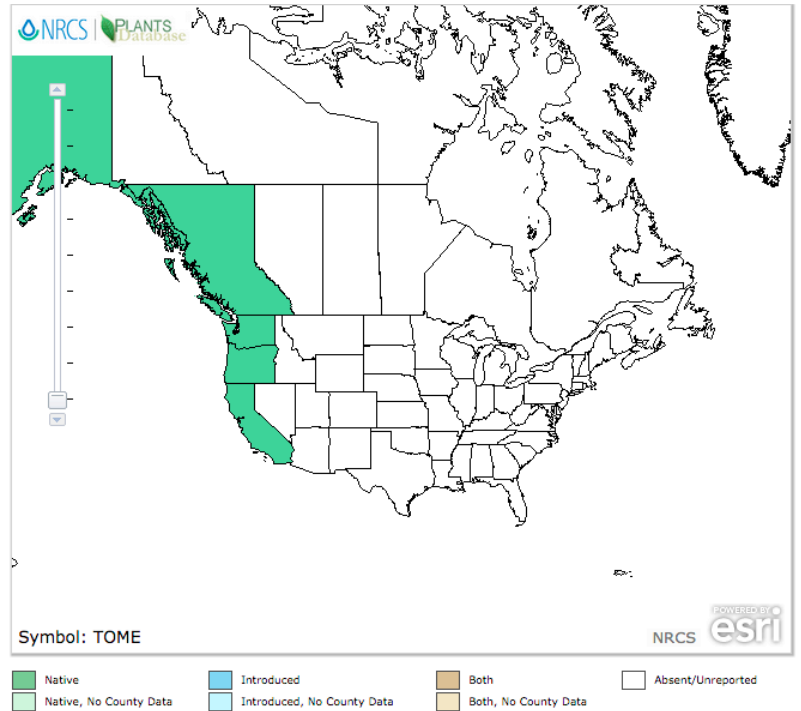
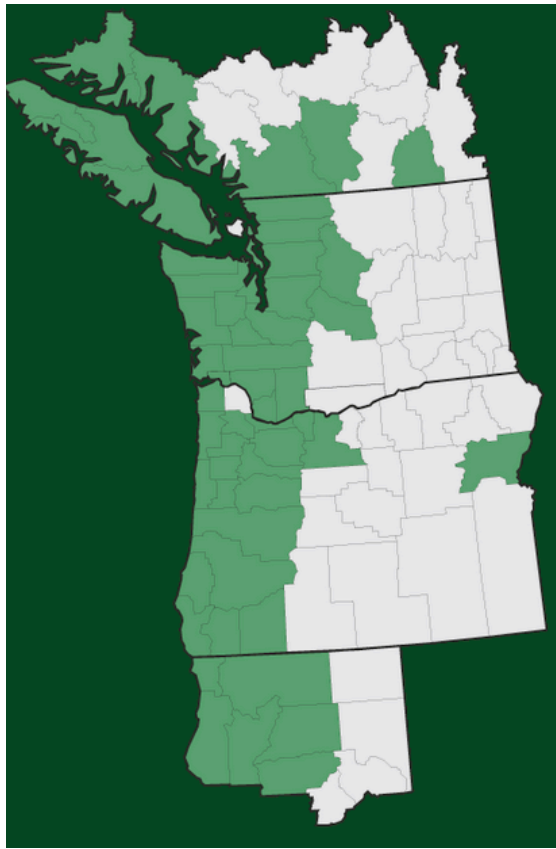


Plant Propagation Protocol for *Tolmiea menziesii*

ESRM 412 – Native Plant Production

Protocol URL: [https://courses.washington.edu/esrm412/protocols/\[TOME.pdf\]](https://courses.washington.edu/esrm412/protocols/[TOME.pdf])



TAXONOMY

Plant Family	Saxifragaceae
Scientific Name	<i>Tolmiea menziesii</i>

Common Name	Piggyback plant/Youth on Age/Thousand Mothers
Species Scientific Name	
Scientific Name	<i>Tolmiea menziesii</i> (Pursh) Torr. & A. Gray
Varieties	
Sub-species	Species is monotypic
Cultivar	
Common Synonym(s)	Tiarella menziesii Pursh <i>Tolmiea diplomenziesii</i> Judd, Soltis & P.S. Soltis
Common Name(s)	Piggyback plant, Youth on Age, Thousand Mothers
Species Code (as per USDA Plants database)	TOME
GENERAL INFORMATION	
Geographical range	Alaska, British Columbia, Washington, Oregon, California
Ecological distribution	FAC and FACW Wetlands, moist forests, and Riparian zones of streams.
Climate and elevation range	Moist climates at low elevations: -Rainfall from 98-1223 cm -Low to Middle elevation levels, 0-5905 ft.
Local habitat and abundance	Local Habitat: Forested wetlands (FAC, FACW) Along freshwater streams Mixed evergreen forests Douglas Fir and Red fir forests Redwood forests Abundance: Commonly found Associated Species: <i>Rubus spectabilis</i> (Salmonberry), <i>Rubus parviflorus</i> (Thimbleberry), <i>Polystichum munitum</i> (Sword fern), <i>Lysichitum americanum</i> (skunk cabbage), <i>Athyrium filix-femina</i> (lady fern) <i>Vaccinium parvifolium</i> (red huckleberry), <i>Thuja plicata</i> (Western red cedar), <i>Alnus rubra</i> (red alder), <i>Picea sitchensis</i> (Sitka spruce)
Plant strategy type / successional stage	Occurs in early-middle successional forests, and is associated with <i>Alnus rubra</i> in early successional sites. Shade and moist tolerant, drought intolerant
Plant characteristics	Perennial from rhizomes Forb/herb Groundcover Group: Dicot Trailing plant with tall stem, hairy Stem leaves long with shallow lobes, pointed tips and

