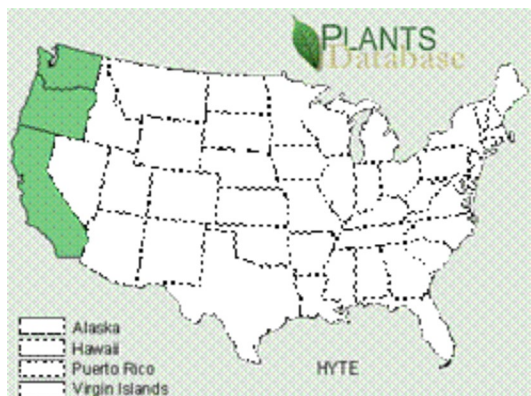


Species

Pacific waterleaf, *Hydrophyllum tenuipes* Heller



Tender leaved, fibrous rooted rhizomatous perennial herb to 80 cm tall. Leaves to 25 cm long by 15 cm wide, alternate, 5-9 pinnapalmately lobed with toothed margins. Flowers greenish-white to purple to blue, 5-7 mm long, bell shaped with conspicuous strongly exerted stamens in branched cymes. (1,3)



Range

Moist middle to low elevation forests of SW British Columbia, W Washington, W Oregon and NW California. (1, 3, 4)

Climate, elevation

Moist maritime climate in low to middle elevation forests (1, 3)

Local occurrence

Low to mid elevation Puget Sound area forests and along the western Olympic peninsula coast forests down to the mouth of the Columbia.

Found in Seattle in profusion at Golden Gardens Park in the mixed conifer/hardwood understory of steep west facing clayey soiled slopes. (1, 2, 3)

Habitat preferences

Moist, shady open conifer and hardwood forests (1, 3)

Plant strategy type/successional stage

Not found in the literature. Seems to found in fairly mature lowland mixed conifer/hardwood forests indicating it is probably a mid to late successional species. Locally in Golden Gardens, Seattle it seems to be an aggressive rhizomatous spreader capable of competing for space with English ivy (*Hedera helix*).

Associated species

Locally in Golden Gardens Park, Seattle found intermixed in profusion with dull Oregon-grape (*Berberis nervosa*), false Solomon's seal (*Smilacina racemosa*), and fringe-cup (*Tellima grandiflora*). Observed to grow under open structured understory shrubs such as beaked hazelnut (*Corylus californica*), oceanspray (*Holodiscus discolor*) and red elderberry (*Sambucus racemosa*). Pacific waterleaf seems to be less profuse (but present) beneath densely structured shrubs such as salmonberry (*Rubus spectabilis*) and snowberry (*Symphoricarpos albus*). Overstory trees found in Golden Gardens with Pacific waterleaf are western red cedar (*Thuja plicata*), Douglas-fir (*Psuedotsuga menziesii*), big-leaf maple (*Acer macrophyllum*), red alder (*Alnus rubra*), western hemlock (*Tsuga heterophylla*) and grand fir (*Abies grandis*).

May be collected as:

Not found in literature. Being a strongly rhizomatous species it can be assumed rhizomes pieces collected in fall would probably be successfully propagated. Seeds probably can also be collected in late summer.

Collection restrictions or guidelines

Typical conservative collection methods for genetic integrity and minimal ecosystem impact probably apply. Foliage is tender so fall/winter collection probably best.

Seed germination

Not found in literature. May need some period of cold stratification typical of Pacific Northwest forest understory species.

Seed life

Not found in literature

Recommended seed storage conditions

Not found in literature. Probably typical low temperature, low humidity conditions

Propagation recommendations

Given its rhizomatous, mat forming habit propagation using rhizome pieces that includes roots as well as shoot buds would probably be successful. Has been propagated in England as a horticultural species though propagation methods were not disclosed.

Soil or medium requirements

Not found in literature. Given its preference for shady, moist understories a standard high organic content potting soil would probably be best.

Installation form

Not found in literature. Second year pot ups would probably be mature enough to install in field. Rhizome transplants directly from donor to restoration site might also be successful.

Recommended planting density

Not found in literature. Where English ivy invasions are a concern close (25cm or less) spacing might be best.

Care requirements after installed

Pacific waterleaf's preference for moist understories would seem to indicate careful weekly watering during the first season would be vital if the installation site's soils were not naturally moist enough.

Normal rate of growth or spread; lifespan

Not found in literature. Seems to be a vigorous moderate to quick spreader. Lifespan unknown but like most perennial clonal species Pacific waterleaf once established probably persists for a long time.

Sources cited

- (1) Hitchcock, C. Leo and Cronquist, Arthur. Flora of the Pacific Northwest. 1998. University of Washington Press, Seattle and London.
- (2) Kozloff, Eugene. Plants and Animals of the Pacific Northwest. 1978. University of Washington Press, Seattle and London.
- (3) Pojar, Jim and McKinnon, Andy, eds. Plants of the Pacific Northwest Coast: Washington, Oregon, British Columbia and Alaska. 1994. Lone Pine Press, British Columbia.
- (4) USDA PLANTS National Database. <http://plants.usda.gov/>

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