

GULF CORDGRASS

Spartina spartinae (Trin.)

Merr. ex A.S. Hitchc.

Plant Symbol = SPSP

Contributed by: USDA NRCS Kika de la Garza Plant Materials Center



USDA NRCS Kika de la Garza Plant Materials Center
Kingsville, TX

Alternate Names

sacahuista, *Vilfa spartinae* Trin.

Uses

Erosion: Gulf cordgrass (*Spartina spartinae*) is a good plant for coastal restoration projects. Its large dense clumps cause it to catch and hold soil, which is beneficial in shoreline stabilization.

Wildlife: Gulf cordgrass can provide good bird nesting habitat and wildlife cover for wetland margin species. Geese and sandhill cranes are among the species that make use of gulf cordgrass stands. Mottled ducks are also known to nest in dense clumps.

Forage: Gulf cordgrass can also be a good source of cattle and geese forage when managed properly. Domestic livestock do not eat unburned gulf cordgrass, but will graze it heavily following a

prescribed burn. The new, young shoots are tender, but older mature plants are too tough even for horses.

Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

Description

Gulf cordgrass is a stout, native, perennial grass that grows in dense clumps. It has a non-rhizomatous base, although occasionally it can be sub-rhizomatous towards the outer edges of the clump. Also called sacahuista, the tips of this grass's leaf blades are sharp and spine-like. It flowers in spring, summer, and rarely in the fall. It is moderately saline tolerant (0-18 ppt.), and does well in mesic areas. It can even grow in soils that are occasionally submerged, but are above sea level most of the time.

The genus name comes from the Greek word "spartine", meaning cord from spartes or *Spartium junceum*. The genus name probably was given because the leaf blades are tough, like cords; hence, the common name cordgrass.

Adaptation and Distribution

Gulf cordgrass grows along the Gulf Coast from Florida to Texas, and South into Eastern Mexico. More rarely, gulf cordgrass grows inland in marshes, swamps, and moist prairies. It can also be found along the Caribbean coasts, and inland in Argentina and Paraguay.

In Texas, it can be found along the gulf coast on coastal flats and around brackish marshes. It is occasionally found in inland marshes and salt flats in the Post Oak Savannah, Rio Grande Plains, and Edwards Plateau Regions. Gulf cordgrass grows mostly on clayey soils, but at the Plant Material Center, we have had success growing it on sandier soils as well. Physical and chemical soil properties do not seem to influence the occurrence of gulf cordgrass, but elevation in relation to inundation is a key factor.

For a current distribution map, please consult the Plant Profile page for this species on the PLANTS Web site.

Establishment

Gulf cordgrass is best reproduced vegetatively for coastal shoreline projects by dividing large clumps into several smaller ones. The success rate at the Plant Materials Center has been 75-80%. Use of a rooting hormone is recommended, but is not a necessity. We recommend placing containers (we use trays of 1"x 1"x 6" or 2"x 2"x 6" paper bands or cone-tainers) with new cuttings in a trough with water about 1" up from the bottom of the containers, so that soil stays wet from the bottom up.

After about four to six weeks, remove the containers from the water bath and begin to harden plants off prior to planting. The potted cuttings can be transplanted six to eight weeks after they are started. Plants can be maintained in the greenhouse longer if necessary, and older plants can be resplit to start new ones. Larger vegetative clumps can be transplanted to new sites successfully.

Restoration of coastal sites by seeding may also be successful. Currently the Kika de la Garza PMC is evaluating the seed potential of gulf cordgrass. Two accessions have had over 30% seed germination over two successive years. Seed yeild has averaged 330 pounds per acre, with approximately 454,000 seeds per pound.

In 1997-98, Kika de la Garza Plant Materials Center staff used gulf cordgrass transplants in a coastal shoreline stabilization project that they worked on in partnership with the San Patricio (Texas) Soil and Water Conservation District. Gulf cordgrass had a 97% survival rate, and was found to be best adapted

to planting sites 2 feet above the mean tide level.

Management

Gulf cordgrass should be burned periodically to increase forage palatability and wildlife utilization. Once burned, it should be grazed continuously to maintain tender regrowth.

Gulf cordgrass requires little management otherwise. It appears to be fairly drought tolerant and does not require irrigation except when establishing new transplants. Any weeds can easily be removed when processing plants.

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1Oct2003 SDM; Edited 05Nov2003 jlk; 24may06jsp

For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS Web site <<http://plants.usda.gov>> or the Plant Materials Program Web site <<http://Plant-Materials.nrcs.usda.gov>>

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