



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

'Alamo'

Switchgrass

Panicum virgatum 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

'Alamo' switchgrass (*Panicum virgatum*, L.) was released from the USDA Natural Resource Conservation Service (NRCS) James E. "Bud" Smith Plant Materials Center in Knox City, Texas in 1978.

Description

Panicum virgatum L., switchgrass, is native to most of the United States except California and the Pacific Northwest. It is a perennial sod-forming grass that grows 3 to 5 feet tall and can be distinguished from other warm-season grasses, even when plants are young, by the white patch of hair at the point where the leaf attaches to the stem. The leaves on the plants are blue-green and usually slightly waxy. The stem is round and has a reddish tint. The seed head is an open, spreading panicle which matures in late October. Seeds are smooth and shiny with about 427,365 seeds per pound.

Source

Alamo switchgrass was originally collected along the Frio River in Live Oak County, Texas.

Conservation Uses

Alamo has the potential to be used as a renewable Biofuel resource in the Southern United States. The ability to produce high yields of biomass and the adaptability of Alamo are two of the main advantages for its use as a Biofuel. Alamo is also used as a valuable soil stabilization plant on sand dunes, dikes, strip-mine spoils, and other critical areas. Dense foliage and heavy seed production from Alamo provides benefits to wildlife and livestock. Alamo provides good warm-season pastures and high quality hay for livestock and deer. Seed provides food for pheasants, quail, turkeys, doves, and songbirds. Alamo also provides good nesting and fall and winter cover for pheasants, quail, and rabbits.

Area of Adaptation and Use

Alamo is adapted throughout the majority of the United States. Performance is best on moderately deep to deep, somewhat dry to poorly drained, sandy to clay loam soils.

Establishment and Management for Conservation Plantings

The full seedling rate for Alamo switchgrass is 2 lbs pure live seed/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 planted ¼ 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. Good stands can be grazed the first winter and continue thereafter throughout the year as with other grasses. Established stands of Alamo should not be grazed lower than 8 inches on areas that are grazed all season. In a rotational program, Alamo can be grazed to 6 inches. Contact your local USDA NRCS field office for assistance in planning and applying prescribed grazing plans.

A soil test should be conducted to determine the amount of fertilizer to apply to maintain a medium soil test 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 switchgrass.

Seed and Plant Production

Switchgrass is harvested by direct combining.

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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