

'Comanche' Partridge Pea

Chamaecrista fasciculata (Michx.) Greene

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



USDA-NRCS James E. "Bud" Smith PMC

'Comanche' Partridge pea (*Chamaecrista fasciculata* Michx.) was released from the James E. "Bud" Smith Plant Materials Center in Knox City, Texas.

Description

Comanche partridge pea is a warm season annual legume that grows from 1 to 3 feet tall. The leaves consist of 8-16 pairs of narrow leaflets ½ to 1½ inches long. Flowers are yellow in color, about 1 inch across, and grow in clusters of two to four flowers. The seed pod is a straight, narrow pod 1 ½ to 2 ½ inches long. When seed matures, the pod splits in half and spirals out to release 10-20 dark brown partridge-shaped seeds. Partridge pea blooms from June to October. There are approximately 65, 376 seeds per pound. The average seed yield is 515 pounds per acre.

Source

Partridge pea was collected from a native stand in Throckmorton County, TX.

Conservation Uses

Comanche is a valuable plant for land reclamation and critical area revegetation efforts. Plantings will cover bare areas quickly, fix nitrogen, and stands will remain as long as 5 years, which allows establishment of perennial species. Partridge pea seed provides food for quail, lesser prairie-chicken, ring-necked pheasant, mallards, grassland birds, and field mice. The leaves are eaten by deer and other upland wildlife species. The dense stands also provide excellent cover for birds and small mammals. Partridge pea is also an important pollinator plant for lime sulfur, cloudless sulfur, sleepy orange sulfur, and little yellow butterflies. It is also used to prevent soil erosion on stream banks, roadsides, and other critical erodible areas. Although foliage is nutritious, it contains a

cathartic substance that should be considered potentially dangerous in large quantities to cattle.

Area of Adaptation and Use

Comanche grows well in all areas of Texas and Oklahoma that receive 19 or more inches of precipitation. This plant grows on a wide range of soils, but favors sands and sandy loams.

Establishment and Management for Conservation Plantings

The full seeding rate for partridge pea is 13.4 pounds of 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 ¼ to ¾ inch deep. Comanche should be inoculated with type EL inoculums. The inoculums should be applied to seed before planting at the rate recommended by the manufacturer. To maximize seed adhesion, apply inoculums 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 a scheduled spring seeding. This will help increase the chances of not having severe weed problems the first year of establishment. Plow and 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.

Comanche will usually reseed itself during years having adequate precipitation. Established stands should be disked lightly in the spring to reduce weeds, small brush, and old sod. Disking will also cover seed produced the previous year allowing good soil contact for germination. In areas permitting prescribed burning, prescription burns will remove unwanted vegetation and encourage seed germination. Contact your local U.S. Department of Agriculture-NRCS field office for assistance in planning and performing prescribed burns.

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 when planted in a mixture with grasses and forbs because it will encourage weed growth. Weeds may be controlled by mowing over the top of partridge pea.

Ecological Considerations

Comanche has the potential to spread to unwanted areas if not properly managed.

Seed and Plant Production

Comanche is harvested by direct combining. Average seed yield is 515 pounds per acre.

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.

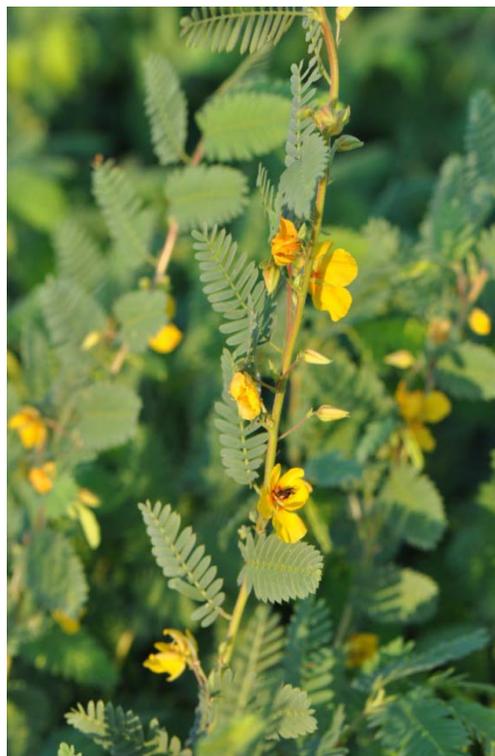


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Citation

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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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