

The Vascular Plants of Northwestern California

A catalog by James P. Smith, Jr. & John O. Sawyer, Jr.



THE VASCULAR PLANTS
of
NORTHWESTERN CALIFORNIA



A CATALOG



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Top Panoramic: The Siskiyou Crest

Plant images, clockwise from top left: calypso orchid (*Calypso bulbosa*), Kellogg's lily (*Lilium kelloggii*), California false hellebore (*Veratrum californicum*), California pitcher plant (*Darlingtonia californica*), Shasta fir (*Abies x shastensis*), Pacific windflower (*Anemone deltoidea*), marijuana (*Cannabis sativa*), Bigelow's sneezeweed (*Helenium bigelovii*).

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SECTION 1 — PREFACE AND INTRODUCTION

PREFACE

This catalog had its beginnings in 1970 shortly after the senior author joined the faculty of Humboldt State College. I had just moved to California from Iowa, where the standard flora was *Plants of Iowa*, a 90 page set of keys by Henry Conard. The contrast between the flora of California and Iowa, as reflected in Conard and *A California Flora* by Philip Munz was dramatic and more than a little intimidating.

I soon learned that northwestern California was botanically one of the least known regions of the state. Collecting trips with my new colleagues John Sawyer and Dennis Anderson began my initiation. I decided that a good way for me to learn the flora would be to compile a checklist of the vascular plants. I sat down with Munz, my portable typewriter, and a stack of 3 x 5 index cards. By the way, as I learned just a few months ago, it was none other than Linnaeus himself who invented the index card as a way of filing information about plants. A few thousand cards later, John Sawyer and I had our working file. When word processing became available, the names in the card file were converted to a printed checklist that has been updated almost annually. A number of plants have been removed from the list over the years, especially those occurring out-of-range in eastern Siskiyou County or that disappeared into synonymy. Our field collections, graduate student theses at Humboldt State University, the publication of the *The Jepson Manual*, and recent monographs and revisions added many more.

Our most recent attempt at inventorying the vascular plants of northwestern California now appears as List 1 in this catalog. I plan to continue to update this list and I ask for your assistance in bringing errors of any sort to my attention at jps2@humboldt.edu.

ACKNOWLEDGMENTS

It is a pleasure to acknowledge the contributions to this and previous checklists made by John Bair, Marc Baker, Douglas Barbe, Linda Barker, Sydney Carouthers, Lincoln Constance, Joseph DiTomaso, Lawrence Heckard,, Gordon Leppig, Kristine Mergenthaler, John Miller, Thomas & Jane Nelson, John Sievert, Alan R. Smith, G. Ledyard Stebbins, and Margaret Wetherwax. Specimens collected by students in the Advanced Plant Taxonomy classes were also important contributions.

We thank Julie K. Nelson for her suggestions and additions of plants to the main checklist. Special thanks to Jennifer Whipple for her additions, comments, and especially for her bringing a generous number of vexing typographical transgressions to my attention.

We must also express our gratitude to the staff members who compile and maintain various data bases, especially the Consortium of California Herbaria and the Oregon Flora Project. We also logged on to the U. S. D. A. Plants Database, the North American Plant Atlas, and the Consortium of Pacific Northwest Herbaria on innumerable occasions.

We especially thank Roberta Jane Cole for her support of this project through the years (actually decades) and for her sharp eyes and companionship in the field.

The financial support of the North Coast Chapter of the California Native Plant Society is gratefully acknowledged.

DEDICATION

This book is dedicated to the memory of John O. Sawyer, Jr. (1939-2012), my colleague, field companion, co-author, and friend. His inquisitive nature, knowledge of the flora and of the geography of California were essential in attempting to account for the plants of our region. This catalog was made possible in large part because of his inspiration, insistence, and contributions.



John O. Sawyer, JR. Photo by Christy Navarro.

SECTION 1.1 — INTRODUCTION

BOTANICAL COVERAGE

Our primary goal is to provide you with a checklist of the native and naturalized vascular plants that occur in northwestern California. By vascular plants, we mean lycophytes (traditionally called fern allies), ferns, conifers, and flowering plants. Escaped ornamentals, plants growing at abandoned home sites, and crops are also included if they have become established and persist without our assistance. This is a more inclusive definition than the one used in the second edition of *The Jepson Manual*, which is the primary reason that we show many more plants as occurring in northwestern California.

The gold standard for documenting the presence of a plant is a pressed and dried specimen deposited in an herbarium. We relied heavily on records available to us at the Consortium of California Herbaria website. Data on over two million specimens may be found at this essential database. While we want this edition of the checklist to be as specimen-based as possible, we decided to allow for the possibility that the author of a treatment has seen the plant in the field, but did not collect a voucher, or that specimens are still being processed. The list of active herbaria with no backlog of unmounted material is a short one.

GEOGRAPHICAL COVERAGE

By northwestern California, we mean the area bounded on the west by the Pacific Ocean, on the north by the Oregon border, on the east by a line that more or less follows Interstate 5, except for an extension into Shasta Co. northwest of Redding, and on the south by the Mendocino-Sonoma county line, then east through Lake Co. to the Central Valley. The region includes all of Del Norte, Humboldt, Lake, Mendocino, and Trinity counties; the western portion of Siskiyou; and the inner Coast Ranges of Tehama, Glenn, and Colusa counties, and the eastern part of the Klamath Region in Shasta County. Plants more characteristic of the floor of the Sacramento Valley are not included.

This area of about 55,000 sq. kilometers (21,000 sq. miles) corresponds roughly to the North Coast subdivision of the California Floristic Province, as defined by Stebbins & Major (1965). In the revised edition of the *Jepson Manual* (Baldwin et al. 2012), it is referred to as the Northwestern California Region (NW),



consisting of three subregions – the North Coast (NCo), the Klamath Ranges (KR), and North Coast Ranges (NcoR). We treat Napa and Sonoma counties as part of the Central Western California Region.

Northwestern California is a region of great botanical, ecological, and geological complexity – in many ways California’s least known and most challenging area. To provide some perspective, there are more vascular plant species in northwestern California than there are in 39 states. See the reviews by Raven & Axelrod (1978), Ornduff et al. (2003), Barbour et al. (2007), and Sawyer et al. (2009) for treatments of the terrestrial vegetation and plant geography.

THE PHYSICAL SETTING

Our region includes the Northern California Coast Ranges and Klamath Mountains geological provinces. The former extends south from Oregon as a narrow band of low coastal mountains. The province widens south of the Klamath Province to include the highlands of Mendocino County and surrounding lowlands. The Klamath Mountains Province is adjacent to the northern Coast Ranges and includes the Marble, Salmon, Scott, Scott Bar, Siskiyou and Trinity ranges, and the Trinity Alps. Both provinces are characterized by steep, rugged terrain. Abrupt changes in aspect, slope, soil properties, and localized disturbance regimes enhance the area's biological diversity.

The climate of northwestern California is generally mild, with wet winters and dry summers. Average annual precipitation at coastal and low elevation mountain locations ranges from 18 to 120 inches. High summer and winter low temperatures range from near 100° and 19° Fahrenheit, respectively. With 145.48 inches, Wilder Ridge in Humboldt County has the highest average annual rainfall in California. In 1982, Camp 6 in Mendocino County was subjected to 257.9 inches, the single year record for California. Here are the much more reasonable temperature and rainfall data from the four corners in the region.

City	Monthly Temperatures (°F)	Annual Precipitation (inches)
Eureka	Highs 55-64 Lows 41-50	40.31
Crescent City	Highs 54-65 Lows 39-51	71.26
Yreka	Highs 45-92 Lows 25-53	19.95
Redding	Highs 55-98 Lows 36-66	34.61

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TAXONOMIC PHILOSOPHY

We begin by confessing to what will be seen as heresy in some quarters. Families and genera do not exist in nature. They are products of the human intellect. We invented these categories as a way of sorting and grouping the array of plants and animals that we encountered. These groups were defined on features that were visible to the unclothed eye. They were the product of an analysis of the similarities and differences in plants. Linnaeus was instrumental in emphasizing the importance of the number of sepals, petals, stamens, and carpels, as opposed to the growth form and

vegetative characters used by his predecessors. Given that we have invented these concepts, it seems reasonable that we would define them so that professionals, amateurs, and ordinary folk alike, would find them useful.

Over a third of the family concepts appearing in this catalog were first published in 1789 by Antoine Laurent de Jussieu, a professor of botany at Jardin de Plantes in Paris. He had his eyes, a hand lens, and his intellect. Through the centuries, new data were derived from anatomy, chemistry, genetics, cytology, and molecular studies. It is impressive to see how well his family concepts have fared.

In the 1960's, advocates of differences in chromosome numbers, the presence of certain chemical compounds, and the new methodology of numerical taxonomy suggested that, at last, we would have objective means of defining our taxonomic categories. Intriguing new data emerged – masses of it. They were most useful in some instances and confounding in others. Today the dominant approach involves cladistic analysis to reveal phylogenetic relationships. These are presented in the form of cladograms, branching diagrams that show closeness of relationships. They are sometimes presented with an aura of metaphysical certitude. They do not, in and of themselves, present classifications. That still requires the work of an experienced taxonomist.

We remain a member of a dwindling minority that does not favor making taxonomic or nomenclatural changes based on molecular, cytological, anatomical or chemical data alone. Those differences must also be expressed in morphological features that are useful in the identification of plants. Segregate genera have been proposed based solely on differences in chromosome numbers. This is not useful. The author of a new taxon should be able to capture its distinctiveness in morphological terms, perhaps best expressed in a dichotomous key. This would rule out recognition of cryptic species that by definition are indistinguishable morphologically.

In most instances, there is little controversy regarding the placement of plants in families. In others, family concepts remain controversial, with significant differences existing among leading experts. Our family concepts are more closely aligned with those of Takhtajan (2009), Heywood et al. (2007), Kubitzki et al. (1990 →), and the United States Department of Agriculture's Plants Database than they are with the circumscriptions found in *The Jepson Manual* (Baldwin et al. 2012) or the Angiosperm Phylogeny Group (2016).

Carving segregate families and genera out of

existing taxa is nothing new – 35 families out of *Compositae*, 50 families out of *Gramineae*, and over 40 segregate genera out of *Astragalus* have been proposed. Obviously they have not withstood the test of usefulness to the taxonomic community. Various analyses have also suggested that a number of well-known families should be merged into other families, as in treating the *Asclepidaceae* as a subfamily of *Apocynaceae*. On the other hand, we believe that the traditional concepts of *Araceae*, *Liliaceae*, *Malvaceae*, *Plantaginaceae*, *Sapindaceae*, and *Scrophulariaceae* have served us well.

Two departures are particularly noteworthy. Recent studies have called into question the limits of the traditional *Scrophulariaceae*. The Angiosperm Phylogeny Group has proposed the transfer of hemi- and holoparasitic taxa to *Orobanchaceae*, *Mimulus* to *Phrymaceae*, and many other well known scrophs to *Plantaginaceae*. We have elected to follow Takhtajan (2009) and others in retaining a more traditional circumscription of the scroph family. We agree with William Weber, who in the latest edition of his Colorado flora noted that “Based on molecular evidence, this family has been broken up and most of its members have been moved elsewhere. Unnatural or not, the traditional *Scrophulariaceae* remains a useful, morphologically recognizable group....” We also follow Takhtajan and others in expanding the limits of the family to include *Orobanchaceae*.

Even more perplexing is how to deal with *Liliaceae*. While students of plant families agree that the traditional circumscription of the family is much too broad, its dismantling into over 100 segregate families remains controversial and unsettled. Our plants in northwestern California could be placed in as many as 25 of them! Note the different circumscription of *Asparagaceae* in *The Jepson Manual* and the new *Flora of Oregon*. Because of the mercurial and conflicting boundaries of these segregate families, we have chosen to retain the traditional view of *Liliaceae*, as seen in Hickman (1993) until a more stable and usable arrangement of segregate families is developed.

FAMILY NAMES

We follow the *International Code of Nomenclature for Algae, Fungi, and Plants* (McNeill et al. 2012) and several other standard references in using the family names *Compositae*, *Cruciferae*, *Gramineae*, *Labiatae*, *Leguminosae*, and *Umbelliferae*, rather than the alternatives (*Asteraceae*, etc.) permitted by the Code. We also follow a recent change in the Code which

calls for the names of all taxonomic categories, including families, to appear in italics or bold-face.

And from the world of the anally-retentive, it's not really proper to say, “The *Liliaceae* are....” It's “*Liliaceae* are....” All family names are plural adjectives used as nouns and you really don't need the “the.”

COMMON NAMES

Those of us with professional backgrounds in botany and related fields rely on the scientific names of plants in our work. These names are subject to the provisions of an international code of nomenclature. Inherent in this system of naming is the concept of reflecting relationships. All of the species assigned to a particular genus are considered closely related to one another; all of the genera in a particular family are similarly related.

The rest of us are more comfortable with common or vernacular names. While scientific names are often Latin- or Greek based and viewed as difficult to pronounce, common names are often descriptive and made up of familiar words, such as California sunflower. But, there are some problems.

- Common names are not constructed according to any set of rules. There is no “correct” common name.
- They do not always indicate closeness of relationship. Bear grass, yellow-eyed grass, grass-of-Parnassus, and grow grass are plants in four different families and none of them are true grasses.
- They are not always short and descriptive. They can be obscure. Welcome home husband no matter who drunk you be, rabbit tobacco, and ramping fumitory are real common names.
- Many common names, such as wheat, magnolia, and aster, have been in use for centuries and are widely known. They are typically applied to plants that are ornamentals or economically important to use. Others have been contrived by botanists or even government agencies. Willis Linn Jepson was very proud in claiming that he had invented more common names for California plants than any other botanist.

We plead guilty in contriving a few common names. Our primary sources are our standard California floras and the United States Department of Agriculture's Plants Database. We have attempted to standardize the format of common names. They are not capitalized, except for proper nouns. We use “small-flow-

ered" rather than "small flower" and "pampas grass" rather than "pampasgrass." We also use the hyphen to distinguish between poison-oak, which is not a true oak, and valley oak, which is.

ORGANIZATION AND FORMAT

This catalog is in three parts. It begins with an introductory section that defines the botanical and geographical scope of the catalog, a history of the professional and amateur botanists whose field work is the basis of our knowledge of the region's flora, and an overview of the plants of northwestern California.

It also includes, as **Section 1.4**, a numerical overview of our flora at two levels — (1) the number of families, genera, species, and taxa in each of the four major groups, and the top five families and genera in terms of taxa; (2) the number of genera, species, and taxa in each family. We have also included a summary (**Section 1.5**) that shows the number of taxa that are herbs, shrubs, trees, vines, annuals, perennials, native, endemic, and introduced. We have treated biennials and annual-perennials as perennials in this tally. The distinction between shrub and tree is arbitrary and you may well disagree as to the proper category in some cases.

The bulk of the catalog is a series of checklists. **Section 2.1** is the main checklist of the catalogue. It assumes that you have a working knowledge of the technical names for plant families and for the plants themselves. If this is not the case, we hope that you will find the next two lists helpful. See 2.1 itself for details as to its format.

The purpose of **Section 2.2** is to allow you to convert the common name of a plant family that is familiar to you to its technical one, as in goosefoot family → *Chenopodiaceae*. This allows you to go back to the main list to find plants. **Section 2.3** does the same thing for the plants themselves, but only at the genus level. For example, the low goosefoot, red goosefoot, and many-seeded goosefoot do not appear in the list under low, red, or many-seeded. They will all be found under goosefoot, along with its genus (*Chenopodium*) and family (*Chenopodiaceae*).

Section 2.4 is a compilation of endemics, those plants found only in northwestern California. There are no families endemic to the region. More intensive field work and records in the Consortium of California Herbaria have caused us to add and to delete a few plants. We have excluded a few anomalous reports, especially historical ones, from specimens collected far out of range. It also deals with the 109 plants that are endemic to our region, but that extend their range into southwestern Oregon.

Section 2.5 shows the rare, endangered, and threatened plants of the region. Please note that by law the United States Department of Fish & Wildlife and the California Department of Fish & Wildlife are authorized to legally declare that a plant is rare, endangered, or threatened. These are the federally-listed and state-listed plants. As you will discover, these two agencies do not always agree. Each has its own set of criteria. In the second part of the section, you will see the results of the cooperative effort between the California Native Plant Society's Rare Plant Program and that of the California Natural Diversity Database. While their decisions are not legally binding, they are seen as scientifically authoritative.

Sections 2.6 through **2.12** address different attributes, biological features, or uses of our plants. We hope that the titles are appropriately descriptive. Explanatory text is provided for each of them.

Section 3 of the catalog is meant to assist you in identifying an unknown plant found in northwestern California. We begin with a different approach. Using easily observed features, such as growth form and habitat, we have extracted from the list of 3811 plants a series of them that are so distinctive that it would be a shame to have to resort to a traditional key to identify them.

As you are probably aware, the traditional method is to run your unknown through the steps of a dichotomous key. Keys can be frustrating. We have included two keys – one to families and the other to the genera of woody plants. They are presented in a more user-friendly format.

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SECTION 1.2

BOTANIZING IN NORTHWESTERN CALIFORNIA

Native Americans have been collecting, naming, and using the plants of this region for thousands of years. This knowledge was critical in recognizing edible, toxic, medicinal, spiritual, and ceremonial plants. And as in all cultures, they saw others that were appreciated for their beauty and fragrance.

The first European plant collections from the region were a product of the English expedition commanded by Captain George Vancouver. On board the H. M. S. Discovery was the Scottish surgeon, botanist, and naturalist **Archibald Menzies** (1754-1842). In May 1753, the expedition anchored off Trinidad for four days, during which crew members, perhaps not including Menzies himself, went onshore and to collect specimens. They brought back a gooseberry that Frederich Pursh would later name *Ribes menziesii*. He would also give the madrone its scientific name, *Arbutus menziesii*. Menzies is also commemorated in the names of two other plants found in northwestern California – the mock azalea (*Menziesia ferruginea*) and the Douglas-fir (*Pseudotsuga menziesii*). From 1783 to 1795, he collected about 400 plants that were new to science, many of them from the Pacific coast of North America. His private herbarium is deposited at the Royal Botanic Garden in Edinburgh.

The next botanist of note was **William Dunlop Brackenridge** (1810-1893), also a Scotsman. He served as horticulturalist and assistant botanist on the United States Exploring Expedition, under the command of Charles Wilkes. From 1841-1842, the crew explored the coasts of Oregon and California, including inland excursions; probably the first. While botanizing around Mount Shasta, Brackenridge came upon what we now call the California pitcher plant. A few years later, it was described formally by John Torrey as *Darlingtonia californica*.

In June and July 1853, the Scottish botanist, plant collector, and conifer enthusiast ("cone-head"), **John Jeffrey** (1826-1854), collected in Scott Valley, on Scott Mountain, and in the Coast Range. He found a large, previously undescribed pine growing on Mount Shasta. Of course, we now know it as the Jeffrey pine (*Pinus jeffreyi*). He also discovered two other plants found in northwestern California, the foxtail pine (*P. balfouriana*) and the Sierra shooting star (*Dodecatheon jeffreyi*).

In 1860, the California Legislature approved the formation of the Geological Survey. In addition to mapping and describing the state's geological features, it was also charged with cataloging its plants and animals. The Survey hired the Yale educated **William Henry Brewer** as its botanist, who served in the position until 1864. He was succeeded by **Henry Nicholas Bolander**. From 1860 through 1873, these two botanists were an omnium gatherum duo. They really bailed hay! No one before them had collected more specimens from around the state, including its remote northwestern corner.

Another Yale graduate, **Sereno Watson** (1820-1892), was the botanist for the Clarence King Expedition in California. He was a major collector of the flora of the western United States, including California. He would succeed his mentor, Asa Gray, as botanist at Harvard University and would coauthor with William Henry Brewer and Asa Gray the *Botany of California*, our first state flora.

The flora of California continued to attract botanists from the eastern United States, including two of its most prominent. **Asa Gray** (1810-1888) is generally regarded as the outstanding American botanist of the nineteenth century. He botanized in California in 1872, 1877, and 1885, ranging from Mount Shasta to Monterey. There is a specimen of *Rosa gymnocarpa* that he collected on Mount Shasta in 1872 deposited at the Gray Herbarium at Harvard, along with *Abies grandis*, *Arnica viscosa*, *Ericameria bloomeri*, and *Streptanthus tortuosus* from his 1877 trip. During Gray's active years, California botanists routinely sent their collections back to Harvard for him to bless or describe as a new species or variety. **John Torrey** (1796-1873) visited California in 1865 and was with Gray in 1877. A few hundred of his California specimens are deposited in the herbaria at Harvard and the New York Botanical Garden. Several were collected in Lake County, including the California nutmeg (*Torreya californica*). In his obituary, Gray described Torrey as "the chief of American botanists."

Clinton Hart Merriam (1855-1942), like Gray and Torrey, was a medical doctor who gave up his practice to become widely respected as an ornithologist, mammalogist, entomologist, and ethnographer. He founded the

U. S. Biological Survey. He eventually moved to California where he became involved with the Sierra Club, met John Muir, and developed a serious interest in the ethnobotany of California Indians, especially their basketry. There are over 500 of his collections at the California Academy of Science, made from 1889 to 1941. Every county in northwestern California is represented in his material. His labels are replete with familiar place names – Gasquet, Mount Shasta, Laytonville, Blue Lake, Happy Camp, and the top of Yolla Bolly.

The California Academy of Sciences was founded in 1853 and early on became an important center of educational and scientific pursuits. Among its seven founders was **Albert Kellogg** (1813-1887), also trained as a physician. He was a collector of the flora of California and described about 215 species of plants. Most of his northwestern California specimens were from Mendocino County.

The Academy was also the home of **Alice Eastwood** (1859-1953), where she worked from 1891 to 1949. She is credited with having built its plant collection, and having personally saved almost 1500 type specimens from the devastating 1906 earthquake and subsequent fires in San Francisco. She was a major collector of our flora, as seen in the data below. The Alice Eastwood Memorial Grove in Humboldt County commemorates her efforts to save this group of redwoods. Seventeen plant species are named after her, as are the genera *Aliciella* and *Eastwoodia*.

The University of California at Berkeley was founded in 1868 and since its inception has been a prominent institution for the study of systematic botany. Its first plant taxonomist was **Edward Lee Greene** (1843-1915), who served as Professor of Botany from 1885 to 1895. He was an avid collector and author. His works on the flora of the San Francisco Bay were seen as the first scholarly local floras of our state. He named over 4400 new species and published 565 papers. His personal library

of over 4000 volumes and his herbarium are at the University of Notre Dame. He had converted to Roman Catholicism in later life.

Greene was succeeded by the individual many believe had the greatest influence on California botany during his lifetime – **Willis Linn Jepson** (1867-1946), a native Californian and graduate of UC, Berkeley. His major works include the *Manual of the Flowering Plants of California* and his incomplete *Flora of California*. His entire professional career (1895-1937) was spent at Berkeley. He founded the California Botanical Society and its journal, *Madroño*. In 1892, along with John Muir, Jepson founded the Sierra Club. Almost all of his plant collections were made in California. There are 3228 specimens records from this area in the Consortium of California Herbaria. The saxifrage genus *Jepsonia* is named after him, as are many species and varieties.

The numbers in the table below are collection records of major historical collectors in northwestern California, from data supplied by the participants of the Consortium of California Herbaria. If, for instance, there is a single Eastwood 5500 collection number, based on a specimen at the California Academy, that is one record. But if there are two duplicate specimens in other herbaria, then there are three records.

BIOGRAPHICAL SKETCHES OF LESSER KNOWN COLLECTORS

Harold Ernest Parks (1880-1967). Early on in his career, Parks volunteered for military service in the Philippines and after being discharged held various jobs, including being a mill worker, a salesman, a special clerk at the Post Office, and an employee of the National Biscuit Company. He also developed an interest in botany, especially fungi. From 1916 to 1921, Parks collected in the San Francisco Bay Area and came to the attention of W. A. Setchell, a world-renowned expert on algae and fungi at the University of California, Berkeley.

