

## Where to Obtain Information

Contact your local USDA - Natural Resources Conservation Service Office 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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United States Department of Agriculture  
Natural Resources Conservation Service  
Plant Materials Center

# 'Earl' Big Bluestem

"Nobleman of High Rank"



An improved  
conservation plant  
selected by the James  
E. "Bud" Smith Plant  
Materials Center, Knox  
City, Texas



## **‘Earl’ big bluestem**

### ***Andropogon gerardii***

**‘Earl’ big bluestem is a cultivar release**

#### **Origin**

‘Earl’ big bluestem was originally collected in 1968 from a native stand located 9 miles north-east of Weatherford in Parker County, Texas. Elevation at the collection site is approximately 1050 feet; the soil at the collection site is classified as a Parves-Dugout Complex. Average precipitation for the area is around 32 inches. The collection site is located in MLRA 85 - Grand Prairie.

#### **Potential Uses**

‘Earl’ big bluestem may be used in pure stands for pasture and hay plantings or as a component in seed mixtures for range seeding. Its forage value is good for livestock, and wildlife can utilize the plants and seed for food. Big bluestem plants provide good ground nesting cover for quail.

‘Earl’ big bluestem maybe utilized for filter strips, field borders, wildlife habitat plantings, and erosion control plantings on a wide variety of soil types.

#### **Plant Description**

‘Earl’ big bluestem is a native, perennial, warm-season grass. ‘Earl’ like other big bluestems has short scaly rhizomes. It was selected for its moderate forage production and good seed production. Seedheads have the distinct 2 to 3

racemes on the top of each stem that resembles the toes of a turkey’s foot. ‘Earl’ Big bluestem has a deep fibrous root system and like other native bluestems normally takes two years to establish and produce seed.



#### **Area of Adaptation**

‘Earl’ big bluestem is adapted in Texas and Oklahoma where big bluestem is commonly found. ‘Earl’ is best adapted to deep fertile soils but will grow well on calcareous, shallow or gravelly soils when adequate moisture is present. ‘Earl’ is not adapted to saline sites but will survive in moderately wet bottomlands. ‘Earl’ has the ability to establish and provide ground cover and forage with as little as 18 inches of precipitation.

#### **Establishment**

Seedbed preparation should begin the year prior to a scheduled spring seeding. This tillage activity reduces weed pressure and increases your chances of a successful planting the first year. Plow and work the site as necessary the summer or early fall prior to establishment to create a firm weed-free seedbed. Tillage should be completed in the fall to allow time for the site to settle and accumulate moisture.

In areas of high erosion potential it is recommended to establish a dead litter cover crop the year prior to planting.

‘Earl’ big bluestem is best planted using a grass drill since grain drills cannot handle fluffy seeds. Broadcast seeding may be used in areas not accessible with a drill, but some type of additional soil disturbance is needed to insure seed-to-soil contact.

Seed should be planted no more than 1/4 inch deep on fine texture soils and to no more than 1/2 inch deep on coarse soils. On a straight seeding basis for drilling or broadcasting, 6.0 pounds pure live seed (PLS) per acre should be planted. When planting in mixtures reduce the rate according to the percent of big bluestem in mixture.

#### **Management**

Plantings should be well established before livestock grazing is permitted. Established stands of ‘Earl’ should not be grazed or cut lower than 10 inches.

Prior to planting, soil fertility should be brought up to a medium level with the addition of P and K. Do not add more than 10 Lbs. of N per acre until the stand is established.

#### **Availability of Plant Materials**

Breeder seed will be maintained by the Plant Materials Center at Knox City. Foundation seed for grower increase is available through the Texas Foundation Seed Service, Vernon, TX (940) 552-6226.