

A Conservation Plant Released by the Natural Resources Conservation Service
 E. "Kika" de la Garza Plant Materials Center, Kingsville, Texas and
 Texas Native Seeds, Caesar Kleberg Wildlife Research Institute,
 Texas A&M University-Kingsville, Kingsville, Texas

Catarina Blend bristlegrass

Setaria leucopila (Scribn. & Merr.) K. Schum. and *Setaria vulpiseta* (Lam.) Roemer & J.A. Schultes

The Catarina blend of bristlegrass is a commercial blend of four bristlegrass collections from south Texas. The releases forming Catarina blend of bristlegrass were cooperative releases between the E. "Kika" de la Garza Plant Materials Center, Texas Native Seeds, and A&M AgriLife Research Station Beeville. These releases are a selected plant material class of certified seed.



Figure 1. Bristlegrass production field

Description

Both species of bristlegrass included in the blend are native, perennial bunchgrasses. They produce seed from May to November (Fig. 1). Their mature foliage height ranges from 1 to 4 feet tall.

Source

One component of this blend is a plains bristlegrass [*Setaria vulpiseta* (Lam.) Roemer & J.A. Schultes] collected in Webb County, Texas. The other three components are streambed bristlegrass [*Setaria leucopila* (Scribn. & Merr.) K. Schum.] collected in Karnes, Bexar, and Willacy County, Texas. These four accessions were chosen from a comparison of ninety-six collections. Kika820 Germplasm and Kika819 Germplasm were chosen for best survival, vigor, growth form, and disease resistance. Kika677 Germplasm and Kika648 Germplasm also had good field performance, but these two accessions had the highest active seed germination. No breeding, selection or genetic manipulation was used in the development of this release.

Conservation Uses

The Catarina blend of bristlegrass is recommended for upland wildlife plantings and in rangeland seed mixes. It provides good grazing for livestock and fair grazing for wildlife. It can be used in many types of conservation plantings, such as riparian buffers and filter strips.

Area of Adaptation and Use

Catarina Blend has performed well at locations in the Rio Grande Plain and Coastal Sand Sheet (MLRA 83), Gulf Coast Prairies and Marshes (MLRA 150), and Rolling Plains (MLRA 78) regions of Texas. Plains and streambed bristlegrass occur naturally in the High Plains (MLRA 77), Edwards Plateau (MLRA 81), and Trans Pecos (MLRA 42) regions. Catarina blend may be adapted to these regions as well, but this has not been verified through field testing.

Establishment and Management for Conservation Plantings

Begin seedbed preparation well in advance of planting. Plant in early fall (August) in south Texas. Establish a clean, weed-free seedbed by either tillage or herbicides. Prior to planting, the site should be firm and have accumulated soil moisture. Plant Catarina Blend bristlegrass with a grass drill with a small seed box to ensure even seed distribution over the planting area. Broadcast seeding may be used in areas not easily planted with a drill and use additional practices such as cultipacking and harrowing to encourage good seed to soil contact. There are approximately 368,100 to 567,500 seeds per pound of bristlegrass. Plant seeds 1/8 to 1/4 inch deep. A seeding rate of 2 pounds of pure live seed (PLS) per acre is recommended. In planting mixtures, reduce the rate of Catarina Blend according to the total percentage desired in the mixture. Double the recommended seeding rate when broadcast seeding or planting critical areas where a dense cover is desired. It should be noted that some of the collections that make up the Catarina blend have high seed dormancy.

Do not graze areas planted to the Catarina Blend for 1 year. Allow plants to produce seed annually to ensure stand longevity.

Ecological Considerations

Rice stinkbugs and ergot have been observed on these bristlegrasses. Appropriate use and timeliness of applications of insecticides or fungicides can control these infestations, but inattention to these outbreaks can affect both the quantity and the quality of the seed harvest. Catarina is a blend of naturally occurring germplasm and has undergone no purposeful selection.

Seed and Plant Production

Catarina Blend bristlegrass has produced as much as 90 PLS lb/acre of clean seed depending on the accession. Seed production of bristlegrass is best started using greenhouse grown transplants, planted on bedded rows. Rapid spread and growth have been observed in transplant established stands providing seed harvests by the second year and sometimes as quick as the first year. Transplants facilitate better weed control in the seed production fields.

Bristlegrass produces multiple seed crops per year when grown in south Texas. The quantity and quality of seed harvests vary greatly depending on location and field conditions. Harvest seed with a combine with either a grain type or a Shelbourne header. Use an air screen seed cleaner to clean stems, chaff, and empty seeds from harvests. In well managed irrigated fields, expect 2-3 harvests per year. The first harvest is typically made in early May with the last harvest occurring in October.

Availability

For conservation use:

Seed is available from native seed dealers in south Texas. Individual components of the Catarina Blend are known as Kika648 Germplasm, Kika677 Germplasm, Kika820 Germplasm, and Kika819 Germplasm.

For seed or plant increase: First generation (G0) seed is produced and maintained by the E. “Kika” de la Garza Plant Materials Center. All commercial seed fields of the Catarina Blend must be isolated from other cultivated varieties and wild populations of *Setaria*. G1 and G2 seed fields have a 7-year production limit, after which time, fields must be replanted using the appropriate seed generation (G0 or G1).

Citation

Release Brochure for Catarina Blend bristlegrass [*Setaria vulpiseta* (Lam.) Roemer & J.A. Schultes] and [*Setaria leucopila* (Scribn. & Merr.) K. Schum.]. USDA-Natural Resources Conservation Service, E. “Kika” de la Garza Plant Materials Center, Kingsville, Texas 78363. Published September 2020.

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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