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Developed by
Jimmy Carter
Plant
Materials
Center

Seedling ID Guide for Native Grasses in the Southeast

Big Bluestem
Eastern Gamagrass
Indiangrass
Little Bluestem
Switchgrass

SEEDLING ID GUIDE FOR NATIVE GRASS IN THE SOUTHEAST

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INTRODUCTION

Native Warm Season Grass Plant ID Guide for the Southeast

The Jimmy Carter Plant Materials Center

The Jimmy Carter Plant Materials Center is a 327 acre facility near Americus, Georgia. The center, operated by the U.S. Department of Agriculture, Natural Resources Conservation Service, serves the states of Georgia, South Carolina, Alabama, Tennessee, North Carolina and a portion of Florida.

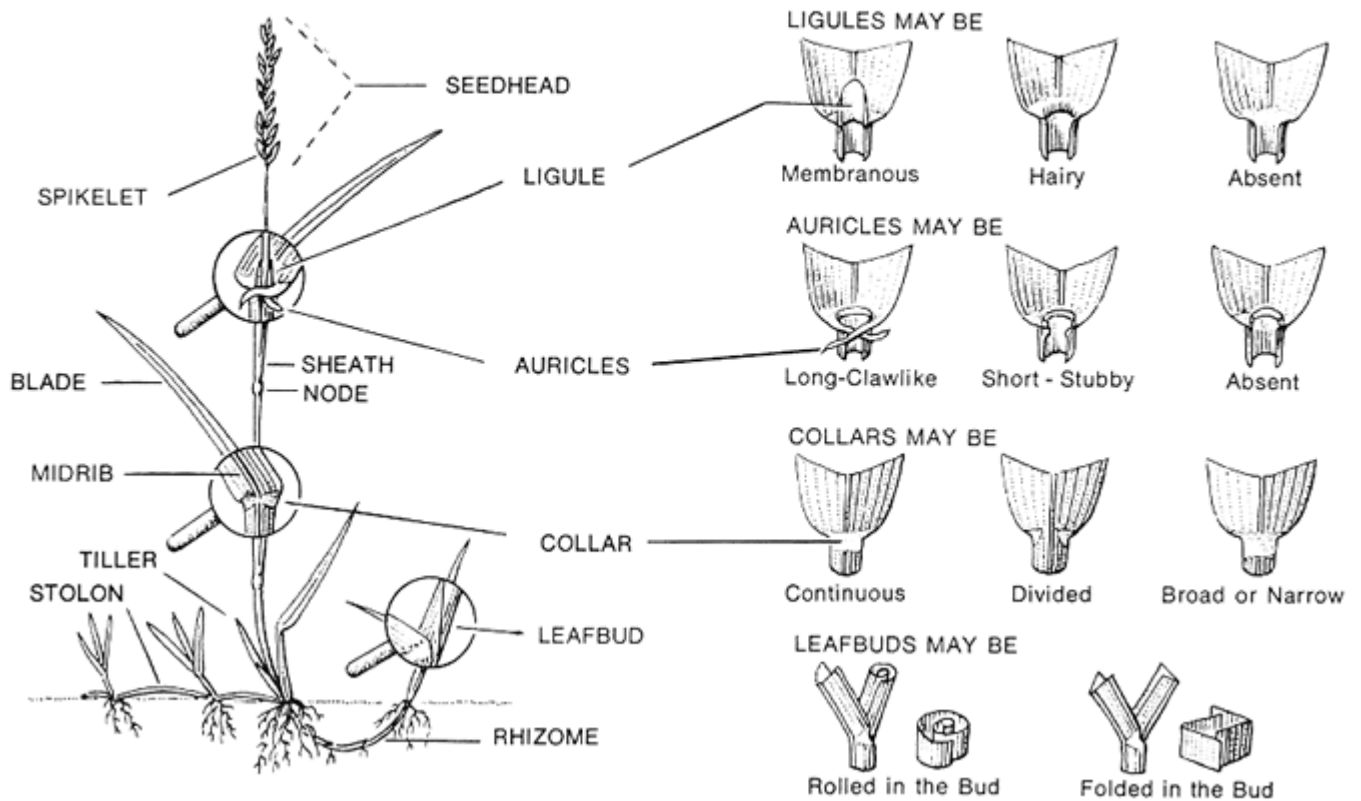
Native plants and especially native grasses are being used much more in the 21st century than during any other previous time. These uses include conservation, forage, landscaping, restoration, beautification, buffers, filtration etc. Natives offer alternatives to introduced species which have been used traditionally in conservation and land management scenarios. Natives that are well adapted to the use areas also present a much reduced invasive weed hazard. However, many introduced species have developed into invasive weed plants requiring extensive eradication programs.

