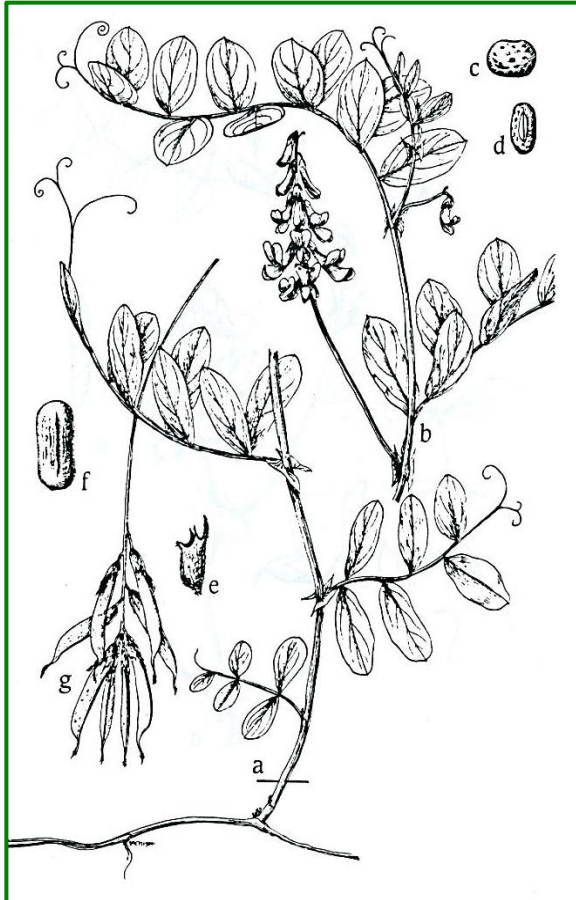


Scientific Name: *Lathyrus ochroleucus* Hook

Family: *Fabaceae*

Common Names: cream pea, creamy peavine, pale vetchling peavine



***Lathyrus ochroleucus* Illustration**
a. habit (inflorescence and leaves)
b. flower c-d. seeds e calyx f. pollen
g. seeds pods

Plant Description

Stems up to 1 m tall, climbing on surrounding vegetation for support; leaves alternate, pinnately compound with 6 to 10 leaflets; leaflets oval, 2.5 to 5 cm long, hairless; tendrils branched; stipule oval to somewhat heart-shaped; raceme flower cluster, 5 to 10 flowers borne on leaf axis; flowers are yellowish-white, irregular, 12 mm long, sepals 5, petals 5 (Royer and Dickinson 2007).

Fruit: Legume 2 to 4 cm long, hairless; seeds 4 to 6.

Seed: Globular seed, 2.5 to 4 mm in size (Burton and Burton 2003).

Habitat and Distribution

Moist woods and clearings (Moss 1983).

Soil: Prefers loam to sandy loam textured soils that are relatively neutral in pH (Burton and Burton 2000).

Distribution: Southeast Alaska, British Columbia, western District of Mackenzie to Quebec south to Washington, Wyoming, South Dakota, northwestern Nebraska, Ohio, Pennsylvania, Vermont (Moss 1983).

Phenology

Flowers bloom from June to July (Royer and Dickinson 2007); early to mid-June in Alberta (Beaubien and Johnson 1994). Ripe seeds appear in late summer.

Pollination

Insect pollinated by bees and butterflies (Hilty 2011).

Genetics

$2n=14$ (Moss 1983).

Symbiosis

Members of the Fabaceae family are associated with rhizobia bacteria.

Seed Processing

Collection: Cut pods off the plant, as they turn brown with a sharp pair of clippers or scissors and place in paper bags (Burton and Burton 2003). Large crops can be harvested with a thrasher or combine at settings of 885 rpm with a 4 mm gap (Burton and Burton 2000).

Seed Weight: 16.4 g/1,000 seed (Royal Botanic Gardens Kew 2008).

Fruit/Seed by Weight: 61 seeds/g or 16.4 g/1,000 seeds (Burton and Burton 2003).

Harvest Dates: End of July to early September.

Cleaning: Put through vacuum separator with speed set high although suction may lose some smaller seeds. Alternatively fanning mill separation can be used if needed (Burton and Burton 2003).

Storage Behaviour: Orthodox, seeds can be dried, without damage, to low moisture contents. Longevity increases with reductions in both moisture content and temperature (Royal Botanic Gardens Kew 2008).

Storage: Cool dry storage (Burton and Burton 2003).

Longevity: Reported to remain in seed bank for many years before germinating (Tannas 1997).

Propagation

Germination: Germinate better in cooler conditions. At 25/15°C, it takes 18 days for seeds to begin germinating (Burton and Burton 2003).

Pre-treatment: Stratification or scarification scoring or cracking the seed coat is beneficial for most legume species.

Direct Seeding: Sow in fall to allow winter stratification to assist in breaking seed dormancy (Burton and Burton 2003).

Seed Rate: Optimal seeding rate not known, but Smith and Smith (2000) suggest 60 to 100 pure live seed per linear metre.

Aboriginal/Food Uses

Food: *L. ochroleucus* contains neurotoxins that, if eaten in moderation, are a nutritious food; but if eaten exclusively for more than 10 days can be poisonous (Mackinnon et al. 2009).

Wildlife/Forage Usage

Wildlife/Livestock: Good forage for both wildlife and livestock high in protein and nutrients (Tannas 1997).

Grazing Response: Decreaser (Tannas 1997).

Reclamation Potential

Peavine is found to grow naturally in disturbed areas though is not good competitor. It can tolerate saline

soils but pH must be close to neutral (Burton and Burton 2003).



Notes

L. ochroleucus is listed as 83% intact (less occurrences than expected) in the Alberta oil sands region (Alberta Biodiversity Monitoring Institute 2014).

Photo Credits

Photo 1: Jason Hollinger @ Wiki commons 2009.

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