

A Conservation Plant Released by the Natural Resources Conservation Service
 East Texas Plant Materials Center, Nacogdoches, Texas and
 Golden Meadow Plant Materials Center, Galliano, Louisiana

Coastal Plains Germplasm Little bluestem *Schizachyrium scoparium* (Michx.) Nash var. *scoparium*



Coastal Plains Germplasm little bluestem at the ETPMC

Coastal Plains Germplasm little bluestem [*Schizachyrium scoparium* (Michx.) Nash var. *scoparium*] was cooperatively released in 2016 by the USDA NRCS East Texas Plant Materials Center, Nacogdoches, Texas and the USDA NRCS Golden Meadow Plant Materials Center, Galliano, Louisiana as a selected class release.

Description

Coastal Plains Germplasm little bluestem is a warm season, long lived, perennial, bunch grass. Plants may reach 5 feet in height on fertile soils with adequate moisture, and range from green to chalky blue in color. The basal stem sheaths are flattened. Leaves may be 12 inches or more in length and approximately 1/2 inch in width.

Source

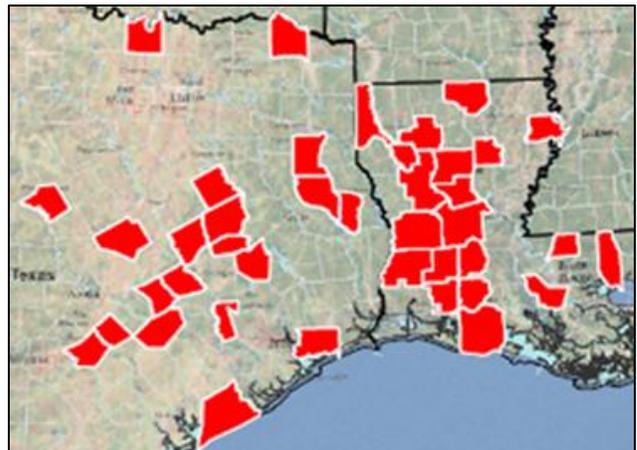
Coastal Plains Germplasm little bluestem is made up of 77 accessions collected from native stands of little bluestem from eastern Texas and Louisiana. Accessions were selected based on superior germination and seedling vigor. Seed was harvested from these 77 accessions to establish a seed production field at the East Texas Plant Materials Center.

Conservation Uses

Coastal Plains Germplasm is used for conservation cover, field borders, wildlife habitat improvement, longleaf pine understory restoration and critical area plantings. It is suitable forage for livestock when grazed or cut while in the vegetative stage. It is reported to be one of the dominant grass species within the longleaf pine ecosystem making up more than 50% of the available forage in some areas. Coastal Plains Germplasm little bluestem is adapted to MLRA 133B, which occupies the historic range of longleaf pine in eastern Texas and Louisiana making it a viable option for longleaf pine understory restoration. It provides critical wildlife habitat for deer, turkey, quail, dove, song birds, and small mammals.

Area of Adaptation and Use

Coastal Plains Germplasm is adapted to the area of seed collections in Louisiana and eastern Texas (see map below). The zone of collection is dominated by the Western Coastal Plains, MLRA 133B, but also comprises MLRAs 86B, 87A, 131A, B, C, D, 134, and 150A, B. Adaptation is anticipated to extend across the southeastern United States through Land Resource Regions P, O, T, and J within USDA Hardiness Zones 8a through 9a. Further testing is needed to confirm anticipated adaptation range.



Counties and parishes where seed collections were made for developing Coastal Plains Germplasm little bluestem

Establishment and Management for Conservation Plantings

Germination tests have shown fresh seed to have approximately 40% dormancy. Plantings should be done in spring, February 15 – May 15. Seedbeds should be clean, free from weeds, firm, and have adequate moisture prior to planting. Coastal Plains Germplasm can be seeded with a native grass drill equipped with picker wheels for planting fluffy seed. A less preferred method

of planting is broadcasting seeding. If seed are broadcast planted, cultipacking or a light drag is needed to cover seed and to ensure good seed-to-soil contact. Seed may be mixed with a carrier such as sand or cat litter to aid in seed dispersal. Hydromulching may be used for areas not accessible by conventional planting equipment.

Seed should be planted approximately $\frac{1}{8}$ inch deep, planting depth may be increased to $\frac{1}{4}$ inch in sandy soils. Coastal Plains Germplasm averages 330,000 seeds per pound. The recommended seeding rate is 5 pounds per acre for monotypic stands. For seed mixes, adjust the rate according to the desired percentage of Coastal Plains Germplasm in the mix.

Grazing should be deferred from new plantings for at least one year. Do not graze or cut below 8 inches and allow ample recovery time between cutting or grazing events. Periodic prescribed fire will help maintain stand health and stimulate production. Contact your local NRCS office for assistance with developing a prescribe grazing plan or burn plan. Mowing and pre-emergent herbicides may be used to control weed competition after establishment where applicable. For herbicide recommendations, please contact your local extension office.

Ecological Considerations

No severe insect or disease problems have been observed in established stands of Coastal Plains Germplasm little bluestem. The seed is wind distributed and may invade areas adjacent to plantings.

Seed and Plant Production

Seed production fields of Coastal Plains Germplasm can be started from transplants or direct seeding. Transplants are the fastest establishment method and allow the use of pre-emergent herbicides; limiting competition from weedy annual species during early establishment. Fields started from seed will require a longer establishment period. Flail-Vacs or similar seed stripper are the preferred method of harvest. Coastal Plains Germplasm is indeterminate and genetically diverse with plants



Coastal Plains Germplasm production field at the ETPMC

maturing throughout the fall. Non-destructive harvesting method offer the greatest seed harvest potential and maintain genetic diversity. Combine harvest is applicable, but will select plants within the release based on maturity date, reducing the genetic diversity of Coastal Plains Germplasm little bluestem.

Breeder field at the East Texas Plant Materials Center have averaged 65 PLS pounds of seed over 5 years. Harvests have exceeded 80 PLS pounds per acre during good years. Seed stored at 45°F and a relative humidity below 60 percent maintained greater than 70% viability for up to 6 years. Viability fell to 40% after 7 years and showed trends for rapidly declining viability beyond 7 years of storage.

Availability

For conservation use:

Breeder seed will be available to growers for seed increase. Seed of Coastal Plains Germplasm little bluestem release will be identified by USDA NRCS accession number 9094826.

For seed or plant increase:

All commercial seed fields of Coastal Plains Germplasm must be isolated from other cultivated varieties and wild populations of little bluestem by a minimum of 900 feet.

For more information, contact:

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6598 FM 2782
Nacogdoches, Texas 75961
Phone: (936) 564-4873

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/plantmaterials/pmc/central/etpmc/>

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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