Washington Flora Checklist

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

Family: Pteridaceae

14 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 except where superceded by new information.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 April 20th, 2024 at 6:28am PST. Available online at https://burkeherbarium.org/waflora/

Comments and questions should be addressed to the checklist administrators: David Giblin (dgiblin@uw.edu)
Peter Zika (zikap941@gmail.com)

Suggested citation:

Weinmann, F., P.F. Zika, D.E. Giblin, B. Legler. 2002+. Checklist of the Vascular Plants of Washington State. University of Washington Herbarium. https://burkeherbarium.org/waflora/. Accessed 20 Apr 2024.

Ferns and Lycophytes:

Parkeriaceae (see Pteridaceae)

Pteridaceae [FNA2, HC2] Maidenhair Fern Family

Synonyms:

Parkeriaceae [FNA2] Vittariaceae [FNA2]

FNA2: "Considerable disagreement exists concerning the circumscription and proper name of this family. The taxa comprising the Pteridaceae in this treatment were assigned to the Sinopteridaceae and Pteridaceae by D. B. Lellinger (1985) and were included in five families by R. E. G. Pichi-Sermolli (1977). The broad concept followed here is similar (except for the exclusion of Ceratopteris) to that espoused by R. M. Tryon and A. F. Tryon (1982), who applied the name Pteridaceae to the group. Until very recently, the newer name Adiantaceae was more commonly used. As represented in North America, Pteridaceae comprise three major evolutionary lines (the adiantoids, the pteroids, and the cheilanthoids). Characteristics holding the family together include abaxial (usually submarginal) sori that lack indusia or are protected by a reflexed or revolute leaf margin, spores that are usually globose-tetrahedral and trilete, and chromosome base numbers of 30 or 29 (rarely 27). The xeric-adapted members of the family (particularly the cheilanthoids) have undergone extensive parallel and convergent evolution, and they have frustrated attempts to produce a natural generic classification based on macromorphologic characteristics alone. Although some workers have aggregated species into a few large genera (e.g., J. T. Mickel 1979b), most tend to recognize smaller segregate genera based on a combination of morphologic, chromosomal, and biochemical data. The latter approach seems to provide a more useful, evolutionarily informative classification and is the one adopted here. Aspidotis and Notholaena are maintained here as distinct from Cheilanthes , and three recently described genera (Argyrochosma , Astrolepis , and Pentagramma) have been incorporated into the treatment. The reasons for these changes in generic circumscription are discussed under the individual genera."

References: (none)

Adiantum [FNA2, HC, HC2]

Sp. Pl. 2: 1094. 1753; Gen. Pl. ed 5, 485. 1754. maidenhair fern

Adiantum aleuticum (Rupr.) Paris [FNA2, HC2]

Rhodora. 93: 112.

maidenhair fern, northern maidenhair fern

Adiantum boreale C. Presl

Adiantum pedatum L. [FNA2, HC], misapplied

The combination A. aleuticum var. subpumilum has been published (Alverson, American Fern Journal, 100(4):230-233. 2010), so the full combination here can be var. aleuticum if one recognizes the distinctiveness of var. subpumilum. FNA2: "Although the western maidenhair has traditionally been interpreted as an infraspecific variant of Adiantum pedatum, the two taxa are reproductively isolated and differ in an array of morphologic characteristics. Therefore, they are more appropriately considered separate species (C. A. Paris and M. D. Windham 1988). Morphologic differences between A. pedatum and A. aleuticum are subtle; the two may be separated, however, using characteristics in the key. Adiantum aleuticum occurs in a variety of habitats throughout its range, from moist, wooded ravines to stark serpentine barrens and from coastal cliffs to subalpine boulder fields. Although morphologic differences exist among populations in these diverse habitats, they are not consistent. Consequently, infraspecific taxa are not recognized here within A. aleuticum."

var. *aleuticum* [HC2]

Aleutian maidenhair fern, western maidenhair fern

Adiantum pedatum L. var. aleuticum Rupr. [Abrams]

Aspidotis [FNA2, HC, HC2]

Gen. Fil. 68. 1947.

aspidotis, Indian's dream

Aspidotis densa (Brack.) Lellinger [FNA2, HC, HC2]

Amer. Fern J. 58: 141.

