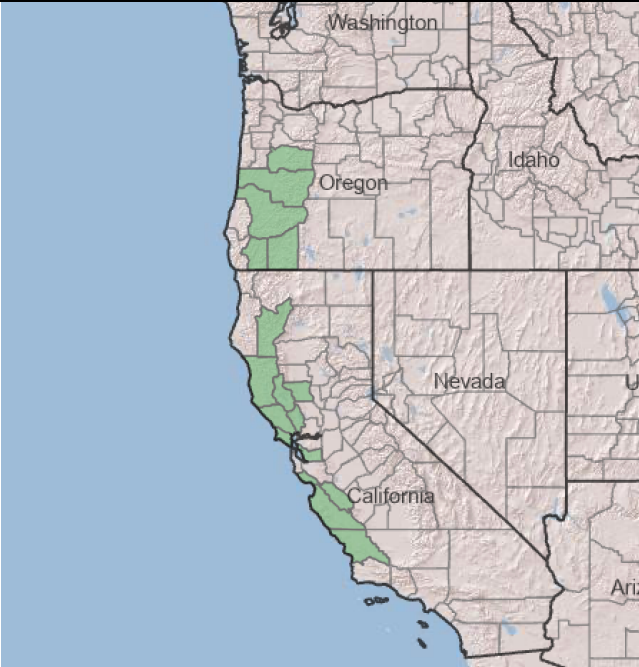



**Plant Propagation Protocol for *Calochortus uniflorus***

ESRM 412 – Native Plant Production

URL: [https://courses.washington.edu/esrm412/protocols/\[year\]/\[USDA Species Code.pdf\]](https://courses.washington.edu/esrm412/protocols/[year]/[USDA Species Code.pdf])

<b>TAXONOMY</b>	
<b>Plant Family</b>	
Scientific Name	Liliaceae
Common Name	Lily
<b>Species</b>	
Scientific Name	
Scientific Name	<i>Calochortus uniflorus</i>
Varieties	None
Sub-species	None
Cultivar	None
Common Synonym(s)	None
Common Name(s)	Monterey mariposa lily, Meadow star tulip, Large flowered star tulip
Species Code (as per USDA Plants database)	CAUN
<b>GENERAL INFORMATION</b>	
Geographical range	 <p>[2]</p>
Ecological distribution	Low, moist meadows on the eastern side of the Cascades [5]

Climate and elevation range	Elevation: <500 meters [10] Climate: 0-32 °C
Local habitat and abundance	Closed-cone pine forest, mixed evergreen forest, north coastal coniferous forest, northern coastal scrub, forest, riparian wetlands [7]
Plant strategy type / successional stage	These plants can tolerate temperatures ranging from -30 to 35°C.
Plant characteristics	<p>Calochortus uniflorus is a perennial forb/herb that is generally under 5cm tall, but can grow to 8 inches tall [4]. It contains 6 petals, which alternate between 3 smaller, pointy petals and wider, rounded petals. The flower is can be light blue to lilac, cream or pink in color [10].</p>  <p>[10]</p>

**PROPAGATION DETAILS: SEED**

Ecotype	Lane Co., Oregon near Eugene [1]
Propagation Goal	Plants
Propagation Method	Seed/Bulb
Product Type	Container (plug)
Stock Type	Cone-tainer
Time to Grow	90 days
Target Specifications	First year bulb, ranging from 3-8mm in diameter [9]
Propagule Collection Instructions (how, when, etc.)	Whole fruits can be collected right before or after ripening. The seed can be shaken from split capsules, but capsules that have not split may need to be split mechanically. On a large scale, fruits can be blended to separate the detritus from the seed. [9]
Propagule Processing/Prop	No information found

