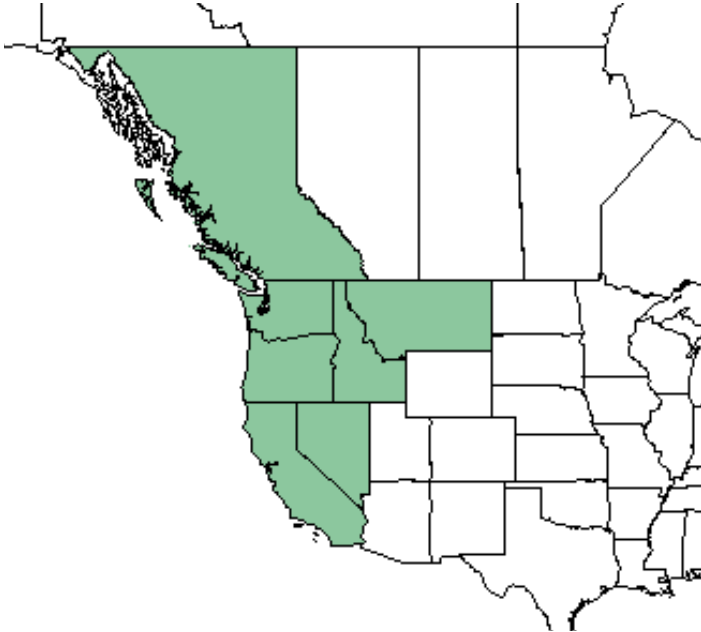


**Plant Propagation Protocol for CIUMU**

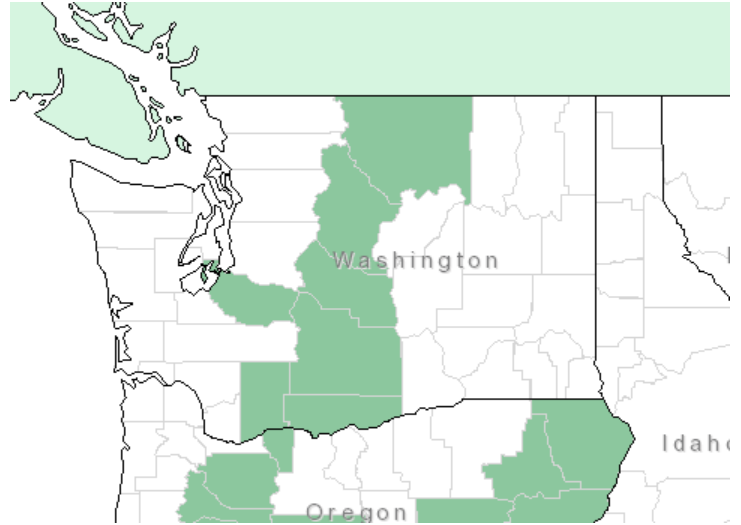
ESRM 412 – Native Plant Production

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

North American Distribution<sup>1</sup>



Washington Distribution<sup>1</sup>



<b>TAXONOMY</b>	
<b>Plant Family</b>	
Scientific Name	Portulacaceae
Common Name	Purslane
<b>Species Scientific Name</b>	
Scientific Name	<i>Cistanthe umbellata</i> (Torr.) Hershkovitz
Varieties	var. <i>umbellata</i>
Sub-species	
Cultivar	
Common Synonym(s)	<i>Calyptridium umbellatum</i> (Torr.) Greene <i>Calyptridium umbellatum</i> (Torr.) Greene var. <i>umbellatum</i> <i>Spraguea umbellata</i> Torr.
Common Name(s)	Mt. Hood pussypaws
Species Code (as per USDA Plants database)	CIUMU
<b>GENERAL INFORMATION</b>	
Geographical range	<i>C. umbellata</i> is native in British Columbia, all the way South to California, as well as East towards Montana,

	and Nevada <sup>1</sup> .  In Washington, it occurs throughout the Cascade Mountains <sup>1</sup> .  Also see maps above.
Ecological distribution	Mt. Hood pussypaws thrives in ponderosa pine forests, in the subalpine sandy flats, and alpines <sup>2</sup> .
Climate and elevation range	High elevations <sup>2</sup> , 1500 – 4300 m <sup>5</sup> .
Local habitat and abundance	
Plant strategy type / successional stage	
Plant characteristics	<i>C. umbellata</i> is a perennial herb plant, it grows in a thick crown, with multiple branches <sup>2</sup> .  Its leaves are 1.5 – 5 cm long, are obovate to oblanceolate shaped. They are all basal in arrangement, allowing a rosette to form <sup>2</sup> .  Flowers vary from 3 – 8 mm, with white or pink petals <sup>3</sup> . Petals are domed or tufted, stems will lie on ground, and form a circle around leaves <sup>3, 5</sup> .  Seeds are black, 7-12 mm long, shiny, and are orbicular-reniform <sup>3</sup> .  <i>C. umbellata</i> is taprooted <sup>4</sup> .
<b>PROPAGATION DETAILS</b>	
Ecotype	
Propagation Goal	Seed
Propagation Method	Seed
Product Type	Bareroot
Stock Type	
Time to Grow	Flowers from May – August <sup>5</sup> .
Target Specifications	N/A
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	Plant prefers dry sandy or gravelly soils <sup>4</sup> , and in open sun <sup>4</sup> . Likes well drained soil <sup>6</sup> .
Establishment Phase Details	N/A
Length of Establishment Phase	N/A
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	
Other Comments	
<b>INFORMATION SOURCES</b>	
References	See below.
Other Sources Consulted	See below.
Protocol Author	Kelly AuVu
Date Protocol Created or Updated	05/22/16

**References:**

1: "Cistanthe Umbellata Umbellata (Mt. Hood Pussypaws)." *Plants Profile*. Web. 30 May 2016. <<http://plants.usda.gov/core/profile?symbol=CIUMU>>.

2: "WTU Herbarium Image Collection." *Burke Museum*. Web. 30 May 2016. <[http://biology.burke.washington.edu/herbarium/imagecollection.php?SciName=Calyptridium\\_umbellatum](http://biology.burke.washington.edu/herbarium/imagecollection.php?SciName=Calyptridium_umbellatum)>.

3: "Mt. Hood Pussypaws Cistanthe Umbellata (Calyptridium Umbellatum, Spraguea Umbellata)." *ENature: FieldGuides: Species Detail*. Web. 30 May 2016. <<http://www.enature.com/fieldguides/detail.asp?recNum=WF0478>>.

4: "Taxon Page." *Flora of North America*. Web. 30 May 2016. <[http://www.efloras.org/florataxon.aspx?flora\\_id=1](http://www.efloras.org/florataxon.aspx?flora_id=1)>.

5: "C. Umbellatum (Torr.) Greene." *UC/JEPS: Jepson Manual*. Web. 30 May 2016. <[http://ucjeps.berkeley.edu/cgi-bin/get\\_JM\\_treatment.pl?6318,6324,6335](http://ucjeps.berkeley.edu/cgi-bin/get_JM_treatment.pl?6318,6324,6335)>.

6: "Wild Ginger Farm." Web. 30 May 2016.

**Other:**

"Ecological Site Identification and Concept." *National Resources Conservation Service*. Web. 30 May 2016.

"NPIN: Native Plant Database." *Lady Bird Johnson Wildflower Center*. Web. 30 May 2016.

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