Oregon, Indian's dream, podfern

Cheilanthes siliquosa Maxon [Peck]

Cryptogramma densa (Brack.) Diels [VPPNW1]

Onychium densum Brack.

Pellaea densa (Brack.) Hook.

Cryptogramma [FNA2, HC, HC2]

Narr. Journey Polar Sea. 767. 1823.

parsley-fern, rock-brake

Cryptogramma acrostichoides R. Br. [FNA2, HC2]

Narr. Journey Polar Sea. 754, 767.

American parsley-fern, American rock-brake

(see also Cryptogramma cascadensis)

Cryptogramma crispa (L.) R. Br. ex Hook. ssp. acrostichoides (R. Br.) Hultén

Cryptogramma crispa (L.) R. Br. ex Hook. var. acrostichoides (R. Br.) C.B. Clarke [HC]

FNA2: "Cryptogramma acrostichoides has often been treated as a variety or subspecies of the strictly European Cryptogramma crispa (Linneaus) R. Brown, which has a chromosome number of 2 n = 120."

Cryptogramma cascadensis E.R. Alverson [FNA2, HC2]

Amer. Fern J. 79: 95.

Cascades parsley-fern, Cascades rock-brake

FNA2: "Populations of Cryptogramma cascadensis were previously identified as C. acrostichoides."

Cryptogramma stelleri (S.G. Gmel.) Prantl [FNA2, HC, HC2]

Bot. Jahrb. Syst. 3: 413.

fragile rock-brake, slender rock-brake, Steller's rock-brake

Pteris stelleri S.G. Gmel.

Myriopteris [HC2]

lace-fern, lip fern

Myriopteris gracilis Fée [Grusz & Windham 2013, HC2]

Mém. Fam. Foug. 5: 150, t. 29, f. 6.

Fee's lace-fern, slender lace-fern, Fee's lip fern

Cheilanthes feei T. Moore [FNA2, HC]

Reports of Cheilanthes lanosa (Michx.) D.C. Eaton from the Olympic Peninsula (VPPN1) have not been confirmed by FNA or Buckingham et al. (1995). FNA2: "Cheilanthes feei is an apogamous triploid of unknown parentage. It has small, beadlike blade segments similar to those of subg. Physapteris , but most morphological characteristics suggest a clear relationship to members of subg. Cheilanthes (T. Reeves 1979). The species is most often confused with C . parryi , from which it can be distinguished by its thinner, sparser pubescence and smaller ultimate segments."

Myriopteris gracillima (D. C. Eaton) J. Sm. [Grusz & Windham 2013, HC2]

Hist. Fil. 280.

lace lip fern

Cheilanthes gracillima D. C. Eaton [FNA2, HC]

FNA2: "Cheilanthes gracillima is a well-marked species, but it apparently hybridizes with C . intertexta (see reticulogram) to produce plants of intermediate morphology with malformed spores that have been called C . gracillima var. aberrans M. E. Jones (A. R. Smith 1974)."

Myriopteris intertexta (Maxon) Grusz & Windham [Grusz & Windham 2013]

PhytoKeys 32: 57. coastal lip fern

Cheilanthes intertexta (Maxon) Maxon in Abrams [FNA2]

Recently (2024) confirmed in WA based on locality from 2009 collection misidentified as M. gracillima; Jepson eFlora: "Allotetraploid hybrid of Myriopteris covillei and Myriopteris gracillima."

Pellaea [FNA2, HC, HC2]

Fil. Spec. 59. 1841.

cliff-brake

Pellaea brachyptera (T. Moore) Baker [FNA2, HC2]

Syn. Fil. ed. 2. 477. Sierran cliffbrake

Platyloma brachyptera T. Moore

FNA2: "The distinctive Pellaea brachyptera reportedly hybridizes with P . mucronata (A. F. Tryon 1957; D. B. Lellinger 1985); the hybrids are morphologically intermediate plants with malformed spores."

