

Key to Common Vascular Plant Families of Western Washington

Adapted from R.J. Taylor, *Plant Systematics*, 1981, and referenced to Pojar & MacKinnon, 1994

1a Plants non-seed bearing; spores produced in terminal cone-like structures, or on large compound leaves, or in leaf axils Ferns and Fern allies (417)

1b Plants producing seeds either in cones or in the remains of flowers

2a Leaves needle-like, scale-like, or awl-shaped, usually evergreen; woody trees or large shrubs, or if less than 3 feet tall (*Juniperus communis*), the leaves whorled, rigid, and sharp-pointed; cones usually produced (conifers) Trees (28)

2b Leaves various but if evergreen and needle-like, scale-like, or awl-shaped, then plants small shrubs, usually less than 3 feet tall, and the leaves neither whorled nor rigid; flowers usually produced but not always obvious (Angiosperms).

3a Plants parasitic; non-green; pinkish; twining or clustered.

4a Plants parasitic on conifers; leaves reduced or absent; stems jointed, yellow or brown Loranthaceae (Mistletoe Family) (308)

4b Plants twining, threadlike; pinkish or yellowish; saltmarshes Cuscutaceae (Dodder Family) (327)

3b Plants various but not as above.

5a Plants tiny, reduced, free-floating aquatics consisting of one or few leaf-like structures with or without simple roots Lemnaceae (Duckweed Family)

5b Plants anchored by well-developed roots; leaves and/or stems well developed.

6a Insectivorous bog plants, the leaves round and covered with gland-tipped (sticky) hairs Droseraceae (Sundew Family) (351)

6b Plants usually not insectivorous; leaves not as above.

7a Flowers tiny, yellow-green, densely clustered on a fleshy, spike-like stem and ensheathed by a large, bright yellow modified leaf; green leaves up to 2 feet long & nearly as wide when fully developed (Skunk Cabbage); Araceae (Arum Family) (334)

7b Flowers not clustered or ensheathed as above; leaves usually much smaller.

8a Leaves mostly parallel-veined; flower parts in multiples of 3s (rarely 4) or modified and inconspicuous (or absent); plants herbaceous (monocots in part) Group I (page 2)

8b Leaves mostly net-veined; flower parts in multiples of 4, 5, or rarely 6 (sometimes modified or inconspicuous); plants herbaceous or woody (dicots in part) Group II (page 2)

Group I - Monocots

1a Perianth segments 6 (sometimes 2 or more fused), these individually showy, or sometimes green or brownish and then the flowers irregular; plants not aquatic. (See also *Primulaceae*).

2a Ovary superior; stamens 6 **Liliaceae** (Lily Family) (99)

2b Ovary inferior; stamens 1, 2, or 3.

3a Flowers regular (radially symmetrical); stamens 3 **Iridaceae** (Iris Family) (114)

3b Flowers irregular; stamens 1 or 2 but may be reduced to pollen masses (plants often saprophytic and not green) **Orchidaceae** (Orchid Family) (117)

1b Perianth segments usually fewer than 6, green or brown, bract-like, not showy; flowers regular but often greatly reduced; plants often aquatic or semi-aquatic.

4a Flowers down-like, in dense, brown spikes; plants 3 to 6 feet tall; leaves long & strap-like *Typha latifolia* (Cattail); **Typhaceae** (Cattail Family) (338)

4b Flowers often clustered but not as above; plants shorter or leaves round.

5a Plants aquatic, at least partially submerged, not grass-like. (335)

5b Plants terrestrial or semi-aquatic, grass-like or rush-like.

6a Flowers with 6 bract-like perianth segments; stems round and not jointed; leaves hollow, round, in two vertical rows on the stem **Juncaceae** (Rush Family) (409)

6b Perianth segments few or modified into bristles; bracts not in series of 6 at base of ovary; characteristics of stems & leaves not in same combination as above.

