Registration of Southlow Michigan Germplasm Big Bluestem

Southlow Michigan Germplasm big bluestem (Andropogon gerardii Vitman) (Reg. no. GP-1, PI 642398) was released 19 September 2001 by the U.S. Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS), Michigan Association of Conservation Districts, and the Michigan Department of Natural Resources. This Source Identified Class (natural track) germplasm is eligible for seed certification under Association of Official Seed Certifying Agencies (AOSCA) guidelines (AOSCA, 2003). Southlow Michigan Germplasm big bluestem was given the designation ACC: 9084510 by USDA-NRCS and determined “OK to release” when evaluated through the “Environmental Evaluation of NRCS Plant Releases” worksheet.

Big bluestem is a native, perennial, warm-season, bunch grass with short, scaly rhizomes and an expansive root system. Erect, pithy stems can reach heights of 2.5 m. Plants are very leafy at the base, lessening considerably up the stem. Leaf blades have long, silky hairs that are widely dispersed on the upper surface. Plants bear 2 to 6 racemes at the tip of the culms, and usually some smaller inflorescences from the leaf axils (Hitchcock and Chase, 1950; USDA-NRCS, 2006).

Southlow Germplasm big bluestem is a multi-origin native germplasm with G0 seed assembled from 22 native stands (as designated by the Michigan Department of Natural Resources, Wildlife Division) in the southern half of Michigan’s Lower Peninsula in 1999. The purpose of the assembly was to provide a genetically diverse big bluestem seed source representing populations that are native to Michigan’s Lower Peninsula. This diversity will enhance establishment of big bluestem across a range of environmental conditions throughout its area of adaptation. Seeds were mixed and planted in a single crossing block without further purposeful selection. Seed harvested from this crossing block was released as Southlow Michigan Germplasm big bluestem. The Michigan epithet depicts its origin in southern Lower Peninsula.

Big bluestem grows in dry to moist open areas throughout much of the USA. It attracts insects, providing escape and winter cover for birds and small mammals and is a major component of tall and mixed grass prairies. Southlow Michigan Germplasm big bluestem, a genetically diverse, defined population for use in diversification of native habitats and for erosion control, has an area of adaptation that is the southern half of Michigan’s Lower Peninsula.

Limited quantities of seed are available on request from Dave Burgdorf (dave.burgdorf@mi.usda.gov) at the USDA-NRCS, Rose Lake Plant Materials Center for five years after registration with CSSA. Afterward, seed will be available from the National Plant Germplasm System. Recipients of seeds are asked to make appropriate acknowledgment of the source of germplasm if it is used in the development of a new cultivar, germplasm, parental line, or genetic stock.

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References


USDA-NRCS, Rose Lake Plant Materials Center, 7472 Stoll Rd., East Lansing, MI 48823. Registration by CSSA. Received 4 May 2006.

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