





## Plant Propagation Protocol for *Eschscholzia caespitosa*

ESRM 412 – Native Plant Production

URL: <https://courses.washington.edu/esrm412/protocols/2024/ESCA.pdf>

TAXONOMY	
Plant Family	
Scientific Name	<i>Papaveraceae</i> Juss.
Common Name	Poppy family
Species Scientific Name	
Scientific Name	<i>Eschscholzia caespitosa</i> Benth.
Varieties	<i>Eschscholzia caespitosa</i> var. <i>hypecoides</i> A. Gray
Sub-species	No sub-species
Cultivar	No cultivars
Common Synonym(s)	No common synonyms
Common Name(s)	tufted poppy, foothill poppy, collarless poppy
Species Code (as per USDA Plants database)	ESCA
GENERAL INFORMATION	
Geographical range	<p>Extends from Oregon to California down as far as Baja.</p>  <p>(7)</p>
Ecological distribution	<p>Found mostly in grasslands, brushy slopes (4), and open areas (5). Also found in dry soils in areas that get a lot of sun (4).</p>  <p>(6)</p>
Climate and elevation range	Prefers dry and warm conditions. Typically found in foothills below 3500 ft elevation (4)

Local habitat and abundance	Found in the coast ranges of California, along with the Sierra foothills and the Transverse Range (6). Found in Oregon in Douglas and Josephine Counties (7). Most common in meadows (6). <i>Eschscholzia caespitosa</i> occupies the same areas as <i>Eschscholzia californica</i> .
Plant strategy type / successional stage	It is a stress tolerator as it can tolerate a lot of sun and drought (6).
Plant characteristics	<p>Annual forb/herb. Flower petals are yellow with orange at the base (4) and 1-2.5cm long (2). Finely dissected, basal leaves (4). Grow up to 1 foot tall and 1 foot wide. Seeds are 1.5-2.4 mm in diameter and brown to black (2). Very similar to <i>Eschscholzia californica</i> (California poppy), the way to tell them apart is that <i>Eschscholzia californica</i> has a disc-shaped collar at the base of the flower and <i>Eschscholzia caespitosa</i> does not (5). Blooms in late spring and early summer (4).</p> <div>   </div> <p>(6) (5)</p>
<b>PROPAGATION DETAILS: FROM SEED</b>	
Ecotype	Dry grasslands and meadows (1)
Propagation Goal	Plants
Propagation Method	Seed (1)
Product Type	Container (plug) (1)
Stock Type	<i>Eschscholzia californica</i> : Leach tube (8)
Time to Grow	Weeks (1)
Target Specifications	Developed crowns, roots should fill the soil profile in the container (1).
Propagule Collection Instructions	<i>Eschscholzia californica</i> : Collect seeds during summer. High abundance of seeds (3).
Propagule Processing/Propagule Characteristics	<i>Eschscholzia californica</i> : 269,888 seeds per pound (3). ( <i>Eschscholzia californica</i> )
Pre-Planting Propagule Treatments	Treat seeds with cold and moist stratification for 45-90 days to break dormancy (1). I also found that seeds can be directly sown with no treatment (6). I did not find any information on why seeds would need to be treated or not, or if there are different conditions in which the seeds require treatment or not.
Growing Area Preparation / Annual Practices for Perennial Crops	<i>Eschscholzia californica</i> : Standard greenhouse. Plants are sown in flats, covered in media (peat moss, perlite, major and minor nutrients, gypsum, and dolomitic lime), and watered (8). Plant in early fall (8).

