

Asteraceae

Species: *Dracopis amplexicaulis* (Vahl) Cass. (Synonym *Rudbeckia amplexicaulis* Vahl)

Common Name: Clasping coneflower

Species Code: DRAM

Ecotype:

Outplanting Site: Natchez Trace Parkway 3X section and others.

Outplanting Date: 3X section planted in 1994, other sections of the Natchez Trace Parkway were planted in 1996.

TARGET SEEDLING INFORMATION

Stock Type:

Height:

Caliper:

Root System:

SEED PROPAGATION

Propagation Environment: Field

Seed Propagation Method: Direct sown.

Source of Seeds: Lower section of the Natchez Trace Parkway collection area, close to Port Gibson, MS.

Collector/Date: B.B. Billingsley, Jr./1990

Seeds/Kg: 2,100,000

% Germination: 1992 – 14, 1993 – 25, 1994 – 43, 1995 – 83.5

% Purity: 1992 – 69, 1993 – 93, 1994 – 98.7, 1995 – 97.31

Seed Processing: Direct combined and cleaned using an air screen cleaner. Although closely related to blackeyed susan, seed of this species is much easier to clean due to a

slightly larger seed size and a slightly elliptic rather than tapering outline typical of blackeyed susan.

Seed Storage: Normal cool, dry storage. PMC cooler is maintained at 12.7 °C (55 °F) and 45% relative humidity.

Seed Dormancy: Seeds appear to have no dormancy.

Seed Treatments: None required.

Container Type and Volume:

Growing Media:

Total Time To Harvest: 11 months

Sowing Date: August to September

% Emergence and Date: September to October.

Sowing/Planting Technique: Broadcast seeding on a field following burning, disking, and cultipacking. In the initial planting, seed was mixed with sand and broadcast on the soil surface. The sand is not necessary if the distributor can handle fairly small quantities of small seed. Planting rate is 4.48 to 5.56 kilograms PLS per hectare (4 to 5 pounds PLS per acre).

Establishment Phase: Seeds germinate in the fall and overwinter as small plants (not rosettes). It is an annual species that establishes readily.

Rapid Growth Phase: Plants begin to elongate to form flowering shoots in March to April.

Hardening Phase:

Harvest Date: Early July. Timing of harvest is critical. The receptacles on the plants eventually become brown and wooly in appearance due to the shedding of the disk florets. Seed must be harvested soon after this occurs or much will be shattered and lost, but if harvest is attempted before this time, the seed is held too tightly in the receptacles for optimum harvest.

Storage Conditions:

Storage Duration: Seeds would be classified as having medium longevity (Hartmann and Kester, 1975). Seeds were stored for 1 to 5 years before planting on the Natchez Trace Parkway.

VEGETATIVE PROPAGATION

Vegetative Propagation Method:

Propagator:

Comments: Seed production from vigorously growing good stands is quite impressive, with yields up to 224 kg per hectare (200 pounds per acre) possible. This species requires more nitrogen fertilizer to produce maximum yields (38 kg per hectare or 34 pounds per acre actual N) compared to the other wildflower species grown for the Natchez Trace (15 kg per hectare or 13 pounds per acre actual N).

Distribution: This species occurs from Missouri and Kansas to Mississippi and Texas. Blackeyed susan is much more common in Mississippi than this species.

References:

Hartmann, H.T. and Kester, D.E. 1975. Plant propagation principles and practices. Prentice-Hall, Inc., Engelwood Cliffs, NJ. 662 p.