Collector	DNT	HUM	LAK	MEN	SIS	TRI
Abrams	399	322	302	415	☼	☼
Applegate	138	☼	☼	☼	565	☼
Baker	☼	175	929	292	370	115
Butler	☼	☼	☼	☼	3894	☼
Eastwood	897	219	429	1507	1173	176
Gillespie	473	1435	☼	☼	722	179
Howell	☼	☼	566	300	1209	573
Jepson	132	598	661	928	727	182
Munz	219	110	160	☼	138	768
Parks	6065	1598	162	☼	☼	☼

☼ Fewer than 100 records from this county

He would later offer him a position – first as a general assistant, then collector, Associate Curator, and finally Honorary Curator. In 1931, Harold and his wife, Susan Priscilla, moved to Trinidad in Humboldt County where they were well-known and active in the area. He continued collecting fungi and vascular plants for another twenty-two years. It was during this period that he met and established a working relationship with Joseph Prince Tracy. About thirty plants have been named in his honor, including *Salix parksiana*, which was originally described as an endemic willow of Del Norte and Humboldt counties. You won't find that name in *The Jepson Manual*. It is now treated as part of *S. melanopsis*.

Elmer Ivan Applegate (1867-1949), the "Erythronium man," as he was sometimes called, was born near Ashland, Oregon. He attended San Jose Normal School (now San Jose State University) and Stanford University where he received his formal botanical education. He would later serve many years as Honorary Acting Director of the Dudley Herbarium at Stanford. He worked under the direction of Frederick Coville of the U. S. Department of Agriculture on plant surveys in the Cascade Mountains, and at age 67 began a new career as a ranger-naturalist at Crater Lake National Park. In the 1930's he published his monograph of the trout lilies (*Erythronium*) and floras of Crater Lake and Lava Beds National Monuments. He named twelve new plants and he is memorialized by the wavy-leaved paintbrush (*Castilleja applegatei*).

George Dexter Butler (1850-1910) was a lawyer by professional training and was admitted to the bar in Iowa. But first he became a teacher in Arkansas and the Indian Territory (now Oklahoma). It was during that period that he began corresponding with the eminent botanist, George Engelmann in St. Louis. Butler later moved to California, where he was also admitted to the bar and began what would become a successful practice in Yreka. Then he ran across a copy of one of Jepson's floras in a bookstore in Oakland. It changed his life. He was now financially independent, which allowed him over the next four years to make numerous botanical forays out of Yreka. He built an herbarium building on his home property. During a four year period of intense collecting, Butler amassed what Jepson called "... by far the most collection that has thus far been made of the flora of Siskiyou County." His herbarium was donated to the University of California. *Isoetes butleri*, the limestone quillwort of the eastern United States, was named after him by Engelmann.

Milo Samuel Baker (1868-1961) was born in Iowa and came to California with his family in 1875, settling in Tehama County. He taught school in Santa Clara, Modoc, San Francisco, and Sonoma counties, and later for many years at Santa Rosa Junior College. He began collecting plants at an early age and continued to do so for the rest of his life. He had two great botanical interests – violets and the flora of the North Coast Ranges. He was the author of *A Partial List of Seed Plants of the North Coast Ranges of California*, which went through seven editions from 1932 to 1954. In his last edition, he reported 2425 taxa. His specimens are now deposited at Sonoma State University, except for his violets, which are at the University of California, Berkeley.

TWO LOCAL AMATEUR BOTANISTS

Have you noticed that sometimes a person is labeled as an "amateur" in an attempt to be dismissive of the individual's knowledge, skills, or accomplishments? Etymology does not support that connotation. The word comes from the Latin infinitive for "to love." The two amateur botanists discussed below are excellent examples of how the word should be used in its positive sense – a person who engages in an activity for pleasure, without compensation, or in their case, because of their love of plants. California has been blessed by many outstanding amateur botanists who have made significant contributions to our knowledge and to the conservation of our flora. If you are not a member of the California Native Plant Society, consider joining at cnps.org!

Ruby Van Deventer (1892-1974) was born and grew up in Del Norte County, attended high school in Crescent City, and was the first woman from her county to graduate from the University of California, Berkeley. She came back to Crescent City where she taught language and history for many years, retiring in 1954. In 1936 Ruby and her husband Arthur took their daughter down to Berkeley to enter her as a new freshman. It was on this trip that she met Willis Linn Jepson. She had sent him specimens a few months earlier, which he identified. He explained that he was happy to meet someone from Del Norte County, noting that it was the least known area of the state botanically. He had begun collecting there in 1907. He also noted that she had told him of compiling a list of 1500 Del Norte County plants. Over the years they would work together, she would send him specimens, and they had collecting trips together. It was Jepson who encouraged her to write a flora of Del Norte County. This



Arthur and Ruby Van Deventer. Photo courtesy of Rick Bennett, co-editor of *A Rare Botanical Legacy*.



Joseph Prince Tracy (left) and his nephew. Photo courtesy of the Tracy family.

would eventually become an eleven hundred page typescript. It was to be illustrated with four hundred of Arthur's paintings and drawings. The book was never published. Luckily the manuscript, her field notes, and her botanical specimens are preserved at the Humboldt State University Library and in the HSU Vascular Plant Herbarium. She amassed 1344 collections from Del Norte County and 399 from Siskiyou County. The recently published *A Rare Botanical Legacy*, edited by Bennett & Calla, provides an excellent account of the lives of Ruby and Arthur Van Deventer and includes 128 of his paintings. Should your travels take you to Del Norte County, visit the Ruby Van Deventer County Park on North Bank Road along the Smith River.

Joseph Prince Tracy (1879-1953) or Joe, as he was known to all, was born in Hydesville, Humboldt County. Early on his family moved to Eureka, which would become his permanent home. He was a member of the first graduating class of Eureka High School and one of the first students from Eureka to enter the University of California. Among his instructors were Harvey Monroe Hall, J. Burt Davy, Willis Linn Jepson, and William Setchell. He graduated in 1904 and was awarded membership in Phi Beta Kappa and Sigma Xi. The death of his father and the need to return to Eureka to support his mother and two younger siblings ended his plans to earn an advanced degree. His father had surveyed many of the roads and land lines in the region

and Joe had learned these techniques from him. He found employment with the Belcher Abstract and Title Company in Eureka, where he quickly gained a reputation as an expert in this field. But in his spare time, he pursued his avocation – the flora of northwestern California. At the time of his death, he was highly regarded by both his business associates for his knowledge of titles and documents and by amateur and professional botanists alike with whom he shared his knowledge. The last plant that he collected (No. 19,523) was the water foxtail (*Alopecurus geniculatus*) at Hydesville. His personal herbarium of about 22,000 specimens collected from 1895 to 1953 and his botanical library were donated to the University of California, Berkeley. It is an outstanding personal collection.

He is memorialized in the generic name *Tracyina*, a North Coast endemic of the sunflower family, and in these plants: *Adiantum x tracyi*, *Arctostaphylos columbiana* f. *tracyi*, *Arctostaphylos tracyi*, *Brodiaea laxa* var. *tracyi*, *Clarkia gracilis* ssp. *tracyi*, *Collomia tracyi*, *Delphinium decorum* ssp. *tracyi*, *Drosera tracyi*, *Eriastrum tracyi*, *Festuca tracyi*, *Hemizonia congesta* ssp. *tracyi*, *Lomatium tracyi*, *Lupinus lanzswertii* var. *tracyi*, *Lupinus densiflorus* var. *tracyi*, *Lupinus nevadensis* var. *tracyi*, *Lupinus tracyi*, *Penstemon tracyi*, *Romanzoffia tracyi*, *Salix tracyi*, and *Sanicula tracyi*. I don't think even the great W. L. Jepson has had this many plants named after him.

Joseph Tracy Collections by County	
County	Collections
Del Norte	976
Humboldt	10,444!
Lake	376
Mendocino	858
Siskiyou	151
Trinity	1489

OTHER COLLECTORS

Several other botanists from outside the region have made significant collections in northwestern California. They include Lowell Ahart (Lake, Mendocino, and Siskiyou counties), Lawrence Janeway (Humboldt, Mendocino, Siskiyou, and Trinity counties), Gilbert Muth (Del Norte, Siskiyou, and Trinity counties), Fred Oettinger (Siskiyou County), Mary Sue Taylor (Trinity County), and Dean W. Taylor (Siskiyou and Trinity counties).

THE HSU HERBARIUM

The only large herbarium in northwestern California is in the Department of Biological Sciences at Humboldt State University. Most of the authors 13,100 specimens, except for some of the most recent, are deposited there. We have had a history of outstanding graduate students whose master's theses were floras from the region. Of particular note are the collections of Thomas W. Nelson and his wife Jane Pratt Nelson. After completing his master's thesis on the flora of the Lassics, he was appointed Herbarium Botanist at HSU and remained active in collecting our flora and describing several new plants from the region.

Graduate Student	DEL	HUM	LAK	MEN	SIS	TRI
Marc Baker	667	767	☼	☼	☼	601
William Ferlatte	☼	☼	☼	☼	1043	1263
Gordon Leppig	☼	19	☼	☼	131	☼
Thomas Nelson	280	1593	280	795	431	2377
Kenneth Stillman	☼	☼	☼	☼	601	☼
Jennifer Whipple	☼	☼	☼	☼	655	549
Cara Witte Scott	☼	958	☼	☼	☼	☼

☼ Fewer than 100 records from this county

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Select Habitats and Destinations Across Northwest California



Freshwater Marsh



Coastal dunes



Bald Hills Prairie



Danthonia-fescue prairie



White oak woodland

Michael Kaufmann



Montane chaparral along the California-Oregon border



Subalpine in the Trinity Alps Wilderness



Mixed chaparral surrounding a blue oak woodland in the distant center



Michael Kauffmann

Darlingtonia californica fen in the Siskiyou Wilderness



Michael Kauffmann

Juniper woodland of the eastern Klamath Mountains



Michael Kauffmann

Redwood forest



Mount Eddy



The Russian Wilderness with the Scott Valley below



The Salmon Mountains as seen from Scott Valley



The Trinity Alps



Big Duck Lake in the Russian Wilderness



Bear Valley



Michael Kauffmann

The Marble Rim in the Marble Mountain Wilderness



Michael Kauffmann

Enriched conifer forest along upper Russian Creek



Michael Kauffmann

Serpentine outcrop in the Siskiyou Wilderness

SECTION 1.3

THE PLANT LIFE OF NORTHWESTERN CALIFORNIA

SETTING THE STAGE

Northwestern California is the home of over 3800 kinds of vascular plants, more than is found in most states, and any of the Canadian provinces, except Ontario. The only other region of roughly equivalent size in the United States, the southern Appalachian Mountains, has a comparably diverse flora. More than fifty years ago, the noted plant ecologist Robert Whittaker (1960) explained this richness by noting that our mountains have been a great meeting place of plants from the Pacific Northwest, California, and the Great Basin.

The region's central location along the Pacific Coast, its continuity with other mountain ranges, its diverse climate, geology, and topography, and its long geological history have led to the development of our complex and diverse flora. The region's central location is evident, but its continuity with other mountain ranges is less so. The Klamath Mountains, the Trinity Mountains, the Sierra Nevada, the Cascades, and the Rocky Mountains form an uninterrupted system – the western cordillera. While the Cascades are volcanic and the Trinity Mountains are not, their ranges are continuous at mid-elevation and they share many plant species. The Trinity Mountains are continuous with the Scott, Salmon, and Marble mountains. Plant migration in and out of the region has been greatly aided by the physical connections.

AN ANCIENT LAND

Northwestern California has been available to flowering plants since the Cenozoic (65 million years ago). During this time, volcanic activity created the Cascades to the east and the hills in the Clear Lake area to the south. The region itself has no volcanic deposits. Glaciers were spotty in many of our mountain ranges. This geological history would suggest that this is a region that could hold on to its ancestors and yet allow them and new immigrants to evolve to meet new environmental situations.

A REGION OF VARIED HABITATS

Beyond its physical continuity, northwestern California offers a multitude of suitable environmental conditions. Granite, metamorphic, sedimentary, and serpentine substrates, including limestone, occur at all elevations. The cool, foggy climate of our coast contrasts with a sun-baked interior. Annual rainfall exceeds

120 inches on the west side of the Smith River in Del Norte County, but it is only 18 inches in the Stony Creek watershed in the northern Coast Range. In Scott Valley, winter temperatures are often well below freezing and snow persists. On the coast, winters are mild and snow is fleeting, occurring only about once a decade.

The maze of mountain ranges and complicated river systems make for many local climates, even within a single watershed. The variable and patchy structure of the vegetation itself adds to this microclimate variability. Patches of open woodlands with filtered light, well-lighted chaparral, and dark coniferous forests mingle on a single mountain slope along the Sacramento River watershed east of the Trinity Mountains.

BIODIVERSITY

by David K. Imper

U. S. F. W. S. Ecologist, Retired

The coastal mountains of northwestern California and adjacent southwestern Oregon constitute an area of 19,400 square miles known as the Klamath-Siskiyou Region. It has been declared an "Area of Global Botanical Significance" by the International Union for the Conservation of Nature. It is the home of one of the four richest conifer forests in the world – the other three being in the southeastern United States, China, and Russia. More serpentine outcrops are found here than any place else in North America, many of them rich in endemics. Logging, mining, road building, and grazing have taken their toll and remain continuing threats. Only about 25% of the region remains relatively intact.

At the same time, a great many species, often referred to as "early successional species", have evolved under recurring natural or human-induced disturbances, such as grazing, fire (both natural and Native American-prescribed), wind-throw, disease and others, which served to maintain open habitat conditions. Modern society has greatly altered the manner and extent to which the historical agents of disturbance influence our environment, particularly over the past century and more. As a result, natural encroachment by shrubs and trees, in our region facilitated by generally mild climate and fertile soils, has been allowed to eliminate large swaths of open habitat. This phenomenon, by no means

limited to northwestern California, has and is seriously impacting many habitat types that support a large portion of our botanical diversity, including among others, coastal prairie and scrub, freshwater wetlands, mountain meadows, and even serpentine barrens and wetlands. Included among the many casualties are a majority of our rare and endangered plant species in northwestern California, dependent on some form of disturbance for their existence. Although we have yet to face this growing threat to biodiversity in any meaningful way, we do have many options available, beginning with more thoughtful planning in the many ways society currently "disturbs" its environment, a few of which include: logging, prescribed fire, roadside vegetation management, and management of our parks and wildlands in general.

PLANT GENERALISTS

A surprisingly high proportion of the species in California's larger genera grow in the region. We find half of our state's pines (*Pinus*), two-thirds of the oaks (*Quercus*) and two-thirds of the gooseberries (*Ribes*) here. Herbaceous plants show the same pattern. Three-fourths of the *Carex* species, and 21 of the 24 wild peas (*Lathyrus*) are found here.

Many of the region's plants grow throughout California and much of the West. Ponderosa pine (*Pinus ponderosa*) ranges from South Dakota to Mexico. Virgin's bower (*Clematis ligustifolia*) has a similar range. Canyon live oak (*Quercus chrysolepis*), green-leaved manzanita (*Arctostaphylos patula*), and tobacco brush (*Ceanothus velutinus*) also reside in the Rocky Mountains.

Many species whose center of distribution is the Pacific Northwest extend south into northwestern California. Mountain alder (*Alnus incana* ssp. *tenuifolia*), Pacific yew (*Taxus brevifolia*), wild-ginger (*Asarum caudatum*), and the yellow pond-lily (*Nuphar polysepala*) grow from Alaska to the Sierra Nevada. We also see a southern pattern. The California poppy (*Eschscholzia californica*) and sugar pine (*Pinus lambertiana*) range from southern California to central Oregon. Still other plants also have extensive ranges. Madrone (*Arbutus menziesii*) ranges from British Columbia to San Diego County. These generalists have contributed much to our floristic diversity.

PLANTS WITH ANCIENT LINEAGES

Large portions of the region have been well above sea level since the Cenozoic. With this kind of geologic history, we expect to find **relicts** – plants surviving after the extinction of

related groups or what were once widespread populations now persisting in isolated localities. Our most famous relict species is the coast redwood (*Sequoia sempervirens*). Fossils of *Sequoia* can be traced back to the Jurassic, 200 mya. Those with the overall aspect of the coast redwood go back to the Paleocene, 60 mya. As many as half of the modern genera of woody plants of the region existed in the Middle Miocene, 45 mya. They include the bay tree (*Umbellularia*), maple (*Acer*), nutmeg (*Torreya*), fir (*Abies*), redbud (*Cercis*), and cedar (*Chamaecyparis*). If we go back even further in the fossil record, northwestern California was the home of cycads, tree ferns, palms, figs, and the bald cypress. Would that we could all climb aboard a time machine!

There are other places with similar climates and geological histories. Fossils of the sycamore (*Platanus*) are widespread in California. Today the genus ranges to eastern North America, Europe, Iran, and China. *Pseudotsuga* includes our familiar and economically important Douglas-fir. Other species in the genus grow in southern California, Mexico, Japan, and China. Our California spicebush (*Calycanthus occidentalis*) is closely related to *C. chinensis* from China. The eastern white pine (*Pinus strobus*) has cones nearly identical to those of the western white pine (*Pinus monticola*) of California. The California hazelnut (*Corylus cornuta* var. *californica*) has broadly elliptical leaves, while its eastern counterpart, the beaked hazelnut (*C. c.* var. *cornuta*), has narrowly elliptical leaves. The false bugbane (*Trautvetteria carolinensis*) grows in the Pacific Northwest, the Rocky Mountains, and the South, where it exhibits little morphological difference in these three isolated areas.

ENDEMICIS

The word itself is derived from two Greek words "in or within" + "people." In everyday usage, endemic means growing or existing in a particular locality, region, or people. Conditions, such as poverty, violence or disease, are said to be endemic to a people or area.

For a plant to be considered endemic, it must be both native to a region and found nowhere else. Existing in botanical gardens, greenhouses, laboratories, and private gardens doesn't count. The size of the area or some other feature that describes it becomes the defining feature. A plant may be endemic to North America, the western United States, California, northwestern California, Humboldt County, or a single known location. It may also be endemic to serpentine soils or coastal dunes, etc.

For instance, the two-flowered pea (*Lathyrus biflorus*) exists only at the Lassics, a set of high peaks in the North Coast Range. The Castle Crags harebell (*Campanula shetleri*) is found only on the north-facing cliffs in the Trinity Mountains. The Brewer spruce (*Picea breweriana*) is endemic to the Klamath Mountains. The giant sequoia (*Sequoiadendron giganteum*) and the valley oak (*Quercus lobata*) are endemic to a larger area – California. The large genus *Penstemon* is endemic to North America. Plants endemic to northwestern California are shown in List 2.4. There are no families and only one genus (*Howellanthus*) endemic to the region.

Stebbins and Major (1965) recognized two kinds of endemics. Paleoendemics are plants (or animals) that have existed in an area for a long time and now represent only the remnants of a once larger distribution. They are often systematically isolated.

Relicts are paleoendemics with very restricted distributions. For example, based on fossil evidence the Brewer spruce (*Picea breweriana*) lived in Oregon and Nevada 15 million years ago. Today it is found only in the Klamath Mountains. Its closest living relatives are two endemic spruces in the Mexican highlands. The closest relatives of Sadler oak (*Quercus sadleriana*) are in Japan. One of our more recently described shrubs is the Shasta snow-wreath (*Neviusia cliftonii*), endemic to the Shasta Lake area. Its closest relative is the Alabama snow-wreath (*N. alabamensis*), endemic to six states east of the Mississippi River.

Paleoendemics occurring more widely in the California Floristic Province include the California bay (*Umbellularia californica*), California sycamore (*Platanus racemosa*), coast redwood (*Sequoia sempervirens*), Oregon ash (*Fraxinus latifolia*), storax (*Styrax redivivus*), and western burning bush (*Euonymus occidentalis*).

Neoendemics, as the name suggests, are recently evolved, often associated with changing environmental conditions. Polyploidy and hybridization are the mechanisms involved. Most of our California endemics belong in this category.

ANOTHER WAY OF LOOKING AT ENDEMICS (SOME EXAMPLES)

Widespread

Castilleja miniata ssp. *elata*, *Dicentra formosa* ssp. *oregana*, *Hemizonia congesta* ssp. *calyculata*, *Hemizonia congesta* ssp. *tracyi*,

Lathyrus lanzswertii ssp. *tracyi*, *Penstemon newberryi* var. *berryi*, *Sedum laxum* var. *heckneri*

Restricted to a Region or Mountain Range

Red Mountain: *Eriogonum kelloggii*, *Sedum eastwoodiae*

Scott Mountains: *Arctostaphylos klamathensis*, *Erythronium citrinum* var. *roderickii*, *Galium serpicum* ssp. *scotticum*, *Ivesia pickeringii*, *Minuartia stolonifera*, *Phacelia greenei*, *Triteleia crocea* var. *modesta*

Trinity Mountains: *Sedum kiersteadiae*, *Triteleia crocea* var. *modesta*

Trinity Alps: *Ericameria ophitidis*, *Penstemon filiformis*, *Penstemon tracyi*, *Raillardella pringlei*

Castle Crags: *Ivesia longibracteata*, *Campanula shetleri*

Siskiyou Mountains: *Eriogonum hirtellum*, *Sedum oblanceolatum*

South Fork Mtn. & North Yolly Bolly Mountains: *Lupinus elmeri*, *Lotus yollabolliensis*

The Lassics: *Lathyrus biflorus*, *Lupinus constancei*, *Minuartia decumbens*

Klamath and Trinity River canyons: *Lewisia cotyledon* var. *howellii*, *Monardella siskiyouensis*, *Silene marmorensis*

SERPENTINE FLORA

Many of our recently evolved species occur on a group of dark green minerals collectively known as serpentine. The name comes from its resemblance to a serpent's skin. Serpentine is green to black, and often mottled, with a shiny or wax-like surface. It often contains asbestos. It is found in the Coast Ranges, Klamath Mountains, and the foothills of the Sierra Nevada. In 1965, Governor Edmond G. Brown signed a bill declaring serpentine as California's official state rock and lithologic emblem. We were the first state to designate a state rock.

Its chemical composition renders it a very difficult substrate for plant growth. The nutrients needed for growth – nitrogen, phosphorus, and potassium – are in short supply, but heavy metals – magnesium, iron, chromium, and nickel – are at high levels. It can also be high in asbestos. Serpentine soils tend to be thin and to dry quickly.

Over time, some plant populations have evolved to take advantage of this inhospitable substrate. There are 70 plants endemic to

the serpentines of the Siskiyou Mountains – a higher number than on any other serpentine outcrops in North America. Most of them come from only a few families and genera: *Cruciferae* (*Arabis*, *Boechera*, and *Streptanthus*), *Polygonaceae* (*Eriogonum*), *Umbelliferae* (*Lomatium* and *Perideridia*), and *Hydrophyllaceae* (*Howellanthus*, *Phacelia*).

Northwestern California has long been known for its high degree of endemic serpentine plants. Safford (2010-2011) reported that the Klamath Mountains and North Coast Ranges were the highest in both restricted and total endemics in the California flora. See List 2.6 for a more complete accounting of our serpentine plants.

A CONCLAVE OF CONIFERS

In 1969, John Sawyer and Dale Thornburgh, a colleague in the Department of Forestry at Humboldt State University discovered an isolated population of subalpine fir (*Abies lasiocarpa* var. *lasiocarpa*) in the Klamath Mountains. It is common in the Rocky Mountains. Analysis of monoterpenes in the fir needles by Edward Cope, one of Sawyer's graduate students, demonstrated that the trees in the Klamath were recent immigrants, as opposed

to relicts far outside their present distribution.

