

Plants for Solving Resource Problems

ANATONE GERMLASM BLUEBUNCH WHEATGRASS

Species: *Pseudoroegneria spicata*

Common Name: Bluebunch
Wheatgrass
Plant Symbol: PSSPS
Accession Number: 9076424

Source: Anatone Germplasm is a selection from a native plant collection made in Asotin County, Washington in 1988 by the USDA Forest Service, Rocky Mountain Research Station, Provo, Utah. The original collection was made in a sagebrush/perennial grass community at an elevation of 3,200 ft. Other associated plants at the original collection site include Idaho fescue, Sandberg bluegrass, and mountain big sagebrush. More detailed collection site information is available upon request.

Native Site Information: Bluebunch wheatgrass is a perennial cool season bunchgrass native throughout the western U.S. Its natural distribution ranges from Alaska to northern California and New Mexico eastward to the Great Plains in locations where annual precipitation averages 10 to 20 inches or more.

Method of Selection: Anatone Germplasm was selected by the Rocky Mountain Research Station from a comparison of approximately 80 collections of bluebunch and Snake River wheatgrass, including 'Goldar', 'Whitmar', and 'Secar' under arid conditions. Plants were compared for stand, vigor, seedling establishment success and adaptability to arid sites. Additionally, Anatone was



**Anatone Germplasm
Bluebunch Wheatgrass**

compared against nearly 50 other populations for cold temperature germination rates. This plant release has also been tested for seed production and seed quality characteristics.

Description: Anatone is a densely tufted bunchgrass with abundant leaves. Seed spikes are typically open and lemma awns are strongly divergent at maturity. Abundant leaves and culms average 18 to 40 inches tall. Spikes are generally loose, open with spikelets about the same length as the rachis internodes at maturity. Plants are diploid, $2N = 14$.

Use: Anatone bluebunch wheatgrass uses include: as a component of a seed mix for

rangeland, erosion control, forage and cover seedings in 10 to 20 inch rainfall zones, mine spoil reclamation, critical area stabilization, and competition with aggressive annuals such as cheatgrass and medusahead.

Insect and Disease Problems: No detrimental disease symptoms or insect problems have been observed in plantings of Anatone. It may be susceptible to stripe rust and mildew if conditions are favorable for these pathogens.

Environmental Considerations: This pre-variety selected class release is from a species native to the Intermountain West and has no known negative impacts on wild or domestic animals. Anatone is not considered a weedy or invasive species but can spread to adjoining vegetative communities under ideal environmental conditions.

Area of Adaptation: Anatone is adapted to the Northwest and Intermountain regions of the United States where annual precipitation averages 10 inches or more.

Soil Adaptation: Anatone prefers light to medium-textured well drained soils. It can be planted in the wetter portions of Wyoming big sagebrush plant communities as well as on mountain slopes with antelope bitterbrush, mountain big sagebrush and Idaho fescue. It can also survive in shallow rocky soils common to low sagebrush plant communities.

Planting and Harvesting: Anatone should be seeded with a drill to a depth of 1/4 to 1/2 inch in a firm, weed-free seedbed. The full seeding rate is 7 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, Anatone should be seeded in 24 to 36 inch rows at a rate of 3 to 4 pounds PLS per acre to allow mechanical weed control and to maintain rows. Anatone may be seeded during the spring or late fall (dormant). Mid-August to early fall seedings should only be performed if irrigation is available to ensure stand establishment.

Harvesting seed is best accomplished by swathing, followed by combining of the cured windrows. The seed readily shatters, requiring close scrutiny of maturing stands. Seed is generally harvested in late July to early August. Seed yields range from 80 pounds per acre (dryland – 16 inch+ rainfall areas) to 170 pounds per acre (irrigated).

Seed Maintenance: G1 and G2 Certified seed is maintained at:

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

G2 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. Certification of seed shall be limited to G2, G3, and G4 generations of seed.

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