

## BILLION-DOLLAR GRASS

*Echinochloa frumentacea*

**Link.**

Plant Symbol = ECFR

Contributed by: USDA NRCS Plant Materials Program



USDA NRCS Manhattan Plant Materials Center  
Manhattan, Kansas

### Alternate Names

*Echinochloa crus-galli* (L.) Beauv. ssp. *edulis* A.S. Hitch.; *Echinochloa crus-galli* (L.) Beauv. var. *frumentaceum* Roxb., non Salisb.

### Uses

Billion-dollar grass is an exceptional wildlife plant. It is a choice duck food and is eaten by 17 species of Northeastern waterfowl. This food is also used by five upland game birds and many non-game birds such as sparrows, finches, and cardinals. Leaves and seedheads are eaten by rabbits and muskrats. As an erosion control plant it is used as a quick growing companion crop with perennial grasses and legumes and is especially suited to wet sites.

### 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

Billion-dollar grass is an introduced annual. It has coarse leaves and varies from one to five feet in height depending on available moisture and fertility. The seed-head is a compact panicle-type inflorescence four to eight inches long, purplish in color, with awnless seed. Conversely, wild barnyard grass has seed with conspicuous awns and a more open-branched panicle. Billion-dollar grass produces a much heavier seed yield than the wild species. There are approximately 155,000 seeds per pound.

### Adaptation and Distribution

This plant is widely adapted to the entire Northeast as it matures in 60-90 days. It grows well in wet soils but will also grow on well-drained upland soils. Billion-dollar grass is somewhat tolerant of low soil pH (4.5) and salinity of 2,000 parts per million.

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

### Establishment

Seed may be drilled or broadcast and incorporated to a one inch depth on upland sites. In wetland areas, draw down water levels and broadcast seed on top of wet ground. Seeding rate for pure stands is 20 lbs./acre when drilled and 25-30 lbs./acre if broadcast. In a mixture reduce rate to 8-12 lbs./acre. Planting is recommended after the last killing frost in the spring. The seeding date may be timed to synchronize the maturity date of seed with the fall migration of specific migratory birds.

### Management

As an upland food source, plant in pure stands as a field crop. For waterfowl, wetland areas planted in the spring should not be reflooded until the plants are at least six inches tall. Flood to 12-18 inches during the migratory season. Replant annually.

### Cultivars, Improved, and Selected Materials (and area of origin)

'Chiwapa' (India) is the only named variety, which was developed at the Coffeville, Mississippi Plant Materials Center and is appropriate only for the southeastern region of the country.

**Prepared By & Species Coordinator:**  
USDA NRCS Plant Materials Program

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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 Web site <<http://plants.usda.gov>> or the Plant Materials Program Web site <<http://Plant-Materials.nrcs.usda.gov>>

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