

A Conservation Plant Released by the Natural Resources Conservation Service
 E. “Kika” de la Garza Plant Materials Center, Kingsville, Texas and
 Texas Native Seeds, Caesar Kleberg Wildlife Research Institute,
 Texas A&M University-Kingsville, Kingsville, Texas

Fuego Germplasm Indian blanket

Gaillardia pulchella Foug.

Fuego Germplasm Indian blanket (*Gaillardia pulchella* Foug.) was cooperatively released in 2020 by the USDA NRCS E. “Kika” de la Garza Plant Materials Center and the Texas Native Seeds Project of the Caesar Kleberg Wildlife Research Institute at Texas A&M University-Kingsville. This release is a selected plant material class of certified seed.

Description

Indian blanket is a native, annual to weak perennial forb that grows to 24 inches tall. It flowers almost year-round in South Texas (Fig. 1). Indian blanket is often found in sandy areas and is common throughout Texas. Its range extends from Nebraska, Colorado, and Arizona, rarely east into Arkansas, and south into Mexico.



Figure 1. Fuego Germplasm Indian blanket flower

Source

This selection consists of three collections from Cameron, Galveston and Nueces Counties in the coastal sands of the Gulf Coast Prairies and Marshes (MLRA 150B) ecoregion of Texas. These three accessions were chosen from 26 accessions of Indian blanket (*Gaillardia* spp.) evaluated at the E. “Kika” de la Garza Plant Materials Center (PMC) in Kingsville, Texas. Additional observations were conducted at the East Texas PMC in Nacogdoches, Texas and the James E. “Bud” Smith PMC in Knox City, Texas for evaluation of cold tolerance. No breeding, selection or genetic manipulation was used in the development of the release.

Conservation Uses

Fuego Germplasm is recommended for upland wildlife plantings, pollinator habitat plantings, highway rights-of-way revegetation, reclamation of energy exploration sites and for inclusion in range seeding mixes.

Area of Adaptation and Use

The area of known adaptation of Fuego Germplasm includes the Rio Grande Plain and Coastal Sand Plain (MLRA 83) and Gulf Coast Prairies and Marshes (MLRA 150) ecoregions of Texas. Best performance of this release has been on medium to course textured soils.

Establishment and Management for Conservation Plantings

Plant in late fall or spring in South Texas. Indian blanket can be included in warm-season planting mixtures. Establish a clean, weed-free seedbed by either tillage or herbicides. Prior to planting, the site should be firm and have accumulated soil moisture. Plant Fuego Germplasm using a native-grass drill with picker wheels or a fluffy seed box. Broadcast seeding may be used in areas not easily accessible with a drill, but some type of additional coverage such as culti-packing or light dragging is beneficial to ensure good seed-to-soil contact. Plant seed 1/8 to 1/4 inch deep. It is better to plant too shallow than too deep. For calibration purposes, Fuego Germplasm has approximately 199,000 seeds per bulk pound. A seeding rate of 4-5 pounds pure live seed (PLS) per acre is recommended. In seed mixes, reduce the rate according to the percent of Indian blanket desired on the planting site.

Do not graze areas planted to Fuego Germplasm for one year. Allow plants to produce seed annually to ensure stand longevity.

Ecological Considerations

No severe insect or disease problems have been observed in Indian blanket once established. Fuego Germplasm is a composite of naturally occurring germplasm and has undergone no purposeful selection.

Seed and Plant Production

Fuego Germplasm Indian blanket is best started from greenhouse grown transplants and planted on bedded rows. Seedlings grow and mature quickly and will produce a marketable crop in the first year of planting. Fuego Germplasm is best harvested using a combine with an all crop header when 75% of the seed has reached maturity. This harvest method stimulates subsequent flushes of seed. Under certain conditions a desiccant may be applied prior to harvesting to improve harvestability. Process the seed through a brush machine and then an air-screen cleaner for final cleaning.

Fuego Germplasm Indian blanket can be harvested three times per year in South Texas, typically May, August and October. Flowering and seed production continue all season long, particularly in response to rainfall. Yields are estimated at 120-200 lb/acre per year in a commercial setting on 36-inch bedded rows with a plant population of 14,500 plants per acre. Plants are best established using transplants spaced 1-ft apart.

Availability

For conservation use:

Seed is available from native seed dealers in south Texas. Seed of Fuego Germplasm Indian blanket is identified by USDA NRCS accession number 9113434.

For seed or plant increase:

All commercial seed fields of Fuego Germplasm must be located in Texas and isolated from other cultivated varieties and wild populations of *Gaillardia pulchella* by a minimum of a half mile. Release of this variety will be limited to a licensed grower or growers, with preference given to those who can provide production locations meeting isolation requirements.

G0 seed of Fuego Germplasm Indian blanket is a composite of three individual accessions, grown in isolation from one another, and maintained by the breeder. G1 seed is harvested by isolated plantings of G0 seed and G2 seed is harvested from plantings of G1 seed. Increasing seed beyond Generation 2 is prohibited. Generation 0 seed will consist of equal amounts (by percent PLS, +/-10%) of each of the three accessions. G1 and G2 seed fields have a 7-year production limit, after which time, fields must be replanted using the appropriate seed generation (G0 or G1).

Citation

Release Brochure for Fuego Germplasm Indian blanket (*Gaillardia pulchella*). 2020. USDA-Natural Resources Conservation Service, E. "Kika" de la Garza Plant Materials Center. Kingsville, Texas.

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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