

Plant Propagation Protocol for *Clematis ligusticifolia*

ESRM 412 – Native Plant Production

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



TAXONOMY	
Plant Family	
Scientific Name	Ranunculaceae
Common Name	Buttercup
Species Scientific Name	
Scientific Name	<i>Clematis ligusticifolia</i> Nutt.
Varieties	<i>Clematis ligusticifolia</i> var. <i>california</i> S. Watson, <i>Clematis ligusticifolia</i> var. <i>ligusticifolia</i>
Sub-species	<i>Clematis ligusticifolia</i> var. <i>brevifolia</i> Nutt
Cultivar	
Common Synonym(s)	
Common Name(s)	Western white clematis, hierba de chivo, old-man's-beard, virgin's-bower, leatherflower
Species Code (as per USDA Plants database)	CLLI
GENERAL INFORMATION	

Geographical range	 <p>http://plants.usda.gov/core/profile?symbol=CLLI2</p>
Ecological distribution	Western white clematis is often found in riparian environments.
Climate and elevation range	Grows in the elevation 150-1375 meters, prefers precipitation levels between 230-530 mm (9-21 inches).
Local habitat and abundance	Commonly found in open Ponderose pine and big sage riparian areas. Likes wet places such as stream environments (Turner, 118).
Plant strategy type / successional stage	Western white clematis is partially shade tolerant and can be found in the stands of alder. Although it grows well in full sun. Soils must be relatively deep with good water holding capacity.
Plant characteristics	A strong, woody or semi-woody climber. A perennial dioecious plant with opposite leaves and clusters of white flowers. Found tangling through treetops or growing along the ground through bushes and fences (Turner, 118).
PROPAGATION DETAILS	
Ecotype	Marin County, California (NPN).
Propagation Goal	Plants
Propagation Method	Seed
Product Type	Container (plug)
Stock Type	1 gallon containers
Time to Grow	
Target Specifications	Root system having a firm plug in container.
Propagule Collection Instructions	Seeds are collected in February when the seed is dark brown with a long plumose tail (NPN).
Propagule Processing/Propagule Characteristics	High germination levels can be achieved by soaking the seeds for 48-hours in a 0.001 M solution of gibberellic acid or de-ionized water (Pullman).
Pre-Planting Propagule Treatments	None required (NPN).
Growing Area Preparation / Annual Practices for Perennial Crops	Western white clematis is best grown in a fully controlled greenhouse environment. Sowing method is transplanting germinants. Seeds should be sown in early spring, in flats containing sunshine mix #4 (NPN).

Establishment Phase Details	Seeds germinate 14 days after sowing. The seedlings should be transplanted 14 days after germination to 1 gallon containers with standard potting mix (NPN).
Length of Establishment Phase	1 month
Active Growth Phase	The seedlings should be placed in the shadehouse after establishment. Plants require pruning prior to outplanting.
Length of Active Growth Phase	10 weeks
Hardening Phase	
Length of Hardening Phase	
Harvesting, Storage and Shipping	Seeds should be stored in containers that allow for dense roots
Length of Storage	
Guidelines for Outplanting / Performance on Typical Sites	
Other Comments	

INFORMATION SOURCES

References	<p>A California Flora and Supplement, Munz, P., University of California Press, Berkeley and London, 1973.</p> <p>Forey, Pamela. Wild Flower Guide. Gallery Books, 1991. Print.</p> <p>[USDA] "Plants Profile for Clematis Ligusticifolia (western White Clematis)." United States Department of Agriculture. Web.</p> <p>Tuner, Mark, and Phyllis Gustafon. Wildflowers of the Pacific Northwest. Timber, 2006. Print.</p> <p>[PULLMAN] USDA, NRCS. 1982. Pullman Plant Materials Center Annual Technical Report, Pullman, Washington.</p> <p>Western Clematis." Flora of North America. Web.</p> <p>[NPN] Young, Betty 2001. Propagation protocol for production of container <i>Clematis ligusticifolia</i> Nutt. plants (1 gallon containers); , San Francisco, California. In: Native Plant Network. URL: http://www.nativeplantnetwork.org (accessed 8 June 2015). Moscow (ID): University of Idaho, College of Natural Resources, Forest Research Nursery.</p>
Other Sources Consulted	
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