

Iowa Germplasm Little Bluestem

Little bluestem, *Schizachyrium scoparium*, is a native warm season grass. It is a major component of the shortgrass prairie and a minor component of the tall grass prairie. Northern, Central and Southern Iowa Germplasm Little Bluestem were collected from the Northern, Central and Southern three tiers of counties respectively.

Cooperating agencies in these releases were Natural Resources Conservation Service (NRCS), University of Northern Iowa (UNI), Iowa Integrated Roadside Vegetation Management Program (IIRVMP), Iowa Department of Transportation (IDOT), and the Iowa Crop Improvement Association (ICIA).

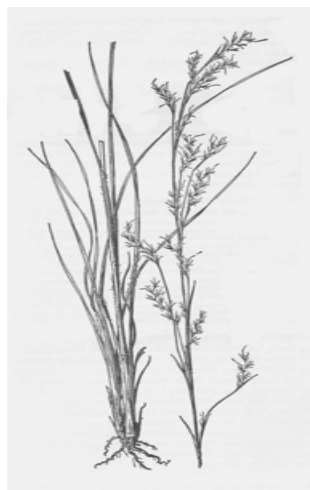
Northern, Central and Southern Iowa Germplasm Little Bluestem is recommended for roadside revegetation, critical areas, wildlife habitat, parks, recreational areas, landscape, and prairie restoration. These releases are recommended for planting within their zone of origin.

Schizachyrium scoparium can provide hay and forage to all classes of livestock. Its forage rates good to excellent if plants are utilized in the leafy stage and before seed head emergence. It is an important part of prairie pastures and is considered a long-lived perennial.

Description

Little bluestem, is a medium tall, native perennial warm-season bunch type grass with coarse stems at basal leaves. It is easily mistaken for common broomsedge. Little bluestem has flat bluish basal shoots, which are somewhat bulbous. Plants are green, but often purplish at base of stem and entire plant has reddish cast after frost. Leaves tend to fold with maturity. Seed heads are in the form of racemes about three inches long. The raceme stems are hairy. Plants are slender to robust, compressed, 50 to 150 cm. Tall, erect, the upper half freely branching; sheaths and blades commonly glabrous or nearly so, frequently sparsely pilose at their junction, rarely pubescent to raceme 3 to 6 cm. long. Little bluestem develops full stands where moisture is sufficient, but gets clumpy on

drier sites. It has value as a persistent low maintenance cover plant and as a summer forage plant.



Manual of the Grasses of the United States.
By A.S. Hitchcock

Origin

Northern, Central, and Southern Iowa Germplasm Little Bluestem Zone 1, Zone 2, and Zone 3 were collected from locations in the three Northern, three Central, and three Southern tiers of counties in the state of Iowa.

Adaptation

Little bluestem grows in the prairies, glades, rocky open woods, abandoned fields, sandy open ground, waste places, and along railroads. It ranges from New Brunswick and Quebec to Alberta, south to Florida, Texas, and Arizona.

This bunchgrass was once the most abundant species in the American mixed-grass prairie region. Now that the prairie has been destroyed, it is perhaps more common as

an old field invader in the Northeast, although it is still common in the Flint Hills area of Kansas.

Recommended Area of Use for Iowa Germplasm Little Bluestem



Establishment

Little bluestem can be established by planting seed using a native grass drill. Plant seed in the spring into a firm seedbed at a depth of ¼ inch deep when the soil reaches 55-60° Fahrenheit. A fall dormant seeding can be made in late October through February. The number of seeds per pound average 270,000. Seeding rates for monoculture pasture for little bluestem should be 7-10 pounds PLS (pure live seed) per acre. Use no fertilizer the establishment year unless soil test indicates a low deficiency of less than 15 PPM of phosphorus and or less than 90 PPM of potassium. Use no nitrogen during the establishment year as this can encourage weed competition.

Management

Weed control can be accomplished by mowing over the height of the little bluestem plants or cultivating between the rows. For grassy and broadleaf weeds usage of Plateau herbicide can provide control and will encourage a good stand. Use label recommendation for application. Burning of straw will invigorate the stand.

Seed and Forage Production

For seed production in rows, plant in the spring into a firm seedbed at a rate of 40 PLS per linear foot in 30 to 40 inch rows. Rates are 2-2.6 pounds PLS per acre. Seed should be planted ¼ inch deep in a firm relatively weed free seedbed.

A solid stand monoculture for seed production or pasture has a seeding rate of 7-10 pounds PLS per acre. In pasture and range seedings little bluestem is generally one component of a mixture, so the rate varies depending on percent desired in the stand. Seedling vigor is good and stands are comparatively easy to establish where competition is controlled. Mowing above the height of the little bluestem has been used to reduce competition when weeds begin to severely encroach into the planting. Follow recommendation under establishment for seeding and fertilization.

Controlling weeds at seeding time is important because grass establishment and survival can be suppressed as a result of weed competition for moisture and sunlight. Weed control during establishment may be enhanced by surface applied Plateau after seeding. Application should be made according to label recommendations where approved for use.

A well-managed stand with favorable growing conditions generally produces seed the second year but can produce small yields the first year. Seed yields of 100 to 200 bulk pounds per acre have been obtained from non-irrigated stands.

Availability

G0 and G1 seed of Iowa Germplasm Little Bluestem has been allocated to Iowa seed growers by USDA-NRCS.

For More Information

Visit our Plant Materials Internet Site at <http://Plant-materials.nrcs.usda.gov> to find more information on using plants to solve conservation problems.

USDA-NRCS
Elsberry Plant Materials Center
2803 N. Hwy 79
Elsberry, Missouri 63343
Phone: 573 898-2012
FAX: 573 898-5019

November 2001

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audio tape, etc.) should contact the USDA's TARGET Center at 1-202-720-2600 (Voice and TDD).

To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call 1-800-245-6340 (voice) or 1-202-720-127 (TDD). USDA is an equal opportunity provider and employer.



Iowa Germplasm Little Bluestem



**A source-identified
conservation plant
developed by the
Elsberry Plant
Materials Center,
Elsberry, Missouri**

