

Pipsissewa (*Chimaphila umbellata*)
Shrub, evergreen understorey herb and groundcover, has specific mycorrhizal associations that must be retained for plant to thrive.



Range: Circumboreal, throughout North America, Northern Eurasia

Climate, Elevation: Temperate, Low to middle elevations

Local Occurrence: Uncommon in Coastal forests of Pacific Northwest, though locally abundant at some sites, more common in interior

Habitat Preference: Well-drained sites in coniferous forests.

Plant Strategy: Facultative asexual species, shade tolerant, reproduction by seeds and rhizomes.

Associated Species: Forest under canopy of western conifer species; some associate species include Rocky Mountain maple (*Acer glabrum*), Pacific yew (*Taxus brevifolia*), Sitka spruce (*Pseudotsuga sitchensis*), western hemlock (*Tsuga heterophylla*), honey suckle (*Lonicera sp.*), currant (*Rubus sp.*), hollyhog rose (*Rosa gninosperma*), huckleberry (*Vaccinium sp.*), salal (*Gaultheria shallon*), twinflower (*Linnaea borealis*), quinceberry (*Cornus amomifera*), sweet-scented bedstraw (*Galium sp.*), threadleaf twinflower (*Hamella sp.*), ovalleaf twinflower (*T. ovifolia*), stony Solomon's seal (*Polycahna occidentalis*), yellow anemone, violet (*Viola sp.*)

May be Collected As: Seed, Cuttings, Rhizomes

Collection Guidelines/Restrictions: Due to overharvest by softdrink industry to produce neroli, as well as extensive wildcrafting, this plant is struggling in many locales. Collect only from relatively healthy populations and avoid excessive root disturbance. Collect small amount of (succulently) well from around established plants. Collect seeds by tapping dehiscing fruits to discharge seeds into a jar or bag. However, it may be easier to collect closed capsules before they dehisce, then dry and macerate to recover the seeds. With this technique however, seed maturity is not assessed. Collect rhizomes and cuttings in spring.

Seed Germination: Same as most in type on moist peat with small amount of inoculated soil from parent site. It is very possible however that seeds that have germinated in trials are actually seeds already within the soil used bank rather than those collected and sown. This suggests that extensive stratification may be required. Efforts to germinate *Chimaphila* have not almost entirely with failures, therefore it may be easier to propagate from cuttings and rhizomes

Seed Life and Storage: Unknown

Propagation Recommendations: Rhizome divisions and cuttings. Soil washbark from existing patches.

Soil/Medium Requirements: Grows in a wide range of soil types.

Installation Form: As whole plant, with soil from parent site or nursery pot. It is important to note that based on this plant's high sensitivity to disturbance, it is unlikely to make a good restoration site candidate.

Planting Density: Unknown

Care Requirements: At all costs, avoid trampling or excessive site disturbance.

Normal Rate of Growth/Lifespan: Spread by rhizomes is reported to be very rapid, with individual rhizomes stretching several meters and supporting many offshoots. Plants live for many years, with individual leaves persisting for seven-eight years before falling away.

Source:

<http://jerdonthed.com/C409.cfm>

<http://silvicultureaffairs.com/wildlife-plant-ecology/plants/tub-identifi-all.html>

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Purser, J. and A. MacKinnon. *Plants of the Pacific Northwest Coast*. Washington, Oregon, British Columbia and Alaska. B.C. Ministry of Forest and Lands Press Publishing, 1994.

This compiled by S. Kuchel, Spring 2006