

Plains Germplasm Prairie Acacia

Acacia angustissima (P. Mill.) Kuntze

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



USDA-NRCS James E. "Bud" Smith PMC

Plains Germplasm prairie acacia [*Acacia angustissima* (P. Mill.) Kuntze] was released from the James E. "Bud" Smith Plant Materials Center in Knox City, Texas in 2008.

Description

Plains Germplasm Prairie Acacia is a native, perennial, warm-season, hardy, deep-tap rooted legume. It is a smooth and small rounded shrub, forming colonies by means of woody rhizomes with aerial stems that are rarely over three feet tall. The plant has an attractive and delicate fern-like foliage which closes at night and when touched. Stems are thin, usually unbranched, glabrate, and ridged. Leaves alternate and divide into 6-20 pairs of tiny leaflets. Flowers are small and white to creamy yellow. The fruit is a brownish flat seed pod 1.6 to 2.8 inches long and filled with multiple seed. It has approximately 22,600 seed per pound. The plant is similar in appearance to Illinois bundleflower, *Desmanthus illinoensis*, and catclaw sensitivebrier, *Mimosa microphylla*, but the fruit and leaf structure are different.

Source

Plains Germplasm Prairie Acacia is a composite of 17 accessions and was originally collected from different vegetative regions in Texas.

Conservation Uses

Plains Germplasm Prairie Acacia may provide ground cover vegetation for critically eroding areas to reduce soil erosion and improve water quality. It is a hardy and drought tolerant plant that is useful for revegetation of land disturbed by mining or road construction. The native legume is high in crude protein, nutritious, palatable and readily eaten by all classes of livestock. Being a prolific seed producer, quail and other birds utilize the seed for food and the vegetation is a component for wildlife habitat. The plant also attracts pollinator species including different species of bees and butterflies.

Area of Adaptation and Use

Plains Germplasm is adapted throughout parts of Texas and southern Oklahoma. It requires at least 14 inches of annual precipitation, but may be produced successfully in areas of lower precipitation if irrigated.

Establishment and Management for Conservation Plantings

The full seedling rate for prairie acacia is 5 pounds of 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 from ½ to ¾ inch deep. Plains germplasm should be inoculated with type EL inoculum. The inoculum should be applied to seed before planting at the rate recommended by the manufacturer. To maximize seed adhesion, apply inoculum to damp seed. Applying to dry seed is also recommended, but is generally not as effective. Mix seed thoroughly to ensure even distribution on all seed. Once seed has been inoculated, plant as soon as possible. Keep inoculated seed out of direct sunlight and hot, drying winds. Re-inoculation is required if seed is not planted within 24 hours of application.

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 include 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. Contact your local U.S. Department of Agriculture-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 prairie acacia.

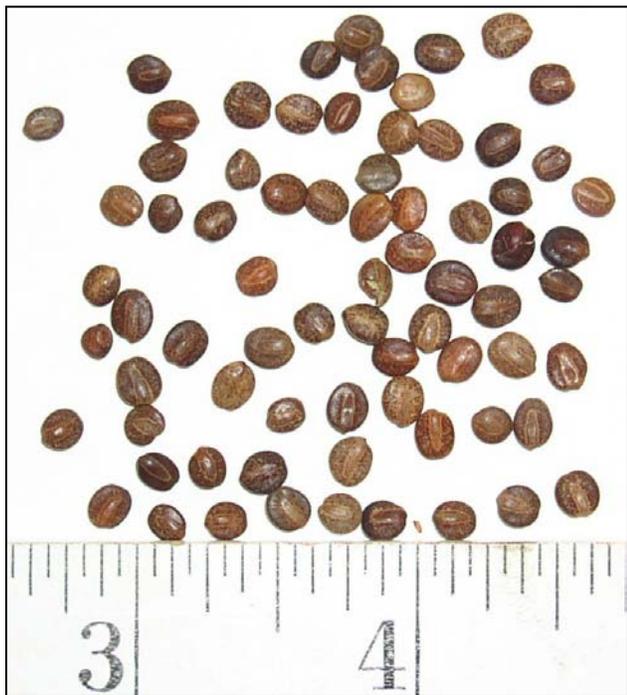
Seed and Plant Production

Prairie acacia is harvested by direct combining. Average seed yield at Knox City is 290 pounds per acre.

Availability

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

For seed or plant increase: Generation Zero (G0) seed (equivalent to Breeder seed) will be maintained by the USDA-NRCS James E. “Bud” Smith Plant Materials Center, Knox City, Texas. Generation 1 (G1) seed is available for grower increase through the Texas Foundation Seed Service in Vernon, Texas, phone number (940) 552-6226.



1USDA-NRCS James E. “Bud” Smith PMC

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/>

Citation

Release Brochure for Prairie Acacia (*Acacia angustissima*). USDA-Natural Resources Conservation Service, James E. “Bud” Smith Plant Materials Center, Knox City, TX. Published November 2012.

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/>>



2USDA-NRCS James E “Bud” Smith PMC

Helping People Help The Land

USDA IS AN EQUAL OPPORTUNITY PROVIDER AND EMPLOYER