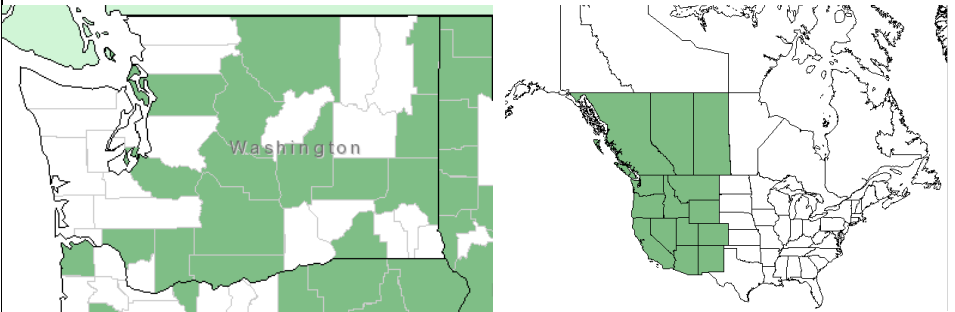


Plant Propagation Protocol for *Symphyotrichum eatonii*

ESRM 412 – Native Plant Production

Protocol URL: <https://courses.washington.edu/esrm412/protocols/SYEA2.pdf>

TAXONOMY	
Plant Family	
Scientific Name	Asteraceae
Common Name	Sunflower Family
Species Scientific Name	
Scientific Name	<i>Symphyotrichum eatonii</i> G.L. Nesom
Varieties	<i>Aster bracteolatus</i> auct. non Nutt. p.p. <i>Aster cordalenus</i> L.F. Hend. <i>Aster eatonii</i> (A. Gray) Howell <i>Aster foliaceus</i> Lindl. ex DC. var. <i>eatonii</i> A. Gray <i>Aster mearnsii</i> Rydb. <i>Aster oregonus</i> auct. non (Nutt.) Torr. & A. Gray <i>Symphyotrichum bracteolatum</i> (Nutt.) G.L. Nesom
Sub-species	N/A
Cultivar	N/A
Common Synonym(s)	N/A
Common Name(s)	N/A
Species Code (as per USDA Plants database)	SYEA2
GENERAL INFORMATION	
Geographical range	 <p>Occurring on both sides of the Cascades crest in Washington; southern British Columbia south to California, east to the Rocky Mountains and Great Plains of Canada and the U.S.</p>
Ecological distribution	Bog, Fen, Wetland
Climate and elevation range	Streambanks and other moist places from low elevation to moderate elevations in the mountains
Local habitat and abundance	Grows in moist to wet soils, often near streams.
Plant strategy type / successional stage	Stress tolerator with rhizomes, early successional/colonizer
Plant characteristics	Forb, perennial from creeping rhizomes. “An aster with tiny, yellow, radially symmetrical flowers forming a central disk; larger white or pink rays surrounding central disk. Long, thin leaves.” (Eaton’s Aster, n.d)

PROPAGATION DETAILS	
Ecotype	N/A
Propagation Goal	Plants
Propagation Method	Seed
Product Type	Propagules
Stock Type	N/A
Time to Grow	Plant inside 4-6 weeks before last frost, or if no late-season frost, plant directly in soil when temperature warms up to 65-70°F.
Target Specifications	N/A
Propagule Collection Instructions	Collect seeds from plants
Propagule Processing/Propagule Characteristics	Approx. 1,120,000 seeds per lb. Seeds last for a max of 1 year in cold dry storage.
Pre-Planting Propagule Treatments	Store in an airtight, cool, dark, very dry, cold place. Aster seeds will remain viable for a max of 1 year.
Growing Area Preparation / Annual Practices for Perennial Crops	Sow seeds to a depth of ¼ inch, keep soil cool and moist.
Establishment Phase Details	N/A
Length of Establishment Phase	5-10 days
Active Growth Phase	N/A
Length of Active Growth Phase	N/A
Hardening Phase	N/A
Length of Hardening Phase	N/A
Harvesting, Storage and Shipping	N/A
Length of Storage	N/A
Guidelines for Outplanting / Performance on Typical Sites	Height: 2-4 ft
Other Comments	
INFORMATION SOURCES	
References	<p>Do Perennial Asters Have Seeds? (2013, December 05). Retrieved April 24, 2017, from http://homeguides.sfgate.com/perennial-asters-seeds-93346.html</p> <p>Eaton's Aster. (n.d.). Retrieved April 24, 2017, from http://www.nationalgeographic.com/lewisandclark/record_species_344_13_9.html</p> <p>Giblin, D. (2017). <i>Symphyotrichum eatonii</i>. Retrieved April 24, 2017, from http://biology.burke.washington.edu/herbarium/imagecollection.php?ID=683</p>

	<p>How to Germinate Aster. (2013, January 06). Retrieved April 26, 2017, from http://homeguides.sfgate.com/germinate-aster-59739.html</p> <p>How to Grow and Care for Aster Flowers. (n.d.). Retrieved April 26, 2017, from http://www.gardenersnet.com/flower/aster.htm</p> <p>Symphyotrichum eatonii (A. Gray) G.L. Nesom Eaton's aster. (n.d.). Retrieved April 25, 2017, from https://plants.usda.gov/core/profile?symbol=SYEA2</p> <p>Symphyotrichum eatonii (A. Gray) G.L. Nesom. (2017, February 25). Retrieved April 24, 2017, from http://eol.org/pages/400037/data</p> <p>Turner, M. (n.d.). Aster eatonii Eaton's aster. Retrieved April 25, 2017, from https://www.pnwflowers.com/flower/aster-eatonii</p>
Other Sources Consulted	
Protocol Author	Stephen Keimach
Date Protocol Created or Updated	4/24/17