

Description

Fort Cooper Germplasm splitbeard bluestem is a native, warm season, perennial bunch grass. The plants are 3- to 8-inches tall or taller when vegetative; culms are 1- to 3-feet tall with paired racemes; spikelets are hairy and white in color. On moist fertile soils, plants can double or triple in size. At Brooksville, seed heads are generally produced in late November and early December. It produces a fairly high percentage of viable seed and establishes readily. Seed of Ft. Cooper Germplasm was originally collected in Ft. Cooper State Park in Citrus County, Florida. It was tested under the NRCS accession number 9060084 and released by the USDA, NRCS Plant Materials Program in 2008.

Adaptation and Uses

Ft. Cooper Germplasm is a source-identified release that has undergone limited testing, all of which was located in central Florida. Currently, the PMC is recommending it be used on suitable sites within Florida; however, further testing may extend this range further into other sections of the Coastal Plain. It prefers sandy, droughty soils or medium-textured soils with good internal drainage. Splitbeard bluestem is grazed by livestock, but one of the greatest potential uses of Ft. Cooper is as a natural nurse crop/erosion control plant for slower establishing native species on coarse dry soils. It is ideally suited to provide wildlife habitat and improve species diversity on reclaimed mineland and other critically disturbed areas. It also has ornamental value when in flower.



Harvesting Ft. Cooper Germplasm with a Woodward Flail-Vac seed stripper



Dehulled Ft. Cooper Germplasm seed (left) and intact seed (right)

Establishment (Seed Production):

The planting site should be cultivated or treated with herbicides for one to two years prior to planting to obtain a clean, weed-free seedbed. In Florida, production fields can be planted year round if irrigation is available.

Non-irrigated fields are best planted in January or August. The recommended planting method is to use a drill with a fluffy seed box in 24- to 48-inch rows. The recommended planting rate for 24-inch rows is 3 lb/ac and should be reduced by one third for 36-inch rows and by one half for 48-inch rows. Seed can also be broadcast; however the planting rate should be doubled. Seed fields established by broadcast planting will be more difficult to manage than if the seed is planted in rows. Debearded seed can also be used if available and will pass more easily through a conventional seed box on a drill. Planting rate for debearded seed is 2 lb/ac for 24-inch rows and should be reduced as outlined above for wider row spacings.

Establishment (Conservation Use):

The planting site should be free of invasive or noxious weeds. Closely mowing or burning prior to planting will reduce competition from existing vegetation and allow seed to reach the soil surface. Most sites will generally be broadcast planted; however, a no-till drill with a fluffy seed box can be used if available. Grazing should be deferred until the plants become established.

Stand Management:

Seed production stands should be fertilized according to soil test recommendations. Nitrogen fertilization is not recommended at planting; but other nutrients should be applied if soil testing indicates they are deficient. Following establishment, 30 to 50 pounds per acre of nitrogen can be applied in the spring on severely nitrogen deficient soils. Excess nitrogen application can cause lodging and may reduce the longevity of the production

stand. Ft. Cooper Germplasm plants are tolerant of fire, but they do not respond well to annual burning; mowing to a 4- to 8-inch-stubble height is recommended to remove dead tissue in the spring.

Seed Harvesting/Processing:

Seed matures from late November to early December. The seed will cling to the plant for several weeks, barring high winds. The seed ripens from the top of the inflorescence downwards, thus allowing multiple harvests to be made as it matures. Seeds should be harvested by stripping during the warmest, driest part of the day. Use of a Woodward Flail-Vac seed stripper or similar machine is recommended. Research at the Brooksville Plant Materials Center has shown that the brush speed should be 400 to 600 rpm. Harvesting at higher speeds causes too much stem tissue to be drawn into the machine. The seed lot should be immediately air dried for 3 to 7 days as necessary and then cleaned using an air-screen cleaner. There is an average of 200,000 seed/lb or 350,000 seed/lb when debearded. Seed can also be dehulled to the bare caryopsis using a hammermill; however, the effect on viability from this treatment has not been fully determined.

Availability:

Generation 1 (foundation quality) seed is being produced at the Brooksville Plant Materials Center and is available for distribution to interested commercial producers. Seed may be obtained by contacting the Florida Plant Materials Specialist.

For More Information:

Brooksville Plant Materials Center
14119 Broad Street
Brooksville, Florida 34601
Phone 352-796-9600

<http://plant-materials.nrcs.usda.gov/flpmc>
<http://www.fl.nrcs.usda.gov/programs/pmc/flplantmaterials.html>

or

Plant Materials Specialist
P.O. Box 141510
Gainesville, Florida 32614-1510
352-338-9544

or

Any USDA Natural Resources Conservation Service Office

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Brooksville, FL July 2008



Fort Cooper Germplasm

Splitbeard Bluestem

Andropogon ternarius Michx.



**Brooksville
Plant Materials Center,
Florida**