

Plant Propagation Protocol for LANE3

ESRM 412 – Native Plant Production

Protocol URL: <https://courses.washington.edu/esrm412/protocols/LANE3.pdf>

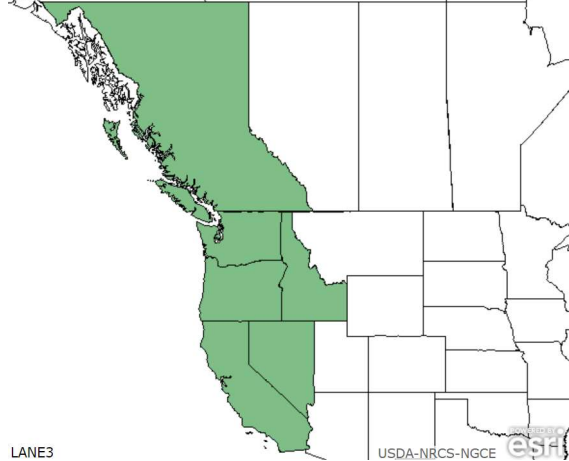




Source 4

TAXONOMY

Plant Family	
Scientific Name	Fabaceae/Leguminosae ¹
Common Name	Pea ¹
Species Scientific Name	
Scientific Name	<i>Lathyrus nevadensis</i> S. Watson ¹
Varieties	<i>Lathyrus nevadensis</i> ssp. <i>lanceolatus</i> var. <i>nuttallii</i> (S. Watson) (Howell) C.L. Hitchc. ¹

	<p><i>Lathyrus nevadensis ssp. lanceolatus var. parkeri</i> (S. Watson) (Howell) (H. St. John) C.L. Hitchc. ¹</p> <p><i>Lathyrus nevadensis ssp. lanceolatus var. pilosellus</i> (S. Watson) (Howell) (M. Peck) C.L. Hitchc. ¹</p> <p><i>Lathyrus nevadensis ssp. lanceolatus var. puniceus</i> (S. Watson) (Howell) C.L. Hitchc. ¹</p>
Sub-species	<p><i>Lathyrus nevadensis ssp. cusickii</i> (S. Watson) C.L. Hitchc. ¹</p> <p><i>Lathyrus nevadensis ssp. lanceolatus</i> (Howell) C.L. Hitchc. ¹</p> <p><i>Lathyrus nevadensis ssp. Nevadaensis</i> S. Watson. ¹</p>
Cultivar	None
Common Synonym(s)	<p><i>Lathyrus lanceolatus</i> Howell. ⁴</p> <p><i>Lathyrus nuttallii</i> S. Watson. ⁴</p>
Common Name(s)	Sierra Pea ² , Sierra Sweet Pea ² , Sierran Vetching ² , Purple Peavine ³ , Cusick's pea ⁸
Species Code (as per USDA Plants database)	LANE3 ¹
GENERAL INFORMATION	

<p>Geographical range</p>	 <p>LANE3 USDA-NRCS-NGCE esri</p> <p>Source 1</p>  <p>Source 4</p>  <p>Source 5</p>
<p>Ecological distribution</p>	<p>Mixed deciduous and coniferous slopes.² Dry soil.² Part-shade.² Moderately moist to dry open woods and clearings.^{3, 8} Occurs from California to British Columbia, and as far East as Idaho.¹ Found predominately on low-mid mountain slopes.³</p>
<p>Climate and elevation range</p>	<p>Grows at elevations between 450m-2300m.⁶ Boreal, temperate, or cool mesothermic climates.</p>
<p>Local habitat and abundance</p>	<p>Abundance: Native. Not threatened or endangered.^{2, 4, 7}</p> <p>Key Attributes of Habitat:</p> <p>All sites: Gradient slope of 0-240%, average site findings of 18%⁸</p> <p>Aspect 0-360°, average site findings of 195° (SSW facing).⁷</p> <p>Western/Coastal sites: Mesic to dry open forests, glades, and meadows in lowland and mountainous zones.^{2, 7} Needs moderately dry to fresh, nitrogen (N) rich soils.⁷ Occurrence decreases as elevation, precipitation,</p>