This resource guide is designed to introduce conservationists to commonly used conservation plants for multiple uses. The guide is especially useful for identification of commonly used native grasses: Big bluestem, Eastern gamagrass, Indiangrass, Switchgrass and Little Bluestem. This will enable a user to successfully identify several native and introduced plant materials in a field environment.

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PARTS OF A GRASS PLANT



Big bluestem

Andropogon gerardii

About this plant:

Warm-season, rhizomatous perennial.

Height: 4 to 8 feet

Leaf blade: Long, flat; scabrous margins

Stem: Purplish at base; covered with fine hair

Seedhead: 2 to 3 distinct racemes on top of stem, resembling toes of a turkey's foot which suggest another common name, turkeyfootgrass



BIG BLUESTEM



BIG BLUESTEM



Indiangrass

***Sorghastrum nutans* (native)**

About this plant:

Warm-season, rhizomatous perennial.

Height: 3 to 7 feet

Leaf blade: 10 to 24 inches long; flat; narrow at base; sometimes hairy

Leaf sheath: Generally shorter than internodes; prominent auricles

Ligule: Membrane $\frac{1}{2}$ inch long, notched at tip

Seedhead: Panicle golden bronze to yellow, 6 to 12 inches long rather dense and narrow; spikelets paired, hairy; awns $\frac{1}{2}$ inch long, bent, twisted



INDIANGRASS



Switchgrass

Panicum virgatum

About this plant:

Warm- season, rhizomatous perennial

Height: 3 to 6 feet

Leaf blade: Flat; 1/2 inch wide; up to 30 inches long

Leaf sheath: Rounded; smooth; as long as or longer than internodes

Ligule: Dense ring of hair; 1/8 inch long.

Seedhead: Open panicle about 10 inches long



SWITCHGRASS



SWITCHGRASS



Little bluestem

Schizachyrium scoparium

About this plant:

Warm-season, perennial bunch grass.

Height: 2 to 4 feet

Leaf blade: Flat 6 to 10 inches long; 1/8 to 1/4 inch wide

Leaf sheath: Mostly basal; strongly keeled; hairy or smooth

Ligule: Ring of short hair on some plants.

Stem: Basal; flat; purplish during early growth

Seedhead: Racemes borne singly, in pairs, or in groups on zigzag rachis; 2 spikelets 1 sterile, 1 fertile



LITTLE BLUESTEM



LITTLE BLUESTEM



Eastern gamagrass

Tripsacum dactyloides

About this plant:

Warm-season, rhizomatous perennial.

Height: 5 to 9 feet

Leaf blade: 12 to 24 inches long; 3/8 to 1/2 inch wide, flat; pronounced midrib

Leaf sheath: Flattened; shorter than internodes

Seedhead: 2 to 3 terminal racemes, occasionally 1; Spikelets unisexual; pistillate (female) spikelets on lower fourth of spike; staminate (male) above on same spike



