

Washington Flora Checklist

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

Family: Orchidaceae

43 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 [APG IV](#) 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synonymy at the rank of genus and below follows the [2nd Edition of the Flora of the Pacific Northwest](#) except where superseded by new information.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 November 1st, 2024 at 11:46am PST.
Available online at <https://burkeherbarium.org/waflora/>

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Monocots:

Orchidaceae [FNA26, HC, HC2] Orchid Family

Synonyms: (none)

The taxonomy presented here follows that presented in Flora of North America Volume 26.

References: (none)

Calypso [FNA26, HC, HC2]

Parad. Lond. plate 89. 1807.

[name conserved]

fairy-slipper, Venus-slipper

Calypso bulbosa (L.) Oakes [FNA26, HC, HC2]

Nat. Hist. Vermont. 1: 200.

calypso, fairy-slipper, Venus-slipper

var. **americana** (R. Br.) Luer [FNA26, HC2]

Native Orchids U.S. & Canada. 336.

calypso, fairy-slipper, Venus-slipper

Calypso americana R. Br.

Taxonomy follows FNA. Reported in Washington by FNA.

var. **occidentalis** (Holz.) B. Boivin [FNA26, HC2]

Naturaliste Canad. 94: 522.

calypso, fairy-slipper, Venus-slipper

Calypso bulbosa (L.) Oakes f. *occidentalis* Holz.

There is some range overlap between this and var. *americana*, and the varieties need study.

Taxonomy follows FNA.

Cephalanthera [FNA26, HC2]

De Orchid. Eur. 29. 1817.

phantom-orchid, snow-orchid

Eburophyton [HC]

Cephalanthera austiniae (A. Gray) A. Heller [FNA26, HC2]

Cat. N. Amer. Pl. ed. 2. 4. (as *austinae*).

phantom orchid

Chloraea austiniae A. Gray

Eburophyton austiniae (A. Gray) A. Heller [HC]

Corallorhiza [FNA26, HC, HC2]

Acta Helv. Phys.-Math. 2: 61. 1755; orthography conserved.

coral-root

Corallorhiza maculata (Raf.) Raf. [FNA26, HC, HC2]

Amer. Monthly Mag. & Crit. Rev. 2: 119.

spotted coralroot

Cladorhiza maculata Raf.

var. **maculata** [FNA26, HC2]

mer. Monthly Mag. & Crit. Rev. 2: 119.

spotted coralroot

Corallorhiza multiflora Nutt.

Corallorhiza multiflora Nutt. var. *sulphurea* Suksd.
Corallorhiza vancouveriana Finet

Taxonomy follows FNA. Varieties weakly defined, intergradient with broadly overlapping ranges, and need more study. Variety *maculata* is reported to flower 2-4 weeks later than var. *occidentalis*.

var. ***occidentalis*** (Lindl.) Ames [FNA26, HC2]

Enum. Orchids U.S. & Canada. 22.

western spotted coralroot

Corallorhiza grab-hamii Cockerell

Corallorhiza leimbachiana Suksd.

Corallorhiza maculata (Raf.) Raf. ssp. *occidentalis* (Lindl.) Cockerell

Corallorhiza multiflora Nutt. var. *occidentalis* Lindl.

Taxonomy follows FNA. Varieties weakly defined, intergradient with broadly overlapping ranges, and need more study. Variety *occidentalis* is reported to flower 2-4 weeks earlier than var. *maculata*.

var. ***ozettensis*** E. Tisch [HC2]

Madroño 48(1): 40-42, f. 1.

ozette coralroot

A Clallam Co., WA endemic.

Corallorhiza mertensiana Bong. [FNA26, HC, HC2]

Mém. Acad. Imp. Sci. St. Pétersbourg, Sér. 6, Sci. Math. 2: 165.

Pacific coralroot, western coralroot

Corallorhiza maculata (Raf.) Raf. ssp. *mertensiana* (Bong.) Calder & Roy L. Taylor

Corallorhiza purpurea L.O. Williams

FNA26: "In the Pacific Northwest *Corallorhiza mertensiana* is largely sympatric with *C. maculata* and occasionally intergrades with it. It frequently forms large clumps."