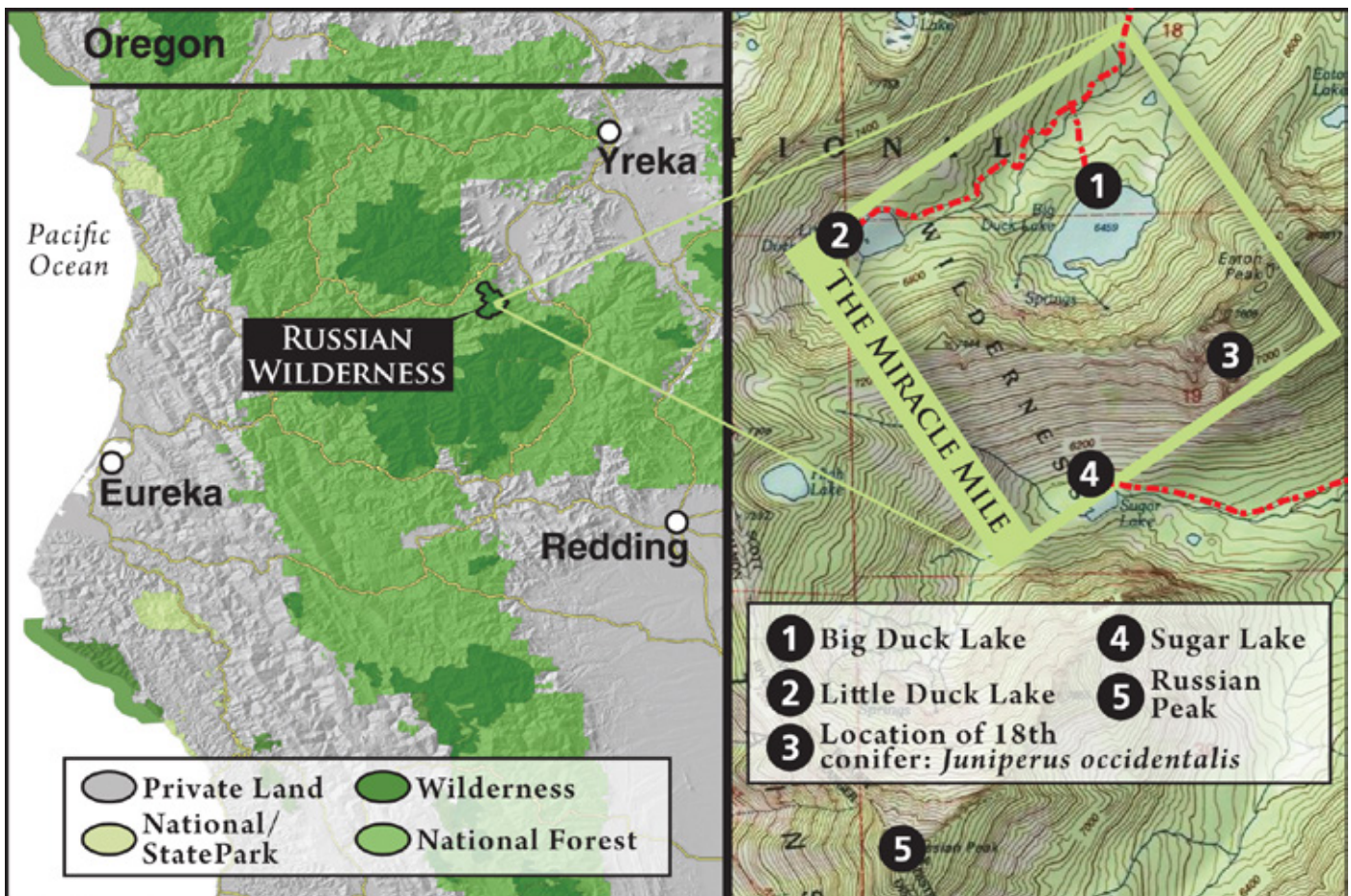
The Russian Wilderness is a 12,000 acre site near Etna in Siskiyou County. The area includes Big and Little Duck Lake, Sugar Lake, the Sugar Creek Research Natural Area, the Duke Lake Botanical Area, and the 8196 ft. Russian Peak. It is also where we find of a biodiversity hotspot known as "The Miracle Mile," one of the highest concentrations of conifer species in the temperate forests of the world. They are listed below. Sawyer and Thornburgh catalogued 17 species in their 1969 investigation. An 18th species, *Juniperus occidentalis*, was discovered in 2012 on a hillside near Sugar Lake by Richard Moore.

Cupressaceae

- Calocedrus decurrens* • incense-cedar
- Juniperus communis* • common juniper
- Juniperus occidentalis* • western juniper

Pinaceae

- Abies concolor* • white fir
- Abies lasiocarpa* var. *lasiocarpa* • subalpine fir



The conclave of conifers in the Miracle Mile. Graphic by Michael Kauffmann.

Abies x shastensis • Shasta fir
Picea breweriana •
 Brewer or weeping spruce
Picea engelmannii • Engelmann spruce
Pinus albicaulis • whitebark pine
Pinus balfouriana • foxtail pine
Pinus contorta ssp. *murrayana* •
 lodgepole pine
Pinus jeffreyi • Jeffrey pine
Pinus lambertiana • sugar pine
Pinus monticola • western white pine
Pinus ponderosa • Ponderosa pine
Pseudotsuga menziesii var. *menziesii* •
 Douglas-fir
Tsuga mertensiana • mountain hemlock

Taxaceae

Taxus brevifolia • Pacific yew

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SECTION 1.4

A Numerical Conspectus

A QUICK OVERVIEW

148 families
 912 genera
 3422 species
 3864 taxa

2950 natives (77.4 %)
 733 naturalized (19.2 %)
 127 endemics (3.3 %)
 197 extinct or extirpated (5.1 %)

999 annuals (25.8 %)
 2869 perennials (74.2 %)

3261 herbs (84.3 %)
 392 shrubs (10.1 %)
 132 trees (3.4 %)
 83 vines (2.1 %)

18 taxa federally-listed (USFWS)
 31 taxa state-listed (CDFW)
 562 taxa listed by CNPS/CNDDDB

TAXA BY MAJOR GROUPS

	Families	Genera	Species	Taxa
Lycophytes	3	4	14	14
Ferns	14	25	61	62
Conifers	3	15	43	44
Flowering Plants	141	868	3304	3744
Totals	161	912	3422	3864

THE TOP FIVE (IN TERMS OF)

Families (genera)

Compositae (133)
 Gramineae (78)
 Cruciferae (45)
 Rosaceae (37)
 Umbelliferae (35)

Genera (species)

Carex (103)
 Trifolium (44)
 Juncus (44)
 Lupinus (37)
 Eriogonum (34)

Families (species)

Compositae (437)
 Gramineae (294)
 Leguminosae (190)
 Scrophulariaceae (162)
 Cyperaceae (155)

Genera (taxa)

Carex (109)
 Lupinus (57)
 Eriogonum (55)
 Trifolium (54)
 Juncus (50)

Families (taxa)

Compositae (498)
 Gramineae (318)
 Leguminosae (232)
 Scrophulariaceae (190)
 Cyperaceae (162)

**NUMERICAL SUMMARY
AT THE FAMILY LEVEL
(GENERA • SPECIES • TAXA)**

LYCOPHYTES

Isoëtaceae	1 • 5 • 5
Lycopodiaceae	2 • 2 • 2
Selaginellaceae	1 • 7 • 7

FERNS

Aspleniaceae	1 • 1 • 1
Athyriaceae	1 • 2 • 2
Blechnaceae	2 • 2 • 2
Cystopteridaceae	1 • 1 • 1
Dennstaedtiaceae	1 • 1 • 1
Dryopteridaceae	2 • 10 • 11
Equisetaceae	1 • 6 • 6
Marsileaceae	2 • 3 • 3
Ophioglossaceae	4 • 7 • 7
Polypodiaceae	1 • 5 • 5
Pteridaceae	6 • 18 • 18
Salviniaceae	1 • 2 • 2
Thelypteridaceae	1 • 1 • 1
Woodsiaceae	1 • 2 • 2

CONIFERS

Cupressaceae	8 • 15 • 15
Pinaceae	5 • 25 • 26
Taxaceae	2 • 3 • 3

FLOWERING PLANTS

Aceraceae	1 • 4 • 7
Acoraceae	1 • 1 • 1
Aizoaceae	6 • 7 • 7
Alismataceae	4 • 11 • 11
Amaranthaceae	1 • 6 • 6
Anacardiaceae	2 • 3 • 3
Apocynaceae	5 • 12 • 12
Aponogetonaceae	1 • 1 • 1
Aquifoliaceae	1 • 1 • 1
Araceae	4 • 5 • 5
Araliaceae	2 • 3 • 3
Aristolochiaceae	2 • 4 • 4
Balsaminaceae	1 • 3 • 3
Berberidaceae	4 • 14 • 15
Betulaceae	3 • 6 • 7
Bignoniaceae	1 • 1 • 1
Boraginaceae	15 • 76 • 81
Buddlejaceae	1 • 1 • 1
Cabombaceae	2 • 2 • 2
Cactaceae	1 • 1 • 1
Callitrichaceae	1 • 7 • 8
Calycanthaceae	1 • 1 • 1
Campanulaceae	9 • 28 • 29

Cannabaceae	2 • 2 • 2
Caprifoliaceae	5 • 16 • 19
Caryophyllaceae	23 • 82 • 90
Celastraceae	2 • 2 • 2
Ceratophyllaceae	1 • 1 • 1
Chenopodiaceae	10 • 38 • 41
Cistaceae	2 • 4 • 5
Cleomaceae	2 • 2 • 2
Commelinaceae	1 • 1 • 1
Compositae	134 • 438 • 499
Convolvulaceae	4 • 26 • 31
Cornaceae	1 • 5 • 6
Crassulaceae	5 • 23 • 33
Crossosomataceae	1 • 1 • 1
Cruciferae	45 • 146 • 154
Cucurbitaceae	1 • 3 • 3
Cyperaceae	14 • 155 • 162
Daticaceae	1 • 1 • 1
Dipsacaceae	2 • 3 • 3
Droseraceae	2 • 7 • 7
Ebenaceae	1 • 1 • 1
Elaeagnaceae	1 • 2 • 2
Elatinaceae	2 • 7 • 7
Ericaceae	23 • 60 • 74
Escalloniaceae	1 • 1 • 1
Euphorbiaceae	2 • 14 • 15
Fagaceae	4 • 24 • 30
Frankeniaceae	1 • 1 • 1
Garryaceae	1 • 4 • 4
Gentianaceae	8 • 19 • 19
Geraniaceae	3 • 20 • 20
Gramineae	78 • 294 • 318
Grossulariaceae	1 • 21 • 26
Haloragaceae	1 • 5 • 5
Hippocastanaceae	1 • 1 • 1
Hippuridaceae	1 • 1 • 1
Hydrangeaceae	2 • 2 • 2
Hydrocharitaceae	5 • 8 • 8
Hydrocotylaceae	1 • 2 • 2
Hydrophyllaceae	10 • 47 • 51
Hypericaceae	1 • 6 • 6
Iridaceae	9 • 24 • 25
Juglandaceae	1 • 3 • 3
Juncaceae	2 • 57 • 65
Juncaginaceae	1 • 3 • 3
Labiatae	21 • 63 • 72
Lauraceae	2 • 2 • 2
Leguminosae	25 • 190 • 232
Lemnaceae	4 • 11 • 11
Lentibulariaceae	2 • 5 • 5
Liliaceae	32 • 133 • 147
Limnanthaceae	2 • 5 • 10
Linaceae	3 • 16 • 16
Loasaceae	1 • 4 • 4
Lythraceae	3 • 6 • 6
Malvaceae	9 • 32 • 41
Martyniaceae	1 • 1 • 1
Meliaceae	1 • 1 • 1
Meliantaceae	1 • 1 • 1

Menyanthaceae	1 • 1 • 1
Molluginaceae	2 • 2 • 2
Moraceae	2 • 2 • 2
Myoporaceae	1 • 1 • 1
Myricaceae	1 • 1 • 1
Myrtaceae	1 • 2 • 2
Nyctaginaceae	2 • 4 • 4
Nymphaeaceae	2 • 3 • 3
Oleaceae	3 • 5 • 5
Onagraceae	9 • 61 • 75
Orchidaceae	10 • 26 • 27
Oxalidaceae	1 • 11 • 11
Paeoniaceae	1 • 1 • 1
Papaveraceae	9 • 17 • 19
Parnassiaceae	1 • 3 • 3
Phytolaccaceae	1 • 1 • 1
Pittosporaceae	1 • 1 • 1
Plantaginaceae	1 • 11 • 11
Platanaceae	1 • 1 • 1
Plumbaginaceae	2 • 2 • 2
Polemoniaceae	12 • 75 • 91
Polygalaceae	1 • 2 • 2
Polygonaceae	7 • 88 • 114
Pontederiaceae	2 • 2 • 2
Portulacaceae	6 • 39 • 45
Potamogetonaceae	3 • 17 • 19
Primulaceae	7 • 14 • 15
Ranunculaceae	14 • 64 • 79
Resedaceae	1 • 2 • 2
Rhamnaceae	3 • 27 • 39
Rosaceae	37 • 114 • 138
Rubiaceae	5 • 25 • 30
Ruppiaceae	1 • 2 • 2
Rutaceae	1 • 1 • 1
Salicaceae	2 • 28 • 29
Santalaceae	1 • 1 • 1
Sarraceniaceae	2 • 2 • 2
Saururaceae	1 • 1 • 1
Saxifragaceae	13 • 43 • 46
Scrophulariaceae	31 • 162 • 191
Simaroubaceae	1 • 1 • 1
Smilacaceae	1 • 2 • 2
Solanaceae	9 • 26 • 26
Staphyleaceae	1 • 1 • 1
Sterculiaceae	1 • 1 • 1
Styracaceae	1 • 1 • 1
Tamaricaceae	1 • 2 • 2
Tecophilaeaceae	1 • 1 • 1
Tropaeolaceae	1 • 1 • 1
Typhaceae	2 • 7 • 8
Umbelliferae	35 • 89 • 96
Urticaceae	3 • 4 • 5
Valerianaceae	4 • 8 • 12
Verbenaceae	2 • 6 • 7
Violaceae	1 • 23 • 30
Viscaceae	2 • 7 • 8
Vitaceae	1 • 2 • 2
Zosteraceae	3 • 5 • 5
Zygophyllaceae	1 • 1 • 1

[These numbers do not reflect a few last minute additions and deletions.]

SECTION 1.5 Nativity, Growth Form, and Duration

CATEGORY	TAXA
Herbs (3261 • 84.3%)	
EA • Endemic annual	22
EAP • Endemic annual-perennial	0
EP • Endemic perennial	90
IA • Introduced annual	296
IAP • Introduced annual-perennial	63
IP • Introduced perennial	262
NA • Native annual	681
NAP • Native annual-perennial	61
NP • Native perennial	1786
Subshrubs-Shrubs (392 • 10.1%)	
ES + ESS • Endemic	8
IS + ISS • Introduced	69
NS + NSS • Native	315
Shrubs-Trees (41 • 1.0 %)	
EST • Endemic	0
IST • Introduced	9
NST • Native	32
Trees (91 • 2.4%)	
ET • Endemic	0
IT • Introduced	29
NT • Native	62
Vines (83 • 2.1%)	
EV • Endemic	5
IV • Introduced	23
NV • Native	55

[These numbers do not reflect a few last minute additions and deletions.]

SECTION 2.1 — THE MAIN CHECKLIST

The primary arrangement of plants is by the traditional major groups: lycophytes or fern allies (quillworts, club-mosses, and spike-mosses), ferns, conifers, and flowering plants. Within each group, the families, genera, species, subspecies, and varieties are arranged alphabetically. Cultivars (cultivated varieties) and forms are not included.

Each entry for a particular plant consists of at least four components: (1) its scientific name, (2) its common name, (3) its nativity and (4) its duration and growth form. The third and fourth elements are shown as a two- or three letter abbreviation where N • native, E • endemic, and I • introduced and A • annual, P • perennial (including biennial), S • shrub, T • tree, and V • vine. Thus NA is a native annual, ET is an endemic tree, IP is an introduced perennial, NST is a native shrub-tree, etc. Several plants also bear the annotation EO (escaped ornamental) or EC (escaped crop).

Many of the entries provide additional information. We have attempted to show which of our plants have not been collected recently and may no longer be a member of our flora. The annotation "Extant?" typically means that a plant has not been collected in our region for the last fifty years. If a plant is of hybrid origin, we have indicated its parents.

The annotation "[TJM2]" indicates that we have included that plant on our list based on its distribution in the second edition of *The Jepson Manual*, even though we have been unable to locate voucher specimens. The phrase "Last collected..." is understood to mean last collected in northwestern California.

At the end of the main list you will find a section entitled "Can't Find A Family?" It is meant to account for the family concepts appearing in Munz, the two editions of *The Jepson Manual*, and other recent sources, but that are not accepted here. A number of entries appear in the format *Asclepiadaceae* → *Apocynaceae*. In some cases, we are dealing with synonyms. *Apiaceae* and *Umbelliferae* are two equally correct names for the same family. We use the traditional form. On the other hand, family names such as *Asclepidaceae*, *Fumariaceae*, and *Pyrolaceae*, have disappeared because they are now treated as subfamilies of a larger family – *Apocynaceae*, *Papaveraceae*, and *Ericaceae*, respectively.

There are a few hundred entries that appear in the Genus A → Genus B format. This is our way of assisting you in looking for plants under generic names that might be unfamiliar. The annotation (in part) means that some of the species in that genus have been transferred to another.

LYCOPHYTES (FERN ALLIES)

ISOËTACEAE – Quillwort Family

- Isoëtes bolanderi* • Bolander's quillwort • NP.
- Isoëtes howellii* • Howell's quillwort, merlin-grass • NP.
- Isoëtes nuttallii* • Nuttall's quillwort • NP.
- Isoëtes occidentalis* • Western quillwort • NP.
- Isoëtes tenella* • Spiny-spore quillwort • NP.

LYCOPODIACEAE – Club-Moss Family

- Lycopodiella inundata* • Bog-moss, bog club-moss • NP.
- Lycopodium* (in part) → *Lycopodiella*
- Lycopodium clavatum* • Ground-pine, running-pine • NP.

SELAGINELLACEAE – Spike-Moss Family

- Selaginella bigelovii* • Bigelow's or bushy spike-moss • NP.
- Selaginella hansenii* • Hansen's spike-moss • NP. [TJM2]
- Selaginella kraussiana* • Krauss' spike-moss • NP.
- Selaginella oregana* • Oregon spike-moss • NP.
- Selaginella scopulorum* • Dense spike-moss • NP.
- Selaginella wallacei* • Wallace's spike-moss • NP.
- Selaginella watsonii* • Alpine spike-moss • NP.



Michael Kaufmann

Lycopodiella inundata

F E R N S

ASPLENIACEAE – Spleenwort Family

Asplenium trichomanes ssp. *trichomanes* • Maidenhair spleenwort • NP.

ATHYRIACEAE – Lady Fern Family

Athyrium distentifolium • Lady fern • NP.

Athyrium filix-femina ssp. *cyclosorum* • Lady fern • NP.

BLECHNACEAE – Deer Fern Family

Blechnum → *Struthiopteris*

Struthiopteris spicant • Deer or hard fern • NP.

Woodwardia fimbriata • Western chain fern • NP.

CYSTOPTERIDACEAE – Brittle Fern Family

Cystopteris fragilis • Brittle or fragile fern • NP.

DENNSTAEDTIACEAE – Bracken Fern Family

Pteridium aquilinum var. *pubescens* • Bracken or brake fern • NP.

DRYOPTERIDACEAE – Holly or Sword Fern Family

Excludes *Woodsia*ceae

Athyrium → *Athyriaceae*

Cystopteris → *Cystopteridaceae*

Dryopteris arguta • Western shield fern, coastal wood fern • NP.

Dryopteris expansa • Spreading wood fern • NP.

Polystichum x *californicum* (*P. munitum* or *P. imbricans* x *P. dudleyi*) • California holly fern • NP.

Polystichum dudleyi • Dudley's holly fern • NP.

Polystichum imbricans ssp. *curtum* • Narrow-leaved sword fern • NP.

Polystichum imbricans ssp. *imbricans* • Narrow-leaved sword fern • NP.

Polystichum x *kruckebergii* (*P. lemmonii* x *P. lonchitis*) • Kruckeberg's sword fern • NP.

Polystichum lemmonii • Shasta holly fern • NP.

Polystichum lonchitis • Northern holly fern • NP.

Polystichum munitum • Western sword fern • NP.

Polystichum x *scopulinum* (*P. imbricans* x *P. lemmonii*) • Western sword or holly fern • NP.

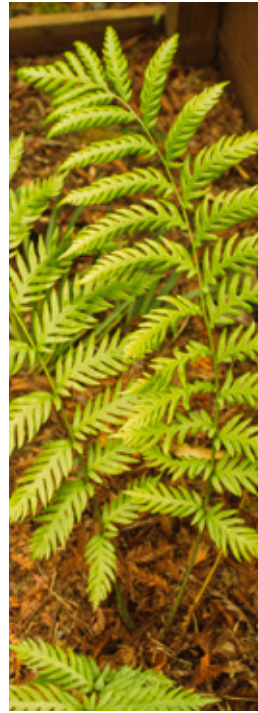
Woodsia → *Woodsia*ceae

EQUISETACEAE – Horsetail or Scouring-Rush Family

Equisetum arvense • Field horsetail • NP.

Equisetum x *ferrissii* (*E. hyemale* x *E. laevigatum*) • Ferriss' hybrid horsetail • NP.

Equisetum hyemale ssp. *affine* • Tall scouring-rush • NP.



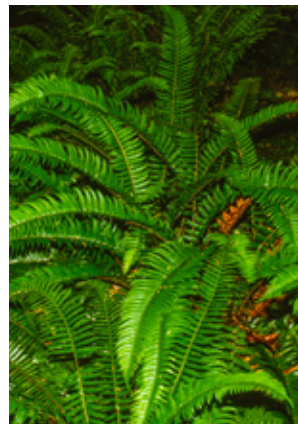
Woodwardia fimbriata



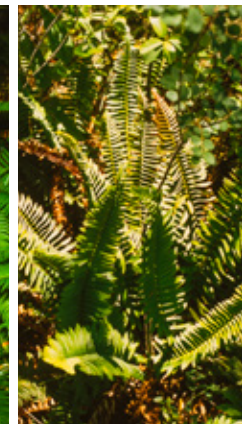
Struthiopteris spicant



Pteridium aquilinum



Polystichum munitum



Polystichum imbricans

Equisetum laevigatum • Smooth scouring-rush • NP.
Equisetum palustre • Marsh horsetail • NP.
Equisetum telmateia ssp. *braunii* • Giant horsetail • NP.

MARSILEACEAE – Water-clover Fern Family

Marsilea oligospora • Water-clover • NP.
Marsilea vestita ssp. *vestita* • Water-clover • NP.
Pilularia americana • American pillwort • NP.

OPHIOGLOSSACEAE – Moonwort Fern Family

Botrychium (in part) → *Botrypus* and *Sceptridium*
Botrychium crenulatum • Scalloped moonwort • NP.
Botrychium minganense • Mingan moonwort • NP.
Botrychium pinnatum • Northwestern moonwort • NP.
Botrychium simplex var. *compositum* • Yosemite moonwort
 • NP
Botrypus virginianus • Rattlesnake fern • NP.
Ophioglossum pusillum • Northern adder’s-tongue fern • NP.
Sceptridium multifidum • Leathery grape fern • NP.

POLYPODIACEAE – Polypody Fern Family

Polypodium californicum • California polypody • NP.
Polypodium calirhiza • Nested polypody • NP.
Polypodium glycyrrhiza • Licorice fern • NP.
Polypodium hesperium • Western polypody • NP.
Polypodium scoleri • Coast polypody, leather-leaved fern • NP.

PTERIDACEAE – Cliff Brake Fern Family

Adiantum aleuticum • Five-finger fern, western maidenhair
 • NP.
Adiantum capillus-veneris • Southern maidenhair • NP.
Adiantum jordanii • California maidenhair • NP.
Adiantum shastense • Shasta maidenhair fern • EP.
Adiantum x *tracyi* (*A. aleuticum* x *A. jordanii*) • Tracy’s maidenhair • NP.
Aspidotis californica • California lace fern • NP.
Aspidotis densa • Indian’s dream • NP.
Cheilanthes cooperae • Mrs. Cooper’s lip fern • NP.
Cheilanthes covillei • Coville’s lip fern • NP.
Cheilanthes gracillima • Lace lip fern • NP.
Cheilanthes intertexta • Coastal lip fern • NP.
Cryptogramma acrostichoides • Parsley fern, American rock-brake • NP.
Cryptogramma cascadiensis • Cascade rock-brake • NP.
Myriopteris → *Cheilanthes*
Pellaea andromedifolia • Coffee fern • NP.
Pellaea brachyptera • Sierra cliff brake • NP.
Pellaea breweri • Brewer’s cliff brake • NP.



