Protocol Information





(Klinkenberg 2005)

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Family Scientific Name: Fabaceae

Family Common Name: Legume or Pea Family

Scientific Name Lupinus rivularis Dougl. ex lindl

Genus: Lupinus Species: rivularis

Species Authority: Dougl. ex lindl

Variety: Sub-species: Cultivar:

Authority for Variety/Sub-species:

Common Synonym

Genus: Lupinus
Species: lignipes
Species Authority: Heller

Variety: Sub-species: Cultivar:

Authority for Variety/Sub-species:

General Information

Common Name: Streambank Lupine, Riverbank Lupine

Species Code: LURI (USDA)

Ecotype: Whidbey Island (Shomer 2007).

General Distribution: Along the Pacific coast from southern BC to

northern California

Climate and Elevation: Low elevation

Local habitat and Abundance: Gravely or sandy river stream banks distributed

near coastal regions (Klinkenberg 2005). Flood prone and disturbed sites (Endangered 2002).

Assosiated plants are *Plantago lanceolata*, *Solidago*

canadensis, Juncus tenuis, Hypericum perforatum, and Epilobium angustifolium (Endangered 2005).

Strategy Type:

Propagation Details

Propagation Goal: **Plants** Propagation Method: Seeds

Product Type: Container (plug)

Stock Type:

Time to Grow: 30 days (Jeroue 2007)

Target Specifications: 4 inches tall with 3-5 true leaves (Jeroue 2007). Collected in July by removing branches of pods Propagule Collection: (Shomer 2007). Hand collected in mesh bag

Subshrub

(Barner 2007).

Propagule Processing/Propagule Characteristics:

Just after harvesting, put pods in a large bag and place in warm sunny location (Shomer 2007). The pods will dry out and pop/break open; some will even jump to release clean seeds. Use a screen to separate seeds and pod (Shomer 2007). Seed density 1600/oz (Shomer 2007), 38,510/lb (Barner 2007). Machine cleaning with a Westrup Model LA-H laboratory brush machine, with a #18 mantel, at medium speed then air screened with a Clipper with 12 round topscreen and 6 round bottom screen

(Barner 2007).

Pre-Planting Propagule Treatment:

Requires scarification. For best results fold seeds in 120 grit sand paper and rub together being careful not to crush seeds (Jeroue 2007). Store in cool place 55-60 degees ferenheit (Shomer 2007).

Stored for 8 months (Jeroue 2007).

Growing Area Preparation/Annual Practices for Perennial Crops:

Establishment Phase:

50 seeds per 12x12" mini flat with fine soil mix Grow Balsamorhiza in deep, fertile, well drained soil with full sun exposure (Huxley 1999). Roots of young plants are prone to rot during summer months if kept too moist (Ryan and Douglas 1999). 97/100 germination, 97% germination (Jeroue

Length of Establishment Phase:

2007).

Active Growth Phase:

Length of Active Growth Phase:

Hardening Phase:

Length of Hardening Phase:

Harvesting, Storage and Shipping:

Length of Storage:

Guidelines for Outplanting / Performance on Typical Sites: Other Comments: Listed as endangered in BC and the hybrid, Yellow

Bush Lupine (*Lupinus arboreus*), is a major threat to *L. rivularis* due to its aggressive growth which

displaces L. rivularis (Klinkenburg 2005).

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