


Plant Propagation Protocol for *Scutellaria galericulata* L.

ESRM 412 – Native Plant Production

URL: <https://courses.washington.edu/esrm412/protocols/2026/SCGA.pdf>

TAXONOMY	
Plant Family	
Scientific Name	Lamiaceae Martinov
Common Name	Mint ¹
Species Scientific Name	
Scientific Name	<i>Scutellaria galericulata</i> L. ¹
	
	Image © 2008 Gerald D. Carr (Burke Herbarium Image Collection)
Varieties	None listed ¹
Sub-species	None listed ¹
Cultivar	None listed ¹

Common Synonym(s)	<i>Scutellaria epilobiifolia</i> A. Ham. ² <i>Scutellaria galericulata</i> ssp. <i>pubescens</i> (Benth.) Á. Löve & D. Löve ² <i>Scutellaria galericulata</i> var. <i>epilobiifolia</i> (A. Ham.) Jordal ² <i>Scutellaria galericulata</i> var. <i>pubescens</i> Benth. ²
Common Name(s)	Marsh Skullcap ¹ Hooded Skullcap ² Willow-Weed Skullcap ⁶
Species Code (as per USDA Plants database)	SCGA
GENERAL INFORMATION	
Geographical range	See maps above for distribution range in North America and Washington. Circumboreal distribution in North America, Europe, and Siberia. ⁴
Ecological distribution	Prefers wet meadows, marshes, streambanks, lakeshores, and similar habitats. ^{3,4} Facultative wetland species. ⁷
Climate and elevation range	Low to moderate elevations. ^{3,4}
Local habitat and abundance	Local specimens along the Pacific Northwest Coast have been found in wetland communities including lake margins, wet meadows, and seasonal ponds. ⁵ Sometimes grows on old pilings or logs in water. ⁵ Found alongside <i>Typha latifolia</i> and <i>Nuphar polysepala</i> . ⁵
Plant strategy type / successional stage	<i>Scutellaria</i> L. spp. varies from early to late successional communities. The established strategy of <i>Scutellaria galericulata</i> is categorized as CR/CSR, in other words the species is between a Competitive Ruderal and a balance of all three strategies (Competitive, Stress-Tolerant, and Ruderal). Tolerant of salt, moderate shade, and light grazing. ^{7,10}

Plant characteristics	<p>General: Perennial herb from slender rhizomes. Stems are erect, square and either simple or branched. Typically with descending hairs along the angles, or less often hairless or glandular. 20–90 cm tall.^{3,4}</p> <p>Leaves: Opposite lance-shaped to oblong-egg-shaped, 2–5 cm long and 6–20 mm. Very short-stalked, leaves are hairless above and short-hairy below. Margins are acute-tipped, cordate, and blunt toothed.</p> <p>Flowers: Can be blue or pink-purple and streaked with white. Sepals are 1.5–2 cm long and are fused into two small lips, the upper with a raised appendage. Petals are fused into a two lipped tube with a hood-like upper lip. Has 4 stamens and a superior 4-lobed ovary similar to other Lamiaceae. Flowers are stalkless and solitary in the axils of slightly reduced upper leaves.^{3,4}</p> <p>Lacks racemes unlike <i>Scutellaria lateriflora</i>.⁶</p> <p>Fruits: Four nutlets, each containing a single seed.^{3,4,7}</p>
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PROPAGATION DETAILS: FROM SEED

NOTE: Some fields have been adapted from a propagation protocol for *S. lateriflora* which reportedly grows in similar habitats as *S. galericulata*.

Ecotype	<i>S. galericulata</i> and <i>S. lateriflora</i> are commonly listed together. Both <i>S. galericulata</i> and <i>S. lateriflora</i> have circumboreal distribution, prefer low to middle elevations, and are facultative wetland species. ⁷
Propagation Goal	Plants. ⁸
Propagation Method	Seed. ⁸
Product Type	Container (plug). ⁸
Stock Type	Initially in 2" containers and uppotted into quarter gallon containers at the beginning of the active growth phase. ⁸
Time to Grow	<i>S. lateriflora</i> : 12 weeks. ⁸
Target Specifications	None specified for <i>S. galericulata</i> or <i>S. lateriflora</i> . ⁸
Propagule Collection Instructions	In the US <i>S. galericulata</i> is Critically Imperiled in Delaware, Kansas, Missouri, Virginia, and West Virginia. The species is Im periled in Iowa, Montana,

