

Plant Propagation Protocol for Fringecup, *Tellima grandiflora*
 ESRM 412 – Native Plant Production
 University of Washington
 Spring 2008



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TAXONOMY	
Family Names	
Family Scientific Name:	Saxifragaceae
Family Common Name:	Saxifrage Family
Scientific Names	
Genus:	<i>Tellima</i>
Species:	<i>grandiflora</i>
Species Authority:	(Pursh) Dougl. ex Lindl.
Common synonym(s)	
Genus:	<i>Tellima</i>
Species:	<i>odorata</i>
Species Authority:	T.J. Howell
Common Name(s):	Big Flower Tellima, Fringecup
Species Code (USDA Plant database):	TEGR2

GENERAL INFORMATION	
General Distribution	Moist woods, riparian zones and lower mountain slopes from S. Alaska to San Francisco Bay. It grows mainly west of the Cascades but it is also found through the Columbia River Gorge, E. British Columbia and N. Idaho and Montana. ^{2,4,5}
Climate and elevation range	Predominantly occurs in regions with Pacific maritime climate but it has also been identified in the moister areas of regions with interior continental climate, such as Idaho and Montana. Common at elevations from sea level to 1000 m. ^{2,4}
Local habitat and abundance	Moist forest understories and riparian zones of shady coniferous and deciduous forests throughout Puget Sound from the lowlands to mid elevations in the Cascades and Olympics. ^{2,4} Commonly found beneath red alder (<i>Alnus rubra</i>), big-leaf maple (<i>Acer macrophyllum</i>), Douglas-fir (<i>Pseudotsuga menziesii</i>), western red cedar (<i>Thuja plicata</i>), black cottonwood and western hemlock (<i>Tsuga heterophylla</i>). Strongly associated with sword fern (<i>Polystichum munitum</i>), salmonberry (<i>Rubus spectabilis</i>), thimbleberry (<i>Rubus parviflorus</i>), red elderberry (<i>Sambucus racemosa</i>), California hazelnut (<i>Corylus cornuta</i>), snowberry (<i>Symphoricarpos albus</i>) and other common understory shrubs. Creates mixed understory ground cover with Pacific waterleaf (<i>Hydrophyllum tenuipes</i>), foamflower (<i>Tiarella trifoliata</i>), youth-on-age (<i>Tolmiea menziesii</i>) and other understory groundcovers. ^{2,4,7}
Plant strategy type / successional stage	Associated with more mature forests. Generally it is not an early successional but it is capable of forming thick monotypic patches in forest gaps, along streambanks and along low elevation hiking trails indicating that it can take advantage of disturbances and therefore may be considered ruderal. ^{2,4} It is a tenacious native competitor against invasive weeds such as <i>Phalaris arundinacea</i> (Reed Canary Grass) and <i>Taraxacum officinale</i> (Common Dandelion). ⁶
PROPAGATION DETAILS	
Ecotype	Not available.
Propagation Goal:	Plants
Propagation Method:	Seed
Product Type:	Container (plug)
Stock Type:	4 inch pots
Time to Grow::	224 days from date seeds are sown to date ready for transplanting.
Target Specifications:	Germinants ready to plant after first year as 4 inch pots.
Propagule Collection:	Hand collect into porous bag ³

Propagule Processing/Propagule Characteristics:	7,560,000 seeds per pound, After screening, purity: 99% ³ Blooms in late Spring/Early Summer. Collect Seeds soon after. ¹
Pre-Planting Propagule Treatments:	Cold storage, 33-38 degrees Fahrenheit ³ (Typical low humidity, low temperature storage). ⁷
Growing Area Preparation / Annual Practices for Perennial Crops:	Seeds are surface sown in flats. ³
Establishment Phase:	Flats are watered with mist irrigation system. Seeds sown June 1 ³ or in greenhouse before last frost. ¹
Length of Establishment Phase:	112 days
Active Growth Phase:	Transplant to 4 inch pots containing standard potting mix. ³ Mature plants have height of 12-18 in. (30-45 cm) ¹
Length of Active Growth Phase:	112 days
Hardening Phase:	No reference of method in literature.
Harvesting, Storage and Shipping (of seedlings):	No reference of method in literature.
Length of Storage:	1 year
Guidelines for Outplanting / Performance on Typical Sites:	Transplant Survival averages 95%. ³ Because <i>Tellima grandiflora</i> is associated with sword fern (<i>Polystichum munitum</i>), salmonberry (<i>Rubus spectabilis</i>), thimbleberry (<i>Rubus parviflorus</i>), it likely favors moist environments, partial to full shade, ideally alongside other such understory species. Requires consistently moist soil. Spacings of 30 cm or less apart will result in more complete monotypic ground cover. Blooms in late Spring/Early Summer. ¹
Other Comments	Because it competes well against invasive weeds, it is useful in succession-strategy restoration projects if shade is established. ⁶ Fresh collected divisions could be installed immediately, especially in late fall/winter. Divisions most likely could be installed same season or potted for more mature plants the next season. ⁷ No references were made in the literature about direct seeding.
INFORMATION SOURCES	
References	<ol style="list-style-type: none"> 1) Dave's Garden, Inc. 2003. Plants Database. http://davesgarden.com/ Last access: April 15, 2008. 2) Hitchcock, C. Leo and Cronquist, Arthur. Flora of the Pacific Northwest. 1998. University of Washington Press, Seattle and London.

	<p>3) Native Plants Journal and Network. http://www.nativeplantsnetwork.org/ Last access: April 15, 2008.</p> <p>4) Pojar, Jim and McKinnon, Andy, eds. Plants of the Pacific Northwest Coast: Washington, Oregon, British Columbia and Alaska. 1994. Lone Pine Press, British Columbia.</p> <p>5) USDA, NRCS. 2002. The PLANTS Database, Version 3.5 (http://plants.usda.gov) National Plant Database Center. Last access: April 15, 2008.</p> <p>6) Mendenhall, Deborah. Washington Native Plant Society. Personal Interview: April 8, 2008.</p> <p>7) Pond, Rodney. http://depts.washington.edu/propplnt/Plants/EHUF_412_TEGR.htm, April 15, 2003. Last access: April 15, 2008.</p> <p>8) www.MostlyNatives.com Last access: April 15, 2009.</p> <p>9) Washington Native Plant Society. www.wnps.org Last access: April 15, 2008</p>
Protocol Author	Dylan Thomas Mendenhall
Date Protocol	04.15.08

Updated from protocol by Rodney Pond, April 15, 2003.
http://depts.washington.edu/propplnt/Plants/EHUF_412_TEGR.htm