



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

Ramadero Germplasm Spike lovegrass

Eragrostis spicata Vasey



Ramadero Germplasm spike lovegrass, photo by South Texas Natives

Ramadero Germplasm (*Eragrostis spicata* Vasey) was cooperatively released in 2015 by the South Texas Natives Project of the Caesar Kleberg Wildlife Research Institute at Texas A&M University-Kingsville, and USDA NRCS E. "Kika" de la Garza Plant Materials Center. This release is a selected plant material class of certified seed.

Description

Ramadero Germplasm spike lovegrass is a perennial, warm season, bunch grass reaching 3 to 4 feet tall. Ramadero Germplasm sets seed in the fall on a tall spike up to 2 feet long.

Source

This selection originates from a single population of spike lovegrass in the Rio Grande Plains ecoregion of South Texas. This one accession was chosen from 26 accessions of native dropseeds (*Sporobolus* spp.) and 19 accessions of native lovegrasses (*Eragrostis* spp.) evaluated at three locations in South Texas. No breeding, selection or genetic manipulation was used in the development of this release.

Conservation Uses

Ramadero Germplasm spike lovegrass is recommended for restoration plantings on rangelands, for wildlife habitat improvement, and reclamation of disturbed and degraded sites. Spike lovegrass is a native species well adapted to moist soil areas and saline soils that result from oil and gas production activities and pipeline right of way construction.

Area of Adaptation and Use

Ramadero Germplasm is adapted to the Rio Grande Plains (MLRA 83A, B, C and D), Coastal Sand Plain (MLRA 83E) and Gulf Coast Prairies and Marshes of Texas (MLRA 150A and B). Spike lovegrass does not naturally occur north of the Rio Grande Plains in North America, and use of the species beyond this limit of distribution of the species is unlikely to be successful. Adaptation of this release to areas south of the suggested areas of adaptation that are within the natural range of the species is untested.

Establishment and Management for Conservation Plantings

Planting is done in late fall or spring in South Texas. In most cases sand dropseed is used as a component of warm-season planting mixtures. Establish a clean, weedfree seedbed by either tillage or herbicides. Prior to planting, the site should be firm and have accumulated soil moisture. Spike lovegrass is seeded using a drill or broadcast seeder. If broadcast seeded, some type of additional coverage such as culti-packing or light dragging is recommended to ensure good seed to soil contact. Seed is planted 1/8 to 1/4 inch deep. For calibration purposes, Ramadero Germplasm spike lovegrass contains approximately 4,000,000 seeds per bulk pound. A seeding rate of 0.5-1 pounds pure live seed (PLS) per acre is recommended for establishment of pure stands; when used as part of a seeding mixture the seeding rate is adjusted according to the desired percentage of the plant on the planting site.

Areas planted to Ramadero Germplasm should be deferred from grazing until plants become established and

are allowed to set seed. Established plants should be allowed to produce seed annually.

Ecological Considerations

No severe insect or disease problems have been observed in spike lovegrass once established. Cold tolerance of this germplasm beyond the area of intended use is unknown.

Seed and Plant Production

Over three years, plots of about 200 plants produced an average of 1.1 PLS pound of seed annually and averaged an extremely high percent of pure live seed (93.6%). Yields were estimated at 80 pounds of PLS per acre per year on 36" bedded rows with a plant population of 14,000 plants per acre (plants established using transplants spaced 1').

Seed production for Ramadero Germplasm is started from transplants or direct seeded on beds or flat ground. Well maintained transplant plots is expected to produce a marketable crop in the first production year. Direct seeded fields are unlikely to produce a seed crop in the planting year. Seed is best harvested with a Flail-Vac Seed Stripper. Following harvest, inert matter and other undersirable components can be removed from the harvested seed using a Clipper seed cleaner.



Seed of Ramadero Germplasm spike lovegrass, photo by South Texas Natives

Availability

For conservation use:

Seed will be available from native seed dealers in South Texas. Seed of Ramadero Germplasm spike lovegrass release will be identified by USDA NRCS accession number 9093461.

For seed or plant increase:

Seed will be made available to growers who agreeto produce seed meeting Texas Department of Agriculture seed certification provisions for Texas Selected Native Plant Germplasm. All commercial seed fields of Ramadero Germplasm must be produced within the ecoregion of known adaptation and must be isolated from other cultivated varieties and wild populations of *Eragrostis spicata* by a minimum of 900 feet. G0 and G1 production stands have a 7 year restriction on stand life. Certification through G2 is allowed, but increase for seed production G2 seed is prohibited. Rights to production and distribution of seed for commercial purposes will be limited to growers participating in production license agreements negotiated with the originating institutions.

For more information, contact:

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http://plant-materials.nrcs.usda.gov/stpmc/ or

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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>