

***Botrychium simplex* E. Hitchc.**

little grape-fern

Ophioglossaceae (Adder's Tongue Family)

Status: State Watch

Rank: G5S3

General Description: From Wagner and Wagner (1993): Trophophore stalk 0-1¼ inch, 1½ times the length of the trophophore rachis. Blade dull to bright green to whitish green, linear to ovate-oblong to oblong to fully triangular with pinnae arranged ternately, simple to 2-pinnate, to 2¾ by 1/16 inch, fleshy to thin, papery or herbaceous. Pinnae or well developed lobes to 7 pairs, spreading to ascending, approximate to widely separated. Distance between 1st and 2nd pinnae frequently greater than between 2nd and 3rd pairs. Basal pinna pair commonly much larger and more complex than adjacent pair, cuneate to fan-shaped, strongly asymmetric, undivided to divided to tip, basiscopic margins ± perpendicular to rachis, acroscopic margins strongly ascending, basal pinnae often divided into 2 unequal parts, margins usually entire or shallowly sinuate, apex rounded, undivided and boat-shaped to strongly divided and plane, venation pinnate or like ribs of fan, with midrib. Sporophores mainly 1-pinnate, 1-8 times length of the trophophores.

Identification Tips: According to Wagner (1991), "typical, well-developed plants [*B. simplex*] are easily recognized by the stalked, ternate blade nestled close to the ground with the sporangia high above them on an elongated stalk."

Phenology: Leaves appear midspring to early fall.

Range: Interruptedly circumboreal; common in the northeastern United States and adjacent Canada. Scattered throughout Washington, in the Olympic Peninsula and Southwest Washington, Western Cascades, Eastern Cascades, and Okanogan Highlands physiographic provinces.

Habitat: In Washington, most occurrences are located in dry meadows and old homesteads. The taxon also occurs in moist meadows, coniferous forests, roadsides, and scree slopes. Elevation ranges from 2100 to 7600 feet.

Ecology: *Botrychium simplex* is highly variable and takes on many environmental forms depending on life stage, habitat conditions, and geographic location. In Washington, we have the western form of *Botrychium simplex* (see Wagner & Wagner 1993).

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State Status Comments: There are more than 50 occurrences in WA. Several occurrences have greater than 1000 plants, but a majority have fewer than 50 plants. This western form of *Botrychium simplex* may warrant sub-species or species status (Wagner & Wagner 1993).

Inventory Needs: Additional inventory is needed throughout Washington in order to understand the abundance and distribution of the species.

Threats and Management Concerns: Cattle grazing, recreation, invasion of non-native species, and herbicides are all threats to the taxon.

References:

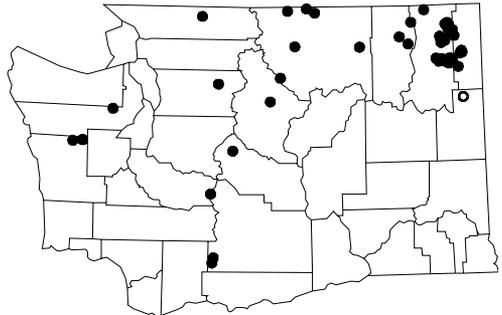
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Known distribution of
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in Washington



- Current (1980+)
- Historic (older than 1980)

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