

Plant Propagation Protocol for [Insert Species]

ESRM 412 – Native Plant Production

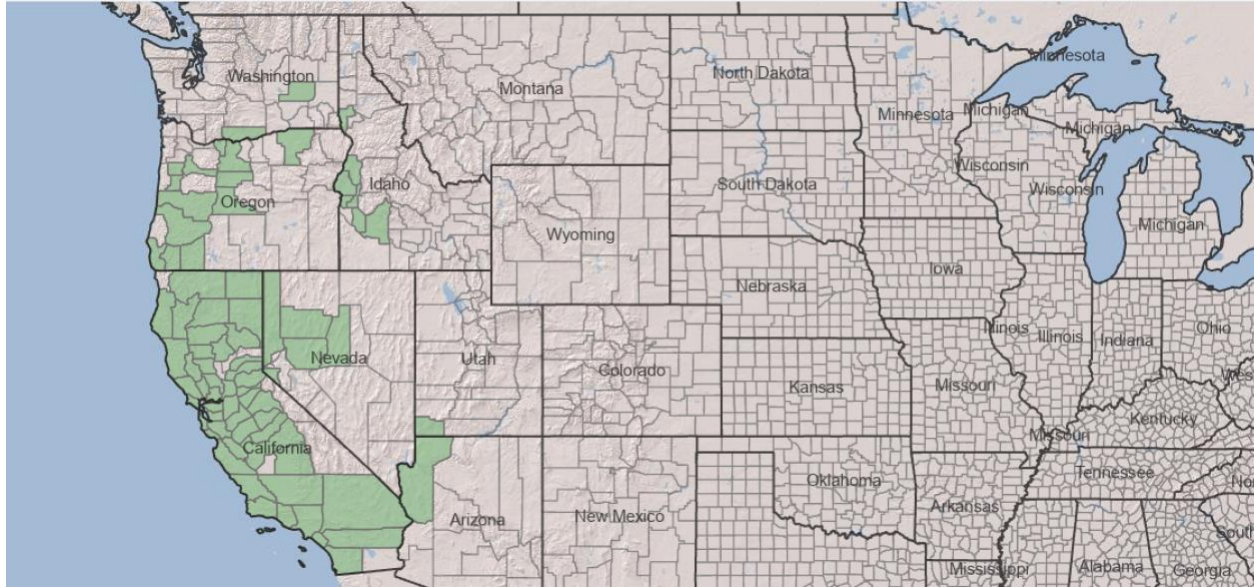
URL: <https://courses.washington.edu/esrm412/protocols/2026/CRSE>

TAXONOMY	
Plant Family	
Scientific Name	Euphorbiaceae
Common Name	Spurge
Species Scientific Name	
Scientific Name	<i>Croton setigerus</i> Hook.
Varieties	n/a
Sub-species	n/a
Cultivar	n/a
Common Synonym(s)	<i>Eremocarpus setigerus</i> (Hook.) Benth.
Common Name(s)	dove weed, doveweed, turkey mullein, fish locoweed
Species Code (as per USDA Plants database)	CRSE11
GENERAL INFORMATION	
Geographical range	<i>Croton setigerus</i> can be found primarily in California, and more sparsely in parts of Arizona, Utah, Nevada, Idaho, Oregon, and Washington ⁸ . Refer to Figure 1. Distribution Map.
Ecological distribution	Open, dry areas; meadows, desert, disturbed areas, valleys, grasslands, along coasts ^{2&3}
Climate and elevation range	Ideal temperature range is zone 8 ³ , in which the lowest average temperatures annually range from 10-20 °F ⁷ . Can withstand temperatures as high as 98 °F ⁵ . Elevation range is 0-1300m, with most occurring at elevations below 1000m ⁶ .
Local habitat and abundance	Coastal sage scrub, valley grassland, oak woodland ⁵ , Columbia basin ⁶ .
Plant strategy type / successional stage	Fast-growing, persistent growth, not shade-tolerant, thrives in disturbed areas; early successional species ³ .
Plant characteristics	Grey-green in color, fully grown specimen feature dichotomous branching, are up to 8 inches tall ⁹ , and have leaves that form rosettes with clusters of flowers. The lower leaves are longer, ranging from 0.3-3 inches and ovate in shape ⁹ .

