Plant Propagation Protocol for Plectritis congesta, Short Spur Sea Blush

ESRM 412 – Native Plant Production

Taxonomy

Family Name: Valerianaceae, Valerian Family

Genus: Plectritis
Species: congesta
Species Authority: (Lindl.) DC.

Common Synonym(s): N/A

Common Name(s): Short spur sea blush, sea blush, rosy plectritis

Species Code (USDA): PLCO4

Varieties: N/A

Sub-species: brachystemon (Fisch. & C.A. Mey) Morey

congesta

nitida (A.Heller) Morey

Cultivars: N/A

GENERAL INFORMATION

Geographical range:

Found in the west coast lowlands from British Columbia, Canada extending south to California (Pojar and Mackinnon, 1994).

Ecological distribution:

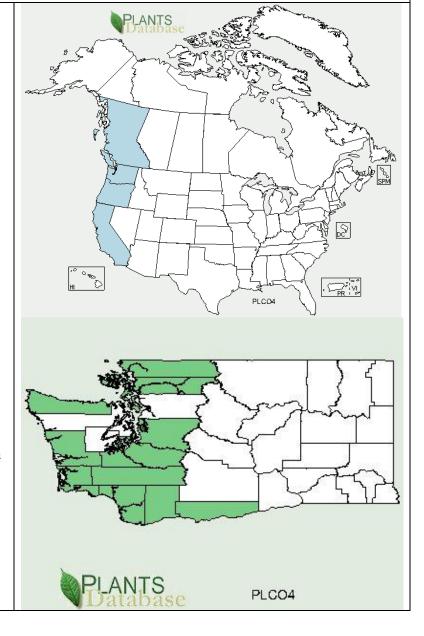
Commonly found on open rocky slopes, bluffs or meadows moist during Spring. Often found on bluffs near marine shores as indicated by the common name (Pojar and Mackinnon, 1994).

Climate and elevation range:

Elevation range listed from sea level to 900 meters in California (Ganders, 1993) and in Washington State it extends to "moderate" mountain elevations (Giblin, 2006).

Local habitat and abundance:

Not commonly found in remnant prairies, and may have been extirpated from some historically occupied areas (Stanley et al, 2010). Densely occupies small patches on balds in San Juan county and scattered populations can be found in most of Western Washington (Chapell 2006).

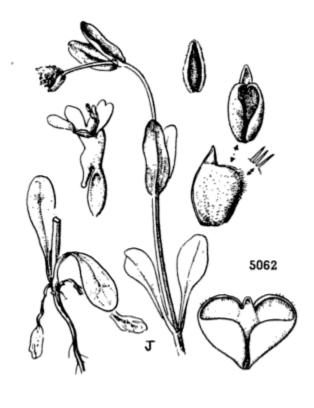


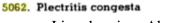
Plant strategy type/successional stage:

This forb appears to thrive following fire disturbance (Stanley et al, 2010). This species is associated with prairie forbs such as Common Camas (*Camassia quamash*) and graminoids such as Roemer's fescue (*Festuca roemerii*) (Chapell 2006).

Plant characteristics:

Annual forb, up to 60cm in height. Leaves are spoon or egg-shaped, opposite, and hairless. Small white or pink flowers (2-8mm long) form 'congested' terminal clusters. Each funnel form flower has 5 petals, fused into two lips, with a thick spur -usually less than 1/3 length of corolla. Dry fruits contain one seed, are sharply winged or wingless (Ganders et al 1977), have a keel on the convex side, can be hairy or hairless, and fall without opening. (Pojar and Mackinnon, 1994; Abrams, 1960). The allele for winged fruits is dominant to wingless, however the percentage of wingless seeds can vary from 1-46% depending on the population. The annual will self pollinate when insects are absent (Ganders et al, 1977).





Line drawing: Abrams, 1960



Propagation Details

(Bartow, 2004)

Ecotype: Lane County, Oregon

Propagation Goal: Plants **Propagation Method:** Seed

Product Type: Plug containers **Stock Type:** Not listed

Growing Area Preparation: Cone-tainers were filled with peat-based media (Sunshine #1) amended with slow

release fertilizer (Osmocote 14-14-14) and micronutrients (Micromax).

Establishment Phase: Flats kept in greenhouse (70°F day/50°F night). Germination began around 1

week

Length of Establishment Phase: 2 weeks, 60% germination

**Not Documented:

Time to Grow:

Target Specifications:

Propagule collection:

Propagule Processing/Characteristics:

Pre-planting Propagule Treatments:

Active Growth Phase:

Length of Active Phase:

Hardening Phase:

Length of Hardening Phase:

Harvesting, Storage and Shipping:

Length of Storage:

Guidelines for Outplanting:

Other Comments:

Propagation Details

(**Ganders et al, 1977**)

Ecotype: Pierce County, Washington

Propagation Goal: Seeds **Propagation Method:** Seed

Stock Type: Not listed

Establishment Phase: Seeds germinated between moist filter paper in petri dishes at 3-8° C and

transferred to pots and flats in controlled environment.

**Not Documented:

Length of Establishment Phase:

Product Type:

Growing Area Preparation:

Time to Grow:

Target Specifications:

Propagule collection:

Propagule Processing/Characteristics:

Pre-planting Propagule Treatments:

Active Growth Phase:

Length of Active Phase:

Hardening Phase:

Length of Hardening Phase:

Harvesting, Storage and Shipping:

Length of Storage:

Guidelines for Outplanting:

Other Comments:

References:

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Bartow, Amy 2004. Propagation protocol for production of container Plectitis congesta (Lindley) A. DC. Plants; USDA NRCS-Corvallis Plant Materials Center, Corvallis, Or. Accessed 16 May 2010. Available: http://www.nativeplantnetwork.org.

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OTHER SOURCES:

Hitchcock, C.L., A. Cronquist, M. Ownbey, and J.W. Thompson. 1961. Vascular plants of the Pacific Northwest. 5 vols. University of Washington Press, Seattle.

Protocol Author: Lisa Shanafelt Date Protocol Created: 05/18/2010

*Note: The protocol template used was modified by J.D. Bakker from that available at: http://www.nativeplantnetwork.org/network/SampleBlankForm.asp