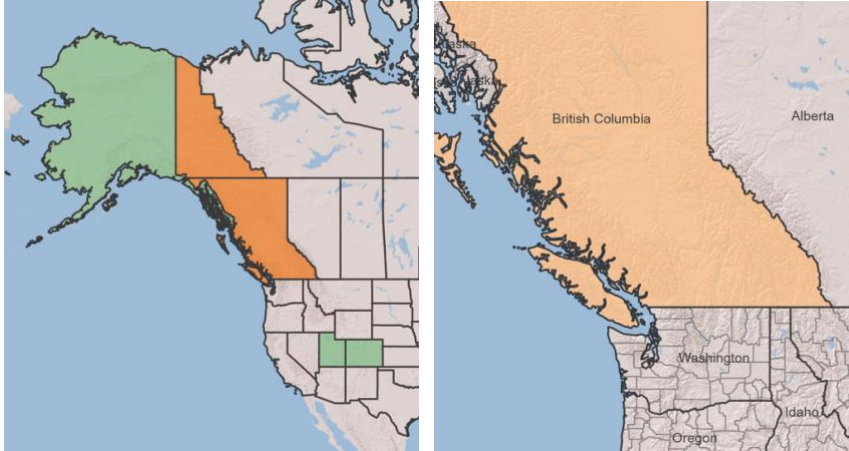
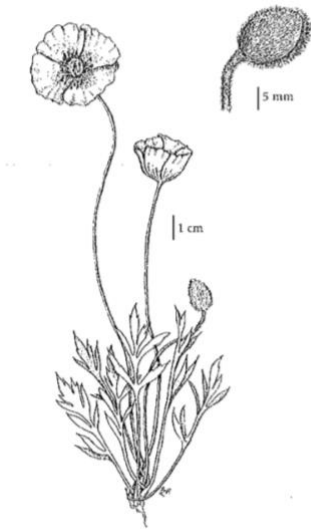


Plant Propagation Protocol for *Papaver nudicaule*

ESRM 412 – Native Plant Production

URL: [https://courses.washington.edu/esrm412/protocols/\[year\]/\[USDA Species Code.pdf\]](https://courses.washington.edu/esrm412/protocols/[year]/[USDA Species Code.pdf])

TAXONOMY	
Plant Family	
Scientific Name	Papaveraceae
Common Name	Poppy family
Species Scientific Name	
Scientific Name	<i>Papaver nudicaule</i> Linnaeus.
Varieties	None listed
Sub-species	<i>Papaver nudicaule</i> L. ssp. <i>americanum</i> Rändel ex D.F. Murray <i>Papaver nudicaule</i> L. ssp. <i>nudicaule</i> L.
Cultivar	
Common Synonym(s)	<i>Papaver croceum</i> Ledeb.
Common Name(s)	Icelandic poppy, Arctic poppy
Species Code (as per USDA Plants database)	PANU3
GENERAL INFORMATION	
Geographical range	 <p style="text-align: center;">Source: USDA Plants Database</p>
Ecological distribution	Native to arctic regions of North America. ^{3,4} Found through the boreal forest along the Yukon and Kuskokwim rivers in Alaska. Mesic to dry, gravel disturbed areas and roadsides in montane zone. Rare in British Columbia. ²
Climate and elevation range	Prefers well-drained soils and full sun. ^{4,5} Thrives in mild climates with soil temperatures between 55°F and 60°F. ⁴ High latitude Arctic regions of North America. ^{3,4,5}
Local habitat and abundance	Found throughout dry, exposed, and rocky openings of interior Alaska. Prefers grasslands, meadows, valleys, river gravel, and roadsides. ⁸