Establishment Phase Details	<i>Eschscholzia californica</i> : Seeds germinate 2 weeks after sowing, then are transplanted to individual containers (8).
Length of Establishment Phase	<i>Eschscholzia californica</i> : 28 days (8)
Active Growth Phase	<i>Eschscholzia californica</i> : Moderate growth rate (3)
Length of Active Growth Phase	<i>Eschscholzia californica</i> : Spring, summer, fall (3)
Hardening Phase	No information on hardening phase was found
Length of Hardening Phase	No information on hardening phase was found
Harvesting, Storage and Shipping	No information was found
Length of Storage	No information was found
Guidelines for Outplanting / Performance on Typical Sites	Areas with dry soil that get a lot of sun are ideal for outplanting (5). After planting, the plants are hardy and will survive without much care.
Other Comments	There is no vegetative propagation protocol for <i>Eschscholzia caespitosa</i> . For many of the propagation details, there was no information about <i>Eschscholzia caespitosa</i> . <i>Eschscholzia californica</i> occurs in the same habitat and in the same region so some information was transferred from protocols for that species and is indicated above.
<b>INFORMATION SOURCES</b>	
References	<ol style="list-style-type: none"> <li>1. 2015. Propagation protocol for production of Container (plug) <i>Eschscholzia caespitosa</i> plants USDA NRCS - Corvallis Plant Materials Center Corvallis, Oregon. In: Native Plant Network. URL: <a href="https://NativePlantNetwork.org">https://NativePlantNetwork.org</a> (accessed 2024/04/30). US Department of Agriculture, Forest Service, National Center for Reforestation, Nurseries, and Genetic Resources.</li> <li>2. Clark, Curtis. <i>Eschscholzia Caespitosa Benth</i>, July 1996, <a href="http://web.archive.org/web/19991127195100/www.csupomona.edu/~jcclark/poppy/cae.html">web.archive.org/web/19991127195100/www.csupomona.edu/~jcclark/poppy/cae.html</a>.</li> <li>3. "Eschscholzia Californica Cham." <i>USDA Plants Database</i>, <a href="https://plants.usda.gov/home/plantProfile?symbol=ESCA2">plants.usda.gov/home/plantProfile?symbol=ESCA2</a>. Accessed 30 Apr. 2024.</li> <li>4. "Plant Database." <i>Lady Bird Johnson Wildflower Center - The University of Texas at Austin</i>, <a href="http://www.wildflower.org/plants/result.php?id_plant=ESCA">www.wildflower.org/plants/result.php?id_plant=ESCA</a>. Accessed 25 Apr. 2024.</li> <li>5. "Plant of the Month Page." <i>Santa Monica Mountains Trails Council</i>, <a href="http://www.smmtc.org/plantofthemonth/Collarless_Poppy.php">www.smmtc.org/plantofthemonth/Collarless_Poppy.php</a>. Accessed 28 Apr. 2024.</li> </ol>

	<ol style="list-style-type: none"> <li>6. "Tufted Poppy, <i>Eschscholzia Caespitosa</i>." <i>California Native Plant Society</i>, <a href="https://calscape.org/Eschscholzia-caespitosa-(Tufted-Poppy)">calscape.org/Eschscholzia-caespitosa-(Tufted-Poppy)</a>. Accessed 29 Apr. 2024.</li> <li>7. "USDA Plants Database." <i>USDA Plants Database</i>, <a href="https://plants.usda.gov/home/plantProfile?symbol=ESCA">plants.usda.gov/home/plantProfile?symbol=ESCA</a>. Accessed 25 Apr. 2024.</li> <li>8. Young, Betty. 2001. Propagation protocol for production of Container (plug) <i>Eschscholzia californica</i> Cham. plants Leach Tube; San Francisco, California. In: Native Plant Network. URL: <a href="https://NativePlantNetwork.org">https://NativePlantNetwork.org</a> (accessed 2024/04/30). US Department of Agriculture, Forest Service, National Center for Reforestation, Nurseries, and Genetic Resources.</li> </ol>
Other Sources Consulted	<ol style="list-style-type: none"> <li>1. "California Poppy." <i>Explore Cornell - Home Gardening - Flower Growing Guides - Growing Guide</i>, <a href="https://www.gardening.cornell.edu/homegardening/scene43bf-2.html">www.gardening.cornell.edu/homegardening/scene43bf-2.html</a>. Accessed 30 Apr. 2024.</li> <li>2. "California Poppy (<i>Eschscholzia Californica</i>)." <i>US Forest Service</i>, <a href="https://www.fs.usda.gov/managing-land/wildflowers/plant-of-the-week/eschscholziacalifornica#:~:text=California%20poppies%20are%20easy%20to,soil%20warms%20in%20the%20spring">www.fs.usda.gov/managing-land/wildflowers/plant-of-the-week/eschscholziacalifornica#:~:text=California%20poppies%20are%20easy%20to,soil%20warms%20in%20the%20spring</a>. Accessed 30 Apr. 2024.</li> <li>3. <i>Eschscholzia Caespitosa</i> in <i>Flora of North America</i>. <i>Flora of North America</i>, <a href="https://www.efloras.org/florataxon.aspx?flora_id=1&amp;taxon_id=233500632">www.efloras.org/florataxon.aspx?flora_id=1&amp;taxon_id=233500632</a>. Accessed 25 Apr. 2024.</li> </ol>
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