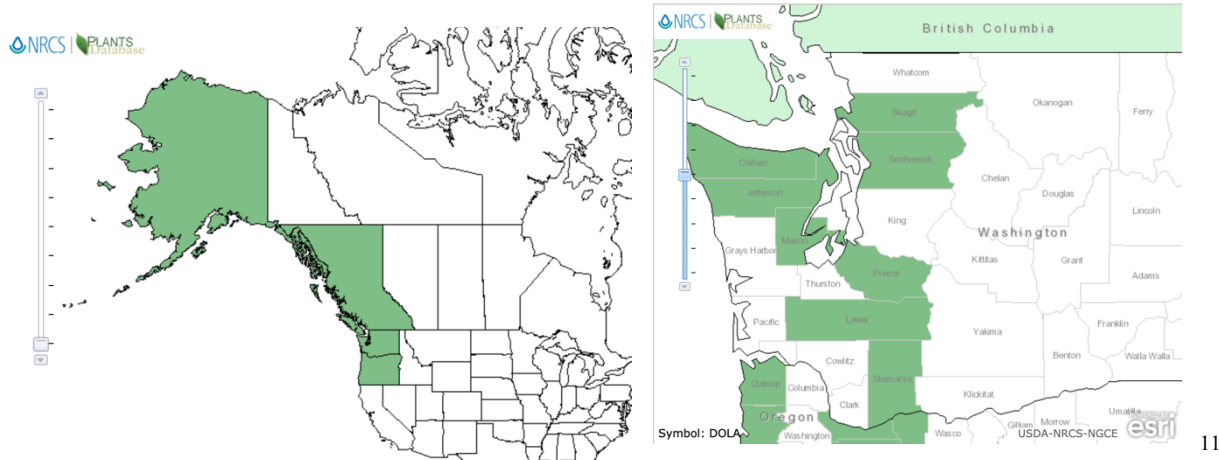


## Plant Propagation Protocol for [*Douglasia Laevigata*]

ESRM 412 – Native Plant Production

Protocol URL: <https://courses.washington.edu/esrm412/protocols/dola>



11

### TAXONOMY

<b>Plant Family</b>	
Scientific Name	Primulaceae
Common Name	Cliff dwarf-primrose Smooth douglasia
<b>Species Scientific Name</b>	
Scientific Name	<i>Douglasia</i> Lindl.
Varieties	<i>Douglasia laevigata</i> A. Gray
Sub-species	
Cultivar	
Common Synonym(s)	<i>Douglasia laevigata</i> A. Gray var. <i>laevigata</i> <i>Douglasia laevigata</i> A. Gray var. <i>ciliolata</i> Constance <i>Douglasia laevigata</i> A. Gray ssp. <i>ciliolata</i> (Constance) Calder & Roy L. Taylor <i>Douglasia laevigata</i> A. Gray var. <i>laevigata</i>
Common Name(s)	Rocky Mountain dwarf-primrose
Species Code (as per USDA Plants database)	DOLA
<b>GENERAL INFORMATION</b>	
Geographical range	AK N – Alaska native CAN N – Canada Native L48 N – Lower 48 states native See map above <sup>1</sup>
Ecological distribution	Subshrub <sup>2</sup>
Climate and elevation range	Flowering early summer, Rocky areas 30-2000m <sup>3</sup>

