

Plant Propagation Protocol for *Potentilla flabellifolia*

ESRM 412 – Native Plant Production

URL: <https://courses.washington.edu/esrm412/protocols/2024/POFL5.pdf>

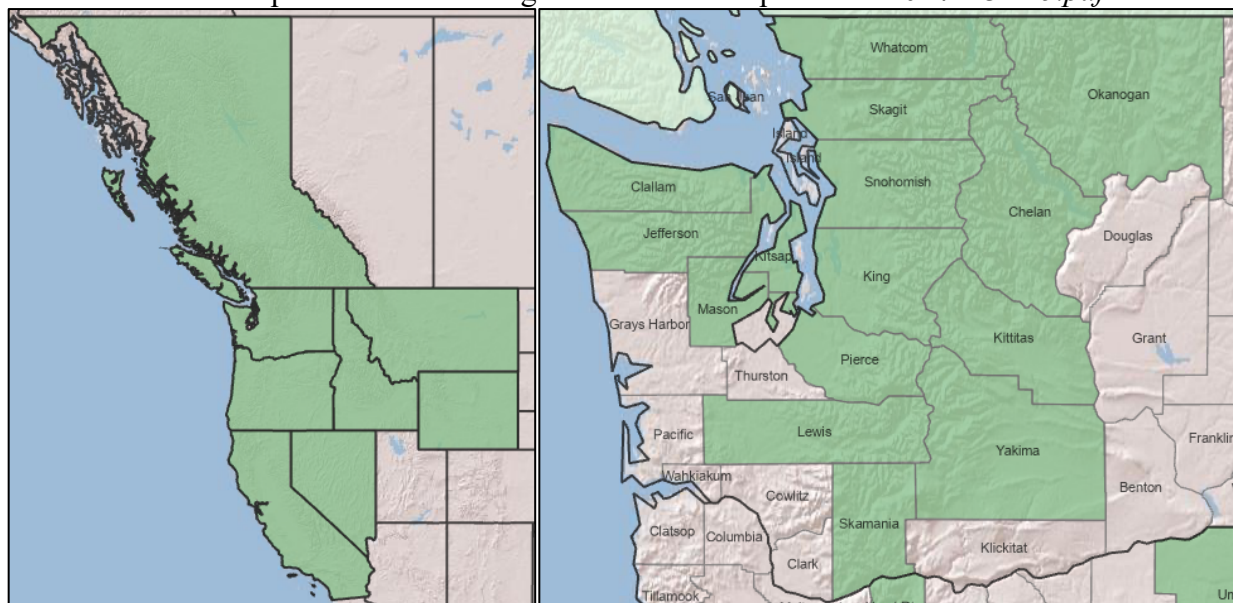


Figure 1. *Potentilla flabellifolia* global distribution (left) and Washington distribution (right)¹



Figure 2. Photo of *Potentilla flabellifolia* flower (left) and leaves (right) from the Burke Image Collection².

TAXONOMY

Plant Family	
Scientific Name	<i>Rosaceae</i>
Common Name	Rose family
Species Scientific Name	
Scientific Name	<i>Potentilla flabellifolia</i> Hook. Ex Torr. & A. Gray
Varieties	
Sub-species	
Cultivar	
Common Synonym(s)	

