

Protocol Information



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United States Department of Agriculture
Natural Resources Conservation Service

Corvallis

Plant Materials Center

Corvallis, Oregon

Family Scientific Name: **Caprifoliaceae**

Family Common Name: **Honeysuckle**

Scientific Name: *Sambucus racemosa* L.

Common Synonym: *Sambucus racemosa* L. *pubens* (Michx) House var. *arborescens* (Torr. And Gray)

Common Name: **red elderberry**

Species Code: **SARA2**

Ecotype: **Crater Lake National Park, 6,000 to 6,500 ft elevation on moist soils at base of cliffs; protected areas**

General Distribution: **Widely distributed across northern North America; except for southern and south-central plains states; more commonly at low to moderate elevations.**

Propagation Goal: **Plants**

Propagation Method: **Vegetative**

Product Type: **Container (plug)**

Stock Type: **2-year 1-gallon containers**

Time To Grow: **2 Years**

Target Specifications: **multi-stemmed with healthy, dark green foliage; roots reaching to bottom of container.**

Propagule Collection: **1-year wood collected well after flowering and berry ripening; late September at Crater Lake; placed into cool moist peat/ leaves trimmed back at collection time with just a little foliage retained.**

Propagule Processing: **Cuttings could be successfully stored in moist peat in walk-in cooler for a few months prior to sticking**

if necessary.

Pre-Planting Treatments: **no special treatment; in our experience none of the rooting hormones enhanced success.**

Growing Area Preparation/

Annual Practices for Perennial Crops: **Cuttings stuck into a light-textured, soil-free rooting medium (vermiculite) and placed into cool, shaded (60% shadecloth) greenhouse propagation bed, no bottom heat, under low rates of intermittent mist.**

Establishment Phase: **Cuttings took several weeks to begin rooting; ultimately about 60% rooted with this method and were ready for transplanting by January.**

Length of Establishment Phase: **3 months**

Active Growth Phase: **Well-rooted cuttings were potted up into one-gallon pots containing an organic-rich mixture of peat / perlite / compost amended with small amounts of Osmocote slow-release N-P-K and Micromax trace elements; and moved to an outdoor lathhouse for overwintering. Pots should be held up off the ground for drainage and periodically we had to remove liverwort and moss growth in early spring. During active growth phase (May to August of the 2nd year) plants were moved to the shadehouse with drip irrigation; fertilized every 2 weeks during May and June with half-strength Peters' Triple-20 N-P-K. Generally by June pots needed to be spread out a bit to provide room for the developing foliage.**

Length of Active Growth Phase: **April to August**

Hardening Phase: **Fertilizer stopped in July; periods between waterings gradually lengthened in August and shade cloth removed at end of August for full-sun acclimation. Plants were generally showing good bud set and at least some stem suberization by the end of August.**

Length of Hardening Phase: **2 months**

Harvesting, Storage and Shipping: **Plants were well-watered just prior to shipping via refrigerated van to Crater Lake at the end of August; if needed they could be held over winter in the lathhouse or in a walk-in cooler but may need some fresh compost / soil mix by the following spring.**

Length of Storage: **see above**

Outplanting performance on typical sites: **Rootball should be scored at planting time; and care taken not to break off stems which might**

encourage bud break. Soil should be moist and cool at planting time.

Other Comments: Propagation by seed was also conducted at the Corvallis PMC; berries are easily collected in late August - early September and extracted by depulping in a blender with dull blades in a water slurry; then strained / drained and spread on paper towels to dry. Seeds are known to survive in "cool, dry conditions" for several years. In one small trial at the PMC one lot of seeds which tested 70% viable by means of TZ (tetrazolium chloride) testing conducted at OSU Seed Lab. were soaked in 1,000 ppm GA3 (giberellic acid) for 2 hours; then cold-moist stratified (moist chilled) in flats filled with a peat-based seedling started mix for 92 days with low success - 3% of seeds germinated after 60 days in a greenhouse at moderate growing temperatures; with additional seedlings emerging one or two at a time over the next few months.

The use of manufacturer and trade names in this document is for clarification only. No discrimination is intended and no endorsement is given by the USDA NRCS.

References: Hitchcock, C.L. and A. Cronquist. 1973. Flora of the Pacific Northwest. Univ. of Washington Press, Seattle, WA.

Kruckeberg, Arthur R. 1982. Gardening With Native Plants of the Pacific Northwest: An Illustrated Guide. Univ. of Washington Press, Seattle, WA.

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Citation:

Flessner, Theresa R.; Trindle, Joan DC. 2003. Propagation protocol for vegetative production of container *Sambucus racemosa* L. plants (2-year 1-gallon containers); USDA NRCS - Corvallis Plant Materials Center, Corvallis, Oregon. In: Native Plant Network. URL: <http://www.nativeplantnetwork.org> (accessed 6 January 2010). Moscow (ID): University of Idaho, College of Natural Resources, Forest Research Nursery.