

USDA-Natural Resources Conservation Service

Notice of Source Identified Plant Release

Tall Dropseed

The USDA-Natural Resources Conservation Service (NRCS), the University of Northern Iowa (UNI), the Iowa County Integrated Roadside Vegetation Management Program (IIRVMP), the Iowa Department of Transportation (IDOT), and the Iowa Crop Improvement Association (ICIA) announce the release of a source identified (Central Iowa) germplasm of tall dropseed, *Sporobolus compositus*.

The tall dropseed has been assigned the NRCS accession number 9062314.

Origin: Central Iowa

Ecotype Description:

Tall dropseed is a native, warm season, perennial bunch grass 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 3 to 10 inches long in the fall. The stems and long leaves of this grass are bleach white in winter. The upper leaf blades are short, the basal blades are very long, tapering to a rolled up and 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.

Tall dropseed seeds per pound average 503,000. A seeding rate of 40 pure live seeds (PLS) per row foot in 30 inch rows for seed production is sufficient, this is approximately 1.5 pounds per acre. Rates for solid seed should be (3 to 3.5 bulk pounds/acre). Seed should be planted 1/4 inch deep in a firm relatively weed free seedbed. Seedling vigor is good and stands are comparatively easy to establish where competition is controlled. Mowing above the height of the tall dropseed plants has been used to reduce competition when weeds begin to severely encroach into the planting. This procedure is probably the best way to control unwanted weed invasion.

Seed yields are fair and can be readily harvested with a combine. Yields of 30 to 70 pounds per acre have been commonly harvested on managed non-irrigated stands. Shattering can be a problem.

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.

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 guarantees the adaptation of releases to the entire zone.

Site Description:

Collections were made from the following locations (see attached) and included in the composite tall dropseed, Central Iowa origin (9062314).

Climate: The average annual temperature is 48 degrees Fahrenheit. July is the warmest month with an average high of 85 degrees and low of 64 degrees. January is the coldest month with an average high of 27 degrees and low of 8 degrees. The average annual precipitation for this region is 30 inches with much of this coming during the growing season. The average frost-free growing period runs from April 30 to October 6.

Availability of Plant Materials:

Breeders material is being produced by the Plant Materials Center, Elsberry, Missouri and University of Northern Iowa (UNI) at Cedar Falls, Iowa.

Release Approved By:
Chairman, PM Advisory Committee, NRCS

Roger A. Hansen
Missouri State Conservationist

President, UNI
Robert D. Koob

Program Director IRVM
Daryl D. Smith

Iowa State Conservationist
Leroy Brown

Secretary/Treasurer ICIA
Robert E. Lawson

Representative IDOT
Steve Holland

References

Grasses and Grassland Farming, p. 241; Staten HI W.; Oklahoma A & M College, Stillwater, OK 1952.

Gray's-Manual of Botany, p. 153; Fernald, M. L.; Harvard University, Boston, Mass, 1950.

A Field Guide to Wildflowers; p. 80; Peterson, R. T. and McKenny, M.

Houghton Mifflin Company, Boston, Mass, 1968.

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

The United States Department of Agriculture (USDA) prohibits discrimination in all its programs on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write the USDA, Director, Office of Civil Rights, Room 326W, Whitten Building, 14th and Independence Avenues, SW. Washington, D.C., 20250-9410 or call (202) 720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.