

**JIMMY CARTER PLANT MATERIALS CENTER  
USDA-NRCS  
AMERICUS, GEORGIA,**

**UNITED STATES FOREST SERVICE  
COLUMBIA, SOUTH CAROLINA  
and**

**SOUTH CAROLINA NATIVE PLANT SOCIETY**

**NOTICE OF RELEASE  
OF**

**Union Germplasm Purpletop**

**Source-Identified Class of Natural Germplasm**



**March 2004**

**NOTICE OF RELEASE  
OF  
UNION GERMPLASM PURPLETOP**

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UNITED STATES DEPARTMENT OF AGRICULTURE  
NATURAL RESOURCES CONSERVATION SERVICE  
AMERICUS, GEORGIA

UNITED STATES FOREST SERVICE  
COLUMBIA, SOUTH CAROLINA  
and

SOUTH CAROLINA NATIVE PLANT SOCIETY

NOTICE OF RELEASE  
OF  
Union Germplasm Purpletop  
Source-Identified Class of Natural Germplasm

The Natural Resources Conservation Service, U.S. Department of Agriculture, U.S. Forest Service and the South Carolina Native Plant Society announce the naming and release of a source identified ecotype of purpletop (*Tridens flavus* (L.) Hitchc.) for South Carolina.

As a source identified release this plant will be referred to as Union Germplasm Purpletop to document its original collection location. The seed was collected in Union County, South Carolina by members of the South Carolina Native Plant Society and employees of the US Forest Service in South Carolina. Union Germplasm Purpletop is released as a source identified type of certified seed (Natural track). It has been assigned the NRCS accession number 9085835.

This alternative release procedure is justified because there are no existing commercial sources of South Carolina Purpletop ecotypes. Propagation material of specific ecotypes is needed for conservation and restoration in South Carolina.

The potential for immediate use is high, and commercial potential beyond South Carolina is limited.

**Collection Site Information:** Union Germplasm is located in Union, South Carolina. GPS coordinates North 34 27 48.5 West 81 43 02.1 on the US Forest Service National Forests.

**Ecotype Description:** Purpletop is a perennial from short, stout rhizome; culms 8-15 dm tall, nodes and internodes glabrous. Leaves basal and cauline; blades elongate, to 6 dm long, 2-12 mm wide, glabrous above, pilose beneath, margins scaberulous; sheaths glabrous; ligules ciliate, 0.5 mm long; pilose ring of trichomes at lower base of blade. Panicle open, 1.5-3.5 dm long, 1-2.5 dm broad; branches mostly spreading, with distinct pulvinus at base. Spikelets usually purplish, compressed, 5-8 flowered, 6-8 mm long, 1.5-2.2 mm broad. Glumes 1-nerved, chartaceous, cuspidate, 1<sup>st</sup> glume 2.5-3 mm long, 2<sup>nd</sup> glume 3-4 mm long; lemmas retuse, cuspidate, lateral nerves usually exerted as short awns, longest 3-3.5 mm long. Grain whitish yellow, ellipsoid, 1.5-1.8 mm long.

**Ecological Considerations and Evaluation:** Union Germplasm is a native plant material which has undergone no purposeful selection. Union Germplasm Purpletop does not differ in rate or spread, seed production and vigor from other naturally occurring purpletop. Since Union Germplasm is native material it is not expected to behave any differently in the environment than other native material. Union Germplasm was "OK to release" when evaluated through the "worksheet for conducting Environmental Evaluation of NRCS plant releases".

**Anticipated Conservation Use:** The potential use of Union Germplasm Purpletop includes erosion control on national forests, wildlife habitat improvement and native plant restoration on the Francis Marion and Sumter National Forests in South Carolina.

**Potential Area of Adaptation:** Union Germplasm Purpletop is adapted to the upland soils of South Carolina especially the Francis Marion and Sumter National Forest area.

**Availability of Plant Materials:** Union Germplasm Purpletop seed will be maintained by USDA-NRCS Jimmy Carter Plant Materials Center and will be available in limited quantities to growers in South Carolina.

