

'Gruening' Alpine Bluegrass

Poa alpina



Uses:

Erosion Control, Revegetation, and Reclamation
Arctic, Southcentral, Southwest,
and Interior Alaska

Background Information

Alpine bluegrass (*Poa alpina*) in the wild in Alaska grows in a wide range of habitats and soil conditions. Some of these are:

- dry slopes
- gravelly sites
- rocky sites
- alpine and sub-alpine sites
- meadows

Growth

Alpine bluegrass is a perennial bunch grass. It does not spread itself vegetatively, but instead is dependent on seeds for reproduction. It does not get tall (10—40 centimeters).

The flexibility of *Poa alpina*, with its tolerance to climatic, soil, fire, and drought conditions, makes it important for high altitude revegetation. It also has low nutrient needs.

Cultivar: 'Gruening'

Plant Introduction Number: 540425

'Gruening' alpine bluegrass is a cultivar developed by the Alaska Plant Materials Center in 1991 for revegetation uses.

'Gruening' alpine bluegrass outperformed 24 other accessions of alpine bluegrass in hardiness and seed production. It was tested both at the Plant Materials Center and at many off-site locations. Evaluations assessed growth in erosion treatments and revegetation sites.

'Gruening' is extremely winter hardy with early maturation of seed (Wright, 1991).



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

Distribution

Poa alpina is circumpolar in distribution. It is native to Alaska (see map). It is an alpine and low arctic species. (Hultén, 1968).

'Gruening' Bluegrass is recognized in breeder, foundation, registered, and certified seed classes.

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

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

Historical Uses

Bluegrass, in Alaska, was used as a fiber for clothes, mats, and bedding. The dried leaves were used to line boots, dry hands, and for several fishing and hunting purposes. (Moerman, 2002).

Alaska Plant Materials Center

Serving Alaska's needs in production of Alaska native plants

July 20, 2007



'Gruening' Alpine Bluegrass

'Gruening' Alpine Bluegrass for Alaska Revegetation Purposes

'Gruening' germinates reliably in the field—**plus**, it will grow on disturbed, gravelly, low nutrient sites!

This makes it an important part of mixes for alpine and sub-alpine revegetation, and for sites needing erosion control.

Alpine Bluegrass for Forage Purposes

Although alpine bluegrass has a good forage value, its production is low.

Note: Alpine bluegrass does not perform well when planted with annual ryegrass.



Poa alpina seed
~ 1,307,205 seeds per pound

To Produce

'Gruening' Alpine Bluegrass:

'Gruening' bluegrass can be established on dry soil as long as there is some irrigation component.

'Gruening's' seed does not need pre-treatment.

Planting times are dependent upon the region. Early spring planting is recommended, although some Interior growers use fall planting.

Seed is harvested during the last week in June or the first week in July in Palmer, Alaska. Production continues for about 4 years.

Alpine Bluegrass is a short bunch grass that can grow almost anywhere!

Growing up to 50 cm, the flowering head develops with the leaves.

It is a perennial that can serve as the pioneer species for a revegetation project. Once established, other plants can follow.



Production field of the 'Gruening' Alpine Bluegrass at the Plant Materials Center in Palmer, Alaska.



'Gruening' plant characteristics

Wetness Tolerance	poor
Acidity Tolerance	fair
Seedling Vigor	good
Yield Potential	low
Longevity	long
Seed Production	moderate
Drought Resistance	fair
Winter Hardiness	high
Root System	bunch
Palatability	fair

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.

Moerman, D. 2002. *Native American Ethnobotany*. Timber Press, Portland, Oregon.

Wright, S. 1991. "Registration of 'Gruening' Alpine Bluegrass." *Crop Science*, Vol. 31, No. 5.

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