



Plant Propagation Protocol for *Allium macrum*

ESRM 412 – Native Plant Production

URL: <https://courses.washington.edu/esrm412/protocols/2024/ALMA5.pdf>

TAXONOMY	
Plant Family	
Scientific Name	Liliaceae [10]
Common Name	Lily Family [10]
Species Scientific Name	
Scientific Name	<i>Allium macrum</i> Genus: <i>Allium</i> [11] Species: <i>Macrum</i> [11]
Varieties	Information Not Found
Sub-species	Information Not Found
Cultivar	Information Not Found
Common Synonym(s)	<i>Allium equicaeleste</i> [8]
Common Name(s)	<i>Rock Onion</i> [9]
Species Code (as per USDA Plants database)	ALMA5 [11]
GENERAL INFORMATION	
Geographical range	United States: OR and WA. [8]  [11]
Ecological distribution	This plant grows in dry and mountainous regions. [4]
Climate and elevation range	They grow at an elevation of 630-780 meters. [1]
Local habitat and abundance	They grow in vernal moist areas on open slopes with little to no shade. [1]
Plant strategy type / successional stage	Information Not Found
Plant characteristics	Forb/herb [11] There are 1–3 bulbs, where the outer coats enclose 1 or more bulbs, membranous, lacking cellular reticulation or cells arranged in only 2–3 rows adjacent to roots, quadrate, without fibers. The leaves are persistent, withering from tip at anthesis, 2; blades solid, flat, or channeled, falcate, 12–38 cm × 2–3 mm. The flowers range from 5–7 mm; tepals spreading, lanceolate, equal, white or pinkish with prominent red midveins, margins entire, apex acute to acuminate; stamens equaling tepals or exserted; ovary crested with 3 obtuse processes; stigma scarcely thickened, unlobed. [3]

PROPAGATION DETAILS	
Ecotype	Information Not Found
Propagation Goal	Bulbs [5]
Propagation Method	Seed [3]
Product Type	Container [4]
Stock Type	Bulbs [5]
Time to Grow	Should be planted and grown in the spring and summer. [4]
Target Specifications	<p>By the end of the nursery. The flowers should be 5–7 mm and white or pinkish with prominent red midveins. [1] They will have about 1-3 bulbs. [5] They will grow up to 1 foot tall. [6]</p>  <p>[7]</p>
Propagule Collection Instructions	Information Not Found
Propagule Processing/Propagule Characteristics	Information Not Found
Pre-Planting Propagule Treatments	Information Not Found
Growing Area Preparation / Annual Practices for Perennial Crops	Lithosol and barren, gravelly soils in the shrub-steppe.
Establishment Phase Details	Information Not Found
Length of Establishment Phase	Information Not Found
Active Growth Phase	Information Not Found
Length of Active Growth Phase	12 weeks to 1 year.
Hardening Phase	Information Not Found
Length of Hardening Phase	Information Not Found
Harvesting, Storage and Shipping	Remove the head and stalks as soon as they turn brown. Then put it into a paper bag and prepare to collect the seeds when the pods open. Then sow the seed right after or they can be stored in a cool and dry place until the following spring. [2]
Length of Storage	Information Not Found
Guidelines for Outplanting / Performance on Typical Sites	Information Not Found
Other Comments	N/A
INFORMATION SOURCES	
References	See Below
Other Sources Consulted	N/A
Protocol Author	Natasha Bounma
Date Protocol Created or Updated	05/31/2024

References

1. *Allium constrictum* - wa - DNR. (n.d.).
https://www.dnr.wa.gov/publications/amp_nh_alco3.pdf
2. Alliums. Crocus. (n.d.).
[https://www.crocus.co.uk/features/_/articleid.955/#:~:text=Remove%20the%20heads%20\(and%20stalks,place%20until%20the%20following%20spring.](https://www.crocus.co.uk/features/_/articleid.955/#:~:text=Remove%20the%20heads%20(and%20stalks,place%20until%20the%20following%20spring.)
3. *Allium macrum* S. Watson. Oregonflora. (n.d.).
<https://oregonflora.org/taxa/index.php?taxon=2618>
4. *Allium*. Allium (Onion, Ornamental Onions) | North Carolina Extension Gardener Plant Toolbox. (n.d.).
<https://plants.ces.ncsu.edu/plants/allium/#:~:text=The%20easiest%20method%20of%20propagation,may%20take%20years%20to%20germinate.>
5. *Chapter 3: 3.13 selecting plant species for propagation*. Chapter 3 | 3.13 Selecting Plant Species for Propagation. (n.d.).
https://www.nativerivevegetation.org/learn/manual_2017/chpt3_planning/3_13_select_plant_species.aspx
6. *Flora of North America*. Allium macrum in Flora of North America @ efloras.org. (n.d.).
http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=242101372
7. *Photos of allium macrum · inaturalist*. iNaturalist. (n.d.).
https://www.inaturalist.org/taxa/158181-Allium-macrum/browse_photos
8. Rcarr. (2020, February 7). *Rcarr*. Flora of Eastern Washington and Adjacent Idaho.
<https://inside.ewu.edu/ewflora/allium-macrum/>
9. *Rock onion (allium macrum)*. Rock Onion (Allium macrum) | Idaho Fish and Game. (n.d.). <https://idfg.idaho.gov/species/taxa/52826>
10. USDA plants database. (n.d.).
<https://plants.sc.egov.usda.gov/home/plantProfile?symbol=ALMA5>
11. WTU Herbarium, B. M. (n.d.). *Allium macrum*. Allium macrum - burke herbarium image collection.
<https://burkeherbarium.org/imagecollection/taxon.php?Taxon=Allium+macrum>