http://www.stage.dnr.wa.gov/nhp/refdesk/fguide/htm/4aldipic.htm

TAXONOMY	
Family Names	
Family Scientific Name:	Liliaceae
Family Common Name:	Lily
Scientific Names	
Genus:	*Allium*
Species:	*dictuon*
Species Authority:	St. John
Variety:	
Sub-species:	
Cultivar:	
Authority for Variety/Sub-species:	
Common Synonym(s)	
Family:	Alliaceae
Genus:	
Species:	
Species Authority:	
Variety:	
Sub-species:	
Cultivar:	
Authority for Variety/Sub-species:	
Common Name(s):	Blue Mountain onion
Species Code (as per USDA Plants database):	ALDI3

GENERAL INFORMATION	
General Distribution (geographical range (states it occurs in), ecosystems, etc):	Blue mountains of SE Washington/NE Oregon. (Flora of North America 2002; Burke/WTU Database Online)
Climate and elevation range	Occurs at middle to upper elevations (4200-5200 feet), generally on rather steep slopes (0-55 degrees) with an unstable substrate. (Washington Natural Heritage Program and U.S.D.I. Bureau of Land Management)
Local habitat and abundance; may	Open, fairly dry and rocky areas. (Burke/WTU

include commonly associated species	Database Online) Soil substrates are derived from surface basalts and interflow material. The surface is dominated by loose gravel. Known occurrences have the following associated species: bluebunch wheatgrass (*Agropyron spicatum*), wormleaf stonecrop (*Sedum stenopetalum*), Gray's desertparsley (*Lomatium grayi*), whiteleaf scorpionweed (*Phacelia hastata*), hotrock beardtongue (*Penstemon deustus* var. *deustus*) and sulfur wild buckwheat (*Eriogonum umbellatum*). (Washington Natural Heritage Program and U.S.D.I. Bureau of Land Management)
Plant strategy type / successional stage (stress-tolerator, competitor, weedy/colonizer, seral, late successional)	
PROPAGATION DETAILS – taken from *A. acuminatum*, habitat similar (all following from Skinner 2004)	
Ecotype (this is meant primarily for experimentally derived protocols, and is a description of where the seed that was tested came from):	
Propagation Goal (Options: Plants, Cuttings, Seeds, Bulbs, Somatic Embryos, and/or Other Propagules):	Bulb
Propagation Method (Options: Seed or Vegetative):	Seed
Product Type (options: Container (plug), Bareroot (field grown), Plug + (container-field grown hybrids, and/or Propagules (seeds, cuttings, poles, etc.))	Container (plug)
Stock Type:	
Time to Grow (from seeding until plants are ready to be outplanted):	3 years
Target Specifications (size or characteristics of target plants to be produced):	
Propagule Collection (how, when, etc):	Seeds are collected when the capsules begin to split in July. Capsules can be collected individually or the entire stalk cut. Seed is black in color. Seed is stored in paper bags or envelopes at room temperature until cleaned.
Propagule Processing/Propagule Characteristics (including seed density (# per pound), seed	Small amounts are rubbed to free the seed, then cleaned with an air column separator. Larger amounts could probably be threshed with a hammermill, then cleaned

longevity, etc):	with air screen equipment. Clean seed is stored in controlled conditions at 40 degrees Fahrenheit and 40% relative humidity.
Pre-Planting Propagule Treatments (cleaning, dormancy treatments, etc):	Cool, moist stratification and cool growing conditions are needed. No seed germinated without pretreatment. 30 days of cool, moist stratification resulted in a few seeds germinating, but they did not survive in the greenhouse. High germination was obtained from seeds sown in flats and left outside under cool, fluctuating spring temperatures. Seedlings which germinated outside died when placed in the greenhouse. Establishment Phase: Flats remain outside. They are watered only during dry spells. Germination will begin as daytime temperatures warm in March, and may occur over 2-4 weeks. Some additional seed will germinate the year following sowing. Active Growth Phase: Plants are watered as needed while outside and fertilized once a week with a water soluble, complete fertilizer. They are moved to the lath house in June. Plants will begin to go dormant in July. Water is cut back and fertilizer is withheld as the plants dry down. Flats remain in the lath house for at least 3 growing seasons.
Growing Area Preparation / Annual Practices for Perennial Crops (growing media, type and size of containers, etc):	In November, seed is sown in flats filled with Sunshine #4 and covered lightly. A thin layer of sand is applied to prevent seeds and planting soil from floating. Flats are watered well and placed outside.
Establishment Phase (from seeding to germination):	
Length of Establishment Phase:	2 months
Active Growth Phase (from germination until plants are no longer actively growing):	Plants are watered as needed while outside and fertilized once a week with a water soluble, complete fertilizer. They are moved to the lath house in June. Plants will begin to go dormant in July. Water is cut back and fertilizer is withheld as the plants dry down. Flats remain in the lath house for at least 3 growing seasons.
Length of Active Growth Phase:	
Hardening Phase (from end of active growth phase to end of growing season; primarily related to the development of cold-hardiness and preparation for winter):	Plants are dormant as winter approaches. They are stored in the lath house over winter. Flats should be covered with an insulating material to protect the bulbs from extreme cold if snow cover is lacking. Regrowth will begin in early March as soon as temperatures begin to warm.
Length of Hardening Phase:	
Harvesting, Storage and Shipping (of	Bulbs are harvested in the fall of the third growing

seedlings):	season by sifting the potting soil thru a sieve. Pea gravel should not be used to cover flats because it is roughly the same size as the bulbs and therefore difficult to separate. Bulbs range in size from 3-5 mm in diameter. They can be stored in dry conditions for a short period prior to planting. We have not attempted to store bulbs for a longer period.
Length of Storage (of seedlings, between nursery and outplanting):	
Guidelines for Outplanting / Performance on Typical Sites (eg, percent survival, height or diameter growth, elapsed time before flowering):	Planted in fall.
Other Comments:	Is a Washington State Threatened species and US Fish & Wildlife Service Species of Concern.

INFORMATION SOURCES

References:

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Date Entered or Updated (MM/DD/YY):	05/08/07