Viola Glabella

TAXONOMY	
Family Names	
Family Scientific Name:	Violaceae
Family Common Name:	Violet
Scientific Names	
Genus:	Viola L.
Species:	Glabella
Species Authority:	Nutt.
Variety:	
Sub-species:	
Cultivar:	
Authority for Variety/Sub-species:	
Common Synonyms	None
Genus:	
Species:	
Species Authority:	
Variety:	
Sub-species:	
Cultivar:	
Authority for Variety/Sub-species:	
Common Names:	Stream violet, pioneer violet, smooth woodland violet, branching yellow violet
Species Code (as per USDA Plants database):	VIGL
GENERAL INFORMATION	
General Distribution	Southern Alaska to Sierran California on both sides of the Cascades, east to Montana, also in Asia[1]
Climate and elevation range	0–2600 m.[2]
Local habitat and abundance; may include commonly associated species	Forested wetlands, nitrogen rich moist forests. [3]
Plant strategy type / successional stage (stress-tolerator, competitor, weedy/colonizer,	

seral, late successional)	
PROPAGATION DETAILS	
Ecotype	
Propagation Goal	Plants
Propagation Method (Options: Seed or Vegetative):	Seed, vegetative (rooted stem)[4]
Product Type:	
Stock Type:	
Time to Grow (from seeding until plants are ready to be outplanted):	Plant seed in fall. Plant rooted stem in fall or spring[5]
Target Specifications (size or characteristics of target plants to be produced):	
Propagule Collection (how, when, etc):	Seed capsules of many violets disperse their seeds explosively so gather with this in mind[6] Blooms in spring.[7] Cleistogamous flower that produces more seed later after more showy spring bloom.[8]
Propagule Processing/Propagule Characteristics (including seed density (# per pound), seed longevity, etc):	
Pre-Planting Propagule Treatments (cleaning, dormancy treatments, etc):	Germination with treatment of Gibberellic acid[9]
Growing Area Preparation / Annual Practices for Perennial Crops	Water year-round; grow in cool, moist climate. Use well drained soil, rich in organic matter, partial sun. Violets root deeply.[10]
Establishment Phase:	
Length of Establishment Phase:	
Active Growth Phase:	
Length of Active Growth Phase:	
Hardening Phase:	
Length of Hardening Phase:	
Harvesting, Storage and Shipping:	

Length of Storage:	
Guidelines for Outplanting / Performance on Typical Sites (eg, percent survival, height or diameter growth, elapsed time before flowering):	Reliable plant.[11]
Other Comments:	

INFORMATION SOURCES

References:

1. Central Washington Native Plants Database, www.cwnp.org

2. University of California Treatment from the Jepson Manual. http://ucjeps.berkeley.edu/cgi-bin/get_JM_treatment.pl?7799,7800,7808

3. Washington State Department of Natural Resources Wetland field guides. www.dnr.wa.gov/htdocs/lm/field_guides/recognizing/vegetation.html

4. Royal British Columbia Museum. Collections and Research Database. http://www.royalbcmuseum.bc.ca/Natural_History/Plants.aspx Originally published in the Coastal Grower in Victoria, B.C.

5. Ibid.

6. Grow your own Native Landscape by Leigh, Michael. Native Plant Salvage Project, Washington State University. Revised, 1999.

7. Wildflowers of the Western Cascades by Ross, Robert and Chambers, Henrietta. Copyright 1988 by Timber Press.

8. Wildflowers of the Pacific Coast by Haskin, Leslie. Copyright 1967 by Binfords and Mort, Publishers.

9. First Supplement to the Second Edition of Seed Germination Theory and Practice. Deno, Norman C. Self Published. March 1, 1996, updated July 10, 1997.

10. The New Royal Horticultural Society Dictionary of Gardening, Vol. R-Z, Copyright 1992 by MacMillan Press Limited.

11. Native Plants of Northern Idaho for Landscaping and Restoration. 1999. Idaho Native Plant Society, White Pine Chapter.

Other Sources Consulted:	Plants of Western Oregon, Washington and British Columbia by Eugene Kozloff. Copyright 2005 by Timber Press USDA Plants Database, http://www.plants.usda.gov/ WTU Herbarium, Burke Museum, University of Washington. http://www.washington.edu/burkemuseum/fieldguide/index.php
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Plant Data Sheet

Viola glabella

Species (common name, Latin name) – Stream violet, wood violet, yellow violet, Johnny jump-up, pioneer violet, *Viola glabella*

Range – Alaska south to coast mountain ranges and Sierra Nevada Mountains of California, east to Montana (Stewart 1994).