	high ridges of the Olympic Mountains <sup>7</sup>
Local habitat and abundance	Moist coastal bluffs, rocky, alpine slopes/ledges <sup>2</sup>
Plant strategy type / successional stage	Grown in rocks, and cliffs Little to no competition <sup>10</sup>
Plant characteristics	reddish-pink flowers shaped in tight umbels, on short stalks without leaves <sup>2</sup> turns lavender color (due to aging) <sup>2</sup> stems spreads on ground <sup>2</sup> Perennial <sup>2</sup>
<b>PROPAGATION DETAILS</b>	
Ecotype	Olympics from mid to high elevations, Washington Cascades at high elevations, Oregon Columbia River Gorge at low elevations <sup>10</sup> .
Propagation Goal	Grows well with cuttings <sup>2</sup>
Propagation Method	Seed <sup>4</sup> Fall- direct sow outdoors Winter- sow in vented containers, cold frame or unheated greenhouse Indoors - stratify if sowing indoors <sup>4</sup>
Product Type	Bareroot (field grown) seeds
Stock Type	Seed <sup>10</sup>
Time to Grow	Seed to flowering 2-3 years <sup>10</sup>
Target Specifications	Under 15 cm, 6 inches <sup>4</sup>
Propagule Collection Instructions	remove and collect seeds when seed heads are dry on plants <sup>4</sup>
Propagule Processing/Propagule Characteristics	Sow seed densely seed germination is low <sup>10</sup>
Pre-Planting Propagule Treatments	When cleaning many seeds may be small and infertile Richard has tried cold stratification over winter (starting in late October/ early November) <sup>10</sup>
Growing Area Preparation / Annual Practices for Perennial Crops	Medium water, part shade, low CaCO <sub>3</sub> tolerance <sup>2</sup> Full sun, partial shade <sup>4</sup> Trough culture <sup>6</sup> can grow in soilless mixture
Establishment Phase Details	2-4 weeks (64-71°F) <sup>5</sup> Supplemental water if planting in spring. <sup>10</sup>
Length of Establishment Phase	(24-39°F) <sup>5</sup> 2-3 months some seed will not germinate until the following year <sup>10</sup>
Active Growth Phase	Roots in fall, top growth late winter to early summer <sup>10</sup> (41-53°F) <sup>5</sup>
Length of Active Growth Phase	Summer/spring
Hardening	Unknown
Length of Hardening Phase	Unknown

Harvesting, Storage and Shipping	Keep in cold temperature
Length of Storage	Seed cold stratification for 2 or 3 months <sup>10</sup>
Guidelines for Outplanting / Performance on Typical Sites	10% survival rate/germination
Other Comments	There are set of bracts, and the grow in small clusters <sup>8</sup> Likes gritty soil <sup>9</sup>
<b>INFORMATION SOURCES</b>	
References	See Below
Other Sources Consulted	Richard Ramsden
Protocol Author	Michelle Koo
Date Protocol Created or Updated	04/29/19

<sup>1</sup> “Douglasia Laevigata A. Gray .” Plants Profile for Douglasia Laevigata (Cliff Dwarf-Primrose), plants.usda.gov/core/profile?symbol=DOLA. 29 Apr. 2019.

<sup>2</sup> “Plant Database.” *Lady Bird Johnson Wildflower Center - The University of Texas at Austin*, 1 Jan. 2007, www.wildflower.org/plants/result.php?id\_plant=DOLA. 29 Apr. 2019.

<sup>3</sup> “Douglasia Laevigata A. Gray, Proc. Amer. Acad. Arts. 16: 105. 1880.” Douglasia Laevigata in Flora of North America @ Efloras.org, www.efloras.org/florataxon.aspx?flora\_id=1&taxon\_id=250092195. 29 Apr. 2019.

<sup>4</sup> “PlantFiles: Douglasia Species, Cliff Dwarf Primrose, Smooth Douglasia.” Dave's Garden, davesgarden.com/guides/pf/go/85478/. 29 Apr. 2019.

<sup>5</sup> “Seed Germination Database - Perennials.” Seed Germination Database - Perennials - D to N, tomclothier.hort.net/page03.html. 29 Apr. 2019.

<sup>6</sup> Symthe, Rupert. Best Plants For Rock Gardens, 4 July 2011, www.houseplantsguru.com/best-plants-for-rock-gardens. 29 Apr. 2019.

<sup>7</sup> Alpine Garden Club of British Columbia. Sept. 2003. 29 Apr. 2019.

<sup>8</sup> Harvey, Tanya. Bulletin of the Native Plant Society of Oregon, Nov. 2010, www.npsoregon.org/bulletin/2010/NPSO\_1011.PDF. 29 Apr. 2019.

<sup>9</sup> "The Gardening Bible." The Gardening Bible. N.p., May 2017. Web. 29 Apr. 2019.

<sup>10</sup> “Douglasia Laevigata.” Received by Richard Ramsden, *Douglasia Laevigata*, 29 Apr. 2019. Fringe Nursery

<sup>11</sup> Plants Profile for Douglasia Laevigata (Cliff Dwarf-Primrose), 30 Apr. 2019, plants.usda.gov/core/profile?symbol=DOLA.