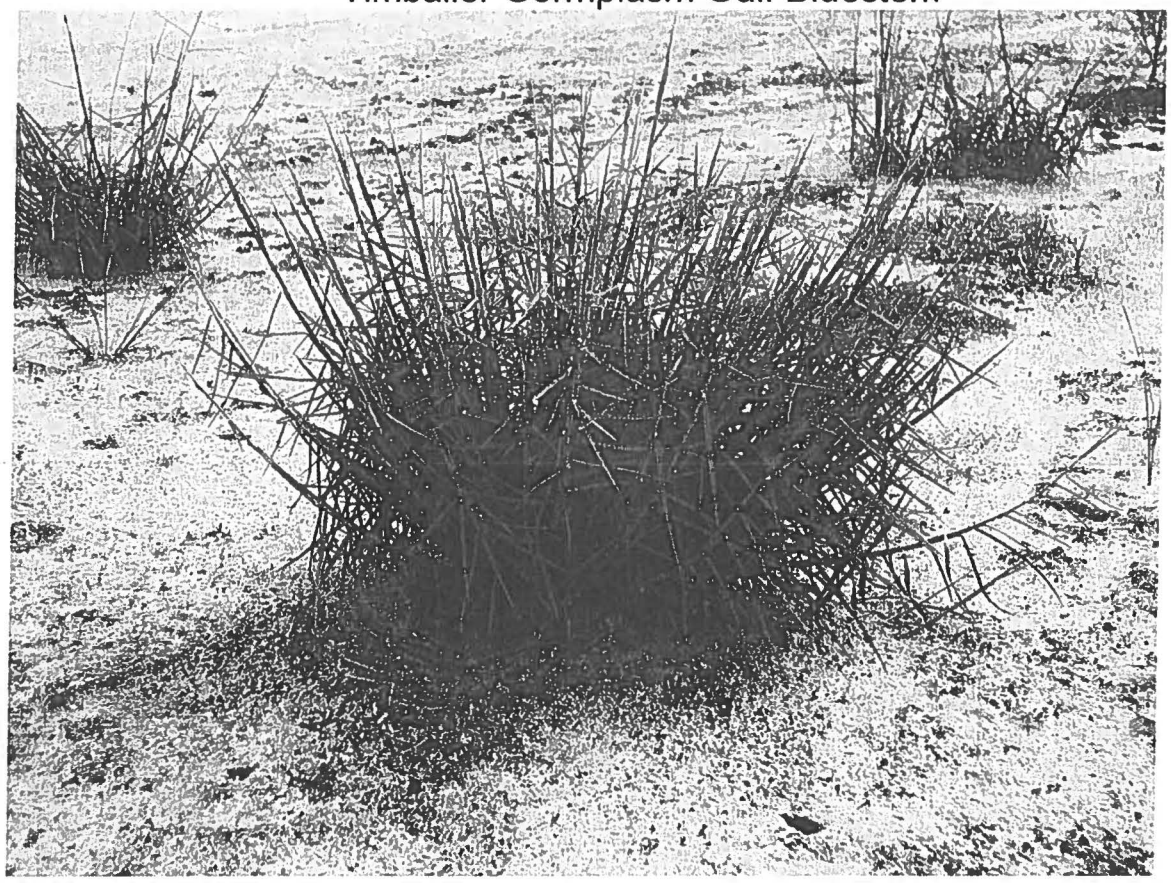
UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOUCES CONSERVATION SERVICE

NOTICE OF RELEASE
Timbalier Germplasm Gulf Bluestem



The USDA, Natural Resources Conservation Service (NRCS) announce the naming and release of Timbalier Germplasm gulf bluestem. Timbalier is assigned and tested using the NRCS accession number 9068290.

Timbalier Germplasm gulf bluestem provides a commercially available source of gulf bluestem for use on low profile dunes found on coastal beaches and barrier islands of the north central Gulf of Mexico.

NOMENCLATURE

Scientific Name – *Schizachyrium maritimum* (Chapman) Nash

Common Name – Gulf bluestem is the most widely accepted vernacular name. Seacoast bluestem is another commonly used name.

Germplasm – Timbalier is the selected name that will be used to identify 9068290 plant materials release. There are no other known commercially produced plant materials of *Schizachyrium maritimum* available.

DESCRIPTION

Gulf bluestem is a native warm-season perennial grass that spreads by seed and short rhizomes. Plants are rhizomatous and colonial, stems usually decumbent, glacous, reddish, and flattened at the base, terminal inflorescences with stalked spikelets. Found native to coastal and offshore islands of the Florida panhandle west to Louisiana (Godfrey and Wooten, 1979).

