
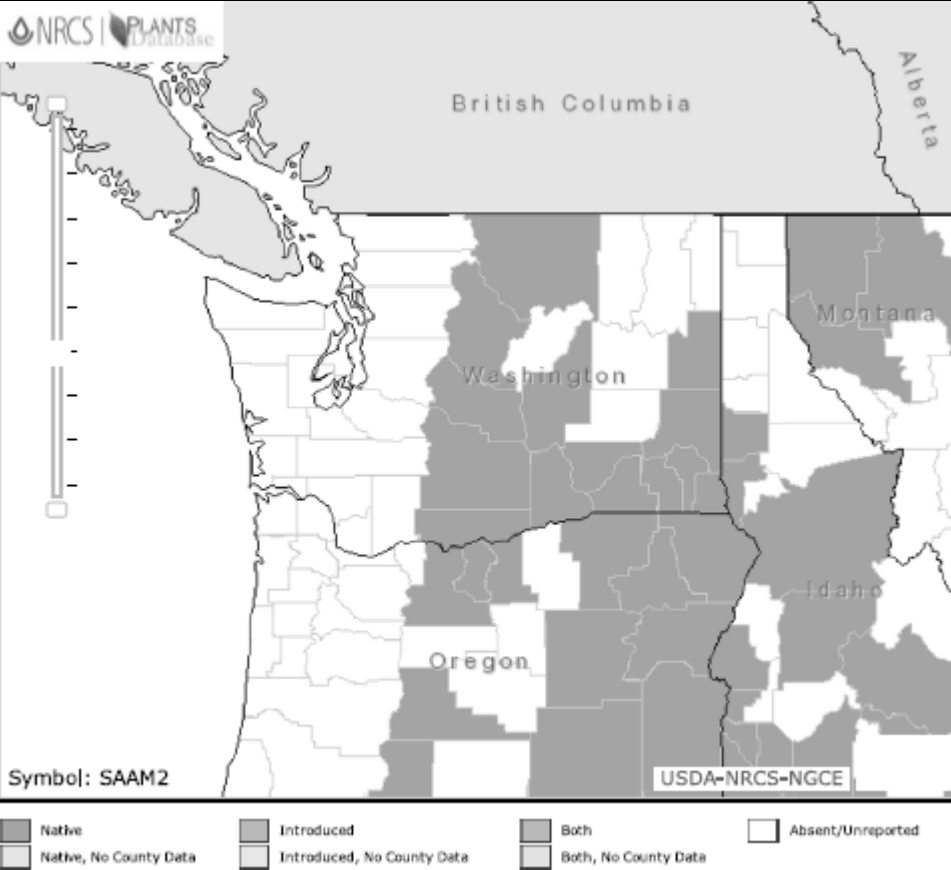


## Plant Propagation Protocol for *Salix amygdaloides*

ESRM 412 – Native Plant Production

Protocol URL: <https://courses.washington.edu/esrm412/protocols/SAAM2.pdf>

TAXONOMY	
Plant Family	
Scientific Name	Salicaceae
Common Name	Willow
Species Scientific Name	
Scientific Name	<i>Salix amygdaloides</i> Andersson
Varieties	None found
Sub-species	None found
Cultivar	None found
Common Synonym(s)	<i>-Salix amygdaloides</i> Andersson var. <i>wrightii</i> (Andersson) C.K. Schneid. <i>-Salix nigra</i> Marshall var. <i>amygdaloides</i> (Andersson) Andersson <i>-Salix nigra</i> Marshall var. <i>wrightii</i> (Andersson) Andersson <i>-Salix wrightii</i> Andersson
Common Name(s)	Peachleaf willow
Species Code (as per USDA Plants database)	SAAM2
GENERAL INFORMATION	
Geographical range	 <p>Symbol: SAAM2</p> <p>USDA-NRCS-NGCE</p> <p> <input checked="" type="checkbox"/> Native                <input checked="" type="checkbox"/> Introduced                <input checked="" type="checkbox"/> Both                <input type="checkbox"/> Absent/Unreported  <input type="checkbox"/> Native, No County Data                <input type="checkbox"/> Introduced, No County Data                <input type="checkbox"/> Both, No County Data         </p>

	 <p>Symbol: SAAM2</p> <p>USDA-NRCS-NGCE</p> <p>Legend:</p> <ul style="list-style-type: none"> <li>Native</li> <li>Introduced</li> <li>Both</li> <li>Native, No County Data</li> <li>Introduced, No County Data</li> <li>Both, No County Data</li> <li>Absent/Unreported</li> </ul>
Ecological distribution	Northern prairies. It ranges from Quebec, west across southern Canada to British Columbia, south to Oregon, Utah, and Arizona, east to Texas, and northeast to Kentucky and Vermont <sup>4</sup>
Climate and elevation range	Low to mid elevations <sup>5</sup>
Local habitat and abundance	Near streams, often near cottonwoods, riparian areas such as the banks of streams and ponds, low woods, roadside gullies, and prairie sloughs. <sup>1</sup>
Plant strategy type / successional stage	
Plant characteristics	Small to medium sized deciduous tree. Single trunk up to 4 trunks with lanceolate leaves, yellowish green in color with a white underside. Flowers are yellow catkins in early spring, with a reddish yellow fruit in late spring. <sup>1</sup>
<b>PROPAGATION DETAILS</b>	
Ecotype	New Mexico
Propagation Goal	Cuttings
Propagation Method	Seed
Product Type	Container, (also Bare Root, Cuttings)
Stock Type	
Time to Grow	About 1 year
Target	30-45 cm Caliper: 3-5 mm Root system: Firm root plug