Common Name(s)	Fan-leaf cinquefoil, fringe-leaf cinquefoil, fan-foil ²
Species Code (as per USDA Plants database)	POFL3
GENERAL INFORMATION	
Geographical range	See Figure 1. Found in California, Idaho, Montana, Nevada, Oregon, Washington, and Wyoming. Also found in British Columbia. In Washington, it is found in subalpine habitats in Skamania, Yakima, Lewis, Pierce, Kittitas, King, Chelan, Snohomish, Skagit, Whatcom, Okanagan, Kitsap, Mason, Clallam, and Jefferson counties ¹
Ecological distribution	At middle to high elevation forests, subalpine meadows, and alpine fellfields ^{2,3}
Climate and elevation range	1300-2100 ⁴
Local habitat and abundance	Common in subalpine meadows with <i>Oreostemma alpigenus</i> , <i>Carex spectabilis</i> , <i>Juncus drummondii</i> , <i>Veronica cusickii</i> , <i>Microseris alpestris</i> , <i>Castilleja parviflora</i> , <i>Hieracium gracile</i> , and <i>Bistorta bistortoides</i> ⁵ .
Plant strategy type / successional stage	Colonizer ⁵ , facultative wetland species ¹
Plant characteristics	Perennial rhizomatous forb ² . See Figure 2.
PROPAGATION DETAILS – Seeds	
Ecotype	NA
Propagation Goal	Plants
Propagation Method	Seeds (recommended over vegetation propagation ^{6,7})
Product Type	No published information on this topic.
Stock Type	No published information on this topic.
Time to Grow	Sow in mid-May for outplantings in mid to late September (J. Drown, pers. comm).
Target Specifications	No published information on this topic.
Propagule Collection Instructions	No published information on this topic.
Propagule Processing/Propagule Characteristics	No published information on this topic.
Pre-Planting Propagule Treatments	Cold-moist stratification ⁸ . Van Horn ⁹ reports some germination after chilling seed for 60 days at -1°C. J. Drown (pers. comm.) reports this species germinates readily without treatment, but achieves more uniform germination with 2 weeks of cold stratification or soaking for a few days followed by air-drying the seed surface.
Growing Area Preparation / Annual Practices for Perennial Crops	No published information on this topic.
Establishment Phase Details	No published information on this topic.

Length of Establishment Phase	Germination occurs within two to three weeks after soaking or cold stratification (J. Drown, pers. comm.).
Active Growth Phase	No published information on this topic.
Length of Active Growth Phase	No published information on this topic.
Hardening Phase	No published information on this topic.
Length of Hardening Phase	No published information on this topic.
Harvesting, Storage and Shipping	No published information on this topic.
Length of Storage	No published information on this topic.
Guidelines for Outplanting / Performance on Typical Sites	<i>P. flabellifolia</i> outplantings at Sunrise, Mt. Rainier have increased from 2% cover the year after planting to 7% cover 6 years after planting ¹⁰ .
Other Comments	Plants propagated using stem cuttings (dipped in 10.4% alpha Naphthyl acetamide, planted in September) did not survive the winter ⁹ .

PROPAGATION DETAILS – Vegetative

Ecotype	NA
Propagation Goal	Plants
Propagation Method	Vegetative – stem cuttings
Product Type	No published information on this topic.
Stock Type	NA
Time to Grow	No published information on this topic.
Target Specifications	No published information on this topic.
Propagule Collection Instructions	No published information on this topic.
Propagule Processing/Propagule Characteristics	No published information on this topic.
Pre-Planting Propagule Treatments	Miller and Miller ¹¹ collected stem cuttings of <i>P. flabellifolia</i> and dipped cuttings in rooting hormone, but no cuttings survived.
Growing Area Preparation / Annual Practices for Perennial Crops	No published information on this topic.
Establishment Phase Details	No published information on this topic.
Length of Establishment Phase	No published information on this topic.
Active Growth Phase	No published information on this topic.
Length of Active Growth Phase	No published information on this topic.
Hardening Phase	No published information on this topic.
Length of Hardening Phase	No published information on this topic.
Harvesting, Storage and Shipping	No published information on this topic.
Length of Storage	No published information on this topic.
Guidelines for Outplanting / Performance on Typical Sites	No published information on this topic.
Other Comments	This species is reported to be resistant to trampling impacts in high-foot-traffic areas ¹² .

INFORMATION SOURCES

References	See below.
Other Sources Consulted	

Protocol Author	Alexandra M. Howell
Date Protocol Created or Updated	05/22/24

REFERENCES

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Personal Communications:

Drown, Josh S. Horticulturist, Mount Rainier National Park. 25 April 2024.