Corallorhiza striata Lindl. [FNA26, HC, HC2]

Gen. Sp. Orchid. Pl. 534.

striped coralroot

var. ***striata*** [FNA26, HC2]

Gen. Sp. Orchid. Pl. 534.

hooded coralroot, striped coralroot

Corallorhiza macraei A. Gray

Weakly defined varieties that need more study, and were not recognized in JPM. Intermediates are known from Oregon and California, and could be expected in Washington. Taxonomy provisionally follows Freudenstein (1997) and FNA.

var. ***vreelandii*** (Rydb.) L.O. Williams [FNA26, HC2]

Ann. Missouri Bot. Gard. 21: 343. (as *Corallorhiza*).

Vreeland's striped coralroot

Corallorhiza bigelovii S. Watson

Corallorhiza ochroleuca Rydb.

Corallorhiza striata Lindl. var. *flavida* Todsén & T.A. Todsén

Corallorhiza vreelandii Rydb.

These are the slightly smaller flowered members of the species, reported for Washington by FNA. Intermediates are known from Oregon and California, and could be expected in Washington. Taxonomy provisionally follows Freudenstein (1997) and FNA.

Corallorhiza trifida Châtel. [FNA26, HC, HC2]

Specim. Inaug. *Corallorhiza*. 8.

early coralroot, northern coralroot, yellow coralroot

Corallorhiza corallorhiza (L.) MacMill., invalidly published

Corallorhiza corallorhiza (L.) MacMill. var. *coloradensis* Cockerell

Corallorhiza innata R. Br.

Corallorhiza verna Nutt.

Corallorhiza wyomingensis Hellmayr & K. Hellmayr

FNA26: "Corallorhiza trifida is largely autogamous, although a syrphid fly (*Syrphus cinctellus*) was reported as a pollinator by F. Silen (1906). Various floral morphs exist, some with weak geographic correlation; they do not appear to warrant taxonomic recognition. Variants of *C. odontorhiza*, *C. wisteriana*, and *C. maculata* without red and purple pigments in sepals and petals are occasionally misidentified as *C. trifida*."

Cypripedium [FNA26, HC, HC2]

Sp. Pl. 2: 951. 1753; Gen. Pl. ed. 5, 408. 1754.

lady's-slipper

Cypripedium x columbianum Sheviak [HC2]

Columbia lady's-slipper, hybrid lady's-slipper

Cypripedium x columbiana Sheviak, orthographic variant

Described from British Columbia (Sheviak 1992). Reported for Washington by P. M. Brown in a personal communication to KZ, but no voucher has been located. The two parents do grow mixed together in Spokane Co., but no spontaneous hybrids have been confirmed.

Cypripedium fasciculatum Kellogg ex S. Watson [FNA26, HC, HC2]

Proc. Amer. Acad. Arts. 17: 380.

clustered lady's-slipper

Cypripedium knightiae A. Nelson

Cypripedium montanum Douglas ex Lindl. [FNA26, HC, HC2]

Gen. Sp. Orchid. Pl. 528.

mountain lady's-slipper

FNA26: "Plants of *Cypripedium montanum* grown in exposed, relatively sunny situations have the ascending leaves inserted along the basal portion of the stem and the flowers displayed well above the leaves. In shadier, especially sheltered sites, the spreading leaves may be more evenly scattered along the stem. In this species the apical margin of the orifice of the lip is usually acute, in common with *C. candidum*, and in contrast to the usually obtuse margin in *C. parviflorum*; this difference can aid determination of discolored herbarium specimens. Hybrids of *C. montanum* and *C. parviflorum* have been designated *C. x columbianum* Sheviak. See 11. *C. parviflorum* for a general discussion of hybridization and variation within and between related species."

