

## Plant Propagation Protocol for *Lathyrus ochroleucus*

ESRM 412 – Native Plant Production

URL: <http://courses.washington.edu/esrm412/protocols/2022/LAOC2.pdf>

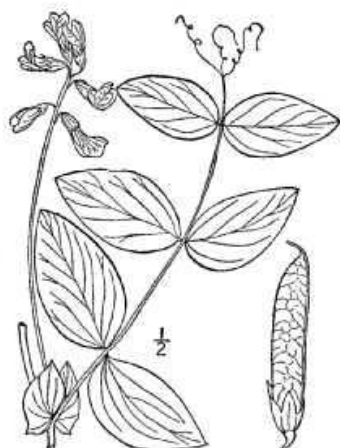
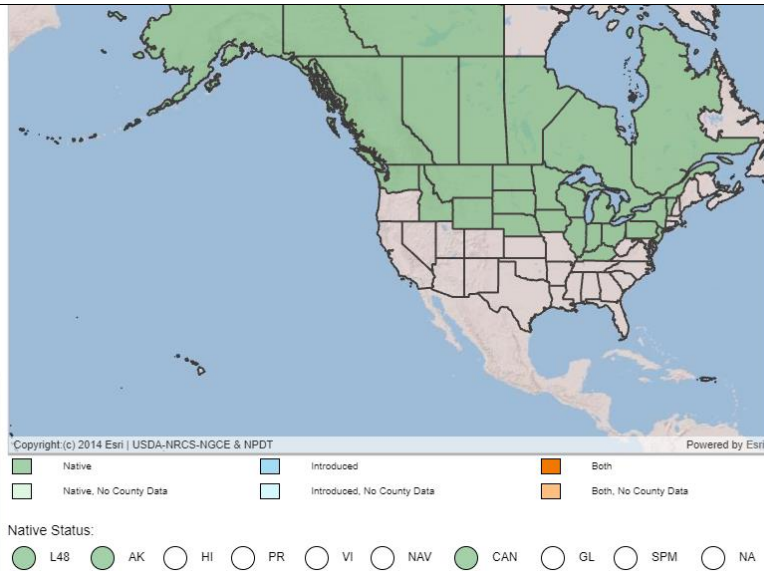


Figure 1: <https://plants.usda.gov/home/plantProfile?symbol=LAOC2>

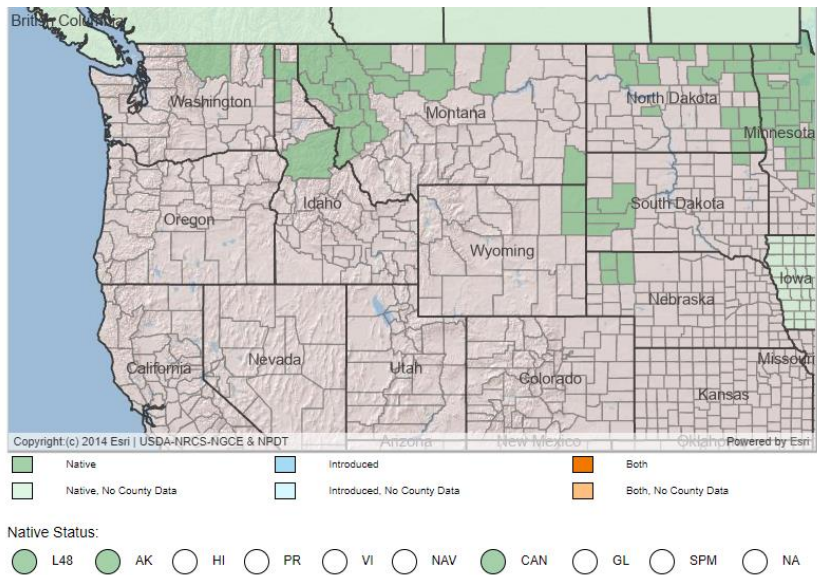
Figure 2: <https://climbers.lsa.umich.edu/?p=284>

