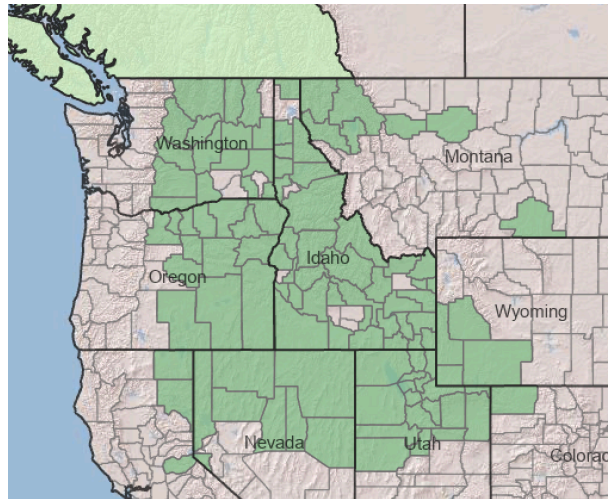
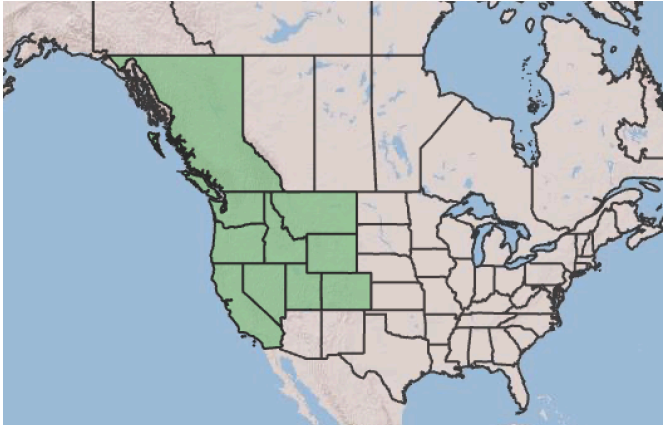


**Plant Propagation Protocol for Parsnipflower Buckwheat (*Eriogonum heracleoide*)**

ESRM 412 – Native Plant Production

Maps from USDA(8). Photos from reference (6) and (7)



*Eriogonum heracleoides* var. *heracleoides*.  
Photo by Charmaine Delmatier.



**Figure 3.** Parsnipflower buckwheat growing in rocky soils in Oregon. Photo: USDI BLM SOS OR130.

**TAXONOMY**

Plant Family	
Scientific Name	Polygonaceae Juss
Common Name	Buckwheat Family/Knotweed family
Species Scientific Name	
Scientific Name	<i>Eriogonum heracleoide</i> Nutt.

Varieties	Eriogonum heracleoides Nutt. var. angustifolium (Nutt.) Torr. & A. Gray Eriogonum heracleoides Nutt. var. heracleoides Eriogonum heracleoides Nutt. var. leucophaeum Reveal
Sub-species	
Cultivar	
Common Synonym(s)	<i>Eriogonum heracleoides</i> var. <i>micranthum</i> Gand., <i>E. h.</i> var. <i>multiceps</i> Gand., <i>E. h.</i> var. <i>rydbergii</i> Gand., <i>E. h.</i> var. <i>simplex</i> S. Watson ex. Piper, <i>E.</i> <i>h.</i> var. <i>utahensis</i> Gand., <i>E. h.</i> var. <i>virile</i> Gand.
Common Name(s)	Parsnipflower Buckwheat, Wyeth buckwheat, creamy buckwheat, hercules buckwheat, indian tobacco, umbrella plant, wild buckwheat, whorled buckwheat (10)
Species Code (as per USDA Plants database)	ERHE2
<b>GENERAL INFORMATION</b>	
Geographical range	Oregon, Washington, California, Idaho, Montana, Utah, Nevada, Wyoming, and Colorado. (6) Maps above. Some in British Columbia (10)
Ecological distribution	Rocky places, lithosolic (steep slope and shallow soil) areas (4).
Climate and elevation range	7000 ft or lower elevation (6), low humidity, full sun.
Local habitat and abundance	Somewhat rare, but an important food source for insects, elk, deer, bison, and shelter for lizards, and a medicinal use for humans. There are over 125 species of Eriogonum. (6)
Plant strategy type / successional stage	Competes against shorter shrubs or sagebrush, and tolerates rocky soil and low water availability. Colonizer plant that can withstand difficult terrain and low nutrient and shallow depth soil. (6)
Plant characteristics	Long lived herbaceous perennial. Woody crown with clusters of white flowers tinged small amounts of white. Basal leaves covered in short hairs connected to the conjunction of stems, and many stems(2 to 10 bracts) connected to one main stem below. Forms mats or clumps of flowers and leaves. (4)(6)(7)(10)

