Plant Propagation Protocol for Lupinus pusillus

ESRM 412 – Native Plant Production

Protocol URL: https://courses.washington.edu/esrm412/protocols/LUPU.pdf





TAXONOMY Plant Family Scientific Name Fabaceae⁴ Common Name Legume family Species Scientific Name Lupinus pusillus Pursh⁴ Scientific Name Varieties None⁴ **Sub-species** Lupinus pusillus Pursh ssp. intermontanus (A. Heller) D. Dunn⁴ Lupinus pusillus Pursh ssp. pusillus ⁴ Lupinus pusillus Pursh ssp. rubens (Rydb.) D. Dunn⁴ None⁴ Cultivar None⁴ Common Synonym(s) rusty lupine, intermountain lupine, dwarf lupine⁴ Common Name(s) Species Code (as per USDA Plants LUPU⁴ database) **GENERAL INFORMATION**

Geographical range	
	Washington
Ecological distribution	These plants can be found in desert shrub and pinyon-
Climate and elevation range	juniper communities, often growing in sandy soils. ² Dry climates, with hot summers and cold winters. They are found at higher altitudes, 2500 to 6150 feet. ²
Local habitat and abundance	The nearest these plants can be found is in Eastern Washington, in Kittitas County. They have a relatively large range and are abundant. ⁴

Plant strategy type / successional stage	Stress-tolerator ²
Plant characteristics	This is a forb. It's an annual that has anywhere from 4-38 bluish flowers. The leaves are ~1in long lancelet shaped and covered in soft hairs. The plant can get up to 9 inches tall and the seedpods are oval shaped. The flowers often contrast sharply with the ground making them easy to spot. ³
PROPAGATION DETAILS	
Ecotype	N/A
Propagation Goal	Plants ⁵
Propagation Method	Seed ⁵
Product Type	Propagules ⁵
Stock Type	N/A
Time to Grow	Plant in summer and let harden through winter ⁵
Target Specifications	N/A
Propagule Collection Instructions	Collect in spring ^{5,3}
Propagule Processing/Propagule	N/A
Characteristics	
Pre-Planting Propagule Treatments	Scarify seeds with a few passes of sandpaper and let
	soak in water overnight. Inoculate with rhizobium. ⁵
Growing Area Preparation / Annual Practices for Perennial Crops	Difficult to maintain in containers, plant in situ. 5
Establishment Phase Details	They should emerge within one week, but could take
	up to 4, should be at least 70 degrees F. 5,3
Length of Establishment Phase	N/A
Active Growth Phase	N/A
Length of Active Growth Phase	N/A
Hardening Phase	N/A
Length of Hardening Phase	Let the plants drop their seeds and self-sow naturally,
	weathering during winter will scarify the seeds and
	prep them to germinate again. ⁵
Harvesting, Storage and Shipping	N/A
Length of Storage	N/A
Guidelines for Outplanting /	N/A
Performance on Typical Sites	
Other Comments	N/A
INFORMATION SOURCES	
References	1.Cretti, J. L., & Newcomer, M. A. (2012). Rocky Mountains gardeners resource: All you need to know to plan, plant, & maintain a Rocky Mountain garden. Minneapolis, MN: Cool Springs Press. 2.Fagan, D. (2012). Canyon country wildflowers: A
	Guide to common wildflowers, shrubs, and trees. Guilford: FalconGuides.

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	3.Hills, L. D. (1976). <i>The propagation of alpines</i> .
	Sakonnet, RI: Theophrastus.
	4.USDA. (n.d.). Lupinus pusillus Pursh. Retrieved May
	29, 2019, from https://plants.usda.gov/core/profile?
	symbol=LUPU#
	5. Wasowski, S., & Wasowski, A. (1995). Native
	gardens for dry climates. New York: C. Potter.
Other Sources Consulted	Cullina, W. (2000). The New England Wild Flower
	Society guide to growing and propagating
	wildflowers of the United States and Canada.
	Boston: Houghton Mifflin.
	How to Grow Lupine Organically. (2018, May 08).
	Retrieved May 29, 2019, from
	https://www.planetnatural.com/growing-lupine/
	Lupinus pusillus. (2018, February 09). Retrieved May
	29, 2019, from https://en.wikipedia.org/wiki/
	Lupinus pusillus#cite note-CCW-2
	Peterson, C. (1998, May 24). To Love a Lupine (or
	Something Like It). Retrieved May 29, 2019, from
	https://www.nytimes.com/1998/05/24/style/
	cuttings-to-love-a-lupine-or-something-like-it.html
	University of Hawaii. (n.d.). Fabaceae. Retrieved May
	29, 2019, from http://www.botany.hawaii.edu/
	faculty/carr/fab.htm
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