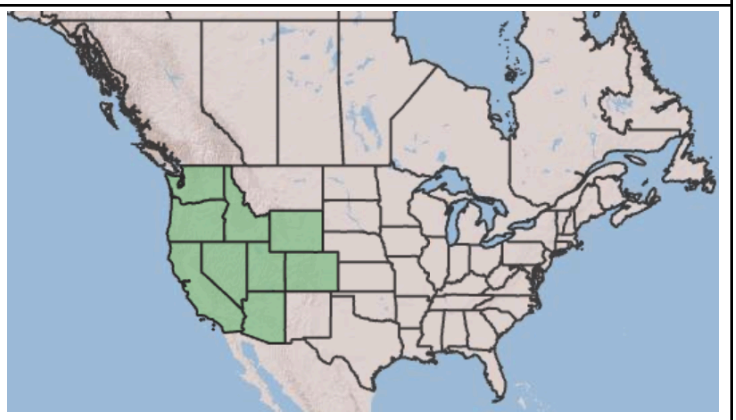
Plant Propagation Protocol for *Asclepias cryptoceras*
ESRM 412 – Native Plant Production
URL: https://courses.washington.edu/esrm412/protocols/2025/ASCR.pdf

TAXONOMY	
Plant Family	**Apocynaceae**[3]
Scientific Name	*Asclepias cryptoceras*
Common Name	pallid milkweed
Species Scientific Name	
Scientific Name	*Asclepias cryptoceras S. Watson*[5]
Varieties	-
Sub-species	*Asclepias cryptoceras* ssp. *cryptoceras* S. Watson[5] *Asclepias cryptoceras* ssp. *davisii* Woodson[5]
Cultivar	-
Common Synonym(s)	*Acerates latifolia*[7]
Common Name(s)	*Asclepias cryptoceras*: Pallid milkweed[5] *Asclepias cryptoceras* ssp. *davisii*: Davis' milkweed[5]
Species Code (as per USDA Plants database)	ASCR
GENERAL INFORMATION	
Geographical range	 5
Ecological distribution	Sand, gravel, clay, or shale of slopes, canyon bottoms, washes and arid plains.[4]
Climate and elevation range	Climate: Dry areas of hills and lower mountains.[2] Elevation: 1400-2500m[4] Wa: 400-730m[2]
Local habitat and abundance	Dry areas of hills and lower mountains, on basalt scree or gravelly clay or silt soils. Slopes are steep, open and 80% bare.[2] Associated species include bluebunch wheatgrass (*Pseudoroegneria spicata),* snow buckwheat

	(*Eriognum niveum*), silverleaf phacelia (*Phacelia hastata*), Cusick's milkvetch (*Astragalus cusickii*), Arthur's milkvetch (*Astragalus arthurii*), And Oregon twinpod (*Physaria oregona*).[2]
Plant strategy type / successional stage	*Asclepias cryptoceras* is likely a stress-tolerator and a pioneer species, due to its lightweight seeds, ability to grow in dry barren areas, and trailing growth habit.
Plant characteristics	*Asclepias cryptoceras* is an herbaceous perennial herb with milky sap. The stem can range from 10-30cm and is usually trailing or close to the ground. Leaves are opposite, 2-6cm long and wide, obovate and rounded to oval, oblong, with the upper leaves ovate-lanceolate. They have conspicuous hairs along the margin, but are usually hairless elsewhere. The inflorescence is umbellate and usually terminal. Central inflorescences are usually composed of 5-10 flowers, and lateral inflorescences have fewer flowers and are sessile. The peduncle bearing the flowers is usually 2-4 cm, and the pedicel is about the same length. The sepals are 5-9mm long, green to reddish, and linear to lanceolate. The corolla is pale greenish yellow, tubular, with reflexed lanceolate lobes tinged with red, 8-12 mm long. The hoods are pinkish, 5-6 mm long, sac-shaped, and bilobed above. The lobes project into short, erect to slightly recurved teeth that slightly exceed the anthers and enclose the short horn. The fruit is a smooth ovoid follicle 3-5 cm long.[6]
PROPAGATION DETAILS: FROM SEED Adapted from *Asclepias eriocarpa protocol* by John W. Hunt[1]	
Ecotype	-
Propagation Goal	Plants
Propagation Method	Seed
Product Type	Container (plug)
Stock Type	
Time to Grow	8 months (may differ due to being different species)
Target Specifications	First-year seedling with fibrous "taproot" 1-3mm in diameter and 10-30cm long.
Propagule Collection Instructions	Fruit should be collected immediately prior to or when it is completely ripe and dry on the plant from mid-spring to mid-summer.
Propagule Processing/Propagule Characteristics	Seed was collected from late summer to early fall. There is approximately 35-55 seeds per gram, but can