EASTERN GAMAGRASS



EASTERN GAMAGRASS



SWITCHGRASS



Actual native grass seedling approximately 6 weeks after planting

Conservation plants

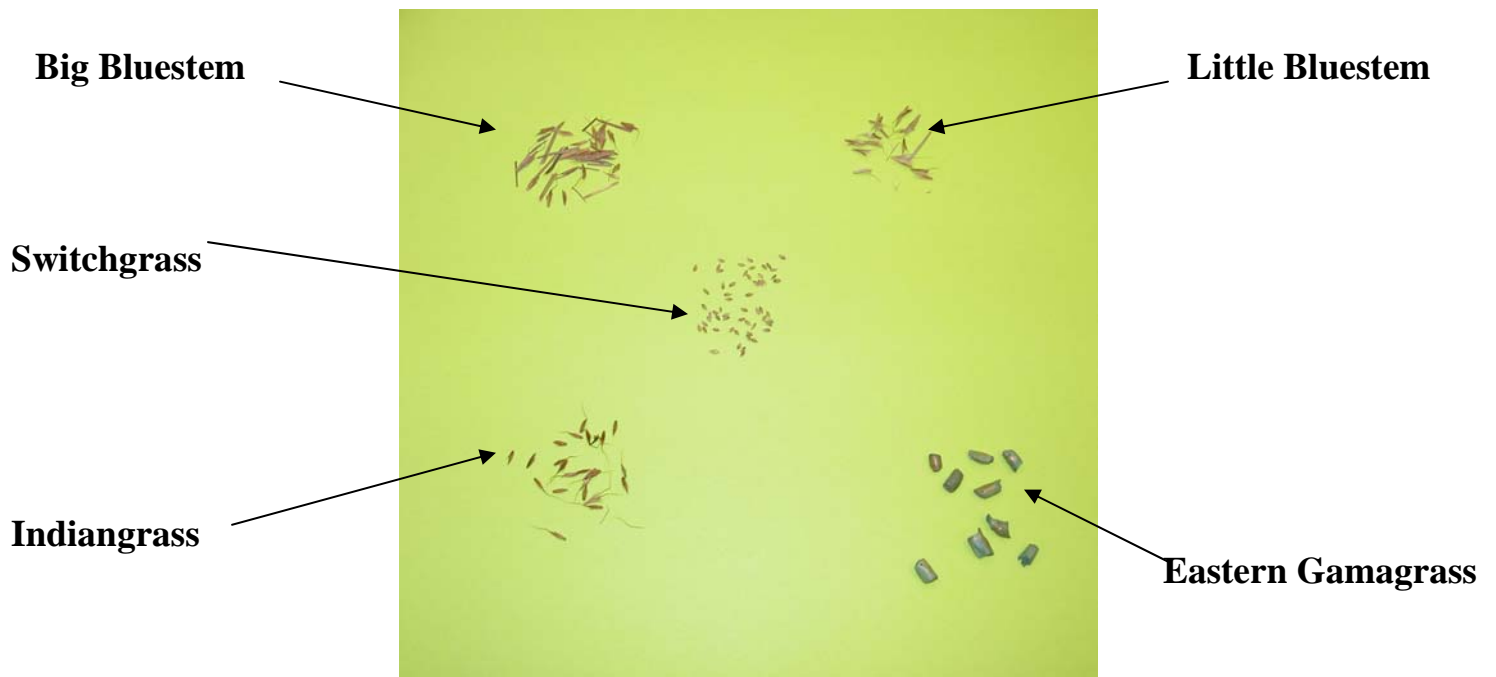
seeds

Plant	Number of Seeds per pound	Number of seeds to be found in a square foot per pound seeded
Alfalfa	200,000	5
Alsike clover	700,000	15
Annual ryegrass	227,000	5
Big bluestem	165,000	4
Birdsfoot trefoil	400,000	9
Cereal rye	18,000	4
Crownvetch	110,000	3
Eastern gamagrass	7,280	2
Hairy vetch	20,000	5
Indiangrass	175,000	4
Kentucky bluegrass	2,177,000	50
Little bluestem	260,000	6
Oats	13,000	.3
Orchardgrass	654,000	15
Perennial ryegrass	227,000	5
Red clover	275,000	6
Redtop	4,990,000	114
Reed canarygrass	533,000	12
Sideoats grama	191,000	4
Smooth brome grass	136,000	3
Sweet clover	260,000	6
Switchgrass	389,000	9
Tall fescue	207,000	5
Timothy	1,230,000	28
Wheat	15,000	.3
White Clover	800,000	18

Example: If the recommendation is to plant 8 pounds of big bluestem per acre expect to find about 32 seeds in a square foot.

Early ID-Seed is Key

Grasses can be very difficult to identify in early growth stages. The seed may be the best identifying aid. A seed retains its form and position in the ground through the seedling's early growth stages. To identify a seedling, carefully dig it up and compare it to photographs or actual seeds.



NATIVE GRASS SEED ID

EASTERN GAMAGRASS



EASTERN GAMAGRASS



EASTERN GAMAGRASS



SWITCHGRASS



SWITCHGRASS



INDIANGRASS



INDIANGRASS



BIG BLUESTEM



BIG BLUESTEM



BIG BLUESTEM



LITTLE BLUESTEM



LITTLE BLUESTEM



LITTLE BLUESTEM



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Where to Get Help

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