Cypripedium parviflorum Salisb. [FNA26, HC2]

Trans. Linn. Soc. London, Bot. 1: 77, plate 2, fig. 2.

yellow lady's-slipper

Recognition of varieties in this species is based on minor fragrance and pubescence differences and inconstant lip dimensions, and remains controversial. Sheviak (2002a) provides a key to the varieties, and reports from Washington both var. *pubescens* and var. *makasin*, but the two have broad and almost completely overlapping ranges across the width of North America. The FNA treatment unfortunately provides the wrong maps for two of the three varieties recognized. "In the west it becomes very difficult to separate [var. *makasin*] from very small plants of var. *pubescens* that are common there," according to Sheviak (2002a).

var. ***makasin*** (Farw.) Sheviak [FNA26, HC2]

Amer. Orchid Soc. Bull. 62: 403.

mocassin yellow lady's-slipper

var. ***pubescens*** (Willd.) O.W. Knight [FNA26, HC2]

Rhodora. 8: 93.

hairy yellow lady's-slipper

Dactylorhiza [FNA26, HC2]

Trudy Bot. Inst. S.S.S.R., Ser. 1, Fl. Sist. Vyssh. Rast. 4: 332. 1937.

[conservation proposed]

keyflower, marsh-orchid

Coeloglossum [FNA26]

***Dactylorhiza viridis* (L.) R. M. Bateman, Pridgeon & M. W. Chase [HC2]**

Lindleyana 12(3): 129.

frog orchid, long-bracted green orchid

Coeloglossum viride (L.) Hartm. [FNA26]

Coeloglossum viride (L.) Hartm. var. *virescens* (Muhl.) Luer

Habenaria viridis (L.) R. Br. [HC]

Habenaria viridis (L.) R. Br. var. *bracteata* (Muhl. ex Willd.) A. Gray [HC]

Habenaria viridis (L.) R. Br. var. *interjecta* Fernald

Satyrion viride L.

From Devos et al.: Our results, which combine sequences of the internal and external transcribed spacers of the nuclear ribosomal DNA, support the monophyly of *Dactylorhiza*, with *Coeloglossum* being a sister clade. The position of *C. viride* in the phylogenetic tree, and the considerable morphological differences with respect to *Dactylorhiza*, incline us to retain both lineages as distinct genera.

***Epipactis* [FNA26, HC, HC2]**

Cat. Pl. Hort. Gott. 85. 1757.

[name conserved]

helleborine

***Epipactis gigantea* Douglas ex Hook. [FNA26, HC, HC2]**

Fl. Bor.-Amer. 2: 202, plate 202.

giant helleborine

Amesia gigantea (Douglas ex Hook.) A. Nelson & J.F. Macbr.

Epipactis gigantea Douglas ex Hook. f. *citrina* P.M. Br.

Epipactis gigantea Douglas ex Hook. f. *rubrifolia* P.M. Br.

Helleborine gigantea (Douglas ex Hook.) Druce

FNA26: "Two very distinct color forms of this species have been published: *Epipactis gigantea* forma *rubrifolia* P. M. Brown, with deep red stems and leaves, and *E. gigantea* forma *citrina* P. M. Brown, with lemon-yellow flowers. Both are known from California. The occurrence of this wide-ranging species in India and Tibet is based on *Epipactis royaleana* Lindley ex Royle being given as a synonym in a study of the Monocotyledoneae of Karakorum (W. B. Dickoré 1995) and an embryologic study (S. P. Vij et al. 1999)."

***Epipactis helleborine* (L.) Crantz [FNA26, HC, HC2]**

Stirp. Austr. Fasc. ed. 2. 2: 467.

broad-leaved helleborine, garden helleborine

Epipactis latifolia (L.) All.

Serapias helleborine L.

***Goodyera* [FNA26, HC, HC2]**

Hortus Kew. 5: 197. 1813.

lattice-leaf, rattlesnake-plantain

***Goodyera oblongifolia* Raf. [FNA26, HC, HC2]**

Herb. Raf. 76.

giant rattlesnake-plantain, western rattlesnake-plantain

Goodyera decipiens (Hook.) F.T. Hubbard

Goodyera oblongifolia Raf. var. *reticulata* B. Boivin

Peramium decipiens (Hook.) Piper

Goodyera oblongifolia and *G. repens* are likely the parents of the allotetraploid *G. tessellata* (Kallunki 1976, 1981, 2002). Earlier checklist reports of *Goodyera repens* from WA are in error. FNA26: "In eastern North America, *Goodyera oblongifolia* is restricted to formerly glaciated areas. Plants with leaves white-reticulate on the lateral veins have been described as *Goodyera oblongifolia* var. *reticulata*. This segregate, essentially coastal in distribution, occurs from northern California to southeastern Alaska and is less frequent inland from British Columbia to New Mexico and in Michigan and Wisconsin. Because garden transplant experiments (J. A. Calder and R. L. Taylor 1968, vol. 1) have shown that both reticulate and non-reticulate leaves are found within the same clone, varieties are not recognized."

