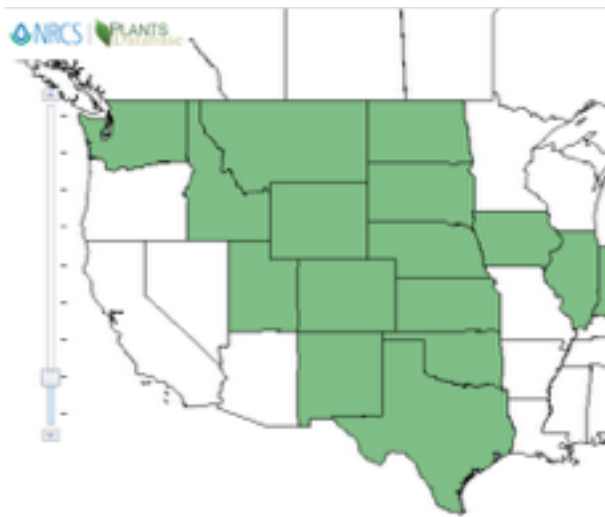


Plant Propagation Protocol for *Argemone polyanthemus*
ESRM 412 – Native Plant Production



(Plant image sources²) (Map image sources¹)



Symbol: ARPD2 USDA-1

Native	Introduced	Both
Native, No County Data	Introduced, No County Data	Both, No County Data

TAXONOMY	
Plant Family	Papaveraceae ¹ (poppy family)
Scientific Name	<i>Argemone polyanthemus</i> ¹

Common Name	crested pricklypoppy ¹
Species Scientific Name	<i>Argemone</i> L. ¹
Scientific Name	<i>Argemone</i> L. <i>polyanthemos</i> (Fedde) G.B Ownbey ¹
Varieties	<i>Argemone intermedia</i> auct. non Sweet (ARIN7), <i>Argemone intermedia</i> Sweet var. <i>polyanthemos</i> Fedde (ARINP2), <i>Argemone platyceras</i> auct. non Link & Otto (ARPL2) ¹
Sub-species	n/a
Cultivar	<i>Argemone polyanthemos</i>
Common Synonym(s)	<i>Argemone intermedia</i> , <i>Argemone intermedia</i> var. <i>polyanthemos</i> , <i>Argemone platyceras</i>
Common Name(s)	crested pricklypoppy, annual pricklepoppy, bluestem pricklepoppy, thistle poppy ¹ , white pricklypoppy ²
Species Code (as per USDA Plants database)	ARPO2 ¹
GENERAL INFORMATION	
Geographical range	<i>Argemone polyanthemos</i> is native in the lower 48, appearing across the majority of the Western half of the United States and into the Midwest, growing in Arizona, Colorado, Idaho, Indiana, Illinois, Kansas, Montana, North Dakota, Nebraska, Wyoming, New Mexico, Oklahoma, Texas, Utah, and Washington. ²
Ecological distribution	Most commonly found in prairie, plains, meadow, desert edge, foothills, pasture, and savanna ecosystems with relatively dry, aerated soil. Thrives in full sunlight conditions, not well-adapted for shade or oversaturated soils. Prefers well-drained gravelly, sandy, sandy/medium or clay loam. ²
Climate and elevation range	1500-8000 ft. Well-suited for sunny and dry plains climates or mild deserts. ³

Local habitat and abundance	Commonly associated with other plains and prairie species, no noted symbiotic relationships or environmental requirements. ³ May become extremely abundant in desirable locations due to self-seeding and spreading capabilities. ⁸
Plant strategy type / successional stage	Annual/Biennial/perennial ¹ Rapid growth during summer ¹ Adaptable species to dry and poor-quality soils, may self-seed in a variety of environments. ⁶ May grow on roadsides and disturbed sites, despite being native, may be considered a weed. ¹⁰
Plant characteristics	<u>Classification:</u> Forb/herb, dicot ¹ <u>Appearance:</u> Branched light green to blue green deeply-lobed leafy plant, erect growth shape reaching 1-3 ft tall in maturity, blooms with white poppy flowers 5 inches in diameter during springtime. Flowers are papery and wavy in structure, with six delicate white petals and a rounded yellow/orange center. ³ Buds appear at the beginning of flowering season, usually late winter-early spring, typically 1 inch long, green and prickly. Seed pods are ova;-shaped, armed with prickles, and can be up to 2 inches in length. ³ The majority of the plant is covered in a protective coat of delicate yellow prickles. Produces yellow sap. Prickly, poor-tasting, and moderately toxic. Reproduces through bisexual flowers in summer and early autumn, blooming April-October. ² <u>Characteristics:</u> Low salinity tolerance, shade intolerant, preference for coarse-textured soils, not well-adapted for fine textures including small-particle silt or clay. Highly drought tolerant. ¹
PROPAGATION DETAILS	
Ecotype	n/a
Propagation Goal	Plants, seeds ¹
Propagation Method	Seed only ¹
Product Type	Seed propagule ¹
Stock Type	seed ¹

