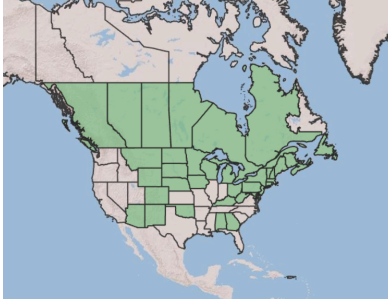


Plant Propagation Protocol for *Agrimonia striata*

ESRM 412 – Native Plant Production

URL: <https://courses.washington.edu/esrm412/protocols/2024/AGST>

TAXONOMY	
Plant Family	
Scientific Name	Rosaceae (2)
Common Name	Rose
Species Scientific Name	
Scientific Name	<i>Agrimonia striata</i> (1)
Varieties	N/A
Sub-species	N/A
Cultivar	N/A
Common Synonym(s)	N/A
Common Name(s)	Roadside agrimony (1) church steeples, stickwort, liverwort (6)
Species Code (as per USDA Plants database)	AGST (1)
GENERAL INFORMATION	
Geographical range	 (1) occurs across much of the United States, Canada, Saint Pierre and Miquelon, and Mexico(2)
Ecological distribution	This species is found in rich deciduous or mixed deciduous woods, floodplains, thickets, edges, fields, and open spaces (2)
Climate and elevation range	from sea level to 3,700 m elevation (2)
Local habitat and abundance	
Plant strategy type / successional stage	weedy/colonizer, spreads vegetatively through rhizomes (1)
Plant characteristics	Perennial Forb/Herb (1)
PROPAGATION DETAILS	
Ecotype	Subalpine meadow on exposed bedrock (5)
Propagation Goal	Plants (5)
Propagation Method	Seed (5)
Product Type	Container (plug) (5)
Stock Type	172 ml conetainer (5)
Time to Grow	2 Years (5)

Target Specifications	Stock Type: Containerseedling Height: 3 cm, multiple leaves Caliper: n/a Root System: Firm plug in container. (5)
Propagule Collection Instructions	Seeds are collected in fall.(1) Seeds are collected in paper bags and kept in a well ventilated drying shed prior to cleaning. (5)
Propagule Processing/Propagule Characteristics	Fruits are brown and have hooks on them that would help them spread by attaching to the fur of passing animals.(2) Seeds are cleaned by using a hammermill and office clipper. Seeds are stored at 0C and low humidity in sealed containers. Seed longevity is at least 3 to 5 years. Seed dormancy is classified as physiological dormancy. (5)
Pre-Planting Propagule Treatments	5 month cold, moist stratification. (5)
Growing Area Preparation / Annual Practices for Perennial Crops	Outdoor nursery growing facility. (5)
Establishment Phase Details	Sowing Method: Direct Seeding. Seeds are lightly covered with a medium. (5)
Length of Establishment Phase	Seedlings germinate in May and June. Germination is uneven and continues over a 2 month period in the outdoor nursery. True leaves develop 4 weeks after germination. (5) 8 weeks to finish establishment (5)
Active Growth Phase	Seed grown plants did not reach root tightness the first growing season. Initial root growth is slow. (5) Plants are fertilized bi-weekly during the growing season. (5)
Length of Active Growth Phase	12 weeks(5)
Hardening Phase	Plants are fertilized during August and September. Irrigation is gradually reduced in September and October. Plants were given one final irrigation prior to winterization (5)
Length of Hardening Phase	4 weeks (5)
Harvesting, Storage and Shipping	Total Time to Harvest: 1.8 years from seed Harvest Date: July of the 2nd year Storage Conditions: Overwinter in outdoor nursery under insulating foam cover and snow (5)
Length of Storage	5 months (5)
Guidelines for Outplanting / Performance on Typical Sites	prefers moist, humus-rich neutral or slightly acidic soil. Appreciates full sun or some shade (3) Would be best in the border area of a forest. (4)
Other Comments	Propagation details sourced from <i>Dryas octopetala</i> L. <i>hookeriana</i> (Juz.) Hult. propagation methods. Both are

	<p>similar weedy plants that spread vegetatively and through seed. They are both native to the same area, have similar growth times and patterns, and are both in the family Rosaceae. Details specific to <i>Agrimonia striata</i> will be interspersed where needed to make this more comprehensive.</p>
<p>INFORMATION SOURCES</p>	
<p>References</p>	<ol style="list-style-type: none"> 1. USDA. (2024, May 21). <i>Agrimonia striata</i> Michx. USDA plants database. https://plants.usda.gov/home/plantProfile?symbol=AGST 2. NatureServe. (2024, May 3). <i>Woodland Agrimony</i>. NatureServe Explorer 2.0. https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.149529/Agrimonia_striata 3. New Jersey Department of Environmental Protection. (2020, September 2). <i>Agrimonia striata - jersey-friendly yards</i>. Jersey-Friendly Yards. https://www.jerseyyards.org/plant/agrimonia-striata/ 4. <i>Roadside Agrimony</i>. Riverside Native Perennials. (2024, March 29). https://riversidenativeperennials.com/product/roadside-agrimony/ 5. <i>Native Plant Network — Reforestation, Nurseries and Genetics Resources</i>, npn.rngr.net/. Accessed 22 May 2024. 6. Paluch, Z, et al. “The Therapeutic Effects of <i>Agrimonia Eupatoria</i> L.” <i>Physiological Research</i>, U.S. National Library of Medicine, 31 Dec. 2020, www.ncbi.nlm.nih.gov/pmc/articles/PMC8603700/#:~:text=Agrimonia%20in%20traditional%20medicine&text=(also%20church%20steeple%2C%20stickwort%2C,inhabiting%20pasture%20lands%20across%20Europe
<p>Other Sources Consulted</p>	<ol style="list-style-type: none"> 7. Raven, Sarah. “How to Plant, Grow & Care for Alliums.” <i>How to Plant, Grow, and Care for Alliums</i>, Sarah Raven, 8 Jan. 2021, www.sarahraven.com/articles/how-to-plant-and-grow-alliums.

	8. Hartmann, Hudson, et al. <i>Plant Propagation: Principles and Practices</i> . Prentice Hall, 2002. 9. Young, James A., and Cheryl G. Young. <i>Collecting, Processing, and Germinating Seeds of Wildland Plants</i> . Timber Press, 1999. 10. Kruckeberg, Arthur R. <i>Gardening with Native Plants of the Pacific Northwest: An Illustrated Guide</i> . Douglas & McIntyre, 1996.
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