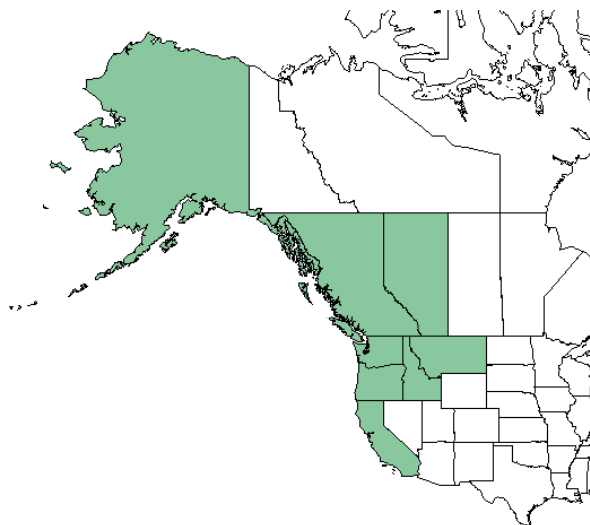


Plant Propagation Protocol for SYSUS

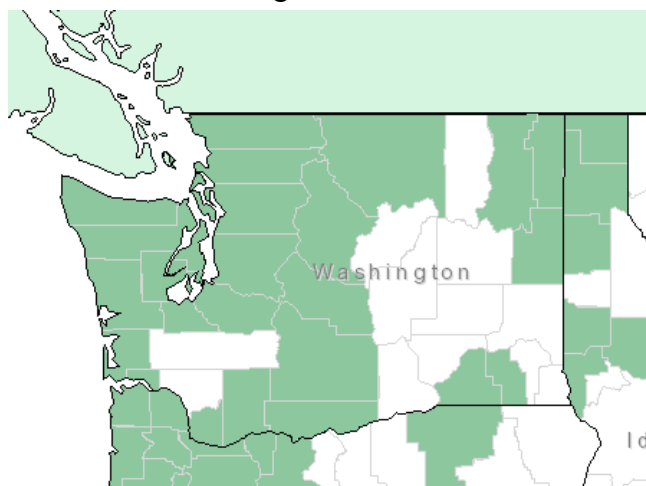
ESRM 412 – Native Plant Production

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

North American distribution¹



Washington distribution¹



TAXONOMY	
Plant Family	
Scientific Name	Asteraceae / Compositae
Common Name	Aster
Species Scientific Name	
Scientific Name	<i>Symphyotrichum subspicatum</i> (Nees) G.L. Nesom
Varieties	var. <i>subspicatum</i>
Sub-species	N/A
Cultivar	
Common Synonym(s)	<i>Aster subspicatus</i> <i>Aster douglasii</i> <i>Aster oregonum</i> (Nutt.) Torr. & A. Gray <i>Aster subspicatus</i> Nees <i>Tripolium oregonum</i> Nutt.
Common Name(s)	Douglas aster
Species Code (as per USDA Plants database)	SYSUS
GENERAL INFORMATION	
Geographical range	Found from British Columbia to California, and East to Alberta and Montana. In Washington, it is found on both sides of the mountain. ² Also see maps shown above.

Ecological distribution	Douglas aster is typically found in moist lowland areas, such as stream banks, marshes, and meadows ⁴ . Also found along beaches, disturbed areas, and open moist sites ⁵ .
Climate and elevation range	Found in low elevations ⁴ .
Local habitat and abundance	Grows in both East and West of the Cascades in Washington ¹ .
Plant strategy type / successional stage	Colonizer
Plant characteristics	<p><i>S. subspicatum</i> is a forb perennial that can grow to 1-4 feet tall³. They are found in clusters, where its stems are growing from its spreading roots³. It is rhizomatous².</p> <p>Its leaves are lanced shaped, with serrated edges⁵; it is attached to the stem with a short petiole³.</p> <p>Its flowers are purple or blue, and measure up to ½ - 1 inch long. The base of the flowers is a light yellow to reddish brown. Flowers are held in cyme³.</p> <p>Its fruit is an achenes, brown or purple in color, it is also hairy^{2,7}.</p>

PROPAGATION DETAILS

Ecotype	N/A
Propagation Goal	Seed
Propagation Method	Seed
Product Type	Bareroot
Stock Type	
Time to Grow	N/A
Target Specifications	Until roots are large enough to be handled.
Propagule Collection Instructions	N/A
Propagule Processing/Propagule Characteristics	N/A
Pre-Planting Propagule Treatments	N/A
Growing Area Preparation / Annual Practices for Perennial Crops	Well-drained, moist soil ⁴ , will spread easily after establishing itself.
Establishment Phase Details	N/A
Length of Establishment Phase	N/A
Active Growth Phase	N/A
Length of Active Growth Phase	Spring – Fall ⁵
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	Soil should be moist, and well drained. <i>S. subspicatum</i> prefers full sun to partial shade ⁴ . Not tolerant to drought conditions ⁴ . Flowers during late summer to fall ⁵ .
Other Comments	Are dependent on pollinators to spread seed, and attracts butterflies ⁴ .
INFORMATION SOURCES	
References	See below
Other Sources Consulted	See below
Protocol Author	Kelly AuVu
Date Protocol Created or Updated	05/22/16

Reference:

- 1: "Plants Profile for Symphyotrichum Subspicatum Subspicatum (Douglas Aster)." *Plants Profiles*. Web. 25 May 2016. <<http://plants.usda.gov/core/profile?symbol=SYSUS>>.
- 2: "WTU Herbarium Image Collection - Burke Museum." *Burke Museum*. Web. 25 May 2016. <<http://biology.burke.washington.edu/herbarium/imagecollection.php?Genus=Symphyotrichum>>.
- 3: "Aster Subspicatus | Douglas's Aster | Wildflowers of the Pacific Northwest." Web. 25 May 2016. <<http://www.pnwflowers.com/flower/aster-subspicatus>>.
- 4: "Aster Subspicatus (Symphyotrichum Subspicatum) | Sevenoaks Native Nursery." *Sevenoaks Native Nursery*. Web. 25 May 2016.
- 5: "Symphyotrichum Subspicatum." *Native Plant Society of BC*. Web. 25 May 2016. <http://npsbc.ca/pdf/Symphyotrichum_subspicatum_web.pdf>.
- 6: "The Native Plant Press." Web. 25 May 2016. <<http://www.wnps.org/cps/documents/SeptemberNPP.pdf>>.
- 7: "Douglas Aster Symphyotrichum Subspicatum (Aster Subspicatus, Aster Douglasii)." *ENature: FieldGuides: Species Detail*. Web. 25 May 2016.
- 8: "Catalog | Fourth Corner Nurseries." *Fourth Corner Nurseries*. Web. 25 May 2016.

Other Sources Consulted:

EMSWCD. Web. 25 May 2016. <<https://emswcd.org/douglas-aster/>>.

"Native Herbaceous Plants in Our Garden." Web. 25 May 2016. <<http://emerald.npsoregon.org/NGAPguides/HerbaceousBooklet.pdf>>.