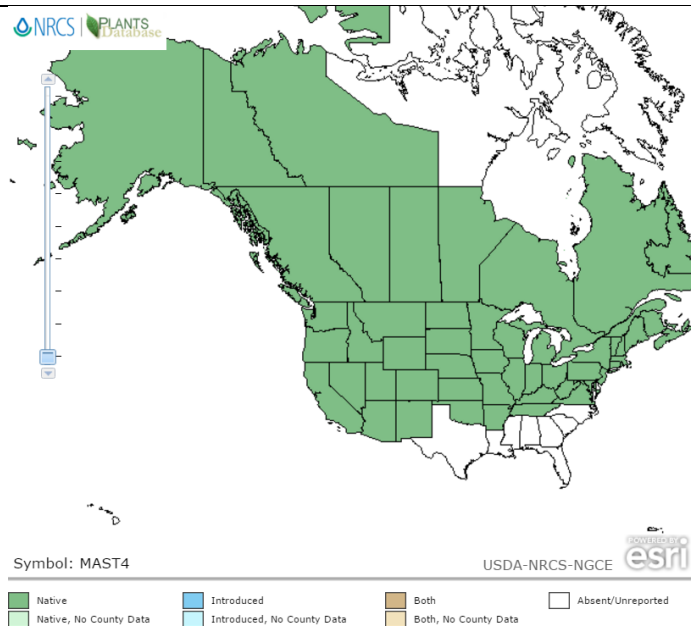


## Plant Propagation Protocol for *Maianthemum stellatum*

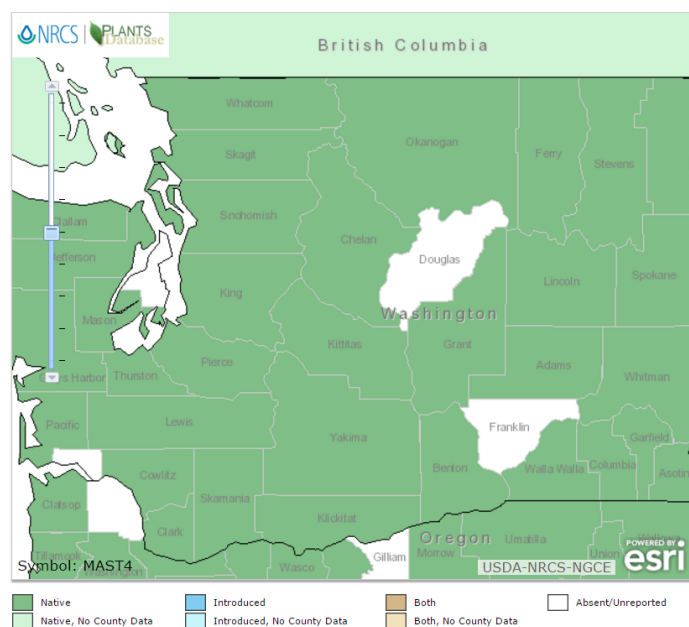
ESRM 412 – Native Plant Production

Protocol URL: <https://courses.washington.edu/esrm412/protocols/MAST4.pdf>

TAXONOMY	
Plant Family	
Scientific Name	Asparagaceae <sup>4</sup> (Previously Liliaceae <sup>1</sup> )
Common Name	False Solomon's seal <sup>1</sup>
Species Scientific Name	
Scientific Name	<i>Maianthemum stellatum</i> (L.) Link <sup>1</sup>
Varieties	
Sub-species	
Cultivar	
Common Synonym(s)	COST12 – <i>Convallaria stellata</i> L. <sup>1</sup> SMLI – <i>Smilacina liliacea</i> (Greene) Wynd <sup>1</sup> SMSE – <i>Smilacina sessilifolia</i> Nutt. Ex Baker <sup>1</sup> SMST – <i>Smilacina stellata</i> (L.) Desf. <sup>1</sup> SMSTM – <i>Smilacina stellata</i> (L.) Desf. Var. <i>mollis</i> Farw. <sup>1</sup> SMSTS – <i>Smilacina stellata</i> (L.) Desf. Var. <i>sylvatica</i> Vict. & J. Rousseau <sup>1</sup> SMSTS2 – <i>Smilacina stellata</i> (L.) Desf. Var. <i>sylvatica</i> Vict. & J. Rousseau <sup>1</sup> VALI2 – <i>Vagnera liliacea</i> (Greene) Rydb. <sup>1</sup> VASE5 – <i>Vagnera sessilifolia</i> (Nutt. ex Baker) Greene <sup>1</sup> VAST4 – <i>Vagnera stellata</i> (L.) Morong <sup>1</sup>
Common Name(s)	Little false Solomon's seal <sup>1</sup> Starry false Solomon' <sup>1</sup> Star false Solomon's seal <sup>1</sup> Star-flower Solomon's seal <sup>1</sup> Starry false lily of the valley <sup>3</sup> Starflower Solomon's-plume <sup>6</sup>
Species Code (as per USDA Plants database)	MAST4 <sup>1</sup>
GENERAL INFORMATION	
Geographical range	



1



1

It is found throughout most of North America and in almost all counties of Washington state<sup>3</sup>.

