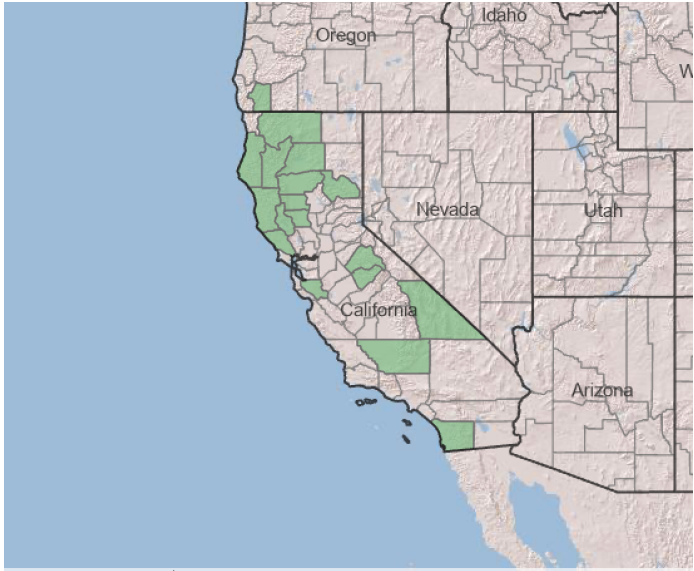


Plant Propagation Protocol for *Lupinus adsurgens*

ESRM 412 – Native Plant Production

URL: <https://courses.washington.edu/esrm412/protocols/2025/LAUD.pdf>

TAXONOMY	
Plant Family	Fabaceae
Scientific Name	<i>Lupinus adsurgens</i>
Common Name	Drew’s silky lupine
Species Scientific Name	
Scientific Name	<i>Lupinus adsurgens</i> E. Drew
Varieties	<i>L. adsurgens</i> var. <i>adsurgens</i> ⁶ , <i>L. adsurgens</i> var. <i>lilacinus</i> ⁵ , <i>L. adsurgens</i> var. <i>undulatus</i> ⁴
Sub-species	N/A
Cultivar	N/A
Common Synonym(s)	No known common synonyms
Common Name(s)	Drew’s silky lupine,
Species Code (as per USDA Plants database)	LAUD
GENERAL INFORMATION	
Geographical range	<p align="center">California and southern Oregon</p>  <p align="center"><small>Copyright:(c) 2014 Esri USDA-NRCS-NGCE & NPDT Powered by Esri</small></p>
Ecological distribution (ecosystems it occurs in, etc)	Mountain forest habitats
Climate and elevation range	500-3500m, dry mountain areas. ⁷

Local habitat and abundance	Mountainous dry slopes and forests. ³
Plant strategy type / successional stage	Shade tolerant, and limited water tolerant ¹¹
Plant characteristics	Life form: Forb ⁶ Seed description: Seeds vary between 3-6mm long and are described as mottled brown. Seeds are stored in fruit Flowers: Flowering occurs between May and July, and the flowers are 9-12mm long uncurled, toothed. They are purple (lavender or violet) with a white and yellow inner part (closest to the stem). ⁷
PROPAGATION DETAILS: FROM SEED	
Ecotype	No available ecotype information.
Propagation Goal	Plants
Propagation Method	Seeds
Product Type	Plug (container) ³
Stock Type	Deepot 40 ¹⁰
Time to Grow	Some sources say weeks ³ , while others say 4 months ¹⁰
Target Specifications	Well-developed crowns, roots filling container with well-developed rhizomes ³
Propagule Collection Instructions	Seeding will occur soon after blooming, suggesting that seeds should be collected in July-August. Collect fruit for processing, store in dry conditions to allow fruits to dry. ^{7,11,13}
Propagule Processing/Propagule Characteristics	Assuming that most lupin seeds are around the same weight, this seed density could vary from 18,000-27,000/lb. ¹²
Pre-Planting Propagule Treatments	Screening will likely be required to remove coarse material and mature pods. Most lupine species appear to store for extended periods of time while remaining viable. ^{9,10} This is likely due to the typically thicker seed coat of most lupine species. ¹² As a result, scarification shown to increase germination. ^{3,12}
Growing Area Preparation / Annual Practices for Perennial Crops	Germination media: Some sources germinated in standard potting mix ¹⁰ Growing media: Fafard germinating mix (superfine) ⁹ Note: This growing media comes from a general propagation protocol for the genus <i>Lupinus</i> , not specifically <i>Lupinus adsurgens</i> .
Establishment Phase Details	Sowing method: direct sowing ¹⁰ in early spring ¹³ . Water or mist by hand. After germination, it is recommended to perform a rhizobium inoculation. ³
Length of Establishment Phase	3 weeks ¹⁰
Active Growth Phase	Species should be watered deeply when dry and fertilize with NPK 13-13-13 at 3 months. Keep plants in an outdoor shade house during the growth period. ¹⁰