	<p>and New Jersey and Vulnerable in California and Wyoming.¹¹</p> <p>Both <i>S. galericulata</i> and <i>S. lateriflora</i> bloom from July through September. Fruiting similarly lasts from July through September for both species.⁷</p> <p>Nutlets are released from the parent plant with wind.¹⁰ So the best way to collect seeds may be to cover inflorescence using a bridal mesh tied around the stem. This way when nutlets mature, they will be contained within the bridal mesh.¹³</p> <p>The flowering aerial portion of <i>Scutellaria</i> L. ssp. containing seeds can be clipped with clippers.⁷</p> <p><i>Scutellaria</i> L. ssp. grows in moist soil, so when harvesting seeds take care to not pull out the entire plant.⁷</p> <p><i>Scutellaria</i> L. ssp. will regrow the following season when some of the root crown and some aerial stems are left.⁷</p>
<p>Propagule Processing/Propagule Characteristics</p>	<p>Four nutlets, each containing a single seed.⁷</p> <p>The walls of the nutlets include air spaces so the lightweight propagules can disperse in water. The propagules will float for up to 12 months.¹⁰</p> <p>1500 seeds per gram.⁹</p>
<p>Pre-Planting Propagule Treatments</p>	<p><i>S. lateriflora</i>: Seeds stratified for 0, 1, and 2 months had 0%, 2.0%, and 1.3% germination, respectively. This shows that stratification for <i>S. lateriflora</i> produces no significant change for germination.¹¹</p> <p><i>S. lateriflora</i>: Scarification for 15 minutes proved to be beneficial. Seeds were submerged in concentrated sulfuric acid (95-98%) for 15 minutes and rinsed under running water for 5 minutes. Seeds scarified for 15 minutes had 69.3% germination. Seeds which did not undergo scarification had 1.3% germination.¹¹</p>

Growing Area Preparation / Annual Practices for Perennial Crops	<i>S. lateriflora</i> : Growing media is 1 part sand and 4 parts commercial potting mix containing 40-50% composted pine bark. Medium should always be kept moist. ⁸
Establishment Phase Details	<i>S. lateriflora</i> : In early Spring, start seeds in a greenhouse with a temperature of 75°F during the day and 65°F during the night. After 2 weeks when seeds have germinated, repot seedlings into 2 inch containers. ⁸
Length of Establishment Phase	<i>S. lateriflora</i> : 6 to 8 weeks. ⁸
Active Growth Phase	<i>S. lateriflora</i> : Using the same growing medium (1 part sand and 4 parts commercial potting mix containing 40-50% composted pine bark) uppot plants into quarter gallon containers. Place back into greenhouse. ⁸
Length of Active Growth Phase	<i>S. lateriflora</i> : 10 to 12 weeks. ⁸
Hardening Phase	<p>In general, plants can be moved from the greenhouse to a shadehouse or outdoor facility to begin the hardening process. If the outplanting site is under a canopy, begin to expose the plants to shade. However if the outplanting site has full sun conditions, plants should receive no shading at any point in nursery cultivation. In an outdoor facility, plants begin to attune to daylength and are exposed to a moderate level of temperature shock.¹⁴</p> <p>As <i>S. galericulata</i> prefers wetland environments where land is saturated with water for at least some parts of the year, reducing irrigation during hardening may not be necessary.^{14, 15}</p>
Length of Hardening Phase	Varies.
Harvesting, Storage and Shipping	<p>Most native plants can be held in a shadehouse or outdoor facility for short-term storage until they are sent to an outplanting site.¹⁴</p> <p>No information found regarding the possibility of long-term or overwintering storage for <i>S. galericulata</i>.</p>
Length of Storage	Varies.
Guidelines for Outplanting / Performance on Typical Sites	<i>Scutellaria</i> L. spp. can be planted in early summer. ⁷
Other Comments	<i>S. galericulata</i> has single flowers in each axil of the upper leaves and lacks racemes, while <i>S. lateriflora</i> has one-sided racemes originating in leaf axils and terminating stem. ⁶

