

Slana Germplasm tufted wheatgrass *Elymus macrourus* (*Agropyron macrourum*) Selected Class Release “Natural”

Uses: Revegetation Interior Alaska

Match the species and seed source to the intended planting site
Plants native to an area create a more permanent habitat

Slana Germplasm tufted wheatgrass Plant Identification Number: 9097726

Slana Germplasm tufted wheatgrass comes from Slana, near Glennallen Alaska (August 1995). It was collected at an elevation of approximately 2400 feet by Stoney Wright (2006).

The seed from the parent (Slana) plant is grown and harvested at the Plant Materials Center and by other seed growers.

Some agencies require the original seed to be collected within a certain circumference around where the revegetation will take place.

An example of this is at Denali National Park. They use a locally collected seed mix of a native legume, Indian Potato (*Hedysarum alpinum*), and wheatgrass (*Elymus macrourus*). By planting both species at the same time, Densmore (2000) states that the resulting product can withstand mowing and light scraping—as well as resist invasive weeds.

This same method is practical throughout Alaska where the seed source material is not so strictly regulated.

Roadsides which are well-drained, nutrient-poor, sandy, or gravelly could be successfully established in about 5 years with a mix of *Elymus macrourus* and *Hedysarum alpinum*.

Background and Growth

Elymus macrourus is native to Alaska. It is found on open slopes, gravel or sand bars, and earth embankments in tundra and woodlands (Hultén, 1968).



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

Tufted wheatgrass is usually found on well-drained soils. It is a long-lived perennial.

It reproduces by seed or (rarely) vegetatively via rhizomes. It is self-fertile (Sullivan, 1993).

This grass grows in clumps to about 3 feet tall. Its leaf blades are narrow and mostly green, but occasionally bluegreen. It has a slender 8 inch seed spike that some growers consider to be attractive.

Slana Germplasm
tufted wheatgrass seed
is maintained by the
Alaska Plant Materials Center
for commercial production.

Wheatgrass in the Wild—

- is considered a colonizer and an indicator of disturbed sites (Tsvelev, 1983);
- is drought-tolerant, long-lived, and forms sod;
- can be found on riverbanks subject to fluctuating erosion;
- plays an important part in natural revegetation as a nurse plant for other species.

Alaska Plant Materials Center

Serving Alaska's needs in production of Alaska native plants

July 23, 2007



Slana Germplasm tufted wheatgrass

Slana Germplasm tufted wheatgrass for Alaska Revegetation Purposes

This wheatgrass can be an important part of seed mixes for revegetation. It is quick to germinate and become established. This enables it to act like a nurse plant for slower growing plant species (Sullivan, 1993).

Slana Germplasm tufted wheatgrass is well suited to revegetate roadsides where the soil is dry. Wildlife and domestic animals eat this grass.



Elymus macrourus production field at the Plant Materials Center in Palmer, Alaska.



Elymus macrourus seed
170,174 seeds per pound



To Produce Slana

Slana Germplasm tufted wheatgrass grows better in fine-textured soils. Drill it about 1/2 inch deep.

Light irrigation will help its growth. Keep weeds controlled. Seeding can begin either in early spring or fall.

Tufted Wheatgrass has an approximately 8 inch seed head, making it easy to harvest with normal farm devices. Its seed spike ripens in late summer, thus it is one of the last grasses harvested.

Slana Germplasm tufted wheatgrass plant characteristics

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

(Sullivan, 1993)

References

- Densmore, R., M. Vander Meer, N. Dunkle. 2000. *Native Plant Revegetation Manual for Denali National Park and Preserve*. Information and Technology Report, USGS, ISSN 1081-2911, Anchorage, Alaska.
- Hultén, E. 1968. *Flora of Alaska and Neighboring Territories*. © by the Board of Trustees of the Leland Stanford Jr. University, Stanford University Press, Stanford.
- Sullivan, J. 1993. *Elymus macrourus*. In: Fire Effects Information System, [Online], USDA, <http://www.fs.fed.us/database/feis>.
- Tsvelev, N.N. 1983. *Grasses of the Soviet Union*. New Delhi: Oxonian Press Pvt. Ltd.
- Wright, S.J. 2006. *Personal Discussion*. Alaska Department of Natural Resources, Division of Agriculture, Plant Materials Center, Palmer, Alaska.

Peggy Hunt & Stoney Wright
State of Alaska
Department of Natural Resources
Division of Agriculture
Plant Materials Center
5310 S. Bodenbug Spur Rd.
Palmer, AK 99645-9706
Phone: (907) 745-4469