Poaceae

Species: Tridens flavus (L.) A.S. Hitchc.

Common Name: Purpletop

Species Code: TRFL2

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: Natchez Trace Parkway (actual collection location was not noted – designated collection area was the lower section of the Natchez Trace Parkway, from around Jackson, MS to the terminus in Natchez, MS.)

Collector/Date: B.B. Billingsley, Jr./1991

Seeds/Kg: 1,025,000

% Germination: 1993 – 89, 1994 – 69

% Purity: 1993 – 96, 1994 – 94

Seed Processing: Direct combined or stripped with a flail-vacuum harvester and cleaned using an air screen cleaner. Seeds can also be hulled for ease of planting, but this operation was not done at the PMC.

Seed Storage: Normal cool, dry storage. PMC cooler is maintained at 12.7  $^{\circ}$ C (55  $^{\circ}$ F) and 45% relative humidity.

Seed Dormancy: Seeds are dormant when harvested.

Seed Treatments: Seeds have an absolute requirement for stratification. Reports from the local seed test laboratory showed 0% germination, however, when seeds from the same seed lot were stratified, high germination percentages resulted. A three month stratification period was used, however, periods as short as two weeks appear to be sufficient to overcome dormancy.

Container Type and Volume:

Growing Media:

Total Time To Harvest: 12 to 13 months.

Sowing Date: August to September. The PMC had some success with spring planting hulled seed, but fall planting is much safer due to the dormancy problem discussed earlier.

% Emergence and Date: Seeds will not germinate until the spring following sowing.

Sowing/Planting Technique: Seed can be drilled shallowly in clean tilled fields or broadcast on the surface of mowed areas. Planting rates of 11.2 to 15.7 kilograms PLS per hectare (10 to 14 pounds PLS per acre) are recommended.

Establishment Phase: Stands are slow to establish and may take a few years to become fully productive.

Rapid Growth Phase: Plants begin to elongate to produce seed heads in late summer.

Hardening Phase:

Harvest Date: Late October to early November.

Storage Conditions:

Storage Duration: Seeds would be classified as having medium longevity (Hartmann and Kester, 1975). Seeds were stored for 1 to 3 years before planting on the Natchez Trace Parkway.

## VEGETATIVE PROPAGATION

Vegetative Propagation Method:

Propagator:

Comments: Yields up to 448 kilogram per hectare (400 pounds per acre) of high quality seed can occur from row planted fields.

Distribution: Native range extends from New Hampshire to Nebraska, south to Florida and Texas.

References: