Plant Data Sheet

Species:
Salmonberry, *Rubus spectabilis*

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Range:
Pacific Northwest region from Santa Cruz County California, north to Alaska, east to Idaho and Montana (Tirmenstein, 1989)

Climate, elevation:
Cool temperate regions, low to middle elevation (below 305 meters in California, below 400 meters in Washington)
(Tirmenstein, 1989)

Local occurrence:
Common, more often found west of Cascades (Tirmenstein, 1989)

Habitat preferences:
Mesic sites. Fairly shade tolerant, also found in clearings. Riparian forests, river terraces, seeps, and swamps (Tirmenstein, 1989)

Plant strategy type/successional stage:
Ruderal, can colonize disturbed areas after fire, logging or other disturbance type by seed or by rhizomes / most often early seral stage (Franklin and Dyrness, 1988), can tolerate mature deciduous forest understory (Tirmenstein, 1989)

Associated species:
Alnus rubra, Populus trichocarpa, Tsuga heterophylla,
Maianthemum dilatatum, Polystichum munitum (Tirmenstein, 1989, Franklin and Dyrness, 1988)

May be collected as:
Seed, Salvaged if young and/or small <4' tall, Layered, or Cut to produce offshoots from root crown, (Leigh, 1999)

Semi-hardwood cuttings (Young, 2001)

Collection restrictions or guidelines:
Seed ripens June through August in Washington, (Rose et al, 1998) it is ripe when fruit is red, yellow or orange and soft. (Tirmenstein, 1989)

Seed germination:
Hard seed coat requires mechanical or chemical (sulfuric acid or 1% sodium hyperchlorite solution)

scarification for 20-60 minutes, seven days prior to cold stratification. (Rose et al, 1998)
Dormant embryo requires stratification, first warm at 20-30 degrees C for 90 days, then cold at 2-5 degrees C for additional 90 days. (Leigh 1999) Or sow in fall for best germination. (Rose et al 1998)

Seed life:
Dried seed can be stored several years (Rose et al, 1998)

Recommended seed storage conditions:
5 degrees C. (Rose et al, 1998)

Propagation recommendations:
Can reproduce sexually or asexually. Produces seed with or without pollination (apomictic), on two year old or older stems.
Sprouts easily from rhizomes, root crown, or stump. Layers from aerial canes (Tirmenstein, 1989)
Easily grown from root cuttings (Leigh 1999)

For propagating by seed according to Rose et al (1998):
Macerate fruit in water and float off pulp and empty seed
Dry seed
Follow germination requirements above

The following protocol for cuttings is from, Young, (2001) working in California:
Hardwood cuttings are collected between November 1st and January 31st.
Cutting diameter, 1.2 cm Cutting length, 25 cm with min. 8 nodes
Cuttings kept moist and cool prior to treatment
Cuttings dipped in a mild bleach solution for 30 seconds
Cuttings recut to 10 cm and min 3 nodes
Cuttings treated with Hormex (3000 ppm IBA) rooting powder and struck 100/flat, 5cm deep in 3:1 perlite/vermiculite
Flats in greenhouse and watered with automatic mist until roots develop.
Cuttings grown for 50 days then transplanted to 5 cm x 25 cm tubes (Deepot 40) with standard potting mix ~50% rooting

Soil or medium requirements:
3:1 Perlite/Vermiculite (Young, 2001)

Installation form:
5 cm x 25 cm tube containers (Deepot 40) containing standard potting mix of peat moss, fir bark, perlite, and sand.
Transplant Survival averages 50%. (Young, 2001)

Recommended planting density:
2.5 meters

Care requirements after installed:
Water once every 2-3 weeks during first summer following transplanting, unless site has adequate summer soil moisture

Normal rate of growth or spread; lifespan:

Fast. Grows to 1-3 meters tall. (Rose et al, 1998)

Sources cited:

Franklin, Jerry and C.T. Dyrness. 1988 Natural Vegetation of Oregon and Washington. Oregon State University Press, Corvalis, OR 452 p.

Leigh, Michael. 1999. Grow your Own Native Landscape A Guide to Identifying, Propagating & Landscaping with Western Washington Native Plants. Native Plant Salvage Project WSU Cooperative Extension-Thurston County Olympia, WA. 116 p.

Rose, Robin, Caryn E.C. Chachulski and Diane L. Haase. 1998. Propagation of Pacific Northwest Native Plants. Oregon State University Press, Corvallis, OR. 248 p.

Young, Betty. 2001. Propagation protocol for vegetative production of container *Rubus spectabilis* Pursh plants (Deepot 40); Golden Gate National Parks, San Francisco, California. In: Native Plant Network. URL: http://www.nativeplantnetwork.org. Moscow (ID): University of Idaho, College of Natural Resources, Forest Research Nursery.
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Tirmenstein, D. A. 1989. Rubus spectabilis. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (2003, March). Fire Effects Information System, [Online]. Available: http://www.fs.fed.us/database/feis/
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