Length of Active Growth Phase	2-3 months ¹⁰
Hardening Phase	As this species of lupine is primarily on dry slopes, it is highly likely that <i>Lupinus adsurgens</i> will need to be hardened off before transplantation. Based on hardening information for <i>Lupinus succulentus</i> , place seedlings in full sun exposure for a minimum of 2 weeks prior to outplanting. ¹³
Length of Hardening Phase	2-4 weeks ¹³
Harvesting, Storage and Shipping	Immediately after hardening phase is completed according to outplanting site requirements.
Length of Storage	No information is available, however with the hardening stage being based on the expected outplanting date, it could be safe to assume that lupine should be out planted as soon as possible after hardening.
Guidelines for Outplanting / Performance on Typical Sites	Seedlings should be shipped to outplanting site as soon as hardening phase is considered completed. Information about survival rate at outplanting site is unavailable.
Other Comments	Much of the active growth information is based on another lupine species, <i>Lupinus arboreus</i> . ¹⁰ Hardening data was found for <i>Lupinus succulents</i> , a species found in southern California found on rocky ridges. ¹³
PROPAGATION DETAILS: VEGETATIVE	
Other Comments	Little to no information available about vegetative propagation of lupine species of any kind. Seeds seem to be the most effective way for propagating the genus <i>Lupinus</i> .
INFORMATION SOURCES	
References	<ol style="list-style-type: none"> 1. Treatment from Jepson Manual (1993) <i>Lupinus adsurgens</i> https://ucjeps.berkeley.edu/cgi-bin/get_JM_treatment?3691,4023,4024 2. (https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.160887/Lupinus_adsurgens) 3. RNGR – <i>Lupinus adsurgens</i> https://rngr.net/renderNPNProtocolDetails?selectedProtocolIds=fabaceae-lupinus-4050 4. <i>L. adsurgens</i> var <i>undulatus</i> https://plants.usda.gov/plant-profile/LUADU 5. <i>L. adsurgens</i> var. <i>lilacinus</i> https://plants.usda.gov/plant-profile/LUADL 6. <i>L. adsurgens</i> var. <i>adsurgens</i> https://plants.usda.gov/plant-profile/LUADA

	<p>7. Jepson Herbarium UC Berkeley https://ucjeps.berkeley.edu/eflora/eflora_display.php?tid=31681</p> <p>8. Lupinus sericeus (silky lupine) USDA Fire Effects information system. https://www.fs.usda.gov/database/feis/plants/forb/lupser/all.html</p> <p>9. L, Springer Lupinus RGNR (done in Colorado) https://rngr.net/renderNPNProtocolDetails?selectedProtocolIds=fabaceae-lupinus-906</p> <p>10. L. arboreous RGNR https://rngr.net/renderNPNProtocolDetails?selectedProtocolIds=fabaceae-lupinus-2353</p> <p>11. Calflora.org Lupinus adsurgens https://www.calflora.org/entry/plantchar.html?crn=10082</p> <p>12. USDA D.E Riemenschneider, Lipinus L. https://www.fs.usda.gov/nsi/Wpsm/Lupinus.pdf</p> <p>13. RGNR Lupinus succulentus https://rngr.net/renderNPNProtocolDetails?selectedProtocolIds=fabaceae-lupinus-3189</p>
Other Sources Consulted	<p>14. https://plants.usda.gov/plant-profile/LUAD</p> <p>15. Lupinus elatus https://plants.usda.gov/plant-profile/LUEL</p> <p>16. L. sericeus RGNR https://rngr.net/renderNPNProtocolDetails?selectedProtocolIds=fabaceae-lupinus-3342</p>
Protocol Author	Matilda W. Webster
Date Protocol Created or Updated	05/25/2025