Plant strategy type / successional stage	Stress-tolerant herb, preferring sunny conditions, is drought tolerant, and is distributed in disturbed areas. ²
Plant characteristics	<p>Short lived (2-3 seasons) perennial, herb; growing heights 20-40 cm tall from a short, thick taproot.^{7,8} This species blooms late spring to early summer (May, June, July). Inflorescence of solitary flowers that are white, yellow, orange, pink, or red in color.^{2,7}</p>  <p style="text-align: center;"><i>Papaver nudicaule</i></p> <p style="text-align: center;">Source: <i>Illustrated Flora of British Columbia</i></p>
PROPAGATION DETAILS	
Ecotype	Not applicable.
Propagation Goal	Plants
Propagation Method	Seed
Product Type	Propagules
Stock Type	
Time to Grow	Sow seed in fall for bloom in the following year. ^{3, 4}
Target Specifications	Firm root and multiple leaves.
Propagule Collection Instructions	Harvest seeds from capsule when dry and they can be heard rattling. Shake seeds from capsule (Information for general poppy family). ¹⁰ Seed collection best in August or September, before planting in fall. ⁴
Propagule Processing/Propagule Characteristics	2,780,000 seeds per pound. Two pounds of seed per acre. ⁴
Pre-Planting Propagule Treatments	Seeds are relatively clean when removed from capsule, but if bristles from capsule are present, brush off. ⁹ Store in cool, dry, dark place. ¹⁰
Growing Area Preparation / Annual Practices for Perennial Crops	Prefers areas of cool temperatures, full sunlight, and well-drained soils. ^{4,5}

Establishment Phase Details	Seeds should be sowed at the surface. ⁴ Light is necessary for poppy seeds to germinate, so cover seeds with no more than one-eighth inch soil and lightly water. Germinate better when exposed to freezing conditions, so sow seeds in fall. ¹⁰
Length of Establishment Phase	20-30 days in cool weather. ⁴
Active Growth Phase	Blooming occurs May to July. ⁴ Several weeks after establishment, prune spent leaves to encourage flowering. ⁵
Length of Active Growth Phase	No information available.
Hardening Phase	No information available.
Length of Hardening Phase	No information available.
Harvesting, Storage and Shipping (of seedlings)	Seedlings not easily transplanted. ^{3,4}
Length of Storage	
Guidelines for Outplanting / Performance on Typical Sites	Not easily transplanted, sow seeds directly at the site. ^{3,4} Planting success is around 60%. ⁴
Other Comments	
INFORMATION SOURCES	
References	¹ <i>Papaver nudicaule</i> L. (n.d.). USDA Plants Database. Retrieved May 18, 2023, from https://plants.usda.gov/home/plantProfile?symbol=PANU3 ² Douglas, G.W., D.V. Meidinger, and J. Pojar (editors). 1999. <i>Illustrated Flora of British Columbia. Volume 3: Dicotyledons (Diapensiaceae Through Onagraceae)</i> . B.C. Ministry of Environment, Lands & Parks and B.C. Ministry of Forests. Victoria. 423 p. ³ Ford, A. L., "Home Propagation of Ornamentals" (1931). Cooperative Extension Circulars: 1917-1950. Paper 304. http://openprairie.sdstate.edu/extension_circ/304 ⁴ Lineberger, D., & Parsons, J. (n.d.). <i>Iceland Poppy</i> . Aggie Horticulture. Retrieved May 22, 2023, from https://aggiehort.tamu.edu/wildseed/icelandpoppy.html ⁵ Martin, C. (n.d.). <i>Papaver nudicaule</i> . Virtual Library of Phoenix Landscape Plants. Retrieved May 22, 2023, from https://www.public.asu.edu/~camartin/plants/Plant%20html%20files/papavernudicaule.html ⁶ <i>Papaver nudicaule</i> . (n.d.). Flora of Pakistan. Retrieved May 22, 2023, from http://www.efloras.org/florataxon.aspx?flora_id=5&taxon_id=200009164 ⁷ Armitage, A. (2001). <i>Armitage's Manual of Annuals, Biennials, and Half-Hardy Perennials</i> . Timber Press. ⁸ Nawrocki, T. (2010). <i>Iceland Poppy</i> (p. 4). University of Alaska Anchorage. https://accs.uaa.alaska.edu/wp-content/uploads/Papaver_croceum_BIO_PACR80.pdf

	<p>⁹Löve, D. (1969). Papaver at High Altitudes in the Rocky Mountains. <i>Brittonia</i>, 21(1), 1–10. https://doi.org/10.2307/2805654</p> <p>¹⁰Drost, D. (2020, May). <i>Seed Poppy in the Garden</i>. Utah State University Yard and Garden. https://extension.usu.edu/yardandgarden/research/seed-poppy-in-the-garden</p>
Other Sources Consulted	
Protocol Author	Lindsey Austin
Date Protocol Created or Updated	05/24/2023