

Plant Propagation Protocol for *Calycanthus occidentalis*

ESRM 412 – Native Plant Production



Protocol URL: <https://courses.washington.edu/esrm412/protocols/CAOC5.pdf>



(4)

TAXONOMY

TAXONOMY	
Plant Family	
Scientific Name	Calycanthaceae (1)
Common Name	Strawberry-shrub Family
Species Scientific Name	
Scientific Name	<i>Calycanthus occidentalis</i> Hook. & Arn.
Varieties	No Varieties recognized by USDA Plants Database
Sub-Species	No Sub-Species recognized by USDA Plants Database
Cultivar	Hook. & Arn
Common Synonym(s)	<i>Calycanthus macrophyllus</i> K.Koch <i>Butneria occidentalis</i> (Hook. & Arn.)
Common Name(s)	California Allspice, Spicebush, Sweet-shrub, Western Sweetshrub (4)(5)
Species Code (as per USDA Plants database)	CAOC5
GENERAL INFORMATION	
Geographical range	South-western N. America - California.

	 
Ecological	Stream banks canyons valley's coast ranges (4),(5)
Climate and elevation range	Does best in wet climates, Below 1200 meters (5)
Local habitat and abundance	Grows in groups, usually found near river banks and in valley's(10). The specific epithet for this plant stands for western to denote its abundance in the western United States (11)
Plant strategy type / successional stage	Stress-tolerant (4)(5)
Plant characteristics	Shrub, when mature will be 4' to 15' in height and width forming a dome bush shape (3)
PROPAGATION DETAILS	
Propagation Goal	Plants, seeds (5)

Propagation Method	Seed
Product Type	Container (5)
Stock Type	
Time to Grow	6-12 months (4)
Target Specifications	Allow them to grow inside a greenhouse for the first winter. (7)
Propagule Collection	Can collect seeds in fall or early winter(8)
Pre-Planting Propagule Treatments	3 month cold stratification (8)
Growing Area Preparation / Annual Practices for Perennial Crops	Loamy soil that retains water, has good drainage and is rich in nutrients. (6)
Active Growth Phase	Transferring from seed flat to growing cups and working up to gallon size containers until lastly distributed in five gallon buckets. (8)
Length of Active Growth Phase	6 months (8)
Length of Storage	6-months (one winter) (3)
PROPAGATION DETAILS	
Propagation Goal	Seeds, cuttings and plants (8)
Propagation Method	Vegetative
Product Type	Bareroot (8)
Stock Type	
Time to Grow	6-12 months(8)
Target Specifications	Before flowering and able to be in at least a one gallon pot(8)
Growing Area Preparation / Annual Practices for Perennial Crops	Loamy soil that retains water, has good drainage and is rich in nutrients. (2)
Hardening Phase	6-12 months in greenhouse for preparation of following years winter (7)
Harvesting, Storage and Shipping	Harvest new cuttings when they are around 3 inches long for second crop. (8)
Guidelines for Outplanting / Performance on Typical Sites	Outplant when plant can sustain in a gallon sized pot (8)

Other Comments	Vegetative propagation is not advised as seeds seem to be more viable. If a strong aromatic plant is desired, clone from a plant that is known to be aromatic. Propagating from seeds doesn't always yield an aromatic plant. Otherwise propagate from seeds (5). If propagating for the use of harvesting seeds, <i>Calycanthus occidentalis</i> , is fertilized by beetle.(8)
INFORMATION SOURCES	
References	<ol style="list-style-type: none"> 1. "United States Department of Agriculture." <i>Plants Profile for Calycanthus Occidentalis (Western Sweetshrub)</i>, (Accessed April 26th 2020) plants.usda.gov/core/profile?symbol=CAOC5 2. "Plant Database." <i>Lady Bird Johnson Wildflower Center - The University of Texas at Austin</i>, 8 Jan. 2011, (Accessed April 29th 2020) www.wildflower.org/plants/result.php?id_plant=caoc5. 3. "Spice Bush, Calycanthus Occidentalis." <i>California Native Plant Society</i>, calscape.org/Calycanthus-occidentalis-(Spice-Bush). (Accessed on April 26th 2020) 4. Mostly Natives Nursery (personal communication) May 4th 2020 5. "Book 13." <i>Britannica 2007</i>, Britannica, 2007, pp. 643–644. (accessed on April 12th 2020) 6. "Calycanthus Occidentalis - Hook.&Arn." <i>Calycanthus Occidentalis Californian Allspice, Western Sweetshrub PFAF Plant Database</i>, (Accessed on April 20th 2020) pfaf.org/user/Plant.aspx?LatinName=Calycanthus+occidentalis. 7. CornFlower Farms (Personal communications with Megan Hall) May 5th 2020 8. "July 2019 Plant Profile: Calycanthus Occidentalis." <i>University of Washington Botanic Gardens</i>, 26 June 2019, botanicgardens.uw.edu/about/blog/2019/07/05/july-2019-plant-profile-calycanthus-occidentalis/. (Accessed on May 5th 2020) 9. George P. Johnson & Fosiée Tahbaz 2012, <i>Calycanthus occidentalis</i>, in Jepson Flora Project (eds.) https://ucjeps.berkeley.edu/eflora/eflora_display.php?tid=16812, accessed on May 05, 2020. 11. <i>Calycanthus Occidentalis - Plant Finder</i>, (Accessed on April 30th 2020) www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?taxonid=278792.
Other Sources Consulted	<ol style="list-style-type: none"> 1. Caines, Kimberly. "Planting Information on Calycanthus Floridus." <i>Home Guides / SF Gate</i>, 7 Oct. 2016, homeguides.sfgate.com/planting-information-calycanthus-floridus-23780.html. (Accessed April 23rd 2020) 2. Myers, Vanessa Richins. "Learn How to Grow and Care for the California Sweetshrub." <i>The Spruce</i>, The Spruce, 27 June 2019, www.thespruce.com/growing-the-california-sweetshrub-3269166. (Accessed April 23rd 2020) 3. "July 2019 Plant Profile: Calycanthus Occidentalis." <i>University of Washington Botanic Gardens</i>, 26 June 2019, botanicgardens.uw.edu/about/blog/2019/07/05/july-2019-plant-profile-calycanthus-occidentalis/.

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