UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE NACOGDOCHES, TEXAS

NOTICE OF RELEASE OF PILGRIM GERMPLASM VELVET PANICUM SELECTED CLASS OF NATURAL GERMPLASM

The Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture announces the release of a selected class of velvet panicum [*Dichanthelium scoparium* (Lam.) Gould].

As a selected class release, this plant will be referred to as Pilgrim Germplasm velvet panicum. It has been assigned the NRCS accession number 9057334. Pilgrim Germplasm is released as a selected class of certified seed (natural track).

This alternative release procedure is justified because currently there is a lack of commercially adapted sources of velvet panicum for conservation use in eastern Texas and across the southeastern U.S.

Collection Site Information: Pilgrim Germplasm was originally seed collected on June 14, 1990 by Ann Saam, an NRCS employee stationed at the Mt. Pleasant, Texas Field Office. This accession was collected in Pittsburg Township in Camp County, Texas. The collection site (N. latitude 33^0 0" 15, W. longitude 94^0 55") is in MLRA 133B on a Bowie fine sandy loam with average yearly precipitation of 48 inches.

Description: Pilgrim Germplasm velvet panicum is a short lived perennial bunchgrass. A basal rosette is produced in late fall or early winter and stems begin growth in the spring. The erect, coarse, thick culms grow to a height of 60 inches. The lower culm internodes, sheaths, and blades are very pubescent while the upper culms and leaves are moderately pubescent to glabrous. An open seed panicle is produced in the summer and a closed spikelet is produced in the fall. This plant tends to flower later when growing in association with other *Dichantheliums*. *Dichanthelium scoparium* frequently grows in open or partially open areas along moist ditches and swales in sandy soils (Gould and Clark, 1978).

Method of Selection: Pilgrim Germplasm was selected from among thirty-three collections (33) of *Dichanthelium* spp. collected from 16 counties in Major Land Resource Areas 133B, 87, and 152B in the USDA/NRCS East Texas Plant Materials Center (PMC) service area (USDA, NRCS East Texas Plant Materials Center, 1993). Collections were evaluated for vigor, seed and foliage height, and foliage width from 1993-1995 at the East Texas PMC, Nacogdoches, Texas. Pilgrim Germplasm exhibited better vigor than 'Tioga', the commercial standard in initial evaluation. From the initial evaluation because of its sustained performance in vigor (USDA, NRCS East Texas Plant Materials Center, 1997). Pilgrim Germplasm was observed to exhibit better drought tolerance and seed production than the other accessions.

Ecological Considerations and Evaluation: Pilgrim Germplasm is a collection of natural germplasm which has not been manipulated or undergone breeding selection. Pilgrim Germplasm was determined "OK to release" when evaluated through "Worksheet for Environmental Evaluation of NRCS Plant Releases."

Conservation Use: This species provides a source of food for songbirds, small mammals, and game birds. Basal rosettes provide winter forage for wild turkey and white tailed deer (Miller and Miller, 1999).

Anticipated Area of Adaptation: *Dichanthelium scoparium* is adapted to coarse and medium textured soils with a pH of 4.5 to 7.5. Precipitation for this species ranges from 30 to 50 inches per year (USDA, NRCS, 2007). Pilgrim Germplasm is potentially adapted for use in the southeastern United States. The full range of adaptation is not known at the present time.

Availability of Plant Materials: G1 seed will be maintained by the USDA-NRCS East Texas Plant Materials Center and is available in limited quantities to interested parties. For more information contact USDA-NRCS East Texas Plant Materials Center, 6598 FM 2782, Nacogdoches, Texas 75964. Phone: (936) 564-4873.

References:

- Gould, F. and C. Clark. 1978. Dichanthelium (Poaceae) in the United States and Canada. Annals of the Missouri Botanical Garden. 65:1088-1132.
- Miller, J.H. and K.V Miller. 1999. Forest Plants of the Southeast and Their Wildlife Uses. Southern Weed Science Society.
- USDA, NRCS East Texas Plant Materials Center. 1993. 1992 Annual Activity Report. Nacogdoches, Texas.
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- USDA, NRCS. 2007. The PLANTS Database (<u>http://plants.usda.gov</u>, 30 May 2007). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

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