



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

## 'Sabine'

# Illinois Bundleflower

*Desmanthus illinoensis* (Michx.)

A Conservation Plant Release by USDA NRCS James E. "Bud" Smith Plant Materials Center, Knox City, TX



USDA-NRCS James E. "Bud" Smith PMC

'Sabine' Illinois bundleflower (*Desmanthus illinoensis* Michx.) was released from the James E. "Bud" Smith Plant Materials Center in Knox City, Texas.

### Description

*Desmanthus illinoensis* (Michx.), Illinois bundleflower is a native, warm season perennial legume which spreads by seed. Sabine averages three to four feet tall at maturity. Small self-pollinating flowers form a ball-like cluster and bloom from May to September. The seed pods are made up of curved pods that are green until the seed matures, then they turn to brown or black and split open to release two to six seeds. The leaves are doubly compound and attached to the stem in alternate arrangements. The plant remains green until frost, shows good drought tolerance, and has good re-growth following defoliation. There are approximately 64,014 seeds per pound.

### Source

Sabine Illinois bundleflower was collected from a native stand near Crystal Beach, Texas in Galveston County.

### Conservation Uses

Sabine is frequently recommended in revegetation projects, especially in mixtures for reclaimed surface-mined areas. Sabine is high in protein and suitable for all

classes of livestock as well as wildlife such as deer and pronghorn antelope. It also provides cover for small mammals and birds. The seed from is eaten by birds and rodents. The plant is a pollinator host for Northern and Southern Cloudywing Skipper butterflies.

### Area of Adaptation and Use

Sabine occurs throughout Texas except in the Rio Grande Plains and east Texas Timberlands. Ideal conditions for vigorous growth include areas that receive at least 20 inches of rainfall and medium textured soils. It does not tolerate heavy clays and coarse sands.

### Establishment and Management for Conservation Plantings

The full seedling rate for Illinois bundleflower is 13.6 PLS lb/acre. If included as a component in a seed mixture, the seeding rate should be adjusted to the desired percent of the mix. Seed should be placed from ¼ to ¾ inch deep. Sabine should be inoculated with *Desmanthus* Spec 1. Inoculum should be applied to seed before planting at the rate recommended by the manufacturer. To maximize seed adhesion, apply inoculum to damp seed. Applying to dry seed is not as effective. Mix seed thoroughly to ensure even distribution on all seed. Once seed has been inoculated, plant as soon as possible. Keep inoculated seed out of direct sunlight and hot, drying winds. Reapply inoculants if seed is not planted within 24 hours of application.

Seedbed preparation should begin the year prior to a scheduled spring seeding. This will help increase the chances of not having severe weed problems the first year of establishment. Plow and work the site as necessary during the summer or early fall prior to establishment to create a firm, weed-free seedbed. Work should be completed in the fall to allow time for the soil to settle and accumulate moisture. Weed control in minimum and no-till operations can be achieved with herbicide applications.

Plants should be well established before livestock grazing is permitted. Twelve months of grazing deferment should give plants enough time to become established. Established stands of Sabine should not be grazed lower than 6 inches on areas that are grazed all season. In a rotational program, Sabine can be grazed to 4 inches. Contact your local U.S. Department of Agriculture-NRCS field office for assistance in planning and applying prescribed grazing plans.

A soil test should be conducted to determine the amount of fertilizer to apply to maintain a medium soil test level. Nitrogen should not be used during the establishment year

because it will encourage weed growth. Consult your local extension weed specialist for recommendations on herbicides for Illinois bundleflower.

#### **Seed and Plant Production**

Sabine is harvested by direct combining. On an average year, two harvests are possible. Average seed yield is 1,075 pounds per acre.

#### **Availability**

*For conservation use:* Commercial seed is available from several commercial seed companies.

*For seed or plant increase:* Breeder seed will be maintained by the USDA-NRCS Plant Materials Center, Knox City, Texas and is available to seed growers through the Texas Foundation Seed Service in Vernon, Texas, phone number (940) 552-6226.

*For more information, contact:*

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#### **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://plants.usda.gov](http://plants.usda.gov/)> or the Plant Materials Program Web site <[http://www.plant-materials.nrcs.usda.gov](http://www.plant-materials.nrcs.usda.gov/)>



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