	<p>and latitude increase.⁷ Found most often in broad-leaved forests in well drained sites.⁷ Symbiotic relationship with N fixing bacteria.⁷</p> <p>Eastern Sites: 1,310-1,950m.⁸ Warm, dry slopes.⁸ Found with Grand Fir, White Spiraea, and Ponderosa Pine.⁸</p>
<p>Plant strategy type / successional stage</p>	<p>Perennial. Stress-tolerator, due to its underground rhizome structure it can tolerate disturbances like fire and come back in the same spot next year.¹²</p>
<p>Plant characteristics</p>	<p>General: Wildflower.³ Perennial herb.³ Has creeping rhizomes and erect/clambering angled stems.³ 15cm - 100cm tall.⁷ Soft hairy stem.⁷</p> <p>Leaves: Pinnately compound leaves with 4-10 leaflets.³ Leaves (opposite) up to 12cm long and 3cm wide.^{3,7} Some grasping tendrils.⁷ 2-lobed stipules, lance-shaped to linear, which are less than 1/2 as long as the leaflets.⁷</p> <p>Flowers: Blueish-purple to mauve-red, pea like flowers.³ Up to 2.5cm long.³ Flower in terminal clusters of 2-7 flowers.³</p> <p>Fruits: Hairless pods up to 7cm long and 9mm wide.^{3,7} Contains 4-12 seeds.⁷</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div data-bbox="568 945 974 1470" style="text-align: center;"> <p>stem segment Lathyrus palustris</p> <p>Lathyrus nevadensis var. nevadensis</p> <p>© Regents of the University of California Source 6</p> </div> <div data-bbox="1019 898 1425 1501" style="text-align: center;"> <p>0405728 © Mark Turner www.turnerphotographics.com</p> <p>Source 5</p> </div> </div>



Source 4

PROPAGATION DETAILS*

*based on the propagation methods for other perineal members of the *Lathyrus* genus, specifically *Lathyrus polyphyllus* and *Lathyrus latifolius*

Ecotype	n/a
Propagation Goal	Seeds ^{2, 9, 10}
Propagation Method	Seeds or vegetatively through creeping rhizomes. ^{2, 10} As this plant is not available for nursery sale you need to go find wild <i>Lathyrus nevadensis</i> and hand collect the seeds. ⁹
Product Type	Container (plug) ⁹
Stock Type	n/a
Time to Grow	Unknown
Target Specifications	Well developed shoots, roots, and rhizomes filling the container before out planting. ⁹
Propagule Collection Instructions	Collect by hand from wild seed. ⁹ Flowers from May-July, so would theoretically want to collect April-August. ¹
Propagule Processing/Propagule Characteristics	Unknown
Pre-Planting Propagule Treatments	Seeds must be scarified and/or stratified. ²
Growing Area Preparation / Annual Practices for Perennial Crops	Well drained, drier media. ² Preferably facing South West with partial shade. Will most likely be able to be grown in plug trays before replanting. ^{7, 9}
Establishment Phase Details	Unknown

Length of Establishment Phase	Unknown
Active Growth Phase	Unknown. Most likely will be from April to September. ² Though the rhizomes most likely continue growing underground during the “dormancy” period.
Length of Active Growth Phase	Probably 4-5 months ^{2,9}
Hardening Phase	Unknown. Important to note that the plant is drought and fire tolerant, due to rhizome structure. ^{10, 12}
Length of Hardening Phase	Unknown
Harvesting, Storage and Shipping	Unknown
Length of Storage	Unknown
Guidelines for Outplanting / Performance on Typical Sites	Plant in the Early to Mid-Spring in South to South West facing, well drained shaded sites. ⁷ Will flower between May-July. ¹ Often found in tree stands but unknown if planting under trees is an important part of their establishment. ^{2,7}
Other Comments	Hermaphroditic flowers pollinated by bees. ¹² Very little is known about propagating and establishing this plant in personal and commercial nurseries. Though the Lady Bird Johnson center claims it’s a commercially available plant, no consulted nurseries seem to have this plant available to purchase. It is a smaller flowering pea, and is most likely barely or unscented, as are most perineal peas.

INFORMATION SOURCES

References	<ol style="list-style-type: none"> 1. <i>Lathyrus nevadensis</i> S. Watson: Sierra Pea. (2007). Retrieved from https://plants.usda.gov/core/profile?symbol=LANE3 2. TWC Staff (Ed.). <i>Lathyrus nevadensis</i>. (2007). Retrieved from https://www.wildflower.org/plants/result.php?id_plant=LANE3 3. MacKinnon, A., Pojar, J., & Alaback, P. B. (2004). <i>Plants of the Pacific Northwest coast: Washington, Oregon, British Columbia & Alaska</i>. Page 191. Vancouver: Lone Pine Pub. 4. Giblin, D. (eds.). 2014. <i>Lathyrus nevadensis</i>. In: WTU Image Collection Web Site: Vascular Plants, MacroFungi, & Lichenized Fungi of Washington State. University of Washington Herbarium. Retrieved from http://biology.burke.washington.edu/herbarium/imagecollection/taxon.php?Taxon=Lathyrus%20nevadensis%20var.%20nevadensis 5. Turner, M. (2018). <i>Lathyrus nevadensis</i>: Purple Peavine. Turner Photographics. Retrieved from http://www.pnwflowers.com/flower/lathyrus-nevadensis 6. Steele, K., & Isely, D. (Ed.). (2012). <i>Lathyrus nevadensis</i> var. <i>nevadensis</i>, in Jepson Flora Project. Retrieved from https://ucjeps.berkeley.edu/eflora/eflora_display.php?tid=76683
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