| <b>TAXONOMY</b>                            |  |
|--|--|
| <b>Plant Family</b>                        |  |
| Scientific Name                            | Fabaceae / Leguminosae <sup>1</sup>  |
| Common Name                                | Pea family <sup>1</sup>  |
| <b>Species</b>                             |  |
| Scientific Name                            |  |
| Scientific Name                            | <i>Lathyrus ochroleucus</i> Hook <sup>1</sup>  |
| Varieties                                  | N/A  |
| Sub-species                                | N/A  |
| Cultivar                                   | N/A  |
| Common Synonym(s)                          | N/A  |
| Common Name(s)                             | This species has a lot of common names including Cream pea <sup>1,2,8</sup> , pale vetchling <sup>2,8</sup> , creamy peavine <sup>2,8</sup> , common vetchling <sup>2</sup> , yellow vetchling <sup>2,8</sup> , pale vetchling Peavine <sup>8</sup> , cream-colored vetchling <sup>8</sup> , Cream vetchling <sup>8</sup> , cream-colored Peavine <sup>8</sup> , and cream-flowered Peavine <sup>8</sup> |
| Species Code (as per USDA Plants database) | LAOC2 <sup>1</sup>   |
| <b>GENERAL INFORMATION</b>                 |  |

Geographical range



Source (USDA)<sup>1</sup>



Source (USDA)<sup>1</sup>

Ecological distribution

This plant can grow in various types of soils ranging from sandy to clay soils, with a preference for moist soil. It also prefers partial or no shade<sup>6</sup>.

Climate and elevation range

It has not yet been found but it is known that with increasing elevations availability of this species decreases<sup>4</sup>.

Local habitat and abundance

This species is usually located in thin dry rocky calcareous to more acidic soils that are usually available in open woodland, forests, and bluffs, and it also has a thin herb layer<sup>4</sup>. This species is located in meadows, valleys, or moist forests<sup>10</sup>.

Plant strategy type / successional stage

The nodules that are located in the roots contain nitrogen-fixing bacteria<sup>4</sup>.

Plant characteristics

This species has alternate oval/ ovate shaped leaves that are about 2-5 cm long and 1-4 cm wide<sup>4</sup>. There are 4-5 petals, tepals, or sepals in the flowers<sup>10</sup>. The Largest leaves are located at the base of the stem and decrease in size Going up the stem<sup>4</sup> (as seen in figure 1). When the fruit is ripe, it is characterized to be very dry and splits open after ripening, with a length of 30-60 mm<sup>10</sup>.

|   |   |
|---|---|
|   | Additional characteristic about this species is that it is Perrenerial and Hermaphrodite <sup>6</sup>   |
| <b>PROPAGATION DETAILS</b>                                      |   |
| Ecotype   | N/A   |
| Propagation Goal  | Seeds <sup>6</sup> .  |
| Propagation Method  | Seeds <sup>6</sup> .  |
| Product Type  | Container and propagules <sup>6</sup> .   |
| Stock Type  | no information found  |
| Time to Grow  | no information found  |
| Target Specifications   | The desired bloom color is white or yellowish white <sup>2,4</sup> . This usually happens in June or July <sup>2</sup> . This species Grows up to 1 m at the end of the growth period <sup>4</sup> .  |
| Propagule Collection Instructions                               | Collect seeds approximately between august and the start of October <sup>7</sup> . This can be done by covering seed heads and using the method of hand clipping <sup>7</sup> .   |
| Propagule Processing/Propagule Characteristics                  | There are about (59-62) seeds per gram <sup>7</sup> .   |
| Pre-Planting Propagule Treatments                               | To clean seeds, the two methods that can be used is vacuum separation and fanning <sup>7</sup> . Vacuum separation will result in the loss of less than 5% of seeds <sup>7</sup> . pre-soak seeds for 24 hours in warm water before sowing <sup>6</sup> . |
| Growing Area Preparation / Annual Practices for Perennial Crops | Sow in a cold frame in early spring <sup>6</sup> . Then, Plant in separate containers when can be handled <sup>6</sup> .  |
| Establishment Phase Details                                     | Plant in fall to allow for winter stratification <sup>7</sup> and make sure that there is no weed In the planting site <sup>7</sup> . plant seedlings at 1 cm depth <sup>7</sup> .  |
| Length of Establishment Phase                                   | The time it takes for the seeds to first germination (which has 50% potential) is 18 days <sup>7</sup> .  |
| Active Growth Phase   | spray the site with herbicides regularly to minimize competition <sup>7</sup> . It is also suggested using fertilizers with high Potassium, high Phosphorus and low Nitrogen <sup>7</sup> .   |
| Length of Active Growth Phase                                   | Not found   |
| Hardening Phase   | Not found   |
| Length of Hardening Phase                                       | Not found   |
| Harvesting, Storage and Shipping                                | Seeds can stay stored for several years, but the exact number of years was not specified <sup>7</sup> .   |
| Length of Storage   | Not found   |
| Guidelines for Outplanting / Performance on Typical Sites       | Can be out planted in summer <sup>6</sup> . Other information in this field Was not found   |
| Other Comments  |   |
| <b>INFORMATION SOURCES</b>                                      |   |
| References  | 1. <i>Lathyrus ochroleucus</i> Hook (n.d.)<br><a href="https://plants.usda.gov/home/plantProfile?symbol=LAOC2">https://plants.usda.gov/home/plantProfile?symbol=LAOC2</a>   |