7a Stems usually 3-angled, not jointed; leaves in 3 vertical rows **Cyperaceae** (Sedge Family) (388)

7b Stems round & jointed; leaves in 2 vertical rows . . . **Poaceae** (Grass Family) (356)

Group II - Dicots

1a Plants woody throughout; trees or shrubs (sometimes vine-like and often dwarfed) **Group IIa** (page 3)

1b Plants herbaceous, dying to ground level each year (occasionally with woody base) **Group IIb** (page 5)

Group IIa - Woody Dicots

1a Leaves needle-like or scale-like, evergreen, thick & shiny; plants low, subalpine or alpine shrubs **Ericaceae** (Heath Family) in part (62-64)

1b Leaves neither needle-like nor scale-like though sometimes evergreen; plant form & habitat various.

2a Leaves evergreen, thick, leathery & shiny, usually toothed or spine-tipped.

3a Leaves pinnately compound, holly-like, with spine-tipped teeth.

4a Flowers yellow; fruits purple; native .. **Berberidaceae** (Barberry Family) in part (95)

4b Flowers small, greenish or absent; fruits red; spines sharp; non-native
..... **Ilex** (Holly) species; **Aquifoliaceae** (Holly Family) in part

3b Leaves simple, not holly-like

5a Leaves opposite; flowers 2 or more in leaf axils or paired at ends of short branches.

6a Low trailing vine; flowers pale pink, in pairs at tips of upright branches
.. **Linnaea borealis** (Twinflower); **Caprifoliaceae** (Honeysuckle Family) in part (68)

6b Upright shrub; flowers maroon, inconspicuous in leaf axils
. **Pachistima myrsinites** (Mountain box); **Celastraceae** (Staff-tree Family) in part (95)

5b Leaves alternate or whorled; flowers variously clustered but not as above.

7a Flowers white, numerous, in a large, much-branched cluster; leaves 2-5 inches long, strongly pinnately veined in furrows ... **Rhamnaceae** (Buckthorn Family) in part (90)

7b Flowers usually pink, borne singly or in small clusters; leaves shorter or more than twice as long as wide **Ericaceae** (Heath Family) in part (49, 53-67)

2b Leaves deciduous, not leathery, entire or variously toothed or lobed.

8a Leaves opposite.

9a Leaves covered with brown scales below, olive-colored above
..... **Shepherdia canadensis** (Buffaloberry); **Eleagnaceae** (Oleaster Family) in part (94)

9b Leaves not as above.

10a Trees or large shrubs; leaves palmately 3 to 9 lobed; fruit winged
..... **Aceraceae** (Maple Family) (45, 93)

10b Smaller shrubs or leaves either entire or pinnately compound; fruit not winged.

11a Leaves pinnately compound; toothed Elderberry; **Caprifoliaceae** in part (70)

11b Leaves simple, mostly entire.

12a Flowers numerous in dense clusters, often surrounded by 4-6 large white showy bracts (the flower cluster & bracts giving the appearance of a single flower)
. **Cornaceae** (Dogwood Family) (51, 90, 320)

12b Flowers mostly 10 or fewer in each cluster, not surrounded by bracts.

13a Petals distinct; fruit a woody capsule; flowers white, in clusters of 3-15; leaves sharp-pointed **Hydrangeaceae** (Hydrangea Family) in part (96)

13b Petals united at the base forming a tube; fruit a berry; flowers usually colored; leaves blunt-tipped or flowers borne in pairs in leaf axils
. **Caprifoliaceae** (Honeysuckle Family) (68-70)

8b Leaves alternate (nearly opposite in *Rhamnus purshiana*).

14a Stems armed with spines or prickles.

15a Leaves often compound; stamens 10 or more per flower
. **Rosaceae** (Rose Family) in part (71-81)

15b Leaves simple though often deeply lobed; stamens 5 per flower.

16a Leaves large & covered with spines on the underside
. *Oplopanax horridum* (Devil's club); **Araliaceae** (Ginseng Family) in part (82)

16b Leaves smaller & not covered with spines on the underside
. **Grossulariaceae** (Currant Family) in part (84-96)

14b Stems unarmed.

17a Plants catkin-bearing; leaves simple, often toothed.

