

The Dalles Milk-vetch (*Astragalus sclerocarpus*)

Fabaceae (Pea Family)

RANGE

- Found in western North America in British Columbia, Washington, and Oregon (USA)
- In B.C., known from at least four sites between Summerland and Osoyoos in the Okanagan Valley

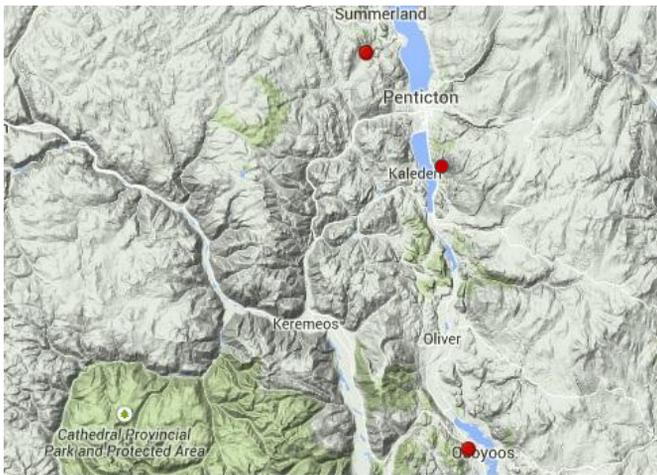


Figure 1 B.C. distribution of *Astragalus sclerocarpus* (BC CDC 2014)

HABITAT

- Dry sandy banks and terraces in the steppe and lower montane zones in the Bunchgrass and Ponderosa Pine Biogeoclimatic Zones
- Known sites are flat to steep slopes with fine, sandy soils and some bare ground
- Associates include ponderosa pine (*Pinus ponderosa*), big sagebrush (*Artemisia tridentata*), needle-and-thread grass (*Hesperostipa comata*), bluebunch wheatgrass (*Pseudoroegneria spicata*) and arrow-leaved balsamroot (*Balsamorhiza sagittata*)



Figure 2 Steep, sandy habitat south of Pentiction, B.C.



Figure 3 Typical plant in dry, sandy habitat near Summerland, B.C.

LIFE HISTORY

- Long-lived perennial species that blooms from early May into June
- Fruit maturity occurs later in summer, with seed release occurring when pods dry and split open
- Reproduces only from seed and not vegetatively (i.e., not from plant or root pieces)

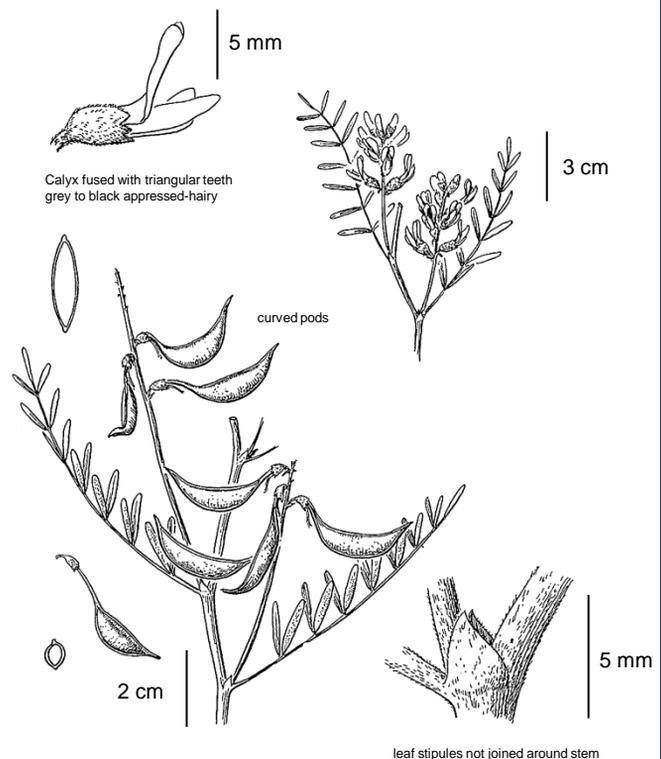


Figure 4 Illustration of *Astragalus sclerocarpus* by Jeanne R. Janish (Hitchcock et al. 1969)

Astragalus sclerocarpus (continued)

DESCRIPTION

General

- Perennial herb, 20 to 50 cm long/tall, with several branched stems and a long, woody taproot
- Stems decumbent to ascending, leafless at the base, and sparsely to densely appressed-hairy

Leaves

- Leaves alternate, pinnately compound, 5 to 13 cm long, short-stalked, with 15 to 21 leaflets, each linear to oblong and 15 to 25 mm long
- Stipules (appendage at base of leaf) triangular, rust-coloured, 2 to 4 mm long, not joined around stem

Flowers

- Inflorescence elongate, arising from leaf axil, 3 to 7 cm long, with 7 to 25 pea-like flowers
- Corolla (petals) white to greenish-white with purplish tips, 10 to 14 mm long
- Calyx (sepals) fused, grey to black appressed-hairy, with triangular teeth half as long as tube

Fruits

- Pods ellipsoid, single-chambered, 2 to 3 cm long, on slender 1.5 to 2 cm long stalks
- Pods curving to a semi-circle and often mottled purple at maturity



Figure 5 Close-up of inflorescence with pea-like flowers; inset: close-up showing leaf stipules that are not joined around the stem

IDENTIFICATION TIPS

- Characterized by its curved pods, reddish buds, rust-coloured leaf stipules that are not joined around the stem, and well-spaced, typically spreading leaflets in sandy habitats
- Timber milk-vetch (*A. miser*) is distinguished by its smaller flowers, leaf stipules fused opposite stem and generally smaller, more tightly spaced leaflets
- Woollypod milk-vetch (*A. purshii*) has unstalked, grey-woolly pods and prostrate growth
- Okanagan locoweed (*Oxytropis* spp.), found in sagebrush steppe, has leaves that are all basal



Figure 6 Close-up of pods on slender stalks curving to a semi-circle

GENERAL THREATS AND GUIDANCE

- **Avoid development in areas with known occurrences of *Astragalus sclerocarpus* through project relocation or redesign**
- Protect dry sandy banks and terraces in the steppe and lower montane zones from disturbance and development, and consider restoration (including invasive plant removal) following professional advice
- Follow provincial methods for when and how to conduct plant species at risk surveys
- Follow provincial policy and guidance on how to avoid, minimize, restore and offset impacts to plant species at risk and their habitats
- Report any sightings to the B.C. Conservation Data Centre (cdccdata@gov.bc.ca) and FLNR Ecosystems Section (josie.symonds@gov.bc.ca)

REFERENCES

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