## Seed Collection: Union County



**South Carolina Native Plant Society collection of splitbeard seed**



**Seed Orchard**



**Seedling Plug Production**

**References:**

Hitchcock, A.S. and A. Chase. 1971. Manual of the Grasses of the United States. New York, New York.

Radford, A.E., H.E. Ahles and C.R. Bell. 1968. Manual of the Vascular Flora of the Carolinas. The University of North Carolina Press, Chapel Hill, North Carolina.

**Prepared by:**

C. M. Owsley, E. D. Surrency USDA-NRCS, Jimmy Carter Plant Materials Center, 295 Morris Drive, Americus GA

### **Request for Release Name Clearance**

1. Request from Jimmy Carter Plant Materials Center
2. November 26, 2003
3. Mike Owsley 229-924-4499
4. *Tridens flavus*
5. Purpletop
6. TRFL 2
7. 9085835
8. Grass
9. Source-Identified Release
10. Proposed names in Order of Preference (a) Union Germplasm Purpletop
11. Anticipated Release Time February 2004



## **Exhibit 540-31 Worksheet for Documenting an Environmental Evaluation of NRCS Plant Releases**

### **Introduction**

This worksheet is used to conduct and document an Environmental Evaluation of Plant Materials releases. Criteria relating to the biological characteristics of a plant, the potential impact on ecosystems, the ease of managing the plant, and conservation need are scored. These scores and their interpretation are used with a decision flowchart to determine the appropriate course of action for making a release. As with any such ranking system, it is necessary to use sound judgment and experience when interpreting the final results.

### **Understanding this worksheet**

The primary purpose for this worksheet is to determine if the plant release has the potential to adversely affect the environment or natural surroundings. It is possible for a plant to rate low on Part 1 (Impact on Habitats), and thus be released without further consideration, and still have a high rating on Part 4 (Biological Characteristics) indicating that the plant has the ability to propagate and maintain itself naturally. Good conservation plants usually need to persist to be able to solve the conservation problem or need for which they were intended. This is even more important for plants used in critical areas, i.e. severely eroding sites. In light of this fact, the most important criteria being used in this worksheet to determine release include those in Part 1 (Impact on Habitats) and Part 2 (Ease of Management). Parts 3 (Conservation Need) and 4 (Biological Characteristics) are used when the decision is not so clear and there is the potential for a high impact on habitats and control may be moderate to difficult.

### **Instructions**

Rate the plant or release based on the following criteria by circling your assessment. If the criteria does not apply to the species or release, then do not rate for that criteria. If you do not have enough information on the species or plant release to complete at least Parts 1, 2 and 4 in Section A, then additional data must be accumulated through literature searches, cooperators, or studies to be able to complete these sections. Additional notes which may be used to clarify or interpret the ranking should be included in the margins of this worksheet. For plant releases which may be considered nearly unacceptable for release it may be helpful to have other PM staff or cooperators complete copies of this worksheet to provide additional documentation.

All rating criteria must be completed, even if it is found in Section A, Part 1 that the plant has a low impact on the environment. Evaluation of all criteria will provide documentation that a thorough evaluation was completed for the plant at the time of release. This documentation may be needed in the future if questions are raised about the potential invasiveness or control of the plant.

When finished with ranking, interpretation, and decision making, record the final decision on the next page of this worksheet. A completed worksheet must be included with the release documentation and a copy sent to the NPMC for filing.



## **MARKETING PLAN FOR UNION GERMPLASM PURPLETOP**

**OBJECTIVE:** To inform the public and promote the use of Union Germplasm Purpletop Release by the USDA-Natural Resource Conservation Service (NRCS) Plant Materials Program. To increase the use of Union Germplasm native grass for erosion control, 2002 Farm Bill implementation, wildlife habitat improvement and native grass restoration.

**Target Audiences:** Native Plant Society, Natural Resources Conservation Service, US Forest Service, University and College Professionals, Commercial Seed Growers, Agency and Resource Specialists.