18a Plants unisexual, pistillate (female) & staminate (male) catkins on separate plants; leaf margins entire or shallowly toothed **Salicaceae** (Willow Family) (87-89)

18b Plants bisexual; (pistillate catkins often woody and cone-like); leaf margins doubly toothed **Betulaceae** (Birch Family) (44, 47, 92)

17b Plants not catkin-bearing; leaves various.

19a Flowers irregular, pea-like; stems strongly angled or ridged; lower leaves 3-foliolate
..... Fabaceae (Pea Family) in part (83, 194)

19b Flowers regular; stems rarely angled; leaves various.

20a Petals fused at least at the base; separating from the flower as a unit, often urn-shaped;
stamens 10 (8); leaves simple & not lobed Ericaceae (Heath Family) (49, 53-67)

20b Petals not fused thus not separating as a unit; stamens more than or fewer than 10;
leaves often compound or lobed.

21a Stamens more than 10 (rudimentary & non-functional in pistillate plants of the
unisexual osoberry (Indian plum)); fruits various; leaves various
..... Rosaceae (Rose Family) (48, 71-81)

21b Stamens 4 or 5; fruit a berry or capsule; leaves simple though often lobed.

22a Leaves lobed, maple-like; fruit a berry; odoriferous shrubs
..... Grossulariaceae (Currant Family) (84-86)

22b Leaves sometimes toothed but not lobed; shrubs with capsular fruits or trees with
berries Rhamnaceae (Buckthorn Family) (90)

Group IIb - Herbaceous Dicots

1a Plants non-green, parasitic or saprophytic, often growing in humus-rich forest soil; flowers
regular, or irregular & blue or purple. (See also *Orchidaceae*)

2a Stems stout, leaves several but often bract-like

3a Flowers regular, often nodding Monotropaceae (352-354)

3b Flowers irregular *Boschniakia* spp; *Orobanchaceae* in part (354-355)

2b Stems slender, leaves few; flowers irregular, blue/yellow
..... *Orobanche uniflora* (Broomrape); *Orobanchaceae* (Broomrape Family) in part (355)

1b Plants green or at least with green leaves; habitat various.

4a Leaves large, flat, roundish, & floating on water; flowers large & showy
..... Nymphaeaceae (Water Lily Family) (349)

4b Plants not as above.

5a Leaves opposite or whorled, sometimes small and bract-like Unit I

5b Leaves alternate or basal (plants may have a whorl of leaf-like bracts below flower clusters or at midlength on the flowering stem). Unit II (page 8)

Unit I - Herbaceous dicots with opposite or whorled leaves

1a Plants with milky (white) juice when broken or punctured.

2a Petals absent or inconspicuous; lower leaves alternate, less than 1 inch in length Euphorbiaceae (Spurge Family)

2b Petals present (pink); leaves opposite throughout, usually more than 1 inch in length Spreading dogbane; Apocynaceae (Dogbane Family) in part (320)

1b Plants without milky juice.

3a Flowers produced in dense heads, the petals of the inner (disk) flowers fused & regular, those of the outer (ray) flowers strap-like; the entire flower cluster superficially resembling a single flower with many petals; heads surrounded by greenish bracts Asteraceae (Aster Family) in part (268)

3b Flowers not produced in heads or otherwise not as above.

4a Plants aquatic, at least partially submerged; flowers inconspicuous in leaf axils. (346)

4b Plants not both aquatic & with inconspicuous flowers borne in leaf axils.

5a Petals absent; sepals 3, dark brownish-purple, the tips elongate & thread-like; leaves heart-shaped Aristolochiaceae (Birthwort Family) (317)

5b Petals present or sepals not as above; leaves and plants various.

6a Flower parts in multiples of 2, ovary inferior.

7a Leaves whorled; stems square with hooked bristles on the angles; fruit 1-2 nutlets Rubiaceae (Madder Family) in part (330-1)

7b Leaves opposite or partially alternate; fruit capsular with many seeds (these often tufted) Onagraceae (Evening Primrose Family) in part (205-10)

6b Flower parts in multiples of 3, 5, or more; ovary usually superior.

