

T - 587 Old World Bluestem

A Germplasm Release

- Stabilization of critically eroding areas
- Range or pasture forage for livestock
- Adapted throughout much of Texas

The Texas Agricultural Experiment Station
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The Texas A&M University System
In cooperation with Soil Conservation Service
U S Department of Agriculture

'T-587'

Old World Bluestem

'T-587,' an old world bluestem (*Dichanthium* spp.), has been released by the Soil Conservation Service in cooperation with the Texas Agricultural Experiment Station as a germplasm source.

Origin

T-587 is a mixture of approximately 80 collections of old world bluestems introduced into the U.S. from the Near Fast.

Description

T-587 is a mixture of several types that do not intercross; thus, plant type is not uniform and the frequency of types may vary from location to location due to differences in adaptation. Shifts in frequency of types may change in future generations due to differences in seed production and environmental adaptation. Generally, though, plants are taller and more robust than KR bluestem, with stems ranging from 3 to $3\frac{1}{2}$ feet in height. Leaves are generally wider than KR (about 0.4 inch in width), 10 to 16 inches in length, and greater in number than KR. Nodes are slightly swelled and reddish-purple in color with a ring of hairs. The seed head is a terminal panicle, with 5 to 26 primary spikelike branches which may be sparingly rebranched. A distinguishing characteristic of T-587 is the aromatic odor of the plants. There are approximately 854,000 seeds per pound.

Adaptation

T-587 lacks the necessary hardiness *to* be adapted to the severe winters in the Texas Panhandle area or into Oklahoma. Its area of adaptation within Texas includes all the area south of a line from Cochran County in northwest Texas to Red River County in northeast Texas with a normal precipitation of 14 inches or more, or anywhere KR is adapted. T-587 is adapted to a wide range of soil textures, with the exception of deep sands and poorly drained soils; it is best adapted to tighter soils.

Uses

T-587 may be increased for use in conservation and forage plantings or it may be used as a source for selection for specific types. It is useful as a stabilization plant for critically eroding areas. It can be used in pure stands for pastures or in range mixtures for warm-season grazing. T-587 is much more leaf rust resistant than KR bluestem.

Establishment

Seeding rate is 1.2 pounds pure live seed per acre broadcast to obtain 20 live seed per square foot. A clean, firm, weed-free seedbed is preferred. Fertilize according to site needs *to* bring soil to at least a medium fertility level.

Forage Production and Quality

Quality analysis shows T-587 to be equal to or higher than KR and Caucasian, and several standards for yield, digestibility, and protein content. In over 140 field plantings throughout Texas including more than 100 counties, T-587 has proven to be quite palatable, a high forage producer, and persistent under heavy grazing.

Seed Production

Seed production fields should be planted in the spring at a depth of 1/4 to 1/2 inch in 38- to 42-inch rows. Two harvests are made at the Soil Conservation Service Plant Materials Center at Knox City, Texas. Seed generally mature from mid-June to early July, and then another crop matures from mid to late October at the Knox City site. They are easy to harvest and they may be direct combined or swathed and combined.

Seed Availability

Limited quantities of seed for commercial production or for research purposes can be obtained from the Knox City Plant Materials Canter, Rt. 1, Box 155, Knox City, Texas 76529.



Closeup of seed

For additional information. contact Soil Conservation Service U.S. Department of Agriculture P.O. Box 648
Temple, Texas 76503

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