### UNITED STATES DEPARMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE ELSBERRY, MISSOURI

And

THE IOWA ECOTYPE PROJECT AT THE UNIVERSITY OF NORTHERN IOWA CEDAR FALLS, IOWA

NATIVE ROADSIDE VEGETATION CENTER CEDAR FALLS, IOWA

IOWA DEPARTMENT OF TRANSPORTATION AMES, IOWA

IOWA CROP IMPROVEMENT ASSOCIATION AMES, IOWA

# NOTICE OF RELEASE OF SOUTHERN IOWA GERMPLASM TALL DROPSEED SOURCE IDENTIFIED CLASS OF NATURAL GERMPLASM

The Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture and the Iowa Ecotype Project at the University of Northern Iowa (UNI), the Native Roadside Vegetation Center (NRVC), the Iowa Department of Transportation (IDOT), and the Iowa Crop Improvement Association (ICIA) announce the release of a source identified ecotype of tall dropseed (*Sporobolus compositus var. compositus*) for Southern Iowa counties.

As a source identified release, this plant will be referred to as Southern Iowa Germplasm tall dropseed to document its original collections. Southern Iowa Germplasm tall dropseed is released as a source identified type of certified seed (natural track). It has been assigned the NRCS accession number 9062315.

This alternative release procedure is justified because there are no existing commercial sources of tall dropseed collected from numerous native sites throughout this specific region. Propagation material of specific ecotypes is needed for roadside plantings and prairie restoration and enhancement. The potential for immediate use is high.

**Collection Site Information:** Collections were taken from native prairie remnants within the three tiers of counties located in southern Iowa.

**Ecotype Description:** Tall dropseed is a native, warm season, perennial bunchgrass which grows to a height of 2 to 4 feet. It is a drought resistant grass and is common throughout the prairies although it generally forms only a small part of the total vegetative cover. Tall dropseed produces seed heads three to ten inches long in the fall. The stems and long leaves of this grass are bleach white in winter. The upper leaf blades are somewhat hairy at the base; culms stout, 3-10 dm (1 dm equals 4 inches) high; sheaths overlapping; blades nearly as long as the culm, the upper exceeding the panicle, pilose above at the flat base, the long involute-filiform tip scabrous;

terminal panicles 0.5-3 dm long, partly included in the large inflated upper sheaths, lateral panicles small and usually hidden in the sheaths, or none; spikelets 5 to 6.5 mm long; glumes unequal, obtuse or subacute, the first about half as long as the floret; lemma and palea glabrous, the lemma slightly the longer.

Collections of tall dropseed from east to west across Iowa prevent positive assessment of all pollination or chromosome characteristics. Plants are cross-pollinated. For isolation requirements, tall dropseed will be considered cross-pollinated.

**Environmental Impact Assessment:** Southern Iowa Germplasm tall dropseed is a collection of naturally occurring germplasm and has been unaltered. Southern Iowa Germplasm tall dropseed did not meet the assessment of a plant, which could become invasive based on guidelines adopted by the NRCS Plant Materials Program.

**Anticipated Conservation Use**: The potential uses of Southern Iowa Germplasm tall dropseed include roadside plantings, prairie creations and restorations, landscaping, and for increasing plant diversity in prairie communities.

**Potential Area of Adaptation:** Tall dropseed occurs throughout the tallgrass prairie biome. Flowering begins in July and may continue until frost.

Tall dropseed is adapted to dry open soils, and is usually found along roadsides and railroads; also occurring in dry prairies and rocky open woods and glades. It is found in half of the counties of the three states served by the Plant Materials Center; Iowa, Illinois and Missouri. Collections from each zone in Iowa guarantee the adaptation of releases to the entire zone.

**Availability of Plant Materials:** G1 material is being produced in limited supply by the Elsberry Plant Materials Center and the University of Northern Iowa, Native Roadside Vegetation Center. For information contact USDA, NRCS, Plant Materials Center, 2803 N. Hwy 79, Elsberry, Missouri 63343 (573 898-2012) or The University of Northern Iowa, Native Roadside Vegetation Center, 113 CEEE, Cedar Falls, IA 50614-0293 (319 273-3005).

#### **References:**

Flora of Missouri; p.164; Stevermark, J. A; Iowa State University Press, Ames, IA 1968.

An Illustrated Guide to Iowa Prairie Plants; p222, Christiansen, P. and Muller, M.; University of Iowa Press, Iowa City, IA 1999.

#### Prepared by:

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## **Signatures for release of:**

## Southern Iowa Germplasm tall dropseed (Sporobolus compositus var. compositus)

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