

Jimmy Carter Plant Materials Center Americus, Georgia

PLANT SHEET

SPECIAL CONSERVATION USES

For

Native Warm Season Grasses

Special Edition: For 2002 Farm Bill Implementation



SPECIAL USES OF NATIVE WARM-SEASON GRASSES

Erosion Control

On critical areas, warm-season grasses will control erosion. They will provide low maintenance cover on banks and roadsides of state and U.S. highways. Excellent for streambank stabilization and conservation buffers. Native grasses can be used successfully for critical area treatment for urban areas.

Photo 1 Switchgrass Buffer- conservation buffer/filter strip reduces erosion from adjacent croplands. Use of switchgrass instead of fescue in a filter strip vastly improves it for wildlife cover while retaining all of the erosion control ability. (For 2002 Farm Bill Implementation)

Photo 2 Urban conservation of Eastern gamagrass. Eastern gamagrass is used at Wolf Creek Skeet Shoot for the Atlanta 96 Olympics in Atlanta, Ga.

Photo 3 Eastern gamagrass used for municipal wastewater Sprayfield in Bellview/Perry located in Marion County, near Ocala, Florida.



Wildlife Habitat Improvement

Wildlife biologists and upland game managers use warm-season grasses for wildlife habitat improvement, nesting and holding areas. The stubble of the grasses remains over the winter providing nesting cover and protected “trafficways”. Little bluestem, big bluestem and indiangrass are usually in these seeding mixtures.



Wildlife planting – Mixture of switchgrass, little bluestem, and indiangrass plants for wildlife after a clear-cut in Abbeville, South Carolina.



Phoenix II – Corner of Georgia Ave. and Martin Street. Switchgrass (Cave in Rock) and Marsh Mallow are good native companion plants to use in urban areas.



Alamo switchgrass is used for streambank stabilization at Thurmond Lake.

Wildlife Habitat Improvement



RECOMMENDED VARIETIES OF NATIVE WARM SEASON GRASSES FOR USE IN GEORGIA, ALABAMA AND SOUTH CAROLINA

Big bluestem

'Rountree'

Preferred variety for hay production, adapted to the southeast, good seedling vigor and forage productivity. Matures two weeks earlier than 'Kaw'. Origin: Iowa. Recommended for wildlife plantings in a mixture (3 lbs PLS/ac) with other native grasses.

'Kaw'

Preferred pasture variety; adapted in most of the southeast, especially to drought sites. Not recommended as a pure stand but in a mixture (3 lbs PLS/ac) with other native grasses. Origin: Kansas.

Little bluestem

Cimarron

Preferred variety for wildlife plantings. Adapted to the southeast.

Aldous

Not well adapted in most of the southeast. Can be used for wildlife plantings in a mixture with other native grasses. Not recommended for forage. Demo plantings in South Carolina have been successful.

Indiangrass

'Lometa'

Preferred variety for the southeast. Good seedling vigor and superior forage production given normal rainfall. Survival and production is better than 'Rumsey' and 'Cheyenne' at the Jimmy Carter Plant Materials Center. Recommended for forage, buffers, wildlife plantings and critical areas.

'Rumsey'

Survival and production not as good as 'Lometa'. Not recommended as a pure stand but in a mixture with other native grasses for forage. Can be planted in mixtures for wildlife plantings.

'Cheyenne'

Not a certified variety, although noncertified seed is available. The performance in most of the southeast is not as good as 'Lometa' or 'Rumsey'. Recommended use is in mixed stands for wildlife plantings on drought sites. Not recommended for forage.

'Oto'

Not well adapted in most of the southeast. Can be used for wildlife plantings in a mixture with other native grasses. Not recommended for forage. Origin: Nebraska.

Americus

Indiangrass

It is a native of the southeast. It has a wide range of adaptation. It outperformed 'Lometa' on many sites and competes well with 'Pensacola' bahiagrass in drought conditions. It is recommended in pure stands. Conservation uses include: forage, buffers, wildlife, urban landscapes and critical areas. It will be the only indiagrass variety that is native to the southeast.

Eastern gamagrass

'Pete'

Adapted to most of the southeast. It can be used for forage, silage, hay, nutrient reclamation from lagoons and municipal spray fields because of good nitrogen and phosphorus uptake. Used for urban conservation during the 1996 Atlanta Olympics for beautification and erosion control. Can be used for conservation buffers.

'Tuka'

'Tuka' is a new variety and its full range of adaptation is unknown at this time. The plant materials centers have established plantings to determine the performance and adaptation in the southeast. Pete is the preferred variety at this time.

Switchgrass

'Alamo'

'Alamo' switchgrass is highly recommended throughout the southeast. It has been fully tested for conservation uses and is recommended for forage, buffers, wildlife plantings, critical area treatment, shoreline and streambank stabilization and nutrient reclamation.

'Cave-In-Rock'

'Cave-In-Rock' is recommended in the northern portion of the Southeastern Region. Not as good on critical sites as 'Alamo'. Adapted to lowland and upland sites with good palatability and animal gains. More dormant seed than 'Blackwell' and tends to be slow to establish. It is a good variety for wildlife plantings.

'Blackwell'

Not well adapted in the lower southeastern portion of the Southeastern Region. Can be used in mixed stands for wildlife plantings. Less forage production than 'Cave-In-Rock'. Fine stemmed and rust resistant

'Shelter'

Adapted mostly for wildlife plantings. Not recommended for forage and/or erosion control.

Miami
Stuart
Wabasso

These relatively new pre-varietal releases (source-identified) which are adapted for use in Florida. The conservation uses include forage, wildlife and critical area treatment. These releases are established vegetatively.

NATIVE GRASS DRILLS



Planting with a no-till drill designed for native warm season grass seed is highly recommended. Do not drill seed any deeper than ¼ inch! In fact, as much as 30 percent of the seed should be obvious on top of the planting furrow.

Drilling – For even grass distribution and a continuous, solid stand, native warm season grasses planted for wildlife should be planted with a drill. When planting bluestems or indiangrass, a drill with a specialized seed box containing “picker wheels” is necessary or the fluffy seed of these grasses will lodge in the seed chute. These drills often are available for use through state wildlife agencies, soil conservation districts, the Natural Resources Conservation Service and some local chapters of Quail Unlimited. Switchgrass can be planted with a conventional drill. Any drill, however, must be calibrated before planting. Refer to manual for proper settings to calibrate drill in accordance to manufacturer recommendations. Eastern gamagrass is usually planted with a corn planter in rows 18-24 inches apart, but some producers like to plant rows only 12 inches apart to reduce stool size and make stems more upright so haying is easier. Native grass drills can be used to plant eastern gamagrass.

NATIVE GRASS DRILLS



Manually Operated Native Grass Drill



Seeder used to plant switchgrass in a small steep area

Manually Operated Broadcast Seeder

For wildlife food plots, odd areas and small plantings a manual operated broadcast seeder (seed slinger) is available from Truax. The *Seed Slinger* is used for surface application of many types of seed on areas that are too small, too steep, or inaccessible for other types of seeding equipment. The manually operated model is fitted with a hand crank and shoulder strap for carry across the field or small plots.

The *Seed Slinger* is a broadcast seeder developed for surface broadcast application of native prairie grass and forb species as well as some introduced grass and legume species. The *Seed Slinger* seed hopper features two seed compartments. The large compartment is for large fluffy, chaffy seeds such as, big bluestem, little bluestem, and indiangrass, The second smaller compartment is for smaller, hard seed such as switchgrass, alfalfa, clover species, etc.

About this publication

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