7a Petals fused (barely so in Primulaceae & Ericaceae) & usually tubular at the base, separating as a unit; stamens usually borne on the corolla tube (fused petals). → 7b

8a Leaves whorled or apparently so.

9a Leaves in 1 whorl below the flowers; petals 6 or 7
..... *Trientalis* species (Starflower); **Primulaceae** (Primrose Family) in part (322)

9b Leaves in 2-more whorls; petals usually 5 ... **Caryophyllaceae** (Pink Family) in part (135)

8b Leaves opposite or alternate in part.

10a Flowers irregular; ovary superior; stems often square.

11a Fruit (ovary), as seen from above, divided into four 1-seeded nutlets; stems square
..... **Lamiaceae** (Mint Family) (242)

11b Fruit (ovary) capsular, rounded, & many-seeded or bilobed & 2-seeded; stems round or
sometimes square **Scrophulariaceae** (Figwort Family) in part (248)

10b Flowers regular or ovary inferior; stems usually round.

12a Stamens 8 or 10; plants with an unbranched flowering stalk; flowers somewhat nodding;
leaves simple, ovate, partially alternate **Pyrolaceae** (Wintergreen Family) (223)

12b Stamens 3-6; other characters various but not in the same combination as above.

13a Stamens opposite of corolla lobes; flowers borne on long peduncles from leaf axils .
..... **Primulaceae** (Primrose Family) in part (321-4)

13b Stamens alternating with corolla lobes; flowers not borne as above.

14a Flowers regular; corolla often twisted (particularly in bud stage); ovary superior.

15a Carpels 3; corolla without fringed appendages
..... **Polemoniaceae** (Phlox Family) (233)

15b Carpels usually 2; corolla with fringed appendages
..... **Gentianaceae** (Gentian Family) (227)

14b Flowers usually irregular (the irregularity mostly expressed as a sac-like projection
at the base of the corolla tube); corolla not twisted; ovary inferior.

16a Leaves usually divided; corolla tube 5-lobed
..... **Valerianaceae** (Valerian Family) (333)

16b Leaves entire, linear; corolla 4-lobed **Rubiaceae** (Madder Family) (330-1)

→ **7b** Petals separate (non-fused) or absent (sepals sometimes fused); stamens usually borne on the
receptacle & not on the petals.

17a Flowers small, in dense clusters surrounded by 4 large white petal-like bracts; leaves opposite below, whorled near the flowers; fruit consisting of few to several red berries
..... *Cornus canadensis* (Bunchberry); **Cornaceae** (Dogwood Family) in part (320)

17b Flowers, leaves and fruits not as above.

18a Petals absent, the flowers small & greenish; plants with stinging hairs
..... *Urtica dioica* (Stinging nettle); **Urticaceae** (Nettle Family)

18b Petals usually present; plants lacking stinging hairs.

19a Plants very succulent (fleshy), growing in rocky, open areas; flowers yellow (purple); fruit consisting of 5 separate follicles **Crassulaceae** (Stonecrop Family) (154)

19b Plants non-succulent or if succulent, then flowers white or pale pink; fruits capsular (1 capsule per flower).

20a Stamens more than 10; leaves spotted with glands; flowers yellow
..... **Hypericaceae** (St. John's-wort Family) (319)

20b Stamens 10 or fewer (if more than 10 the flowers pink); leaves not glandular spotted; flowers usually pink or white.

21a Leaves palmately lobed or divided; style becoming beak-like
..... **Geraniaceae** (Geranium Family) (~~315~~)

(315-317)

21b Leaves entire or toothed; style not beak-like.

22a Stems somewhat swollen at the nodes; sepals 5 (sometimes fused); plants usually not succulent; petals not pink-striped
..... **Caryophyllaceae** (Pink Family) (135)

22b Stems not swollen at the nodes; sepals usually 2; plants succulent; petals usually white with pink stripes **Portulacaceae** (Purslane Family) (131)

Unit II - Herbaceous dicots with alternate or basal leaves

→ Composites

1a Flowers clustered into dense heads surrounded by greenish bracts; individual flowers regular with fused petals (disc flowers) or irregular with the corolla strap-like (ray flowers) or both types in the same head, the entire head resembling a single flower; ovary inferior, 1-seeded.
..... **Asteraceae** (Aster Family) in part (268)

1b Flowers not produced in dense heads or otherwise not as above.