Equisetum arvense



Polypodium californicum



Adiantum aleuticum



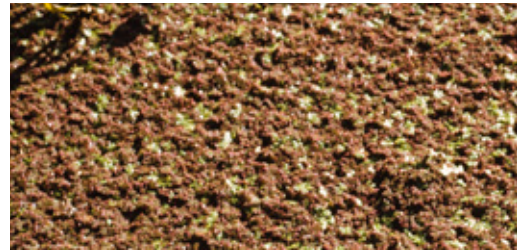
Aspidotis densa

- Pellaea mucronata* ssp. *mucronata* • Bird's-foot fern • NP.
Pentagramma triangularis ssp. *triangularis* • Goldback fern
 • NP.

SALVINIACEAE – Floating Fern Family

Includes *Azollaceae*

- Azolla filiculoides* • Mosquito or duckweed fern • NA.
Azolla mexicana • Mexican mosquito fern • NA.



Azolla filiculoides

THELYPTERIDACEAE – Wood Fern Family

- Thelypteris nevadensis* • Nevada wood fern, Sierra marsh fern
 • NP.

WOODSIACEAE – Cliff Fern Family

Traditionally included in *Dryopteridaceae*

- Athyrium* → *Athyriaceae*
Cystopteris → *Cystopteridaceae*
Woodsia oregana ssp. *oregana* • Oregon woodsia • NP.
Woodsia scopulina • Rocky Mountain woodsia • NP.



Calocedrus decurrens



Callitropsis nootkatensis

Michael Kauffmann

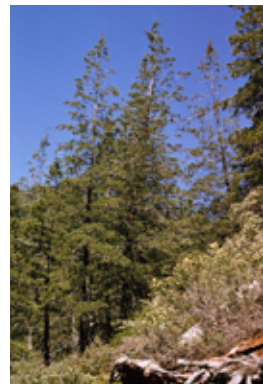
GYMNOSPERMS

CUPRESSACEAE – Cedar or Cypress Family

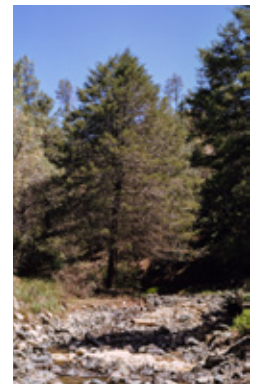
Includes *Taxodiaceae*

- Callitropsis nootkatensis* • Alaska-cedar, Alaska yellow-cedar
 • NT.

- Calocedrus decurrens* • Incense-cedar • NT.
Chamaecyparis (in part) → *Callitropsis*
Chamaecyparis lawsoniana • Port Orford-cedar, Lawson-cypress • NT.
Cupressus (in part) → *Callitropsis*
Cupressus bakeri • Modoc or Baker cypress • NT.
Cupressus macnabiana • McNab cypress • NT.
Cupressus macrocarpa • Monterey cypress • IT.
Cupressus pygmaea • Pygmy cypress • NT.
Cupressus sargentii • Sargent cypress • NT.



Cupressus bakeri

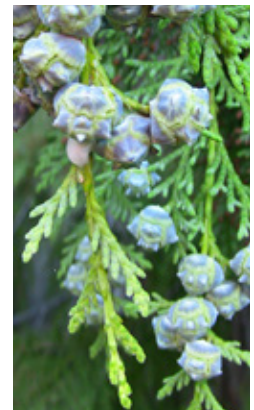


Cupressus sargentii

- Hesperocyparis* → *Cupressus*
Juniperus californica • California juniper • NS. Last collected in 1952. Extant?
Juniperus communis var. *jackii* • Jack's juniper • NS.
Juniperus communis var. *saxatilis* • Common or mountain juniper • NS.
Juniperus occidentalis • Western juniper • NT.
Libocedrus → *Calocedrus*
Neocupressus → *Cupressus*
Sequoia sempervirens • Redwood, coast redwood • NT.
Sequoiadendron giganteum • Sierra redwood, big tree • IT.
Thuja plicata • Western red-cedar or canoe-cedar • NT.
Xanthocyparis → *Callitropsis*



Juniperus communis var. *jackii*



Chamaecyparis lawsoniana

Michael Kauffmann

PINACEAE – Pine Family

- Abies amabilis* • Pacific silver fir • NT.
- Abies concolor* var. *lowiana* • California white fir • NT.
- Abies grandis* • Grand fir • NT.
- Abies lasiocarpa* var. *lasiocarpa* • Subalpine fir • NT.
- Abies magnifica* • Red fir, California red fir • NT.
- Abies procera* • Noble fir • NT.
- Abies x shastensis* (*A. magnifica* x *A. procera*) • Shasta fir • NT.
- Picea breweriana* • Brewer or weeping spruce • NT.
- Picea engelmannii* var. *engelmannii* • Engelmann spruce • NT.
- Picea sitchensis* • Sitka or tideland spruce • NT.
- Pinus albicaulis* • Whitebark pine • NT.
- Pinus attenuata* • Knobcone pine • NT.
- Pinus balfouriana* ssp. *balfouriana* • Foxtail pine • NT.
- Pinus contorta* ssp. *contorta* • Shore or beach pine • NT.
- Pinus contorta* ssp. *murrayana* • Lodgepole or tamarack pine • NT.
- Pinus coulteri* • Coulter pine • IT.
- Pinus jeffreyi* • Jeffrey pine • NT.
- Pinus lambertiana* • Sugar pine • NT.
- Pinus monticola* • Western white or silver pine • NT.
- Pinus muricata* • Bishop pine • NT.
- Pinus ponderosa* var. *benthamiana* • Pacific ponderosa pine • NT.
- Pinus radiata* • Monterey pine • IT.
- Pinus sabiniana* • Ghost, foothill, or gray pine • NT.
- Pseudotsuga menziesii* var. *menziesii* • Douglas-fir, coast Douglas-fir • NT.
- Tsuga heterophylla* • Western or coast hemlock • NT.
- Tsuga mertensiana* • Mountain or subalpine hemlock • NT.



Sequoia sempervirens

Michael Kauffmann



Thuja plicata

Michael Kauffmann

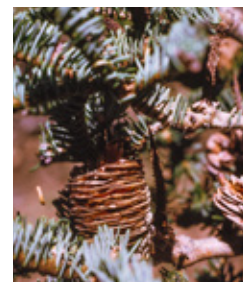


Abies lasiocarpa var. *lasiocarpa*

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TAXACEAE – Yew Family

- Taxus baccata* • Yew, English yew • IST. EO.
- Taxus brevifolia* • Pacific yew • NST.
- Torreya californica* • California-nutmeg, California torreya • NST.



Abies concolor var. *lowiana*



Picea breweriana

Michael Kauffmann



Pinus sabiniana



Pinus albicaulis



Taxus brevifolia

Michael Kauffmann

Michael Kauffmann



Pseudotsuga menziesii var. *menziesii*

FLOWERING PLANTS

ACERACEAE – Maple Family

Included in *Sapindaceae* by some authors, as in TJM2

Acer circinatum • Vine maple • NS.

Acer glabrum var. *diffusum* • Rocky Mountain maple • NST.

Acer glabrum var. *douglasii* • Douglas' maple • NST.

Last collected in 1935. Extant?

Acer glabrum var. *glabrum* • Rocky Mountain maple • NST.

Acer glabrum var. *torreyi* • Torrey's or mountain maple
• NST.

Acer macrophyllum • Bigleaf, canyon, or Oregon maple • NT.

Acer negundo var. *californicum* • California box elder • NT.

ACORACEAE – Sweet Flag Family

Included traditionally in *Araceae*

Acorus calamus • Sweet flag • IP. Last collected in 1949.
Extant?

AIZOACEAE – Ice Plant Family

Aptenia cordifolia • Baby sun-rose • IP. EO.

Carpobrotus chilensis • Sea-fig • IS.

Carpobrotus edulis • Hottentot-fig • IS.

Cypselea humifusa • Panal • IA.

Drosanthemum floribundum • Rosea ice plant • IS. EO.

Mesembryanthemum (in part) → *Carpobrotus* and *Drosan-*
themum

Mesembryanthemum crystallinum • Crystalline ice plant
• IAP.

Tetragonia tetragonioides • New Zealand-spinach • IA. EO.

ALISMATACEAE – Water-Plantain Family

Alisma gramineum • Narrow-leaved water-plantain • NP.

Alisma lanceolatum • Lance-leaved water-plantain • IP.

Alisma subcordatum • Southern water-plantain • IP.

Alisma triviale • Common water-plantain • NP.

Damasonium californicum • Fringed or star water-plantain
• NP.

Echinodorus berteroi • Upright burhead • NA.

Echinodorus cordifolius • Texas mud baby, creeping burhead
• IP.

Machaerocarpus → *Damasonium*

Sagittaria cuneata • Arum-leaved arrowhead • NP.

Sagittaria latifolia var. *latifolia* • Wappato, tule- or Indian-
potato, common arrowhead • NP.

Sagittaria rigida • Sessile-fruited arrowhead • NP.

Sagittaria sanfordii • Sanford's arrowhead • NP.



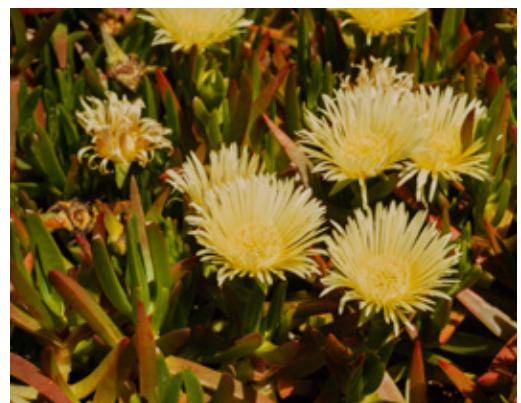
Acer circinatum



Acer macrophyllum



Acer negundo



Carpobrotus edulis

AMARANTHACEAE – Amaranth or Pigweed Family

Excludes *Chenopodiaceae*.

- Amaranthus albus* • Pigweed, tumbleweed • IA.
- Amaranthus blitoides* • Prostrate pigweed • NP.
- Amaranthus californicus* • California pigweed • NA.
- Amaranthus hybridus* • Green pigweed, green amaranth • IA.
- Amaranthus powellii* • Powell’s pigweed • NA.
- Amaranthus retroflexus* • Rough pigweed • IA.

ANACARDIACEAE – Cashew or Poison-Oak Family

- Rhus* (in part) → *Toxicodendron*
- Rhus aromatica* var. *trilobata* • Skunk bush, sumac • NS.
- Rhus ovata* • Sugar bush, sugar sumac • IS.
- Toxicodendron diversilobum* • Poison-oak, Pacific poison-oak • NSV.

APOCYNACEAE – Dogbane Family

- Includes *Asclepiadaceae*
- Apocynum androsaemifolium* • Mountain-hemp, spreading or bitter dogbane • NP.
- Apocynum cannabinum* • Indian-hemp • NP.
- Asclepias californica* ssp. *greenei* • Greene’s milkweed • NP.
- Asclepias cordifolia* • Purple milkweed • NP.
- Asclepias eriocarpa* • Indian milkweed, kotolo • NP.
- Asclepias fascicularis* • Mexican whorled milkweed • NP.
- Asclepias latifolia* • Broad-leaved milkweed • NP. Last collected in 1912. Extant?
- Asclepias solanoana* • Prostrate milkweed • NP.
- Asclepias speciosa* • Showy or creek milkweed • NP.
- Cycladenia humilis* var. *humilis* • Waxy-dogbane • NP.
- Nerium oleander* • Oleander • IS • EO.
- Vinca major* • Periwinkle • IVS • EO.

APONOGETONACEAE – Pondweed Family

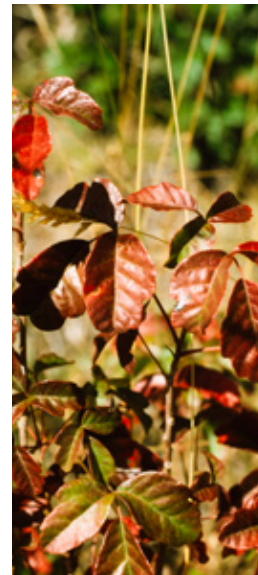
- Aponogeton distachyus* • Cape pondweed, water-hawthorn • IP.

AQUIFOLIACEAE – Holly Family

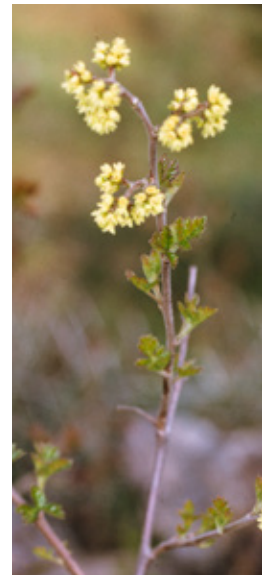
- Ilex aquifolium* • English holly • IST • EO.

ARACEAE – Philodendron or Aroid Family

- Excludes the closely related *Lemnaceae* and *Acoraceae*
- Acorus* → *Acoraceae*
- Arum italicum* • Italian arum • IP. EO.
- Arum palaestinum* • Solomon’s-lily • IP. EO.
- Landoldtia* → *Lemnaceae*
- Lemna* → *Lemnaceae*
- Dracunculus vulgaris* • Dragon-arum • IP. EO.



Toxicodendron diversilobum



Rhus aromatica var. *trilobata*

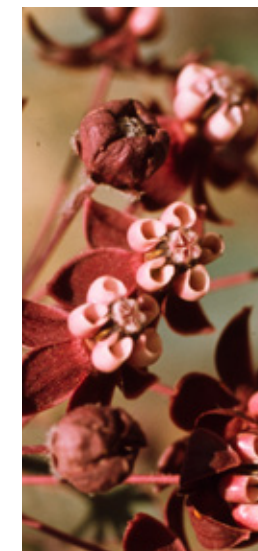


Apocynum androsaemifolium



Apocynum cannabinum

Michael Kauffmann



Asclepias cordifolia



Asclepias solanoana

Lysichiton americanus • Yellow skunk-cabbage • NP.
Spirodela → Lemnaceae
Wolffia → Lemnaceae
Wolffiella → Lemnaceae
Zantedeschia aethiopica • Calla-lily • IP. EO.

ARALIACEAE – Aralia or Ginseng Family

Excludes *Hydrocotylaceae*
Aralia californica • Elk-clover, spikenard, spig nut • NS.
Hedera helix • English ivy • IV. EO.
Hedera hibernica • Atlantic ivy • IV. EO.
Hydrocotyle → *Hydrocotylaceae*

ARISTOLOCHIACEAE – Birthwort Family

Aristolochia californica • Pipe vine, Dutchman’s pipe, birthwort, California snakeroot • NV.
Asarum caudatum • Wild-ginger, long-tailed-ginger • NP.
Asarum hartwegii • Hartweg’s wild-ginger • NP.
Asarum marmoratum • Marbled wild-ginger • NP.

BALSAMINACEAE – Jewel Weed Family

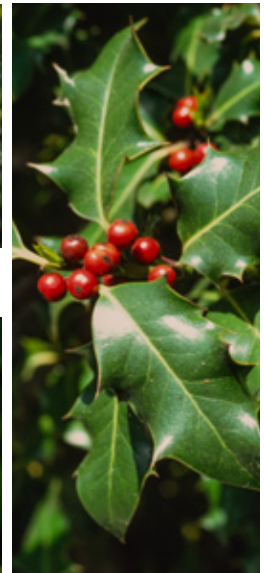
Impatiens balfourii • Balfour’s snap weed • IA. EO.
Impatiens glandulifera • Glandular snap weed • IA. EO.
Impatiens nolitangere • Western jewel weed • IA. EO.

BERBERIDACEAE – Barberry Family

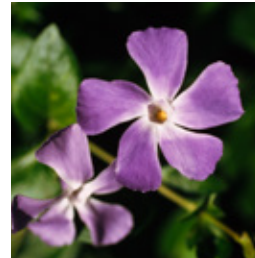
Includes *Podophyllaceae*
Achlys californica • Vanilla leaf, deer foot • NP.
Achlys triphylla ssp. *triphylla* • Vanilla leaf, deer foot • NP.
Berberis (in part) → *Mahonia*
Berberis darwinii • Darwin’s barberry • IS • EO.
Berberis vulgaris • Common barberry • IS. Last collected in 1952. Extant?
Mahonia aquifolium • Oregon-grape, holly-leaved mahonia • NS.
Mahonia dictyota • Jepson’s mahonia, California barberry • NS.
Mahonia nervosa var. *mendocinensis* • Hardy Creek barberry • ES.
Mahonia nervosa var. *nervosa* • Oregon-grape, long-leaved mahonia • NS.
Mahonia pinnata ssp. *pinnata* • California or shiny mahonia, California barberry • NS.
Mahonia piperiana • Piper’s barberry • NS.
Mahonia pumila • Dwarf mahonia, dwarf barberry • NS.
Mahonia repens • Creeping mahonia, creeping barberry • NS.
Vancouveria chrysantha • Siskiyou inside-out flower, yellow inside-out flower • NP.



Nerium oleander



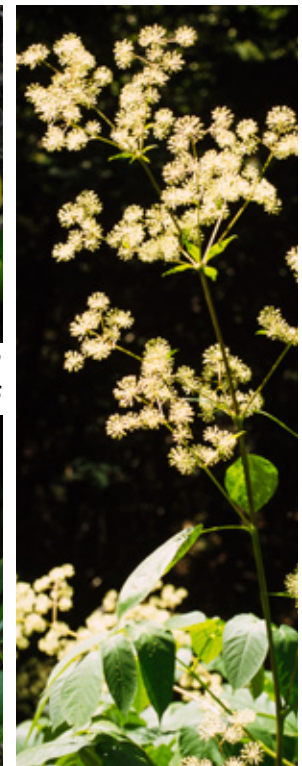
Ilex aquifolium



Vinca major



Lysichiton americanus



Aralia californica



Zantedeschia aethiopica



Asarum caudatum

Michael Kauffmann

Vancouveria hexandra • Northern vancouveria • NP.
Vancouveria planipetala • Inside-out flower, redwood-ivy • NP.

BETULACEAE – Alder or Birch Family

Alnus incana ssp. *tenuifolia* • Mountain alder • NS.
Alnus rhombifolia • White or California alder • NT.
Alnus rubra • Red or Oregon alder • NT.
Alnus viridis ssp. *fruticosa* • Siberian alder • NS.
Alnus viridis ssp. *sinuata* • Sitka, tag, or thin-leaved alder • NS.
Betula occidentalis • Water or western birch • NST.
Corylus cornuta ssp. *californica* • California hazelnut, filbert
• NST. EO.



Achlys triphylla

BIGNONIACEAE – Bignonia Family

Catalpa bignonioides • Catalpa, Indian bean • IT. EO.

BORAGINACEAE – Borage Family

Excludes *Hydrophyllaceae*.

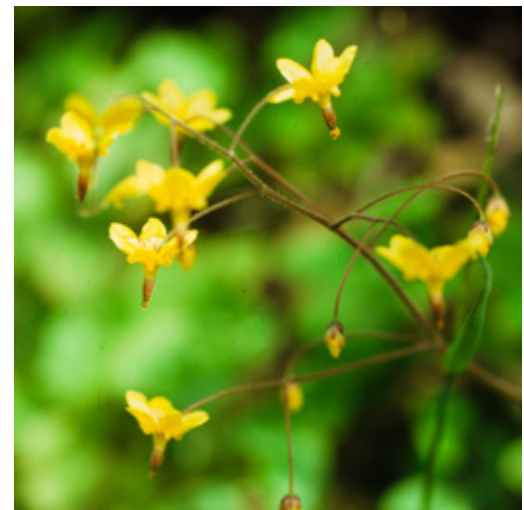
Adelinia → *Cynoglossum*

Allocarya → *Plagiobothrys*

Amsinckia eastwoodiae • Eastwood's fiddleneck • NA.
Amsinckia intermedia • Common fiddleneck, rancher's fireweed
• NA.
Amsinckia lunaris • Bent-flowered fiddleneck • NA.
Amsinckia lycopoides • Bugloss-flowered fiddleneck • NA.
Amsinckia menziesii • Menzies' fiddleneck • NA.
Amsinckia retrorsa • Harvest fireweed • NA.
Amsinckia spectabilis var. *spectabilis* • Seaside alkanet • NA.
Amsinckia tessellata var. *gloriosa* • Devil's-lettuce • NA.
Last collected in 1902. Extant?
Anchusa officinalis • Alkanet, bugloss • IP.
Andersonglossum → *Cynoglossum*
Borago officinalis • Common borage • IA.
Buglossoides arvensis • Corn gromwell • IA.
Cryptantha affinis • Common cryptantha • NA.
Cryptantha ambigua • Wilke's cryptantha • NA.
Cryptantha crinita • Sacramento cryptantha • NA.
Cryptantha dissita • Lake cryptantha • NA.
Cryptantha excavata • Deep-scarred cryptantha • NA.
Cryptantha flaccida • Flaccid cryptantha • NA.
Cryptantha hispidula • Napa cryptantha • NA.
Cryptantha intermedia var. *hendersonii* • Henderson's
cryptantha • NA.
Cryptantha intermedia var. *intermedia* • Clearwater cryptantha
• NA.
Cryptantha leiocarpa • Coast cryptantha • NA.
Cryptantha microstachys • Tejon cryptantha • NA.
Cryptantha milobakeri • Milo Baker's cryptantha • NA.
Cryptantha muricata var. *jonesii* • Prickly cryptantha • NA.



Mahonia aquifolium



Vancouveria chrysantha



Alnus viridis

Cryptantha nemaclada • Colusa cryptantha • NA.
Cryptantha rostellata • Beaked cryptantha • NA.
Cryptantha simulans • Pine cryptantha • NA.
Cryptantha subretusa • Crater Lake cryptantha • NP.
Cryptantha torreyana var. *torreyana* • Torrey's cryptantha
 • NA.

Cynoglossum grande • Hound's-tongue • NP.
Cynoglossum occidentale • Western hound's-tongue • NP.
Cynoglossum officinale • Hound's-tongue • IP. [TJM2]

Draperia → *Hydrophyllaceae*

Echium lusitanicum • Violet-veined viper's-bugloss • IS. EO.
Echium vulgare • Blue weed, common viper's-bugloss • IS. EO.

Eriodictyon → *Hydrophyllaceae*

Emmenanthe → *Hydrophyllaceae*

Hackelia amethystina • Amethyst stickseed, Howell's stickseed • NP.

Hackelia bella • Showy stickseed • NP.

Hackelia californica • California stickseed • NP.

Hackelia cusickii • Cusick's stickseed • NP.

Hackelia micrantha • Jessica's stickseed • NP.

Hackelia mundula • Pink stickseed • NP.

Hackelia setosa • Bristly stickseed • NP.

Heliotropium curassavicum var. *oculatum* • Seaside heliotrope,
 quail plant • NP.

Heliotropium europaeum • European heliotrope • IP.

Hesperochiron → *Hydrophyllaceae*

Hydrophyllum → *Hydrophyllaceae*

Lemmonia → *Hydrophyllaceae*

Lithospermum (in part) → *Buglossoides*

Lithospermum californicum • California gromwell, Shasta puc-
 coon • NP.

Mertensia bella • Oregon lungwort • NP.

Mertensia oblongifolia var. *amoena* • Lungwort • NP.

Myosotis discolor • Yellow-and-blue or English scorpion-grass
 • IAP.

Myosotis latifolia • Broad-leaved forget-me-not • IP.

Myosotis laxa • Smaller forget-me-not • NAP.

Myosotis micrantha • small-flowered forget-me-not • IA.