Liparis [FNA26, HC, HC2]

De Orchid. Eur. 21, 30, 38. 1817.

[name conserved]

liparis, twayblade

Liparis loeselii (L.) Richardson [FNA26, HC, HC2]

De Orchid. Eur. 38.

fen orchid, Loesel's twayblade

Leptorchis loeselii (L.) MacMill.

Liparis correana (Barton) Spreng.

Malaxis correana W. Barton

Malaxis longifolia W. Barton

Ophrys loeselii L.

Rare in Washington.

Malaxis [FNA26, HC, HC2]

Prodr. 8, 119. 1788.

adder's-mouth, malaxis

Malaxis monophyllos (L.) Sw. [FNA26, HC, HC2]

Kongl. Vetensk. Acad. Nya Handl. 21: 234.

white adder's-mouth, one-leaved malaxis

Observed in Whatcom County. Plants documented with photographs; no specimen collected due to small size of population.

var. **brachypoda** (A. Gray) F. Morris & E.A. Eames [FNA26, HC2]

Our Wild Orchids. 358.

North American white adder's-mouth

Malaxis brachypoda (A. Gray) Fernald

Recently observed in Whatcom County. Plants documented with photographs; no specimen collected due to small size of population.

Neottia [HC2]

listera, twayblade

Listera [FNA26, HC]

Neottia banksiana (Lind.) Rchb. f. [HC2]

Ann. Bot. Syst. (Walpers) 3(4): 595.

northwestern twayblade

Listera banksiana Lindl.

Listera caurina Piper [FNA26, HC]

Listera retusa Suksd.

Neottia caurina (Piper) Szlachetko

Ophrys caurina (Piper) Rydb.

Neottia borealis (Morong) Szlachetko [HC2]

Fragm. Florist. Geobot. Supp. 3: 117.

northern twayblade

Listera borealis Morong [FNA26, HC]

Ophrys borealis (Morong) Rydb.

FNA26: "In Japan *Listera borealis* is replaced by *L. yatabei* Makino, which is nearly identical except for short basal auricles. *Listera borealis* and *L. auriculata* are very similar in overall appearance; the ovaries and pedicels in *L. borealis* are glandular-pubescent, and in *L. auriculata* they are glabrous."

Neottia convallarioides (Sw.) Richardson [HC2]

De Orchid. Eur. 37.

broad-lip twayblade

Bifolium convallarioides (Sw.) Nieuwl.
Diphryllum convallarioides (Sw.) Kuntze
Epipactis convallarioides Sw.
Listera convallarioides (Sw.) Nutt. ex Elliott [FNA26, HC]
Listera eschscholzia Cham.
Ophrys convallarioides (Sw.) W. Wight ex House

***Neottia cordata* (L.) Richardson [HC2]**

De Orchid. Eur. 37.
heart-leaf twayblade

Bifolium cordatum (L.) Nieuwl.
Diphryllum cordatum (L.) Kuntze
Distomaea cordata (L.) Spenner
Listera cordata (L.) R. Br. [FNA26, HC]
Listera cordata (L.) R. Br. var. *cordata* [FNA26]
Listera cordata (L.) R. Br. var. *nephrophylla* (Rydb.) Hultén [FNA26]
Ophrys cordata L.
Pollinirhiza cordata (L.) Dulac

The FNA treatment by Magrath and Coleman (2002) notes the varietal taxonomy is controversial. They assign our material to var. *nephrophylla*. Their key separates the two proposed varieties on the basis of leaf shape, lip length, and flower color, while stating "the distinction is not sufficient to maintain the varieties."

