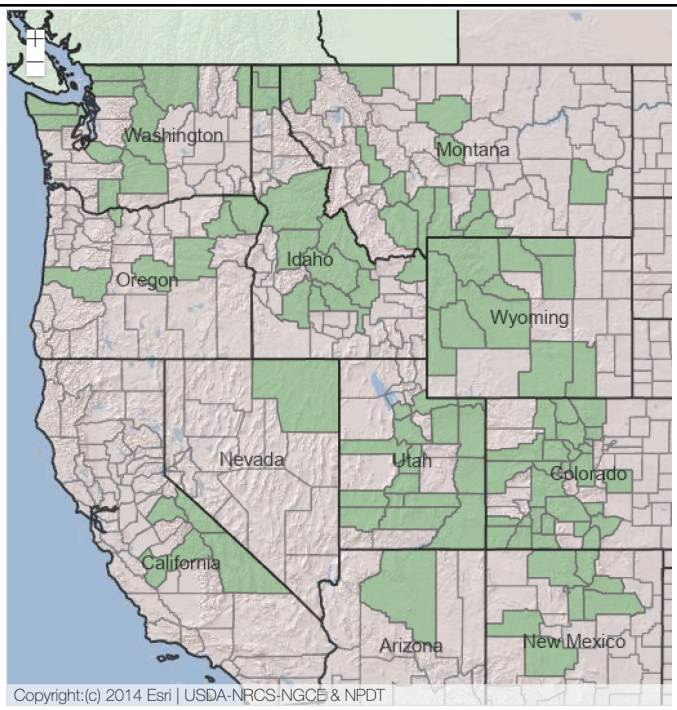
Plant Propagation Protocol for *Minuartia obtusiloba*
ESRM 412 – Native Plant Production
URL: https://courses.washington.edu/esrm412/protocols/*2025*/*MIOB2*

TAXONOMY	
Plant Family	
Scientific Name	*Caryophyllaceae* Jussieu
Common Name	Pink family
Species Scientific Name	
Scientific Name	*Minuartia obtusiloba*
Sub-species	*Minuartia* is a highly polyphyletic genus. Recent phylogenetic analysis has placed it within the new genus *Cherleria* after *Minuartia* was broken up into 11 genera [8].
Common Synonym(s)	*Cherleria obtusiloba* (Rydb.) A.J. Moore & Dillenb., *Arenaria obtusiloba* (Rydb.) Fern., *Alsinopsis obtusiloba* (Rydb.), *Lidia obtusiloba* (Rydb.), *Arenaria sajanensis, Minuartia sajanensis* [4, 10, 8].
Common Name(s)	Twinflower sandwort, alpine sandwort, alpine stitchwort, cushion sandwort [4, 10]
Species Code (as per USDA Plants database)	MIOB2
GENERAL INFORMATION	
Geographical range	 Alta., B.C., N.W.T., Yukon, Alaska, Ariz., Calif., Colo., Idaho, Mont., Nev., N.Mex., Oreg., Utah, Wash., Wyo., Asia (Russian Far East) [6]

	 [7]
Ecological distribution	Subalpine and alpine. Dry summers, snowy winters
Climate and elevation range	0-13,000 ft, hardy to USDA zone 3 [6]
Local habitat and abundance	Fell-fields, snowbeds, gravel bars, alpine meadows, rocky slopes, tundra. [6, 4]
Plant strategy type / successional stage	Survives harsh conditions: colonization of rocky and dry soils in alpine areas with seasonal snow cover. Seeds dispersed by wind or spring flooding, can germinate in continuous darkness if buried by colluvial or wildblown silt [2].
Plant characteristics	Caespitose (mat-forming) perennial forb/herb with short and slender woody roots. White flowers bloom in summer from at the end of stems that stick up from vegetation below, 0.4-2.4 in tall. Basal leaves are numerous and linear, 1-8mm long by 0.4-1mm wide, dead leaves remain on the plant and help to form the mat [6, 10]. Seeds are tiny, 0.6-0.7 mm with radicle end prolonged into beak shape [6] Cherleria is one of two clades of Minuartia that have sepals with obtuse, not acute tips. [8]
PROPAGATION DETAILS: FROM SEED	
Propagation Goal	Plants
Propagation Method	Seed
Product Type	Containers

Stock Type	2.5 inch pots
Time to Grow	1 year
Target Specifications	
Propagule Collection Instructions	Seeds are contained within a capsule turns from green to tan as it dries and splits open [5]. Don't collect capsules that have already dropped all seeds. [10] Flowers in summer, collect seeds late summer. [2]
Propagule Processing/Propagule Characteristics	Drying capsules and agitating them in some way to open and release seeds. Seeds 0.6-0.7 mm. Seeds can be stored at 5 F for at least 6-7 months [2].
Pre-Planting Propagule Treatments	Seeds are non-dormant, no stratification needed. Can be sown in late fall and allowed to naturally overwinter and germinate in spring [9].
Growing Area Preparation / Annual Practices for Perennial Crops	Press seeds onto surface without burying in 4 inch pots with 7:10:3 peat to perlite to sand [9, 3]. Sow in late winter or early spring [9].
Establishment Phase Details	Seeds germinate at 64-72 F. Can germinate in variety of lighting conditions, but once germinated provide full sun [3, 9, 1, 2].
Length of Establishment Phase	Weeks to months [9]
Active Growth Phase	Transplant into 2.5 inch pots once true leaves emerge. Place in misting system 1-3 weeks, then add granite grit and keep soil moist but avoid overwatering [3, 9]
Length of Active Growth Phase	June - September [4].
Hardening Phase	Allow to undergo natural alpine climatic conditions and overwinter.
Length of Hardening Phase	September - early spring
Harvesting, Storage and Shipping	Deliver pots for outplanting in spring [3].
PROPAGATION DETAILS: VEGETATIVE	
Propagation Goal	Plants
Propagation Method	Vegetative
Product Type	Container
Stock Type	2.5 inch pots
Time to Grow	1 year
Propagule Collection Instructions	Take cuttings in late spring to early summer [3]. Take nonflowering stems 2-3 in long, make a clean cut below the leaf node and remove bottom leaves [9].
Pre-Planting Propagule Treatments	Optional: dip proximal end in rooting hormone [9].
Growing Area Preparation / Annual Practices for Perennial Crops	Same media as seed sowing: 7:10:3 peat to perlite to sand [3]. Maintain cool temperature, 59-64 F [9].
Establishment Phase Details	Place under misting system to keep humid [3].

Length of Establishment Phase	1-3 weeks, until roots hold plant firm when lightly tugged [9, 3].
Active Growth Phase	Dress with granite grit after 1-3 weeks of misting [3]. Keep soil moist but do not overwater.
Harvesting, Storage and Shipping	Allow to overwinter and deliver for outplanting in spring [3].

INFORMATION SOURCES

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