



Black Rapids Germplasm field oxytropis

Oxytropis campestris

Selected Class Release “Natural”

Uses: Revegetation
Southcentral, Interior, Subarctic Alaska

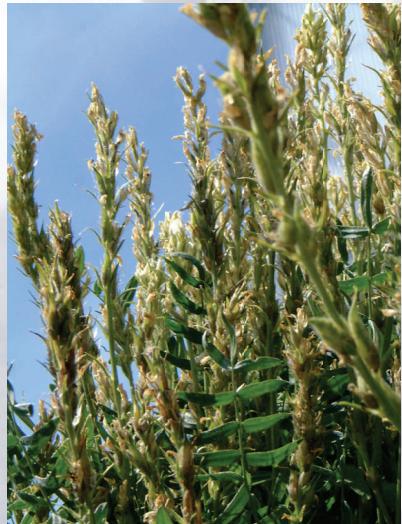
Background Information

Oxytropis campestris is in the pea family. It grows wild in Alaska on gravel bars, rock outcrops, roadsides, alpine meadows and dry, sandy places (Walsh, 1974).

Its white-yellow flowers bloom in July. The flowers are located on their own stem. The seedpods are hairy and ripen unevenly in August.

Field oxytropis's leaves come from the base of the plant. The leaflets are hairy, a distinguishing characteristic.

As a perennial legume, it has deep tap roots.



Map from Hultén, 1968.
Used with the permission of Stanford University

Distribution

According to Walsh (1974), *Oxytropis campestris* can be found throughout most of Alaska and the Yukon (south of the 68th parallel), in northern Europe, and throughout most of the northern U.S. It is circumboreal.

Black Rapids Germplasm field oxytropis seed is maintained by the Alaska Plant Materials Center for commercial production.

Black Rapids Germplasm
Plant Identification Number: 9097735

Black Rapids Germplasm field oxytropis was collected in 1995 by Stoney Wright. Black Rapids is a glacial area on the Richardson Highway, north of Glennallen, Alaska (Wright, 2006). This mountainous, dry area is home to many winter-hardy plants.

This native legume is a Selected Class Release by the Alaska Plant Materials Center (PMC). This means it has been grown and harvested at the PMC and continues to exhibit excellent performance.

This legume is recommended for use in revegetation because not only are its seedlings vigorous and able to survive in dry areas, but they also fix nitrogen, enhancing the soil for future plant succession.

Interesting Note

Another common name for this plant is “Locoweed”. *Oxytropis campestris* accumulates the alkaloid swainsonine. Most of the time animals avoid eating it, but if they do, the alkaloid may cause them to act strangely (“loco” is Spanish for crazy). If the animals continue to eat it for long periods of time, they may die (Ralphs, et al., 2002).

Black Rapids Germplasm field oxytropes



Black Rapids Germplasm field oxytropes for Alaska Revegetation Purposes

Black Rapids grows easily and quickly in most situations, although slower than most grasses used for revegetation purposes. When the grass seed mix is spread evenly and Black Rapids is at least 5% by weight of the seed mix, this oxytropes should perform vigorously and eventually contribute to the revegetation results.

Its long inflorescence of white flowers adds to the visual appeal of roadside revegetation projects. A pea-like nitrogen fixer, it enriches the soil, contributing to a low-maintenance, long-lived, quality revegetation effort.



Oxytropis campestris seed.
~237,040 seeds per pound



Black Rapids in production at the
Alaska Plant Materials Center,
Palmer, Alaska.

To Produce Black Rapids

Conventional farm equipment is needed. A drill for seeding to a depth of ~1/4 inch is recommended. Soil should be well-drained.

Seeds germinate best with a light scarification. Seed may be sown in either fall or spring. A fall seeding replicates natural conditions in Alaska and tends to encourage faster germination (Hunt and Moore).

Cultural practices of light irrigation, cultivation of weeds, and a low nitrogen/high phosphorous fertilization should enhance growth.

When seed pods start cracking, harvest pods by hand (Hunt and Moore). Let pods dry, then clean brown seeds with a brush cleaner, followed by hand screens (Hunt and Moore).



References

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