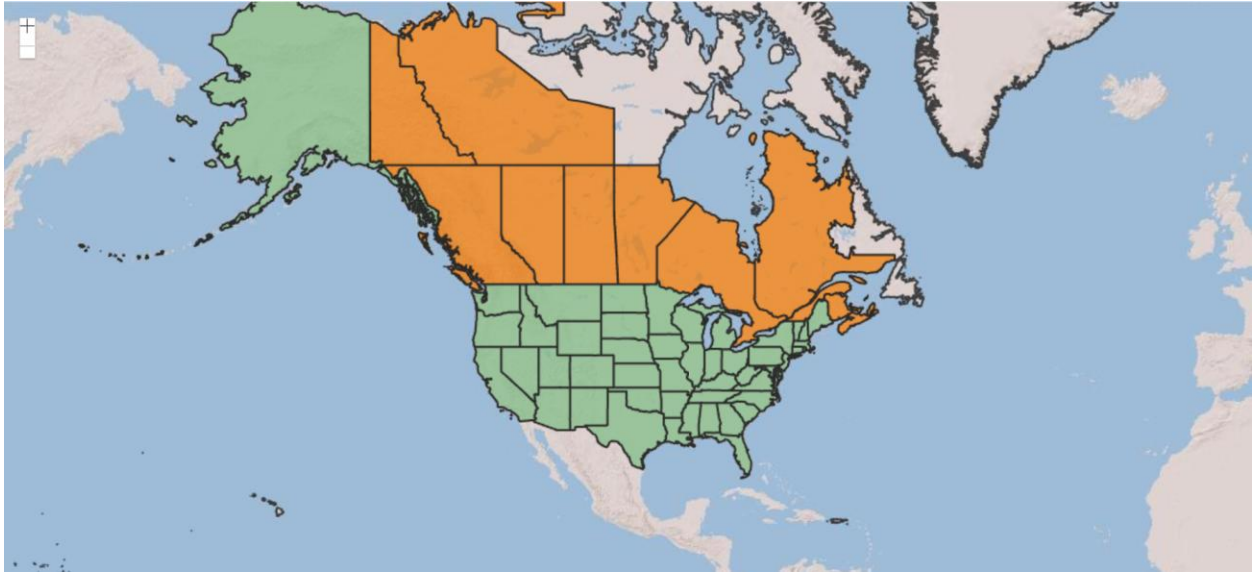


Plant Propagation Protocol for *Chenopodium berlandieri*
 ESRM 412 – Native Plant Production



(1)

TAXONOMY	
Plant Family	
Scientific Name	Chenopodiaceae Vent (1).
Common Name	Goosefoot (1).
Species Scientific Name	
Scientific Name	<i>Chenopodium Berlandieri</i> Moq (1).
Varieties	<i>Chenopodium berlandieri</i> Moq. var. <i>berlandieri</i> <i>Chenopodium berlandieri</i> Moq. var. <i>boscianum</i> (Moq.) Wahl <i>Chenopodium berlandieri</i> Moq. var. <i>bushmanum</i> (Aellen) Cronquist <i>Chenopodium berlandieri</i> Moq. var. <i>macrocalyrium</i> (Aellen) Cronquist <i>Chenopodium berlandieri</i> Moq. var. <i>sinuatum</i> (Murr) Wahl <i>Chenopodium berlandieri</i> Moq. var. <i>zschackii</i> (Murr) Murr ex Asch. (1).
Sub-species	<i>Chenopodium berlandieri</i> Moq. ssp. <i>nuttalliae</i> (Saff.) H.D. Wilson & Heiser (1).
Cultivar	No information found.

Common Synonym(s)	<i>Botrys berlandieri</i> , <i>Chenopodium berlandieri</i> [unranked] <i>farinosum</i> <i>Chenopodium berlandieri forma sinuatum</i> <i>Chenopodium berlandieri subsp. boscianum</i> <i>Chenopodium berlandieri forma integrum</i> (3).
Common Name(s)	Lamb's quarters, lambsquarter, goosefoot, pitseed goosefoot, wild spinach, Indian spinach, pigweed, frostblite, fathen, bacon weed, poulette, chou grass (2).
Species Code (as per USDA Plants database)	CHBE4 (1).
GENERAL INFORMATION	
Geographical range	Alaska, Contiguous United States, Canada (7).
Ecological distribution	Roadsides, pastures, disturbed prairie, gardens, and waste ground, floodplain forest (5).
Climate and elevation range	<i>Chenopodium berlandieri</i> is an extremely versatile plant and can be found at elevations ranging from sea level to 3,000 meters (7).
Local habitat and abundance	Disturbed roadside edge with <i>Thinopyrum</i> <i>intermedium</i> , <i>Melilotus alba</i> , <i>Bassia scoparia</i> , and <i>Leymus cinereus</i> common (9).
Plant strategy type / successional stage	Weedy (6).
Plant characteristics	<i>Chenopodium Berlandieri</i> is an herb with slender arching branches and alternating leaves. Flowers are small and clustered into dense heads at the top of the plant. Fruits are dry and inflated at 1.2-15mm in diameter, with small seeds across the surface (4) .
PROPAGATION DETAILS: FROM SEED	
Ecotype	<i>Chenopodium berlandieri</i> from the United States National Germplasm system, which had been grown out and harvested in the Plum Bayou Garden, near Little Rock, Arkansas, in 2017 (9).
Propagation Goal	Plants (8).
Propagation Method	Seed (9).
Product Type	Container (plug) (9).
Stock Type	No information found.
Time to Grow	90 days (10).
Target Specifications	10-100cm (10).
Propagule Collection Instructions	Harvest between September and November. Begin by cutting the entire plant off at the base of the stem

	with shears, then place the plants in paper bags to dry in a cool, dark place for around a week. Seeds should then be stripped from the plant and dried further on trays lined with chiffon. Harvest as late as possible to maximize yield (9).
Propagule Processing/Propagule Characteristics	No information found.
Pre-Planting Propagule Treatments	Cold stratification of at least four weeks (9).
Growing Area Preparation / Annual Practices for Perennial Crops	Cover with ¼ inch of soil in a garden bed (9).
Establishment Phase Details	Several methods: <ol style="list-style-type: none"> 1. Plant seeds in the fall to mimic natural dispersal. 2. Plant seeds in the late winter, as soon as the soil is thawed. 3. Mix seeds into wet top soil, store this mess in a refrigerator, then spread it over your garden bed.
Length of Establishment Phase	One month (9).
Active Growth Phase	No information found.
Length of Active Growth Phase	No information found.
Hardening Phase	No information found.
Length of Hardening Phase	No information found.
Harvesting, Storage and Shipping	Store seeds in a freezer (9).
Length of Storage	No information found.
Guidelines for Outplanting / Performance on Typical Sites	No information found.
Other Comments	<i>Chenopodium berlandieri</i> can be prepared for consumption in a manner similar to quinoa (9). The plant was also used as a sustainable and abundant food source by American Indigenous groups (2).
INFORMATION SOURCES	
References	See below
Protocol Author	Max Wang
Date Protocol Created or Updated	5/6/25

References:

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