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|----------------------------------|--|
|                                  | <ol style="list-style-type: none"> <li>2. JAM (2015) <i>Lathyrus Ochroleucus</i>.<br/><a href="https://www.wildflower.org/plants/result.php?id_plant=LAOC2">https://www.wildflower.org/plants/result.php?id_plant=LAOC2</a></li> <li>3. Werrier et.al. (2022) <i>Lathyrus ochroleucus</i>. New York Flora Atlas.<br/><a href="https://newyork.plantatlas.usf.edu/Plant.aspx?id=1448">https://newyork.plantatlas.usf.edu/Plant.aspx?id=1448</a></li> <li>4. Burnham et al. (n.d.) <i>Lathyrus Ochroleucus</i>. Climbers<br/><a href="https://climbers.lsa.umich.edu/?p=284">https://climbers.lsa.umich.edu/?p=284</a></li> <li>5. <i>Lathyrus ochroleucus</i> -- Cream vetchling (n.d.)<br/><a href="https://gobotany.nativeplanttrust.org/species/lathyrus/ochroleucus/">https://gobotany.nativeplanttrust.org/species/lathyrus/ochroleucus/</a></li> <li>6. <i>Lathyrus ochroleucas</i> – Hook. (n.d.) PFAF.<br/><a href="https://pfaf.org/user/Plant.aspx?LatinName=Lathyrus+ochroleucas">https://pfaf.org/user/Plant.aspx?LatinName=Lathyrus+ochroleucas</a></li> <li>7. <i>Lathyrus ochroleucus</i> Hook. Creamy Peavine. (2003) Symbiosis Research &amp; Restoration.<br/><a href="https://www.env.gov.bc.ca/fia/documents/native_seed_manual/22lathyrus_ochroleucus.pdf">https://www.env.gov.bc.ca/fia/documents/native_seed_manual/22lathyrus_ochroleucus.pdf</a></li> <li>8. <i>Lathyrus ochroleucus</i> Hook. Planet Net. <a href="https://identify.plantnet.org/the-plant-list/species/Lathyrus%20ochroleucus%20Hook./data">https://identify.plantnet.org/the-plant-list/species/Lathyrus%20ochroleucus%20Hook./data</a></li> <li>9. Pale Vetchling. (n.d.) Illinois Wildflowers.<br/><a href="https://www.illinoiswildflowers.info/savanna/plants/pale_vetchling.htm">https://www.illinoiswildflowers.info/savanna/plants/pale_vetchling.htm</a></li> <li>10. Pale Vetchling Peavine - <i>Lathyrus ochroleucus</i><br/><a href="https://fieldguide.mt.gov/speciesDetail.aspx?elcode=PDFAB250M0">https://fieldguide.mt.gov/speciesDetail.aspx?elcode=PDFAB250M0</a></li> </ol> |
| Other Sources Consulted          | <ol style="list-style-type: none"> <li>11. <i>Lathyrus</i>. (n.d.) RNGR. <a href="https://rngr.net/search/search?SearchableText=lathyrus">https://rngr.net/search/search?SearchableText=lathyrus</a></li> <li>12. Flora of North America (n.d.)<br/><a href="http://www.efloras.org/browse.aspx?flora_id=1&amp;name_str=Lathyrus%20ochroleucus">http://www.efloras.org/browse.aspx?flora_id=1&amp;name_str=Lathyrus%20ochroleucus</a></li> </ol>   |
| Protocol Author                  | Nawres Abdulmohsin   |
| Date Protocol Created or Updated | 05/26/2022   |