Plant Propagation Protocol for *Oxytropis campestris* (L.) DC ESRM 412 – Native Plant Production Spring 2012





Source: USDA PLANTS Database

	TAXONOMY	
Family Names		
Family Scientific Name:	Fabaceae	
Family Common Name:	Pea family	
Scientific Names		
Genus:	Oxytropis	
Species:	campestris	
Species Authority:	(L.) DC	
Variety:		
Sub-species:	Oxytropis campestris var. columbiana	
	Oxytropis campestris var. cusickii	
	Oxytropis campestris var. gracilis	
	Oxytropis campestris var. wanapum	
Cultivar:		
Authority for Variety/Sub-species:		
Common Synonym(s):	Oxytropis columbiana St. John columbiana	
Common Name(s):	field locoweed, slender crazyweed, field oxytrope	
Species Code:	OXCA4	
GENERAL INFORMATION		
Geographical range	This species is found from British Columbia south to	
	Montana, Idaho, and Washington (2).	

	DATA SE OXCAA
	North American Distribution
	PLANTS OXCA4
	Database
	Washington Distribution Source: USDA PLANTS Database
Ecological distribution:	Commonly found on gravel bars, rocky outcrops,
	roadsides, grasslands, meadows, forest openings and
	rocky balds (2, 4, 5).
Climate and elevation range	Low to alpine elevations (2, 4).
Local habitat and abundance	Abundant; of no concern. Found on both sides of the
	Cascades in Washington (5).
Plant strategy type / successional	N/A
stage	
Plant characteristics	Taprooted perennial that grows 5-30 cm tall.
	Grayishgreen and hairy with many stems branching
	from the center of the plant. Leaves are basal, 3-20 cm
	long, and are pinnately arranged. Flowers 10-20 mm
	long, white to yellowish, clustered and pea-like. Fruit is
	a pod with black and white hairs and becomes papery when dry (2, 4). <i>Oxytropis campestris</i> is extremely
	variable due in part to inter-specific hybridization (8).
PROPAGATION DETAILS	
Ecotype:	Central, South-Central Alaska; dry, sandy areas (3).
Leotype.	Condai, Boddi-Condai Alaska, diy, sandy areas (3).

Propagation Goal:	Plants (1, 3).	
Propagation Method:	Seed (1, 3, 9).	
Fugures	(-, -, -, -)	
Product Type	Container (plug) (1, 3).	
Stock Type:	N/A	
Time to Grow:	N/A	
Target Specifications:	Root trainer, 10.5 cu.in./cell. Multiple leaves, firm root	
	plug (3).	
Propagule Collection:	Done by hand when pods start opening. The seeds are	
	ripe when brown and hard (3).	
Propagule Processing/Propagule	Seeds exhibit physical dormancy (1).	
Characteristics:	Air dry. Approximately 500 seeds per gram. Clean seed	
	with brush cleaner then use a hand screen. Store in	
	freezer (3).	
Pre-Planting Propagule Treatments:	Germination occurs at 22° C (1).	
	Germination occurred when seeds were planted into	
	cells in the fall and subjected to ambient temperature	
	fluctuations. In spring, seeds start germinating at	
	approximately 50 degrees F. With a Tetrazolium test of	
	96%, eleven days after bringing cells into greenhouse,	
	92% of seeds had germinated (3).	
	After scarification with fine sandpaper, 83%	
	germination was attained. Mold can be a problem on	
	the seeds so a surface disinfection is recommended	
	(10% bleach soak for 15 min) (9).	
	Note: Information above refers to <i>Oxytropis campestris</i> var. <i>wanapum</i> . (9).	
Growing Area Preparation / Annual	Soil mix: upland well drained. Plant 2 seeds per cell. If	
Practices for Perennial Crops:	planted in the fall, bring into greenhouse by end of	
Tractices for Terenmar Crops.	March. If planted in the spring, propagate in the	
	greenhouse initially (3).	
Establishment Phase:	Plants moved to lathhouse to harden off after last frost.	
	Fertilize minimally after true leaves appear (3).	
Length of Establishment Phase:	Two months (3)	
Active Growth Phase:	N/A	
Length of Active Growth Phase:	N/A	
Hardening Phase:	N/A	
Length of Hardening Phase:	N/A	
Harvesting, Storage and Shipping:	N/A	
Length of Storage:	N/A	
Guidelines for Outplanting:	N/A	
Other Comments:	N/A	
INFORMATION SOURCES		
References: See below		

Other Sources Consulted:	See below
Protocol Author:	Ellen Sherck
Date Protocol Created or Updated:	05/16/12

## References

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## **Images**

1. USDA, NRCS. 2012. The PLANTS Database. Available: <a href="http://plants.usda.gov">http://plants.usda.gov</a>. (Accessed: April 15th, 2012).

## Other Sources Consulted

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- 2. Young, J. & C. 1986. *Collecting, Processing, and Germinating Seeds of Wildland Plants*. Timber Press, Portland OR. 1986.

- 3. Klinka, K. (et al.) 1998. *Indicator plants of coastal British* Columbia. University of British Columbia Press, Vancouver, B.C. 1989.
- 4. Pojar, J. and MacKinnon, A. 1994. *Plants of the Pacific Northwest Coast: Washington, Oregon, British Columbia & Alaska*. Lone Pine Publishing, Redmond, WA. 1994

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