


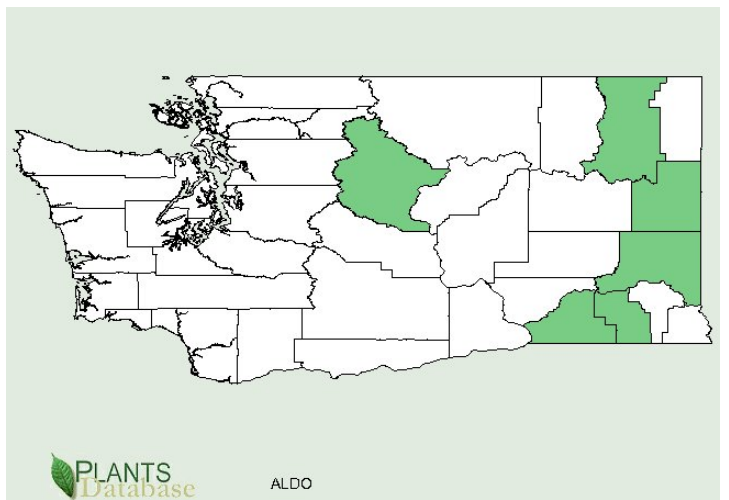
Plant Propagation Protocol for [*Allium douglasii*]

ESRM 412 – Native Plant Production

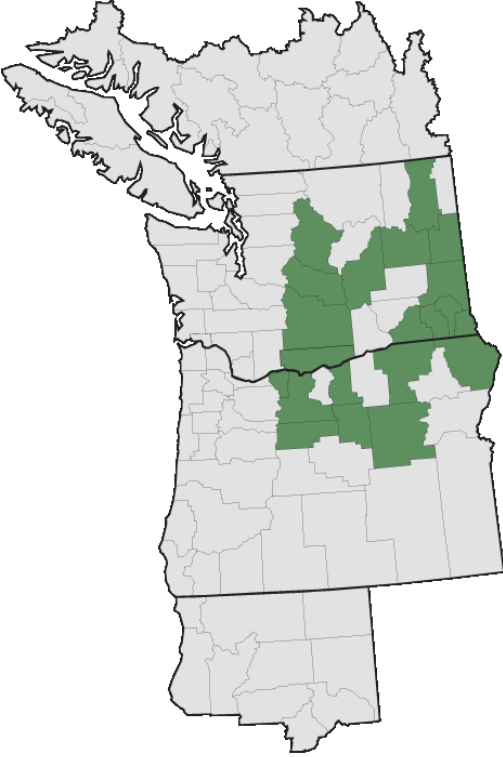
Protocol URL: [https://courses.washington.edu/esrm412/protocols/\[ALDO.pdf\]](https://courses.washington.edu/esrm412/protocols/[ALDO.pdf])

<p align="center">TAXONOMY</p>	 <p align="center">[www.hillkeep.ca]</p>
<p>Plant Family</p>	
<p>Scientific Name</p>	<p>Amaryllidaceae</p>
<p>Common Name</p>	<p>Amaryllis</p>
<p>Species Scientific Name</p>	
<p>Scientific Name</p>	<p><i>Allium Douglasii</i> Hook</p>
<p>Varieties</p>	<p><i>Allium Douglasii</i> var <i>douglasii</i>, <i>Allium Douglasii</i> var <i>colubianum</i>, <i>Allium Douglasii</i> var <i>constrictum</i>, <i>Allium Douglasii</i> var <i>nevii</i> [UBC botany]</p>
<p>Sub-species</p>	
<p>Cultivar</p>	
<p>Common Synonym(s)</p>	
<p>Common Name(s)</p>	<p>Douglas' Onion</p>
<p>Species Code (as per USDA Plants database)</p>	<p>ALDO</p>
<p>GENERAL INFORMATION</p>	

Geographical range



[USDA plants database]