***Platanthera* [FNA26, HC2]**

De Orchid. Eur. 20, 26, 35. 1817.
[name conserved]
bog-orchid, piperia, rein-orchid

Piperia [FNA26]

***Platanthera aquilonis* Sheviak [FNA26, HC2]**

Lindleyana. 14: 193, figs. 1?5.
eagle rein orchid, Sheviak's bog orchid

Recently described (Sheviak 1999b), and difficult to distinguish from *Platanthera huronensis*. FNA26: "Flowers of *Platanthera aquilonis* are usually scentless, but in the far northwest they have a sweet, pungent scent, like that of some related species. The flowers are commonly self-pollinating: the pollinia rotate forward and downward, contacting the stigma, and/or the pollen masses dissociate and are deposited on the stigma as if they had sifted downward. *Platanthera aquilonis* is a North American diploid species long confused with the tetraploid Icelandic *P. hyperborea* (Linnaeus) Lindley. Flowers of both species autopollinate, although the details of the mechanisms may differ. The two species differ in column structure and lip and viscidium shape. True *P. hyperborea* is similar to *P. huronensis*, and the relationship of these two species needs further study."

***Platanthera chorisiana* (Cham.) Rchb. f. [FNA26, HC2]**

Icon. Fl. Germ. Helv. 13?14: 128.
choriso bog orchid

Habenaria chorisiana Cham. [HC]
Limnorchis chorisiana (Cham.) J.P. Anderson
Pseudodiphryllum chorisianum (Cham.) Nevski

Rare.

***Platanthera dilatata* (Pursh) Lindl. ex L.C. Beck [FNA26, HC2]**

Bot. North. Middle States. 347.
bog-candle, boreal bog-orchid, white orchid, white rein-orchid, scent-bottle

Habenaria dilatata (Pursh) Hook. [HC]

var. *albiflora* (Cham.) Ledeb. [FNA26, HC2]

Fl. Ross. 4: 71. 1853.
white bog-orchid

Habenaria dilatata (Pursh) Hook. var. *albiflora* (Cham.) Correll [HC]

var. *dilatata* [FNA26, HC2]

white bog-orchid

Habenaria dilatata (Pursh) Hook. var. *dilatata* [HC]

Sheviak (2002b) discusses variability in this species, with spur length modified by pollinators, and spur length defining the infraspecific taxa. However, extreme variability in spurs and their development can lead to a single plant "simulating all three varieties" (Sheviak 2002b). There is limited geographic sorting of the three proposed varieties, all of which are found in the same habitats and have broadly overlapping ranges in western North America. "Intermediates and populations with variable spur lengths are abundant" (Sheviak 2002b). Luer (1975) also questioned the taxonomic validity of the varieties, even as he was proposing a new combination for one of them. Wallace (2003) suggested the species is "actively evolving" but failed to find molecular markers or consistent physical features to further resolve the three proposed varieties. We suggest more work is needed before the varieties can be reliably separated morphologically and recognized taxonomically.

var. *leucostachys* (Lindl.) Luer [FNA26, HC2]

Native Orchids U.S. & Canada. 225.

white bog-orchid

Habenaria dilatata (Pursh) Hook. var. *leucostachys* (Lindl.) Ames [HC]

Habenaria leucostachys (Lindl.) S. Watson

Platanthera leucostachys Lindl. [JPM]

FNA26: " *Platanthera dilatata* traditionally has been divided on the basis of spur length into three varieties, one of which, var. *leucostachys*, is sometimes treated as a distinct species. These infraspecific taxa seem to reflect differing pollination pressures. The moderate spur length and diurnal fragrance of var. *dilatata* suggests adaptation to diurnal Lepidoptera; the long spurs and primarily nocturnal fragrance of var. *leucostachys* indicates specialization for moth pollination, and the short spurs and often broader viscidia of var. *albiflora* suggest a broader range of pollinators or, in extreme cases, specialization for bee or fly pollination. Alone, these characteristics might support recognition at the specific level, but intermediates and populations with variable spur lengths are abundant. In some plants in western Canada, in particular, spurs that are very short when the flower is young grow to equal the lip as the flower ages, and in some they may eventually greatly exceed the lip, thereby simulating all three varieties. Plants with short spurs, either thick or variably slender, occur occasionally across the range of the species. In the southern Rocky Mountains spur reduction reaches an extreme, yet populations with moderate-length spurs occur there as well. In the broad sense, then, *P. dilatata* forms a cohesive unit in which spur length varies greatly, apparently in response to differing pollination pressures. The northwest is the center of variability of the species, and as it ranges eastward through the boreal forest, and southward down the Rockies and the more western ranges, it appears to have specialized for different pollinators. The recognized varieties of *P. dilatata* are evidentially merely endpoints in a very complex variation pattern. They have some utility for discussion purposes, but they are very simplistic representations of the underlying situation. Variety *leucostachys* and, to a lesser extent, var. *dilatata* appear to be real entities that have emerged from a background of variability that continues to produce similar plants. This variability is here treated within var. *albiflora*. *Platanthera dilatata* hybridizes with *P. huronensis* and *P. purpurascens*, and perhaps also does so with other related species; see the note under 10. *P. aquilonis*."

