

Plant Propagation Protocol for *Sedum obtusatum*

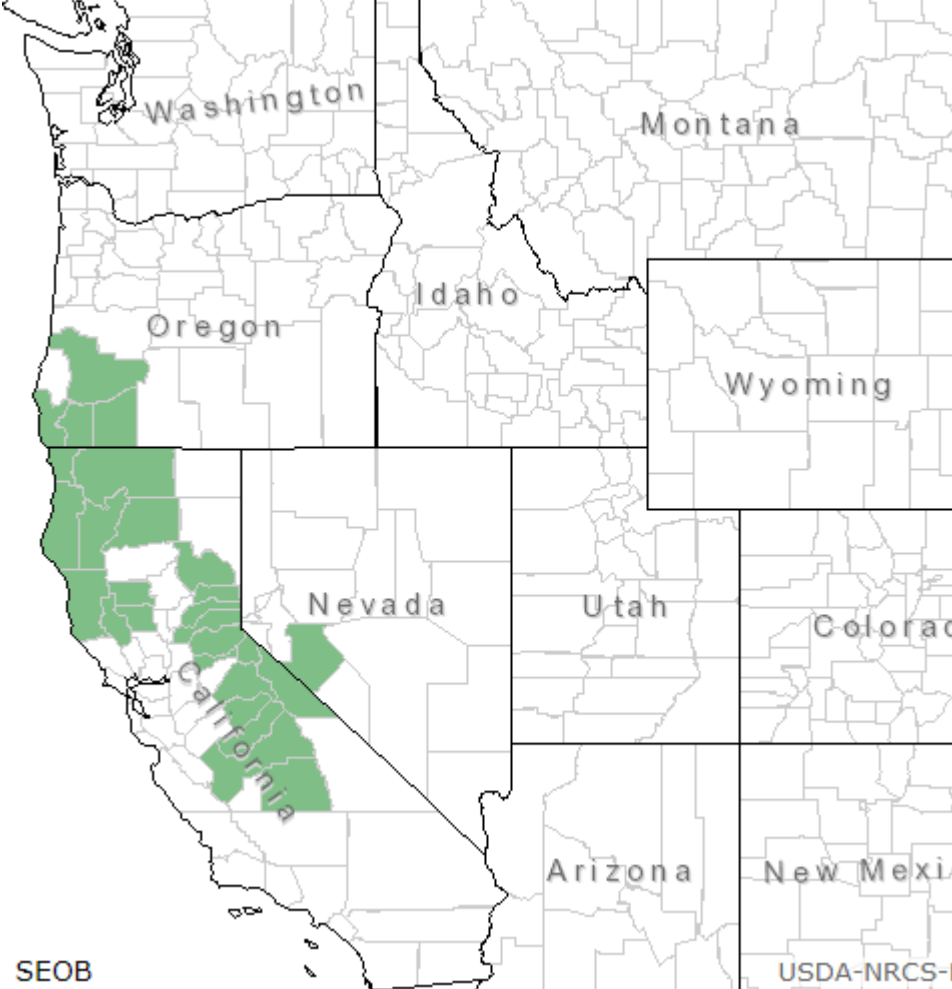
ESRM 412 – Native Plant Production

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



Photos from Steve Matson 2004

TAXONOMY	
Plant Family	
Scientific Name	Crassulaceae
Common Name	Stonecrop
Species	
Scientific Name	
Scientific Name	<i>Sedum obtusatum</i>
Varieties	N/A – Some consider <i>Sedum obtusatum</i> A. Gray ssp. <i>paradisum</i> Denton a variety
Sub-species	<i>Sedum obtusatum</i> A. Gray ssp. <i>boreale</i> R.T. Clausen <i>Sedum obtusatum</i> A. Gray ssp. <i>obtusatum</i> <i>Sedum obtusatum</i> A. Gray ssp. <i>retusum</i> (Rose) R.T. Clausen <i>Sedum obtusatum</i> A. Gray ssp. <i>paradisum</i> Denton
Cultivar	N/A
Common Synonym(s)	N/A
Common Name(s)	Sierra stonecrop, Sierran stonecrop, Sierra sedum Canyon Creek stonecrop (<i>paradisum</i>)
Species Code (as per USDA Plants database)	SEOB
GENERAL INFORMATION	

<p>Geographical range</p>	
<p>Ecological distribution</p>	<p>Confined to western North America and native to California.¹ Southern Oregon to southern Sierra Nevada.² Found on rocky slopes, ridges, and with rocky outcrops.</p>
<p>Climate and elevation range</p>	<p>Grows in full sun typically at elevations between 3900-12100 feet.³ The areas the stonecrop grows in receive between 5.2 - 112.0 inches of rain a year with temperatures ranging between 19.8 – 80.8 degrees Fahrenheit.³</p>
<p>Local habitat and abundance</p>	<p>Grows in lodgepole, subalpine, alpine, Yellow pine, and Red fir communities.¹ Grows in rocky soils on slopes and ridges.¹ Grows in well drained dry soils.⁴ Also grows in chalky, clay, loamy, Sandy soils, and will tolerate most soil types.⁵ Grows in full sun to partial shade.⁴ The yellow flowers also attract bees.⁴ Also is often used by <i>Euptoieta claudia</i> butterfly.⁶</p>
<p>Plant strategy type / successional stage</p>	<p>Sierra stonecrop is rather hardy tolerating freezing temperatures, droughts, deer, rabbits, pests, etc.⁴ Grows in alkaline, acid, and neutral pH and tolerates most soil type.⁵ It is also an evergreen succulent and has waxy leaves preventing water loss. The plant is a stress tolerator.</p>
<p>Plant characteristics</p>	<p>Sierra stonecrop is a perennial evergreen succulent dicot herb that grows in matts.⁵ It has yellow-pale yellow flowers with red veins growing atop red stalks. With spoon shaped leaves 3 cm long. The leaves are green</p>

