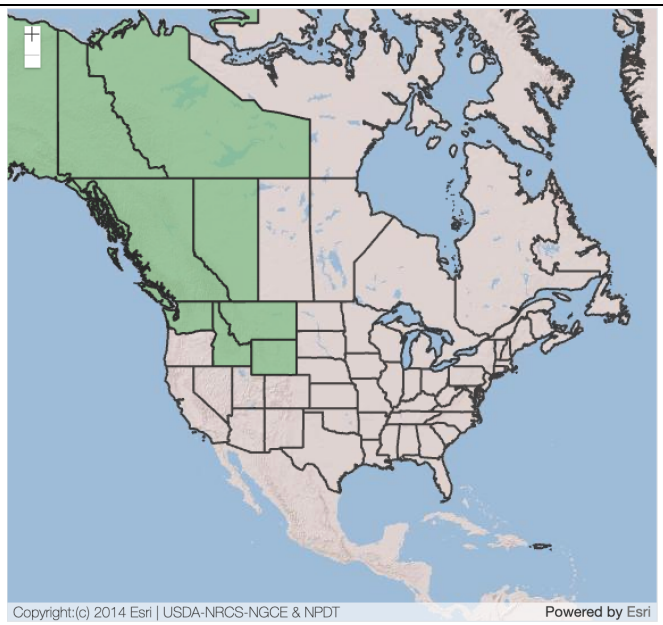
Plant Propagation Protocol for Anemone lithopila Rydb.

ESRM 412 – Native Plant Production

URL: https://courses.washington.edu/esrm412/protocols/*2025*/ANLI4.*pdf*

TAXONOMY	
Plant Family	
Scientific Name	Ranunculaceae Juss.
Common Name	Buttercup Family
Species Scientific Name	
Scientific Name	Anemone lithophila Rydb.
Varieties	No information found
Sub-species	No information found
Cultivar	No information found
Common Synonym(s)	Anemone drummondii S. Watson var. lithophila (Rydb.) C.L. Hitchc. (1) *Anemone globosa var. lithophila* (Rydberg) M.Peck (2) Anemone drummondii subsp. Drummondii (4)
Common Name(s)	Little Belt Mountain thimbleweed
Species Code (as per USDA Plants database)	ANLI4
GENERAL INFORMATION	
Geographical range	 *Distribution map of Anemone lithophila Rydb. from the USDA* https://plants.sc.egov.usda.gov/plant-profile/ANLI4
Ecological distribution	Slopes, ridges (2,3) Rocky slopes, conifer forest, alpine (4)
Climate and elevation range	No Climate information found Elevation between 2100 and 3300 M (2)
Local habitat and abundance	No information found on Local habitat

	Anemone drummondii var. drummondii and Anemone drummondii var. lithophila are considered to be blue and yellow (respectively) on the BC Red Blue List (5)
Plant strategy type / successional stage	No information found
Plant characteristics	"Perennial with a short thick rootstock: basal leaves several, glabrous or nearly so, thickish, shining, somewhat glaucous; petioles 5-8 cm. long; blades ternate; divisions obovate-cuneate, about 3 cm. long, strongly veined, deeply 3-cleft, again cleft and toothed; the ultimate segments short, oblong-oblanceolate: scape I-2 dm. high, sparingly pubescent with long silky hairs: in- volucral leaves subsessile or short-petioled; divisions similar to those of the basal leaves : sepals silky, ochroleucous, tinged with blue, I12-15 mm. long, broadly obovate or oval: achenes densely villous all over : style filiform, about 2mm. long." (10) Perennial Herb w/ Achene fruit (spheric not cylindric); full plant can be up to 10 inches tall (3,5) "Ahenes are wooly all over, not merely strigose on the back as in that species [A. Tetonensis] and the flowers are larger and lighter"; Though to be a hybrid of A. parviflora and A. globose Nutt. (10) "Aerial shoots (7-) 10-25 cm. Basal leaves 5-12 (-15); petiole 5-9 cm; leaflets nearly glabrous or pilose; ultimate segments of lateral leaflets 1.5-2.6 mm wide. Inflorescences: peduncle pilose; involucral-bracts nearly glabrous or pilose; ultimate segments of lateral leaflets 1.5-2.6 mm wide. Flowers: sepals white, tinged blue, rarely abaxially white and blue, adaxially white, abaxially hairy; filaments yellow. Heads of achenes spheric. 2n=48." (*in reference to synonymous Anemone drummondii var. lithophila* - 2,4)
PROPAGATION DETAILS: FROM SEED	
Ecotype	No information found
Propagation Goal	Plants
Propagation Method	Seeds
Product Type	Container
Stock Type	No information found
Time to Grow	0 *in reference to Anemone occidentalis Wats (6)
Target Specifications	No information found
Propagule Collection Instructions	"Seeds are collected in mid August. Seeds are mature when the achenes are brown and the cotton-like material encasing the seeds is fully expanded. Seeds are collected in paper bags and kept in a well ventilated drying shed prior to cleaning." *in reference to Anemone multifida Poir (7) Flowers from June to August; Seed collection post august (2,4)

