

# NATIVE HERBACEOUS PERENNIALS OF THE PACIFIC NORTHWEST WORTHY OF COMMERCIAL PRODUCTION

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An estimated 3,000 native herbaceous perennial species grow in the Pacific Northwest, from Oregon into British Columbia. They grow from sea level to alpine peaks. Among them is a great diversity of form, size, color, habitat, and adaptability.

This presentation will not include plants growing at higher elevations, nor the grasses (Poaceae or Graminae), sedges (Cyperaceae), rushes (Juncaceae), the many families of water plants, nor some of the lower plant families, such as club-mosses (Lycopodiaceae), and selaginella (Selaginellaceae). But even without them, the number of Northwest native herbaceous perennials is enormous, and the potential for their use is substantial.

Relatively little use is currently made of these plants. Competition of plants from other parts of the world, especially from Eastern North America, Europe, China, and Japan, and traditional use habits are among reasons for the tardy recognition of Northwest natives. Limited interest has delayed much needed selection, breeding, and propagation of superior clones and hybrids.

Most interest in commercial production of native materials has been for the woody species. Few nursery propagation and production practices are developed for Northwest herbaceous perennials. Seeding is the best known and mostly widely practiced of propagation techniques, as discussed by a number of authors (1, 2, 4, 5, 7).

Vegetative propagation will become more important with selection of improved clones, cultivars, and hybrids. Research, experience, and information is limited on propagation of Northwest herbaceous perennials by cuttings, tissue culture, grafting, and other vegetative techniques. Division is a more common method. Few have written on vegetative propagation of these perennials (1, 5, 6, 7).

Following is a listing of a few Northwest native herbaceous perennials which merit consideration for commercial production. The multitude of species and varieties in nature suggests the possibilities to be far greater. Careful selection of better performing clones is suggested for most species. Nomenclature is according to Hitchcock and Cronquist (3), with family in parenthesis.

*Anemone deltoidea* Hook., western white anemone (Ranunculaceae). A nice ground-cover for moist woodlands; good spring bloom of white flowers.

*Aquilegia formosa* Fisch., red columbine (Ranunculaceae). An adaptable red flowering columbine, unique in form; blooms best in sun with good moisture, in partial shade in warmer areas; readily self-sows and crosses with other species.

*Aruncus sylvestris* Kostel., = *A. dioicus* (Walt.) Fern., sylvan goatsbeard (Rosaceae).

- Attractive foliage and billowy floral plumes, 3 to 7 ft tall in bloom; for moist woodland or shade garden; native range extends beyond Northwest, across North America, and into Europe.
- Dicentra formosa* (Andr.) Walp., Pacific bleedingheart (Fumariaceae). A 12 to 18 in. high groundcover or border plant for moist shaded areas; a vigorous, attractive plant with finely cut foliage and pink to purple, or bluish lavender to white, flowers.
- Disporum smithii* (Hook.) Piper, fairy lantern (Liliaceae). A 1½ to 2 ft high groundcover or border plant for shaded areas, best in moist soil with added organic matter; white hanging flowers in spring, red fruits in fall.
- Erigeron speciosus* (Lindl.) DC., showy fleabane (Compositae). Blue to bluish lavender flowers at top of clustered 10 to 30 in. stems during several weeks in late spring and summer; good foliage, easy to grow in full sun to light shade, not invasive.
- Eriophyllum lanatum* (Pursh) Forbes, woolly sunflower (Compositae). Dense yellow flowers, May to August, gray tomentose foliage, 4 in. to 2 ft according to variety; best in sun, well-drained soil.
- Fragaria chiloensis* (L.) Duchesne, coastal strawberry (Rosaceae). Evergreen maritime groundcover only a few inches high, white flowers in spring, handsome foliage; for sunny or partially shaded moist areas.
- Galium boreale* L., northern bedstraw (Rubiaceae). Showy panicles of fragrant white flowers in late spring, leafy plant 10 to 30 in. tall; sun to light shade with ample moisture; native across North America.
- Lupinus polyphyllus* Lindl., bigleaf lupine (Leguminosae). Largest and most lush Northwest lupine, to 3 to 4 ft tall, 6 to 24 in. spikes of blue, violet, or reddish flowers; does best in open, moist areas.
- Oxalis oregana* Nutt., Oregon oxalis or redwood sorrel (Oxalidaceae). An aggressive groundcover for moist shaded areas, handsome foliage, white flowers in spring; botanical forma *smalliana* (Knuth) Munz, with deep rose-purple flowers and patterned leaves, is especially attractive.
- Smilacina racemosa* (L.) Desf., false Solomon's seal (Liliaceae). Arching stems to 3 ft tall, with panicles of often fragrant white flowers, red berries in fall; a beautiful, bold garden plant for light to rather deep shade with moisture.
- Thalictrum occidentale* Gray, western meadow rue (Ranunculaceae). Delicately beautiful foliaged plant, finer textured than most meadow rues, 2½ to 4 ft tall in flower; for open woodland or semi-shaded border plantings.
- Vancouveria hexandra* (Hook.) Morr. & Dec., inside-out flower (Berberidaceae). A foot high plant of moist shady woods, dull green hexagonal leaflets make it a most attractive plant, lacy panicles of sparse ¼ in. white flowers in spring; vigorous, can be invasive if not contained; excellent groundcover under trees, around ericaceous and other shrubs.