	vary depending on the individual, population, year and cleanliness of the seed.
Pre-Planting Propagule Treatments	Seeds were separated from the pods and woolly down by putting the fruits in a pillow case and beating vigorously until the seeds were separated and collected at the bottom. Dry, clean seed was placed in dry cold storage following collection and cleaning, and prior to sowing.
Growing Area Preparation / Annual Practices for Perennial Crops	Seeds were directly sown in 1.5" deep flats in November. The potting mix was composed of approximately 1:1:1:2 sand, pumice, peat moss, and fir bark. Seedlings were transplanted to pots varying in size using the same potting mix. Deep pots were noted to work the best, as they allow the taproot to develop.
Establishment Phase Details	The flats were placed in an outdoor cold frame from late fall through spring and transplanted into pots.
Length of Establishment Phase	Germination occurred 6 weeks after sowing. Seedlings reached transplant size in 7-8 weeks
Active Growth Phase	Growth occurred following autumn rains until late summer/ early fall. The active growth period can be extended by keeping the soil moist.
Length of Active Growth Phase	6-8 months, from late winter to midsummer. Older plants may not start above-ground growth until spring.
Hardening Phase	After the growing season ends, senescence occurs, and the plant goes dormant. The plant can be placed in dry storage at 60 to 70 degrees Fahrenheit, and growth will resume after fall rains or in late winter or early spring.
Length of Hardening Phase	-
Harvesting, Storage and Shipping	-
Length of Storage	Two months
Guidelines for Outplanting / Performance on Typical Sites	-
Other Comments	*Asclepias eriocarpa* was chosen as the model for this protocol as it is a closely related species and shares a similar habitat type, growing in dry, barren areas.[1]
INFORMATION SOURCES	
References	1: Hunt, J. W. (2006). *Native plant network — reforestation, nurseries and genetics resources*. Native Plant Network Propagation Protocol Database; USDA

Forest Service. https://npn.rngr.net/renderNPNProtocolDetails?selectedProtocolIds=asclepiadaceae-asclepias-3086

2: Montana State Library: Natural Heritage Program. (n.d.). *Washington Field Guide- Asclepias cryptoceras ssp. davisii*. Montana Field Guide; Montana State Library: Natural Heritage Program. Retrieved May 29, 2025, from https://fieldguide.mt.gov/wa/?species=asclepias%20cryptoceras%20ssp.%20davisii

3: Royal Botanic Gardens Kew. (n.d.). *Asclepias cryptoceras S.Watson*. Plants of the World Online; Board of Trustees of the Royal Botanic Gardens, Kew. Retrieved May 29, 2025, from https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:94206-1#distributions

4: The Jepson Herbarium. (2025, May 12). *Asclepias cryptoceras*. Jepson Herbarium-; Regents of the University of California. https://ucjeps.berkeley.edu/eflora/eflora_display.php?tid=14361#MAP

5: U.S. Department of Agriculture. (n.d.). *USDA Plants Database: Asclepias cryptoceras*. USDA. Retrieved May 29, 2025, from https://plants.usda.gov/plant-profile/ASCR

6: Washington Natural Heritage Program. (2011). *Field guide to the rare plants of washington* (P. Camp & J. G. Gamon, Eds.). University of Washington Press. (2011)

	7: World Flora Online. (2024, December). *WFO Plant List: Asclepias cryptoceras*. World Flora Online; WFO . https://wfoplantlist.org/taxon/wfo-0000551237-2024-12?page=1
Other Sources Consulted	Fishbein, M. (n.d.). *OregonFlora- Asclepias cryptoceras*. OregonFlora. Retrieved May 29, 2025, from https://oregonflora.org/taxa/index.php?taxon=10678 Marcus, J. A. (2017, August 15). *Plant Database: Asclepias cryptoceras*. Lady Bird Johnson Wildflower Center. https://www.wildflower.org/plants/result.php?id_plant=ASCR Utah Natural Heritage Program. (2023, December 13). *Utah Division of Wildlife Resources: Humboldt Milkweed- Asclepias cryptoceras*. Utah Natural Heritage Program Field Guide; State of Utah. https://fieldguide.wildlife.utah.gov/?Species=Asclepias%20cryptoceras
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