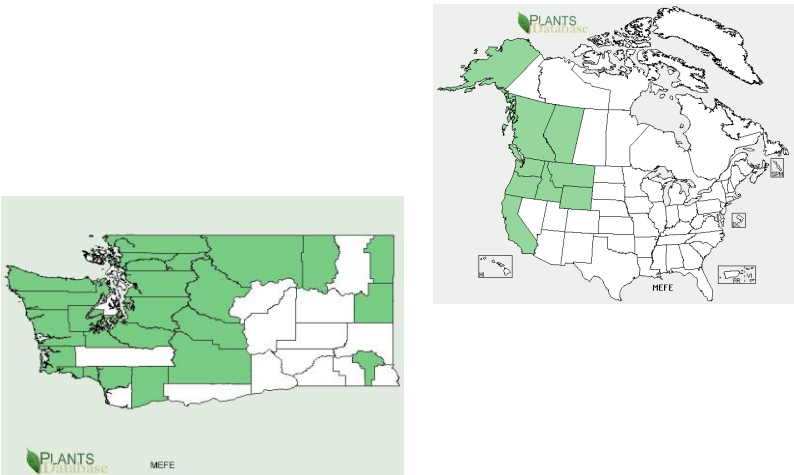
Protocol URL: <https://courses.washington.edu/esrm412/protocols/MEFE.pdf>



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TAXONOMY

TAXONOMY	
Plant Family	
Scientific Name	Ericaceae
Common Name	Heath family
Species Scientific Name	
Scientific	<i>Menziesia ferruginea</i> Sm.
Varieties	<i>Menziesia Ferruginea</i> var <i>glabella</i> M. Peck
Sub-species	

Cultivar	
Common Synonym(s) \	<i>Menziesia ferruginea</i> Sm. Var. <i>glabella</i> (A. Gray) M. Peck <i>Menziesia glabellaa</i> A. gray <i>Menziesia ferruginea</i> Sm. Ssp. <i>Glabella</i> (A. Gray) Calder & Roy
Common Name(s)	Rusty menziesia or Fool's Huckleberry
Species Code (as per USDA Plants database)	MEFE
GENERAL INFORMATION	
Geographical range	<p>The Rusty menziesia lives throughout and is native to western America in the states of AK, CA, ID, MT, OR, WA, and WY. The plant also lives in parts of Canada, specifically AB, and BC. (USDA Database)</p> 
Ecological distribution	Fool's huckleberry lives in dry to wet forests in the lowland, montane and subalpine zones. (Klinkenberg, 2013)
Climate and elevation range	<p>Elevation: 935 average, minimum 0, Maximum 2750. (Klinkenberg, 2013)</p> <p>Climate: Unknown or variable (Meidinger et al. 2008)</p>
Local habitat and abundance	<p>The rusty menziesia is located in almost all of western and western-central Washington. (USDA Database)</p> <p>Could not find what the local abundance is, but the number of field plots species was recorded as 7466. (klinkenberg 2013)</p>
Plant strategy type / successional stage	This shrub is a dominant species in habitat types (Habeck1992)
Plant characteristics	<p>This plant is a shrub. The general characteristics are shrubs that are 3.3 to 6.6 feet tall with leaves that are 1.5 to 2.5 inches long. The leaves should have a skunky odor when crushed. (Green 1984)</p> <p>Naturally numerous small seeds are produced in capsules which dehisce naturally when mature. The wind or gravity then disperses them. Menziesia sprouts from root crowns and adventitious stem buds after destruction of aboveground parts. (Habeck1992)</p>
PROPAGATION DETAILS	

Ecotype	Not specified
Propagation Goal	The only thing I could find of re-growing this species was of clippings. (klinkenberg 2013)
Propagation Method	No information
Product Type	No information
Stock Type	Not specified
Time to Grow	Not specified, but this is a biannual plant.
Target Specifications	
Propagule Collection Instructions	Menziesia flowers from late May through July; capsules mature in July and August, so this would be the time to collect seeds. (Viereck 1972)
Propagule Processing/Propagule Characteristics	Could find no information.
Pre-Planting Propagule Treatments	Rusty Menziesia cannot be used as an ornamental because it requires a special soil fungus to survive that does not thrive when transplanted. (Spear Cooke)
Growing Area Preparation / Annual Practices for Perennial Crops	Should have soil that is moist, humus rich, and well drained. ("Menziesia Ferrunginea") NOTE: This is from private nursery so information may not be 100% accurate.
Establishment Phase Details	No information found
Length of Establishment Phase	No information found
Active Growth Phase	No information found
Length of Active Growth Phase	No information found
Hardening Phase	No information found
Length of Hardening Phase	No information found
Harvesting, Storage and Shipping	No information found
Length of Storage	No information found
Guidelines for Outplanting / Performance on Typical Sites	No information found
Other Comments	No information found
INFORMATION SOURCES	
References	Klinkenberg, Brian. (Editor) 2013. E-Flora BC: Electronic Atlas of the Plants of British Columbia [eflora.bc.ca]. Lab for Advanced Spatial Analysis, Department of Geography, University of British Columbia, Vancouver. [Accessed:4/20/2014 8:38:38 PM] "Global Biodiversity Information Facility." Data Use Agreement - GBIF