agule Characteristics	
Pre-Planting Propagule Treatments	Seeds should be sown into cone-tainers [1]
Growing Area Preparation / Annual Practices for Perennial Crops	Growing media: Sunshine #1, amended with micro-nutrients (Micromax) and a slow-release fertilizer (Osmocote 14-14-14) [RNCR]. Soil should be temporarily wet, but well-drained alkaline soils [Wildflower] Container Size & Type: Cone-tainer [1]
Establishment Phase Details (cultural practices from seeding to germination)	Seed should be sown into Cone-tainers at a density of 2 seeds per container.
Length of Establishment Phase	2 weeks [1]
Active Growth Phase	6-8 months, late fall to early summer [9]
Length of Active Growth Phase	No information
Hardening Phase	Does not occur
Length of Hardening Phase	The hardening phase is not necessary because Pacific Calochortus tend to grow during the winter months. [9]
Harvesting, Storage and Shipping	No information
Length of Storage	3-5 months [9]
Guidelines for Outplanting / Performance on Typical Sites	No information
Other Comments	Some of the Propagation details are from a protocol on Calochortus uniflorus [1], and the missing information was filled in from Calochortus luteus [9], which is also from California and have similar characteristics.
<b>INFORMATION SOURCES</b>	
References	1. Bartow, Amy L. 2006. Propagation protocol for production of Container (plug) <i>Calochortus uniflorus</i> Hook. & Arn. plants USDA NRCS - Corvallis Plant Materials Center Corvallis, Oregon. In: Native Plant Network. URL: <a href="https://NativePlantNetwork.org">https://NativePlantNetwork.org</a>

	<ol style="list-style-type: none"> <li>2. Cal. (n.d.). <i>Calochortus uniflorus</i>. USDA Plants Database. <a href="https://plants.sc.egov.usda.gov/plant-profile/CAUN">https://plants.sc.egov.usda.gov/plant-profile/CAUN</a></li> <li>3. <i>Calochortus Uniflorus</i>. Flora of North America. (n.d.). <a href="https://nwwildflowers.com/compare/?t=Calochortus+umbellatus,+Calochortus+uniflorus">https://nwwildflowers.com/compare/?t=Calochortus+umbellatus,+Calochortus+uniflorus</a></li> <li>4. <i>Calochortus uniflorus</i>. Lady Bird Johnson Wildflower Center - The University of Texas at Austin. (n.d.). <a href="https://www.wildflower.org/plants/result.php?id_plant=CAUN">https://www.wildflower.org/plants/result.php?id_plant=CAUN</a></li> <li>5. <i>Calochortus uniflorus</i>. PFAF Plant Search. (n.d.). <a href="https://pfaf.org/user/Plant.aspx?LatinName=Calochortus%2Buniflorus">https://pfaf.org/user/Plant.aspx?LatinName=Calochortus%2Buniflorus</a></li> <li>6. <i>Calochortus uniflorus</i> “Cupido.” California Flora Nursery. (2026, May 17). <a href="https://www.calfloranursery.com/plants/calochortus-uniflorus-cupido/">https://www.calfloranursery.com/plants/calochortus-uniflorus-cupido/</a></li> <li>7. Calscape. (n.d.). <i>Calochortus uniflorus - large flowered star tulip</i>. California Native Plant Community. <a href="https://calscape.org/Calochortus-uniflorus-(Large-Flowered-Star-Tulip)">https://calscape.org/Calochortus-uniflorus-(Large-Flowered-Star-Tulip)</a></li> <li>8. <i>How to grow and care for Monterey Mariposa Lily</i>. PictureThis. (n.d.). <a href="https://www.picturethisai.com/care/Calochortus_uniflorus.html">https://www.picturethisai.com/care/Calochortus_uniflorus.html</a></li> <li>9. Leigh, Mark; Pushnik, James C.; Boul, Rachelle D.; Brown, Matthew R.; Hunt, John W.; Koenig, David A.. 2006. Propagation protocol for production of Container (plug) <i>Calochortus luteus</i> bulbs Potted nursery stock; University of California - Chico Chico, California. In: Native Plant Network. URL: <a href="https://NativePlantNetwork.org">https://NativePlantNetwork.org</a></li> <li>10. University of California Berkeley. (n.d.). <i>Calochortus uniflorus</i>. The University and Jepson Herbaria. <a href="https://ucjeps.berkeley.edu/eflora/eflora_display.php?tid=16771">https://ucjeps.berkeley.edu/eflora/eflora_display.php?tid=16771</a></li> </ol>
Other Sources Consulted	<i>Calochortus uniflorus - FNA</i> . Flora of North America. (n.d.-a). <a href="http://beta.floranorthamerica.org/Calochortus_uniflorus">http://beta.floranorthamerica.org/Calochortus_uniflorus</a>
Protocol Author	Maura Fitzgerald
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