

Protocol Information



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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: *Symphyotrichum foliaceum* (DC.) Nesom

Common Synonym: *Aster foliaceus* Lindl. ex. DC.

Common Name: **Leafybract aster**

Species Code: **SYFOF**

Ecotype: **Mt Rainier National Park; 3,700 to 4,900 feet elevation; along highway 410.**

General Distribution: **Alaska, Montana, and Washington; moist places at moderate to high elevations (elevation decreases in more northern latitudes); moist meadows and seeps.**

Propagation Goal: **Plants**

Propagation Method: **Seed**

Product Type: **Container (plug)**

Stock Type: **1-year plugs (10)**

Target Specifications: **Single healthy crown; roots well-established.**

Propagule Collection: **Seeds hand-collected by pinching off mature heads in late August and early September at Mt Rainier; fairly slow as plants were thinly scattered in native stands. In most collection years moderate to heavy insect predation was apparent. X-ray examination of test lots showed up to 17% of seed was empty and others showed signs of insect damage.**

Propagule Processing: **Mothballs placed in paper sacks containing seed heads seemed to help drive off thrips and other insect pests, protecting seed from further predation**

while drying. Open sacks dried on warm, dry greenhouse bench. Heads first gently rubbed to remove fuzz; then scalped with office clipper, 1/4 to 1/16" screen and low air flow to remove debris.

Pre-Planting Treatments: **none**

Growing Area Preparation/

Annual Practices for Perennial Crops: **3 to 5 seed sown into Ray Leach SC-10 super cells filled with Fisons Sunshine #1 potting mix, amended with 3-month slow-release Osmocote NPK fertilizer and small amounts of Micromax trace elements. Placed into greenhouse at moderate temperatures.**

Establishment Phase: **No special procedures needed, emergence was rated as "fair".**

Length of Establishment Phase: **6 to 8 weeks**

Active Growth Phase: **Plants thinned to one per cone when needed. No special procedures needed during 1st growing season.**

Length of Active Growth Phase: **May through June at the Corvallis PMC.**

Hardening Phase: **Plants remained in cones and were removed to a shadehouse to overwinter at Corvallis. No special procedures needed.**

Length of Hardening Phase: **1 month**

Harvesting, Storage and Shipping: **Cones can be shipped in fall or early spring to be transplanted before active crown growth starts.**

Length of Storage: **6 to 8 months**

Outplanting performance on typical sites: **Small test plots established easily from transplants at the Corvallis PMC but growth was not very vigorous and weed competition could be a problem. Supplemental irrigation was needed in May and June. In the favorable conditions of their native habitat we would expect these transplants to flourish.**

Other Comments: **A small test plot at Corvallis PMC did produce some seed, but plants were not as vigorous as native stands, and very little seed was produced this way. Weed competition was a serious problem; there are no selective herbicides available to keep broadleaf weeds at bay. Seed maturity was much earlier (June to early July) at the PMC and seeds ripened unevenly.**

Some of the references given below refer to this

plant by its older name of *Aster foliaceus*.

Due to changing labels, laws, and regulations, the authors and USDA NRCS assume no liability for pesticide information. Any use of a pesticide contrary to current product label instructions is neither legal nor recommended.

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).**

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

Link, Ellen, ed. 1993. Native Plant Propagation Techniques for National Parks Interim Guide; Compiled by Rose Lake Plant Materials Center 7472 Stoll Road East Lansing, MI 48823.

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

Citation:

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