



'Sourdough' Bluejoint Reedgrass

Calamagrostis canadensis

Uses: Revegetation and Forage Throughout Alaska

Background Information

Bluejoint reedgrass (*Calamagrostis canadensis*) grows in a wide range of habitats and soil conditions in the wild in Alaska.

Some of these are:

- lowland wet sites,
- partially shaded woods,
- alpine slopes,
- moist sites,
- peat soils,
- mineral soils,
- high pH soils,
- slightly saline soils,
- and can survive for 100 years in well developed fields (Tesky, 1992).



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

Distribution

Calamagrostis canadensis is found in meadows and wet places throughout Alaska (Hultén, 1968).

Growth

Bluejoint reedgrass forms sod, is a perennial, and a cool-season grass.

Established plants can reach a height of up to 6 feet within 6 weeks in Alaska. It spreads by underground rhizomes or by seed. Its fibrous roots are shallow.

It is an aggressive colonizer and can become dominant in the community.

Cultivar: Sourdough

Plant Introduction Number: 562651

'Sourdough' bluejoint reedgrass is a cultivar developed by the Alaska Agricultural Experiment Station for revegetation uses. It is quick to grow, adaptive to many different conditions, and can tolerate arctic cold and drought.

Thirty-six native Alaskan collections from the Interior, Western and Southcentral Alaska were combined into a synthetic and grown in Palmer nurseries for 10 years. Sourdough has been tested in Alaska revegetation trials since 1971.

'Sourdough' bluejoint reedgrass tolerates severe cold and wind under arctic and alpine conditions, and resists snow mold infestations (Mitchell, 1980).

'Sourdough' bluejoint reedgrass 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

Bluejoint reedgrass can be found throughout most of Northern America. It is, and was, an important forage for bison and livestock.

Together with sedges, bluejoint often forms the bulk of the 'beaver-hay' that grows naturally in meadows too wet for cultivation.

Alaska Plant Materials Center

Serving Alaska's needs in production of Alaska native plants

July 17, 2007



'Sourdough' Bluejoint Reedgrass

'Sourdough' Bluejoint for Alaska Revegetation Purposes

Bluejoint reedgrass grows throughout Alaska. For revegetation, it makes sense to use a species that might naturally occur. 'Sourdough' bluejoint is specified in many revegetation mixes—but not as a monoculture.

Bluejoint provides good erosion control because of its aggressive rhizomes and root structure. It can successfully reclaim strip mines and oil spills. It can also thrive in cold conditions.

'Sourdough' Bluejoint for Forage Purposes

Most grazers prefer to eat bluejoint when it is young and tender. Once it grows tall and produces flowers it is too tough for most animals. Overgrazing can harm a good stand of bluejoint.



Calamagrostis canadensis seed
~3,680,000 seeds per pound

To Produce

'Sourdough' Bluejoint Reedgrass:

'Sourdough' bluejoint needs a moist (mesic-hydric) soil for establishment. The seed is very small, thus it does not need to be planted deeply.

'Sourdough's seed has a long period of viability when stored in cool, dry conditions. Contact the PMC about storage and cleaning techniques.

Planting Times are dependent on the region. In Southcentral plant seed between May 20 and July 10. Seeding too early in the spring may cause lower germination rates. Seeding too late in the fall may cause poor germination, spring soil fungi, or winter kill.



'Sourdough' is a beautiful landscape plant.

Growing up to six feet, its plume turns purple when mature.

Sourdough bluejoint is not good as a turf grass because of its growth as a bunch grass. It is a perennial which means that its first year of growth may be slow. Mature stands can last for many years.



'Sourdough' bluejoint production at the Plant Materials Center in Palmer, AK

'Sourdough' plant characteristics

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

References

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