

Plant Propagation Protocol for *Arceuthobium abietinum*

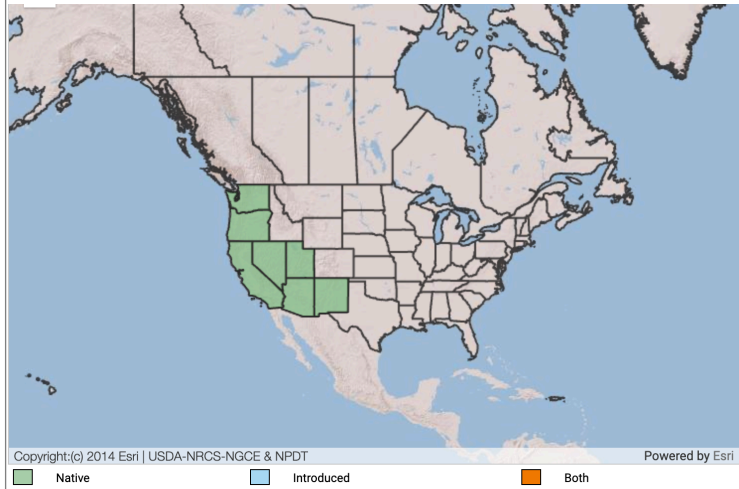
ESRM 412 – Native Plant Production

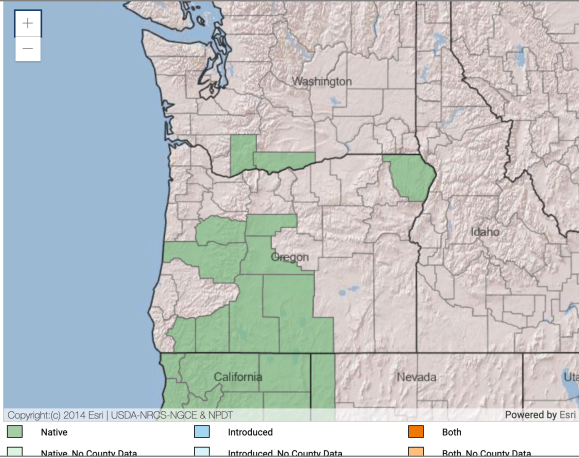
URL: <https://courses.washington.edu/esrm412/protocols/2024/ARAB4>

TAXONOMY	
Plant Family	
Scientific Name	<i>Viscaceae Batsch</i> ¹
Common Name	Christmas Mistletoe family ¹
Species Scientific Name	<i>Arceuthobium abietinum</i> ¹
Scientific Name	<i>Arceuthobium abietinum</i> ¹
Varieties	None ¹
Sub-species	Klamath fir dwarf mistletoe (ARABW) ¹
Common Name(s)	fir dwarf mistletoe ¹
Species Code (as per USDA Plants database)	ARAB4 ¹
GENERAL INFORMATION	

Geographical range

The Western United States including Washington, Oregon, California, Nevada, Utah, Arizona and New Mexico. ¹



Geographical range in the PNW	<div>1</div>  <p>Copyright(c) 2014 Esri USDA-NRCS-NGCE & NPDT Native Introduced Both Native_No County Data Introduced_No County Data Both_No County Data Powered by Esri</p>
Local habitat and abundance	It is a parasitic plant that grows on the limbs of coniferous trees. ⁵
Plant strategy type / successional stage	Perennial ¹

Plant characteristics

Shrub, ¹This plant is a perennial shrub with alternate simple leaves and berry fruits. The branches grow to around three inches in length. The leaves are a green that is tinged brownish and the fruit is olive green. The blooms are red or purple and happen march through may. ⁵



Image ⁴

PROPAGATION DETAILS:SEED	
Ecotype	Found in Conifers, specifically fir trees. ²
Propagation Goal	Plant ³
Propagation Method	Seed ³
Product Type	Plant grown on a host. ³
Time to Grow	Fruting can take up to 6 years. ³
Target Specifications	Several true leaves ³
Propagule Collection Instructions	Collect seeds from only fresh berries then wash. ³
Pre-Planting Propagule Treatments	After seeds are rinsed put them into the bark of the host plant for germination and mist daily. ³
Growing Area Preparation / Annual Practices for Perennial Crops	Host coniferous tree, fir. ³
Guidelines for Outplanting / Performance on Typical Sites	In oder to make a transplant make a cut in the host trees bark and put the moss in this cut so that it can reach underneath the bark. Do this when the mistletoe has several true leaves. ³
INFORMATION SOURCES	

References	<p>USDA plants database. (n.d.). https://plants.usda.gov/home/plantProfile?symbol=ARAB4</p> <p>Dwarf mistletoes. (n.d.-b). https://apps.fs.usda.gov/r6_decaid/views/dwarf_mistletoe.html#:~:text=The%20aerial%20shoots%20of%20the,living%20tree%20branches%20or%20boles.&text=These%20shoots%20vary%20in%20length,%20F4%20to%206%20in</p> <p>Grant, B. L. (2013a, November 25). <i>Care of mistletoe: How to grow mistletoe plants</i>. gardeningknowhow. https://www.gardeningknowhow.com/ornamental/flowers/mistletoe/how-to-grow-mistletoe-plants.htm#:~:text=The%20mistletoe%20will%20need%20to,light%2C%20moisture%20and%20temperature%20conditions.</p> <p><i>Dwarf mistletoe basics</i>. Forest Pathology. (n.d.-b). https://forestpathology.org/parasitic-plants/dwarf-mistletoe/</p> <p><i>Plant database</i>. Lady Bird Johnson Wildflower Center - The University of Texas at Austin. (n.d.). https://www.wildflower.org/plants/result.php?id_plant=ARDO#:~:text=Distribution&text=Native%20Distribution%3A%20British%20Columbia%20and,Native%20Habitat%3A%20Conifer%20limbs.</p>
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Other Sources Consulted	<p><i>Mistletoe - Hardy Plant Society</i>. The Hardy Plant Society. (2023, May 26). https://hardy-plant.org.uk/publication/mistletoe/</p> <p><i>Grow your own mistletoe</i>. How to grow your own mistletoe – RHS Gardening / RHS Gardening. (n.d.-a). https://www.rhs.org.uk/plants/articles/graham-rice/mistletoe</p> <p><i>New method for propagation of mistletoes enables production as potted plants</i>. NEW METHOD FOR PROPAGATION OF MISTLETOES ENABLES PRODUCTION AS POTTED PLANTS International Society for Horticultural Science. (n.d.). https://www.ishs.org/ishs-article/813_24</p> <p>Hadfield, J., Mathiasen, L., & Hawksworth, F. G. (2000, February). Douglas-Fir Dwarf Mistletoe. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsbdev2_043663.pdf</p> <p><i>Arceuthobium abietinum (engelm.) munz: Plants of the World Online: Kew Science</i>. Plants of the World Online. (n.d.). https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:60452877-2</p>
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Date Protocol Created or Updated	05/22/2024