

PLANTING GUIDE

Andropogon gerardii Vitman.

Common Names:

big bluestem
turkey foot

Accession Number/Release:

9079000 Zone 1, Northern Missouri Germplasm

Description:

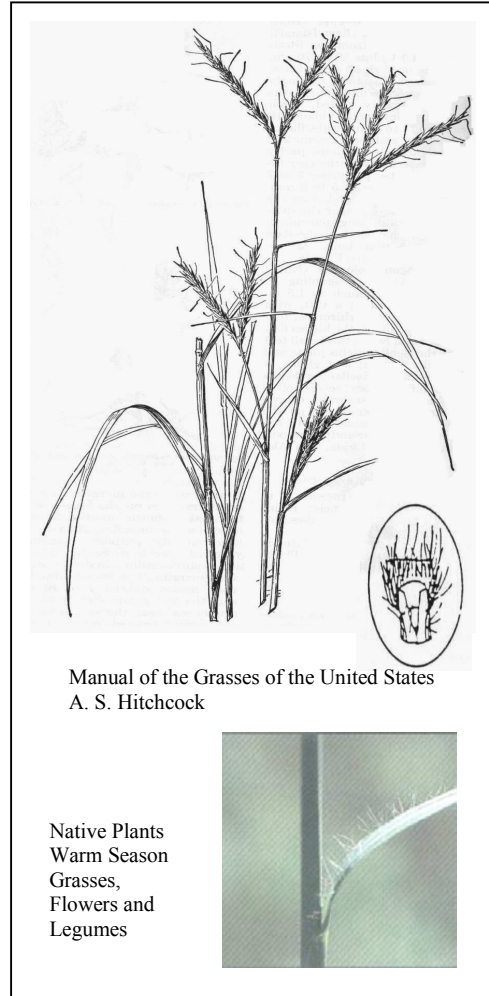
Big bluestem is a tall, warm-season perennial native grass with stiff, erect culms; flattened and keeled sheaths; membranous ligules; and flat or folded leaf blades. Big bluestem has developed a very efficient spreading root system, which may reach depths of 5-8 feet (150-200 cm.), or more in the northern latitudes, and 6-8 feet (180-240 cm.) or more in the southern part of its natural range. Although short rhizomes may be present, it usually makes a bunch type growth. It is usually associated with one or more of the other three dominant tall grass prairie species, indiangrass, (*Sorghastrum nutans* (L.) Nash.), switchgrass, (*Panicum virgatum* L.), and Eastern gamagrass (*Tripsacum dactyloides* L.). Big bluestem occurs on subirrigated lowlands, nearly level to gently undulating glacial till plains, overflow sites, level swales and depressions, residual and glacial uplands, and stream terraces and bottomlands along rivers and tributaries. The abundant, leafy forage is palatable to all classes of livestock.

Purpose: Big bluestem can be used in the following situations: roadside plantings, range seedings, pasture seedings, prairie restoration, prairie landscaping and wildlife cover.

Source: Seed of this accession 9079000 was collected from native stands located in the northern counties of the state of Missouri (Zone 1).

Establishment:

Prepare a clean weed free seedbed by disking and harrowing. Firm the seedbed by cultipacking. Seedbed should be firm enough to allow the seed to be planted ¼ inch deep. Big bluestem can also be notilled into sod or crop stubble using appropriate notill equipment and chemical programs (See Agronomy Technical Note MO#24). Planting can be made using a grass drill



with a seedbox designed for fluffy seed. A brilliant seeder works well in the seeding operation although other types of seeders or drills may be used provided debarbed seed is used.

Plants are cross-pollinated, so for seed production, to prevent crossing, plant 900 to 1000 feet from other varieties or accessions.

Big bluestem grows well on deep to shallow, sandy to fine-textured and rocky soils. Seed can be planted in the spring or a dormant seeding can be made in the fall or winter. The seedlings are vigorous; therefore, new plantings can be established quickly. It is ordinarily ready for harvest from September in the South to October in the northern part of the Midwest region.

Fertilizer: Apply no fertilizer the establishment year unless soil test indicates a severe deficiency of potassium and/or phosphorus. Use no nitrogen during the establishment year as this can encourage weed competition.

Seeding Rates: Seeding rates for big bluestem should be about 7-10 pounds of pure live seed (PLS) per acre for pasture planting. There are approximately 165,000 clean seeds in one pound of undebarbed big bluestem and 190,000 clean seed in one pound of debarbed seed. Big bluestem is a major component of a range mix, so seeding rate varies depending on percent desired in the stand.

Seeding Dates: Spring (May to June), or a fall dormant seed (November to March).

Management: Reduce weed competition by mowing at a height that will not affect the big bluestem seedlings during the establishment year or use recommended pesticides for this species and follow the label recommendation.

NOTE: Some herbicide products may not be registered on this grass species in your state or province.

4/27/00

References:

Prairie Plants of Illinois; pp. 38-39; Voigt, John W. and Mohlenbrock, Robert H.; Both from Southern Illinois University, Edwardsville, Illinois.

The Prairie Garden, 70 Native Plants You Can Grow in Town or County; pp. 176-177, Smith, J. Robert and Smith, Beatrice S., University of Wisconsin Press, Madison, Wisconsin 1980.

Wildflowers of the Tallgrass Prairie, The Upper Midwest, p. 249; Runkel, Sylvan T. and Roosa, Dean M., Iowa State University Press, Ames, Iowa 1989.

Flora of Missouri; p. 246; Steyermark, Julian A., Iowa State University Press, Ames, Iowa 1963.

Grass Yearbook of Agriculture, pp. 651-653; United States Department of Agriculture; U.S. Government Printing Office, Washington, DC 1948.

The Grasses of Missouri; pp. 211, 213-214; Kucera, L. Clair, University of Missouri Press, Columbia, MO 1961.

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