

A Conservation Plant Released by the Natural Resources Conservation Service Golden Meadow Plant Materials Center, Galliano, Louisiana

Fourchon Germplasm bitter panicum

Panicum amarum Ell. var amarum



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Fourchon Germplasm bitter panicum (*Panicum amarum* Ell. var. *amarum*) is a selected class release from the USDA, Natural Resources Conservation Service (NRCS) in 1998.

Description

Fourchon Germplasm bitter panicum is a native, warmseason, perennial grass that spreads primarily by rhizomes or by rooting from lower nodes of plant stems (culms). Fourthon Germplasm will typically grow to a height of 4 feet with erect to decumbent stems. Stems can reach 8 feet in length. Leaves are 1/2 inch in width and may reach 20 inches in length. Leaves and culms are smooth and bluish in color. The inflorescence is a panicle 12 to 15 inches in length that is contracted in maturity. Flowering begins in September and continues through December. Bitter panicum is a hexaploid (2n=54), consequently, seeds of Fourchon Germplasm are consistently sterile. Reproduction is vegetative by lateral tillering from established plants. Yearlong growth occurs where sand is actively accumulating, but winter cover is usually sparse.

Source

Fourchon Germplasm was collected from a native stand of bitter panicum located on Fourchon Beach, Lafourche Parish, Louisiana. Plants were selected from a naturally-occurring population growing on a low-profile beach ridge and slightly elevated sandy back ridge. Plants were collected from sites exposed to salt spray, over wash and blowing sand. Soils were generally low in fertility and dry during the summer months, and subject to heavy pedestrian and vehicular traffic. Collections were made

in August 1994, and vegetatively increased at the Golden Meadow Plant Materials Center. Known cultivars and other commercially available germplasm was also collected and increased for comparative field testing. From 1994 to 1998, field evaluation plots were established and evaluated at the Golden Meadow Plant Materials Center; Fourchon Beach, Lafourche Parish; Timbalier Island, Terrebonne Parish; and Rutherford Beach, Cameron Parish, Louisiana. Additional field plots were established at Harrison County, Mississippi. Performance criteria were based on survival, vigor, persistence, dune enhancement and stability. Fourchon Germplasm demonstrated superior transplant survival, rate of growth, plot density and persistence in Louisiana and Mississippi.

Conservation Uses

Erosion control:

The principal use for Fourchon Germplasm bitter panicum is in coastal dune erosion control, however it may have a role in stabilizing other dry, sterile areas such as roadsides and mine spoils.

Livestock and forage:

Bitter panicum is consumed by cattle, sheep, and goats. This grass has a low-medium browse and grazing palatability and a medium protein potential. It is a favorite forage of livestock in some areas and was eliminated along some portions of the Texas barrier islands by grazing. When livestock are removed, this grass re-establishes rapidly.

Wildlife Use:

Bitter panicum can provide cover and/or habitat for song birds, water fowl and small mammals.

Area of Adaptation and Use

The native range or distribution of bitter panicum is along the coastal beach system of the north central Gulf of Mexico basin. Fourchon Germplasm bitter panicum has exhibited excellent performance in plantings on coastal beaches of Mississippi and Louisiana. For a current distribution map, please consult the Plant Profile page for this species on the <u>PLANTS Website</u>.

Establishment and Management for Conservation Plantings

Generally, no site preparation is required when planting Fourchon Germplasm. Freshly dug bareroot shoots (tillers) and rooted or unrooted stem cuttings can be used in plantings. Container grown plants have been proven to be more reliable in establishing coastal plantings.

Field plantings are established by planting on 2 to 5 feet centers between plants. Spacing is dependent on the protective cover desired, but a 2 foot spacing is frequently used. Place plants 8 to 10 inches deep or deeper in moist soil. Bury unrooted stems end to end in trenches 4 to 6 inches deep and 2 to 3 feet apart leaving the top 6 to 10 inches of the stem exposed. Unrooted cuttings can also be planted 3 to a hole.

Bitter panicum can be established in the fall with rooted cuttings. It can be planted in late winter or early spring, although success has been noted when planting young tillers in late spring, if a rainy season is more likely to occur then, as in some regions of distribution.

Containerized plants can be planted year around if moisture is adequate; however, better establishment may be achieved by planting in late winter or early spring.

Bitter Panicum grows on low fertility soils, however, if fertilization is desired place a slow release tablet with each plant while planting or broadcast a balanced fertilizer such as 10-10-10 at 150 to 200 pounds N per acre after planting.

During establishment, restrict traffic and livestock grazing. All sites should be allowed to establish the first year, prior to any grazing. Once grazing is started, do not graze lower than 4 to 6 inches. Apply fertilizer according to soil test recommendations. Application of fertilizer may be split. Bitter panicum has a high fire tolerance, making it tolerable to controlled burns.

Ecological Considerations

There are no known serious environmental concerns.

Seed and Plant Production

Fourchon Germplasm bitter panicum must be established vegetatively; seed is not available. Mature stems with or without roots, as well as underground rhizomes can be established as sprigged materials. Rooted container stock of any size provides the highest probability of survival and rapid growth.

Availability

For conservation use: Mature stems, rhizomes and containerized material are available through commercial wetland plant growers.

For seed or plant increase: Generation 0 planting stock is available for commercial nursery production from the USDA, Natural Resources Conservation Service, Golden Meadow Plant Materials Center.

For more information, contact:
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Fax: 1-844-325-6941

http://www.nrcs.usda.gov/wps/portal/nrcs/main/plantmaterials/p mc/southeast/lapmc

Citation

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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://www.plant-materials.nrcs.usda.gov/