Ecological distribution

Can occur from moist environments and prairies near streams to rocky mountains or hillsides.<sup>2</sup> Can be found in wet forest understory or in dry forest openings.<sup>4</sup>

Climate and elevation range

Ranges from 4,400 to 8,700 feet in elevation. Wet/moist environments.<sup>2</sup>

Local habitat and abundance

It will do well in both thickets and open areas and tends to be surrounded by cottonwoods, aspens, and oaks as well as bluegrass and wheatgrass.<sup>2</sup> Often found around Ponderosa pines.<sup>4</sup>

Plant strategy type / successional stage	Seral species that also has fire-adaptations that allows it to thrive and dominate in its ecosystem. <sup>2</sup>
Plant characteristics	<p>Forb with rhizomes that spread far underground.<sup>3</sup></p> <p>Alternate leaves from 5-17 cm long and 1.5-5 cm across that are pointed and oblong with many visible veins.<sup>3</sup></p> <p>The stems grow up to 60 cm<sup>6</sup> long and 2-6 cm in diameter.<sup>3</sup> They have flowers that are 3-6 cm long with 6 stamens.<sup>3</sup></p> <p>It produces a yellowish-green berry for fruit<sup>3</sup> that has 1-2 seeds<sup>6</sup> and turn blue-black.<sup>3</sup> Seeds mostly disbursed through consumption of fruit by wildlife.<sup>2</sup></p> <p>Perennial and blooms from May to July.<sup>3</sup></p>
<b>PROPAGATION DETAILS</b>	
Ecotype	
Propagation Goal	Plants <sup>7</sup>
Propagation Method	Seeds <sup>2</sup>
Product Type	Container (plug) <sup>7</sup>
Stock Type	
Time to Grow	
Target Specifications	
Propagule Collection Instructions	
Propagule Processing/Propagule Characteristics	Morpho-physiological dormancy so the seeds can only germinate when conditions are right. <sup>7</sup>
Pre-Planting Propagule Treatments	Require cold-moist stratification that can vary from 71 to 122 days. <sup>7</sup>
Growing Area Preparation / Annual Practices for Perennial Crops	
Establishment Phase Details	
Length of Establishment Phase	
Active Growth Phase	
Length of Active Growth Phase	
Hardening Phase	
Length of Hardening Phase	
Harvesting, Storage and Shipping	
Length of Storage	
Guidelines for Outplanting / Performance on Typical Sites	
Other Comments	Not a lot of information has been found about the seed storage and care of this particular plant.
<b>INFORMATION SOURCES</b>	
References	<ol style="list-style-type: none"> <li>1. "Plants Profile for Maianthemum Stellatum." <i>Natural Resource Conservation Service</i>. USDA, Web. 24 Apr. 2016.</li> <li>2. "Maianthemum Stellatum." <i>Species Information</i>. Forest Service. Web. 25 Apr. 2016.</li> <li>3. Knoke, Dan, and David Giblin. "Mainathemum stellatum." <i>Burke</i></li> </ol>

	<p><i>Museum of Natural History and Culture</i>. University of Washington. Web. 26 Apr. 2016.</p> <p>4. "Herbarium Database." <i>WTU Herbarium Database</i>. Burke Museum. Web. 26. Apr. 2016.</p> <p>5. "Maianthemum Stellatum (L.) Link." <i>Consortium of Pacific Northwest Herbaria</i>. Web. 26 Apr. 2016</p> <p>6. "Maianthemum Stellatum." <i>Encyclopedia of Life</i>. Nature Serve. Web. 26 Apr. 2016.</p> <p>7. "Liliaceae (Maianthemum)." <i>Reforestation, Nurseries, and Genetic Resources</i>. USDA Forest Service. Web. 26 Apr. 2016.</p>
Other Sources Consulted	<p>"Washington Flora Checklist." <i>Washington Flora Checklist</i>. University of Washington Burke Museum, n.d. Web. 26 Apr. 2016.</p> <p>"Maianthemum stellatum." <i>Electronic Atlast of the Flora of British Columbia</i>. Web. 26 Apr. 2016</p> <p>"Maianthemum Stellatum." <i>Wildflower Center</i>. Lady Bird Johnson, n.d. Web. 26 Apr. 2016.</p>
Protocol Author	Hollie Pope
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