

Description

Sideoats grama is a native warm-season perennial grass common to the Great Plains. It is a bunchgrass that grows to a height of 1 to 3 ½ feet. Its short scaly rhizomes rarely form a sod. Leaves are flat, one cm wide and grow perpendicular to the one meter erect rachis. Leaf sheaths, longer than the internodes, are slightly hairy toward the top and ligules bear short hairs. Hairs on the leaf margins grow from glandular bumps. Green leaves frequently have dark spots creating a diseased appearance; lower leaves curl and turn nearly white when dry. Late in the growing season, the entire plant takes a reddish cast. Oat-like seeds hang from one side of the stem (rachis), hence 'sideoats'. The seed heads have a purple tinge, bright orange anthers, and short awns on the lemmas that fall away at maturity. In the Great Plains and Westward, sideoats is usually planted as a part of a range seeding mixture.

Sideoats grama is a minor component of the tall-grass prairie but increases in percentage becoming a greater component on dryer sites and in the short-grass prairie.

Northern, Central and Southern Iowa Germplasm of sideoats grama, *Bouteloua curtipendula* Michx. were released in 1995.

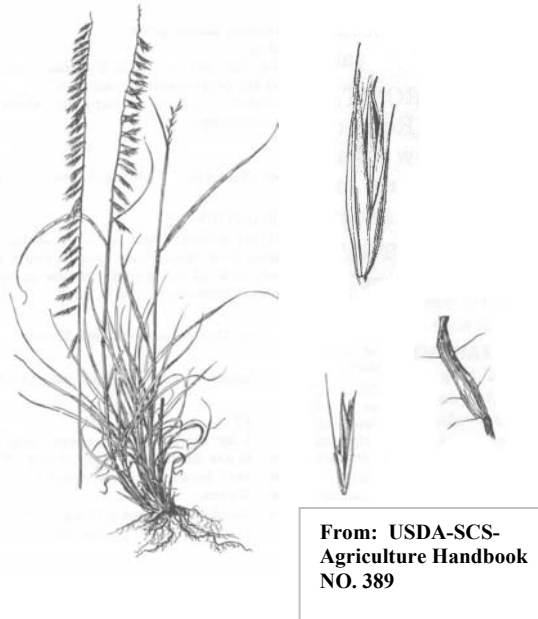
Releasing Agencies

Cooperating agencies in these releases were Natural Resources Conservation Service (NRCS), University of Northern Iowa (UNI), Iowa-Integrated Roadside Vegetative (IRVMP), Iowa Department of transportation (IDOT), and the Iowa Crop Improvement Association (ICIA).

Recommended Use

The Iowa Germplasm Sideoats Grama is recommended for use in plantings on roadside re-vegetation, critical areas, wildlife habitat, parks and recreational areas, and prairie restoration. Each zone is recommended for planting within its zone of origin.

Bouteloua curtipendula, Michx. can provide nutritious hay and forage for all classes of livestock in the spring and summer but only fair in the fall. It remains palatable into the winter. Its principal pests are grasshoppers and rusts. Sideoats can tolerate rotational grazing pressures. Graze leaving eight inches of stuble and recover time for species: no continuous grazing.

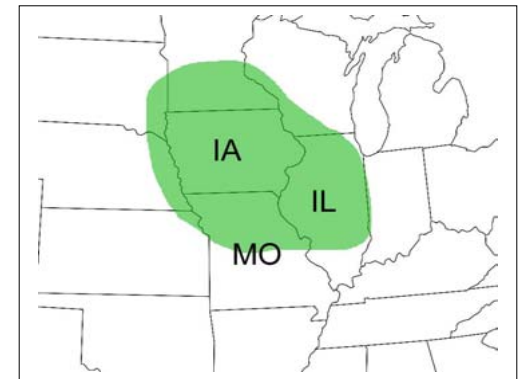


Origin

Northern, Central and Southern Iowa Germplasm Sideoats Grama, Zones 1, 2, and 3 originated from locations in the Northern, Central and Southern counties in the state of Iowa, thereby making these releases well adapted throughout the state.

Sideoats grama is adapted to a wide range of soils from sands to clays but will not grow on dense clays or very loose sands. It prefers 14 to 25 inches annual precipitation and can grow at elevations up to 8000 feet. It does best on medium to coarse textured soils. It is commonly found growing in association with the bluestems. Sideoats grama tolerates soils that are weak to moderately saline. It can withstand moderate periods of drought (less so than blue grama but more so than big bluestem). It can tolerate moderate spring flooding and semi-shade but is damaged by fire unless it is burned during the dormant season.

Recommended Area of Use for Iowa Germplasm Sideoats Grama



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 in fine soils ½ inch deep in coarse soils. An average pound of sideoats grama contains approximately 191,000 seeds. Sideoats should be planted when the soil reached 55-60 degrees Fahrenheit. A seeding rate for drilling seed should be 15-25 pure live seeds (PLS) per square foot 3.5 to 5.5 pounds PLS per acre). Apply 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 over the height of the sideoats grama plants or cultivating between the rows. For broadleaf weed control usage of a post emergence broadleaf herbicide (2,4-D) can provide control and will encourage a good stand. For faster greenup remove dead plant material in the spring by shredding. Burning of straw will weaken the plants unless done before it has broken dormancy.

Commercial Production

For a solid stand seeding, plant in spring when the soil temperature reaches 55 – 60 degrees Fahrenheit. Plant seed ¼ inch deep in clean weed-free seedbed by disking and harrowing. Firm the seedbed by cultipacking. Seeding rate should be 20-40 PLS per square foot (4.5 to 9.0 pounds PLS per acre). Mowing over the height of the sideoats along with the use of 2,4D (follow label recommendations where permitted)

may be required to control broadleaf weed infestation.

One year is usually necessary for stands to develop and produce seed however, with favorable growing conditions stand establishment can be accomplished the year planted. Seed yields can reach 400 pounds per acre (bulk) under cultivation.

Availability

G0 and G1 seed of Northern, Central and Southern Iowa Germplasm Sideoats Grama have been allocated to Iowa seed growers by the USDA-NRCS.

For More Information

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

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