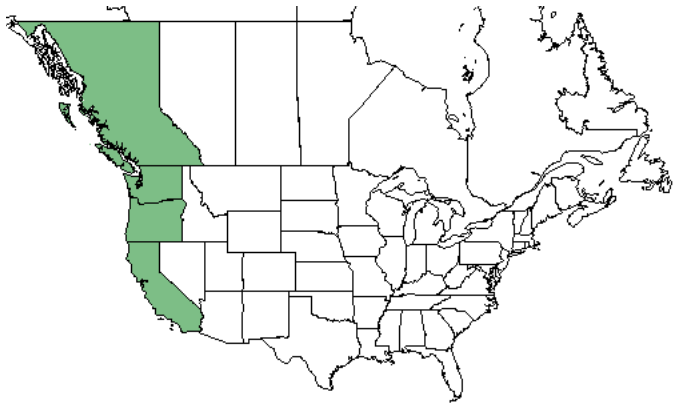
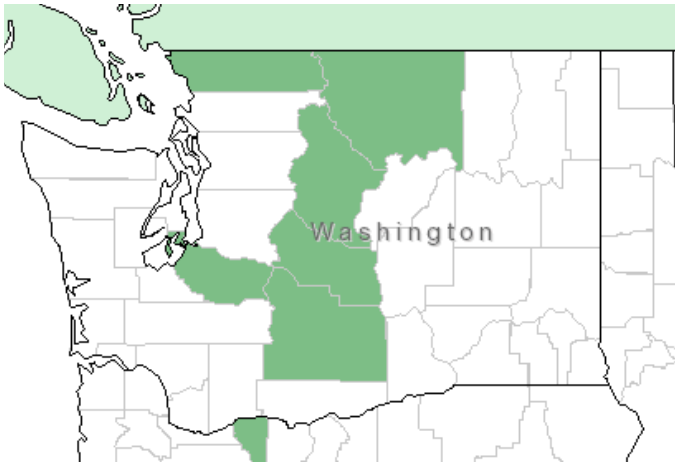
Plant Propagation Protocol for *Smelowskia ovalis*
ESRM 412 – Native Plant Production
Protocol URL: https://courses.washington.edu/esrm412/protocols/*SMOV.pdf*

Smelowskia ovalis, Alpine false candytuft (© 2010, Ray Izumi[1])

TAXONOMY	
Plant Family	
Scientific Name	Brassicaceae
Common Name	Mustards, crucifers, cabbage family
Species Scientific Name	
Scientific Name	*Smelowskia ovalis*
Varieties	*Smelowskia ovalis* var. *congesta* (Rollins)[2] *Smelowskia ovalis* var. *ovalis*
Sub-species	N/A
Cultivar	N/A
Common Synonym(s)	N/A
Common Name(s)	Alpine false candytuft, short-fruited smelowskia
Species Code (as per USDA Plants database)	SMOV

GENERAL INFORMATION	
Geographical range	**North America Distribution**  **Washington State Distribution**  Source: USDA Plants Database[3]
Ecological distribution	Appears to be rare in Oregon, common at Mt. Lassen (Shasta County, California), and widespread at high elevations in Washington[4]; temperature range 27 to 36 °C
Climate and elevation range	Typically experiences a wet season of 6 to 10 months[5]; Found at 1500-3400 m[4]
Local habitat and abundance	Loose talus, mica shist, alpine rock slides, rocky moraines, rock crevices[4]; mesic to dry rocky slopes and fellfields in the alpine zone[6]; rocky crevices, moraines, ridges and talus slopes in alpine and sup-alpine regions[1]

Plant strategy type / successional stage	Stress-tolerator
Plant characteristics	Forb/ herb; Flowering Jul-Aug.; flowers: sepals (persistent), 2-2.5 mm; petals usually white, rarely pinkish, spatulate to obovate; fruits suberect to ascending, ovoid to suboblong, terete or slightly flattened; seeds 1-1.5 × 0.6-0.7 mm[4] Form small rosettes of densely tufted compound leaves; produce short, spikey racemes of white flowers followed by small pods[7] Stems reach approx. 5-15 cm long, simple or branched, densely hairy with long, simple and short, branched hairs[2]
PROPAGATION DETAILS	
Ecotype	N/A
Propagation Goal	Plants
Propagation Method	Seed
Product Type	Container (plug)
Stock Type	N/A
Time to Grow	Unknown
Target Specifications	N/A
Propagule Collection Instructions	*S. ovalis* produces siliques (seed capsules)[3], a structure that can be dried and seeds removed from in other species
Propagule Processing/Propagule Characteristics	Unknown
Pre-Planting Propagule Treatments	Seeds should be removed from dried siliques before dormancy treatments and cleaned of chaff. Other species of Brassicaceae have been documented responding to dark, moist stratification for 15-30 days[8]
Growing Area Preparation / Annual Practices for Perennial Crops	Given that *S. ovalis* occurs natively in rocky substrate, growing media in the nursery should be well aerated and allow for adequate drainage. No further information was found.
Establishment Phase Details	Unknown
Length of Establishment Phase	Unknown
Active Growth Phase	Unknown
Length of Active Growth Phase	Up to 2 months[5]
Hardening Phase	Hardening phase should include a reduction in water supply and cooler coditions as *S. ovalis* occurs in high elevation water-limited environments[5]
Length of Hardening Phase	Unknown
Harvesting, Storage and Shipping	Unknown

Length of Storage	Unknown
Guidelines for Outplanting / Performance on Typical Sites	Unknown
Other Comments	While commonly occurring in the wild, little information exists that documents the propagation practices of *S. ovalis* from seed.
INFORMATION SOURCES	
References	See below
Other Sources Consulted	See below ([9],[10],[11],[12],[13])
Protocol Author	Carter Johnson
Date Protocol Created or Updated	05/16/18

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