Pellaea breweri D.C. Eaton [FNA2, HC, HC2]

Proc. Amer. Acad. Arts. 6: 555.

Brewer's cliffbrake

FNA2: "Pellaea breweri is distinguished from other North American taxa (except for some populations of P . glabella) by the presence of prominent articulation lines near the base of the petiole. The leaves are easily detached, and many herbarium specimens consist of separate leaves and stems, the latter covered with petiole bases of approximately equal length."

Pellaea gastonyi Windham [FNA2, HC2]

Contr. Univ. Michigan Herb. 19: 36.

Gastony's cliff-brake

The specimen at RM was annotated by Michael Windham, author of the taxon, in 2006. FNA2: "Pellaea gastonyi is an apogamous tetraploid that has originated through repeated hybridization between P . atropurpurea and P . glabella . Isozyme studies (G. J. Gastony 1988) indicate that P . glabella subsp. missouriensis was the diploid parent of plants found in Missouri, whereas diploid P . glabella subsp. occidentalis was involved in the origin of P . gastonyi populations occurring in western North America. Pellaea gastonyi is most often confused with P . atropurpurea , from which it differs in having sparsely villous rachises, smaller ultimate segments, and spores averaging more than 62 µm in diameter."

Pellaea glabella Mett. ex Kuhn [FNA2, HC, HC2]

Linnaea. 36: 87. smooth cliff-brake

ssp. occidentalis (E.E. Nelson) Windham [FNA2, HC2]

Contr. Univ. Michigan Herb. 19: 39.

western smooth cliff-brake

Pellaea glabella Mett. ex Kuhn var. occidentalis (E.E. Nelson) Butters [HC]

ssp. simplex (Butters) A. Löve & D. Löve [FNA2, HC2]

Taxon. 26: 325. simple cliff-brake

Pellaea atropurpurea (L.) Link var. simplex (Butters) C.V. Morton

Pellaea glabella Mett. ex Kuhn var. simplex Butters [HC]

Pellaea occidentalis (E.E. Nelson) Rydb. ssp. simplex (Butters) Gastony

Pellaea suksdorfiana Butters [Abrams]

FNA2: "This western counterpart of Pellaea glabella subsp. glabella is an apogamous tetraploid. A. F. Tryon (1957) and D. B. Lellinger (1985) hypothesized that it might have arisen as a hybrid between the western diploid member of the P . glabella complex (here called subsp. occidentalis) and P . atropurpurea . G. J. Gastony (1988) has shown conclusively, however, that P . glabella subsp. simplex is an autopolyploid derivative of subsp. occidentalis and does not contain genes contributed by P .

atropurpurea."

Pentagramma [FNA2, HC2]

Windham, & E. Wollenweber, Amer. Fern J. 80: 15. 1990. gold-back fern

Pentagramma triangularis (Kaulf.) Yatsk., Windham & E. Wollenw. [FNA2, HC2]

Amer. Fern J. 80: 15. gold fern, gold-back fern

Pentagramma triangularis (Kaulf.) Yatsk., Windham & E. Wollenw. ssp. semipallida (J.T. Howell) Yatsk. [FNA2]

Pentagramma triangularis (Kaulf.) Yatsk., Windham & E. Wollenw. ssp. triangularis [FNA2]

Pityrogramma triangularis (Kaulf.) Maxon [HC]

Pityrogramma triangularis (Kaulf.) Maxon var. triangularis

FNA2: "We here restrict Pentagramma triangularis subsp. triangularis to plants with yellow farina and glabrous adaxial leaf surfaces occurring throughout a large region in westernmost North America. This subspecies comprises a complex of morphological, cytological, and phytochemical variants, at least some of which may deserve formal taxonomic recognition, following more detailed studies. Plants with yellow farina reported from Arizona, Nevada, and Utah may represent tetraploid hybrids between P . triangularis subsp. triangularis and P . triangularis subsp. maxonii and are not mapped herein."

Vittariaceae (see Pteridaceae)