Platanthera elegans Lindl. [HC2]

Gen. Sp. Orchid. Pl., 285.

elegant rein-orchid, hillside rein orchid

Habenaria elegans (Lindl.) Bol. [HC]

Piperia elegans (Lindl.) Rydb. [FNA26]

ssp. *elegans* [HC2]

Gen. Sp. Orchid. Pl. 285.

elegant rein-orchid, hillside rein-orchid

(see also *Platanthera elongata*, *Platanthera transversa*)

Habenaria greenei Jeps. [HC]

Habenaria unalascensis (Spreng.) S. Watson var. *maritima* (Greene) Correll

Piperia elegans (Lindl.) Rydb. ssp. *elegans* [FNA26]

Taxonomy follows FNA. A second subspecies is endemic to the Pt. Reyes Peninsula in California.

Platanthera elongata (Rydb.) R.M. Bateman [HC2]

Bot. J. Linn. Soc. 142(1): 21.

dense orchid, dense-flower rein orchid

(see also *Platanthera elegans*, *Platanthera transversa*)

Habenaria unalascensis (Spreng.) S. Watson ssp. *elata* (Jeps.) Calder & Roy L. Taylor

Habenaria unalascensis (Spreng.) S. Watson var. *elata* (Jeps.) Correll

Piperia elegans (Lindl.) Rydb. var. *elata* (Jeps.) Luer

Piperia elongata Rydb. [FNA26]

Taxonomy follows FNA & JPM. Similar to *Piperia unalascensis* but with a longer spur. Reports of *Piperia leptopetala* from Klickitat Co., Washington (WS) presumably belong here. FNA treats *Piperia leptopetala* as a California endemic.

Platanthera ephemerantha R.M. Bateman [HC2]

Ann. Bot. (Oxford) n.s., 104(3): 439.

white-lip rein-orchid

Piperia candida Rand. Morgan & Ackerman [FNA26]

Platanthera huronensis (Nutt.) Lindl. [FNA26, HC2]

Gen. Sp. Orchid. Pl. 288.

northern green bog-orchid

Habenaria media (Rydb.) Niles

Limnorchis media Rydb.

Orchis huronensis Nutt.

Platanthera hyperborea (L.) Lindl. [FNA26, JPM], misapplied

Platanthera xmedia (Rydb.) Luer

FNA26: "Northwestern plants commonly treated as *Platanthera hyperborea* var. *viridiflora* (Chamisso) Kitamura (note Kitamura's priority over Luer) are *P. huronensis*; Chamisso's name furthermore is synonymous with *P. stricta*. Aleutian and coastal Alaskan plants are often short, stout, and broad-leaved, and they have incorrectly been referred to 9. *P. convallariifolia*. *Platanthera huronensis* as here delimited does not auto-pollinate in the manner of *P. aquilonis*. Occasional plants and populations that may be referable to *P. huronensis*, however, exhibit the movement of pollinia typical of *P. aquilonis*. These plants might reflect infraspecific variation within an allotetraploid species, result from hybridization, or constitute a distinct taxon. The relationship of some of these plants to *P. hyperborea* needs study. *Platanthera huronensis* is typically intensely fragrant with the sweet, pungent scent of some related species. *Platanthera huronensis* is known to hybridize with *P. dilatata*; it may hybridize with other species as well. Although hybrids of *P. dilatata* and *P. aquilonis* may occur, the name traditionally used for them, *P. xmedia* (Rydb.) Luer is a synonym of *P. huronensis*. See notes under 10. *P. aquilonis* and 8. *P. hyperborea*."