2a Individual flowers small, inconspicuous, often densely clustered, apparently lacking petals or the petals inconspicuous and non-pigmented (plants lacking petals but having conspicuous flowers with pigmented sepals are not keyed here).

3a Plants with milky (white) juice Euphorbiaceae (Spurge Family)

3b Plants without milky juice.

4a Leaves all basal; flowers borne in dense spike-like clusters.

**5a Leaves consisting of 3 large leaflets on an elongate petiole, not strongly veined
. *Achlys triphylla* (Vanilla leaf); Berberidaceae (Barberry Family) in part (312)**

**5b Leaves simple, strongly veined, elongate & lance-shaped or nearly round
. Plantaginaceae (Plantain Family) (328-9)**

4b Leaves borne on the flowering stem; flowers variously associated.

**6a Leaves with papery sheathing bases; flowers mostly whitish (sometimes pinkish)
. Polygoneae (Buckwheat Family) (124)**

**6b Leaves without papery sheathing bases; flowers green or dry and papery
. Amaranthaceae (Amaranth); Chenopodiaceae (Goosefoot Family) (310-1)**

2b Flowers usually showy, pigmented or white, variously clustered or solitary.

7a Stamens numerous or at least more than 10; petals rarely fused together.

**8a Floral parts completely non-fused, all borne on the receptacle
. Ranunculaceae (Buttercup Family) (170)**

8b Stamens fused to each other at the base or sepals, petals, and stamens fused into a saucer-shaped or cup-like structure (hypanthium) which may be very short & best observed by viewing the flower from the base or by sectioning it longitudinally.

**9a Fruit flat on top, separating into pie-shaped segments; stamens fused at the base into a tube, this borne on the petals; flowers lacking a hypanthium
. Malvaceae (Mallow Family) (318)**

**9b Fruit not as above; stamens not fused to form a tube; hypanthium present
. Rosaceae (Rose Family) in part (182-8, 339)**

7b Stamens 10 or fewer; petals often fused.

10a Plants very fleshy (succulent); fruit consisting of 5 separate follicles; flowers yellow or reddish Crassulaceae (Stonecrop Family) (154)

10b Plants not succulent or fruit not consisting of 5 follicles; flower color various.

11a Petals absent or non-distinguishable from greenish-white to pink sepals; ovary superior; sepals & stamens in multiples of 3 Polygonaceae (Buckwheat Family) in part (124)

11b Petals present, color various.

12a Petals fused, at least at the base, all separating from the flower as a unit; stamens borne on the corolla tube (rarely on the receptacle in *Ericaceae* and *Campanulaceae*) Subunit IIa

12b Petals not fused (or at least some petals distinct); corolla not separating from the flower as a unit; stamens borne on receptacle or hypanthium, not on corolla tube Subunit IIb (page 11)

Subunit IIa - Petals fused

13a Ovary superior and flowers regular.

14a Stamens twice as many as the corolla lobes; fruit a capsule with 5 cells; corolla usually urn-shaped Pyrolaceae (Wintergreen Family) (223)

14b Stamens as many as or fewer than the corolla lobes; fruit not a 5-celled capsule; corolla not urn-shaped.

15a Leaves trifoliate or simple & crenate; petals white, with hair-like or fringed scales; bog plants Menyanthaceae (Buck-bean Family) (325, 339)

15b Plants not having the same combination of characteristics as above.

16a Leaves all basal, simple and elongate, sometimes grass-like.

17a Flowers irregular, spurred, blue, single; plants of bog-like meadows or wet rocky outcrops Butterwort; Lentibulariaceae (Bladderwort Family) in part (351)

17b Flowers regular, not blue, usually more than one per stem; habitat various.