	<i>S. lateriflora</i> blooms after 16 to 18 weeks of sowing. ⁸
PROPAGATION DETAILS: VEGETATIVE	
NOTE: Vegetative propagation for <i>S. galericulata</i> and more broadly <i>Scutellaria</i> L. ssp. is not widely recorded.	
Ecotype	Protocol not experimentally derived.
Propagation Goal	Plants.
Propagation Method	Vegetative.
Product Type	Container (plug).
Stock Type	None found.
Time to Grow	None found.
Target Specifications	None found.
Propagule Collection Instructions	<p>In the US <i>S. galericulata</i> is Critically Imperiled in Delaware, Kansas, Missouri, Virginia, and West Virginia. The species is Imperiled in Iowa, Montana, and New Jersey and Vulnerable in California and Wyoming.¹¹</p> <p><i>Scutellaria</i> L. ssp. grows in moist soil, so when harvesting seeds take care to not pull out the entire plant.⁷</p> <p><i>Scutellaria</i> L. ssp. will regrow the following season when some of the root crown and some aerial stems are left.⁷</p> <p>Cuttings from non-woody herbaceous plants like <i>S. galericulata</i> are considered softwood and should be collected in late spring to early summer when stems are actively growing.¹⁴</p> <p>Softwood cuttings are ideally collected during early morning on cool days. In general, only collect from healthy plants using sharp pruning shears. Pruning shears should be disinfected using a solution of 1 part bleach (5.25% sodium hypochlorite) to 10 parts water to avoid spreading disease. When collecting, all cuttings should be misted to keep them moist and stored in white plastic bags. Label bags with the date and origin of collection for record keeping.¹⁴</p>

Propagule Processing/Propagule Characteristics	<i>Scutellaria</i> L. ssp. can be propagated vegetatively using basal cuttings. ⁷
Pre-Planting Propagule Treatments	Storage of softwood cuttings should be kept at a minimum. ¹⁴ No specific propagule treatments found for <i>S. galericulata</i> . In general, inspect cuttings for and remove dead leaves or cuttings that could be a source of disease infection. ¹⁴
Growing Area Preparation / Annual Practices for Perennial Crops	<i>Scutellaria</i> L. ssp. cuttings can be grown in a hoophouse or in a cold frame. ⁷
Establishment Phase Details	Strike softwood cuttings as soon as possible while maintaining a clean propagation environment. During establishment, cuttings should be kept at high levels of humidity and kept out of excessive sunlight. ¹⁴
Length of Establishment Phase	None found.
Active Growth Phase	For most plant species, root development should be inspected after a few weeks of striking. Until adequate root system forms, continue to maintain high levels of humidity. ¹⁴
Length of Active Growth Phase	None found.
Hardening Phase	In general, when cuttings have developed an adequate root system, including secondary roots, the hardening phase begins. Some guidelines to follow for hardening cuttings include reducing misting frequency over a period of 3-4 weeks, and increasing exposure to wind. The main goal is to condition both stem and leaf tissues to promote secondary root development. ¹⁴
Length of Hardening Phase	Varies.
Harvesting, Storage and Shipping	For most plant species, cuttings can be transplanted after hardening. Before transplanting, moisten the growing media and prepare any containers, labels, and tools. Ideally, cuttings should be transplanted when air temperature is cool to avoid transplant shock. Additionally, transplant in an area protected from wind and sunlight. Place transplanted cuttings in a shadehouse where they will be protected from full sun and wind. ¹⁴ After two weeks in the shadehouse, gradually increase the cuttings exposure to sun. At this time cuttings should be closely monitored for signs of stress. ¹⁴

	If overwintering is necessary, newly rooted cuttings of all species need extra protection during overwinter storage. Room temperature of overwintering facility should be kept at 34–41°F. ¹⁴
Length of Storage	Varies.
Guidelines for Outplanting / Performance on Typical Sites	For all plants, examine cuttings to ensure it has a sufficient root system capable of sustaining itself in the outplanting site. ¹⁴
Other Comments	None.
INFORMATION SOURCES	
References	See below.
Other Sources Consulted	See below.
Protocol Author	Zaida Faulhaber
Date Protocol Created or Updated	06/08/26

References:

