

Protocol Information



USDA NRCS
Corvallis Plant Materials Center
3415 NE Granger Ave
Corvallis, Oregon 97330
(541)757-4812

United States Department of Agriculture
Natural Resources Conservation Service

Corvallis

Plant Materials Center

Corvallis, Oregon

Family Scientific Name: **Asteraceae**

Family Common Name: **Composites**

Scientific Name: ***Ericameria bloomeri* (Gray) J.F. Macbr.**

Common Synonym: ***Haplopappus bloomeri* Gray**

Common Name: **Rabbitbrush; Bloomer rabbitbrush, goldenbrush**

Species Code: **ERBL2**

Ecotype: **Crater Lake National Park; 6,500 to 7,000 feet**

General Distribution: **Northwest US., California, Nevada, Idaho. In Crater lake, occurs around pumice flats and other dry, open areas.**

Propagation Goal: **Plants**

Propagation Method: **Seed**

Product Type: **Container (plug)**

Stock Type: **1-gallon containers**

Target Specifications: **Well-developed root system filling pot, free of root rot, tops well-branched with well-developed woody bases.**

Propagule Collection: **Seed collected in late August / September by hand into paper sacks, air-dried on open benches. Seed production very limited in some years; also extensive insect damage noted on seeds and flowering heads in some years.**

Propagule Processing: **Small quantities of seed collected here were gently hand-rubbed after drying and sieved through a hand-screen, blowing gently to remove chaff. Cleaning is fairly easy but some of the seed did show signs of insect damage and was probably**

empty or non-viable.

Pre-Planting Treatments: 2 weeks cold -moist stratification; no germination was achieved without stratification but in our observations longer periods (up to 6 weeks) did not further enhance germination.

Growing Area Preparation/

Annual Practices for Perennial Crops: Seed should be sown in well-drained soil mix (we used Fisons Sunshine #3 soil-less potting mix; addition of perlite may be useful to enhance aeration and drainage. These were started in a sunny greenhouse in spring (up to about 85°F day; 55 to 65°F nights) without bottom heat.

Establishment Phase: Seedlings are slow to emerge; should be watched carefully for signs of damping-off. Light watering when needed; no fertilizer used until seedlings are well-established and ready to transplant.

Length of Establishment Phase: About 8 to 10 weeks.

Active Growth Phase: Established seedlings transplanted into 3.5 " pots filled with Fisons' Sunshine #3 soilless mix amended with about 20% by volume horticultural sand. Low rates of fertilizer (Peters' Triple 20 at half-strength) applied monthly during active growing season. Overwatering stunts these plants and leaves them susceptible to root rots. Plants were retained in small pots on an unheated greenhouse bench at Corvallis over winter, and repotted into 1-gallon cans the following spring. Plants were held outdoors in full sun from May to August of the 2nd year when they were shipped to Crater Lake. A few plants were lost in the 2nd year most likely due to overheating of the black containers exposed to full sun; after that the container bases were shaded to prevent soil heating / root damage.

Length of Active Growth Phase: May to August

Hardening Phase: Fertilizer discontinued in August and intervals between watering lengthened to encourage vegetative maturity.

Length of Hardening Phase: 6 weeks

Harvesting, Storage and Shipping: Shipped by refrigerated van in August to a holding facility at Crater Lake where they were kept for 2 to 4 weeks before outplanting.

Length of Storage: Plants overwintered well at Corvallis in an outdoor lean-to shelter (to keep excess rain out). Plants were

Outplanting performance on typical sites: **reotted to 1-gallon containers in early spring. Rootball should be scored before transplanting - first year survival at Crater Lake was good.**

Other comments: **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: **Corvallis Plant Materials Center Technical Report: Plants for Woodland and Rangeland Reclamation and Erosion Control 1980 - 1997 (includes Annual Reports to Mount Rainier National Park from 1990 – 1996).**

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

USDA, NRCS. 2001. The PLANTS Database, Version 3.1 (<http://plants.usda.gov>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

Citation:

Trindle, Joan D.C.; Flessner, Theresa R. 2003. Propagation protocol for production of container *Ericameria bloomeri* (Gray) J.F. Macbr. plants (1-gallon containers); USDA NRCS - Corvallis Plant Materials Center, Corvallis, Oregon. In: Native Plant Network. URL: <http://www.nativeplantnetwork.org> (accessed 5 January 2010). Moscow (ID): University of Idaho, College of Natural Resources, Forest Research Nursery.