**Regions include:** South Carolina.

### **Publicity and Technology Transfer Action Plan**

1. NRCS plant materials specialist will provide the leadership for the implementation and the coordination of the marketing plan within NRCS, US Forest Service, South Carolina Native Plant Society, Conservation Districts, Colleges and Universities, Land Users and Partnerships.
2. NRCS and US Forest Service Public Affairs Specialists will partner to develop information packages for the media, state and federal agencies.
3. State Public Affairs Specialists will take the lead in the preparation of a plant release information campaign. Develop information packet with photos for seed companies, native plant society and power-point presentations.
4. Plant Materials Specialist will network with partnerships implement marketing plan.
5. State, regional and plant materials public affairs specialists will assist with the preparation of the plant release information for distribution to media, conservation districts, customers, NRCS field offices and partnerships.
6. NRCS and US Forest Service Public Affairs Specialists, South Carolina Native Plant Society will network with Crop Improvement Association, Academia and Seed Companies to cooperatively develop a color brochure on Union Germplasm Purpletop. All partners will share in the cost of publishing the new release.
7. Plant materials specialists will prepare technical notes and appropriate technology for establishment and management to state resource conservationists for integrating into Field Office Technical Guide (FOTG) in South Carolina.
8. Plant Materials specialists will provide plant release information to new NRCS linkages, such as National Tech Centers.
9. The plant release notice, technical notes, and other plant science technology for Union Germplasm Purpletop will be included on the PMC homepage  
[www.ga.nrcs.usda.gov/technical/pmc/pmc.html](http://www.ga.nrcs.usda.gov/technical/pmc/pmc.html).

10. Provide notification of plant release to State Food and Agriculture Council.
11. News release notices will be provided to all media in South Carolina to include regional daily and weekly newspapers, radio stations, extension public affairs and other media specialists, South Carolina Native Plant Society and university and agency newsletter editors.
12. Feature articles and/or abstract on new plant release to submit to selected publications including, Southeast Farm Press, Progressive Farmer, native plant information outlets, and other appropriate media.
13. Plant release information will be provided to NHQ, State Conservationists in South Carolina, North Carolina, Georgia, Alabama, and Tennessee, Plant Materials Centers, Plant Materials Specialists, State Biologists, agronomists, and National Tech Centers.
14. Plant Materials Specialist will present programs at national resource and agriculture related conferences, such as Soil & Water Conservation Society, National Agronomy Conference, Erosion and Sediment Control Conference, Native Plant Society Meetings.
15. Plant Materials Center manager shall make presentations to local agricultural groups, farmer groups, conservation districts, WALB Channel 10 in Albany, Georgia and WSST Channel 55 in Cordele, Georgia.
16. PowerPoint presentations and exhibits will be developed to enhance the visibility of the Union Germplasm Purpletop release.
17. Plant Materials Specialist will provide plant release information to Crop Improvement Associations and commercial seed growers, etc.

Prepared by: Donald Surrency, Plant Materials Specialist, Athens, Georgia.  
Mike Owsley, PMC Manager, Americus, Georgia

Peer Reviews: Dennis Law, US Forest Service, Columbia, South Carolina  
Amy Maxwell, NRCS Public Affairs Specialist, Columbia, South Carolina  
William C. Stringer, PhD, Clemson University and Coordinator, SC Native Plant Society, Clemson, South Carolina  
John Brubaker, President, SC Native Plant Society, Charleston, South Carolina

**Reviewed by:**

Donald Surrency, PMS, GA

Anthony Burns, SRC, GA

William Hughes, SRC, AL

Lane Price, SRC, NC

Vic Simpson, SRC, TN

Dennis Law, USFS, SC

Dr. Levester Pendergrass, USFS, GA

Roger Hansard, PMS, NC

Ed Hackett, Wildlife Habitat Management Institute, MS

Mike Hall, Grazing Land Specialist, SC

Mary Ann McQuinn, PAS, GA

Amy Maxwell, PAS, SC

Andy Smith, PAS, NC

Sam Sanders, PMS, FL

Mike Owsley, Mgr., Jimmy Carter PMC, Americus, GA

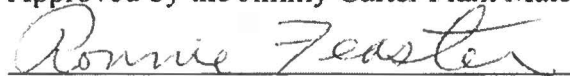
Dr. Erroll Rhoden, Tuskegee University, Tuskegee, AL