Myosotis scorpioides • water forget-me-not • IP.

Myosotis stricta • Forget-me-not • IA.

Myosotis verna • Spring scorpion-grass • NAP. Last: 1927.
 Extant?

Nama → *Hydrophyllaceae*

Nemophila → *Hydrophyllaceae*

Pectocarya penicillata • Winged pectocarya, sleeping comb-
 seed • NA.

Pectocarya pusilla • Little pectocarya • NA.

Phacelia → *Hydrophyllaceae*

Plagiobothrys arizonicus • Arizona popcorn flower • NA. Based
 on a single 1960 collection. Extant?

Plagiobothrys bracteatus • Bracted popcorn flower • NA.



Betula occidentalis



Amsinckia intermedia



Cynoglossum grande



Lithospermum californicum

Plagiobothrys cognatus • cognate popcorn flower • NA.
Plagiobothrys collinus var. *californicus* • Cooper's popcorn flower • NA.
Plagiobothrys cusickii • Cusick's popcorn flower • NA.
Plagiobothrys fulvus var. *campestris* • Fulvous popcorn flower • NA.
Plagiobothrys glyptocarpus var. *glyptocarpus* • Sculptured-nut allocarya • NA.
Plagiobothrys glyptocarpus var. *modestus* • Cedar Ridge popcorn flower • NA. Last: 1952. Extant?
Plagiobothrys greenei • Greene's allocarya • NA.
Plagiobothrys hispidulus • Meadow or marsh popcorn flower • NA.
Plagiobothrys hispidus • Cascade or bristly popcorn flower • NA.
Plagiobothrys infectivus • Due popcorn flower • NA.
Plagiobothrys lithocaryus • Mayacamas popcorn flower • EA. Last collected in 1899. Extant?
Plagiobothrys nothofulvus • Rusty popcorn flower, foothill snowdrops • NP.
Plagiobothrys reticulatus var. *reticulatus* • Netted popcorn flower • NA.
Plagiobothrys reticulatus var. *rossianorum* • Fort Ross popcorn flower • NA.
Plagiobothrys scouleri • Meadow popcorn flower • NA.
Plagiobothrys shastensis • Shasta popcorn flower • NA.
Plagiobothrys stipitatus var. *micranthus* • Popcorn flower • NA.
Plagiobothrys stipitatus var. *stipitatus* • Stalked popcorn flower • NA.
Plagiobothrys tenellus • Slender popcorn flower • NA.
Plagiobothrys tener var. *subglaber* • Slender allocarya • NA. Last collected in 1943. Extant?
Plagiobothrys tener var. *tener* • Slender allocarya • NA.
Plagiobothrys undulatus • Popcorn flower • NA.
Romanzoffia → *Hydrophyllaceae*
Sonnea → *Plagiobothrys*
Symphytum asperum • Rough or prickly comfrey • IP. Last collected in 1968. Extant?
Symphytum x uplandicum (*S. asperum* x *S. officinale*) • Russian comfrey • IP. Last collected in 1961. Extant?

BUDDLEJACEAE – Butterfly Bush Family

Included in *Scrophulariaceae* by some authors, as in TJM2
Buddleja davidii • butterfly bush, summer-lilac • IS. EO.

CABOMBACEAE – Water-Shield Family

Brasenia shreberi • Water-shield • NP.
Cabomba caroliniana • Fanwort • NP.

CACTACEAE – Cactus Family

Opuntia fragilis var. *fragilis* • Pigmy tuna, bristly prickly-pear
 • NS.

CALLITRICHACEAE – Water-Starwort Family

Included in *Plantaginaceae* by some authors, as in TJM2
Callitriche heterophylla var. *bolanderi* • Bolander's water-starwort • NP.
Callitriche heterophylla var. *heterophylla* • Two-headed water-starwort • NAP.
Callitriche longipedunculata • Long-stalked water-starwort • NA.
Callitriche marginata • California water-starwort, wallow-star-



Buddleja davidii

wort • NA.

Callitriche palustris • Vernal-starwort • NP.

Callitriche peploides • Matted water-starwort • IA. Last collected in 1943. Extant?

Callitriche stagnalis • Pond-starwort • IA.

Callitriche trochlearis • Effluent-starwort • NA.

CALYCANTHACEAE – Spice Bush Family

Calycanthus occidentalis • California spice bush, sweet shrub, sweet bush • NS.

CAMPANULACEAE – Bellflower or Harebell Family

Includes *Lobeliaceae*

Asyneuma prenanthoides • California harebell • NP.

Campanula (in part) → *Asyneuma*

Campanula angustiflora var. *angustiflora* • Eastwood's harebell • NA.

Campanula californica • Swamp harebell • NP.

Campanula griffinii • Griffin's harebell • NA.

Campanula rotundifolia • Scotch harebell • NP.

Campanula scabrella • Rough harebell • NP.

Campanula scouleri • Scouler's harebell • NP.

Campanula shetleri • Castle Crags harebell • EP.

Campanula wilkinsiana • Wilkins' harebell • NP.

Downingia bacigalupii • Bach's calico flower • NA.

Downingia bicornuta var. *bicornuta* • Double-horned calico flower • NA.

Downingia bicornuta var. *picta* • Double-horned calico flower • NA.

Downingia concolor var. *concolor* • Maroon-spotted calico flower • NA.

Downingia cuspidata • Cuspidate calico flower • NA.

Downingia elegans • Common calico flower • NA.

Downingia insignis • Cupped calico flower • NA.

Downingia pulchella • Flat-faced calico flower • NA.

Downingia pusilla • Dwarf calico flower • NA.

Downingia yina • Cascade calico flower • NA.

Githopsis diffusa ssp. *robusta* • Southern bluecups • NA.

Githopsis pulchella ssp. *campestris* • Large-flowered bluecups • NA.

Githopsis specularioides • Common bluecups • NA.

Heterocodon rariflorum • Western pearl flower • NA.

Howellia aquatilis • Water howellia • NA.

Legenere limosa • False Venus' looking glass • NA.

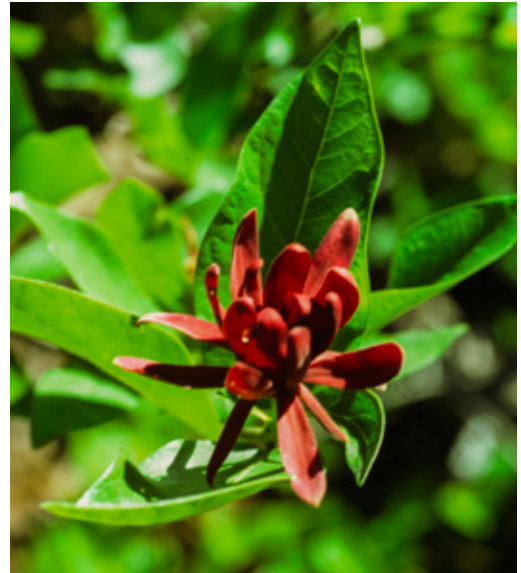
Nemacladus capillaris • Common nemacladus • NA.

Nemacladus montanus • Mountain nemacladus • NA.

Specularia → *Heterocodon* and *Triodanis*

Triodanis biflora • Small Venus' looking-glass, thread plant • NA.

Triodanis perfoliata • Clasping Venus' looking-glass • NA.



Calycanthus occidentalis



Asyneuma prenanthoides



Downingia pulchella

CANNABACEAE – Hemp Family

Included traditionally in *Moraceae*, as in Munz (1959)
Cannabis sativa • Marijuana, pot, grass, etc. • N(?)A.
Humulus lupulus var. *lupulus* • Hops • IV. EO and EC.

CAPRIFOLIACEAE – Honeysuckle Family

Includes *Adoxaceae*, *Linnaeaceae*, *Sambucaceae*, and
Viburnaceae

Excludes *Dipsacaceae* and *Valerianaceae*

Centranthus → *Valerianaceae*

Dipsacus → *Dipsacaceae*

Linnaea borealis ssp. *longiflora* • Western or long-tubed twin-
flower • NS.

Lonicera ciliosa • Orange or Northwest honeysuckle • NV.

Lonicera conjugialis • Double or purple-flowered honeysuckle
• NS.

Lonicera etrusca • Etruscan honeysuckle • IV. Last: 1948.
Extant? EO.

Lonicera hispidula • Hairy or California honeysuckle • NV.

Lonicera interrupta • Chaparral honeysuckle • NS.

Lonicera involucrata var. *involucrata* • Black twinberry, bear-
berry honeysuckle • NS.

Lonicera involucrata var. *ledebourii* • Twinberry • NS.

Lonicera tatarica • Tatarian honeysuckle • IS. EO.

Plectritis → *Valerianaceae*

Sambucus nigra ssp. *caerulea* • Blue elderberry, blue elder
• NS.

Sambucus racemosa var. *melanocarpa* • Black elderberry • NS.

Sambucus racemosa var. *racemosa* • Red elderberry, red elder
• NS.

Scabiosa → *Dipsacaceae*

Symphoricarpos albus var. *laevigatus* • Common snowberry
• NS.

Symphoricarpos mollis • Spreading or creeping snowberry
• NS.

Symphoricarpos rotundifolius var. *parishii* • Parish's mountain
snowberry • NS. Last collected in 1897. Extant?

Symphoricarpos rotundifolius var. *rotundifolius* • Mountain
snowberry • NS. Last collected in 1955. Extant?

Valeriana → *Valerianaceae*

Valerianella → *Valerianaceae*

Viburnum ellipticum • Western viburnum • NS.

Viburnum opulus • European cranberry bush • IST. EO.

Viburnum tinus • Laurustinus • IS.

CARYOPHYLLACEAE – Pink or Carnation Family

Agrostemma githago var. *githago* • Corn cockle • IAP.

Arenaria (in part) → *Minuartia*, *Moehringia*, and *Pseudostellaria*

Arenaria congesta var. *congesta* • Capitulate sandwort • NP.

Arenaria congesta var. *crassula* • Sandwort • NP.



Michael Kauffmann

Cannabis sativa



Linnaea borealis



Lonicera involucrata

Arenaria congesta var. *subcongesta* • Loose-headed sandwort • NP.

Arenaria congesta var. *suffrutescens* • Suffrutescent sandwort • NP.

Arenaria paludicola • Marsh sandwort • NP.

Arenaria serpyllifolia ssp. *serpyllifolia* • Thyme-leaved sandwort • IA.

Cardionema ramosissimum • Sandmat • NP.

Cerastium arvense ssp. *strictum* • Field or meadow chickweed • IP.

Cerastium dichotomum • Chickweed • IA.

Cerastium fontanum ssp. *vulgare* • Perennial mouse-ear chickweed • IP.

Cerastium glomeratum • Annual mouse-ear chickweed • IA.

Cerastium viride • Western field mouse-ear chickweed • NP.

Dianthus armeria • Deptford pink • IA. EO.

Dianthus barbatus ssp. *barbatus* • Sweet William • IP.

Eremogone → *Arenaria*

Gypsophila paniculata var. *paniculata* • Baby's breath • IP. EO.

Herniaria hirsuta ssp. *cinerea* • Hairy rupturewort • IA.

Herniaria hirsuta ssp. *hirsuta* • Hairy rupturewort • IA.

Holosteum umbellatum ssp. *umbellatum* • Jagged chickweed • IA.

Lychnis (in part) → *Silene*

Minuartia californica • California sandwort • NA.

Minuartia cismontana • Cismontane sandwort • NAP.

Minuartia decumbens • Lassics sandwort • EP.

Minuartia douglasii • Douglas' sandwort • NA.

Minuartia howellii • Howell's sandwort • NA.

Minuartia nuttallii ssp. *fragilis* • Nuttall's sandwort • NP.

Minuartia nuttallii ssp. *gracilis* • Nuttall's sandwort • NP.

Minuartia nuttallii ssp. *gregaria* • Nuttall's sandwort • NP.

Minuartia pusilla • Dwarf sandwort • NA.

Minuartia rosei • Peanut sandwort • EP.

Minuartia rubella • Beautiful sandwort • NP.

Minuartia stolonifera • Nelsons' sandwort, Scott Mountain sandwort • EA.

Moehringia macrophylla • Large-leaved sandwort • NP.

Paronychia ahartii • Ahart's nailwort • NA.

Petrorhagia dubia • Grass pink • IA.

Polycarpon tetraphyllum ssp. *tetraphyllum* • Four-leaved many-seed • IA.

Pseudostellaria jamesiana • Sticky starwort • NP.

Sabulina → *Minuartia*

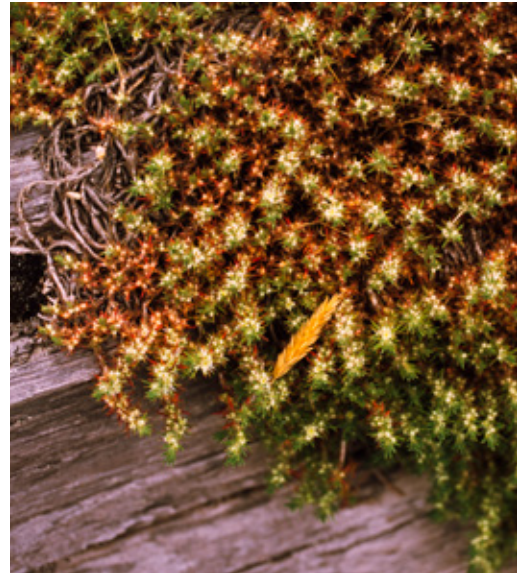
Sagina apetala • Dwarf or sticky pearlwort • NA.

Sagina decumbens ssp. *occidentalis* • Decumbent pearlwort • NA.

Sagina maxima ssp. *crassicaulis* • Beach pearlwort • NP.

Sagina procumbens • Procumbent pearlwort • IP.

Sagina saginoides • Arctic pearlwort • NP.



Cardionema ramosissimum



Cerastium arvense



Minuartia nuttallii

Michael Kaufmann

- Saponaria officinalis* • Bouncing bet, soapwort • IP. EO.
Scleranthus annuus ssp. *annuus* • Knawel, German knot-grass • IA.
Silene antirrhina • Sleepy catchfly • NA.
Silene bernardina • Palmer's catchfly • NP.
Silene bolanderi • Bolander's campion • EP.
Silene bridgesii • Bridges' campion • NP.
Silene campanulata ssp. *campanulata* • Red Mountain catchfly • EP.
Silene campanulata ssp. *glandulosa* • Mountain catchfly • NP.
Silene coronaria • Mullein pink, rose campion, dusty-miller • IP. EO.
Silene douglasii var. *douglasii* • Douglas' or sea bluff campion • NP.
Silene gallica • Windmill pink, common or small-flowered catchfly • IA.
Silene grayii • Gray's campion • NP.
Silene hookeri • Oregon or Hooker's Indian pink, string flower • NP.
Silene invisia • Short-petaled campion • NP.
Silene laciniata ssp. *californica* • California Indian pink • NP.
Silene latifolia • Bladder campion • IP.
Silene lemmonii • Lemmon's campion • NP.
Silene marmorensis • Marble Mountain campion • EP.
Silene menziesii • Menzies' campion • NP.
Silene noctiflora • Night-flowering catchfly • IA. Last: 1910. Extant?
Silene salmonacea • Klamath Mountain catchfly • EP.
Silene scouleri ssp. *scouleri* • Simple catchfly • NP.
Silene serpentinicola • Serpentine Indian pink • NP.
Silene suksdorfii • Suksdorf's catchfly • NP.
Silene verecunda • San Francisco campion • NP.
Silene vulgaris • Bladder-campion, maiden's tears • IP.
Spergula arvensis • Corn spurrey • IA.
Spergularia bocconi • Boccone's sand spurrey • IA.
Spergularia canadensis var. *occidentalis* • Western sand spurrey • NP.
Spergularia macrotheca var. *longistyla* • Large-flowered sand spurrey • NP.
Spergularia macrotheca var. *macrotheca* • Sticky sand spurrey • NP.
Spergularia marina • Salt sand spurrey • NAP.
Spergularia rubra • Red sand or purple sand spurrey • IAP.
Spergularia salina • Saltmarsh sand spurrey • NA.
Spergularia villosa • Hairy sand spurrey • IP.
Stellaria (in part) → *Pseudostellaria*
Stellaria borealis ssp. *sitchana* • Boreal starwort • NP.
Stellaria calycantha • Northern bog spurrey • NP.
Stellaria crispa • Von Chamisso's or crisp starwort • NP.
Stellaria littoralis • Beach starwort • NP.



Minuartia stolonifera



Saponaria officinalis



Silene hookeri

Stellaria longifolia • Long-leaved starwort • NP.
Stellaria longipes ssp. *longipes* • Long-stalked chickweed • NP.
Stellaria media • Common chickweed • IAP.
Stellaria neglecta • Greater chickweed • IA. [TJM2]
Stellaria nitens • Shiny or shining chickweed • NA.
Stellaria obtusa • Rocky Mountain starwort, obtuse chickweed
 • NP.
Stellaria pallida • Lesser chickweed • IA.
Stellaria umbellata • Umbellate chickweed • NP.
Tunica → *Petrorhagia*
Vaccaria hispanica • Cow cockle, cow herb • IA.
Velezia rigida • Velezia • IA.



Michael Kauffmann

Paxistima myrsinites

CELASTRACEAE – Bittersweet or Staff Tree Family

Euonymus occidentalis var. *occidentalis* • Western burning bush, heart's-bursting-with-love • NS.
Paxistima myrsinites • Mountain lover, Oregon or myrtle-boxwood • NS.

CERATOPHYLLACEAE – Hornwort Family

Ceratophyllum demersum • Hornwort, common coon's-tail • NAP.

CHENOPODIACEAE – Goosefoot Family

Treated as a subfamily of *Amaranthaceae* by some recent authors

Atriplex californica • California saltbush, California orache • NP.
Atriplex fruticulosa • Little oak orache • NP.
Atriplex gmelinii var. *gmelinii* • Gmelin's saltweed, Gmelin's orache • NA.
Atriplex hortensis • Garden orache • IA.
Atriplex joaquinana • San Joaquin spear scale • NA. [TJM2]
Atriplex leucophylla • Beach saltbush, sea scale • NP.
Atriplex micrantha • Two-scale saltbush • IA.
Atriplex parishii var. *depressa* • Brittlescale • NA.
Atriplex patula • Spear orache, spear saltbush • NA.
Atriplex prostrata • Fat-hen, spear scale, thin-leaved orache • IA.
Atriplex rosea • Red scale, red or tumbling orache • IA.
Atriplex semibaccata • Creeping or Australian saltbush • IP.
Bassia (in part) → *Kochia*
Bassia hyssopifolia • Five-hooked bassia • IA.
Chenopodium (in part) → *Dysphania*
Chenopodium album • Lamb's quarters • IA.
Chenopodium atrovirens • Piñon goosefoot • NA.
Chenopodium berlandieri var. *sinuatum* • Pit-seeded goosefoot • NA.
Chenopodium berlandieri var. *zschackei* • Zschack's goosefoot • NA.
Chenopodium californicum • California goosefoot • NP.
Chenopodium capitatum var. *capitatum* • Strawberry-blite • IA.
Chenopodium chenopodioides • Low goosefoot • IA.
Chenopodium hians • Hian's goosefoot • NA.
Chenopodium leptophyllum • Narrow-leaved goosefoot • NA.
Chenopodium macrospermum • Large-seeded goosefoot • IA.



Chenopodium sp.

Chenopodium murale • Nettle-leaved or wall goosefoot • IA. Last collected in 1948. Extant?
Chenopodium polyspermum var. *acutifolium* • Many-seeded goosefoot • IA.
Chenopodium rubrum var. *humile* • Marshland goosefoot • NA.
Chenopodium rubrum var. *rubrum* • Red goosefoot, red pigweed • NA.
Chenopodium vulvaria • Stinking goosefoot • IA.
Dysphania ambrosioides • Mexican tea, wormseed • IA.
Dysphania botrys • Jerusalem-oak, feather-geranium • IA.
Dysphania chilensis • Chilean wormwood • IA.
Dysphania multifida • Tasmanian or clammy goosefoot • IA.
Dysphania pumilio • Cut-leaved or clammy goosefoot • IA.
Extriplex → *Atriplex*
Kochia scoparia • Burning bush, summer-cypress, Mexican fireweed • IA.
Nitrophila occidentalis • Borax weed • NP.
Salicornia (in part) → *Sarcocornia*
Salicornia bigelovii • Dwarf saltwort • NA.
Salicornia depressa • Glasswort, pickle weed, samphire, woody saltwort • NPSS
Salsola tragus • Russian thistle, tumble weed • IA.
Sarcocornia pacifica • Glasswort, pickle weed, samphire • NP.
Sarcocornia perennis • Chicken-claws • NP. [TJM2]
Suaeda calceoliformis • Horned sea-blite • NAP. Last: 1910. Extant?

CISTACEAE – Rock-rose Family

Cistus creticus • Cretan rock-rose • IS. Known from a 1965 collection.
Cistus incanus • hairy rock-rose • IS.
Cistus monspeliensis • Rock-rose • IS. EO. [TJM2]
Crocanthemum scoparium var. *scoparium* • Sun-rose, rush-rose, peak rush-rose • NP.
Crocanthemum scoparium var. *vulgare* • Sun-rose, rush-rose, peak rush-rose • NP.
Helianthemum (in part) → *Crocanthemum*

CLEOMACEAE – Bee Plant Family

Traditionally included in *Capparaceae* (*Capparidaceae*), as in TJM1
Cleome (in part) → *Peritoma*
Peritoma platycarpa • Golden bee plant • NA.
Polanisia dodecandra ssp. *trachysperma* • Red-whiskered or western clammy weed • NA.

COMMELINACEAE – Spiderwort Family

Tradescantia ohiensis • Bluejacket • IP. EO.

COMPOSITAE (ASTERACEAE) – Aster or Sunflower Family

Achillea filipendulina • Fern-leaved yarrow • IP. Last: 1975. Extant?
Achillea millefolium • Yarrow, milfoil • NP.
Achyrrachaena mollis • Blow-wives • NA.
Acroptilon repens • Russian knapweed • IP.
Adenocaulon bicolor • Trail plant, path finder • NP.
Ageratina occidentalis • Western snakeroot • NP.
Ageratina shastensis • Shasta snakeroot • EP.
Ageratum conyzoides • Tropical whiteweed • IAP.



Achillea millefolium

Agnorhiza → *Wyethia*

Agoseris apargioides ssp. *apargioides* • Seaside or woolly agoseris • NP.

Agoseris apargioides ssp. *eastwoodiae* • Eastwood's agoseris • NP.

Agoseris apargioides ssp. *maritima* • Oregon agoseris • NP.

Agoseris aurantiaca var. *aurantiaca* • Orange-flowered agoseris • NP.

Agoseris grandiflora var. *grandiflora* • Large-flowered agoseris • NP.

Agoseris grandiflora var. *leptophylla* • Large-flowered agoseris • NP.

Agoseris heterophylla var. *cryptopleura* • California agoseris • NA.

Agoseris heterophylla var. *heterophylla* • Annual agoseris • NA.

Agoseris hirsuta • Coast Range agoseris • NP.

Agoseris monticola • Short-beaked agoseris • NP.

Agoseris retrorsa • Spear-leaved agoseris • NP.

Ambrosia acanthicarpa • Annual bur-sage, bur ragweed • NP.

Ambrosia artemisiifolia • Common ragweed • IA.

Ambrosia chamissonis • Bur weed, beach bur • NP.

Ambrosia psilostachya • Western ragweed • NP.

Anaphalis margaritacea • Pearly everlasting • NP.

Ancistrocarphus filagineus • Woolly fishhooks, woolly hook fruit • NA.

Anisocarpus madioides • Woodland alpine tarplant • NP.

Anisocarpus scabridus • Scabrid raillardella, scabrid alpine tarplant • NP.

Antennaria argentea • Silvery pussy-toes • NP.

Antennaria corymbosa • Meadow or flat-topped pussy-toes • NP.

Antennaria dimorpha • Low pussy-toes • NP.

Antennaria geyeri • Geyer's pussy-toes • NP.

Antennaria howellii ssp. *howellii* • Howell's pussy-toes • NP.

