

United States Department of Agriculture

Natural Resources Conservation Service Plant Materials Program

OK Select Germplasm Little Bluestem

Schizachyrium scoparium (Michx.) Nash

A Conservation Plant Release by USDA NRCS James E. "Bud" Smith Plant Materials Center, Knox City, TX



1USDA-NRCS James E. "Bud" Smith PMC

OK Select Germplasm little bluestem [Schizachyrium scoparium (Michx.) Nash] was released from the James E. "Bud" Smith Plant Materials Center in Knox City, Texas in 2002.

Description

Little bluestem, is a native, perennial, warm season, long-lived bunchgrass. The plants grow from 1.5 feet on droughty sites to 3 feet on fertile soils. Little bluestem has very flat basal shoots. Plants are green except for a purplish color at the base of the stems. After frost, the plants have a reddish cast. The leaves are smooth, but are covered with hair at the base next to the sheath. The seed is produced at the top of a hairy cluster stem and average 3 inches long. Little bluestem has a deep fibrous root system, and can spread by short rhizomes. Growth starts in late spring and continues throughout summer if moisture is adequate. Seed from this plant generally ripens in October and November. There are approximately 379,000 seed per pound of little bluestem.

Source

OK Select Germplasm little bluestem was originally collected from native stands in the southwestern Oklahoma counties of Caddo, Grady, Jefferson, Stephens, and Washita.

Conservation Uses

OK Select Germplasm may be used in pure stands for pasture and hay plantings or as a component in a seed mixtures for rangeland seeding. Little bluestem is an important forage grass for livestock, deer, and elk. The plants provide good nesting and cover for birds, reptiles, and small mammals. OK Select Germplasm may also be utilized for filterstrips, field borders, contour buffer strips and for erosion control plantings.

Area of Adaptation and Use

OK Select Germplasm is adapted throughout much of Texas, Oklahoma, Arkansas, and Louisiana where little bluestem is commonly found. It grows well on deep, shallow, sandy, fine-textured, and rocky soils, but is not adapted to saline sites or wet bottomlands.

Establishment and Management for Conservation Plantings

The full seedling rate for OK Select Germplasm little bluestem is 3.4 pounds of pure live seed per acre. When planting this as a component of a seed mixture, the seeding rate should be adjusted to the desired percent of the mix. Seed should be placed \(^{1}\)4 to \(^{1}\)2 inch deep.

Seedbed preparation should begin the year prior to spring planting to reduce weed problems during the first year of establishment. Work the site as necessary during the summer or early fall prior to establishment to create a firm weed-free seedbed. Work should be completed in the fall to allow time for the soil to settle and accumulate moisture. Minimum and no-till operations should use herbicide applications to control weeds.

Plantings should be well established before livestock grazing is permitted. Twelve months of grazing deferment should give plants enough time to become established. Established stands of OK Select Germplasm little bluestem should not be grazed lower than 6-8 inches, depending upon the prescribed grazing system. Contact your local U.S. Department of Agriculture-NRCS field office for assistance in planning and applying prescribed grazing plans.

Soil tests should be conducted to determine the amount of fertilizer applied to sustain a medium level. Nitrogen should not be used during the establishment year because it will encourage weed growth. Weeds may be controlled by mowing or with herbicides. Consult your local extension weed specialist for recommendations on herbicides for little bluestem.

Seed and Plant Production

Little bluestem is harvested by either direct combining, swathing and combining, or a seed stripper. Average seed yield is 206 pounds per acre.

Availability

For conservation use: Commercial seed is available from several commercial seed companies.

For seed or plant increase: Generation zero (G0) seed (equivalent to Breeder seed) will be maintained by the USDA-NRCS Plant Materials Center in Knox City, Texas and is available through the Texas Foundation Seed Service in Vernon, Texas, phone number (940) 552-6226.



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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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