

**Plant Propagation Protocol for *Claytonia exigua***

ESRM 412 – Native Plant Production

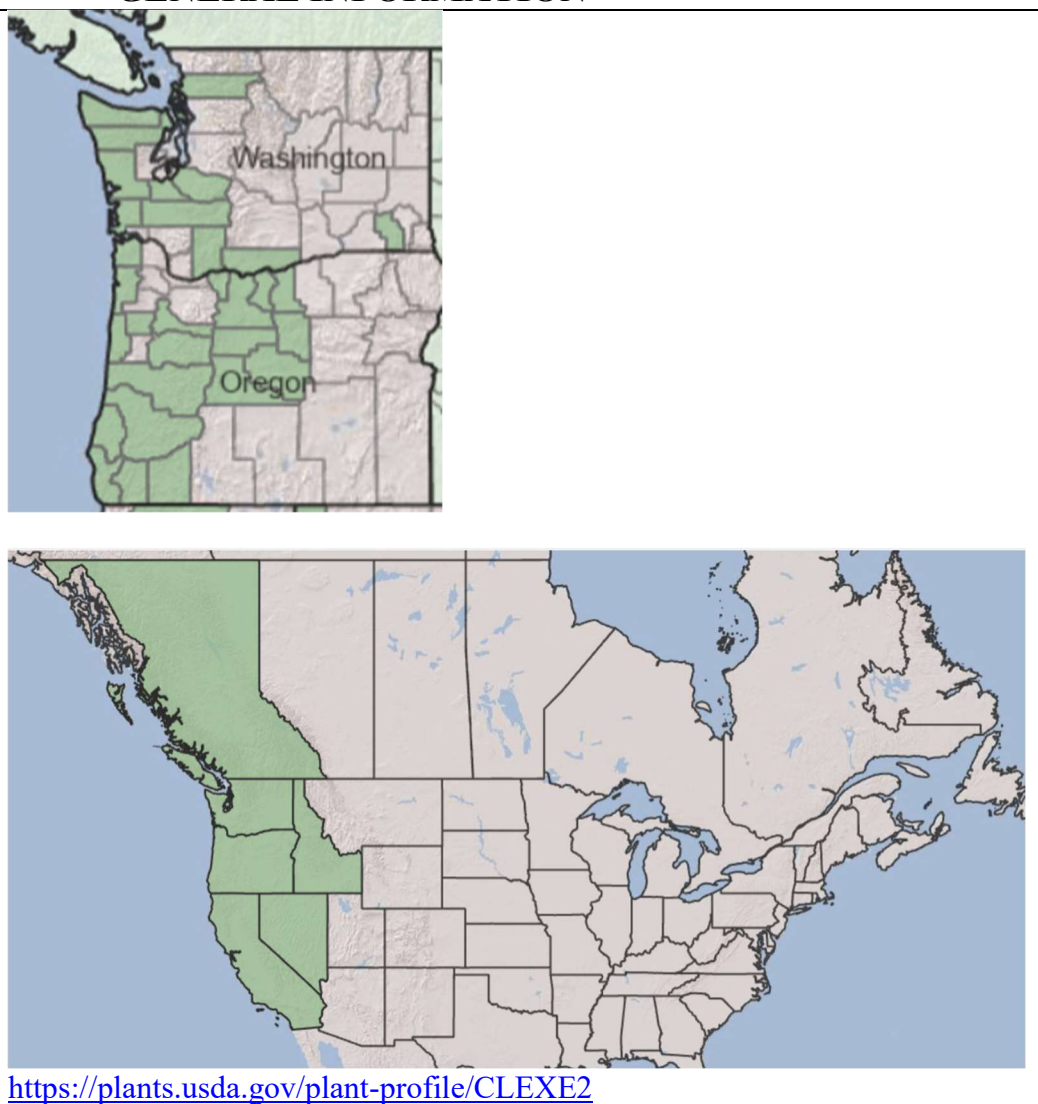
URL: <https://courses.washington.edu/esrm412/protocols/2025/CLEX2.pdf>



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<b>TAXONOMY</b>	
<b>Plant Family</b>	
Scientific Name	<i>Montiaceae (Portulacaceae)</i>
Common Name	Montia <sup>1</sup> (Purslane)
<b>Species Scientific Name</b>	
Scientific Name	<i>Claytonia exigua</i> Torr. & A. Gray
Varieties	
Sub-species	<i>Claytonia exigua</i> Torr. & A. Gray ssp. <i>exigua</i>
Cultivar	
Common Synonym(s)	<i>Claytonia spathulate</i> Douglas <i>Montia spathulate</i> (Douglas) Howell <i>Claytonia spathulate</i> var. <i>spathulate</i> Douglas <i>Claytonia spathulate</i> var. <i>exigua</i> (Torr. & A. Gray) Hook. & Arn. <i>Claytonia spathulata</i> var. <i>rosulata</i> (Eastw.) McNeill <i>Claytonia spathulata</i> var. <i>tenuifolia</i> Torr. & A. Gray <i>Montia spathulata</i> var. <i>exigua</i> (Torr. & A. Gray) B.L. Rob. <i>Montia spathulata</i> var. <i>rosulata</i> (Eastw.) J.T. Howell <i>Montia spathulata</i> var. <i>tenuifolia</i> (Torr. & A. Gray) Munz <i>Montia spathulata</i> var. <i>spathulata</i> (Douglas) Howell <sup>2</sup>
Common Name(s)	Serpentine springbeauty, pale claytonia
Species Code (as per USDA Plants database)	CLEX2