Antennaria lanata • Woolly pussy-toes • NP.

Antennaria luzuloides ssp. *luzuloides* • Woodrush pussy-toes • NP.

Antennaria media • Rocky Mountain pussy-toes • NP.

Antennaria microphylla • Little-leaved pussy-toes • NP.

Antennaria racemosa • Slender everlasting • NP.

Antennaria rosea ssp. *confinis* • Rosy pussy-toes • NP.

Antennaria rosea ssp. *rosea* • Rosy pussy-toes • NP.

Antennaria sawyeri • Sawyer's pussy-toes • EP.

Antennaria suffrutescens • Evergreen or Siskiyou pussy-toes • NP.

Antennaria umbrinella • Brown pussy-toes • NP.

Anthemis (in part) → *Chamaemulum* and *Cota*

Anthemis arvensis • Field chamomile, corn chamomile • IA.

Anthemis cotula • Mayweed, dog-fennel, stinkweed • IA.

Arctium lappa • Greater burdock • IP. EFP.

Arctium minus • Common burdock • IP.

Arctotheca calendula • Cape weed • IAP.

Arctotheca prostrata • Prostrate Cape weed • IP. Based on a single collection. [TJM2]

Arnica cernua • Serpentine arnica, nodding arnica • EP.



Anaphalis margaritacea



Ken DeCamp

Antennaria sawyeri

Arnica chamissonis • Narrow-leaved, leafy, or Chamisso's arnica • NP.

Arnica cordifolia • Heart-leaved arnica • NP.

Arnica dealbata • Little or mock leopard's bane • NP.

Arnica discoidea • Rayless arnica • NP.

Arnica lanceolata ssp. *prima* • Streambank arnica • NP.

Arnica latifolia • Mountain arnica • NP.

Arnica longifolia • Seep-spring arnica • NP.

Arnica mollis • Cordilleran or hairy arnica • NP.

Arnica nevadensis • Sierra or Nevada arnica • NP.

Arnica ovata • Sticky-leaved arnica • NP.

Arnica parryi • Nodding arnica • NP.

Arnica spathulata • Klamath arnica • NP.

Arnica venosa • Shasta County arnica • EP.

Arnica viscosa • Mt. Shasta arnica • NP.

Artemisia arbuscula ssp. *arbuscula* • Dwarf sagebrush • NS.

Artemisia biennis • Biennial wormwood • IAP.

Artemisia borealis ssp. *borealis* • Boreal sage • NP.

Artemisia californica • Coastal sagewort • NS. Last collected in 1894. Extant?

Artemisia douglasiana • Douglas' mugwort, Douglas' sagewort • NP.

Artemisia dracunculus • Tarragon, dragon wormwood • NP.

Artemisia furcata • Three-forked wormwood • NP.

Artemisia ludoviciana ssp. *ludoviciana* • Western mugwort • NP.

Artemisia norvegica var. *saxatilis* • Boreal sagebrush • NP.

Artemisia pycnocephala • Beach sage, beach wormwood, coastal sagewort • NP.

Artemisia suksdorfii • Coastal mugwort, Suksdorf's sagewort • NP.

Artemisia tridentata ssp. *tridentata* • Common sagebrush • NS.

Aster (in part) → *Eucephalus*, *Eurybia*, and *Symphotrichum*

Baccharis glutinosa • Coyote bush, salt marsh or Douglas' baccharis • NP.

Baccharis pilularis ssp. *consanguinea* • Chaparral broom, coyote brush • NS.

Baccharis pilularis ssp. *pilularis* • Dwarf baccharis, dwarf chaparral broom • NS.

Baccharis salicifolia • Mule fat • NS.

Baeria → *Lasthenia*

Balsamita → *Tanacetum*

Balsamorhiza deltoidea • Deltoid balsamroot • NP.

Balsamorhiza lanata • Yreka balsamroot • NP.

Balsamorhiza macrolepis ssp. *macrolepis* • California balsamroot • NP.

Balsamorhiza sericea • Silky balsamroot • NP.

Bellis perennis • English daisy, lawn daisy • IP.

Bidens cernua • Nodding bur-marigold, beggar's-ticks • NA.

Bidens frondosa • Beggar-ticks, stick-tight • NA.

Bidens laevis • Bur-marigold, beggar-ticks • NA.

Bidens vulgata • Tall bidens, western stick-tight • IA.

Blennosperma nanum var. *nanum* • Common sticky seed • NA.

Blennosperma nanum var. *robustum* • Point Reyes blennosperma • NA. Last collected in 1928. Extant?

Blepharipappus scaber • Rough eyelash weed • NA.

Brickellia californica • California brickellia, California brickell bush • NS.

Brickellia grandiflora • Large-flowered brickellia, tassel flower • NS.



Michael Kauffmann

Artemisia tridentata
ssp. *tridentata*

Brickellia greenei • Greene's brickellia, Greene's tassel flower
• NS.

Calaliopsis nardosmia • Silver crown • NP.

Calendula arvensis • Field-marigold • IA. EO.

Calycadenia fremontii • Klamath calycadenia, Klamath rosin weed • NA.

Calycadenia micrantha • Western rosin weed • NA.

Calycadenia multiglandulosa • Sticky western rosin weed
• NA.

Calycadenia pauciflora • Small-flowered calycadenia • NA.

Calycadenia truncata • Oregon western rosin weed • NA.

Carduus acanthoides ssp. *acanthoides* • Plumeless thistle • IP.

Carduus nutans • Musk thistle • IP.

Carduus pycnocephalus ssp. *pycnocephalus* • Italian thistle
• IAP.

Carduus tenuiflorus • Italian thistle, slender-flowered thistle
• IAP.

Carthamus creticus • Woolly distaff thistle • IA.

Carthamus lanatus • Distaff thistle, woolly distaff thistle • IA.

Centaurea (in part) → *Acroptilon*

Centaurea benedicta • Blessed thistle • IA.

Centaurea calcitrapa • Purple star thistle • IAP.

Centaurea cyanus • Corn flower, bachelor's button • IA.

Centaurea diffusa • Diffuse or tumble knapweed • IAP.

Centaurea jacea ssp. *jacea* • Brown or brown-rayed knapweed
• IP.

Centaurea jacea ssp. *nigra* • Black knapweed, hardheads • IP.

Centaurea jacea ssp. *x pratensis* • Brown-rayed knapweed
• IP.

Centaurea melitensis • Tocalote, Napa thistle • IA.

Centaurea x pouzinii (*C. aspera* x *C. calcitrapa*) • Pouzin's star thistle • IAP. [TJM2]

Centaurea solstitialis • Yellow star thistle, St • Barnaby's thistle • IA.

Centaurea stoebe ssp. *micranthos* • Spotted knapweed • IP.

Centaurea virgata ssp. *squarrosa* • Squarrose knapweed • IP.

Centromadia fitchii • Fitch's tarweed, Fitch's spikeweed • NA.

Centromadia parryi • Pappose tarweed • NA.

Centromadia parryi ssp. *rudis* • Parry's false tarplant • NA.

Centromadia pungens ssp. *pungens* • Common spineweed
• NA.

Chaenactis douglasii var. *douglasii* • Dusty maidens, hoary chaenactis • NP.

Chaenactis glabriuscula var. *glabriuscula* • Yellow pincushion
• NA.

Chaenactis glabriuscula var. *heterocarpha* • Inner Coast Range pincushion • NA.

Chaenactis suffrutescens • Shasta chaenactis • NP.

Chaetopappa → *Pentachaeta*

Chamaemulum fuscatum • Dusky dog-fennel • IA.

Chamaemulum nobile • Chamomile, Russian chamomile • IA.



Balsamorhiza deltoidea



Bellis perennis



Centaurea solstitialis

Chamomilla → *Matricaria*

Chondrilla juncea • Skeleton weed, gum succory • IP.

Chrysanthemum (in part) → *Glebionis*, *Leucanthemum*, and *Tanacetum*

Chrysopsis (in part) → *Eucephalus* and *Heterotheca*

Chrysothamnus (in part) → *Ericameria*

Chrysothamnus viscidiflorus ssp. *viscidiflorus* • Yellow rabbit brush • NS.

Cichorium intybus • Chicory, wild succory • IP.

Cirsium andersonii • Anderson's thistle • NP.

Cirsium andrewsii • Franciscan thistle • NP. Last collected in 1950. Extant?

Cirsium arvense • Canada or creeping thistle • IP.

Cirsium brevistylum • Indian thistle • NAP.

Cirsium ciliolatum • Ashland thistle • NP.

Cirsium cymosum var. *cymosum* • Peregrine or Greene's thistle • NP.

Cirsium douglasii var. *breweri* • Brewer's thistle • NP.

Cirsium douglasii var. *douglasii* • Douglas' or swamp thistle • NP.

Cirsium occidentale var. *californicum* • Cobwebby thistle • NP.

Cirsium occidentale var. *candidissimum* • Snowy thistle • NP.

Cirsium occidentale var. *occidentale* • Cobwebby thistle • NP.

Cirsium occidentale var. *venustum* • Venus thistle • NP.

Cirsium quercetorum • Brownie thistle • NP.

Cirsium remotifolium var. *odontolepis* • Pacific fringe-scaled thistle • NP.

Cirsium remotifolium var. *remotifolium* • Remote-leaved thistle • NP.

Cirsium remotifolium var. *rivulare* • Klamath thistle • NP.

Cirsium scariosum var. *robustum* • Elk thistle • NP.

Cirsium scariosum var. *scariosum* • Elk thistle • NP.

Cirsium vulgare • Bull or common thistle • IP.

Cnicus → *Centaurea*

Conyza → *Erigeron*

Coreopsis (in part) → *Leptosyne*

Coreopsis lanceolata • Garden coreopsis • IP.

Coreopsis tinctoria var. *tinctoria* • Calliopsis, golden tickseed • IA.

Corethrogyne filaginifolia • California-aster • NP.

Cota tinctoria • Golden marguerite • IP. Known from a 1970 collection. Extant?

Cotula australis • Australian brass buttons • IA.

Cotula coronopifolia • Common brass buttons • IP.

Crepis acuminata • Long-leaved hawk's-beard • NP.

Crepis bakeri ssp. *bakeri* • Baker's hawk's-beard • NP.

Crepis bakeri ssp. *cusickii* • Cusick's hawk's-beard • NP.

Crepis capillaris • Smooth hawk's-beard • IAP.

Crepis intermedia • Limestone hawk's-beard • NP.

Crepis monticola • Mountain or Siskiyou hawk's-beard • NP.



Chaenactis douglasii



Chaenactis suffrutescens



Cirsium andersonii

Crepis occidentalis ssp. *conjuncta* • Gray or western hawk's-beard • NP.
Crepis occidentalis ssp. *costata* • Gray or western hawk's-beard • NP.
Crepis occidentalis ssp. *pumila* • Gray or western hawk's-beard • NP.
Crepis pleurocarpa • Naked-stemmed hawk's-beard • NP.
Crepis setosa • Bristly hawk's-beard • IA.
Crepis vesicaria • Beaked hawk's-beard • IAP.
Crocidium multicaule • Spring gold, gold star • NA.
Cynara cardunculus ssp. *flavescens* • cardoon • IP.
Deinandra corymbosa ssp. *corymbosa* • Coast tarweed • NA.
Deinandra kelloggii • Kellogg's tarweed • NA. Last collected in 1910. Extant?
Delairea odorata • German, parlor or Cape ivy • IP.
Dieteria canescens var. *canescens* • Hoary-aster • NAP.
Dieteria canescens var. *incana* • Tall hoary-aster • NAP.
Dieteria canescens var. *shastensis* • Shasta-aster • NAP.
Dittrichia graveolens • Stinkwort • IA.
Dugaldia → *Hymenoxys*
Erechtites → *Senecio*
Ericameria arborescens • Golden fleece • NS.
Ericameria bloomeri • Bloomer's golden bush or golden weed • NS.
Ericameria ericoides • California golden bush • NS.
Ericameria greenei • Greene's golden bush • NS.
Ericameria linearifolia • Narrow-leaved or interior golden bush • NS.
Ericameria nauseosa var. *speciosa* • Common or rubber rabbit brush • NS.
Ericameria ophitidis • Serpentine golden bush • ES.
Ericameria parryi var. *latior* • Parry's rabbit brush • NS.
Erigeron aliceeae • Eastwood's daisy, Alice's fleabane • NP.
Erigeron annuus • Annual daisy • IA.
Erigeron biolettii • Biolett's daisy • NP.
Erigeron bloomeri var. *bloomeri* • Bloomer's daisy • NP.
Erigeron bloomeri var. *nudatus* • Waldo daisy • NP.
Erigeron breweri var. *breweri* • Brewer's fleabane • NP.
Erigeron canadensis • Horseweed • NA.
Erigeron cervinus • Siskiyou daisy, Siskiyou fleabane • NP.
Erigeron compositus • Cut-leaved daisy, dwarf mountain fleabane • NP.
Erigeron concinnus • Navajo fleabane • NP.
Erigeron divergens • Diffuse daisy • NA.
Erigeron eatonii var. *plantagineus* • Plantain-leaved daisy • NP.
Erigeron elegantulus • Volcanic daisy, blue dwarf fleabane • NP.
Erigeron filifolius • Thread-leaved fleabane • NP.
Erigeron floribundus • Asthma weed • NAP.
Erigeron foliosus var. *confinis* • Leafy fleabane • NP.
Erigeron foliosus var. *hartwegii* • Hartweg's leafy fleabane • NP.
Erigeron foliosus var. *mendocinus* • Leafy fleabane • EP.
Erigeron glacialis var. *glacialis* • Subalpine fleabane • NP.
Erigeron glacialis var. *hirsutus* • Subalpine fleabane • NP.
Erigeron glaucus • Seaside daisy, beach fleabane • NP.
Erigeron greenei • Serpentine fleabane • NP.
Erigeron inornatus var. *inornatus* • California rayless daisy • NP.

Erigeron klamathensis • Klamath fleabane • EP.
Erigeron lassenianus var. *lassenianus* • Mount Lassen fleabane • NP.
Erigeron maniopotamicus • Mad River fleabane • EP.
Erigeron nivalis • Snow fleabane • NP.
Erigeron petrophilus var. *petrophilus* • Rock daisy • NP.
Erigeron petrophilus var. *viscidulus* • Rayless daisy • NP.
Erigeron philadelphicus var. *philadelphicus* • Philadelphia daisy • NP.
Erigeron pumilus ssp. *intermedius* • Hairy daisy • NP. Last: 1949. Extant?
Erigeron reductus var. *angustatus* • California rayless fleabane • NP.
Erigeron reductus var. *reductus* • California rayless daisy • NP.
Erigeron robustior • Serpentine fleabane, robust or Willamette daisy • NP.
Erigeron strigosus • Branching daisy • IAP.
Erigeron sumatrensis • Asthma weed • IA.
Erigeron supplex • Supple daisy • NP.
Erigeron tener • Slender daisy • NP.
Eriophyllum confertiflorum var. *confertiflorum* • Yellow-yarrow, golden-yarrow • NSS.
Eriophyllum lanatum var. *achillaeoides* • Common woolly-sunflower • NAP.
Eriophyllum lanatum var. *arachnoideum* • Common woolly-sunflower • NP.
Eriophyllum lanatum var. *grandiflorum* • Common woolly-sunflower • NP.
Eriophyllum lanatum var. *integrifolium* • Common woolly-sunflower • NP.
Eriophyllum lanatum var. *lanceolatum* • Common woolly-sunflower • NP.
Eriophyllum lanatum var. *leucophyllum* • Common woolly-sunflower • NP.
Eriophyllum staechadifolium • Seaside woolly-sunflower • NP.
Eucephalus breweri • Brewer's-aster • NP.
Eucephalus engelmannii • Engelmann's-aster • NP.
Eucephalus glabratus • Smooth wayside-aster • NP.
Eucephalus ledophyllus var. *covillei* • Cascade-aster • NP.
Eucephalus tomentellus • Brickell-bush or rayless leafy-aster • NSS.
Euchiton gymnocephalus • Creeping cudweed • IP.
Euchiton involucratus • Common cudweed • IP.
Euchiton japonicus • Father-and-child plant • IA.
Euchiton sphaericus • Japanese or star cudweed • IA.
Eupatorium (in part) → *Ageratina*
Eurybia integrifolia • Thick-stemmed-aster • NP. Last collected in 1943. Extant?
Eurybia merita • Subalpine-aster • NP.
Eurybia radulina • Rough-leaved wood-aster • NP.
Euthamia occidentalis • Western-goldenrod • NP.
Evax → *Hesperevax*
Filago (in part) → *Logfia*
Filago pyramidata var. *pyramidata* • Broad-leaved cotton-rose • IA.
Franseria → *Ambrosia*
Gamochaeta coarctata • Gray everlasting • IP.
Gamochaeta ustulata • Feather weed • NP.
Glebionis coronaria • Crown daisy, garland-chrysanthemum • IA. EO.
Glebionis segetum • Corn-chrysanthemum, corn-marigold • IA. EO.
Gnaphalium (in part) → *Euchiton*, *Gamochaeta*, and *Pseudognaphalium*
Gnaphalium palustre • Lowland cudweed, western marsh cudweed • NA.
Grindelia camporum • Great Valley gumweed • NP-subshrub.

Grindelia hirsutula • Hairy gumweed • NP-subshrub.
Grindelia stricta var. *platyphylla* • Oregon gumweed • NP.
Grindelia stricta var. *stricta* • Oregon gumweed • NP.
Gutierrezia californica • California matchweed • NP.
Haplopappus → *Ericameria*, *Grindelia*, *Hazardia*, *Pyrocoma*, and *Tonestus*
Harmonia doris-nilesiae • Niles' tarweed • EA.
Harmonia guggolziorum • Guggolz's tarweed • EA.
Harmonia hallii • Hall's tarweed • NA.
Harmonia nutans • Nodding tarweed • NA.
Harmonia stebbinsii • Stebbins' tarweed • EA.
Hazardia whitneyi var. *discoidea* • Whitney's goldenbush • NP.
Hedypnois cretica • Cretan weed • IA.
Helenium (in part) → *Hymenoxys*
Helenium autumnale • Common sneezeweed • NP.
Helenium bigelovii • Bigelow's sneezeweed • NP.
Helenium bolanderi • Coast sneezeweed • NP.
Helenium puberulum • Rosilla • NAP.
Helianthella californica var. *californica* • California dwarf-sunflower • NP.
Helianthella californica var. *nevadensis* • California dwarf-sunflower • NP.
Helianthella californica var. *shastensis* • Mount Eddy dwarf-sunflower • NP.
Helianthus annuus • Common sunflower • NA.
Helianthus bolanderi • Bolander's sunflower • NA.
Helianthus californicus • California sunflower • NP. [TJM2]
Helianthus cusickii • Cusick's sunflower • NP. Last collected in 1909. Extant?
Helianthus exilis • Slender or serpentine sunflower • NA.
Helichrysum petiolare • Licorice plant • IP. Known from a single 1981 collection.
Helminthotheca echioides • Bristly oxtongue • IAP.
Hemizonella minima • Opposite-leaved or miniature tarweed • NA.
Hemizonia (in part) → *Centromadia* and *Deinandra*
Hemizonia congesta ssp. *calyculata* • Mendocino tarplant • NA.
Hemizonia congesta ssp. *clevelandii* • Cleveland's tarweed • NA.
Hemizonia congesta ssp. *congesta* • Hayfield tarplant • NA.
Hemizonia congesta ssp. *lutescens* • Hayfield tarweed • NA.
Hemizonia congesta ssp. *luzulifolia* • Hayfield tarweed • NA.
Hemizonia congesta ssp. *tracyi* • Tracy's tarweed • EA.
Hesperevax acaulis var. *ambusticolia* • Stemless dwarf cudweed • NA.
Hesperevax acaulis var. *robustior* • Stemless dwarf cudweed • NA.
Hesperevax sparsiflora var. *brevifolia* • Short-leaved evax • NA.
Heterotheca (in part) → *Eucephalus*
Heterotheca grandiflora • telegraph weed • NAP. [TJM2]
Heterotheca oregona var. *compacta* • Oregon golden-aster • NP.
Heterotheca oregona var. *oregona* • Oregon golden-aster • NP.
Heterotheca oregona var. *rudis* • Oregon false golden-aster • NP.
Heterotheca sessiliflora ssp. *bolanderi* • Bolander's golden-aster • NP.



Michael Kauffmann

Helenium bigelovii

Heterotheca villosa var. *minor* • Golden-aster • NP.
Hieracium albiflorum • White-flowered hawkweed • NP.
Hieracium bolanderi • Bolander's hawkweed • NP.
Hieracium greenei • Greene's hawkweed • NP.
Hieracium horridum • Shaggy hawkweed • NP.
Hieracium nudicaule • Naked-stemmed hawkweed • NP.
Hieracium parryi • Parry's hawkweed • NP. Last collected in 1950. Extant?
Hieracium scouleri • Scouler's hawkweed • NP.
Hieracium triste • Woolly hawkweed • NP.
Holocarpha heermannii • Heermann's tarweed • NA.
Holocarpha virgata ssp. *virgata* • Yellow-flowered tarweed • NA.
Holozonia filipes • White crown • NP.
Hulsea nana • Alpine gold, dwarf hulsea • NP.
Hymenoxys hoopesii • Owl's-claws, orange sneezeweed • NP.
Hymenoxys lemmonii • Lemmon's rubberweed • NP.
Hypochaeris glabra • Smooth cat's-ear • IA.
Hypochaeris radicata • Hairy cat's-ear • IP.
Jaumea carnosa • Fleshy jaumea • NP.
Kyhosia bolanderi • Bolander's tarweed • NP.
Lactuca biennis • Tall blue lettuce • IP.
Lactuca canadensis • Tall lettuce, Canadian wild lettuce • IP.
Lactuca ludoviciana • Western lettuce • IP.
Lactuca saligna • Willow lettuce • IA.
Lactuca serriola • Prickly lettuce • IA.
Lagophylla glandulosa • Glandular hare-leaf • NA.
Lagophylla minor • Lesser hare-leaf • NA.
Lagophylla ramosissima • Common hare-leaf • NA.
Lapsana communis • Nipplewort • IA.
Lasthenia burkei • Burke's goldfields • NA.
Lasthenia californica ssp. *bakeri* • Baker's goldfields • NA.
Lasthenia californica ssp. *californica* • Coast goldfields • NA.
Lasthenia californica ssp. *macrantha* • Perennial goldfields • NA.
Lasthenia conjugens • Contra Costa goldfields • NA. Last collected in 1937. Extant?
Lasthenia fremontii • Fremont's goldfields • NA.
Lasthenia glaberrima • Smooth goldfields • NA.
Lasthenia glabrata ssp. *glabrata* • Yellow-rayed goldfields • NA.
Lasthenia gracilis • Common goldfields • NA.
Lasthenia maritima • Woolly goldfields • NA.
Lasthenia microglossa • Small-rayed goldfields • NA.
Lasthenia minor • Goldfields • NA.
Layia carnosa • Beach tidy tips • NA.
Layia chrysanthemoides ssp. *chrysanthemoides* • Smooth layia • NA.
Layia fremontii • Fremont's layia • NA.
Layia gaillardioides • Woodland layia • NA.
Layia platyglossa • Tidy tips • NA.
Layia septentrionalis • Colusa layia • NA.
Leontodon saxatilis ssp. *longirostris* • Hairy hawkbit • IP.
Leontodon saxatilis ssp. *saxatilis* • Hairy hawkbit • IP.