Climate, elevation – Stream violet is found in the lowland to subalpine zones.

Local occurrence (where, how common) – The species is common throughout the mountains of the Pacific Northwest (Taylor and Douglas 1995).

Habitat preferences – Stream violet inhabits roadside ditches, streams and seepage areas in moist to wet subalpine meadows (Taylor and Douglas 1995) and boggy ground in forests (Stewart 1994).

Plant strategy type/successional stage (stress-tolerator, competitor, weedy/colonizer, seral, late successional) – Stream violet is tolerant of shade.

Associated species - Associated overstory species include Sitka spruce (Picea sitchensis), mountain hemlock (Tsuga mertensiana), Alaska-cedar (*Chamaecyparis nootkatensis*), lodgepole pine (*Pinus contorta*), and western white pine (*P. monticola*). It may also grow with hardwood species such as maples (*Acer*, spp.), birches (*Betula* spp.) or red alder (*Alnus* rubra). Understory associates include western swordfern (*Polystichum munitum*), false lily-of-the-valley (*Maianthemum dilatatum*), evergreen violet (*V. sempervirens*), red huckleberry(*Vaccinium parvifolium*), devils club (*Oplopanax horridum*), salmonberry(*Rubus spectablis*), and thimbleberry (*R. parviflorus*).

May be collected as: (seed, layered, divisions, etc.) – Seed or divisions from rooted pieces of the stem.

Collection restrictions or guidelines – Since it has explosive seed capsules, seeds will carpet the ground (take care when harvesting seed).

Seed germination (needs dormancy breaking?) – Seeds do not need dormancy breaking.

Seed life (can be stored, short shelf-life, long shelf-life) – No information was found on this topic.

Recommended seed storage conditions - No information was found on this topic.

Propagation recommendations (plant seeds, vegetative parts, cuttings, etc.) The easiest way to plant stream violet is from rooted pieces of the stem (Hebda, 2003). Division should be done in the autumn or just after flowering. Larger divisions can be planted out direct into their permanent positions, though it is best to pot up 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.

Seed - best sown in the autumn in a cold frame, or directly after collecting in the spring. Prick out the seedlings into individual pots when they are large enough to handle and plant them out in the summer.

Soil or medium requirements (inoculum necessary?) - Prefers a cool moist well-drained humus-rich soil in partial or dappled shade and protection from wind. Tolerates sandstone and limestone soils but becomes chlorotic if the pH is too high. Prefers a pH between 6 and 6.5 (Huxley 1992).

Installation form (form, potential for successful outcomes, cost) – Plant in a wooded site where the canopy consists mainly of deciduous species like maples, birches or alder. The easiest way to propagate stream violet is from rooted pieces of the stem. Plant these in the fall or spring. It also sprouts readily from seed. Sow the seed in the fall or find seedlings early in the spring (Hebda 2003).

Recommended planting density – Stream violet is easy to plant and may make a colony within a few years (Idaho Native Plant Society 1999). Therefore, do not plant it too densely.

Care requirements after installed (water weekly, water once etc.)

Normal rate of growth or spread; lifespan – A few individuals of stream violet can create a colony within a few years (Idaho Native Plant Society 1999).

Sources cited

Hebda, R. 2003. Natural History, Stream Violet. Royal British Columbia Museum

Huxley. A. *The New RHS Dictionary of Gardening. 1992.* MacMillan Press 1992 Excellent and very comprehensive, though it contains a number of silly mistakes. Readable yet also very detailed.

Idaho Native Plant Society. 1999. *Native Plants of Northern Idaho for Landscaping and Restoration.* White Pine Chapter.

Plants For A Future: http://www.ibiblio.org/pfaf/cgi-bin/arr_html?Viola+glabella

Stewart, C. 1994. *Wildflowers of the Olympics and Cascades. Nature Education Enterprises.* Port Angeles, Washington.

Taylor, R.J. and G.W. Douglas. 1995. *Mountain Plants of the Pacific Northwest.* Mountain Press Publishing Company. Missoula, Montana.

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