Washington Flora Checklist

A checklist of the Vascular Plants of Washington State Hosted by the University of Washington Herbarium

Family: Polypodiaceae

4 terminal taxa (species, subspecies, and varieties).

The Washington Flora Checklist aims to be a complete list of the native and naturalized vascular plants of Washington State, with current classifications, nomenclature and synonymy.

Taxa included in the checklist:

- * Native taxa whether extant, extirpated, or extinct.
- * Exotic taxa that are naturalized, escaped from cultivation, or persisting wild.
- * Waifs (e.g., ballast plants, escaped crop plants) and other scarcely collected exotics.
- * Interspecific hybrids that are frequent or self-maintaining.
- * Some unnamed taxa in the process of being described.

Family classifications follow <u>APG IV</u> for angiosperms, PPG I (J. Syst. Evol. 54:563?603. 2016.) for pteridophytes, and Christenhusz et al. (Phytotaxa 19:55?70. 2011.) for gymnosperms, with a few exceptions. Nomenclature and synonymy at the rank of genus and below follows the <u>2nd Edition of the Flora of the Pacific Northwest</u> except where superceded by new information.

Accepted names are indicated with blue font; synonyms with black font. Native species and infraspecies are marked with **boldface** font.

Please note: This is a working checklist, continuously updated. Use it at your discretion.

Created from the Washington Flora Checklist Database on May 5th, 2024 at 2:44pm PST. Available online at https://burkeherbarium.org/waflora/

Comments and questions should be addressed to the checklist administrators: David Giblin (dgiblin@uw.edu)
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Ferns and Lycophytes:

Grammitidaceae (see Polypodiaceae)

Polypodiaceae [FNA2, HC, HC2] Polypody Fern Family

Synonyms:

Grammitidaceae [FNA2]

References: (none)

Polypodium Sw. [FNA2, HC, HC2]

Sp. Pl. 2: 1082. 1753; Gen. Pl. ed. 5, 485, 1754. polypody

Polypodium amorphum Suksd. [FNA2, HC2]

Werdenda. 1: 16. irregular polypody

Polypodium montense F.A. Lang [HC]

FNA2: "The diploid Polypodium amorphum is one of the progenitors of allotetraploid P . hesperium , and these two species are occasionally sympatric. Although P . amorphum can be mistaken for P . hesperium , consistent differences exist for separating these two species (see comments under P . hesperium). Hybridization between P . amorphum and P . hesperium results in triploid individuals with misshapen spores (F. A. Lang 1971)."

Polypodium glycyrrhiza D.C. Eaton [FNA2, HC, HC2]

Amer. J. Sci. Arts. ser. 2, 22: 138.

licorice fern

Polypodium aleuticum A.E. Bobrov

Polypodium falcatum Kellogg

Polypodium occidentale (Hook.) Maxon

Polypodium vulgare L., misapplied

Polypodium vulgare L. var. falcatum (Kellogg) H. Christ

Polypodium vulgare L. var. occidentale Hook. [Peck]

FNA2: "Polypodium glycyrrhiza hybridizes with P . calirhiza and with P . hesperium to produce sterile triploids with misshapen spores. Polypodium glycyrrhiza was involved in the origin of both of these allotetraploid species, and some individuals can be difficult to identify. Free versus anastomosing venation distinguishes this species from P . calirhiza ; the presence of adaxial hairs on the rachis separates it from P . hesperium . An additional character for distinguishing these taxa is spore length, which is less than 58 ${\rm \hat{A}\mu m}$ in diploid P . glycyrrhiza and more than 58 ${\rm \hat{A}\mu m}$ in the two tetraploid species."

Polypodium hesperium Maxon [FNA2, HC, HC2]

Proc. Biol. Soc. Wash. 13: 200.

western polypody

Polypodium prolongilobum Clute

Polypodium vulgare L. var. columbianum Gilbert [Peck]

Polypodium vulgare L. var. hesperium (Maxon) A. Nelson & J.F. Macbr.

FNA2: "Using morphologic and chromosomal data, F. A. Lang (1971) proposed that Polypodium hesperium originated through allotetraploidy involving P . glycyrrhiza and P . amorphum , a hypothesis recently supported by electrophoretic studies (C. H. Haufler, M. D. Windham, and E. W. Rabe, unpublished). Variations in spore surface morphology and banding patterns observed in isozyme studies indicate that P . hesperium may have originated more than once from different individuals of the same

species. Some collections of P . hesperium can be mistaken for P . glycyrrhiza , but the latter species is easily distinguished by its pubescent rachises, linear blade scales, and smaller spores (less than 58 ${\rm \hat{A}\mu m}$). Although P . amorphum has sporangiasters and P . hesperium lacks them, misshapen sporangia in P . hesperium can mimic these distinctive soral structures. Therefore, it is often necessary to use a combination of soral, stem scale, and blade scale features (discussed in the key) to separate P . hesperium from P . amorphum . Hybridization occurs between P . hesperium and each of its progenitor diploids to form triploid individuals with misshapen spores (F. A. Lang 1971). Rare, sterile, tetraploid hybrids with P . saximontanum have also been detected (M. D. Windham, unpublished)."

Polypodium scouleri Hook. & Grev. [FNA2, HC, HC2]

Icon. Filic. 1: 56.

leathery polypody, Scouler's polypody

FNA2: "The distinctive Polypodium scouleri has occasionally been assigned to the genus Goniophlebium because of its anastomosing venation and conspicuous areoles. Its venation pattern can be quite variable, however, and cannot be used as the sole feature distinguishing P. scouleri from P. californicum. Combining venation characteristics with others provided in the key distinguishes it clearly from its congeners in Polypodium. Some evidence suggests that P. scouleri hybridizes with P. californicum (S. A. Whitmore, unpubl.). I. Manton (1951) reported diploid and triploid cytotypes for P. scouleri, and variation in spore size suggests that the species may also include tetraploid populations."