Platanthera obtusata (Banks ex Pursh) Lindl. [FNA26, HC2]

Gen. Sp. Orchid. Pl. 284.

small northern bog-orchid, blunt-leaf rein-orchid, one-leaf rein-orchid

Habenaria obtusata (Banks ex Pursh) Richardson [HC]

Orchis obtusata Banks ex Pursh

ssp. ***obtusata*** [FNA26, HC2]

Gen. Sp. Orchid. Pl. 284.

small northern bog-orchid, blunt-leaf rein-orchid, one-leaf rein-orchid

Habenaria obtusata (Banks ex Pursh) Richardson var. *collectanea* Fernald

Rare. Taxonomy follows FNA. FNA26: "The rare Eurasian *Platanthera obtusata* subsp. *oligantha* (Turczaninow) Hultén differs from the North American subsp. *obtusata* in its smaller dimensions and rhombic-lanceolate lip. It is also said to be densely few-flowered, although some Siberian material is comparable to American plants. Supposedly intermediate plants are reported from Alaska, and much material from that area is reduced in stature and with smaller flowers than typical of American plants. In most cases, however, lips are relatively slender, and the plants seem merely to be stunted by their

environment. One or two collections from the Alaskan Peninsula and Aleutians, however, seem entirely referable to subsp. *oligantha* with dense, few-flowered inflorescences of very small flowers with rhombic-lanceolate lips and shorter curved spurs. Eurasian plants are reported to be hexaploid or perhaps sometimes triploid, and if the apparent ploidy differences delimit the taxa, then it should be possible to unequivocally identify Alaskan plants."

***Platanthera orbiculata* (Pursh) Lindl. [FNA26, HC2]**

Gen. Sp. Orchid. Pl. 286.

large round-leaf orchid

Habenaria orbiculata (Pursh) Torr. [HC]

Orchis orbiculata Pursh

Taxonomy follows FNA. Closely related to *Platanthera macrophylla* of northeastern North America (Reddoch and Reddoch 1993). FNA26: "Considerable variation in size and shape of leaves occurs, and although to some extent regional in nature, intergradation is complete; recognition of infraspecific taxa is unwarranted. A few collections from isolated areas on the Pacific Coast of Canada are noteworthy, however. Those are small, few-flowered plants with rather narrow leaves borne alternately or suboppositely toward the base of the stem, as in some Asiatic species. They are in some respects very similar to *Platanthera freynii* Kränzlin, an Asiatic species distinguished primarily by its abruptly narrowed petals, in contrast to the generally broader, but variable, petals in North American plants. These western plants warrant further study to establish their identity and to elucidate relationships between North American and Asiatic species."

***Platanthera sparsiflora* (S. Watson) Schltr. [FNA26, HC2]**

Bull. Herb. Boissier. 7: 538.

canyon bog orchid

Habenaria sparsiflora S. Watson [HC]

***Platanthera stricta* Lindl. [FNA26, HC2]**

Gen. Sp. Orchid. Pl. 288.

canyon bog orchid, needle-spur green orchid, slender bog orchid

Habenaria borealis Cham. var. *viridiflora* Cham.

Habenaria saccata Greene [HC]

Habenaria stricta (Lindl.) Rydb., homonym (illegitimate)

Limnorchis stricta (Lindl.) Rydb.

Platanthera gracilis Lindl. [KZ99]

Platanthera hyperborea (L.) Lindl. var. *viridiflora* (Cham.) Luer

Platanthera saccata (Greene) Hultén

Taxonomy follows FNA. Hybrids between *Platanthera huronensis* and *P. stricta* may be the source of the incorrect report of *Platanthera* × *correllii* Schrenk (*P. hyperborea* × *stricta*) from WA, made by KZ on the strength of a personal communication by P. M. Brown, and not supported by specimens. FNA does not map *Platanthera sparsiflora* north of the Siskiyou Mountains, suggesting all WA reports (e.g., H&C from Skamania Co., and WNHP from Skamania, Yakima, Chelan & Whatcom Cos.) were misidentifications of the notoriously variable *Platanthera stricta*. Further work is needed support reports of *Platanthera sparsiflora* from Washington. FNA26: "The plants here treated as *Platanthera stricta* have in common more or less saccate spurs, orbiculate viscidia, and leaves that abruptly diverge from the stem, often at angles approaching 90° (this feature is sometimes obscured in sheltered, deeply shaded habitats). The plants described as *P. gracilis* Lindley are florally typical of the slender-spurred extreme of *P. stricta*; they differ only in peculiarly reduced, slenderly oblong but nonetheless abruptly wide-spreading leaves. The plants figured by C. A. Luer (1975) as *P. hyperborea* var. *gracilis* (Lindley) Luer are not referable to *P. stricta* but rather are apparently hybrids of *P. stricta* and *P. dilatata*. Critical study of the description of *Habenaria borealis* var. *viridiflora* Chamisso and an evident isotype show this plant to be referable to *P. stricta*, although the name has been applied to *P. huronensis* in the Northwest and to *P. convallariifolia* in Japan. See also the discussion under 9. *P. convallariifolia*."