	<p>Portal. N.p., n.d. Web. 21 Apr. 2014.</p> <p>Green, R. N.; Courtin, P. J.; Klinka, K.; [and others]. 1984. Site diagnosis, tree species selection, and slashburning guidelines for the Vancouver Forest Region. Land Management Handbook Number 8. Abridged version. Burnaby, BC: Ministry of Forests, Vancouver Forest Region.</p> <p>Habeck, R. J. 1992. <i>Menziesia ferruginea</i>. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available: http://www.fs.fed.us/database/feis/ [2014, April 20].</p> <p>"<i>Menziesia Ferruginea</i> (Rusty <i>Menziesia</i>, False Azalea, Fool's Huckleberry)." <i>Menziesia Ferruginea</i> (Rusty <i>Menziesia</i>, False Azalea, Fool's Huckleberr. N.p., n.d. Web. 21 Apr. 2014.</p> <p>"Plants Profile for <i>Menziesia Ferruginea</i> (Rusty <i>Menziesia</i>)." Plants Profile for <i>Menziesia Ferruginea</i> (Rusty <i>Menziesia</i>). N.p., n.d. Web. 20 Apr. 2014. USDA database.</p> <p>Viereck, Leslie A.; Little, Elbert L., Jr. 1972. Alaska trees and shrubs. Agric. Handb. 410. Washington, DC: U.S. Department of Agriculture, Forest Service. 265 p. [6884]</p> <p>Spear Cooke, S. (1997). A Field Guide to the Common Wetland Plants of Western Washington & Northern Oregon. Seattle Audubon Society. Seattle, WA.</p>
Other Sources Consulted	<p>Toogood, Alan R. Plant Propagation Made Easy. Portland, Or.: Timber, 1994. Print.</p> <p>Toogood, Alan R. Plant Propagation. New York: DK Pub., 1999. Print.</p> <p>Thompson, Peter. The Propagator's Handbook: Fifty Foolproof Recipes, Hundreds of Plants for Your Garden. Newton Abbot, Devon: David & Charles, 1996. Print.</p> <p>"British Columbia plant species codes and selected attributes. Version 6 Database" (Meidinger et al. 2008</p> <p>"Global Biodiversity Information Facility." Data Use Agreement - GBIF Portal. N.p., n.d. Web. 21 Apr. 2014.</p> <p>"<i>Menziesia Ferruginea</i> in Flora of North America @ Efloras.org." <i>Menziesia Ferruginea</i> in Flora of North America @ Efloras.org. N.p., n.d. Web. 21 Apr. 2014.</p> <p>TWC, Staff. "NPIN: Native Plant Database." Lady Bird Johnson Wildflower</p>

	<p>Center. N.p., 24 June 2013. Web. 21 Apr. 2014.</p> <p>Wallace, Garry D. "Jepson Herbarium: Jepson Flora Project: Jepson EFlora: Menziesia Ferruginea." Jepson Herbarium: Jepson Flora Project: Jepson EFlora: Menziesia Ferruginea. N.p., 2013. Web. 21 Apr. 2014.</p> <p>Pojar, J., MacKinnon, A. (1994). <i>Plants of the Pacific Northwest Coast</i>. Lone Pine Publishing Vancouver British Columbia.</p>
Protocol Author	<p>Lauren Kmiechick</p> <p>Original Protocol link:</p> <p>http://depts.washington.edu/propplnt/Plants/Menziesia_ferruginea.htm</p>
Date Protocol Created or Updated	04/20/2014

ORIGINAL PROTOCOL:

Menziesia ferruginea- false azalea, fool's huckleberry

Range: Alaska south along the coast and in the Cascades to Northern California. (Spear Cooke 1997)

Climate, elevation: From sea level to subalpine in the northern half of our region; in montane to subalpine forests from Vancouver Island south. (Pojar 1994)

Local occurrence:

Habitat preferences: Shady to open coniferous woods with acid humus, moist slopes, streambanks. (Pojar 1994) Also found in hummocks in scrub-shrub wetlands. (Spear Cooke 1997)

Plant strategy type/successional stage: Most always associated with cold, wet habitat types, very shade tolerant. (Habeck 1992)

Associated species: Overstory; subalpine fir (*Abies lasiocarpa*), Pacific silver fir (*A. amabilis*), western redcedar (*Thuja plicata*), mountain hemlock (*Tsuga mertensiana*), western hemlock (*T. heterophylla*), and Engelmann spruce (*Picea engelmannii*). Understory; blue huckleberry (*Vaccinium globulare*), smooth woodrush (*Luzula hitchcockii*), and on higher sites, white rhododendron (*Rhododendron albiflorum*). (Habeck 1992)

May be collected as: Not specified.

Collection restrictions or guidelines: Flowers from late May thru early July. (Habeck 1992)

Seed germination: Little information is available on the propagation of this species. It appears to be capable of layering, and the seeds are wind or gravity dispersed. (Habeck 1992)

Seed life: Not specified.

Recommended seed storage conditions: Not specified.

Propagation recommendations: Requires a special soil fungus to survive that does not thrive when transplanted. (Spear Cooke 1997)

Soil or medium requirements: Not specified.

Installation form: Not specified.

Recommended planting density: Not specified.

Care requirements after installed: Not specified.

Normal rate of growth or spread: Not specified.

Sources cited:

Habeck, R. J. 1992. *Menziesia ferruginea*. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available: <http://www.fs.fed.us/database/feis/> [2014, June 92004, May 17].

Pojar, J., MacKinnon, A. (1994). *Plants of the Pacific Northwest Coast*. Lone Pine Publishing Vancouver British Columbia.

Spear Cooke, S. (1997). *A Field Guide to the Common Wetland Plants of Western Washington & Northern Oregon*. Seattle Audubon Society. Seattle, WA.

Data compiled by: Jennifer Boardman, 05/17/2004

My original protocol:

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