

A Conservation Plant Released by the Natural Resources Conservation Service, James E. “Bud” Smith Plant Materials Center, Knox City, Texas; E. “Kika” de la Garza Plant Materials Center, Kingsville, Texas and *Texas Natives Seeds*, Caesar Kleberg Wildlife Research Institute, Texas A&M University-Kingsville, Kingsville, Texas

## Santiago Germplasm silver bluestem

*Bothriochloa laguroides* (DC) Hert ssp. *torreyana* (Steud.) Allred & Gould

Santiago Germplasm silver bluestem, a selected class release, was cooperatively released in 2018 by the *Texas Natives Seeds* project of the Caesar Kleberg Wildlife Research Institute at Texas A&M Kingsville, Texas and the USDA NRCS James E. “Bud” Smith Plant Materials Center in Knox City, Texas, and E. “Kika” de la Garza Plant Materials Center, Kingsville, Texas. This release has not undergone any breeding, selection or genetic manipulation.

### Description

Santiago Germplasm silver bluestem is similar to the typical description for silver bluestem. It is a warm season perennial bunch grass. Culms to 5 feet tall. Leaves are basal up to 10 inches long with terete sheaths. The inflorescence is a contracted panicle up to 8 inches long with 12 or more rames. Sessile spikelets less than 4.4 mm. Pedicellate spikelets up to 3 mm long. Caryopses are 1.6-2.5 mm long, lanceolate, and amber. Foliage is 12 to 18 inches and green to blue-green in color. Inflorescence is silvery-white.

### Source

Santiago Germplasm includes 3 distinct populations of silver bluestem, each increased in isolation to maintain genetic diversity of the wild populations. This selection originates from native collections from the Edwards Plateau and Trans Pecos ecoregions of Texas.

### Conservation Uses

Santiago Germplasm silver bluestem is recommended for critical area revegetation, roadside plantings, rangeland seeding mixes and wildlife habitat in West Texas.

### Area of Adaptation and Use

Silver bluestem is a hardy, warm season perennial grass that is easily reestablished after drought, overgrazing, or surface disturbance. Santiago Germplasm performs well in well-drained soils across a wide variety of soil textures. It is not suited for moist sites.

The area of known adaptation of Santiago Germplasm includes the southern High Plains, southern Rolling Plains, Trans Pecos, and western Edwards Plateau ecoregions of Texas.

### Establishment and Management for Conservation Plantings

Seedbed preparation should begin in advance of planting. Planting can be done in late fall or spring in the Edwards Plateau, High Plains, or Rolling Plains. Mid-summer planting is recommended for the Chihuahuan Desert portions of the Trans Pecos. Establish a clean, weed-free seedbed by either tillage or herbicides. Prior to planting, the site should be firm and have accumulated soil moisture.



Santiago Germplasm silver bluestem.

Areas planted to Santiago Germplasm should be deferred from grazing until plants are well established. Established plants should be allowed to produce seed annually to ensure reseeding with minimal soil disturbance.

#### **Ecological Considerations**

No severe insect or disease problems have been observed in silver bluestem once established.

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

Silver bluestem is seeded with a drill or broadcast seeder. If broadcast seeded, additional coverage such as culti-packing or light dragging is recommended to ensure good seed to soil contact.



Seed of Santiago Germplasm silver bluestem.

Seed should be planted  $\frac{1}{8}$  to  $\frac{1}{4}$  inch deep. It is better to plant too shallow than too deep. For calibration purposes, Santiago Germplasm silver bluestem contains approximately 503,991 seeds per bulk pound. A seeding rate of 1-2 pounds pure live seed per acre is recommended for pure stands. For seed mixes, adjust the rate according to the desired percentage of silver bluestem in the mix.

#### **Availability**

Seed of the Santiago Germplasm silver bluestem will be identified by USDA NRCS accession number 9112293. First generation (G0) seed is produced and maintained by *Texas Native Seeds*.

#### ***For more information, contact:***

USDA-NRCS

James E. "Bud" Smith Plant Materials Center

3950 FM 1292 Ste.100

Knox City, Texas 79529

Phone: (940) 658-3922 ext.5

<https://www.nrcs.usda.gov/wps/portal/nrcs/main/plantmaterials/pmc/central/txpmc/>

or

USDA-NRCS

E. "Kika" de la Garza Plant Materials Center

3409 N FM 1355

Kingsville, Texas 78363

Phone: (361) 595-1313

<https://www.nrcs.usda.gov/wps/portal/nrcs/main/plantmaterials/pmc/central/stpmc/>

or

Texas Native Seeds

CKWRI-TAMUK

MSC 218, 700 University Blvd.

Kingsville, Texas 78363

Phone: (361) 593-4525

<http://ckwri.tamuk.edu/research-programs/texas-native-seeds>

#### **Citation**

Release Brochure for Santiago Germplasm silver bluestem [*Bothriochloa laguroides* (DC) Hert ssp. *torreyana* (Steud.) Allred & Gould]. USDA-Natural Resources Conservation Service, James E. "Bud" Smith Plant Materials Center, Knox City, Texas 79529. Published June 2018.

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>>

*Helping People Help the Land*

USDA IS AN EQUAL OPPORTUNITY PROVIDER, EMPLOYER, AND LENDER