1. Natural Resources Conservation Service. “*Scutellaria galericulata* L.” *PLANTS* Database, United States Department of Agriculture, Accessed April 27, 2026.
<https://plants.sc.egov.usda.gov/plant-profile/SCGA/sources>.
2. Integrated Taxonomic Information System. “*Scutellaria galericulata* L.” [itis.gov](https://www.itis.gov) (Online Database), Accessed April 27, 2026.
https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=32798#null.
3. Knoke, Don and David Giblin. “*Scutellaria galericulata*.” Burke Herbarium Image Collection, Accessed April 27, 2026.
<https://burkeherbarium.org/imagecollection/taxon.php?Taxon=Scutellaria%20galericulata>.
4. Pojar, Jim and Andy MacKinnon. *Plants of the Pacific Northwest Coast*. Vancouver: Lone Pine Publishing, 2014.
5. University of Washington Herbarium, Burke Museum of Natural History and Culture. “Consortium of Pacific Northwest Herbaria.” Accessed April 27, 2026.
<https://www.pnwherbaria.org/>.
6. Cooke, Sarah Spear. *A Field Guide to the Common Wetland Plants of Western Washington & Northwest Oregon*. Seattle, WA: Seattle Audubon Society, 1997.
7. Vance, Nan C., Melissa Borsting, David Pilz, and Jim Freed. *Special Forest Products Species Information Guide for the Pacific Northwest*. Portland OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, 2001.

8. Chiari, Alessandro. "Propagation Protocol for Production of Container (plug) *Scutellaria lateriflora* L. Plants." Cougar Springs Ranch Brooklyn, New York. In: Native Plant Network, US Department of Agriculture, Forest Service, National Center for Reforestation, Nurseries, and Genetic Resources, 2004. Accessed April 27, 2026.
<https://nnp.rngr.net/renderNPNProtocolDetails?selectedProtocolIds=lamiaceae-scutellaria-2849>.
9. "Scutellaria galericulata." Emorsgate Seeds. Accessed June 6, 2026.
<https://wildseed.co.uk/product/species/wild-flowers/scutellaria-galericulata/>.
10. Forbes, Ralph. "Scutellaria galericulata L., Skullcap." Fermanagh Species Accounts. Accessed June 6, 2026.
<https://fermanagh.bsbi.org/scutellaria-galericulata-l?q=scutellaria%20galericulata>.
11. NatureServe. "NatureServe Explorer." Accessed June 6, 2026.
<https://explorer.natureserve.org/>.
12. O'Brien, Jennifer. "Seed Germination and Seed Bank of Scutellaria Species. Student Honors Theses, Eastern Illinois University, Spring 2013.
https://thekeep.eiu.edu/cgi/viewcontent.cgi?article=1003&context=bio_students.
13. Carmen, Dave. "Seed Collection Methods." Posted November 7, 2013, by Forest Farming, YouTube, 4 min., 27 sec.. <https://www.youtube.com/watch?v=3ddMKWA9Dvs>.
14. Dumroese, R. Kasten, Tara Luna, and Thomas D. Landis, eds. *Nursery Manual for Native Plants: A Guide for Tribal Nurseries*. United States Department of Agriculture, Forest Service, 2022.
15. "Wetlands: Nature's Water Filters, Sponges & Nurseries." Department of Ecology, State of Washington. Accessed June 8, 2026.
<https://ecology.wa.gov/water-shorelines/wetlands/wetlands-overview>.

Other Sources Consulted (but that contained no pertinent information):

Rose, Robin, Chachulski Caryn E C and Haase Diane L. *Propagation of Pacific Northwest Native Plants*. Corvallis: Oregon State University Press, 1998.

Kosakowska, Olga, Katarzyna Baczek, Jaroslaw L. Przybyl, Ewelina Piorek-Jabrucka, and Zenon Węglarz. "Chemical Variability of Common Skullcap (*Scutellaria galericulata* L.) Wild Growing in the Area of Eastern Poland." *Herba Polonica*, October 2016.
https://www.researchgate.net/publication/309019809_Chemical_variability_of_common_skullcap_Scutellaria_galericulataL_wild_growing_in_the_area_of_eastern_Poland.

Fernald, M.L.. "*Scutellaria epilobiifolia*." *Rhodora*, Vol. 23, No. 268, pg. 85-86.
<http://www.jstor.org/stable/23298369>.

Meyer, Mary Hockenberry. "Using Native Plants: National Satellite Program." University of Wisconsin Extension and University of Minnesota Extension, 1996. Retrieved from the University Digital Conservancy, <https://hdl.handle.net/11299/225051>.