

'Alyeska' Polargrass

Arctagrostis latifolia

Uses: Revegetation Interior, Western, and Arctic Alaska

Background Information for 'Alyeska' Polargrass

In the wild, polargrass occurs in wet meadows, tundra, and marshes.

It is a pioneer species in disturbed areas. These disturbed areas are usually moist and sometimes acidic (Walkup, 1991).

Polargrass is high in food value. Grizzly bears and caribou selectively eat it (Walkup, 1991). According to naturalist Adolph Murie, bears at Denali National Park find polargrass to be a favorite food during June and July (Klebesadel, 1969).

Arctagrostis latifolia grows naturally as a north-latitude species with a circumpolar distribution.



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

g

'Alyeska' and 'Kenai' Polargrass are the same species. Parent grasses, though, were collected in different Alaskan regions.

> 'Alyeska' is for revegetation in north and west Alaska. 'Kenai' is more southern. For best results plant in the appropriate region.

'Alyeska' Polargrass is recognized in breeder, foundation, registered, and certified seed classes.

Growth

Polargrass is a perennial.

It grows about 1.5 feet

spikelets when mature.

It has wide, lax leaves

It reproduces by seed

Polargrass has small

development. Once

winter hardy.

established, it is very

seeds and poor seedling

tall and has purple

and stout rhizomes

(Mitchell, 1980).

and underground

rhizomes.

Breeder and foundation seed is maintained by the Alaska Plant Materials Center.

Registered and certified seed is available through the Alaska Seed Growers, Inc.

Cultivar: 'Alyeska'

Plant Introduction Number: 562650

'Alyeska' Polargrass is a cultivar developed by the University of Alaska Agricultural Experiment Station.

The prime reason for developing this cultivar was for revegetation in Interior and Western Alaska.

The original collections (parents) for this cultivar came from native plants growing in interior and western Alaska (Mitchell, 1980).

Before being registered in 1980, 'Alyeska' was evaluated for 9 years in many different settings.

'Alyeska' is adapted to moderately wet areas, can tolerate acid soils, and may be immune to snow mold (Mitchell, 1987).

Interesting Note:

The genus *Arctagrostis* comes from the Greek "Arctos" which means north or bear; and "agrostis" for fodder grass (Klebesadel, 1969).

Alaska Plant Materials Center

Serving Alaska's needs in production of Alaska native plants

July 16, 2007





'Alyeska' Polargrass

'Alyeska' for Alaska Revegetation Purposes

'Alyeska' Polargrass is for moist or moderately wet areas. It is quite tolerant of low temperatures and acidic soils. It does well if planning to revegetate with a native grass where extreme conditions occur (Mitchell, 1980).

'Alyeska' does not grow well with fertilization or competition. Once established, it is very hardy and helps prevent erosion (Klebesadel, 1969). For revegetation in Western, Arctic, or Interior Alaska, 'Alyeska' should be a part of the mix—not the dominant portion.



'Alyeska' Polargrass seed 1,800,000 seeds per pound

To Produce 'Alyeska' Polargrass

To maintain genetic purity, 'Alyeska' needs at least a 1,000 foot boundary from other polargrass varieties.

Plant 'Alyeska' after breakup in Western, Arctic, and Interior Alaska.

Using traditional plant drills, the seeding depth should be shallow. The seed is small and germination is sporadic. Plan on spreading more seed per acre to acquire a productive field (Walkup, 1991).

Once established, 'Alyeska' excels in seedling earliness and vigor of spring growth (Klebesadel, 1969).

Seed is mature mid-September. Cleaning 'Alyeska' seed is relatively easy since there is one seed per spikelet.

Peggy Hunt & Stoney Wright State of Alaska Department of Natural Resources Division of Agriculture Plant Materials Center 5310 S. Bodenburg Spur Rd. Palmer, AK 99645-9706







'Alyeska' plant characteristics

Wetness Tolerance good **Acidity Tolerance** good Seedling Vigor moderate Yield Potential high Longevity long **Seed Production** moderate **Drought Resistance** poor Winter Hardiness good **Palatability** good

References

Hultén, E. 1968. Flora of Alaska and Neighboring Territories. © by the Board of Trustees of the Leland Stanford Jr. University, Stanford University Press, Stanford.

Klebesadel, L.J. 1969. "Agronomic characteristics of the little-known, northern grass, Arctagrostis latifolia var. arundinacea (Trin.) Griseb., and a proposed common name, Tall Arcticgrass."

Agronomy Journal 61: 45-49.

Mitchell, W. 1980. "Registration of Alyeska Polargrass", Crop Science Vol. 20, 671.

Walkup, C. 1991. Arctagrostis latifolia. In: Fire Effects Information System, [Online]. USDA, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory. Http://www.fs.fed.us/database/feis.