

United States Department of Agriculture Natural Resources Conservation Service Plant Materials Program

Harrison Germplasm Florida paspalum

Paspalum floridanum var glabratum Engelm. Ex Vasey

A Conservation Plant Release by USDA NRCS East Texas Plant Materials Center, Nacogdoches, Texas



Figure 1. Harrison Germplasm Florida paspalum production field at the East Texas Plant Materials Center in Nacogdoches, Texas

Harrison Germplasm Florida paspalum was released by the USDA Natural Resources Conservation Service East Texas Plant Materials Center (ETPMC) in 2003.

Description

Harrison Germplasm is a medium tall, native, warm season, perennial, bunchgrass. Plants may reach five feet in height under optimal conditions, and have stiff basal leaves up to 20 inches long and 3/8 inch wide. The inflorescence consists of two to five racemes, three to four inches in length. Harrison Germplasm foliage is almost hairless and is chalky blue in color. The plants senesce and go dormant in late September or early October.

Source

The original seed was collected in 1986 from Harrison County, Texas, and was compared to 45 other collections from east Texas. Progeny from the collections were evaluated for plant vigor, foliage characteristics, dry matter yield, and seed production over a three year period. Harrison Germplasm was selected from the evaluations for its superior performance.

Conservation Uses

Florida paspalum bears the largest seed of the *Paspalum* genus, and Harrison Germplasm is no exception. Quail, doves, and turkey utilize the seed and the open areas between plant stools for foraging. Harrison Germplasm is recommended for wildlife food and cover, prairie restoration, and as a component in native grass mixtures to increase diversity in conservation plantings.

Harrison Germplasm is also suitable for a number of conservation plantings including, critical area plantings to control soil erosion, wetland restoration and habitat management, and filter strips along wetlands and waterways.

Florida paspalum is palatable to all classes of livestock, but its forage value decreases rapidly as the plant matures. Florida paspalum tolerates multiple cuttings for haying, but decreases due to selective grazing in its early stages if proper livestock rotation and management are not used. Harrison Germplasm is not recommended in a monoculture for grazing.

Area of Adaptation and Use



Figure 2. Area of adaptation for Harrison Germplasm Florida paspalum.

Harrison Germplasm prefers coarse to moderately fine soils with a neutral to slightly acidic pH. It is designated as a facultative wetland plant and favors moist, poorly drained sites. It may also be found in well drained upland sites, especially those that have coarse grained soil overlaying fine textured clay. It does not perform well on heavy, tight, clay soils.

Establishment and Management for Conservation Plantings

Harrison Germplasm is easily established from seed using a grain drill or broadcast seeder. Seed should be planted approximately ½ inch deep in the spring into a firm weed-free seedbed. Planting depth may be increased in coarse, sandy sites. High levels of dormancy exist in freshly harvested seed, but decreases as the seed ages. Studies at the ETPMC showed storage at room temperature for 12 months yielded optimum germination results. 8 PLS (pure live seed) lb/acre is adequate to establish a monoculture stand when drill planted, but should be increased to 10 to 15 PLS lb/acre if using the broadcast method of planting. Fertilization is not recommended during the first year of establishment as it promotes competition from annual weeds. Selective herbicides such as 2-4D amine are useful to control broadleaf weeds, and timely mowing can reduce competition from annual grasses and other weeds. Mowing should be timed to cut weeds during or just before seeds set. This will help limit future competition from annual species. Harrison Germplasm is fire tolerant and prescribed burns encourage rapid spring regrowth.

Seed and Plant Production

Direct seeding with a grain drill is the preferred method for establishing production fields. Seeding rates should be increased 5 to 10% from recommended rates for conservation plantings to ensure a solid stand. This will aid in weed control and ensure a uniform stand in seed production fields. Fertility amendments should be made in production fields according to soil test results. As previously stated, fertilization is not recommended during the first year of establishment. Weeds may be controlled via mechanical and chemical means as necessary. Harrison Germplasm is moderately drought tolerant, but irrigation may be required during seed set to ensure good seed fill during exceptionally dry years.

Direct combining, flail-vac, and Native Seedster[®] have been used successfully to harvest Florida paspalum at the ETPMC. The indeterminate seed matures July through early August. Combine harvests have resulted in the largest seed yields, varying from 57 to 120 pounds of cleaned seed per acre. In some years, a second harvest may be possible. However, the second seed set at the ETPMC has been prone to ergot infections. If infected seeds are present, it is not advised to make a second harvest.

Availability

For conservation use: Harrison Germplasm is available commercially from native seed producers.

For seed or plant increase: Breeder seed of Harrison Germplasm is available through the Texas Foundation Seed Service.

For more information, contact: USDA-NRCS East Texas Plant Materials Center, 6598 FM 2782, Nacogdoches, TX 75964 Phone: (936) 564-4873 Fax: (936) 552-7924 http://plant-materials.nrcs.usda.gov/etpmc/

Citation

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Figure 3. Ergot infection visible on seed raceme.