Lasthenia burkei

Leptosyne stillmanii • Stillman's tickseed • NA. [TJM2]
Lessingia (in part) → *Corethrogyne*
Lessingia hololeuca • Woolly-headed lessingia • NA.
Lessingia leptoclada • Sierra lessingia • NA. Known from a single 2006 collection.
Lessingia nemaclada • Greene's slender-stemmed lessingia • NA.
Lessingia ramulosa • Sonoma lessingia • NA.
Leucanthemum lacustre • Portuguese daisy • N(?)P. Last collected in 1936. Extant?
Leucanthemum maximum • Shasta daisy • IP. EO.
Leucanthemum vulgare • Ox-eye daisy • IP. EO.
Logfia filaginoides • California cotton-rose • NA.
Logfia gallica • Narrow-leaved cotton-rose • IA.
Luina hypoleuca • Little-leaved or silver-backed luina • NP.
Machaeranthera (in part) → *Dieteria* and *Xanthisma*
Madia (in part) → *Anisocarpus*, *Harmonia*, *Hemizonella*, and *Kyhosia*
Madia anomala • Plump-seeded tarweed • NA.
Madia citrigracilis • Shasta tarweed • NA.
Madia citriodora • Lemon-scented tarweed • NA.
Madia elegans • Common madia • NA.
Madia exigua • Small or thread-stemmed tarweed • NA.
Madia glomerata • Tarweed, mountain tarweed • NA.
Madia gracilis • Gumweed, slender tarweed • NA.
Madia sativa • Chilean or coast tarweed • NA.
Malacothrix clevelandii • Cleveland's malacothrix or desert-dandelion • NA.
Malacothrix floccifera • Woolly malacothrix • NA.
Matricaria (in part) → *Tripleurospermum*
Matricaria discoidea • Pineapple weed • IA.
Matricaria occidentalis • Western pineapple weed • NA.
Micropus amphibolus • Mount Diablo cotton weed • NA.
Micropus californicus var. *californicus* • Slender cotton weed • NA.
Microseris (in part) → *Nothocalais* and *Stebbinsoseris*
Microseris acuminata • Sierra foothills microseris • NA.
Microseris bigelovii • Coast silverpuffs • NA.
Microseris borealis • Bog silverpuffs • NP.
Microseris douglasii ssp. *douglasii* • Douglas' silverpuffs • NA.
Microseris douglasii ssp. *tenella* • Douglas' silverpuffs • NA.
Microseris elegans • Elegant silverpuffs • NA.
Microseris laciniata ssp. *detlingii* • Detling's silverpuffs • NP.
Microseris laciniata ssp. *laciniata* • Cut-leaved scorzonella, cut-leaved silverpuffs • NP.
Microseris laciniata ssp. *leptosepala* • Slender silverpuffs • NP.
Microseris laciniata ssp. *siskiyouensis* • Siskiyou silverpuffs • NP.
Microseris nutans • Nodding silverpuffs • NP.
Microseris paludosa • Marsh silverpuffs • NP.



Layia carnosa



Leucanthemum vulgare



Petasites frigidus

Microseris sylvatica • Sylvan scorzonella, silverpuffs • NP.
Monolopia major • Cupped monolopia • NA.
Nothocalais alpestris • Alpine lake false dandelion • NP.
Nothocalais troximoides • Sagebrush false dandelion • NP.
Onopordum acanthium ssp. *acanthium* • Scots, Scotch or cotton thistle • IP.
Oreostemma alpigenum var. *andersonii* • Tundra mountain crown • NP.
Packera bolanderi var. *bolanderi* • Bolander's groundsel • NP.
Packera cana • Silver-woolly groundsel • NP.
Packera clevelandii • Cleveland's groundsel • NP.
Packera eurycephala var. *eurycephala* • Siskiyou groundsel • NP.
Packera greenei • Flame groundsel • NP.
Packera hesperia • Western ragwort, western groundsel • NP.
Packera macounii • Siskiyou Mountains groundsel • NP.
Packera streptanthifolia • Rocky Mountain groundsel • NP.
Packera subnuda var. *subnuda* • Buek's groundsel • NP.
Pentachaeta alsinoides • Tiny pigmy daisy • NA.
Pentachaeta exilis ssp. *exilis* • Meager pigmy daisy • NA.
Petasites frigidus var. *palmatus* • Colt's-foot • NP.
Picris → *Helminthotheca*
Pseudognaphalium beneolens • Fragrant cudweed • NAP.
Pseudognaphalium californicum • Ladies-tobacco • NAP.
Pseudognaphalium canescens • Wright's rabbit-tobacco • NP.
Pseudognaphalium luteoalbum • Jersey cudweed, weedy cudweed • IA.
Pseudognaphalium macounii • Macoun's rabbit-tobacco • NAP.
Pseudognaphalium microcephalum • San Diego rabbit-tobacco • NP.
Pseudognaphalium ramosissimum • Pink rabbit-tobacco • NP.
Pseudognaphalium stramineum • Cotton batting plant • NAP.
Pseudognaphalium thermale • Northwestern rabbit-tobacco • NP.
Psilocarphus brevissimus var. *brevissimus* • Round or dwarf woolly-heads • NA.
Psilocarphus brevissimus var. *multiflorus* • Round woolly-heads • NA.
Psilocarphus elatior • Tall or meadow woolly-heads • NA.
Psilocarphus oregonus • Oregon woolly-heads • NA.
Psilocarphus tenellus • Slender woolly-heads • NA.
Pyrrocoma racemosa var. *congesta* • Clustered golden weed • NP.
Pyrrocoma racemosa var. *pinetorum* • Pine golden weed • EP.
Pyrrocoma racemosa var. *racemosa* • Racemed golden weed • NP.
Rafinesquia californica • California-chicory • NA.
Raillardella (in part) → *Anisocarpus*
Raillardella argentea • Silky raillardella • NP.
Raillardella pringlei • Showy raillardella • EP.
Rigiopappus leptocladus • Bristlehead • NA.
Rudbeckia californica • California cone flower • NP.
Rudbeckia glaucescens • Waxy cone flower • NP.
Rudbeckia klamathensis • Klamath cone flower • EP.
Rudbeckia occidentalis • Western cone flower • NP.
Saussurea americana • American sawwort • NP.
Scorzonera hispanica • Black salsify, viper's-grass • IP. Known from a single 1983 collection. Extant?
Senecio (in part) → *Delairea* and *Packera*

Senecio aronicoides • California groundsel, California butter weed • NP.

Senecio elegans • Red-purple or purple ragwort • IA.

Senecio flaccidus var. *douglasii* • Thread-leaved ragwort • NP.

Senecio fremontii var. *fremontii* • Dwarf mountain groundsel • NP.

Senecio glomeratus • Australian fireweed, cut-leaved burn weed • IAP.

Senecio hydrophiloides • Stout meadow ragwort • NP.

Senecio hydrophilus • Water ragwort • NP.

Senecio integerrimus var. *exaltatus* • Tall western or Columbia River groundsel • NP.

Senecio integerrimus var. *major* • Big-headed groundsel or lamb's-tongue • NP.

Senecio integerrimus var. *ochroleucus* • Pale-yellow ragwort • NP.

Senecio jacobaea • Tansy ragwort, stinking willie • IP.

Senecio minimus • Australian or coastal fireweed • IAP.

Senecio sylvaticus • Wood groundsel • IA.

Senecio triangularis • Arrow-leaved butterweed • NP.

Senecio vulgaris • Common groundsel, old-man-in-the-spring • IA.

Sericocarpus oregonensis var. *californicus* • Oregon white-topped-aster • NP.

Sericocarpus oregonensis var. *oregonensis* • White-topped-aster • NP.

Silybum marianum • Milk thistle • IAP.

Solidago altissima var. *altissima* • Late goldenrod • IP.

Solidago californica • California or common goldenrod • NP.

Solidago elongata • West Coast goldenrod • NP.

Solidago lepida ssp. *salebrosa* • Meadow groundsel, mountain goldenrod • NP.

Solidago multiradiata • Alpine or northern goldenrod • NP.

Solidago spathulata • Dune or coast goldenrod • NP.

Solidago spectabilis • showy goldenrod • NP.

Soliva sessilis • Prickly soliva, bur weed • IA.

Sonchus arvensis ssp. *arvensis* • Perennial sow-thistle • IP.

Sonchus asper • Prickly or spiny-leaved sow-thistle • IA.

Sonchus oleraceus • Common sow-thistle • IA.

Stebbinsoseris heterocarpa • Grassland silverpuffs • NA.
[TJM2]

Stephanomeria elata • Nuttall's wire-lettuce • NA.

Stephanomeria exigua ssp. *coronaria* • Small wire-lettuce • NA.

Stephanomeria lactucina • Large-flowered wire-lettuce • NP.

Stephanomeria paniculata • Tufted wire-lettuce • NAP.

Stephanomeria virgata ssp. *pleurocarpa* • Tall wire-lettuce • NA.

Stephanomeria virgata ssp. *virgata* • Rod wire-lettuce • NA.

Stylocline (in part) → *Ancistrocarphus* and *Micropus*



Michael Kaufmann

Rudbeckia occidentalis



Senecio jacobaea



Silybum marianum

Stylocline gnaphaloides • Everlasting nest straw • NA.
Symphyotrichum ascendens • Western American-aster • NP.
Symphyotrichum bracteolatum • Eaton's-aster • NP.
Symphyotrichum chilense • Pacific-aster • NP.
Symphyotrichum cusickii • Cusick's-aster • NP. Last collected in 1939. Extant?
Symphyotrichum eatonii • Eaton's- or Oregon's-aster, bracted American-aster • NP.
Symphyotrichum foliaceum var. *apricum* • Alpine leafy-bracted-aster • NP.
Symphyotrichum foliaceum var. *parryi* • Parry's leafy-bracted-aster • NP.
Symphyotrichum frondosum • Short-rayed alkalai-aster • NA.
Symphyotrichum hendersonii • Lyall's-aster • NP.
Symphyotrichum lentum • Suisun Marsh aster • NP.
Symphyotrichum novae-angliae • New England-aster • IP, Last collected in 1966. Extant?
Symphyotrichum spathulatum var. *intermedium* • Western mountain-aster • NP.
Symphyotrichum spathulatum var. *spathulatum* • Western mountain-aster • NP.
Symphyotrichum subspicatum var. *subspicatum* • Leafy-bracted American-aster • NP.
Symphyotrichum subspicatum var. *yosemitanum* • Western bog-aster • NP.
Tanacetum balsamita • Costmary • IP. Escaped medicinal-herbal. Last collected in 1939. Extant?
Tanacetum bipinnatum • Dune tansy • NP.
Tanacetum parthenium • Feverfew • IP.
Tanacetum vulgare • Common tansy • IP.
Taraxacum erythrospermum • Red-seeded dandelion • IP.
Taraxacum officinale • Common dandelion • IP.
Tetradymia canescens • Spineless horse brush • NS.
Tolpis barbata • Umbrella milkwort • IA.
Tonestus lyallii • Lyall's tonestus • NP.
Tracyina rostrata • Beaked tracyina, Indian head-dress • NA.
Tragopogon dubius • Yellow salsify, goat's-beard • IAP.
Tragopogon porrifolius • Purple salsify, oyster plant, goat's-beard • IP.
Tragopogon pratensis • Jack-go-to-bed-at-noon, meadow salsify, goat's-beard • IP.
Trimorpha → *Erigeron*
Tripleurospermum inodorum • Scentless or false mayweed, false chamomile • IAP.
Uropappus lindleyi • Silver puffs • NA.
Whitneya (in part) → *Arnica*
Wyethia angustifolia • Narrow-leaved mule's-ears • NP.
Wyethia bolanderi • Bolander's mule's-ears • NP.
Wyethia glabra • Coast Range mule's-ears • NP.
Wyethia helenioides • Gray mule's-ears • NP.
Wyethia longicaulis • Humboldt County mule's-ears • EP.
Wyethia mollis • Mountain mule's-ears • NP.
Xanthisma texanum var. *drummondii* • Texas sleepy daisy • NA. Last collected pre-1964. Extant?
Xanthium spinosum • Cocklebur, spiny clotbur, Spanish-thistle • IA.
Xanthium strumarium • Rough cocklebur • IA.

CONVOLVULACEAE – Morning-Glory or Bindweed Family

Includes *Cuscutaceae*

Calystegia atriplicifolia ssp. *buttensis* • Butte County morning-glory • NV.
Calystegia collina ssp. *collina* • Coast range bindweed • NV.
Calystegia collina ssp. *oxyphylla* • Mount Saint Helena morning-glory, Coast Range bindweed • NV.

Calystegia collina ssp. *tridactylosa* • Coast Range bindweed • EV.
Calystegia malacophylla ssp. *malacophylla* • Sierra bindweed • NV.
Calystegia occidentalis ssp. *occidentalis* • Western morning-glory • NV.
Calystegia purpurata ssp. *purpurata* • Bush morning-glory • NV.
Calystegia purpurata ssp. *saxicola* • Bush morning-glory • NV.
Calystegia sepium ssp. *limnophila* • Hedge bindweed • IV. Based on a single 1997 collection.
Calystegia silvatica ssp. *disjuncta* • Short-stalked bindweed • IV.
Calystegia soldanella • Beach morning-glory • NV.
Calystegia subacaulis • Hillside bindweed • NV.
Convolvulus (in part) → *Calystegia*
Convolvulus arvensis • Wild morning-glory, field bindweed • IV.
Cuscuta approximata var. *approximata* • Alfalfa dodder • IV. Last collected in 1959. Extant?
Cuscuta brachycalyx ssp. *brachycalyx* • San Joaquin dodder • NV. Last collected in 1959. Extant?
Cuscuta californica var. *californica* • California or chaparral dodder • NV.
Cuscuta californica var. *papillosa* • Chaparral dodder • NV. Known from a 1983 collection. Extant?
Cuscuta campestris • Field dodder • NV.
Cuscuta cephalanthi • Buttonbush dodder • NV. Last collected in 1967. Extant?
Cuscuta howelliana • Boggs' Lake dodder • NV.
Cuscuta indecora var. *indecora* • Big-seed alfalfa or lucerne dodder • NV.
Cuscuta jepsonii • Jepson's dodder • NV.
Cuscuta occidentalis • Chaparral or western dodder • NV.
Cuscuta pacifica var. *pacifica* • Golden thread • NV.
Cuscuta pacifica var. *papillata* • Golden thread • NV. Last collected in 1912. Extant?
Cuscuta pentagona var. *pentagona* • Five-angled dodder • NV.
Cuscuta salina • Marsh or alkali dodder • NV.
Cuscuta suaveolens • Fringed dodder • IV. Last collected in 1918. Extant?
Cuscuta subinclusa • Canyon dodder • NV.
Cuscuta suksdorfii • Suksdorf's or mountain dodder • NV.
Dichondra donnelliana • Dichondra, California pony's-foot • NP.

CORNACEAE – Dogwood Family

Cornus glabrata • Smooth or brown dogwood • NS.
Cornus nuttallii • Pacific, Nuttall's, or mountain dogwood • NST.
Cornus sericea ssp. *occidentalis* • Western dogwood • NS.
Cornus sericea ssp. *sericea* • Red osier, American dogwood, American dog-berry • NS.
Cornus sessilis • Black-fruited or miner's dogwood • NS.
Cornus unalaschensis • Western cordilleran bunchberry • NS.

CRASSULACEAE – Stonecrop or Orpine Family

Amerosedum → *Sedum*
Crassula aquatica • Water pigmy • NA.
Crassula connata • Sand pigmy weed • NA.
Crassula solieri • Smooth-seeded pigmy weed • NA.
Crassula tillaea • Moss pigmy weed • IA.
Dudleya caespitosa • Sea-lettuce • NP.
Dudleya cymosa ssp. *cymosa* • Dudleya, live-forever, hens-and-chickens, sea-lettuce • NP.
Dudleya farinosa • Powdery dudleya, bluff-lettuce • NP.
Parvisedum → *Sedella*



Calystegia soldanella



Cornus sessilis



Convolvulus arvensis



Sedum laxum



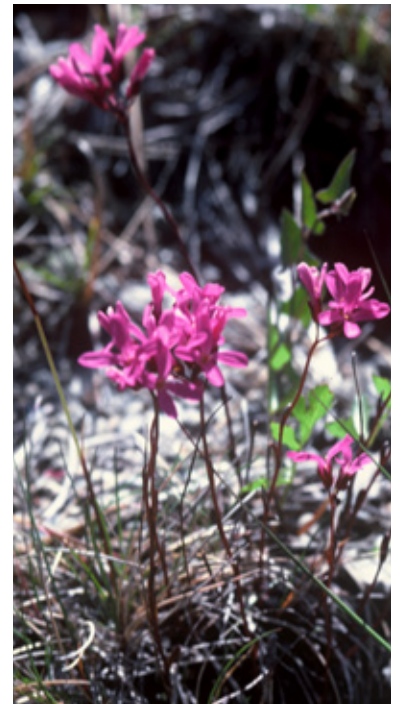
Cornus unalaschkensis



Cornus nuttallii



Dudleya cymosa



Arabis macdonaldiana

Rhodiola integrifolia ssp. *integrifolia* • Ledge stonecrop • NP.
Sedella leiocarpa • Lake County or mock stonecrop • EA. Last collected in 1943. Extant?
Sedella pentandra • Mount Hamilton mock stonecrop • NA.
Sedella pumila • Sierra mock stonecrop • NA.
Sedum (in part) → *Rhodiola*
Sedum citrinum • Blue Creek stonecrop • EP.
Sedum divergens • Cascade stonecrop • NP.
Sedum kiersteadiae • Kierstead's stonecrop • EP.
Sedum lanceolatum var. *lanceolatum* • Spear-leaved stonecrop • NP.
Sedum laxum ssp. *eastwoodiae* • Red Mountain stonecrop • EP.
Sedum laxum ssp. *flavidum* • Pale-yellow stonecrop • EP.
Sedum laxum ssp. *heckneri* • Heckner's stonecrop • NP.
Sedum laxum ssp. *latifolium* • Smith River stonecrop • EP.
Sedum laxum ssp. *laxum* • Rose-flowered stonecrop • NP.
Sedum marmorense • Marble Mountains stonecrop • EP.
Sedum oblanceolatum • Applegate's stonecrop • NP.
Sedum obtusatum ssp. *boreale* • Sierra stonecrop • NP.
Sedum obtusatum ssp. *obtusatum* • Sierra stonecrop • NP.
Sedum obtusatum ssp. *paradisum* • Canyon Creek stonecrop • EP.
Sedum obtusatum ssp. *retusum* • Klamath stonecrop • NP.
Sedum oregonum • Oregon stonecrop • NP.
Sedum oregonense • Cream stonecrop • NP.
Sedum patens • Smith River stonecrop • EP.
Sedum radiatum ssp. *depauperatum* • Coast Range stonecrop • NAP.
Sedum radiatum ssp. *radiatum* • Star-fruited or Coast Range stonecrop • NAP.
Sedum rubiginosum • Tedoc stonecrop • EP.
Sedum spathulifolium ssp. *pruinatum* • Broad-leaved stonecrop • NP.
Sedum spathulifolium ssp. *spathulifolium* • Broad-leaved stonecrop • NP.
Sedum stenopetalum ssp. *monanthum* • Worm-leaved stonecrop • NP.
Sedum stenopetalum ssp. *stenopetalum* • Explorer's sedum, worm-leaved stonecrop • NP.

CROSSOSOMATACEAE – Crossosoma Family

Forsellesia → *Glossopetalon*

Glossopetalon spinescens var. *aridum* • Nevada greasewood • NS.

CRUCIFERAE (BRASSICACEAE) – Mustard or Crucifer Family

Alyssum alyssoides • Sweet alyssum, yellow alyssum • IAP.

Alyssum simplex • European alyssum • IA. [TJM2]

Arabidopsis thaliana • Thale cress, mouse-ear cress • IAP.

Arabis (in part) → *Boechera* (only where no combination in *Arabis* is available) and *Planodes*

Arabis aculeolata • Waldo rock cress • NP.

Arabis acutina • Pointed rock cress • NP.

Arabis breweri var. *austinae* • Brewer's rock cress • NP.

Arabis breweri var. *breweri* • Brewer's rock cress • NP.

Arabis x *divaricarpa* (*A. drummondii* x *A. holboellii*) • Spreading-pod rock cress • NP.

Arabis drummondii • Drummond's or Canadian rock cress • NP.

Arabis eschscholtziana • Eschscholtz's rock cress • NP.

Arabis glabra • Tower mustard • NP.

Arabis howellii • Howell's rock cress • NP.
Arabis koehleri • Koehler's rock cress • NP.
Arabis lyallii • Lyall's rock cress • NP.
Arabis macdonaldiana • McDonald's rock cress • NP.
Arabis modesta • Modest rock cress • NP.
Arabis oregana • Oregon rock cress • NP.
Arabis pendulocarpa • Dropseed rock cress • NP.
Arabis pinetorum • Woodland rock cress • NP.
Arabis platysperma • Broad-seeded or pioneer rock cress • NP.
Arabis pratincola • Meadow rock cress • NP.
Arabis puberula • Blue Mountain rock cress • NP.
Arabis pycnocarpa var. *pycnocarpa* • Cream-flowered rock cress • NP.
Arabis repanda • Repand rock cress • NP.
Arabis retrofracta • Reflexed rock cress • NP.
Arabis rigidissima var. *rigidissima* • Trinity Mountains rock cress • EP.
Arabis rollei • Rolle's or Klamath River rock cress • EP.
Arabis sparsiflora var. *sparsiflora* • Elegant rock cress • NP.
Arabis sparsiflora var. *subvillosa* • Elegant rock cress • NP.
Arabis subpinnatifida • Klamath or two-way rock cress • NP.
Arabis suffrutescens var. *horizontalis* • Woody or purple rock cress • NP.
Arabis suffrutescens var. *suffrutescens* • Woody or purple rock cress • NP.
Athysanus pusillus • Common sand weed • NA.
Athysanus unilateralis • Ladies-tongue mustard • NA.
Aubrieta deltoidea • Lilac bush • IP. Last collected in 1977. Extant?
Barbarea orthoceras • Winter cress • NP.
Barbarea verna • Early winter cress • IP.
Barbarea vulgaris • Yellow rocket • IP.
Boechera (in part) → *Arabis* (where appropriate combinations have been published)
Boechera serpenticola • Serpentine rock cress • EP.
Boechera shevockii • Shevock's rock cress • NP.
Boechera ultraalsa • Snow Mountain rockcress • EP. Known from a single 1981 collection. Extant?
Brassica (in part) → *Hirschfeldia* and *Sinapis*
Brassica nigra • Black mustard • IA.
Brassica oleracea • Cabbage • IP. Escaped crop.
Brassica rapa • Field mustard • IAP.
Cakile edentula • California sea rocket • IA.
Cakile maritima • Sea rocket • IA.
Camelina microcarpa • Dutch false flax • IA.
Capsella bursa-pastoris • Shepherd's purse • IA.
Cardamine (in part) → *Planodes*
Cardamine angulata • Bitter cress, wood cress • NP.
Cardamine breweri • Brewer's bitter cress, Sierra cress • NP.
Cardamine californica • California toothwort, milk maids • NP.
Cardamine cordifolia • Heart-leaved bitter cress • NP.
Cardamine hirsuta • Hairy bitter cress • IA.
Cardamine nuttallii • Nuttall's toothwort • NP.
Cardamine occidentalis • Big western bitter cress • NP.
Cardamine oligosperma • Few-seeded bitter cress, hill cress • NAP.

