

Plant Propagation Protocol for *Gentiana glauca*

ESRM 412 – Native Plant Production

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



TAXONOMY

Plant Family

Scientific Name Gentianaceae ⁽¹⁾

Common Name Gentian Family ⁽¹⁾

Species Scientific Name

Scientific Name *Gentiana glauca* Pall.

Varieties No Varieties Recognized

Sub-species No Sub-species Recognized

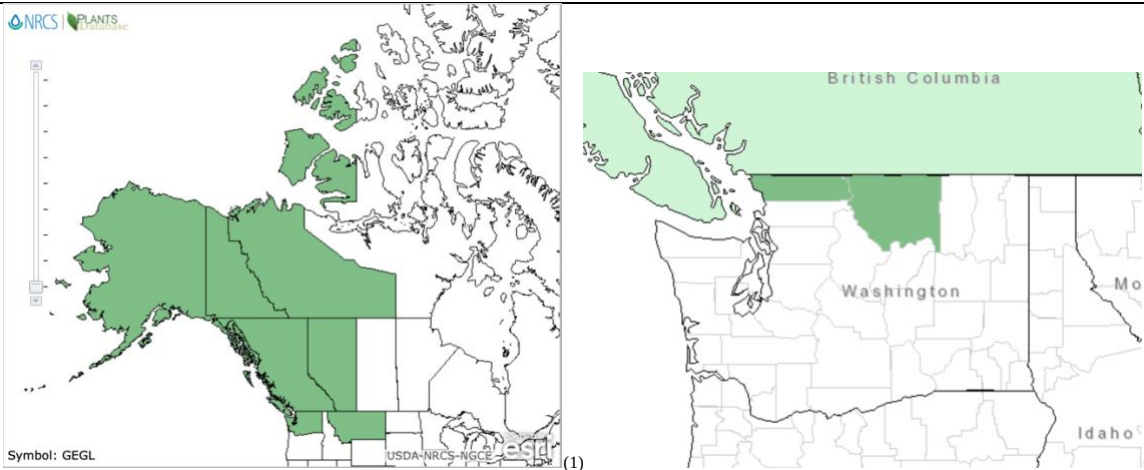
Cultivar Not available

Common Synonym(s) *Dasystephana glauca* (Pall.) Rydb.
Entianodes glauca (Pall.) Á. Löve & D. Löve ⁽¹⁾

Common Name(s) Pale Gentian, laucus Gentian, Inky Gentian, Smooth Alpine Gentian ⁽⁵⁾

Species Code (as per USDA Plants database) GEGL

GENERAL INFORMATION

Geographical range	
Ecological distribution	Western mountains, valleys, and coasts ⁽¹⁾
Climate and elevation range	1890-2350 m ⁽²⁾ Moist environments and seepage areas ⁽²⁾
Local habitat and abundance	They are commonly found in meadows and grow next to Engelmann spruce (<i>Picea engelmannii</i>), lodgepole pine (<i>Pinus contorta</i>), willow (<i>Salix</i> spp.), mountain heather (<i>Phyllodoce</i> spp., <i>Cassiope tetragona</i>), sedges (<i>Carex</i> spp.), dwarf bilberry, mosses , and lichens ⁽²⁾
Plant strategy type / successional stage	Forb/herb ⁽¹⁾
Plant characteristics	Perennial herb ⁽⁸⁾ doesn't get higher than 6 in tall. ⁽⁹⁾
PROPAGATION DETAILS	
Some information listed in this section is from a similar plant, marked as follows, *Sourced from <i>Gentiana andrewsii</i> Griseb ** sources from <i>Gentiana</i> L. spp. <i>Gentian</i>	
Ecotype	Not Available
Propagation Goal	Plants
Propagation Method	Seed
	Container
Stock Type	
Time to Grow	Not Provided
Target Specifications	Outplant in early to late spring, mature plants can be out planted during a cold frame (winter) as long as you cover the plant with a material that diffuses light ^{(10)*}
Propagule Collection Instructions	Not Provided
Propagule Processing/Pr opagule	Single chambered capsules, seeds are flat, a palish tan color, and irregularly wrinkled ⁽²⁾

Pre-Planting Propagule Treatments	In order for faster germination, treat seeds with gibberellic acid. In order to break dormancy sow seeds in a flat containing good seed germination media. Keep in refrigerator for two months. Following cold stratification, place in a dark location at 70-75 degrees Fahrenheit. ⁽¹¹⁾
Growing Area Preparation / Annual Practices for Perennial Crops	Grow in well drained moist soil with a pH of 5.0 to 7.5 ⁽¹¹⁾
Establishment Phase Details	While germinating, keep in a green house at 65°F January through August. Keep at 55°F during September through December. ^{(10)*}
Length of Establishment Phase	Not Provided
Active Growth Phase	Not Provided
Length of Active Growth Phase	Not Provided
Hardening Phase	Not Provided
Length of Hardening Phase	Not Provided
Harvesting, Storage and Shipping	Keep plant in container for storage ^{(11)**}
Length of Storage	Not Provided
Guidelines for Outplanting / Performance on Typical Sites	Not Provided
Other Comments	Very difficult plant to propagate.

INFORMATION SOURCES

References	1- https://plants.usda.gov/core/profile?symbol=G EGL Plants Profile for Gentiana Glauca (Pale Gention), plants.usda.gov/core/profile?symbol=G EGL. Accessed 19 May 2020. 2- https://www.dnr.wa.gov/publications/amp_nh_gegl.pdf Gentiana Glauca, https://www.dnr.wa.gov/publications/amp_nh_gegl.pdf. Accessed 19 May 2020. 3- https://www.fs.fed.us/pnw/pubs/gtr513/gtr513d.pdf
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- 11- <https://homeguides.sfgate.com/grow-gentian-24672.html>
Kilpatrick, Judy. "How to Grow Gentian." Home Guides | SF Gate, 21 Nov. 2017, homeguides.sfgate.com/grow-gentian-24672.html. Accessed 21 May 2020.

*Sourced from *Gentiana andrewsii* Griseb

	** sources from Gentiana L. spp. Gentian
Other Sources Consulted	
Protocol Author	Bailey DeWald
Date Protocol Created or Updated	(06/6/20)