	 <p>[PNW flowers]</p>
Ecological distribution	arid west, western mountains, valleys, and coast
Climate and elevation range	400-1300 meters, dry summers with wet winters. Most common on east side of cascades in Washington and Oregon. Can tolerate -28 degrees fahrenheit. [USDA plants database]
Local habitat and abundance	State sensitive, BLM sensitive. Low lying meadows with well draining soils, shrub-steppe or vernal wet. Associate with roses, carrots, beet and chamomile. Competes with alfalfa and inhibits the growth of legumes. [plants for a future][department of natural resources]
Plant strategy type / successional stage	
Plant characteristics	Forb. Perennial. Short to medium length lifespan. Grows quickly. Flowers from June-August. Single crown of hermaphroditic purple to white flowers. Mature height: 15-30 cm [USDA plants database]
PROPAGATION DETAILS	
Ecotype	
Propagation Goal	Bulbs
Propagation Method	Seed, bulblets [hortipedia]
Product Type	Seeds

Stock Type	
Time to Grow	1 year [plants for a future]
Target Specifications	
Propagule Collection Instructions	Between spring and summer. Allow seedheads to dry on plants, then remove. [daves garden]
Propagule Processing/Propagule Characteristics	No seed persistence [USDA plants database]
Pre-Planting Propagule Treatments	No cold stratification required [hortipedia]
Growing Area Preparation / Annual Practices for Perennial Crops	The plants prefer a sunny to half-shady situation on dry to moderately moist soil. The substrate should be sandy-loamy, gritty-loamy or sandy clay and comparatively poor with a pH between 6 and 7.8. The plants need a soil depth of at least 20 centimetres for good growth. They tolerate temperatures down to -23°C (USDA zone 6) and need a frost-free period of at least 14 weeks. Anaerobic Tolerance: Low. CaCO ₃ Tolerance: Medium. [hortipedia]
Establishment Phase Details	Sow in spring in a cold frame. Prick out the seedlings into individual pots when they are large enough to handle - if you want to produce clumps more quickly then put three plants in each pot. [plants for a future]
Length of Establishment Phase	
Active Growth Phase	Grow them in the greenhouse for at least their first winter and plant them out into their permanent positions in spring once they are growing vigorously and are large enough. Division in spring. The plants divide successfully at any time in the growing season, pot up the divisions in a cold frame or greenhouse until they are growing well and then plant them out into their permanent positions. [plants for a future]
Length of Active Growth Phase	Spring [USDA plants database]
Hardening Phase	
Length of Hardening Phase	
Harvesting, Storage and Shipping	
Length of Storage	
Guidelines for Outplanting / Performance on Typical Sites	Plant individuals 60-90 cm away from each other. 4,800-11,000 per acre. [hortipedia]
Other Comments	

INFORMATION SOURCES	
References	<p>Krukeberg, Arthur. 1996. Gardening with Native Plants. University of Washington Press.</p> <p>Hilty, J. Editor. 2014. Illinois Wildflowers. World Wide Web electronic publication. flowervisitors.info (accessed 6/13/14)</p> <p>https://plants.usda.gov/core/profile?symbol=ALDO</p> <p>http://science.halleyhosting.com/nature/basin/3petal/lily/m/douglasii.htm (accessed 6/13/14)</p> <p>http://www.hillkeep.ca/bulbs%20allium%20a-h.htm (accessed 6/13/14)</p> <p>http://en.hortipedia.com/wiki/Allium_douglasii (accessed 6/13/14)</p> <p>http://sagebud.com/douglas-onion-allium-douglasii (accessed 6/13/14)</p> <p>http://www.pfaf.org/user/Plant.aspx?LatinName=Allium_douglasii (accessed 6/13/14)</p> <p>http://www.pnwflowers.com/flower/allium-douglasii (accessed 6/13/14)</p> <p>http://www3.botany.ubc.ca/rieseberglab/loren%20pubs/188%20Systematic%20Botany%20Peterson%20et%20al.1999.pdf (accessed 6/13/14)</p>
Other Sources Consulted	King County Dept of Public Works. 1994. Northwest Native Plants.
Protocol Author	Connor McGarry
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