Many other Pacific Northwest herbaceous perennials are also worthy of consideration and should be tried. Following is a partial list.

- Achlys triphylla* (Smith) DC., vanillaleaf (Berberidaceae)  
*Actaea rubra* (Ait.) Willd., western red baneberry (Ranunculaceae)  
*Anemone multifida* Poir. var. *multifida*, Pacific anemone (Ranunculaceae)  
*Angelica arguta* Nutt. ex T. & G., *A. canbyi* Coult. & Rose, angelica (Umbelliferae)  
*Armeria maritima* (Mill.) Willd., thrift or sea pink (Plumbaginaceae)  
*Arnica cordifolia* Hook., heartleaf arnica (Compositae)  
*Artemisia tilesii* Ledeb. var. *unalascensis* Bess., Aleutian mugwort (Compositae)  
*Asarum caudatum* Lindl., wild ginger (Aristolochiaceae)  
*Aster* L. spp., aster (Compositae)  
*Boykinia elata* (Nutt.) Greene, slender boykinia (Saxifragaceae)  
*Cynoglossum grande* Dougl., Pacific hound's tongue (Boraginaceae)  
*Delphinium* spp., larkspur (Ranunculaceae), many forms, blue to white



*Erigeron glaucus* Ker-Gaul, seaside daisy (Compositae)  
*Eschscholzia californica* Cham., California poppy (Papaveraceae)  
*Gaillardia aristata* Pursh, gaillardia (Compositae)  
*Geranium oreganum* Howell, western geranium (Geraniaceae)  
*G. viscosissimum* F. & M., sticky purple geranium (Geraniaceae)  
*Geum triflorum* Pursh var. *ciliatum* (Pursh) Fassett, prairie smoke avens (Rosaceae)  
*Helenium autumnale* L., sneezeweed (Compositae)  
*Heuchera micrantha* Dougl. ex Lindl., smallflowered alumroot (Saxifragaceae)  
*Lupinus* spp., lupine (Leguminosae)  
*Mertensia paniculata* (Ait.) G. Don var. *borealis* (Macbr.) Williams, tall bluebells  
 (Boraginaceae)  
*Mimulus* spp., monkeyflower (Scrophulariaceae) yellow and red forms  
*Montia cordifolia* (Wats.) Pax & K. Hoffm., broadleaved montia (Portulacaceae)  
*Nothochelone nemorosa* (Dougl. ex Lindl.) Straw, woodland beardtongue  
 (Scrophulariaceae)  
*Oxalis suksdorfii* Trel., western yellow oxalis (Oxalidaceae)  
*Peltiphyllum peltatum* (Torr.) Engl. = *Darmera peltata* (Torr.) Voss, umbrella plant  
 (Saxifragaceae)  
*Penstemon* spp., penstemon (Scrophulariaceae)  
*Petasites frigidus* Fries var. *palmatus* (Ait.) Cronq. = *P. palmatus* (Ait.) Gray, sweet  
 coltsfoot (Compositae)  
*Polemonium occidentale* Greene = *P. caeruleum* L. subsp. *amygdalinum* (Wherry)  
 Munz, western polemonium (Polemoniaceae)  
*Potentilla gracilis* Dougl. ex Hook., slender cinquefoil (Rosaceae)  
*P. villosa* Pall. ex Pursh, villous cinquefoil (Rosaceae)  
*Sidalcea* spp., checker mallow (Malvaceae)  
*Solidago spathulata* DC. var. *neomexicana* (Gray) Cronq., dune goldenrod  
 (Compositae)  
*Streptopus amplexifolius* (L.) DC., clasping-leaved twisted-stalk (Liliaceae)  
*S. roseus* Michx. var. *curvipes* (Vail) Fassett, rosy twisted-stalk (Liliaceae)  
*Tellima grandiflora* (Pursh) Dougl., fringe-cup (Saxifragaceae)  
*Tolmiea menziesii* (Pursh) T. & G., piggy-back plant (Saxifragaceae)  
*Trautvetteria carolinensis* (Walt.) Vail, false bugbane (Ranunculaceae)  
*Trientalis latifolia* Hook., western starflower (Primulaceae)  
*Valeriana sitchensis* Bong., Sitka valerian (Valerianaceae)  
*Veratrum* spp., false hellebore (Liliaceae)

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