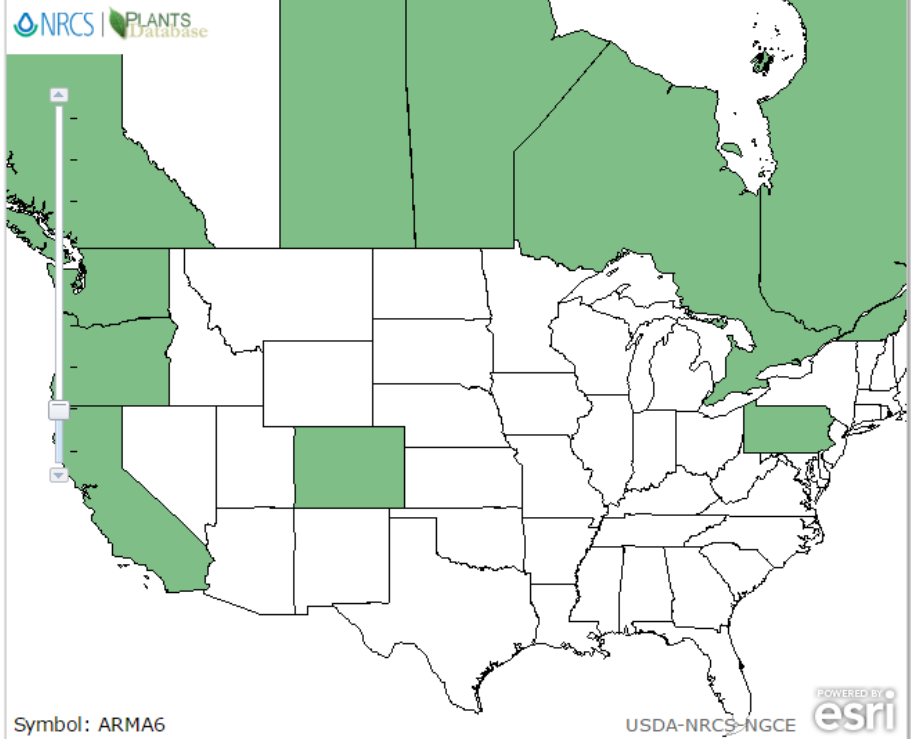


Plant Propagation Protocol for *Armeria maritima*

ESRM 412 – Native Plant Production

Protocol URL: <https://courses.washington.edu/esrm412/protocols/ARMA6.pdf>

TAXONOMY	
Plant Family	Plumbaginaceae
Scientific Name	<i>Armeria maritima</i>
Common Name	Thrift Seapink
Species Scientific Name	
Scientific Name	<i>Armeria maritima</i> (Mill.) Willd. [1]
Varieties	None
Sub-species	<i>Armeria maritima</i> subsp. <i>californica</i> <i>Armeria maritima</i> subsp. <i>elongata</i> <i>Armeria maritima</i> subsp. <i>interior</i> <i>Armeria maritima</i> subsp. <i>maritima</i> <i>Armeria maritima</i> subsp. <i>Sibirica</i> [1]
Cultivar	None
Common Synonym(s)	None
Common Name(s)	Thrift, Sea Pink, California Sea Pink, Interior Sea Pink. Siberian Sea Pink
Species Code (as per USDA Plants database)	ARMA6
GENERAL INFORMATION	

<p>Geographical range (distribution maps for North America and Washington state)</p>	 <p>Symbol: ARMA6</p> <p>USDA-NRCS-NGCE</p> <p>POWERED BY esri</p>
<p>Ecological distribution (ecosystems it occurs in, etc)</p>	<p>[1] Occurs along coastlines and rocky shores of lakes.</p>
<p>Climate and elevation range</p>	<p>Costal, low elevation.</p>
<p>Local habitat and abundance (may include commonly associated species)</p>	<p>Grows well in salty soil and moderate temperatures. Will tolerate low fertility soil. Usually found along coasts. [2]</p>
<p>Plant strategy type / successional stage (stress-tolerator, competitor, weedy/colonizer, seral, late successional)</p>	<p>Salt Tolerator [2]</p>

Plant characteristics (life form (shrub, grass, forb), longevity, key characteristics, etc.)	Perennial shrub that produces dense inflorescences of pale pink to purple-red flowers. Requires little care and tolerates drought. [3]
PROPAGATION DETAILS (Report one type of propagation in section; duplicate section as needed for multiple types of propagation)	
Propagation Goal (Options: Plants, Cuttings, Seeds, Bulbs, Somatic Embryos, and/or Other Propagules)	Plants
Propagation Method (Options: Seed or Vegetative)	Seed
Product Type (options: Container (plug), Bareroot (field grown), Plug + (container-field grown hybrids, and/or Propagules (seeds, cuttings, poles, etc.))	Plug container [5]
Stock Type	Deepot 16 [5]
Time to Grow (from seeding until plants are	As long as desired. [5]