	<p>Annual plant; life cycle spans across one season. Germination occurs in spring, flowering in June-September, dies in the fall⁶.</p> <p>Toxic with relatively low risk to most animals, except the seeds, which are dispersed through water, mud, or by animals^{7&5}.</p> <p>Monoecious; male and female reproductive organs are on the same plant, but different flowers⁵.</p>
<p>PROPAGATION DETAILS: FROM SEED Young, Betty Protocol on <i>Croton californicus</i>¹⁰</p>	
Ecotype	n/a
Propagation Goal	Seed
Propagation Method	Seed ⁷
Product Type	Propagules
Stock Type	Seedling trays
Time to Grow	None
Target Specifications	Mature, healthy seeds
Propagule Collection Instructions	Collect seeds May-October ⁷ during the flowering period.
Propagule Processing/Propagule Characteristics	175 seeds/gram ⁴
Pre-Planting Propagule Treatments	Seeds should be soaked for 24 hours and cold stratified for 30 days.
Growing Area Preparation / Annual Practices for Perennial Crops	Plant in loamy soil that is moderately nutrient rich with sufficient drainage. <i>C. setigerus</i> grows best in drier environments, so the containers should have adequate drainage as well ⁷ .
Establishment Phase Details	n/a
Length of Establishment Phase	No information available
Active Growth Phase	Ensure the plants are not overwatered by allowing the soil to become near completely dry before watering again ⁷ .
Length of Active Growth Phase	2-3 months; annual plant, which grows over a season ³ .
Hardening Phase	No information available
Length of Hardening Phase	No information available
Harvesting, Storage and Shipping	No information available
Length of Storage	No information available
Guidelines for Outplanting / Performance on Typical Sites	No information available
Other Comments	The protocol which was used as a baseline was written for a related <i>Croton</i> with a similar range and growth

	conditions; notably it is a perennial plant where setigerus is not. It is still the closest existing protocol, so it has been used as a baseline, with supplemental information from other sources used where applicable.
INFORMATION SOURCES	
References (full citations)	<p>¹“2023 USDA Plant Hardiness Zone Map.” USDA Plant Hardiness Zone Map, U.S. Department of Agriculture, planthardiness.ars.usda.gov/. Accessed 27 Apr. 2026.</p> <p>²“Croton Setigerus Hook.” Oregon Flora, Oregon State University, oregonflora.org/taxa/index.php?tid=15601. Accessed 27 Apr. 2026.</p> <p>³“Doveweed.” Nature Collective, 29 Sept. 2019, naturecollective.org/plant-guide/details/doveweed/.</p> <p>⁴“Eremocarpus Setigerus.” Ransom Seed Laboratory, Ransom Seed Laboratory, 18 May 2019, https://www.ransomseedlab.com/new-blog/category/Euphorbiaceae.</p> <p>⁵Garcia, Vianna, and Aurora Keener. “Croton Setigerus: Dove Weed.” CK12, 29 June 2016, www.ck12.org/book/ck-12-understanding-biodiversity/section/10.5/. Accessed 27 Apr. 2026.</p> <p>⁶Hitchcock, C. Leo, et al. Vascular Plants of the Pacific Northwest. University of Washington Press, 1961.</p> <p>⁷“How to Grow Croton Setigerus.” EarthOne, EarthOne, https://earthone.io/plant/croton%20setigerus. Accessed 24 Apr. 2026.</p> <p>⁸Kartesz, John. “Croton Setigerus Hook.” USDA Plants Database, U.S Department of Agriculture, plants.sc.egov.usda.gov/plant-profile/CRSE11. Accessed 24 Apr. 2026.</p> <p>⁹“Turkey Mullein.” Calscape, California Native Plant Society , calscape.org/Croton-setiger-(Turkey-Mullein). Accessed 24 Apr. 2026.</p> <p>¹⁰Young, Betty. “Euphorbiaceae (Croton).” Reforestation, Nurseries, & Genetic Resources, 2001, rngr.net/npn/propagation/protocols/euphorbiaceae-croton-589.</p>
Other Sources Consulted	n/a
Protocol Author	Nico Favorito
Date Protocol Created or Updated	04/27/26

Figure 1. Distribution Map



Source: USDA Plants Database