	<p>sharp bristles, scalloped, and palmately veined Small plantlets occur on top of leaf Flowers are slender and spiked with 4 petals, petals brown or purple. Height: up to 30 cm. Blooms: May-August Growth habit: Clumps</p>
PROPAGATION DETAILS	
Ecotype	
Propagation Goal	Plants Leaf cuttings Divisions
Propagation Method	Seed and Vegetative (the latter is more common)
Product Type	Propagules (seeds, leaf cuttings, divisions)
Stock Type	
Time to Grow	Lifespan: about 2 years
Target Specifications	Size of mature plant: about 30 cm.
Propagule Collection Instructions	<p>Leaf cutting method: remove a single mature lead with plantlets, place stem in moist/warm soil in Spring months. After Parent leaf has dried, cut away from new growth.</p> <p>Division method: Separate root ball or remove offshoots.</p> <p>Planting seed: Plant outdoors in moist, warm soil in late Winter months. Plant seeds in shaded areas.</p>
Propagule Processing/Propagule Characteristics	Inoculum not necessary
Pre-Planting Propagule Treatments	None
Growing Area Preparation / Annual Practices for Perennial Crops	Soil PH can range between 5 and 7 Well-drained, moist soil Must be planted outside Spacing: 18-24 in.
Establishment Phase Details	<p>Seeds planted in late Winter Cuttings/Divisions planted in Spring</p> <p>Seeds and Propagules should germinate during late Spring or Summer months</p>
Length of Establishment Phase	1 year
Active Growth Phase	Spring-Late Summer
Length of Active Growth Phase	Spring-Late Summer
Hardening Phase	September-May
Length of Hardening Phase	About 8 months
Harvesting, Storage and Shipping	

Length of Storage	
Guidelines for Outplanting / Performance on Typical Sites	Outplanting conditions: Well-drained soil in shady location Plant will be buried by overstory leaves/needles and will lie dormant during the winter months. Flowering begins in May.
Other Comments	Plant is hardy and can be unruly.
INFORMATION SOURCES	
References	See Below
Other Sources Consulted	See Below
Protocol Author	Briana Brodin
Date Protocol Created or Updated	04/28/15

References:

"WTU Herbarium Image Collection - Burke Museum." *WTU Herbarium Image Collection - Burke Museum*. Burke Museum of Natural History and Culture. Web. 28 Apr. 2015. <<http://biology.burke.washington.edu/herbarium/imagecollection.php?Genus=Tolmiea&Species=menziesii>>.

"PLANTS Database | USDA PLANTS." *PLANTS Database | USDA PLANTS*. Natural Resources Conservation Service. Web. 28 Apr. 2015. <<http://plants.usda.gov/java/>>.

Herbarium Database." *Burke Museum*. University of Washington. Web. 28 Apr. 2015. <<http://biology.burke.washington.edu/herbarium>

Washington Native Plant Society: Piggyback Plant." *Washington Native Plant Society: Photograph of Tolmiea Menziesii*. Washington Native Plant Society, 1 Jan. 2013. Web. 28 Apr. 2015. <http://www.wnps.org/plants/tolmiea_menziesii.html

"Tolmiea Menziesii Information from NPGS/GRIN." *Tolmiea Menziesii Information from NPGS/GRIN*. United States Dept. of Agriculture. Web. 28 Apr. 2015. <<http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?417579>>.

"Calflora: Tolmiea Menziesii." *Calflora: Tolmiea Menziesii*. Calflora. Web. 28 Apr. 2015. <http://www.calflora.org/cgi-bin/species_query.cgi?where-cname=youth on age&ttime=1113357219>.

"ITIS Standard Report." *ITIS Standard Report*. ITIS Taxonomy. Web. 28 Apr. 2015. <http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=24533>

Morosco, Tony. "UCJEPS: Jepson Interchange: Tolmiea Menziesii (Pursh) Torr. & A. Gray." *UCJEPS: Jepson Interchange: Tolmiea Menziesii (Pursh) Torr. & A. Gray*. University and Jepson Herbaria, 1 Apr. 2001. Web. 28 Apr. 2015. <http://ucjeps.berkeley.edu/cgi-bin/get_cpn.pl?TOME>.

"NPIN: Native Plant Database." *Lady Bird Johnson Wildflower Center*. University of Texas. Web. 28 Apr. 2015. <http://www.wildflower.org/plants/result.php?id_plant=TOME>.

"Tolmiea Menziesii | Piggy-back Plant | Wildflowers of the Pacific Northwest." *Tolmiea Menziesii | Piggy-back Plant | Wildflowers of the Pacific Northwest*. Turner Photographics. Web. 28 Apr. 2015. <<http://www.pnwflowers.com/flower/tolmiea-menziesii>>.

Other Sources Consulted:

"Piggyback Plant (Tolmiea Menziesii)." Washington Native Plant Society. Web. 28 Apr. 2015. <http://www.wnps.org/landscaping/documents/piggyback_plant.pdf>.

"Piggyback Plant Care - Tolmiea Menziesii." *Piggyback Plant Care - Tolmiea Menziesii*. Guide to House Plants. Web. 28 Apr. 2015. <<http://www.guide-to-houseplants.com/piggyback-plant.html>>.