***Platanthera transversa* (Suksd.) R.M. Bateman [HC2]**

Botanical Journal of the Linnean Society 142(1): 21.

royal rein orchid

Piperia transversa Suksd. [FNA26]

***Platanthera unalascensis* (Spreng.) Kurtz [HC2]**

Bot. Jahrb. Syst. 19(4): 408.

Alaska rein-orchid

Habenaria schischmareffiana Cham.

Habenaria unalascensis (Spreng.) S. Watson [HC]

Habenaria unalascensis (Spreng.) S. Watson, orthographic variant

Piperia unalascensis (Spreng.) Rydb. [FNA26]

Platanthera foetida Geyer ex Hook.

Platanthera unalascensis (Spreng.) Kurtz, orthographic variant

Spiranthes unalascensis Spreng.

Taxonomy follows FNA and Ackerman (1977). FNA26: "The racemes in *Piperia unalascensis* are usually slender and sparsely flowered; racemes of uncommon coastal populations (including the type) are short, stout, and densely flowered. Plants of the coast ranges and the Pacific Northwest are stouter and have broader sepals and petals than do interior and montane forms. Two sym-patric forms appear to be in the Sierra Nevada, differing in lip morphology and scent."

***Spiranthes* [FNA26, HC, HC2]**

De Orchid. Eur. 20, 28, 36. 1817.

[name conserved]

ladies-tresses, pearl-twist

***Spiranthes diluvialis* Sheviak [FNA26, HC2]**

Brittonia. 36: 11, figs. 1C, D, 2A?C, F.

diluvial ladies'-tresses

Spiranthes romanzoffiana Cham. var. *diluvialis* (Sheviak) S.L. Welsh

Rare. FNA notes it is an amphiploid hybrid derived from *S. romanzoffiana* and *S. magnicamporum* Sheviak, a species of central North America.

***Spiranthes porrifolia* Lindl. [FNA26, HC2]**

Gen. Sp. Orchid. Pl. 467.

western ladies'-tresses

Spiranthes romanzoffiana Cham. var. *porrifolia* (Lindl.) Ames & Correll [HC]

Rare.

***Spiranthes romanzoffiana* Cham. [FNA26, HC, HC2]**

Linnaea. 3: 32.

hooded ladies'-tresses

(see also *Spiranthes porrifolia*)

Gyrostachys stricta Rydb.

Ibidium strictum (Rydb.) House

Spiranthes romanzoffiana Cham. var. *romanzoffiana* [HC]

Spiranthes stricta (Rydb.) A. Nelson

Taxonomy follows FNA. To the south of us a variable species, $2n = 44,66,88$, with different ploidy levels possible within a single population, and further complicated by crossing with *Spiranthes porrifolia* (Sheviak & Brown 2002). FNA26: "Plants of *Spiranthes romanzoffiana* vary considerably in habit but are usually quite consistent in floral morphology. The strongly hooded, ascending flowers with abruptly reflexed lips provide a distinctive geometric precision. The pandurate lip with typically three veins, the lateral with abruptly wide-spreading branches, is a key feature. In some areas, however, especially at the edges of the range of the species, some variation is apparent and is sometimes coincident with variability in ploidy level. In particular, in California and adjacent southwestern Oregon variability reaches its peak, with plants variously exhibiting yellowish flowers, loosely spiraled inflorescences, and spreading lateral sepals. Some of this variation may result from gene flow from *S. porrifolia*, but with various ploidy levels common in this area, even within populations, the situation is apparently more complex than simple hybridization."