<b>PROPAGATION DETAILS: FROM SEED</b>	
Ecotype	Paradise Creek drainage near Pullman, WA (2)
Propagation Goal	Plants
Propagation Method	Seed
Product Type	Container (plug)
Stock Type	10 cubic inches
Time to Grow	4 months
Target Specifications	Tight root plug container
Propagule Collection Instructions	Seed is collected in Late July to early August when the seeds are a light red-brown color. Store seeds in paper bags at room temp until cleaned. (2)
Propagule Processing/Propagule Characteristics	Small amounts are rubbed at a time to free the seed from the chaff and then cleaned with an air column. Then they are threshed with a hammer mill, cleaned with an air screen, and stored in 40F degrees and 40% humidity conditions. There were 321 seeds per gram for this ecotype. (2)
Pre-Planting Propagule Treatments	30-40 days to wait before sowing at least, and 12 weeks of cold moist stratification is required for best germination rates. Can be stored up to 5 years. (2)
Growing Area Preparation / Annual Practices for Perennial Crops	Late October or Early November seed is sown in 10 inch conetainers filled with Sunshine Mix and covered with a thin layer of coarse grit to prevent seeds from floating when being watered. Watered deeply and placed outside, or moist stratified in a refrigerator at 35F for 90-120 days before sowing in a greenhouse. (2)
Establishment Phase Details	Sown in the fall, medium is kept moist.
Length of Establishment Phase	Starts in 4 days, complete in 12 days
Active Growth Phase	Water plants deeply every 3rd day, fertilized once per week with a fertilizer containing micronutrients. Switch to every other day watering if soil dries out too fast. (2)
Length of Active Growth Phase	3 months
Hardening Phase	Move plants to a cold frame in mid April. water every other day if the weather is cool, and every day if there are hot dry spells. (2)

Length of Hardening Phase	2-3 weeks
Harvesting, Storage and Shipping	Not mentioned
Length of Storage	Not mentioned
Guidelines for Outplanting / Performance on Typical Sites	Most plants with need 2-3 years to produce seed, but some will flower one year following outplanting. (2)
Other Comments	After the hardening phase, nothing is mentioned for storage or shipping.
<b>PROPAGATION DETAILS: SEEDS</b>	
Ecotype	USFS, Boise National Forest, Lucky Peak Nursery, Boise, Idaho: 2842 ft. elevation – grown for and collected by USFS, Wallowa–Whitman National Forest, LaGrande Ranger District, LaGrande, Oregon (3)
Propagation Goal	Seeds
Propagation Method	Seed
Product Type	Propagules (seeds, cuttings, poles, etc)
Stock Type	18 pounds of seeds
Time to Grow	0 weeks, because it is a seed harvesting protocol. otherwise 1 year for plants made for raised beds
Target Specifications	Clean and viable seeds OR grow plugs to be transplanted into raised beds to increase seed production. (1) (3)
Propagule Collection Instructions	Collect all of the flower heads and put into a paper bag before cleaning. Collect in July through August and manually rub the seeds to get them out of the chaff if no machinery is available (4)
Propagule Processing/Propagule Characteristics	Seed lot is processed with a Westrup model brush machine at speed 3 to remove flower heads, then they are air screened with medium speed and medium air. purity: 97% (3) No longevity mentioned.
Pre-Planting Propagule Treatments	Seeds will germinate without pretreatment. Cold storage for seeds, 33-38F degrees (3)
Growing Area Preparation / Annual Practices for Perennial Crops	Rocky, sandy, well draining soil media mixes in 3in pots for ideal germination and growing(4)

Establishment Phase Details	Sown in fall in a course soil medium, with peat moss to prevent damping off. The following spring, transplant seedlings into 3in pots and allow to grow until closer to 90in tall. (4)
Length of Establishment Phase	NA
Active Growth Phase	NA
Length of Active Growth Phase	NA
Hardening Phase	NA
Length of Hardening Phase	NA
Harvesting, Storage and Shipping	Storage of pure seed is cold storage, 33-38F degrees(3)
Length of Storage	5 years
Guidelines for Outplanting / Performance on Typical Sites	90cm tall plants ideal for outplanting.
Other Comments	There is very little information on growing parsnipflower buckwheat plants to increase seed production. A mix of 2 protocols and book entries was used, and information about growing plants is limited in reference to seed product types.
<b>INFORMATION SOURCES</b>	
References	See Below
Other Sources Consulted	See Below
Protocol Author	Catalina Hagen
Date Protocol Created or Updated	05/19/2026
There are no vegetative methods in books or online. Experiments would need to be concluded to see if this is a viable propagation method.	

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