	often tinged with red or blue. ⁶ The matts can spread 6 inches in 5 years and grow around 2 in. tall. ⁵ grows in clusters with several stems. It flowers from May-June and flowers last through the summer. ¹ It is also classified as a forb.
PROPAGATION DETAILS	
Ecotype	No information
Propagation Goal	Softwood cuttings.
Propagation Method	Vegetative
Product Type	Cuttings / containers
Stock Type	No information
Time to Grow	2-5 months
Target Specifications	2 in. high by 6 in spread.
Propagule Collection Instructions	No information.
Propagule Processing/Propagule Characteristics	No information.
Pre-Planting Propagule Treatments	No information
Growing Area Preparation / Annual Practices for Perennial Crops	Alpine areas, well drained slightly acidic or alkaline soils, moderately fertile soil. ⁵ Suitable in 1 gallon, suitable in 3 gallon or larger, needs excellent drainage in pots. ⁴
Establishment Phase Details	No information
Length of Establishment Phase	No information
Active Growth Phase	Prune after flowering. ⁵
Length of Active Growth Phase	No information
Hardening Phase	Protect from winter wetness. ⁵
Length of Hardening Phase	No information
Harvesting, Storage and Shipping	No information
Length of Storage	No information

Guidelines for Outplanting / Performance on Typical Sites	Should flower every May/June.
Other Comments	Very hardy species and easy to propagate with cuttings. Not much information available.
Propagation Method 2	
Ecotype	Colorado, Sprague Lake (98-012s), Moraine Park (98-072s), Long's Peak Parking Lot (98-129s) ⁷
Propagation Goal	Seeds
Propagation Method	Seeds
Product Type	Propagules
Stock Type	no information
Time to Grow	No information
Target Specifications	No information
Propagule Collection Instructions	Seed heads crushed and tiny seeds fall out. Use of screens helpful to separate seeds from miscellaneous plant material. ⁷
Propagule Processing/Propagule Characteristics	No information
Pre-Planting Propagule Treatments	No information
Growing Area Preparation / Annual Practices for Perennial Crops	Greenhouse, 65-70 degrees F day/55 degrees F night. Propagated under tent with misters set 8 am-8 pm, with 10 sec/15 min watering intervals. One week after germination, seedlings were moved to mister area without tent. Germination media: Fafard Germinating Mix (superfine). Growing media: Fafard Growing Mix 2. ⁷
Establishment Phase Details	Sow on Surface. Best to use small pots, with a few seeds per pot. Time to germination: 7 days. Establishment Phase: Germination uniform and rapid, but these plants grow slowly ⁷
Length of Establishment Phase	1-1.5 months
Active Growth Phase	No information
Length of Active Growth Phase	No information
Hardening Phase	No information
Length of Hardening Phase	No information

Harvesting, Storage and Shipping	No information
Length of Storage	No information
Guidelines for Outplanting / Performance on Typical Sites	No information
Other Comments	Method 2 is based of sedums in general, not specific for <i>Sedum obtusatum</i> .

INFORMATION SOURCES

References	<ol style="list-style-type: none"> 1. “Sedum Obtusatum”. Calflora: Information on California plants for education, research and conservation. <i>The Calflora Database</i>. Berkeley, California 2018. Accessed 04/24/18 <http://www.calflora.org/cgi-bin/species_query.cgi?where-taxon=Sedum+obtusatum> 2. “Plant Database - Sedum Obtusatum” Lady Bird Johnson Wildflower Center. <i>The University of Texas at Austin</i>. 2007. Accessed 04/24/18 <https://www.wildflower.org/plants/result.php?id_plant=SEOB> 3. “Sierra Stonecrop”. California Native Plant Society. <i>Calscape</i>. n.d. Accessed 04/24/18 <http://calscape.org/Sedum-obtusatum-ssp.-obtusatum-(Sierra-Stonecrop)?srchr=sc5719cc384e228> 4. “Sierra Sedum (Sedum Obtusatum) in Sedums Database”. The National Gardening Association Plants Database. <i>The National Gardening Association</i>. n.d. Accessed 04/24/18 <https://garden.org/plants/view/85122/Sierra-Sedum-Sedum-obtusatum/> 5. “Sedum obtusatum (Sierra stonecrop)” Shoot. <i>Shoot Gardening Co.</i> n.d. Accessed 04/24/18 <https://www.shootgardening.co.uk/plant/sedum-obtusatum> 6. “Sierra stonecrop (Sedum obtusatum)”. INaturalist. n.p. n.d. Accessed 04/24/18 <https://www.inaturalist.org/taxa/60847-Sedum-obtusatum> 7. Butler J. “Crassulaceae (Sedum)” Restoration, Nurseries, and Genetic Resources. 2001. Accessed 05/09/2018 <https://admin.rngr.net/npn/propagation/protocols/crassulaceae-sedum-949?searchterm=sedum+> 8. “Sedum obtusatum A. Gray Sierra stonecrop” USDA Natural Resources Conservation Service. <i>United States Department of Agriculture</i>. n.d. Accessed 04/24/18 <https://plants.usda.gov/core/profile?symbol=SEOB>
Other Sources Consulted	<ol style="list-style-type: none"> 1. “Sedum obtusatum”. <i>Flora of America</i>. n.p. n.d. Accessed 04/24/18 <http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=250092135>

	2. "Sedum obtusatum A. Gray" Discover Life. n.p. FNA (Flora of North America) Vol. 8 Page 201, 202, 217 n.d. Accessed 05/09/2018. < http://www.discoverlife.org/mp/20q?search=Sedum+obtusatum >
Protocol Author	Jason Panzera
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