ENVIRONMANTAL IMPACT ASSESSMENT

Timbalier germplasm gulf bluestem plant materials were collected and vegetatively propagated from naturally occurring germplasm and have not been altered from the original collection. Timbalier does not meet the assessment of a plant which could become invasive based on guidelines by the NRCS Plant Materials Program. This species is ranked on the Rare, Threatened, and Endangered Species state list as an S1 (extensive rarity and factors which make it especially vulnerable to extirpation), and a global ranking of G3 (vary rare and local throughout its range).

ORIGIN AND SITE DESCRIPTION

Timalier germplasm gulf bluesem was originally collected from Timbalier Island, (29° 03' 45.2"N, 90° 28' 56.6"W) Terrebonne Parish, Louisiana. Vegetative plant materials were taken from a colony of plants found growing in a protected back dune area on November 16, 1998. Soils classification is described as Sand Beaches (Sc) which typically ranges from 0.2 to 1 mile in width and sands comprising grayish-brown clean sand particles mixed with shell fragments (Soil Survey of Terrebonne Parish, Louisiana). Sand beaches are typically 5-6 feet in height built by sediments carried by wind and waves from the Gulf of Mexico and frequent overwashing by high tides and storm surges. The collection site was a typical low profile sand beach. Vegetative propagules were taken from 100 plants found growing in the colony.

METHOD OF SELECTION

Timbalier germplasm gulf bluestem is a pre-varietal (tested class) release, Plant materials have been propagated and increased from the original collection by plant division and cuttings. Plant performance and adaptation plantings have been established in association with bitter panicum, sea oats, and marshhay cordgrass from the Mississippi coast to plantings across the Louisiana coast and barrier islands. Though not part of an assembly, this collection has performed well and persisted in all plantings established since 1998. Timbalier germplasm performs best on the back side of primary dunes and the more stable back dune areas. This ecotype has proven to persist and perpetuate itself from seed (Thetford and Miller, 2004). The consistency of seed reproduction is under study.

ECOLOGICAL CONSIDERATIONS AND EVALUATION

Timbalier germplasm gulf bluestem was selected as a native species which fills a unique niche in the coastal dune community (Montz, 1977). Because it is of scattered occurrence there are still questions about reproduction in the wild and did not meet the assessment of a plant which could become invasive, based on guidelines adopted by the NRCS Plant Materials Program.

USE AND ADAPTATION

Timbalier germplasm gulf bluestem is intended for use on coastal beaches and barrier islands of the north central Gulf of Mexico basin. Timbalier performs best when planted on the leeward side of the primary dune and the more protected areas behind the primary dune. It is an excellent planting component to increase species diversity and back dune stabilization when planted in association with *Panicum amarum*, *Uniola paniclata*, *Spartina patens* and other herbaceous species. Timbalier germplasm gulf bluestem can be successfully planted with proven persistence and performance on beaches and barrier islands of the Mississippi and Louisiana coast.

RELEASE JUSTIFICATION

Timbalier germplasm gulf bluestem has application as a vegetative component for beach and barrier island plantings of the north central Gulf coast. It is of known origin and has proven performance for planting and establishment on coastal areas of Mississippi and Louisiana. Gulf bluestem is potentially imperiled in Louisiana because of its rarity and factors that make it especially vulnerable to extirpation. Gulf bluestem is an important species on dunes, beaches, and barrier islands to combat erosion and added species diversity.

AVAILABILITY OF PLANT MATERIALS

Timbalier germplasm gulf bluestem is propagated from vegetative rootstock. Rooted container stock provides the highest probability of survival and planting success. Containerized plant materials will be available through coastal wetland plant growers.

Generation 1 plant materials for commercial nursery production is available from the USDA, Natural Resources Conservation Service, Golden Meadow Plant Materials Center, 438 Airport Road, Galliano, Louisiana. The Center can be contacted by calling 985-475-5280, or FAX 985-475-6545.

REFERENCES

Godfrey, R.K., and J.W. Wooten. 1979. Aquatic and Wetland Plants of Southeastern United States: Monocotyledons. University of Georgia Press. Athens, GA. 712p.

Montz, G.N. 1977. A vegetational Study of the Timbalier and Isle Dernieres, Barrier Islands, Louisiana. Proc. LA. Acad. Sci. 40:59-69.

Soil Survey of Terrebonne Parish, Louisiana. 1960. Series1956, No. 1. U.S. Government Printing Office, Washington D.C.

Thetford, M. and D. Miller. 2004. Propagation and Production of Gulf Bluestem. FL Coop Ext Ser, University of Florida. Publication No. ENH974.

Approved by:

Donald W. Gohmert

Donald W. Gohmert, State Conservationist
USDA, Natural Resources Conservation Service
3737 Government Street
Alexandria, Louisiana 71302

8/7/06
Date

Robert T. Eckleman for

Diane E. Gelburd
Director
Ecological Sciences Division
United States Department of Agriculture
Natural Resources Conservation Services
Washington, D.C.

8-9-06
Date