

Ericaceae

Species: *Vaccinium elliottii* Chapman

Common Name: Elliott's blueberry

Species Code: VAEL

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: Containerized.

Height: 0.3 to 1.2 meter (1 to 4 foot).

Caliper:

Root System:

SEED PROPAGATION

Propagation Environment: Field (divisions) and greenhouse (cuttings)

Seed Propagation Method: Had little success germinating seeds.

Source of Seeds: Naturally layered plants were dug from the Natchez Trace Parkway close to Jackson, Mississippi. Cuttings were also taken from larger plants in this same vicinity.

Collector/Date: PMC personnel/June, 1991 (cuttings), February 1992 (cuttings), June 1992 (layered plants and seeds)

Seeds/Kg:

% Germination:

% Purity:

Seed Processing: Fruits were macerated in a blender and pulp and immature seeds were removed by floating. Seeds were dried and any remaining impurities were removed by hand screening.

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

Seed Dormancy: Blueberries generally have a shallowly dormant embryo (Dirr and Heuser, 1987; Nokes, 1986).

Seed Treatments: Many blueberry species require no pretreatment, while others require stratification for up to 3 months (Dirr and Heuser, 1987). Stratification is recommended for species where the level of dormancy is unknown (Dirr and Heuser, 1987; Nokes, 1986). Seeds of Elliott's blueberry were stratified for 3 to 4 months, but germination was minimal.

Container Type and Volume: Commercial 2 gallon plastic containers were the final planting container for the 3X section. Plants to be planted on the other sections needed to be held longer so they were moved from a 2 to a 3 gallon in 1995.

Growing Media: Media was mixed by PMC staff. Either a 3:2:1 pine bark, peat moss, sand or a 6:1 pine bark to sand medium was used.

Total Time To Harvest:

Sowing Date: February to March.

% Emergence and Date: Very poor emergence.

Sowing/Planting Technique: Spread the stratified seed/growing medium mixture on the surface of a growing flat.

Establishment Phase:

Rapid Growth Phase:

Hardening Phase:

Harvest Date: May to June.

Storage Conditions:

Storage Duration: Blueberry seeds can retain viability in storage for up to 12 years (USDA Forest Service, 1974).

VEGETATIVE PROPAGATION

Vegetative Propagation Method: Commercially blueberries are rooted using either hardwood cuttings or softwood cuttings taken just after the leaves have expanded in the spring (Dirr and Heuser, 1987; Nokes, 1986). It is difficult to take cuttings of Elliott's blueberry in the spring because the plants flower so early. In Mississippi, the flowers begin to expand in late February and the plants are in full flower by March to April. Semi-hardwood cuttings taken in June did not root in high percentages (estimated about 7 % rooting) and the plants did not overwinter well. Hardwood cuttings taken in February rooted better, but the percentages were still low.

Propagator: Janet Grabowski and B.B. Billingsley, Jr.

Comments:

Distribution: Elliott's blueberry is found from southeastern Virginia to Florida, west to Louisiana.

References:

Dirr, M.A. and Heuser, C.W, Jr. 1985. The reference manual of woody plant propagation from seed to tissue culture. Varsity Press, Inc., Athens, GA. 239 p.

Nokes, J. 1986. How to grow native plants of Texas and the Southwest. Texas Monthly Press, Austin, TX. 404 p.

U. S. Department of Agriculture, Forest Service. 1974. Seeds of woody plants in the United States. Agric. Handb. 450, U. S. Government Printing Office, Washington, D.C.