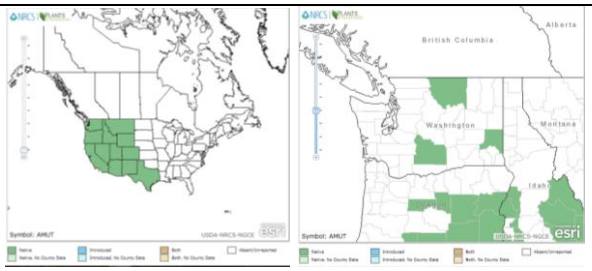
Plant Propagation Protocol for *Amelanchier utahensis*
ESRM 412 – Native Plant Production
Protocol URL: https://courses.washington.edu/esrm412/protocols/AMUT.pdf

TAXONOMY	
Plant Family	
Scientific Name	*Rosaceae*
Common Name	Rose family
Species Scientific Name	
Scientific Name	*Amelanchier utahensis* Koehne
Varieties	
Sub-species	
Cultivar	
Common Synonym(s)	*Amelanchier utahensis var. utahensis, Amelanchier utahensis var. covillei* [3]
Common Name(s)	Utah Serviceberry, Coville's Serviceberry, Juneberry, Shadbush and Sarvis. [3, 5]
Species Code (as per USDA Plants database)	AMUT
GENERAL INFORMATION	
Geographical range	 [3]
Ecological distribution	Dry rocky slopes and ridges, canyons, and streambanks from sagebrush deserts to middle elevation montane. Prefers coarse to medium textured soils that are well drained. Not tolerant of high water tables or saline soils [2].
Climate and elevation range	Found at elevations of 5000-9000 ft. in areas with 12-20 in. annual precipitation. [1]
Local habitat and abundance	Commonly associated with big sagebrush, pinyon-juniper, and aspen communities [2]. Often hybridizes with Saskatoon Serviceberry when found together [5].
Plant strategy type / successional stage	Tolerant of poor, dry soil and windy sites.
Plant characteristics	Perennial deciduous shrub or small tree growing to 5 M with grayish oval leaves, ash gray bark, and dark purple pomes. It serves as browse for Mule Deer, Desert Bighorn Sheep, and livestock [6]. Its berries are eaten by birds such as the Sage Grouse. Flowers from April-June and attracts nectar insects, especially native

	bees. [6] The plant is monoecious and can self-fertilize. Flowers are pollinated by bees. [5]
PROPAGATION DETAILS	
Ecotype	Not applicable for this protocol.
Propagation Goal	Plants
Propagation Method	Seed
Product Type	Container (plug)
Stock Type	1-gallon tree pot
Time to Grow	1 year [4]
Target Specifications	Height: 8 in. Root System: Root system must balance top growth. There should be enough roots to prevent root ball disintegration during outplanting.
Propagule Collection Instructions	Fruiting occurs July-September in the form of a purplish-black pome [7]. The pomes are persistent, so it is possible to collect seeds past September. [6]
Propagule Processing/Propagule Characteristics	Seeds are wild collected during fall months and are kept separated according to site, elevation and source. Mature fruit is a purple dry and pulpy pome containing several seeds. There is around 25,800 seeds/lb. [2]
Pre-Planting Propagule Treatments	Seeds will need to be cleaned of their fleshy fruit. Seeds have physiological dormancy and require 45 days of cold moist stratification. Germination occurs at 10 to 40 C [9]. If planting in the field, seeds should be planted ¼" deep under leaf litter in fall. [5]
Growing Area Preparation / Annual Practices for Perennial Crops	Media should be well-drained. Seeds should start in plug containers then move to 1-gallon pots as the plants mature and become root bound.
Establishment Phase Details	Seeds should be lightly covered with soil or organic matter, as they are in the field. Media should be kept moist, but not wet [8].
Length of Establishment Phase	1 month after spring emergence [4]
Active Growth Phase	Fertilizer application can begin in this phase. Plants should be watered frequently [8].
Length of Active Growth Phase	4 months [4]
Hardening Phase	Hardening begins around the 3rd week of August or when dormancy is induced. No fertilizer should be applied during this phase. [4]
Length of Hardening Phase	2 months [4]
Harvesting, Storage and Shipping	Plants are ready for harvest when leaves fall, and growth slows. The plant seedlings should be kept above 12 F in winter storage to prevent cold injury. If needed, seedlings can be removed from their containers and placed into bags or boxes kept refrigerated for shipping. [8]

Length of Storage	Information is not yet available for this species.
Guidelines for Outplanting / Performance on Typical Sites	Time to flower: 8-10 years [1] Other information not available.
Other Comments	No collection restrictions found.
INFORMATION SOURCES	
References	1. Noller, Garry L. "Plant Fact Sheet for Utah Serviceberry." *plants.usda.gov* US Department of Agriculture, 26 Aug. 2008. Web. 20 April 2018. 2. Noller, Garry L. "Plant Guide for Utah Serviceberry." *plants.usda.gov* US Department of Agriculture, 26 Aug. 2008. Web. 20 April 2018. 3. USDA NCRS National Plant Data Team. "Plant Profile for *Amelanchier utahensis* Koehne." *plants.usda.gov* US Department of Agriculture. Web. 20 April 2018. 4. Zeidler, Scott; Justin, John. "Propagation protocol for production of Bareroot (field grown) *Amelanchier utahensis* Koehne plants 1+0." *NativePlantNetwork.org* US Department of Agriculture, Forest Service, National Center for Reforestation, Nurseries, and Genetic Resources, 2003. Web. 20 April 2018. 5. "*Amelanchier utahensis* Koehne." *pfaf.org* Plants For A Future Database, 2012. Web. 20 April 2018 6. "*Amelanchier utahensis*" *wildflower.org* Ladybird Johnson Wildflower Center Plant Database, 13 November 2015. Web. 20 April 2018. 7. "3. *Amelanchier utahensis* Koehne Identification" *eFloras.org* Flora of North America. Web. 20 April 2018. 8. Drumroese, R. Kasten et al. *Nursery Manual for Native Plants Vol. 1: Nursery Management*. US Department of Agriculture Forest Service, 2009. Print. 9. Baskin, Jerry M; Baskin, Carol C..

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Other Sources Consulted	10. Trimmer, Edie. "Propagation of *Amelanchier utahensis* Container Plugs". *NativePlantNetwork.org* US Department of Agriculture, Forest Service, National Center for Reforestation, Nurseries, and Genetic Resources, 2003. Web. 20 April 2018.
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