

Plants for Solving Resource Problems

'P-27' SIBERIAN WHEATGRASS

Species: *Agropyron fragile*

Common Name: Siberian Wheatgrass

Plant Symbol: AGFR

Accession Number: PI-108434

Source: 'P27' was selected by the Aberdeen, ID and Pullman, WA Plant Materials Centers from collections originating from Kazakhstan. The original collection was made in 1934. Detailed collection site information is not available.

Native Site Information: Siberian wheatgrass was introduced from Asia and is naturalized from the Pacific coast to New York and is widely used in dryland pasture and rangeland seedings throughout the western United States.

Method of Selection: P-27 was planted in row nurseries and field evaluations beginning in 1935 and individual clones were selected for drought resistance, good seedling vigor and seed yield. P-27 was released in 1953 by Aberdeen PMC, Pullman PMC and the University of Idaho Agricultural Experiment Station.

Description: Siberian wheatgrass is a long-lived, cool season, drought tolerant, introduced, winter hardy bunch grass with an extensive root system. Siberian wheatgrass is very similar to fairway and standard crested wheatgrass, but has finer leaves and stems, narrower and awnless glumes and lemmas, and the spikelets are more ascending, which gives the spike a narrow, oblong, sub-cylindrical shape. Siberian wheatgrass is more drought tolerant and retains its greenness and palatability later into the summer than either standard or fairway crested wheatgrass.



'P-27'
Siberian Wheatgrass

Use: Siberian wheatgrass is commonly seeded in the arid regions of the western United States. Siberian wheatgrass is usually recommended for livestock forage production. It is palatable to all classes of livestock and wildlife. It is a preferred feed for cattle, sheep, horses, and elk in spring, early summer and also in the fall, if additional growth occurs from late growing season rainfall. Siberian wheatgrass is well adapted for stabilization of disturbed soils. It competes well with aggressive introduced plants such as cheatgrass during the establishment period. Its drought tolerance, fibrous root system, and excellent seedling vigor make Siberian wheatgrass ideal for

reclamation in areas receiving 8 inches or more annual precipitation. This grass can be used in urban areas where irrigation water is limited to provide ground cover, weed control and to stabilize ditch banks, dikes, pipelines, power lines, and roadsides.

Insect and Disease Problems: When in pure stands, P-27 is susceptible to the black grass bug, *Labops hesperius*.

Environmental Considerations: Since P-27 is an introduced plant from Europe, it is not an appropriate component in native plant community restoration. This release is from a species that was introduced to the United States in the early 1900's. P-27 represents an incremental improvement in performance within a well documented species. P-27 spreads very little via natural seed distribution. It is not considered a weedy or invasive species but can spread into adjoining vegetative communities under ideal environmental conditions. There are no known negative impacts on wild or domestic animals.

Area of Adaptation: Siberian wheatgrass is adapted for non-irrigated seedings where annual precipitation averages 8-14 inches and where the frost-free period is generally less than 140 days. It is known to surpass fairway and standard crested wheatgrass in rate of establishment, stand persistence, and total forage yield on more arid sites (8 to 10 inches annual precipitation). It is very tolerant of fire.

Soil Adaptation: Siberian wheatgrass is well adapted to silt loam to light-sandy, droughty soils. It has been seeded in areas with as little as 5 inches of annual precipitation with some success. Siberian wheatgrass is cold tolerant and can withstand moderate periodic flooding, not exceeding 7-10 days in the spring. It will not tolerate long periods of inundation-standing water, poorly drained soils, or excessive irrigation.

Planting and Harvesting: P-27 should be seeded with a drill to a depth of ¼ to ½ inch into a firm, weed-free seedbed. The full seeding rate is 6 pounds Pure Live Seed (PLS) per acre. When used as a component of a seed mix, adjust to the percent of mix desired.

For seed production P-27 should be seeded in 36 inch rows at a rate of 2.7 pounds PLS per acre to allow mechanical weed control and to maintain rows. Harvesting seed is best accomplished by swathing, followed by combining of the windrows. Seed is generally harvested in late July. Seed yields range from 150 pounds per acre (dryland) to 500 pounds per acre (irrigated).

Seed Maintenance: Breeder and Foundation seed is maintained at:

USDA-NRCS, Aberdeen PMC
P.O. Box 296
1691A S. 2700 W.
Aberdeen, ID 83210
Phone: (208) 397-4133

Foundation seed is available through the University of Idaho Foundation Seed Program and Utah Crop Improvement Association and Soil Conservation Districts in Idaho, Utah and Nevada. Certified seed shall be limited to not more than two generations from Foundation seed (Registered and Certified).

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