Specifications	
Propagule Collection Instructions	Stem cuttings taken from dormant plants, during dormant season from January to February.
Propagule Processing/Propagule Characteristics	Cuttings are trimmed to 15 cm in length with a diagonal cut at the basal end, and terminal buds are removed.
Pre-Planting Propagule Treatments	Stick cuttings in container to a depth of 10 cm. Cuttings should be kept moist through the rooting period. Keep on standard greenhouse benches.
Growing Area Preparation / Annual Practices for Perennial Crops	Establishment happens in greenhouse, and active growth phase will occur in greenhouse and shade-house. Hardening phase will occur in shade-house. Cuttings are stuck in in early May, and when reaching 25-30 cm in height (after about 8-10 weeks) then they can be moved into shade-house facility. Seedlings are kept in greenhouse until dormant and leaves are spread, at which point they are move into a cold-frame for wintering. Irrigation is provided through a sub-irrigation system, and seedlings are fertilized through irrigation system. Seedlings are not fertilized in shade house or cold frame.
Establishment Phase Details	During establishment phase, until shoot and root growth is apparent, intermittent mist is maintained. Media in containers should be kept moist. No additional light should be provided.
Length of Establishment Phase	2-4 weeks
Active Growth Phase	During weeks 4-10 of active growth phase in greenhouse, containers are kept irrigated as needed which becomes more frequent as seedlings grow. Intervals of irrigation are 3-4 days for first two weeks after rooting, and 2-3 days for the next few weeks, then every 1-2 days for remainder of active growth period. Perform irrigation in early morning to allow drying before nightfall.
Length of Active Growth Phase	8-10 weeks
Hardening Phase	During hardening phase, seedlings are kept in shade house once reaching target shoot height. Intervals of irrigation are increased because seedlings become more acclimated to water deficits. Seedlings are considered hardened with buds have been formed and leaves are shed.
Length of Hardening Phase	8-10 weeks
Harvesting, Storage and Shipping	Seedlings are moved to cold frame in late October to early November. This prevents continuous thawing and freezing which can damage the seedlings. Seedlings are irrigated as needed. No supplemental light is provided. Seedlings kept here until shipped in later February-early March.
Length of Storage	5 months
Guidelines for Outplanting /	

Performance on Typical Sites	
Other Comments	
<b>INFORMATION SOURCES</b>	
References	<p>1 Arno, Stephen F., and Ramona P. Hammerly. <i>Northwest Trees: Identifying and Understanding the Region's Native Trees</i>. Seattle, WA: Mountaineers, 2007. Print</p> <p>2 Dirr, Michael, and Charles W. Heuser. <i>The Reference Manual of Woody Plant Propagation: From Seed to Tissue Culture: A Practical Working Guide to the Propagation of over 1100 Species, Varieties, and Cultivars</i>. Athens, GA: Varsity, 1987. Print.</p> <p>3 Harrington, John T. "Native Plant Network — Reforestation, Nurseries and Genetics Resources." <i>Reforestation, Nurseries and Genetics Resources</i>. N.p., n.d. Web. 24 May 2017</p> <p>4 Jacobson, Arthur Lee. <i>North American Landscape Trees</i>. Berkeley, Calif: Ten Speed Pr., 1996. Print.</p> <p>5 Lyons, C. P. <i>Trees, Shrubs and Flowers to Know in British Columbia and Washington</i>. Edmonton: Lone Pine Pub., 1995. Print.</p> <p>6 Peterson, J. Scott. <i>PEACHLEAF WILLOW</i> (n.d.): n. pag. Web. 20 May 2017.</p> <p>7 Robson, Kathleen A., Alice Richter, and Marianne Filbert. <i>Encyclopedia of Northwest Native Plants for Gardens and Landscapes</i>. Portland, Or.: Timber, 2008. Print.</p> <p>8 Rose, Robin, Caryn E. C. Chachulski, and Diane L. Haase. <i>Propagation of Pacific Northwest Native Plants</i>. Corvallis: Oregon State UP, 1998. Print.</p> <p>9 Young, James Albert, and Cheryl G. Young. <i>Collecting, Processing and Germinating Seeds of Wildland Plants</i>. Portland, OR: Timber, 1995. Print.</p> <p>10 Young, J. A., and C. G. Young. <i>Seeds of Woody Plants in North America. - Revised and Enlarged Edition</i>. Portland, Or.: Dioscorides, 1992. Prin</p>
Other Sources Consulted	Lyons, C. P. <i>Trees, Shrubs and Flowers to Know in Washington</i> . Toronto: J.M. Dent, 1977. Print.
Protocol Author	Tara Van Corbach
Date Protocol	June 3 <sup>rd</sup> 2017

Created or Updated	
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