



United States Department of Agriculture
Natural Resources Conservation Service
Plant Materials Program

'Selection 75' Kleingrass

Panicum coloratum L.

A Conservation Plant Release by USDA NRCS James E. "Bud" Smith Plant Materials Center, Knox City, TX



USDA-NRCS James E. "Bud" Smith PMC

'Selection 75' kleingrass *Panicum coloratum* L. was released from the James E. "Bud" Smith Plant Materials Center in Knox City, Texas in 1969.

Description

Kleingrass is a warm-season, perennial bunchgrass native to Africa. Plants grow 3 to 4 feet tall and will reproduce by both seed and rhizomes. Kleingrass is quite variable in its makeup, with some plants being relatively smooth while others have abundant pubescence. While most plants grow upright, prostrate plants can also be found. There is an average of 500,000 seed per pound.

Source

Selection 75 was selected at the USDA Soil Conservation Service Nursery in San Antonio from a large number of similar African accessions.

Conservation Uses

Selection 75 is most commonly used as grazed pastureland for livestock. The plant yields good quality forage; however, it produces a toxin which can be harmful to horses, sheep, and goats. Research indicates that selection 75 kleingrass has a crude protein of 17% in April and declines to 7% in November. The In Vitro Dry Matter Digestibility (IVDMD) starts at 69% but falls to

53% for the same time period. Selection 75 forage yields at the James E. "Bud" Smith PMC range from approximately 1500 lb/acre in April to a total biomass production of approximately 12,500 lb/acre in October. Kleingrass is beneficial to wildlife as well. Seed is eaten by many species of birds and small mammals. The dense foliage provides nesting and cover sites. It can also be used to prevent soil erosion on embankments, ditches, and other highly erodible sites.

Area of Adaptation and Use

Kleingrass is adapted to a variety of soils. It will thrive on heavy soils and dry wet conditions, shallow sandy soils and river bottom clay soils. It is also successful on sites with deep sands and medium textured soils. Selection 75 will produce good forage amounts in areas that receive 18-30 inches of precipitation each year or under irrigation management.

Establishment and Management for Conservation Plantings

The full seedling rate for selection 75 kleingrass is 1.5 pure live seed per acre. When planting this as a component of a seed mixture, the seeding rate should be adjusted to the desired percent of the mix. Seed should be placed $\frac{1}{4}$ to $\frac{1}{2}$ inch deep.

Seedbed preparation should begin the year prior to spring planting to reduce weed problems during the first year of establishment. Work the site as necessary during the summer or early fall prior to establishment to create a firm weed-free seedbed. Work should be completed in the fall to allow time for the soil to settle and accumulate moisture. Minimum and no-till operations should use herbicide applications to control weeds.

Plantings should be well established before livestock grazing is permitted. Twelve months of grazing deferment should give plants enough time to become established. Established stands of selection 75 kleingrass should not be grazed lower than 4-6 inches, depending upon the prescribed grazing system. Contact your local U.S. Department of Agriculture-NRCS field office for assistance in planning and applying prescribed grazing plans.

Soil tests should be conducted to determine the amount of fertilizer applied to sustain a medium level. Nitrogen should not be used during the establishment year because it will encourage weed growth. Weeds may be controlled by mowing or with herbicides. Consult your local extension weed specialist for recommendations on herbicides for kleingrass.

Seed and Plant Production

Kleingrass is harvested by either direct combining, swathing and windrowing, then combining, or with a seed stripper.

Availability

For conservation use: Commercial seed is available from several commercial seed companies.

For seed or plant increase: Breeder seed will be maintained by the USDA-NRCS Plant Materials Center, Knox City, Texas and is available to seed growers through the Texas Foundation Seed Service in Vernon, Texas, phone number (940) 552-6226.



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Citation

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



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For more information, contact:

James E. "Bud" Smith PMC
3950 FM 1292 Suite 100
Knox City, TX 79529
Phone: (940) 658-3922 ext. 5
Fax: (940) 658-3095
<http://plant-materials.nrcs.usda.gov/txpmc/>

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