

CREEPING RIVER GRASS

Echinochloa polystachya
(Kunth) A. S. Hitchc.

plant symbol = ECPO3

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



Alternate Names

mudflat millet, rivergrass, barnyard grass
Panicum polystachyum

Uses

Livestock: Creeping river grass (*Echinochloa polystachya*) produces forage in the late summer months that is highly palatable to cattle.

Wildlife: Creeping river grass can have seed yields of 98 pounds per acre, and averages 495,000 seeds per pound. Its seeds are eaten by puddle ducks, and gallinules like to forage along the edges. It is also a good source of shelter for nutria and muskrats, and can provide a windbreak for waterfowl. Hatch, Schuster, and Drawe (1999) note that creeping river grass is one of “the most important wetland plants for attracting upland game birds, songbirds, and waterfowl” (p.145).

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

Creeping river grass is a native, warm-season, perennial grass, with stout culms creeping from the base. It can grow to five feet in height. It has been known to set roots from the lower nodes. Creeping river grass can easily be distinguished from other *Echinochloa* species by its ligule, which is a dense line of stiff yellow hairs. The genus name, *Echinochloa*, is Greek for hedgehog grass and the panicle-type seed head, with its awned spikelets does look somewhat like a hedgehog.

Creeping river grass is a member of the Panicaceae tribe of grasses and was previously known as *Panicum polystachyum*. It goes by a variety of common names, including: Creeping river grass, mudflat millet, river grass, and barnyard grass.

Adaptation

Creeping river grass can be found in swamps and ditches along the Gulf Coast from Louisiana to Brownsville, Texas, and also in the West Indies south to Argentina. In Texas, it can be found in wet swales and ditches along the southern Gulf Coast, from the southern part of Southeastern Texas to the coastal portion of the Rio Grande Plains.

Creeping river grass prefers freshwater marshes where salinities are below 0.5 parts per thousand. It will prosper on both mineral and organic soils, but tends to prefer moist clay loam soils. Creeping river grass will often form dense colonies on newly created mudflats that have formed after shallow flooding has occurred. It is not tolerant of water levels over two feet, and prefers to have some periods of dry conditions in order to spread laterally.

Known Distribution



Establishment

Creeping river grass can be propagated by transplanting rootstocks or vegetative splits, transplanting whole plants, taking cuttings, or seed. Transplants are best done in the later winter or early spring, while seed should be hand-broadcast in the late spring. Soils should be moist to wet at planting time whether you seed or transplant. Do not plant in areas subject to deep flooding. If propagating new plants from cuttings, it is recommended that the water be maintained at a level at or below the crown level. A recent germination study conducted at the Kika de la Garza Plant Materials Center in 2001 found that dry-stored seed had better germination than either seed stored in water, or thiram (a fungicide) treated seed. However, for the accession we tested, germination of dry-stored seed was not consistent between harvest years, and ranged from 1.5 to 34 percent. This variation in germination rate may be due in part to poor seed fill in some years.

Management

Water is a key factor with creeping river grass. Soils should be kept moist, or wet and water level should be kept at less than two feet. Although some late spring and early summer dry periods are helpful for lateral growth, moist soil is necessary. Creeping river grass is not well suited for areas with extended dry conditions. Grazing should be rotational in nature and should be carefully managed. No grazing should be done the first year.

Pests and Potential Problems

Creeping river grass is prone to root damage from fire ants, which like to build their mounds around the base during drydowns, and it has been known to get aphids. Poor seed fill can be a problem, as can poor seed retention.

For additional assistance regarding the production and establishment of creeping river grass, please contact the Plant Material Center at (361) 595-1313.

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

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