Eddie Jolley, Agronomist, Auburn, AL

Steve Musser, Agronomist, Auburn, AL

Malcome Kirkland, Asst. Mgr., Jimmy Carter PMC, Americus, GA

Approved by the Jimmy Carter Plant Materials Center Technical Committee

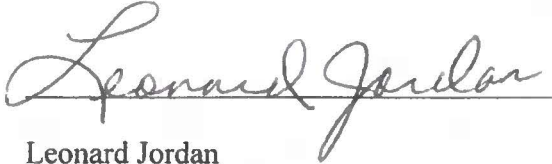


Ronnie Feaster, Chairperson  
State Resource Conservationist  
Columbia, South Carolina

Signatures for release of:  
Union Germplasm Purpletop

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State Conservationists' Advisory Committee



Leonard Jordan  
State Conservationist  
United States Department of Agriculture  
Natural Resources Conservation Service  
Athens, Georgia

11/12/04

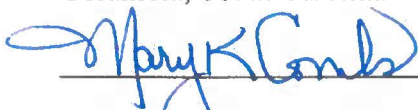
Date



Walter Douglas  
State Conservationist  
United States Department of Agriculture  
Natural Resources Conservation Service  
Columbia, South Carolina

11/22/04

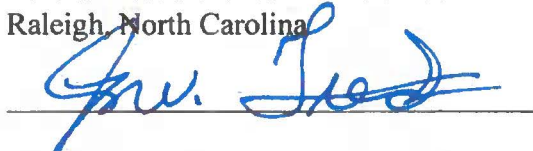
Date



Mary K. Combs  
State Conservationist  
United States Department of Agriculture  
Natural Resources Conservation Service  
Raleigh, North Carolina

11/29/04

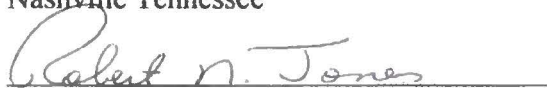
Date



James Ford  
State Conservationist  
United States Department of Agriculture  
Natural Resources Conservation Service  
Nashville Tennessee

12-27-04

Date

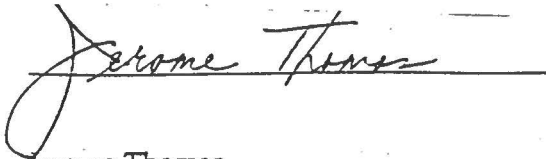


Robert Jones  
State Conservationist  
United States Department of Agriculture  
Natural Resources Conservation Service  
Auburn, Alabama

01-31-05

Date

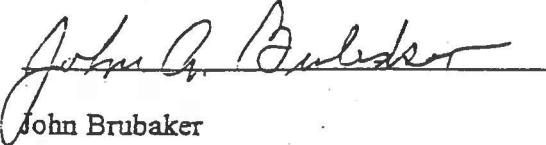
## Plant Materials Partnership



Jerome Thomas  
Forest Supervisor  
Francis Marion & Sumter National Forests  
United States Forest Service  
Columbia, South Carolina

11/29/04

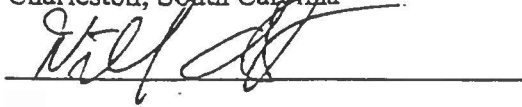
Date



John Brubaker  
President  
South Carolina Native Plant Society  
Charleston, South Carolina

12-15-04

Date



William C. Stringer, PhD  
Clemson University  
Dept of Entomology, Soils and Plant Sciences &  
South Carolina Native Plant Society Coordinator,  
USFS / SC Native Plant Society Cooperative Native Grass Collection Project  
Clemson, South Carolina

12-8-04

Date

### National Headquarter Approval



Robert Eschman  
National Program Leader  
United States Department of Agriculture  
Natural Resources Conservation Service  
Washington, D.C.

6-29-05

Date



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

6-29-05

Date