



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

Maverick Germplasm pink pappusgrass

Pappophorum bicolor E. Fourn.

Maverick Germplasm pink pappusgrass (*Pappophorum bicolor* E. Fourn.) was cooperatively released in 2010 by the Texas Native Seeds Program of the Caesar Kleberg Wildlife Research Institute at Texas A&M University-Kingsville, USDA NRCS E. "Kika" de la Garza Plant Materials Center, and the Texas AgriLife Research Station-Beeville, Texas. This release is a selected plant material class of certified seed.

Description

Pink pappusgrass is a native, warm-season, perennial bunch grass with a height of 2 to 5 feet tall. The seedhead is 4 to 8 inches long and as its name implies, has a pink or purplish tinge at maturity (Fig. 1). Pink pappusgrass is found in the dry rangelands of Texas to Arizona with annual rainfall of 10 to 20 inches. It is located on a wide variety of range sites including gray sandy loam, clay loam, and saline clay. It grows in association with Arizona cottontop, false Rhodes grass, alkali sacaton, plains bristlegrass,



Figure 1. Maverick Germplasm pink pappus plant

whiplash pappusgrass, and curly-mesquite. Pink and whiplash pappusgrass have considerable overlap in range and habit, and often grow together.

Source

This selection was made from native plants growing in South Texas and was chosen from an evaluation of 70 native collections of *Pappophorum* spp. evaluated at 4 locations in south Texas over multiple years. Seven accessions included in this release originated from Maverick, Webb, Kinney, Uvalde, Dimmit, Starr, and Duval County, Texas.

Conservation Uses

Maverick Germplasm pink pappusgrass is recommended for use in rangeland seed mixes, for saline and alkaline site restoration, highway right-of-way plantings, retired cropland restoration plantings, and for use in efforts to diversify invasive grass monocultures. Maverick Germplasm provides good forage for livestock and is an excellent bunchgrass for wildlife cover. It may also be useful in urban wildscaping and ornamental plantings. The foliage provides deep green color and seedheads are an attractive pink color.

Area of Adaptation and Use

Maverick Germplasm is likely to perform best in the Rio Grande Plain (MLRA 83) and Gulf Coast Prairies and Marshes (MLRA 150) ecoregions. Maverick Germplasm has been shown to have good performance in trials in the Western Edwards Plateau (MLRA 81) and Eastern Trans Pecos (MLRA 42), but long-term persistence in these areas is unknown. Pink pappusgrass grows well on most soil types. Maverick Germplasm is also adapted to a variety of soil types except for sand and loamy sand soils. Seed collections used in the development of Maverick Germplasm originated from gravelly loam, clay loam, and sandy loam soils. Maverick Germplasm is also adapted to saline and alkaline soils common throughout south Texas

Establishment and Management for Conservation Plantings

Begin seedbed preparation well in advance of planting. The best stands of Maverick Germplasm are obtained by drilling or broadcasting seed into a firm, well-prepared seedbed in late August-early October in south Texas. Plantings done at other times of the year typically have little emergence until late summer or early autumn, regardless of moisture availability. If broadcast seeded, firm the soil afterwards by culti-packing or light dragging to ensure seed coverage and to prevent seed loss

to animals or wind. Plant seed no deeper than ¼ inch below the soil surface. For calibration purposes, Maverick Germplasm contains approximately 322,000 seeds per bulk pound. The seeding rate of Maverick Germplasm is 3 pounds pure live seed per acre for solid stands. When included in a mixture, adjust seeding rate according to the desired amount of Maverick Germplasm for the planting site. On most sites, a mixture of Webb Germplasm whiplash pappusgrass and Maverick Germplasm pink pappusgrass will provide the best results.

Do not graze areas planted to Maverick Germplasm for 1 year. Afterward, it can be periodically grazed to 4" stubble height with no adverse effects. Allow plants to produce seed annually. Pink pappusgrass is a long-lived perennial that is extremely drought and fire tolerant once established.

Ecological Considerations

Common pests of pink pappusgrass seed include fall armyworms (*Spodoptera* spp.), thrips (*Thrips* spp.), and rice stink bugs (*Oebalus pugnax*). Control of pests may be necessary in order to produce seed crops in dry years under irrigation. Maverick Germplasm is a naturally occurring germplasm and no breeding, selection or genetic manipulation was carried out on the release.

Seed and Plant Production

Seed increase fields have been established from transplants spaced on 36" bedded rows. Pink pappusgrass produces seed throughout the growing season, whenever adequate soil moisture is present. The first harvest usually occurs in early April with the last harvest occurring in October 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. Seed harvested in this manner averages 42% pure lives seed. To clean stems and chaff from harvests when needed, an air screen seed cleaner has been used. No attempt has been made to clean caryopsis from the bur or glumes, as seed damage or reductions in seed life are likely to occur.

Availability

For conservation use: Seed is available from native seed dealers in Texas. Seed of Maverick Germplasm pink pappusgrass is identified by USDA NRCS accession number 9093444.

For seed or plant increase: All commercial seed fields of Maverick Germplasm must be located in Texas and isolated from other cultivated varieties and wild populations of *Pappophorum bicolor* by a minimum of 900 feet. G1 and G2 seed fields have a 7 year production limit, after which time, fields must be replanted using the appropriate seed of generation (G0 or G1).

Citation

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For more information, contact:

E. "Kika" de la Garza Plant Materials Center 3409 North FM 1355 Kingsville, Texas 78363 Phone: (361) 595-1313 http://plant-materials.nrcs.usda.gov/stpmc/

or

Texas Native Seeds CKWRI-TAMUK, MSC 218, 700 University Blvd., Kingsville, Texas 78363 Phone: (361) 593-4525

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