


Plant Propagation Protocol for [*Sidalcea oregana*]

ESRM 412 – Native Plant Production

Protocol URL: [https://courses.washington.edu/esrm412/protocols/\[SIOR.pdf\]](https://courses.washington.edu/esrm412/protocols/[SIOR.pdf])

***Sidalcea oregano* (Malvaceae)**

TAXONOMY	
Plant Family	
Scientific Name	Malvaceae
Common Name	Mallow Family
Species Scientific Name	
Scientific Name	<i>Sidalcea oregana</i>
Varieties	<i>Sidalcea oregana</i> (Nutt. Ex Torr. & A. Gray) A. Gray var. <i>calva</i> C.L Hitchc.
Sub-species	<i>Sidalcea oregana</i> subsp. <i>oregana</i> <i>Sidalcea oregana</i> subsp. <i>oregano</i> var. <i>calva</i> <i>Sidalcea oregano</i> subsp. <i>spicata</i> <i>Sidalcea oregano</i> subsp. <i>valida</i>
Cultivar	
Common Synonym(s)	
Common Name(s)	Oregon checkerbloom Oregon checker mallow Checker mallow
Species Code (as per USDA Plants database)	SIOR
GENERAL INFORMATION	
Geographical range	Found East of the Cascades

	
Ecological distribution	Found east of the Cascades in moist meadows. It can also be found in dry forest areas as well as around them (Portland nursery).
Climate and elevation range	Found in both high and low elevations (Turner). 1,970 to 3,300 ft (Center for Plant Conservation)
Local habitat and abundance	Meadow, East-Side Forest, Meadows, stream margins and wet places. It is considered Endangered. It may also be commonly associated with ponderosa pine forests and sagebrush (Turner).
Plant strategy type / successional stage	Checker mallow can reliably grow in drier conditions but also reliably in moist meadow environments. They prefer silty loam to clay-loam soils. Does not handle fluctuating water tables and changes in hydrology can be detrimental.
Plant characteristics	Perennial sub-shrub with flowering time in late spring to early summer. Grows up to 2-4 feet in height with dark pink flowers (Portland Nursery). The stem is coarse and consists of star-shaped hairs on the lower portion while the upper section of the stem remains smooth. The branches are leafy with deeply lobed leaves. The flowers have 1/2-3/4 inch petals in a loose "spike-like raceme" (Turner).
PROPAGATION DETAILS	
Ecotype	
Propagation Goal	The current propagation goal is to collect and store seeds. Due to its endangered status and lack of propagation methods, it is currently undergoing experimentation and going through the recovery steps.

	There are a number of conditions that must be met in order for it to be considered for down listing. In summary, those conditions include ensuring self-sustaining populations on protected sites secure from threats as well as storing the genetic material in a facility. Those materials must be monitored with provisions for research and habitat maintenance and restoration (Fish and Wildlife).
Propagation Method	Seed propagation is the only method for <i>Sidalcea oregana</i> . Sow seeds approximately 3mm deep in a well drained soil mix at a temperature of 10 degrees Celsius. The seed will typically germinate in 14-42 days (B&T World Seeds).
Product Type	Sold as seeds to be sown directly into a garden or in flats left outside to chill for several weeks (Portland Nursery).
Stock Type	
Time to Grow	Can be planted in late summer or early fall and will see germination in the following spring.
Target Specifications	
Propagule Collection Instructions	Allow pods to dry on plant; break open pod to collect seeds (Davesgarden). Summer time is when the seeds period begins and ends.
Propagule Processing/Propagule Characteristics	158,325 seeds per pound.
Pre-Planting Propagule Treatments	
Growing Area Preparation / Annual Practices for Perennial Crops	
Establishment Phase Details	
Length of Establishment Phase	
Active Growth Phase	
Length of Active Growth Phase	Spring and Summer
Hardening Phase	
Length of Hardening Phase	
Harvesting, Storage and Shipping	
Length of Storage	

Guidelines for Outplanting / Performance on Typical Sites	According to USDA NRCS Plants Database, the growth rate is considered 'Moderate,' and the After Harvest Growth Rate considered "Slow." Seedling survival is listed as 'Medium' (Encyclopedia of Life)
Other Comments	
INFORMATION SOURCES	
References	<p>"CNPLX: Sidalcea+oregana." CNPLX: Sidalcea+oregana. Calflora, n.d. Web. 18 May 2015.</p> <p>"Measurements and Facts about Oregon Checkerbloom (Sidalcea Oregana) - Encyclopedia of Life." Encyclopedia of Life. EOL, n.d. Web. 18 May 2015.</p> <p>"National Collection of Imperiled Plants - Plant Profiles." National Collection of Imperiled Plants - Plant Profiles. Center for Plant Conservation, 28 Sept. 2010. Web. 18 May 2015.</p> <p>"Natives." Sidalcea. Fiddleface Web Design, n.d. Web. 18 May 2015.</p> <p>"Oregon Checker Mallow, Oregon Checkerbloom." Taxon Report. Calflora, n.d. Web. 18 May 2015.</p> <p>"PlantFiles: Oregon Checkerbloom." Dave's Garden. Internet Brands, n.d. Web. 18 May 2015.</p> <p>"Plants Profile for Sidalcea Oregana (Oregon Checkerbloom)." Plants Profile for Sidalcea Oregana (Oregon Checkerbloom). USDA, n.d. Web. 18 May 2015.</p> <p>"Sidalcea Oregana at B & T World Seeds." Sidalcea Oregana at B & T World Seeds. B&T World Seeds, n.d. Web. 18 May 2015.</p> <p>"Sidalcea Oregana Information from NPGS/GRIN." Sidalcea Oregana Information from NPGS/GRIN. USDA, n.d. Web. 18 May 2015.</p> <p>"Threatened, Endangered, and Proposed (TEP) Plant Profile." Sidalcea Oregana Var. Calva, Wenatchee Mountains Checker-mallow. USDA, n.d. Web. 18 May 2015.</p> <p>Turner, Mark. "Sidalcea Oregana Oregon Checker Mallow Wildflowers of the Pacific Northwest." Sidalcea Oregana Oregon Checker Mallow Wildflowers of the Pacific Northwest. Mark Turner, n.d. Web. 18 May 2015.</p> <p>Zwartjes. Recovery Plan for Sidalcea Oregana (2004): n. pag. U.S Fish and Wildlife Service, 22 July 2004. Web. 18 May 2015.</p>

Other Sources Consulted	
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