18a Flowers densely clustered into a spike; petals 4, papery in texture and non-pigmented Plantaginaceae (Plantain Family) (328-9)

18b Flowers 1 or few, not borne in spikes; petals 5 or more, pigmented or white Primulaceae (Primrose Family) (321-4)

16b Leaves not all basal, variously shaped.

19a Fruit divided into 4 1-seeded nutlets, these often armed with bristles Boraginaceae (Borage Family) (238)

19b Fruit capsular, not consisting of 4 nutlets.

20a Plants twining & vine-like; corolla trumpet-shaped; leaves ± kidney- or arrowhead shaped or reduced to tiny scales **Convolvulaceae** (Morning-glory Family) (326-7)

20b Plants not vine-like; corolla & leaves various but not in the same combination as above.

21a Styles 3-cleft; corolla long-tubular with perpendicular lobes
. **Polemoniaceae** (Phlox Family) (233)

21b Styles usually 2-cleft; corolla various.

22a Ovary 1-celled; corolla lobes projected forward or perpendicular to the corolla tube; plants often densely hairy; flowers often numerous in a dense, coiled cluster
. **Hydrophyllaceae** (Waterleaf Family) (230)

22b Ovary 2-5 celled; corolla lobes usually reflexed backward toward the base of the flower; plants not densely hairy; flowers not borne in a coiled cluster
. **Solanaceae** (Nightshade Family) (325)

13b Ovary inferior or flowers irregular.

23a Flowers irregular; ovary superior **Scrophulariaceae** (Figwort Family) (248)

23b Flowers regular; ovary inferior **Campanulaceae** (Harebell Family) (332)

Subunit IIb - Petals distinct

24a Flowers irregular and ovary superior.

25a Stamens 10, fused at the base; leaves compound and not all basal
. **Fabaceae** (Pea Family) (190)

25b Stamens 5 or 6, not fused or fused at the anthers; leaves simple or all basal.

26a Leaves compound and basal; flowers reddish-purple
. **Fumariaceae** (Bleeding Heart Family) (313)

26b Leaves simple or if compound not all basal; flowers blue or yellow
. **Violaceae** (Violet Family) (200)

24b Flowers regular; ovary sometimes inferior.

27a Flowers in umbels; petals small, white or yellow; leaves compound (carrot-like) with inflated bases; ovary inferior **Apiaceae** (Carrot Family) (212)

27b Characteristics various but not in the same combination as above.

28a Petals & sepals 4; stamens in even numbers but less than 10.

29a Ovary superior; stamens usually 6 (4 long, 2 short)
. **Brassicaceae** (Mustard Family) (144)

29b Ovary inferior; stamens 8 **Onagraceae** (Evening Primrose Family) (205-10)

28b Petals & sepals 5 or 3; stamens in odd numbers or 10.

30a Sepals & petals undifferentiated, usually in multiples of 3; flowers in umbels or
leaves simple, with papery stipule sheathing the stem
. **Polygonaceae** (Buckwheat Family) in part (124)

30b Sepals & petals distinct, in multiples of 5 (or sepals 2); flowers not in umbels; leaves
various but lacking papery stipules.

31a Leaves resembling those of a 4-leaf clover; flowers white, yellow or pinkish
. **Oxalidaceae** (Wood Sorrel Family) (315)

31b Leaves not as above; flower color various.

32a Sepals 2; stamens 5; plants succulent . . **Portulacaceae** (Purslane Family) (131)

32b Sepals 5; stamens usually 10; plants often not succulent.

33a Petals pink or red; leaves palmately lobed or divided or pinnately
compound; style elongate, 5-cleft . . . **Geraniaceae** (Geranium Family) (315-7)

33b Petals usually not pink or red; leaves various; style not 5-cleft.

34a Ovary 5-celled, capsular; stems woody at the base; floral parts borne on
the receptacle **Pyrolaceae** (Wintergreen Family) (223)

34b Ovary 2-celled, the cells (carpels) sometimes partially or completely
separate, non-fused; stems herbaceous throughout; sepals, petals, & stamens
borne on a hypanthium **Saxifragaceae** (Saxifrage Family) (158)