



'Alkar' tall wheatgrass is a cultivar released in 1951 by the NRCS Pullman Plant Materials Center in cooperation with the Washington, Oregon, and Idaho Agriculture Experiment Stations.

#### **Description**

'Alkar' tall wheatgrass is a late maturing, stemmy bunchgrass that frequently attains a height of 84 inches. The stems are stiff, upright and smooth. The seed heads are 6-10 inches long, and the glumes are blunt-tipped. Each seed is 1/2- 3/4 inch long, and there are approximately 79,000 seeds/pound. The leaves are wide, mostly upright and bluish in color.

#### **Source**

'Alkar' originates from a seed collection made in 1934 from the former USSR. It was isolated after several generations of phenotypic selections from the original accession, PI-98526.

#### **Conservation Uses**

The primary use of 'Alkar' tall wheatgrass is reclaiming saline-alkali land. It is also very useful for upland wildlife habitat, hay production, and cropland retirement plantings. It grows well in irrigated, subirrigated, and seasonally wet sites. Alkar can produce over 7 tons

biomass/acre. It is less palatable than most pasture grasses but livestock will make good use of it.

#### **Area of Adaptation and Use**

'Alkar' tall wheatgrass plantings can be found throughout the Northern Great Plains and Intermountain West. It is not adapted to the coastal areas. 'Alkar' grows best on deep soils that are either seasonally wet or irrigated. It can be grown in dryland upland sites that receive at least 12-14 inches of annual precipitation. 'Alkar' is one of the most saline-alkali tolerant revegetation plants available. It will grow on sites that only support greasewood and/or inland saltgrass.

#### **Establishment and Management for Conservation Plantings**

Tall wheatgrass is large seeded and can be planted as much as 3/4-1 inch deep on coarse soil or heavy soils, respectively. It can be planted alone or in mixtures. 'Alkar' seedlings develop slowly but are quite competitive once they achieve the five-leaf stage.

Irrigated or subirrigated sites can be planted in the spring or late summer. Spring planting is recommended for dryland plantings. 'Alkar' should be drill seeded into a firm, weed-free seedbed. A deep-furrow drill is preferred for planting subirrigated, saline soils. The typical seeding rate for upland plantings is 8-10 lb/acre. Saline sites should be seeded at 15 lb/acre.

'Alkar' should not be grazed during the establishment year. Weeds such as annual kochia need to be controlled during the establishment year.

Stand longevity of 'Alkar' is achieved by not cutting hay too short (8-inch stubble height) and/or not overgrazing the stand.

#### **Ecological Considerations**

'Alkar' tall wheatgrass is not native and should not be used in restoration plantings.

#### **Seed and Plant Production**

Propagation of tall wheatgrass is by seed. 'Alkar' needs to be drill seeded into a clean seedbed using a minimum of 20 seeds/linear foot. Irrigated plantings can be established in the spring and early fall. Dryland seedings should occur in the spring. Seed typically is ripe by late-August. Harvest will require swathing and combining.

**Availability**

Certified seed of 'Alkar' tall wheatgrass is readily available in the commercial market. Much of the certified seed is grown and marketed by growers in Washington state.

The USDA Pullman Plant Materials Center maintains the Breeder Seed production. Foundation Seed is maintained and distributed by the Washington State Crop Improvement Association. Registered and Certified Seed classes are recognized.

*For more information, contact:*

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**Citation**

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For additional information about this and other plants, please contact your local USDA Service Center, NRCS field office, or Conservation District <<http://www.nrcs.usda.gov/>>, and visit the PLANTS Web site <<http://plants.usda.gov>> or the Plant Materials Program Web site <<http://www.plant-materials.nrcs.usda.gov>>

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