

Draba mulliganii Al-Shehbaz

Brassicaceae

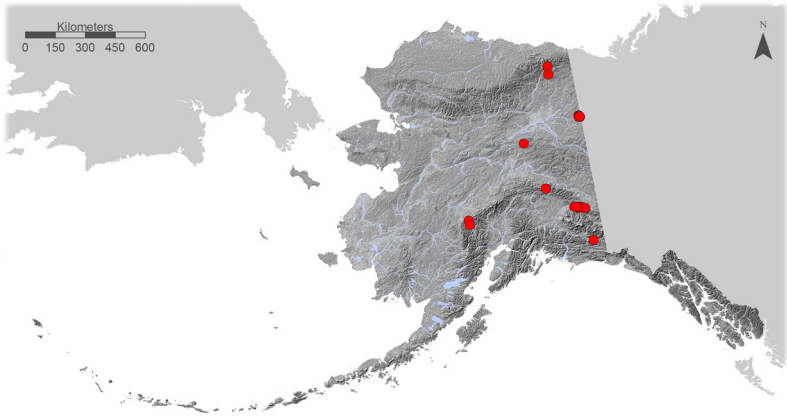
Synonyms: *Draba porsildii* auct. non G.A. Mulligan

Global Distribution: Endemic to mountains of Alaska.

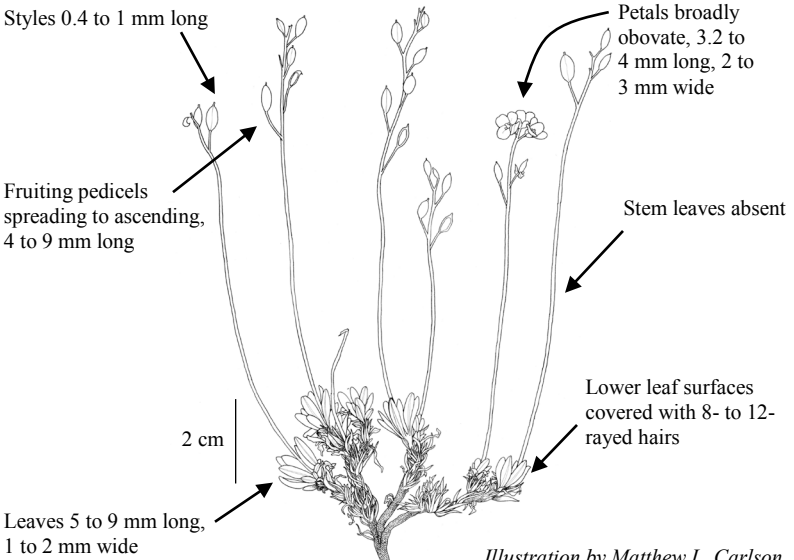
Alaska Distribution: Arctic Tundra, Intermontane Boreal, Alaska Range Transition, Coastal Mountains Transition, Coastal Rainforests.

Ecoregions Occupied: Brooks Range, North Ogilvie Mountains, Ray Mountains, Alaska Range, Kluane Ranges, Chugach-St. Elias Mountains.

Conservation Status: S3 GNR; BLM Watch.



Description^{93, 99}



Draba mulliganii

- General:** Perennial herb from many-branched caudex with persistent leaf remains; tufted; stems 3 to 12 cm tall, unbranched, leafless, glabrous or sparsely pubescent in the lower half with short-stalked, 4- to 10-rayed hairs.
- Leaves:** Basal leaves arranged in rosettes, sessile or short-petiolated, oblanceolate to lanceolate, 5 to 9 mm long, 1 to 2 mm wide, margins entire; lower leaf surfaces pubescent with short-stalked, 8- to 12-rayed hairs; upper leaf surfaces with similar stellate hairs and some simple hairs; petiole bases and lower margin ciliate with stiff, simple hairs; stem leaves absent.
- Flowers:** Racemes of 3 to 11 flowers, lacking bracts, elongating in fruit; rachis and pedicels glabrous; sepals ovate, 1.7 to 2.2 mm long, covered with simple and 2-rayed hairs; petals white, broadly obovate, 3.2 to 4 mm long, 2 to 3 mm wide.
- Fruits:** Fruits ovate-lanceolate to oblong, flattened, glabrous, 5 to 8 mm long, 2 to 2.5 mm wide with styles 0.4 to 1 mm long; 12 to 16 seeds per fruit.



ALA 71705

Ecology

- Elevation:** Known from 360 to 1,780 m.
- Landform:** Alpine slopes, alpine ridges, alpine bowls, glacial outwash, rock outcrops, river bluffs.
- Soil Type:** Scree, gravel, mineral soil; associated with calcareous, shale, and granite substrates.⁴⁸
- Moisture regime:** Dry.
- Slope:** 5° to at least 35° slopes.

- Aspect:** No particular aspect except south-facing on river bluffs.
- Vegetation type:** Sparsely vegetated, late-melting snow beds.
- Associated species:** *Artemisia alaskana*, *Calamagrostis purpurascens*, *Carex glacialis*, *Carex microchaeta*, *Carex rupestris*, *Cassiope tetragona*, *Diapensia lapponica*, *Draba breweri*, *Dryas alaskensis*, *Dryopteris fragrans*, *Hierochloa alpina*, *Lloydia serotina*, *Potentilla uniflora*, *Salix arctica*, *Saxifraga tricuspidata*, *Senecio spp.*, *Taraxacum spp.*, *Vaccinium uliginosum*.
- Longevity:** Perennial, likely long-lived as some specimens show extensively branched caudex.
- Phenology:** Flowering early June, probably sooner, through late July; fruiting mid-June through July, probably later.
- Population estimate:** There are 17 known occurrences in Alaska; population sizes range from few individuals to locally common.

Similar Species^{93, 99}

All material in Alaska previously assigned to *Draba porsildii* has been reassigned to *Draba mulliganii*.⁹⁹ However, *Draba porsildii* does occur near the Alaska-Yukon border in the St. Elias Mountains. The table below describes the differences in morphology between the two species.

Species	Hairs	Petals	Fruiting Pedicels	Fruits
<i>Draba mulliganii</i>	Lower leaf surfaces with 8- to 12-rayed hairs often without spurred rays	Broadly obovate, 3.2 to 4 mm long, 2 to 3 mm wide	Spreading to ascending, 4 to 9 mm long	Non-appressed; with styles 0.4 to 1 mm long
<i>Draba porsildii</i>	Lower leaf surfaces with 3- to 5-rayed hairs often with spurred rays	Spatulate, 1.5 to 2.2 mm long, 0.7 to 1.2 mm wide	Ascending, 0.5 to 4 mm long	Appressed; with styles 0.05 to 0.1 mm long

Similar white-flowered, tufted *Draba* species with leafless stems that grow in Alaska can be distinguished from *Draba mulliganii* by the morphological features listed in the table below.

Species	Leaves	Fruits	Styles
<i>Draba mulliganii</i>	Petiole and midvein of basal leaves not thickened, basal leaves 1 to 2 mm wide	Fruits ovate-lanceolate to oblong, 5 to 8 mm long	Styles 0.4 to 1 mm long
<i>Draba lactea</i>	Petiole and midvein of basal leaves thickened, basal leaves 2 to 6 mm wide	Fruits oblong to ovate, 4 to 8 mm long	Styles 0.1 to 0.4 mm long
<i>Draba lonchocarpa</i>	Petiole and midvein of basal leaves not thickened, 1 to 3 mm wide	Fruits linear to oblong, 6 to 15 mm long	Styles 0.1 to 0.25 mm long



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