Time to Grow	One growing season (4-7 months) ⁷
Target Specifications	Mature plants are 1-3 feet in height, capable of flowering and producing seed pods. ¹
Propagule Collection Instructions	Seeding period runs summer through autumn, with blooming beginning in early to mid-spring ¹ and fruiting in late spring-summer. ⁵ Seeds may be manually harvested from wild-growing plants, or purchased from nursery distributors. ⁴
Propagule Processing/Propagule Characteristics	9000 seeds/lb ¹
Pre-Planting Propagule Treatments	No cold stratification needed ¹ , but seeds germinate best after a period of cold, moist stratification, which can be achieved by sowing outdoors in autumn or winter. In nursery conditions, seeds can be mixed with sterilized moist fine sand or medium vermiculite media, then held in cold storage (33-38 degrees F) for approximately 60 days. May sprout after one month of stratification in especially moist conditions and may be planted immediately. ⁴
Growing Area Preparation / Annual Practices for Perennial Crops	Growing media should be moist but well-drained with relatively large particle-sizes: either fine sand or sandy loam. ⁵
Establishment Phase Details	Grow more easily in natural and/or outdoor conditions than in a container setting, but may be artificially propagated. Best sown outdoors in outplanting site rather than in a nursery setting, especially sensitive to transplanting stress. Initially place in peat pots or pellets, keeping moisture and temperature constant at approximately 70 degrees F during germination. ⁷ 1 plug per 3.5 in (8-9cm) ⁹
Length of Establishment Phase	Two weeks ⁸ Plant/establish in growing medium slightly before end of winter or early spring frost period to achieve growth that upcoming spring-autumn season for outdoor planting. ⁶ Indoor/nursery propagation may occur later, with 2-4 weeks of warm establishment followed by 4-6 weeks of colder temperature exposure. ⁹

Active Growth Phase	Dislike transplanting between containers. ⁶ When roots begin to grow out the sides of peat pot container, transfer to larger pot. ⁷
Length of Active Growth Phase	4-7 months ⁸
Hardening Phase	Can grow as annuals, biennials, or perennials depending on climate and age of plant, may die at the end of growing season, or survive multiple years through winter conditions. ²
Length of Hardening Phase	Grow rapidly and consistently through flowering and fruiting season (March-October). ²
Harvesting, Storage and Shipping	Transportation, indoor propagation/growth, and transplanting should be minimized. ⁴
Length of Storage	n/a
Guidelines for Outplanting / Performance on Typical Sites	Hardy and adaptable plant, best survival when allowed to self seed and/or establish at out planting site rather than in a container or indoor nursery setting. Very susceptible to death from transplanting stress. ⁷
Other Comments	In garden or controlled settings, should be deadheaded in order to prevent unregulated spreading or self-seeding. ⁸
INFORMATION SOURCES	

References

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- ²"Plant Database." Lady Bird Johnson Wildflower Center - The University of Texas at Austin. Accessed May 23, 2019. https://www.wildflower.org/plants/result.php?id_plant=arpo2.
- ³Southwest, The American. "Argemone Polyanthemus, Crested Prickly Poppy." The American Southwest. Accessed May 23, 2019. <https://www.americansouthwest.net/plants/wildflowers/argemone-polyanthemus.html>.
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- ⁵"Argemone Polyanthemus." SEINet Portal Network - Argemone Polyanthemus. Accessed May 23, 2019. <http://swbiodiversity.org/seinet/taxa/index.php?taxon=463>.
- ⁶"Argemone Polyanthemus." Argemone Polyanthemus - Plant Finder. Accessed May 23, 2019. <http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?taxonid=284846&isprofile=0>.
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- ⁸Ravenscroft, Dean. "Guide to Growing Mexican Poppy and Prickly Poppy." Argemone Plant | How to Grow Mexican Poppy, Prickly Poppy. Accessed May 24, 2019. <https://www.gardenershq.com/Argemone-Mexican-poppy.php>.

	<p>⁹"ARGEMONE Polyanthemus." Jelitto Perennial Seed. Accessed May 24, 2019. https://www.jelitto.com/Seed/ARGEMONE polyanthemus Portion s.html.</p> <p>¹⁰Montana Natural Heritage Program. "MTNHP." White Prickly-poppy. May 29, 2019. Accessed May 24, 2019. http://fieldguide.mt.gov/speciesDetail.aspx?elcode=PDPAP030D0&sort=3.</p>
Other Sources Consulted	<p>"Prickly Poppy." EOL. Accessed May 23, 2019. https://eol.org/pages/594635.</p> <p>"Argemone Polyanthemus." Argemone Polyanthemus in Flora of North America @ Efloras.org. Accessed May 23, 2019. http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=233500143.</p>
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