

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

Carrizo Blend Little bluestem

Schizachyrium scoparium (Michx.)
 Nash var. *scoparium*



Carrizo Blend little bluestem, photo by South Texas Natives

Carrizo Blend little bluestem [*Schizachyrium scoparium* (Michx.) Nash var. *scoparium*] is a commercial blend comprised of two native seed releases. These were cooperatively released in 2015 by the *South Texas Natives* Project of the Caesar Kleberg Wildlife Research Institute at Texas A&M University-Kingsville, and USDA NRCS E. "Kika" de la Garza Plant Materials Center. These releases are each a selected plant material class of certified seed, available as the designated commercial blend or singly as STN-176 Germplasm little bluestem or STN-461 Germplasm little bluestem.

Description

Carrizo Blend little bluestem is a warm-season, native, perennial bunch grass that grows 3-6 feet tall.

Source

This blend is comprised of two releases both originating from native populations of little bluestem in South Texas. These two accessions were chosen from 95 accessions evaluated at three locations in South Texas. No breeding, selection or genetic manipulation was used in the development of this release.

Conservation Uses

Carrizo Blend little bluestem is recommended for use in range seeding mixtures, upland wildlife plantings, roadside plantings, and other conservation plantings in South Texas. Little bluestem is a dominant plant species on sandy, loamy sand, and sandy loam soils in South Texas. Little bluestem produces abundant forage, provides excellent nesting habitat for bobwhite quail, and cover for other wildlife species.

Area of Adaptation and Use

The area of known adaptation of Carrizo Blend is the Rio Grande Plains (MLRA 083B), Coastal Sand Plain (MLRA 083E), Gulf Coast Prairies and Marshes (MLRA 150B), and southern portions of the Post Oak Savannah Ecoregions of Texas (MLRA 87). Components of Carrizo Blend are recommended for sandy soils, but not on heavy textured soils. Carrizo Blend is recommended for use in most situations in lieu of STN-461 Germplasm or STN-176 Germplasm individually, especially where the exact ecotype of little bluestem cannot definitively be determined for the planting site.

Establishment and Management for Conservation Plantings

Planting is done in early spring or late summer-early fall 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. Little bluestem is best seeded with a native grass drill with picker wheels or a fluffy seed box. Broadcast seeding may be used in areas not easily planted with a drill, but some type of additional coverage such as culti-packing or light dragging is beneficial to ensure a good seed-to-soil contact.

Seed is planted 1/8 to 1/4 inch deep. It is better to plant too shallow than too deep. For calibration purposes, Carrizo Blend little bluestem contains approximately 250,000 seeds per pound. A seeding rate of 5-10 pounds of pure live seed (PLS) per acre is recommended. In seed mixes, reduce the rate according to the percent of little bluestem desired on the planting site. Carrizo Blend little bluestem is slow to establish in dry-land seedings, commonly requiring two years for plant maturity under good conditions.

Stands of Carrizo Blend little bluestem should not be grazed until adequate plant establishment and reproductive capacity are obtained. Allow established plants to produce seed periodically to ensure stand

longevity. Little bluestem is a long-lived perennial with extreme drought and fire tolerant.

Ecological Considerations

No severe insect or disease problems have been observed in little bluestem once established. Cold tolerance of this germplasm beyond the area of intended use is unknown, and use outside of the designated ecoregions is discouraged in favor of more appropriate ecotypes of this plant species.

Seed and Plant Production

Seed production of the components of Carrizo Blend little bluestem is best started using greenhouse grown transplants, planted on bedded rows. Seedlings are relatively slow growing, and when direct seeded, most plants will not reach maturity until the end of 2nd growing season, whereas well managed transplant stands will produce a marketable crop in the planting year. Seed production north of a line from approximately Del Rio to San Antonio to Victoria, TX is discouraged.

Seed harvest is possible with a variety of methods and implements; however we have had excellent results using a Flail-Vac Seed Stripper. Seed of little bluestem ripens indeterminately, and the Flail-Vac can collect the ripe seed crop without damaging or eliminating subsequent harvests as later flowering florets mature.

Seed is best cleaned by combinations of debearding, hammer milling, and screening. Large amounts of inert matter in cleaned seed are unavoidable due to the pubescence and hairs of the spikelets of this ecotype. This inert matter is generally impossible to remove, and influences the low PLS values associated with this selection. Seed morphology is distinctly different than many commercial sources of little bluestem because of longer spikelet length and increased pubescence.

Availability

For conservation use:

Seed will be available from native seed dealers in South Texas. Seed of STN-176 Germplasm little bluestem will be identified by USDA NRCS accession 9086176. Seed of STN-461 Germplasm little bluestem will be identified by USDA NRCS accession 9064461. As a blend they will be identified as Carrizo Blend little bluestem.

For seed or plant increase:

Carrizo Blend little bluestem is a mechanical blend of 2 released accessions of little bluestem, STN-176 Germplasm and STN-461 Germplasm. For each accession in the Carrizo Blend, G0 seed will be made up of the individual accessions, grown in isolation from one another, and maintained by the breeder. G1 seed is harvested by isolated plantings of G0 seed by commercial

seedsmen and G2 seed is harvested from plantings of G1 seed. Increase using G2 seed is prohibited. Carrizo Blend is a mixture of equal amounts of certified, G1 or G2 pure live seed (PLS) of accession 9064461 and accession 9086176. Variance of +/- 15%, such that no accession makes up more than 65%, or less than 35%, of the blend is acceptable in seed marketed as Carrizo Blend. Each component of the release may be marketed individually as certified, selected native Texas germplasm seed, and sold as STN-461 Germplasm little bluestem or STN-176 Germplasm little bluestem.

All commercial seed fields of STN-176 Germplasm and STN-461 Germplasm must be located in Texas and isolated from other cultivated varieties and wild populations of *Schizachyrium scoparium* by a minimum of 990 feet. 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).

For more information, contact:

Kika de la Garza Plant Materials Center
3409 North FM 1355
Kingsville, Texas 78363
Phone: (361) 595-1313
<http://plant-materials.nrcs.usda.gov/stpmc/>

or

South Texas Natives
CKWRI-TAMUK
MSC 218, 700 University Blvd.
Kingsville, Texas 78363
Phone: (361) 593-4525
<http://ckwri.tamuk.edu/research-programs/south-texas-natives>

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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