

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
ELSBERRY, MISSOURI

And

MISSOURI DEPARTMENT OF CONSERVATION
JEFFERSON CITY, MISSOURI

**NOTICE OF RELEASE OF SOUTHERN MISSOURI GERmplASM
LITTLE BLUESTEM
SOURCE IDENTIFIED CLASS OF NATURAL GERmplASM**

The Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture, and the Missouri Department of Conservation (MDC) announce the release of a source identified ecotype of little bluestem (*Schizachrium scoparium*, Michx.) for Southern Missouri counties.

As a source identified release, this plant will be referred to as Southern Missouri Germplasm little bluestem to document its original collections. Southern Missouri Germplasm little bluestem is released as a source identified type of certified seed (natural track). It has been assigned the NRCS accession number 9079006.

This alternative release procedure is justified because there are no existing commercial sources of little bluestem collected from numerous native sites throughout this specific region. Propagation material of specific ecotypes is needed for roadside plantings and prairie restoration and enhancement. The potential for immediate use is high.

Collection Site Information: Collections were taken from native prairie remnants within the counties in Missouri south of the Missouri River in the Ozark region.

Ecotype Description: Little bluestem is a medium tall, warm season, bunch type grass with coarse stems at basal leaves. As a perennial it begins growth in late spring and continues through the hot summer period until the first killing frost. It is easily mistaken for common broomsedge, *Andropogon virginicus*. Plants are slender to robust, compressed, 50 to 150 cm. tall, erect, the upper half freely branching; sheaths and blades commonly glabrous or nearly so, frequently sparsely pilose at their junction, rarely pubescent to villous throughout, the blades 3 to 6 mm. wide, flat; raceme 3 to 6 mm. long, mostly curved, the filiform peduncles mostly wholly or partly included in the sheaths, commonly spreading, the rachis slender, flexuous, pilose, sometimes copiously so; sessile spikelet mostly 6 to 8 mm. long, scabrous, the awn 8 to 15 mm. long; pedicellate spikelet usually reduced, short-awned, spreading, the pedicel pilose. It develops full stands where moisture is sufficient, but gets clumpy on drier sites. It has value as a persistent low maintenance cover plant and as summer forage.

Collections of little bluestem from east to west across Missouri guarantees the adaptation of releases to the entire zone. Plants are cross-pollinated. For isolation requirement, little bluestem should be spaced a minimum of 1000 feet from any other different little bluestem selection.

Ecological Considerations and Evaluation: Southern Missouri Germplasm little bluestem is a collection of naturally occurring germplasm and has been unaltered. It does not differ in rate or spread, seed production, and vigor from naturally occurring little bluestem. Southern Missouri Germplasm little bluestem did not meet the assessment of a plant that could become invasive based on guidelines adopted by the NRCS Plant Materials Program. It is not expected to behave any differently in the environment than other native plant material. Southern Missouri Germplasm little bluestem was “okay to release” when evaluated through the “Worksheet for Conducting an Environmental Evaluation of Plant Materials Releases”.

Anticipated Conservation Use: Little bluestem can be used in a range seeding, a pasture seeding, prairie restoration, prairie landscaping and wildlife cover and roadside restoration.

Potential Area of Adaptation: Little bluestem is adapted to a wide variety of soil. It grows well on deep to shallow, sandy to fine-textured and rocky soils. It tolerates low rainfall and is often found on droughty sites. It is not tolerant to heavy shade. Ecotypes are adapted to areas with as little as 14 inches to over 50 inches of average annual precipitation.

Little bluestem occurs in prairies, glades, rocky open woods, abandoned fields, sandy open ground, waste places, and along railroads. Southern Missouri Germplasm little bluestem is found throughout the southern counties of the Missouri Ozarks within MLRA’s 116a and 116b. It is found in USDA plant hardiness zones 5 and 6.

Availability of Plant Materials: G1 material is being produced in limited supply by the Elsberry Plant Materials Center. For information contact USDA, NRCS, Plant Materials Center, 2803 N. Hwy 79, Elsberry, Missouri 63343 (573 898-2012).

References:

Flora of Missouri; p. 244, Steyermark, J. A; Iowa State University Press, Ames, IA 1968.

Manual of Grasses of the United States; pp. 753-755, Hitchcock, A.S., United States Department of Agriculture, Washington, DC, 1951.

Forages; p. 514, Hughes, H.D.; Heath, M.E.; Metcalfe, D.S., The Iowa State College Press, Ames, Iowa, 1951.

Badlands Ecotype Little Bluestem, United States Department of Agriculture, Natural Resources Conservation Service, Plant Materials Center, North Dakota, 1997.

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Signatures for release of:

Northern Missouri Germplasm little bluestem (*Schizachrium scoparium*, Michx.)

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