

**UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
ATHENS, GEORGIA**

**NOTICE OF RELEASE OF PENN CENTER GERmplasm SWITCHGRASS
SOURCE IDENTIFIED CLASS OF NATURAL GERmplasm**

The Natural Resources Conservation Service, U.S. Department of Agriculture announces the naming and release of Penn Center Germplasm Switchgrass (*Panicum virgatum* L.). Penn Center Germplasm Switchgrass has been assigned the NRCS Accession number 9093789.

The source identified release procedure is being utilized because there is a high demand for materials of this level. Penn Center Germplasm is adapted to our target area of the South Carolina and Georgia coastal development areas. It is recommended for use in residential and business development landscapes to help control erosion and beautify disturbed areas along the high marsh- maritime forest zone.

Collection Site Information: The collection site is near the community of Penn Center South Carolina which is a significant national historic area recognizing civil rights milestones and the efforts of Dr. Martin Luther King. Material was collected at North latitude 32° 22' 02" West longitude 080° 51' 32.7". It was collected in Beaufort Co South Carolina along highway 170, 4.2 miles west of the Broad river and 7 miles west of Port Royal on the edge of Capers soil association (Typic Sulfaquent) and Wahee soil (Aeric Ochraquults). It was on 0-2 % slope at a transition zone between the high marsh and maritime forest. It can be influenced by high spring tides. Climate is considered moderate temperate with mean annual rainfall of 49 inches. Temperatures are high in summer and moderate in winter. Associated plants at the collection site are *Spartina patens* (Aiton) Muhl., *Juncus roemerianus* Scheele, *Baccharis halimifolia* L., *Baccharis angustifolia* Michx., *Sabal palmetto*(Walter) Lodd. ex. Schult & Schult f., *Quercus virginiana* Mill., *Sabal minor* (Jacq.) Pers., and *Juniperus virginiana* L. var. *silicicola* (Small) J. Silba

Description: This plant is a native warm-season perennial bunch grass that grows from short branching rhizomes. Stems range in size from 2 to 5 mm in diameter. Green to yellowish green leaves can reach 35 cm long and 15 mm wide. Plant height can reach 4 to 6 feet tall including inflorescence panicle. Inflorescence can range in color from purple to light tan. The spikelet contains a sterile lemma and palea and a fertile lemma and palea. The fertile lemma and palea contain one seed about 1-2 mm long (Weakley 2008). This plant would be in the facultative (FAC +) wetland plant indicator group (Reed 1998).

Method of Breeding and Selection: This is a native source identified release which has undergone no purposeful selection pressure.

Ecological Considerations and Evaluation: Penn Center Germplasm was rated OK to release under the **Environmental Evaluation of Plant Materials Releases**. It rated low for Impacts on Habitats, Ecosystems, and Land Use. It rated easy to control under Ease of Management . It rated moderate for Conservation Need and Plant Use. It rated moderate for Biological Characteristics. It is native material and should not have a negative effect on the environment.

Conservation Use: Penn Center can provide a vegetative cover to prevent erosion along coastal areas of South Carolina and Georgia. It evolved and is adapted to the transition zone between the high marsh and the maritime forest. It can be utilized in residential and commercial areas where ground disturbance has left the landscape susceptible to soil erosion.

Area of Adaptation: This source identified material of *Panicum virgatum* L. is well adapted to the outer coastal plain of South Carolina and Georgia. It should do well in areas of precipitation around 49 inches per year, hardiness zones of 8a, and 8b, and MLRA of 153B. It tolerates flooding during spring high tides.

Availability of Plant Materials: Foundation vegetative material will be maintained at the Jimmy Carter Plant Materials Center Americus, Georgia. A nursery in South Carolina has been contacted and is growing vegetative stock for conservation use.

References:

Reed, P.B. 1988. National List of Plant Species That Occur in Wetlands: Southeast (Region 2). National Wetlands Inventory U.S. Fish and Wildlife Service. p. 43.

Weakley, A.S. 2008. Flora of the Carolinas, Virginia, Georgia, and surrounding areas. University of North Carolina Herbarium. University of North Carolina at Chapel Hill, North Carolina.

Prepared by:

Mike Owsley, USDA-NRCS Jimmy Carter Plant Materials Center, 295 Morris Dr. Americus, Georgia. 31719. 229-924-4499. fax 229-924-0013.

**Signatures for the release of:
Penn Center Germplasm Switchgrass (*Panicum virgatum* L.)**

James Tillman
Georgia State Conservationist
United States Department of Agriculture
Natural Resources Conservation Service
Athens, Georgia

Date

South Carolina State Conservationist
United States Department of Agriculture
Natural Resources Conservation Service
Athens, Georgia

Date

Dr. Bill Puckett
Alabama State Conservationist
United States Department of Agriculture
Natural Resources Conservation Service
Athens, Georgia

Date

North Carolina State Conservationist
United States Department of Agriculture
Natural Resources Conservation Service
Athens, Georgia

Date

Mike Hubbs
Director, Ecological Sciences Division
United States Department of Agriculture
Natural Resources Conservation Service
Washington, D.C.

Date