

Plant Propagation Protocol for *Erigeron purpuratus*

ESRM 412 – Native Plant Production

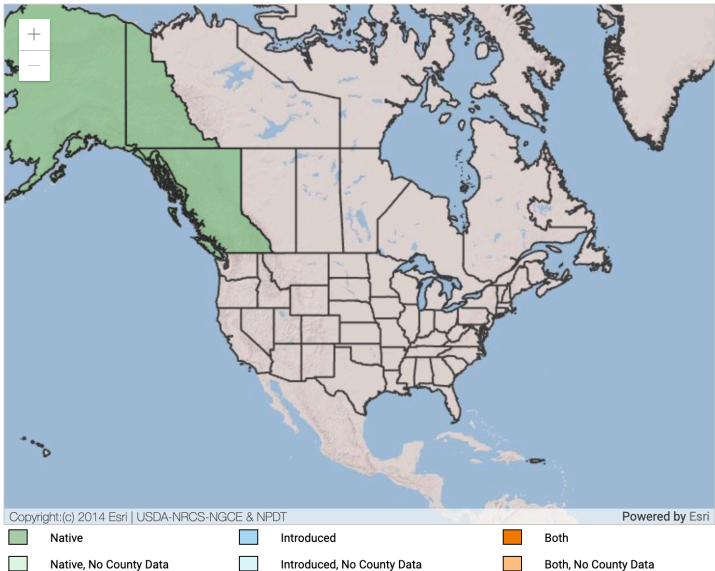
URL: <https://courses.washington.edu/esrm412/protocols/2024/ERPU3>


TAXONOMY

Plant Family Asteraceae, Aster ¹

Scientific Name	<i>Erigeron purpuratus</i> ³
Common Name	purple fleabane ³
Scientific Name	Erigeron Purpuratus, Greene ³
Varieties	Erigeron purpuratus Greene var. purpuratus ³
Sub-species	None ³
Common Synonym(s)	Purple fleabane, and Erigeron Purpuratus Greene ³
Common Name(s)	Purple fleabane ³
Species Code (as per USDA Plants database)	ERPU3 ³

GENERAL INFORMATION

Geographical range	 <p>British Columbia, Yukon, Alaska ³</p>
Ecological distribution	Riparian mostly and sometimes rocky, disturbed and alpine ecosystems ⁵ .
Climate and elevation range	The elevation range is from 0-11,000ft but is most prevalent in 2,000-6,000ft ⁵ .
Local habitat and abundance	It likes dry and often rocky soil and grows in meadows and woodlands ⁴ .
Plant strategy type / successional stage	Perennial ⁸ , wildflowers ¹ .

<p>Plant characteristics</p>	<p>Herb, wildflower, can grow to six inches tall, though most are larger than this, flowers can bloom in white, pink or purple. It blooms in June through August¹.</p>  <p>11</p>
<p>PROPAGATION DETAILS (of Erigeron (alicea) as by Lee Riley)</p>	
<p>Propagation Goal Plants⁴</p>	
<p>Propagation Method</p>	<p>Seed⁴</p>

Product Type	Container (plug) ⁴
Stock Type	262ml container ⁴
Time to Grow	20 weeks ⁴
Target Specifications	Container (plug) seedling that has a root system ⁴
Propagule Collection Instructions	They are ready to harvest when the flowers are puffy and the stems are yellow. Take the flower into a bag and shake the seeds off. Seeds should be kept dry during storage ⁶ .
Pre-Planting Propagule Treatments	The seeds are put into sealed plastic bags sown in to plugs, then put into the refrigerator for 70 days at 1-3 degrees Celsius ⁴ .
Growing Area Preparation / Annual Practices for Perennial Crops	Grown in a green house, transplanted from plug in a bag to a container about 21 days after being removed from the refrigerator. They should be grown in a in 262 ml containers in medium that is 40% peat, 20% competed fir bark ⁴ .
Establishment Phase Details	The Establishment Phase Details takes about 10-14 days. After germination the plants should be fertilized for a week with soluble 12-2-14-6Ca-3Mg at 75 ppm ⁴ .
Length of Establishment Phase	14 days ⁴
Active Growth Phase	During the Active Growth phase there is relatively slow root development, there is a moderate amount of shoot growth, but can be pushed to reach target heights. Weekly, throughout the active growth phase, it is given soluble fertilizer (20-9-20 NPK, 20-18-18 NPK, or 17-5-24 NPK) at a dosage of 150 ppm ⁴ .

Length of Active Growth Phase	126 days / 18 weeks ⁴
Hardening Phase	In late September the seedlings should be moved to grow outdoors. There is no dry down done ⁴ .
Length of Hardening Phase	21-28 day / 3 to 4 weeks ⁴

Harvesting, Storage and Shipping	There is no indoor storage, they are only stored in an outdoor area until they are the planted, which is usually in full. If plants are shipped they are shipped in containers and are irrigated well before shipping ⁴ .
Length of Storage	Minimal to none ⁴ .
Guidelines for Outplanting / Performance on Typical Sites	The seeds should be planted in field sites in late September. The seeds should be planted in soils that drain well and are a bit dry ⁴ .

INFORMATION SOURCES

References

1)“Plant Database.” *Lady Bird Johnson Wildflower Center - The University of Texas at Austin*, www.wildflower.org/plants/result.php?id_plant=ERPU3. Accessed 1 May 2024.

3) *USDA Plants Database*, plants.usda.gov/home/plantProfile?symbol=ERPU3. Accessed 1 May 2024.

4) Riley, Lee. “Native Plant Network Propagation Protocol Database Erigeron (Alicea).” *REFORESTATION, NURSERIES, & GENETIC RESOURCES*, 2020, npn.rngr.net/renderNPNProtocolDetails?selectedProtocolIds=asteraceae-erigeron-2.

5)“Wildflower Search.” *Favicon*, wildflowersearch.org/search?&PlantName=Erigeron%2Bpurpuratus. Accessed 1 May 2024.

6) “How to Harvest Fleabane (Erigeron) Seeds.” *YouTube*, YouTube, 26 July 2023, www.youtube.com/watch?v=-vW2dwd_av0. based on information from “Welcome!” *Ottawa Wildflower Seed Library*, wildflowerseedlibrary.ca/. Accessed 1 May 2024.

8) “Purple Fleabane.” *EOL*, eol.org/pages/469010. Accessed, 1 May 2024.

11)*Purple Fleabane (Erigeron purpuratus)*. iNaturalist. (n.d.). <https://www.inaturalist.org/taxa/162522-Erigeron-purpuratus>

Other Sources Consulted	<p>2) <i>Erigeron Purpuratus</i> in <i>Flora of North America</i> @ efloras.Org, www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=250066662. Accessed 1 May 2024.</p> <p>9) “Asters.” NASA, NASA, earthobservatory.nasa.gov/biome/seedasters.php. Accessed 1 May 2024.</p> <p>10) Greene, & Nesom, G. L. (n.d.). <i>Erigeron purpuratus</i>. <i>Erigeron purpuratus</i> - FNA. http://floranorthamerica.org/Erigeron_purpuratus</p>
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