EASTERN GAMAGRASS

Tripsacum dactyloides L.

Plant Symbol = TRDA3

Contributed by: USDA NRCS Plant Materials Program

Britton and Brown 1913
Illustrated flora of the northern states and Canada.

Uses
The primary uses of eastern gamagrass are for producing hay and haylage. It is more productive, palatable, and nutritious than the other native perennial warm season grasses. Gamagrass may be used as an alternative to annual silage crops, or as a pasture forage where intensive rotational grazing is well managed.

Status
Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

Description
Tripsacum dactyloides L., eastern gamagrass, is a native, warm season, perennial, sod-forming grass that is a distant relative of corn. This plant can reach a height of up to 8 feet. Seed is produced from June to September. The seed heads are 6 to 10 inches long and are made up of one to several spikes. The leaves can be 3/8 to 3/4 inch wide and 12 to 24 inches long. They also have a well defined midrib.

Adaptation
Gamagrass is native to the eastern half of the United States. It does best in moderately well drained to somewhat poorly drained soils. Lowlands, subirrigated, or irrigated areas that are not alkaline will also support this species well. It will tolerate extended periods of flooding.

For a current distribution map, please consult the Plant Profile page for this species on the PLANTS Website.

Establishment
Site selection must be made carefully before planting. Gamagrass may be seeded with conventional equipment into a thoroughly prepared seedbed if the site has good weed control history. Sites formerly in cool season pastures or hayland should be sown without tillage to avoid exposing weed seeds to good germination conditions.

The seeds must first be stratified (exposed to cold, wet conditions) for 8 weeks before spring sowing. Seed may be purchased stratified from commercial growers. To stratify artificially, place the seeds in a burlap bag until the bag is about 1/2 full. Soak this in a 1% solution of fungicide for 10-12 hours. Afterwards, drain the seeds and seal them, along with the sack, in a plastic bag. Store them this way for 8 weeks at 35-45 °F. Stratification may also be achieved by planting in the fall after November 1, but before frost is in the soil.

The planting site must also be prepared. Do this as you would for corn. Planting should be done when the soil is at least 55 °F; early corn planting season is preferred. If planting gamagrass with corn, plant the corn first and sow the grass between the corn rows.

In the Northeast, gamagrass is prone to frost heaving over the first winter after planting on some soils. The use of moderately well drained or well drained soils makes this possibility less likely. On soils with somewhat poor drainage, use all strategies to produce the largest possible plants by the end of the first

season. Plants with 15 to 20 culms seem to be very resistant to frost heaving, while those with less than 10 culms are vulnerable.

Management

To control weeds in pure stands of gamagrass, cultivation works the best with care taken not to bury the seedlings. If the grass is planted with corn, cultivation should not be used. In this case, good pre-emergent weed control measures should have been taken. To control perennial cool-season grasses in established stands, woody competition, and some diseases, a controlled burn may be done in the early spring when the grass is about 1 inch tall.

When cutting hay, do not cut any lower than 6-8 inches. Three cuttings may be done: The first one about June 10-15 prior to heading; the second cutting about July 30; and the third cutting should be done no later than September 5. A two cut system may be appropriate in more northern states and on lower production sites. The first cutting should be at boot stage; the second cutting 4-8 weeks later depending on production, but no later than September 5 to allow adequate growth before frost. If the gamagrass is to be grazed, a good forage management system must be used that provides recovery periods for the grass and does not allow grazing below an 8-inch stubble height.

Cultivars, Improved, and Selected Materials (and area of origin)

'Pete': This cultivar was developed at the Kansas Plant Materials Center from an assembly of over 60 Kansas and Oklahoma collections. It is non-uniform and widely adapted.

Prepared By & Species Coordinator:

USDA NRCS Plant Materials Program

05Feb2002 JLK; 30may06jsp

For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS Web site<http://plants.usda.gov> or the Plant Materials Program Web site <http://Plant-Materials.nrcs.usda.gov>

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