## GENERAL INFORMATION

<p>Geographical range</p>	 <p><a href="https://plants.usda.gov/plant-profile/CLEXE2">https://plants.usda.gov/plant-profile/CLEXE2</a></p>
<p>Ecological distribution</p>	<p>Found in dry or moist conditions, with it sometimes being in bare clay to sandy soils, often on serpentine.<sup>4</sup></p>
<p>Climate and elevation range</p>	<p>In California, this herb is found in &lt; 2000 m.<sup>4</sup></p>
<p>Local habitat and abundance</p>	<p>Found in various systems but mostly in well-drained soils and seen in various types of soil conditions. Occurs on the west of the Cascades crest and in the Columbia River Gorge in Washington.<sup>8</sup></p>
<p>Plant strategy type / successional stage</p>	<p>Data not available.</p>
<p>Plant characteristics</p>	<p>Annual dicot, somewhat succulent forb/herb.<sup>3</sup> <i>Claytonia exigua</i>'s flowers, Flowers in February to April<sup>6</sup>, have 5 petals that are either pink or white, with 5 stamens. The leaves are basal, &lt; 12 cm, and grow on the entire stem. Patterns of the leaves are that they can be fully free or fused to the stem, occurring in an opposite leaf pattern. There are 3-6 seeds from a singular plant, they are black</p>

	and are 1 – 1.5mm in size. <sup>4</sup> <i>Claytonia exigua</i> is self-pollinated. <sup>5</sup> Relatively adapted to well-drained and nutritionally poor soil. <sup>6</sup>
<b>PROPAGATION DETAILS</b>	
Note: Due to limited data on <i>Claytonia exigua</i> , I used <i>Claytonia virginica</i> to gather more information on a similar species to develop parts of this protocol (indicated with a*). Additionally, <i>Claytonia perfoliata</i> was used to help develop this protocol (indicated with a <sup>1</sup> ). For items marked ‘Data not available,’ it is due to no literature on <i>Claytonia exigua</i> , and there was too much variability within the <i>Claytonia</i> genus to give a somewhat accurate prediction for this protocol.	
Ecotype	n/a
Propagation Goal	Plants
Propagation Method	Seed
Product Type	Container (plug).
Stock Type	Container seedling.
Time to Grow	>1 year. There is not enough data to comprehensively review the length of the growing season for <i>Claytonia exigua</i> or its similar species
Target Specifications	Data not available.
Propagule Collection Instructions	Seeds are ready to harvest when the flowers have dried brown and the seeds are black. <sup>7*</sup> Additionally, when they are ready, the capsules will split open on their own. <sup>10*</sup>
Propagule Processing/Propagule Characteristics	Fresh seeds should be used each season as they cannot be stored for extended periods. <sup>7*</sup> Data is not available for seed density and its # per pound.
Pre-Planting Propagule Treatments	Seeds need to go through two dormancies, while being exposed to warm, moist conditions that replicate summer, followed by a cold, moist period to mimic winter. <sup>10*</sup> Seed cleaning can be done by rubbing on screens that separate the pods and chaff. <sup>11!</sup>
Growing Area Preparation / Annual Practices for Perennial Crops	N/a.
Establishment Phase Details	Data not available.
Length of Establishment Phase	1 year. <sup>10*</sup>
Active Growth Phase	Data not available. The species in the <i>Claytonia</i> genus have too much variability to accurately predict the suggested active growth phase.
Length of Active Growth Phase	Data not available.
Hardening Phase	Data not available.
Length of Hardening Phase	Data not available.
Harvesting, Storage and Shipping	Outplant as soon as possible. <sup>11!</sup>
Length of Storage	Data not available on how long the storage of the <i>Claytonia exigua</i> seedlings can be.

Guidelines for Outplanting / Performance on Typical Sites	Data not available.
Other Comments	No additional informal for guidelines or restrictions.
<b>INFORMATION SOURCES</b>	
References	See below.
Other Sources Consulted	See below.
Protocol Author	Kylie Gates
Date Protocol Created or Updated	05/25/2025

#### References:

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11. Young, Betty. 2001. Propagation protocol for production of Container (plug) *Claytonia perfoliata* Donn. ex Willd. plants Container Seedling; San Francisco, California. In: Native Plant Network. URL: <https://NativePlantNetwork.org> (accessed 2025/05/23). US Department of Agriculture, Forest Service, National Center for Reforestation, Nurseries, and Genetic Resources.

Other sources:

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