



United States Department of Agriculture
Natural Resources Conservation Service
Plant Materials Program

South Texas Germplasm sideoats grama

Bouteloua curtipendula (Michx.) Torr. var.
caespitosa Gould & Kapadia

A Conservation Plant Release by USDA NRCS E. "Kika" de la Garza Plant Materials Center, Kingsville, TX



South Texas Germplasm sideoats grama. Photo by Forrest Smith, South Texas Natives, Kingsville, TX.

South Texas Germplasm sideoats grama (*Bouteloua curtipendula* (Michx.) Torr. var. *caespitosa* Gould & Kapadia) is a selected plant material class of certified seed cooperatively released in 2012 by the *South Texas Natives* Project of the Caesar Kleberg Wildlife Research Institute at Texas A&M University-Kingsville, USDA NRCS E. "Kika" de la Garza Plant Materials Center, and Texas AgriLife Research Station Beeville.

Description

Sideoats grama is a warm-season, native, perennial bunch grass that grows 3-4 feet tall. The plants produce seed from May through October in south Texas.

Source

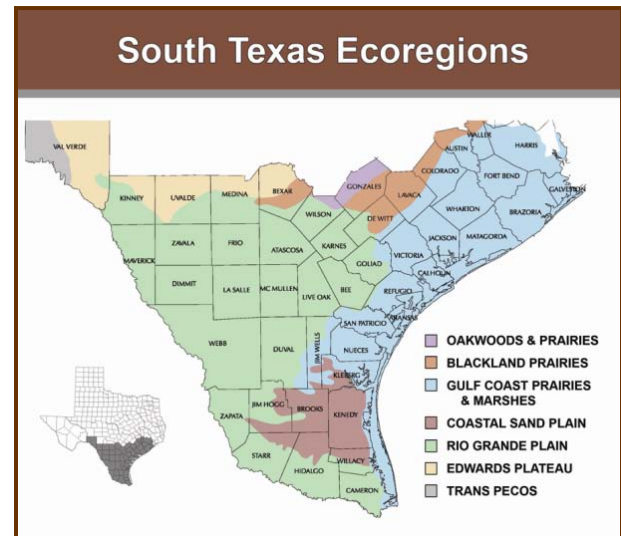
South Texas Germplasm sideoats is a blend of 6 native populations collected in Atascosa, Frio, Medina, Uvalde, and Val Verde Counties of south Texas. This release is selected plant material class of certified seed. South Texas Germplasm has superior plant vigor, seed production, and biomass production compared to available sideoats grama releases when grown in south Texas. No breeding, selection or genetic manipulation was imposed with any of this material, and all accessions were increased for

commercial production using the original wild-harvested seed.

Conservation Uses

Sideoats grama is recommended for use in upland wildlife, highway rights-of-way, energy exploration, reclamation, and range plantings in south Texas.

Area of Adaptation and Use



Sideoats grama is a common plant on many ecological sites in the Rio Grande Plain, Coastal Sand Plain, and Gulf Coast Prairies and Marshes Ecoregions. Sideoats grama produces abundant forage and provides suitable nesting habitat for bobwhite quail, and cover for other wildlife species. Because of the plants stature and fast-growing seedlings, it shows good competitive ability with many introduced exotic grasses. Populations in the release originated from fine sandy loam, loamy fine sand, sandy clay loam, gravelly loam, and clay loam soils.

Best performance in planting trials has been observed on medium to fine textured soils. The area of known adaptation of South Texas Germplasm is the Rio Grande Plain, Coastal Sand Plain, and Gulf Coast Prairies and Marshes Ecoregions of Texas.

Establishment and Management for Conservation Plantings

Seedbed preparation should begin well in advance of planting. Planting can be 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.

Sideoats grama is best seeded using a native-grass drill with picker wheels or a medium to large 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 will be beneficial to ensure good seed to soil contact.

Seed should be planted 1/8 to 1/4 inch deep. It is better to plant too shallow than too deep. For calibration purposes, South Texas Germplasm sideoats grama contains approximately 165,000 seeds per bulk pound. A seeding rate of 5-10 pound of pure live seed (PLS) per acre is recommended. In planting mixtures, reduce the rate according to the percent of sideoats grama in the seed mixture. South Texas Germplasm has shown rapid emergence in most planting trials, and is typically one of the easiest native grasses to establish by seeding.

Stands of South Texas Germplasm should not be grazed for 1 year after planting to allow adequate rootstock development. Established plants should be allowed to produce seed annually to insure stand health. Sideoats grama is a long-lived perennial that is extremely drought and fire tolerant once established.

Ecological Considerations

No severe insect or disease problems have been observed in sideoats grama once established. Cold tolerance of this germplasm beyond the area of intended use is unknown.

Seed and Plant Production

Seed increase plots have been managed on 36" bedded rows. Flat plantings may be possible with adequate weed control. Sideoats grama can also be established with vegetative transplants. Rapid spread and growth has been observed in transplant established stands providing seed harvests within the first year. Furthermore transplant stands facilitate better weed control in the seed production fields. Deep soil tillage or frequent close cultivation is recommended to promote seed production.

South Texas Germplasm produces four seed crops per year when grown in south Texas. Seed can be harvested

with a Flail-Vac or combine. To clean stems and chaff from harvests, a Clipper seed cleaner has been used.

Well managed seed fields of South Texas Germplasm have produced 80-350 bulk pounds of clean seed per year. Purity of the seed is usually around 50% and germination rates range from 5-20%. South Texas Germplasm has a large amount of dormant seed.

Availability

For conservation use: Initially seed will be produced exclusively by Douglass King Seed Company, San Antonio, TX.

For seed or plant increase: Seed of the South Texas Germplasm sideoats grama will be identified by USDA NRCS accession number 9109632. First generation (G0) seed will be produced and maintained by South Texas Natives. Seed production fields have a 7 year production limit.

For more information, contact:
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Website: <http://plant-materials.nrcs.usda.gov/stpmc/index.html>

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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