ready to be outplanted)	
Target Specifications (size or characteristics of target plants to be produced)	Roots will hold soil shape when removed from container. [5]
Propagule Collection Instructions (how, when, etc)	Seeds can be collected during the summer, when they have dried. They can be separated from the flower head by rubbing over a screen or by hand. [5]
Propagule Processing/Propagule Characteristics (including seed density (# per pound), seed longevity, etc)	Seeds will be dry at collection, chaff and debris can be separated with a screen. Seeds should be kept cool and dry. [5]
Pre-Planting Propagule Treatments (cleaning, storage, dormancy treatments, etc)	None required. [5]
Growing Area Preparation / Annual Practices for Perennial Crops	Plants kept in germination trays with basic, well-draining soil in a fully controlled greenhouse. [5]
Establishment Phase Details (from seeding to germination)	Plants germinate in one month. After another month of growth, they are transplanted to Deepots. Soil is a mixture of bark, peat, Sunshine Soil #4 and sand. [5]
Length of Establishment Phase	8 weeks [5]

Active Growth Phase (from germination until plants are no longer actively growing)	Plants will grow actively until reaching a height of about one foot.
Length of Active Growth Phase	Varies by growing conditions.
Hardening Phase (from end of active growth phase to end of growing season; primarily related to the development of cold-hardiness and preparation for winter)	Plant growth slows during cold periods and hardening will occur naturally.
Length of Hardening Phase	Fall months.
Harvesting, Storage and Shipping (of seedlings)	Plants can be shipped in plugs.
Length of Storage	Plant growth slows in cold temperatures and growth will stop after plant reaches about 1 foot in height.
Guidelines for Outplanting / Performance on Typical Sites	Plant in rocky, dry areas. Roots may have rot problems in wet areas. [6] The plant will thrive in nutritionally poor soils [7] and soils with high salt or copper content. [8] Typically 85% of plants will survive outplanting. [6]
Other Comments	These plants also grow well along roadways due to their salt tolerance [9]. They have value to private consumers around the edges of large planters or grown in pots.
INFORMATION SOURCES	

References	<p>[1] http://plants.usda.gov/core/profile?symbol=arma6 "Plants Profile for Armeria Maritima (thrift Seapink)." <i>Plants Profile for Armeria Maritima (thrift Seapink)</i>. USDA NRCS, n.d. Web. 19 May 2016</p> <p>[2] http://www.gardening.cornell.edu/homegardening/scene6f0c.html "Explore Cornell - Home Gardening - Flower Growing Guides - Growing Guide." <i>Explore Cornell - Home Gardening - Flower Growing Guides - Growing Guide</i>. Cornell University, n.d. Web. 19 May 2016.</p> <p>[3] http://www.thegardenhelper.com/armeria.htm "How to Grow and Care for Sea Pink Plants." <i>Sea Pinks, , Armeria Maritima</i>. The Garden Helper, n.d. Web. 19 May 2016.</p> <p>[4] https://www.rhs.org.uk/plants/details?plantid=167 "Armeria Maritima." RHS Gardening. Royal Horticultural Society, n.d. Web. 19 May 2016.</p> <p>[5] http://nnp.nngr.net/renderNPNProtocolDetails?selectedProtocolIds=plumbaginaceae-armeria-553 Young, Betty. 2001. Propagation protocol for production of Container (plug) Armeria maritima (Boiss.) Porsild plants Deepot 16; San Francisco, California. In: Native Plant Network. (accessed 2016/05/22). US Department of Agriculture, Forest Service, National Center for Reforestation, Nurseries, and Genetic Resources.</p> <p>[6] http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?taxonid=256038&isprofile=0& "Armeria Maritima 'Splendens' - Plant Finder." <i>Armeria Maritima 'Splendens'</i>. Missouri Botanical Garden, n.d. Web. 20 May 2016.</p> <p>[7] http://www.pfaf.org/user/Plant.aspx?LatinName=Armeria+maritima "Pfaf Plant Search." http://www.pfaf.org/user/Plant.aspx?LatinName=Armeria+maritima . Plants for a Future, n.d. Web. 20 May 2016.</p> <p>[8] http://www.boningale-greensky.co.uk/portfolio/armeria-maritima/ "Armeria Maritima – Boningale Greensky." <i>Boningale Greensky</i>. GreenSky, n.d. Web. 20 May 2016.</p> <p>[9] www.treeboss.net/salt-tolerant_trees.htm</p>
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	<p>Feather, Sandy. "Salt Tolerant Trees." <i>Lists of and Shrubs for Plant Selections in Roadside Plantings</i>. Penn State Extension, 2007. Web. 20 May 2016.</p> <p>[10] http://en.hortipedia.com/wiki/Armeria_maritima "Armeria Maritima." - <i>Hortipedia</i>. Hortipedia, 19 Apr. 2015. Web. 20 May 2016.</p>
Protocol Author	Jake Friend
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