Chaparral Germplasm

Hairy grama

*Bouteloua hirsuta* Lag.

Chaparral Germplasm hairy grama (*Bouteloua hirsuta* Lag.) was a cooperative release between Texas Native Seeds, the E. “Kika” de la Garza Plant Materials Center, and Texas A&M AgriLife Research Station, Beeville, Texas in 2007. It is a selected plant material class of certified seed.

**Description**

Hairy grama is a warm season, perennial grass native to Texas. The low-growing dense bunchgrass grows 1-2½ feet tall. The plants will flower and produce seed throughout the year (fig. 1). Individual plants are long lived.

**Source**

Chaparral Germplasm hairy grama is a blend of 4 collections from the Rio Grande Plain of Texas. These collections were chosen from a comparison with 24 total collections. Collections comprising this release were selected for seed quality and production, plant vigor, forage production, and adaptability throughout the south Texas area.

**Conservation Uses**

Chaparral Germplasm was developed for use in highway right-of-way seeding, native rangeland restoration, and wildlife plantings in the Rio Grande Plain and Coastal Sand Plain of Texas.

**Area of Adaptation and Use**

Hairy grama is an important component of many range sites throughout south Texas. Chaparral Germplasm will persist on sand, sandy loam, clay, and clay loam soil types. This germplasm is compatible in plantings with other native species. Chaparral Germplasm’s fast seed production, establishment, and spreading habit make it an excellent planting choice for highly disturbed sites like highway rights-of-way or areas susceptible to erosion.

Chaparral Germplasm has shown good performance in the Rio Grande Plain and Coastal Sand Plain (MLRA 83), Gulf Coast Prairies and Marshes (MLRA 150), Edwards Plateau (MLRA 81), and Post Oak Savannah (MLRA 78) of Texas.

**Establishment and Management for Conservation Plantings**

Begin seedbed preparation well in advance of planting. Plant in early fall (August) in south Texas. 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 Chaparral Germplasm using a grass drill equipped with picker wheels to evenly distribute the seed and prevent clogging of the planter tubes. Broadcast seeding may be used in areas not easily planted with a drill, but additional practices to encourage good seed-to-soil contact, such as cultipacking and harrowing, may be necessary after planting. Plant seed ¼ inch deep. It is better to plant too shallow than too deep. For calibration purposes, Chaparral Germplasm hairy grama contains approximately 800,000 seeds per bulk pound. A seeding rate of 2 pounds of pure live seed (PLS) per acre is recommended. In planting mixtures, reduce the rate according to the percent of Chaparral Germplasm desired in the seed mixture.

Chaparral Germplasm has fair grazing value, depending on the range site and soil type. Do not graze Chaparral Germplasm for 1 year after planting to allow plants to fully establish. Allow established plants to produce seed annually to ensure stand health. Mowing or burning old growth while dormant helps to stimulate seed and forage production. Plants can be mowed to 4 inches yearly with no adverse effects.
Ecological Considerations
No severe insect or disease problems have been observed in hairy grama once established. Chaparral Germplasm is a composite of naturally occurring germplasm and no breeding, selection or genetic manipulation was used in the development of this release.

Seed and Plant Production
Chaparral Germplasm produces multiple seed crops per year when grown in south Texas. Seed is harvested with a Flail Vac or similar brush-type harvester. The use of slow travel and RPM speeds while harvesting results in relatively clean seed, needing little cleaning or processing. The quantity and quality of seed harvests vary greatly depending on location and field conditions, but averages 30% pure live seed (PLS). Hairy grama has produced as much as 150 lb/acre of clean seed but averages around 80 lb/acre. Germination is low, ranging from 2-20%; however, the tremendous number of seeds produced offsets its active seed germination rate. Seed production of Chaparral Germplasm is best started using greenhouse grown transplants, planted on bedded rows. Rapid spread and growth have been observed in transplant established stands providing seed harvests by the second year and sometimes as quick as the first year. Transplants facilitate better weed control in the seed production fields. The first harvest is typically made in early May with the last harvest occurring in October.

Availability
For conservation use:
Seed is available from native seed dealers in south Texas. Seed of Chaparral Germplasm hairy grama is identified by accession number 9093400.

For seed or plant increase: First generation (G0) seed is produced and maintained by Texas Native Seeds. All commercial seed fields of Chaparral Germplasm must be isolated from other cultivated varieties and wild populations of *Bouteloua hirsuta*. 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

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>

For more information, contact:
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or
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https://www.ckwri.tamuk.edu/research-programs/texas-native-seeds-programs-tns

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