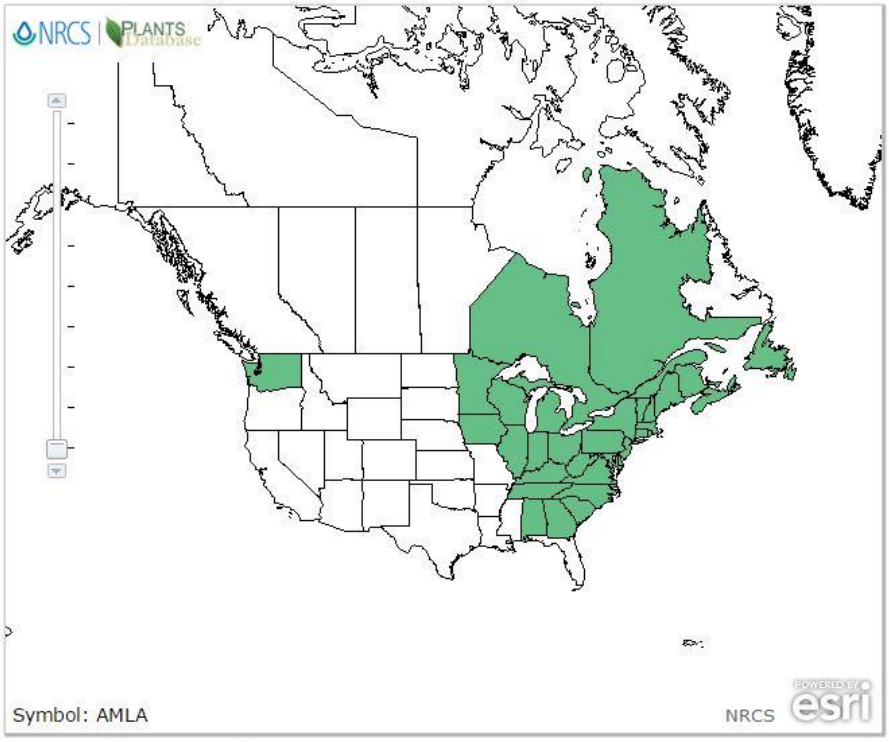
Plant Propagation Protocol for *[*Amelanchier laevis***]***
ESRM 412 – Native Plant Production
Protocol URL: https://courses.washington.edu/esrm412/protocols/*[AMLA.pdf]*

Amelanchier laevis (Portulacaceae)

TAXONOMY	
Plant Family	
Scientific Name	Rosaceae
Common Name	Rose Family
Species Scientific Name	
Scientific Name	*Amelanchier laevis* Wiegand
Varieties	Amelanchier laevis Wiegand var. nitida (Wiegand) Fernald
Sub-species	
Cultivar	
Common Synonym(s)	
Common Name(s)	Allegheny serviceberry, Allegheny service-berry, Serviceberry
Species Code (as per USDA Plants database)	AMLA
GENERAL INFORMATION	
Geographical range	It is commonly distributed around the Eastern parts of North America and Canada with Native appearances in Washington as well (USDA).

	 
Ecological distribution	It prefers cool, and moist conditions in rich woods. It is also seen in swamp margins and clearings (Wildflower Center).
Climate and elevation range	"High-Elevation rock outcrops, balds, red oak forests, forest edges, common in mountains, uncommon in Pledmont," (Spira).

