

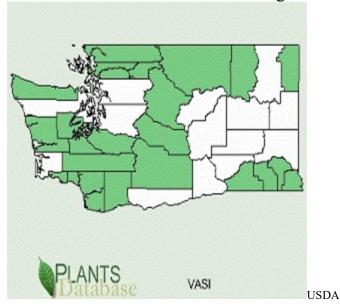
Photo by: Jamie Fenneman

Species: Valeriana sitchensis, Sitka Valerian, Mountain Heliotrope

Range: Coastal areas from Alaska to California; Olympic and Cascade Mountains

Climate, elevation: 1464-6080 meters, sub-alpine

Local occurrence: State of Washington



Habitat preferences: Moist ground on wooded slopes or meadows, sub-alpine, full Sun to

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partial shade. May become dwarf under extreme cold conditions, in young plants it has a pink or redness which is anthocyanin, a pigment that protects the plant from UV rays and also absorbs and concentrates infrared, heating the plant.

Plant strategy type: Early to late successional in meadow communities. Associated species: Valeriana acutiloba

May be collected as: seed, allow pods to dry on plant; break open to collect seeds Collection restrictions or guidelines:

- · Seeds are hand collected in mid September when achenes are turn tan and are easily separated from the receptacle. Seeds can be cleaned using a hammermill.
- Ripe seeds collected generally when pappus-like "plumules" or plumose calyx appendages, are beginning to unfurl are best: seeds shatter and blow away easily once these have opened. However if collected too early you can find incomplete seed fill.

Seed germination: Seed - sow spring in a cold frame and only just cover the seed because it requires light for germination. Cold moist stratification is needed for this species. *5 month outdoor cold moist stratification

Seed life: Seed longevity is unknown

Recommended seed storage conditions; Dry,

seed dormancy is classified as physiological dormancy

Propagation recommendations: Seeds preferred, but limited vegetative propagation, by cutting large rhizomes with several growing crown points, was also successful for this species although seed propagation was preferred to avoid the need for digging up rhizomes from their native sites

Propagation Methods:

From seed, direct sow outdoors in fall

If sowing indoors, stratify, winter sow in vented containers, coldframe or unheated greenhouse

Soil or medium requirements:

Soil pH requirements:

6.1 to 6.5 (mildly acidic)

6.6 to 7.5 (neutral)

7.6 to 7.8 (mildly alkaline

Installation form (form, potential for successful outcomes, cost): Place seedlings into individual pots when they are large enough to handle and plant out into their permanent positions in the summer if sufficient growth has been made. If the plants are too small to plant out, grow them on in the greenhouse or frame for their first winter and plant them out early in the following summer. Division in spring. Larger divisions can be planted out direct into their permanent positions. Pot smaller divisions and grow them on in light shade in a greenhouse or cold frame until they are growing well. Plant them out in the summer or the following spring.

Recommended planting density:

Spacing:

18-24 in. (45-60 cm)

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Care requirements after installed: medium moisture requirements

Normal rate of growth or spread; lifespan: establishment phase 3 months, active growth phase May - August

Sources cited:

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- 3. Mathews, Daniel. Cascade-Olympic Natural History. 1988
- 4. USDA Natural Resources Conservation District, http://nativeplants.for.uidaho.edu/network/view.asp?protocol_id=2642
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Data compiled by: Maura Shelton, April 27, 2006

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