Franklin Bluffs Germplasm nodding locoweed

Oxytropis deflexa

Selected Class Release "Natural"

Uses: Revegetation

Southcentral, Interior, and Arctic Alaska

Background Information

Nodding locoweed is a perennial legume found growing along riverbanks, meadows, and waste places in nature (Hultén, 1968). It is a natural colonizer of dry, rocky soils.

Oxytropis deflexa is a species of arctic and mountainous areas. It is considered circumboreal in distribution.

This locoweed is different from others because the pods hang toward the ground and are one-chambered. There are 4 - 10 seeds per chamber.

Many of its characteristics are common to many arctic plants. Low-growing habit, taproot, hairy leaves, and prolific flowering with large seeds enable nodding locoweed to survive in inhospitable environments. Companion plants include willows, grasses, and mosses.

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

Distribution

According to White (2005), *Oxytropis deflexa* can be found in Alaska, Canada, Norway, Kazakhstan, Mongolia, Russia, Canada, and in some northern states in the contiguous U.S.

Franklin Bluffs Germplasm nodding locoweed seed is maintained by the Alaska Plant Materials Center for commercial production.

Franklin Bluffs Germplasm

Plant Identification Number: 9097746

Franklin Bluffs Germplasm nodding locoweed was collected by Stoney Wright in 1995 (Wright, 2007). Franklin Bluffs is the name of a geographic feature along the road to Prudhoe Bay, Alaska.

This germplasm was collected at a very low elevation—72 feet above sea level where a beautiful view of the bluffs can be seen.

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 forb is recommended for use in revegetation because its seedlings are vigorous and able to survive in very dry conditions. As a legume, it adds nitrogen to the soil. The leaves and flowers of nodding locoweed enhance the diversity of the finished project.

Alaska Plant Materials Center

Serving Alaska's needs in production of Alaska native plants

July 20, 2007

Franklin Bluffs Germplasm nodding locoweed

Franklin Bluffs Germplasm
nodding locoweed
for Alaska Revegetation Purposes

Franklin Bluffs Germplasm is a colonizer of dry, gravelly areas. Many times it is the only plant, besides mosses, that grows in these extreme situations.

Since it is a legume, it adds to the nitrogen in the soil—thus helping other plants to survive. Arctic plant studies of nitrogen fixing plants in Alaska (Allen, 1995) have found that rhizobia are associated with *Oxytropis.* They hypothesize that these types of legumes help create a healthy ecosystem. This indicates the importance of adding legumes to the revegetation mix.

For revegetation purposes, a mixture of 'Tundra' glaucous bluegrass, 'Nortran' tufted hairgrass, Cantwell Germplasm arctic bluegrass, and 'Arctared' red fescue, plus the forbs Franklin Bluffs Germplasm nodding locoweed and Kobuk Germplasm dwarf fireweed, would make a stable and attractive effect. Contact the Alaska Plant Materials Center for further advice.

***Oxytropis deflexa* seed.**
~495,954 seeds per pound

To Produce Franklin Bluffs

Conventional farm equipment is needed. Either use a drill for seeding to a depth of ~1/4 inch or sow on the surface. Seed needs to be scarified lightly (sanded) before planting to remove part of the hard seed coat.

Seed may be sown in the spring, although a fall planting imitates nature better. Soil must be an upland, dry mixture.

Cultural practices of light irrigation, cultivation of weeds, and fertilization should enhance growth.

Collection of seeds begins when inflorescences and seed are brown.

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References

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