Local habitat and abundance	Woodland garden canopy, swamp edges, woodland edges, dry to moist thickets; Elevation 1055 Meters (Plants for a Future).
Plant strategy type / successional stage	Very easy to grow with year round interest. It requires Medium water use with soil moistures of dry or moist. *Amelanchier laevis* can thrive in Full Sun or Shade and Part Shade. Sensitive to drought, disease and insect problems (Spira).
Plant characteristics	Deciduous and Perennial Shrub growing up to 30 feet by 20 feet. Serviceberry is a multi-trunked tree with dense branches. White flowers with Summer berries that turn from Red to Black. The foliage has blue-green coloring during summer and can turn orange or red in the fall (Spira).
PROPAGATION DETAILS	
Ecotype	
Propagation Goal	Seed: Seed is best propagated when it is fully formed and 'green' (Plants for a Future).
Propagation Method	Seed: It is best before the seed coat has hardened and then must be sown immediately into outdoor pots, alternatively in a cold frame.
Product Type	Seed: 20 cm tall in a pot/container (plug)
Stock Type	
Time to Grow	Seed: If a seed is retrieved in early autumn, it must receive 4 weeks stratification in warm temperate before it can be left out in the winter. From here, it will germinate in the spring. Otherwise, it is a very slow germinator and can take up to 18 months or more (Plants for a Future).
Target Specifications	Seed: When the seed is considered large enough to handle, you can pluck the seeds and place them into individual pots. They can be moved into a permanent location when they are 20 cm or taller (Plants for a Future).
Propagule Collection Instructions	Seed: When the seed is considered large enough to handle, you can pluck the seeds and place them into individual pots. They can be moved into a permanent location when they are 20 cm or taller.
Propagule Processing /Propagule Characteristics	Seeds per Pound: 84,000 Seed Period: Begin Spring, End Summer
Pre-Planting Propagule Treatments	It is best harvested when the seed is fully formed but must be sown before the seed coat has hardened. They must be sown immediately after into outdoor pots or a cold frame. Seed extraction is typically maceration of the fruit and washing the seeds over screens, air dried, and stores in a sealed, refrigerated container.

	Seeds are stratified for 120 days and germinate at 21 degrees C (Baskin).
Growing Area Preparation / Annual Practices for Perennial Crops	Minimum temperature requirements of -38 degrees F Precipitation Range: 34-60 Root depth 30 inches Minimum 85 Frost Free days Planting Density per Acre: 700 minimum, 1200 Maximum
Establishment Phase Details	
Length of Establishment Phase	Seeds may take 18 months or more to germinate. Grow seedlings for 2 years in seedbed. Layering in spring takes 18 months. 2 years of sucker growth before removal.
Active Growth Phase	Mature height of 35 feet takes about 20 years
Length of Active Growth Phase	Spring and Summer
Hardening Phase	Hardening phase takes place during the Fall and Winter after the Growth Period ends in the Summer.
Length of Hardening Phase	
Harvesting, Storage and Shipping	
Length of Storage	Air dry and store in sealed container refrigerated for up to 5 years (Wildflower Center).
Guidelines for Outplanting / Performance on Typical Sites	Short lifespan and height of 35 ft at mature age 20 ft wide
Other Comments	
INFORMATION SOURCES	

References	"Amelanchier laevis Information from NPGS/GRIN." Amelanchier Laevis Information from NPGS/GRIN. USDA, 25 Mar. 2011. Web. 26 Apr. 2015. Baskin, Carol, and Jerry Baskin. "Protocol Information." Protocol Information. First Step Internet`, 2009. Web. 26 Apr. 2015. "Conservation Plant Characteristics for Amelanchier laveis | USDA PLANTS." Conservation Plant Characteristics for ScientificName (CommonName) | USDA PLANTS. USDA, 26 Apr. 2015. Web. 26 Apr. 2015. "NPIN: Native Plant Database." Lady Bird Johnson Wildflower Center. Lady Bird Johnson Wildflower Center, 2015. Web. 26 Apr. 2015. "Pfaf Plant Search." Pfaf Plant Search. Plants for a Future, n.d. Web. 26 Apr. 2015. "Plants Profile for Amelanchier Laevis (Allegheny Serviceberry)." Plants Profile for Amelanchier Laevis (Allegheny Serviceberry). USDA, n.d. Web. 26 Apr. 2015. Spira, Timothy. "Trees." Wildflowers and Plant Communities of the Southern Appalachian Mountains. North Carolina: U of North Carolina, 2011. N. pag. Print.
Other Sources Consulted	
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Date Protocol Created or Updated	04/26/15