Propagule Processing/Propagule Characteristics	"Seeds exhibit morpho-physiological dormancy" *in reference to Anemone occidentalis Wats and Anemone multifida Poir (6,7) Germination occurs at 20 C. *in reference to Anemone occidentalis Wats (6) "Seeds are cleaned with a hammermill at NRCS. Seed longevity is 5 years at 3 to 5C in sealed containers. Seeds/Kg: 820,000/kg % Purity:100% % Germination: 60%" ^*in reference to Anemone multifida Poir (7)
Pre-Planting Propagule Treatments	"Two year old dry stored seeds were placed into a 24 hour running water rinse prior to a 120 day outdoor cold, moist stratification. Germination occurs when day temperatures reach 21 C in early May. Fresh seeds must be dry stored for 6 months prior to stratification or treated with gibberellic acid prior to cold, moist stratification. %Germination:60%" ^*in reference to Anemone multifida Poir (7)
Growing Area Preparation / Annual Practices for Perennial Crops	No information found on Annual/Perennial practices Anemone drummondii var. lithophila requires anaverage SMR of 3 and average elevation of 2155m. (5) "Grow in humus-rich, gritty or gravelly, moist but well-drained soil in full sun or partial shade. Deadhead regularly. In the wild, flowering time is dependent upon elevation and timing of snow melt. Avoid wet, waterlogged winter conditions." (8)
Establishment Phase Details	No information found
Length of Establishment Phase	No information found
Active Growth Phase	No information found
Length of Active Growth Phase	No information found
Hardening Phase	No information found
Length of Hardening Phase	No information found
Harvesting, Storage and Shipping	"Storage Conditions: Overwinter in outdoor nursery under insulating foam cover and snow." <-in reference to Anemone multifida Poir (7)
Length of Storage	5 months <-in reference to Anemone multifida Poir (7)
Guidelines for Outplanting / Performance on Typical Sites	No information found

Other Comments	Majority of the information above relates to Anemone multifida Poir, which can share a similar ecological range and distribution to Anemone lithophila Rydb. but not exactly. More information needed on species through experimental extrapolation.
PROPAGATION DETAILS: VEGETATIVE	
Ecotype	No information found
Propagation Goal	Plants
Propagation Method	Vegetative (8)
Product Type	Plug + Propagules
Stock Type	No information found
Time to Grow	No information found
Target Specifications	No information found
Propagule Collection Instructions	“Division is a simple means of vegetative propagation for plants that produce suckers, stolons, bulbs, tubers or rhizomes.To propagate by division, dig up the plant and divide it carefully using a spade or secateurs. The newly divided portions of plant are potted into appropriate potting media, containing controlled release fertiliser.” (9) Division is suggested for the active growth period.
Propagule Processing/Propagule Characteristics	No information found
Pre-Planting Propagule Treatments	No information found
Growing Area Preparation / Annual Practices for Perennial Crops	No information found
Establishment Phase Details	No information found
Length of Establishment Phase	No information found
Active Growth Phase	No information found
Length of Active Growth Phase	No information found
Hardening Phase	No information found
Length of Hardening Phase	No information found
Harvesting, Storage and Shipping	No information found

Length of Storage	No information found
Guidelines for Outplanting / Performance on Typical Sites	No information found
Other Comments	More information needed on species through experimental extrapolation. Germination is likely to be slow and erratic depending on elevations (8)

INFORMATION SOURCES

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