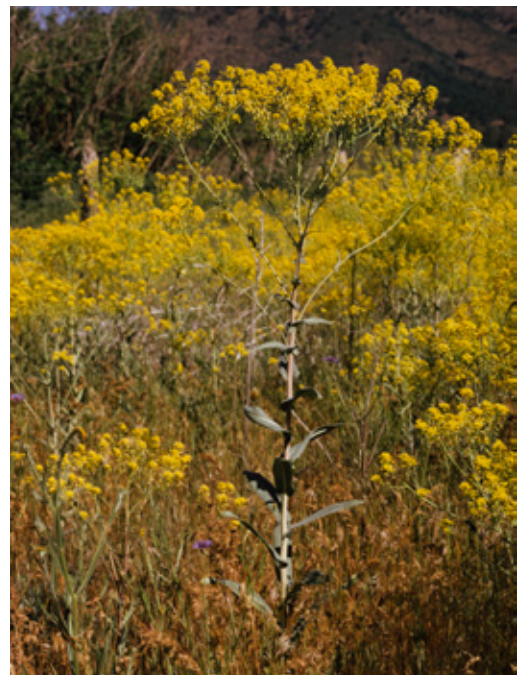
Cardamine pachystigma • Stout-beaked toothwort • NP.
Cardaria → *Lepidium*
Caulanthus flavescens • Yellow mustard • NA.
Caulanthus lasiophyllus • California mustard • NA.
Chorispora tenella • Cross flower • IA.
Cochlearia groenlandica • Greenland cochlearia, scurvy-grass. NAP.
Coincya monensis var. *recurvata* • Star mustard, wallflower-cabbage • IA.
Coronopus → *Lepidium*
Cusickiella douglasii • Alkali cusickiella • NP.
Dentaria → *Cardamine*
Descurainia incana • Mountain tansy mustard • NP.
Descurainia incisa ssp. *filipes* • Mountain tansy mustard • NA. Last collected in 1950. Extant?
Descurainia incisa ssp. *incisa* • Mountain tansy mustard • NA.
Descurainia pinnata ssp. *brachycarpa* • western tansy mustard • NA. Last collected in 1942. Extant?
Descurainia pinnata ssp. *glabra* • western tansy mustard • NA. Last collected in 1913. Extant?
Descurainia sophia • Flix weed • IAP.
Draba (in part) → *Cusickiella*
Draba albertina • Alaska whitlow-grass • NP.
Draba aureola • Golden, Mount Lassen, or vulcan draba • NP.
Draba carnosula • Mount Eddy draba • EP.
Draba howellii • Howell's or rosette draba • NP.
Draba nemorosa • Wood whitlow-grass • IA. Last collected in 1910. Extant?
Draba pterosperma • Wing-seeded draba • EP.
Draba verna • Shad flower, vernal whitlow-grass, whitlow-grass • IA.
Erophila → *Draba*
Eruca vesicaria ssp. *sativa* • Garden or salad rocket • IA. Last collected in 1911. Extant?
Erysimum capitatum var. *capitatum* • Douglas' or western wallflower • NP.
Erysimum concinnum • Coast wallflower • NP.
Erysimum franciscanum • San Francisco wallflower • NP.
Erysimum menziesii • Menzies' wallflower • NP.
Erysimum perenne • Sierra wallflower • NP.
Guillenia → *Caulanthus*
Hesperis matronalis • Dame's rocket • IP. EO.
Heterodraba → *Athysanus*
Hirschfeldia incana • Hoary mustard • IAP.
Hornungia procumbens • Prostrate hutchinsia, oval purse • IA.
Hutchinsia → *Hornungia*
Hymenolobus → *Hornungia*
Idahoia scapigera • Flat pod • NA.



Erysimum capitatum



Erysimum menziesii



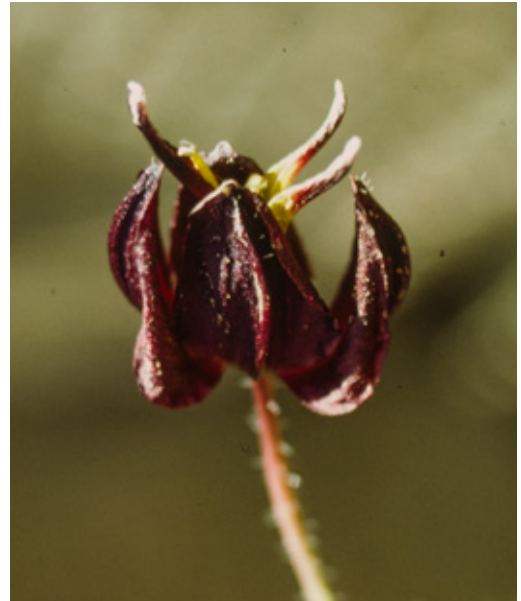
Isatis tinctoria

Ionopsidium acaule • Violet cress • IA. Last collected in 1933. Extant?
Isatis tinctoria • Woad, dyer's woad, Marlahan mustard • IAP.
Lepidium acutidens • Alkali pepper weed • NA.
Lepidium appelianum • Hairy white top, hoary cress • IP. Last collected in 1960. Extant?
Lepidium campestre • Poor man's pepper, English pepper-grass, cow cress • IA.
Lepidium chalapense • White top, lens-podded hoary cress • IP.
Lepidium densiflorum • Big-seeded pepper weed • NP.
Lepidium dictyotum • Alkali pepper weed • NA.
Lepidium didymum • Wart cress, swine cress • IA.
Lepidium draba • Heart-podded hoary cress • IP.
Lepidium heterophyllum • Purple-anthered field pepper-grass • NP.
Lepidium lasiocarpum • Sand or hairy-podded pepper-grass • NA.
Lepidium latifolium • Broad-leaved pepper weed • IP.
Lepidium latipes • Dwarf pepper-grass • NA.
Lepidium montanum • Mountain pepper-grass • NP.
Lepidium nitidum • Common or shining pepper-grass • NA.
Lepidium oblongum • Veiny pepperwort • NAP.
Lepidium oxycarpum • Sharp-podded pepper-grass • NA.
Lepidium perfoliatum • Shield cress, round-leaved pepper-grass • IAP.
Lepidium pinnatifidum • Tansy or feather-leaved pepper weed • IA. Known from a 1979 collection.
 Extant?
Lepidium strictum • Pepper-grass • NA.
Lepidium virginicum ssp. *menziesii* • Menzies' pepper-grass • NA.
Lesquerella → *Physaria*
Lobularia maritima • Sweet-alyssum • IAP.
Lunaria annua • Money plant, honesty • IAP.
Mathiola incana • Stock • IP.
Nasturtium officinale • Water cress • NP.
Noccaea fendleri ssp. *californica* • Kneeland penny cress • EP.
Noccaea fendleri ssp. *glauca* • Alpine penny cress • NP.
Phoenicaulis cheiranthoides • Dagger pod • NP.
Physaria occidentalis ssp. *occidentalis* • Western bladderpod • NAP.
Planodes virginicum • Virginica or winged rock cress • NAP.
Raphanus raphanistrum • Jointed wild radish, jointed charlock • IAP.
Raphanus sativus • Wild radish • IAP. Escaped food plant.
Rorippa (in part) → *Nasturtium*
Rorippa columbiae • Columbia yellow cress • NP. Last collected in 1956. Extant?
Rorippa curvipes • Blunt-leaved Columbia yellow cress • NAP.
Rorippa curvisiliqua • Western yellow cress • NAP.
Rorippa palustris ssp. *palustris* • Marsh cress, yellow cress • NAP.
Rorippa teres • Southern marsh yellow cress • IAP.
Sibara → *Planodes*
Sinapis (in part) → *Hirschfeldia*
Sinapis alba • White charlock • IA. [TJM2]
Sinapis arvensis • Field charlock • IA.
Sisymbrium altissimum • Tumble mustard, Jim Hill mustard • IA.

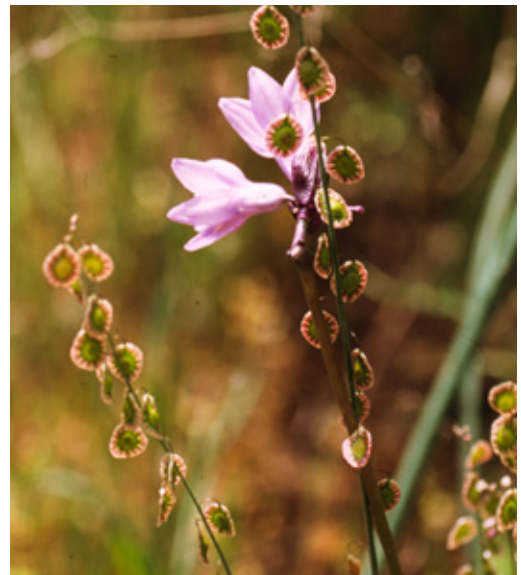


Nasturtium officinale

Sisymbrium officinale • Hedge mustard • IA.
Sisymbrium orientale • Indian hedge mustard • IA.
Streptanthus barbatus • Pacific jewel flower • EP.
Streptanthus barbiger • Bearded jewel flower • NA.
Streptanthus batrachopus • Tamalpais jewelweed • NA.
Streptanthus brachiatus • Socrates Mine jewel flower • NP.
Streptanthus breweri • Brewer's jewel flower • NA.
Streptanthus drepanoides • Sickle-fruited jewel flower • NA.
Streptanthus glandulosus ssp. *glandulosus* • Bristly jewel flower • NA.
Streptanthus glandulosus ssp. *hoffmanii* • Hoffman's bristly jewel flower • NP.
Streptanthus hesperidis • Serpentine jewel flower • NA.
Streptanthus howellii • Howell's jewel flower • NP.
Streptanthus longisiliquus • Long-fruited jewel flower • NP.
Streptanthus morrisonii ssp. *elatus* • Three peaks jewel flower • NP.
Streptanthus morrisonii ssp. *kruckebergii* • Kruckeberg's jewel flower • NP.
Streptanthus oblancoelatus • Trinity River or Burnt Ranch jewel flower • EP.
Streptanthus tortuosus • Mountain jewel flower • NP.
Streptanthus vernalis • Three Peak's jewel flower • EA.
Streptanthus vimineus • Greene's jewel flower • NA.
Thelypodium (in part) → *Caulanthus*
Thelypodium brachycarpum • Short-podded thelypody • NP.
Thelypodium flexuosum • Perennial thelypody • NP.
Thelypodium laciniatum • Cut-leaved thelypody • NP.
Thlaspi (in part) → *Noccaea*
Thlaspi arvense • Penny cress, field penny cress, fan weed • IA.
Thysanocarpus curvipes var. *curvipes* • Fringe pod, hairy fringe pod • NA.
Thysanocarpus laciniatus var. *laciniatus* • Southern lace pod • NA.
Thysanocarpus radians • Spoke pod, ribbed fringe pod • NA.
Tropidocarpum gracile • Dobie pod • NA.
Turritis → *Arabis*



Streptanthus breweri



Thysanocarpus curvipes



Marah oregana

CUCURBITACEAE – Gourd, Pumpkin, or Squash Family

Marah fabacea • California or valley manroot • NV.
Marah oregana • Wild-cucumber, coast or hill manroot, big root • NV.
Marah watsonii • Taw manroot • NV.

CYPERACEAE – Sedge Family

Bolboschoenus fluviatilis • River bulrush • NP.

Bolboschoenus maritimus ssp. *paludosus* • Salt-marsh or alkali bulrush, bayonet-grass • NP.

Bolboschoenus robustus • Seacoast bulrush, seaside club-rush • NP.

Bulbostylis capillaris • Dense-tufted hair sedge • NA. Last: 1958. Extant?

Calliscirpus criniger • Fringed cotton-grass • NP.

Carex abrupta • Abruptly-beaked sedge • NP.

Carex amplifolia • Big-leaved sedge • NP.

Carex angustata • Narrow-leaved sedge • NP.

Carex aquatilis var. *aquatilis* • Water sedge • NP. [TJM2]

Carex aquatilis var. *dives* • Water sedge • NP.

Carex arcta • Northern clustered sedge • NP.

Carex athrostachya • Slender-beaked sedge • NP.

Carex aurea • Golden-fruited sedge • NP.

Carex barbarae • Santa Barbara sedge • NP.

Carex bolanderi • Bolander's sedge • NP.

Carex brainerdii • Brainerd's sedge • NP.

Carex brevicaulis • Short-stemmed sedge • NP.

Carex breweri • Brewer's sedge • NP.

Carex buxbaumii • Buxbaum's sedge • NP.

Carex californica • California sedge • NP.

Carex canescens ssp. *canescens* • Silvery or hoary sedge • NP.

Carex comosa • Bristly sedge • NP.

Carex concinnoides • Northwestern sedge • NP.

Carex cusickii • Cusick's sedge • NP.

Carex deflexa var. *boottii* • mountain mat sedge • NP.

Carex densa • Dense sedge • NP.

Carex diandra • Lesser-panicled sedge • NP.

Carex douglasii • Douglas' sedge • NP.

Carex echinata ssp. *echinata* • Star sedge • NP.

Carex echinata ssp. *phyllomanica* • Star sedge • NP.

Carex exsuccata • western inflated sedge • NP.

Carex feta • Green-sheathed sedge • NP.

Carex fissuricola • Canyon sedge • NP.

Carex fracta • Fragile-sheathed sedge • NP.

Carex geyeri • Geyer's sedge, elk sedge • NP.

Carex globosa • Round-fruited sedge • NP.

Carex gracilior • Slender sedge • NP.

Carex gynodynema • Olney's hairy sedge • NP.

Carex halliana • Hall's or Oregon sedge • NP.

Carex harfordii • Harford's sedge • NP.

Carex hassei • Hasse's sedge • NP.

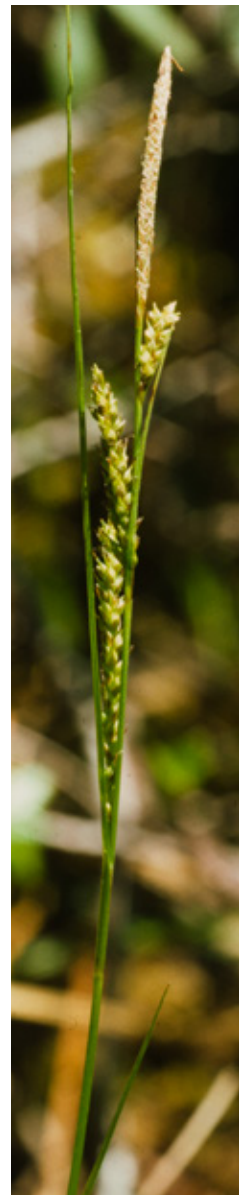
Carex hendersonii • Henderson's sedge • NP.

Carex heteroneura • Various-nerved or smooth-fruited sedge • NP.

Carex hirtissima • Hairy Sierra sedge • NP.

Carex hoodii • Hood's sedge • NP.

Carex hystericina • Porcupine or bottlebrush sedge • NP.



Carex sp.

Carex infirmivervia • Weakly-veined sedge • NP.
Carex inops ssp. *inops* • Long-stoloned sedge • NP.
Carex integra • Smooth-beaked sedge • NP.
Carex interior • Inland sedge • NP.
Carex jonesii • Jones' sedge • NP.
Carex kelloggii var. *impressa* • Lake shore or tarn sedge • NP.
Carex kelloggii var. *kelloggii* • Lake shore sedge • NP.
Carex kelloggii var. *limnophila* • Lagoon sedge • NP.
Carex klamathensis • Klamath sedge • NP.
Carex laeviculmis • Smooth-stemmed sedge • NP.
Carex lemmonii • Lemmon's sedge • NP.
Carex lenticularis var. *limnophila* • Lagoon sedge • NP.
Carex leporina • hare sedge, oval sedge • NP.
Carex leporinella • Bog hare sedge • NP.
Carex leptalea • Bristle-stalked sedge • NP.
Carex leptopoda • Slender-footed sedge • NP.
Carex limosa • Mud sedge • NP.
Carex livida • Livid sedge, pale sedge • NP. Last: 1866. Extant?
Carex longii • Green-and-white sedge • IP. [TJM2]
Carex luzulifolia • Luzula-leaved sedge • NP.
Carex luzulina • Woodrush sedge • NP.
Carex lyngbyei • Lyngby's sedge • NP.
Carex mariposana • Mariposa sedge • NP.
Carex mendocinensis • Mendocino sedge • NP.
Carex mertensii • Merten's sedge • NP.
Carex microptera • Small-winged sedge • NP.
Carex multicaulis • Many-stemmed or stick sedge • NP.
Carex multicostata • Many-ribbed sedge • NP.
Carex nardina • Hepburn's sedge • NP.
Carex nebrascensis • Nebraska sedge • NP.
Carex nervina • Sierra sedge • NP.
Carex neurophora • Alpine nerved sedge • NP.
Carex nigricans • Black alpine sedge • NP.
Carex nudata • Torrent sedge • NP.
Carex obnupta • Slough sedge • NP.
Carex pachycarpa • Furrowed broom sedge • NP.
Carex pachystachya • Thick-headed sedge • NP.
Carex pansa • Sand dune sedge • NP.
Carex pellita • Woolly sedge • NP.
Carex petasata • Liddon's sedge • NP.
Carex phaeocephala • Alpine hare sedge • NP.
Carex praegracilis • Black creeper or freeway sedge • NP.
Carex praticola • Meadow sedge • NP.
Carex preslii • Presl's sedge • NP.
Carex raynoldsii • Raynold's sedge • NP.
Carex rossii • Ross' sedge • NP.
Carex saliniformis • Deceiving sedge • NP.
Carex scabriuscula • Siskiyou sedge • NP.

Carex schottii • Schott's sedge • NP.
Carex scopulorum var. *bracteosa* • Holm's Rocky Mountain sedge • NP.
Carex serpenticola • Serpentine sedge • NP.
Carex serratodens • Saw-toothed sedge • NP.
Carex simulata • Short-beaked or analogue sedge • NP.
Carex specifica • Narrow-fruited sedge • NP.
Carex spectabilis • Showy sedge • NP.
Carex stipata var. *stipata* • Awl-fruited sedge • NP.
Carex straminiformis • Mount Shasta sedge • NP.
Carex subbracteata • Small-bracted sedge • NP.
Carex subfusca • Rusty sedge • NP.
Carex tumulicola • Foothill sedge • NP.
Carex unilateralis • One-sided sedge • NP.
Carex utriculata • Southern beaked sedge • NP.
Carex vesicaria • Lesser bladder or blister sedge • NP.
Carex viridula ssp. *viridula* • Green sedge • NP.
Carex vulpinoidea • Brown fox sedge • IP.
Carex whitneyi • Whitney's sedge • NP.
Cyperus (in part) → *Isolepis*
Cyperus acuminatus • Short-pointed flat sedge • NA.
Cyperus bipartitus • Slender flat sedge • NA.
Cyperus eragrostis • Umbrella or flat sedge • NP.
Cyperus erythrorhizos • Red-rooted flat sedge • NA.
Cyperus esculentus var. *leptostachyus* • Yellow nut-grass, yellow nut sedge, chufa • NP.
Cyperus niger • Black flat sedge • NP.
Cyperus squarrosus • Bearded flat sedge • NA.
Cyperus strigosus • Straw-colored flat sedge • NP.
Dulichium arundinaceum var. *arundinaceum* • Three-way sedge • NP.
Eleocharis acicularis var. *acicularis* • Needle spike-rush • NP.
Eleocharis acicularis var. *gracilescens* • Needle spike-rush • NP.
Eleocharis acicularis var. *occidentalis* • Needle spike-rush • NP. Last collected in 1956. Extant?
Eleocharis bella • Pretty spike-rush • NA.
Eleocharis bolanderi • Bolander's spike-rush • NP.
Eleocharis decumbens • Decumbent spike-rush • NP.
Eleocharis engelmannii var. *detonsa* • Engelmann's spike-rush • NP. [TJM2]
Eleocharis engelmannii var. *engelmannii* • Englemann's spike-rush • NP.
Eleocharis macrostachya • Pale spike-rush • NP.
Eleocharis montevidensis • Sand spike-rush • NP.
Eleocharis obtusa • Blunt spike-rush • NA.
Eleocharis ovata • Ovate spike-rush • NA. Known from a single 1963 collection. Extant?
Eleocharis pachycarpa • Black sand spike-rush • IP.
Eleocharis palustris var. *palustris* • Common spike-rush • NP.
Eleocharis parishii • Parish's spike-rush • NP.
Eleocharis parvula • Small spike-rush • NP.
Eleocharis quinqueflora • Few-flowered spike-rush • NP.
Eleocharis radicans • Rooted spike-rush • NP.



Schoenoplectus sp.

Eleocharis rostellata • beaked spike-rush • NP.
Eleocharis suksdorfiana • Suksdorf's spike-rush • NP.
Eriophorum (in part) → *Calliscirpus*
Eriophorum gracile var. *caurinum* • Slender cotton-grass • NP.
Heleocharis → *Eleocharis*
Hemicarpha → *Lipocarpha*
Isolepis carinata • Keeled lateral bulrush • NA.
Isolepis cernua • Low lateral bulrush • NA.
Isolepis levynsiana • Tiny flat-sedge • IA.
Isolepis setacea • Bristle-leaf lateral bulrush • NP.
Lipocarpha aristulata • Awned half-chaff sedge • NA.
Lipocarpha micrantha • Small-flowered half-chaff sedge • NA.
Lipocarpha occidentalis • Western small-flowered half-chaff sedge • NA.
Rhynchospora alba • White beaked-rush • NP.
Rhynchospora capitellata • Brownish beaked-rush • NP.
Schoenoplectiella mucronata • Bog club-rush • IP.
Schoenoplectus (in part) → *Bolboschoenus* and *Schoenoplectiella*
Schoenoplectus acutus var. *occidentalis* • Common tule, hard-stemmed bulrush • NP.
Schoenoplectus americanus • Common three-square • NP.
Schoenoplectus californicus • California bulrush, California tule, California clubrush • NP.
Schoenoplectus pungens var. *longispicatus* • Three-square • NP.
Schoenoplectus subterminalis • Water bulrush • NP.
Schoenoplectus tabernaemontani • Soft-stemmed bulrush • NP.
Scirpus (in part) → *Bolboschoenus*, *Bulbostylis*, *Calliscirpus*, *Isolepis*, and *Schoenoplectus*
Scirpus congdonii • Congdon's bulrush • NP.
Scirpus diffusus • Diffuse bulrush, umbrella bulrush • NP.
Scirpus microcarpus • Small-fruited or red-tined bulrush, panicked sedge • NP.
Scirpus pendulus • Rufous or pendulous bulrush • NP.

DATISACEAE – Datisca Family

Datisca glomerata • Durango root • NP.

DIPSACACEAE – Teasel Family

Family sometimes included in *Caprifoliaceae*

Dipsacus fullonum • Fuller's teasel • IP.
Dipsacus sativus • Common teasel, Indian teasel • IP.
Scabiosa atropurpurea • Mourning bride • IAP.

DROSERACEAE – Sundew Family

Dionaea muscipula • Venus flytrap • N(?)P. Escaped or discarded ornamental. Last collected in 1982. Extant?



Datisca glomerata



Dipsacus sp.



Drosera anglica

Michael Kauffmann

Drosera aliciae • South African sundew • N(?)P. Escaped or discarded ornamental.

Drosera anglica • English sundew • NP.

Drosera capensis • Cape sundew • N(?)P. Escaped or discarded ornamental.

Drosera filiformis • Thread-leaved sundew • N(?)P. Escaped or discarded ornamental.

Drosera rotundifolia • Round-leaved sundew • NP.

Drosera tracyi • Tracy's sundew • N(?)P. EO.

EBENACEAE – Ebony Family

Diospyros virginiana var. *virginiana* • Common persimmon • IT.
Last collected: 1959. Extant?

ELAEAGNACEAE – Oleaster Family

Shepherdia argentea • Silver buffalo berry • NS. [TJM2]

Shepherdia canadensis • Canadian buffalo berry • NS.

ELATINACEAE – Waterwort Family

Bergia texana • Water fire • NA. Last collected in 1949. Extant?

Elatine ambigua • Asian waterwort • IA.

Elatine brachysperma • Short-seeded waterwort, yerba fango
• NAP. Last collected in 1957. Extant?

Elatine californica • California waterwort, yerba estera • NAP.

Elatine heterandra • Mosquito waterwort • NAP.

Elatine rubella • Southwestern waterwort • NAP.

Elatine triandra • Three-stamened waterwort • IP.

ERICACEAE – Heath Family

Includes *Empetraceae*, *Monotropaceae*, and *Pyrolaceae*

Allotropa virgata • Sugar stick • NP.

Arbutus menziesii • Madrone, Pacific madrone, madroño • NST.

Arctostaphylos canescens ssp. *canescens* • Hoary manzanita
• NS.

Arctostaphylos canescens ssp. *sonomensis* • Sonoma manzanita
• NS.

Arctostaphylos x *cinerea* (*A. canescens* x *A. viscida*) • Waldo or
Del Norte manzanita • ES.

Arctostaphylos columbiana • Columbia or hairy manzanita • NS.

Arctostaphylos crustacea ssp. *crustacea* • Brittle-leaved manzanita
• NS. Last collected in 1957. Extant?

Arctostaphylos glandulosa ssp. *cushingiana* • Cushing's manzanita
• NS.

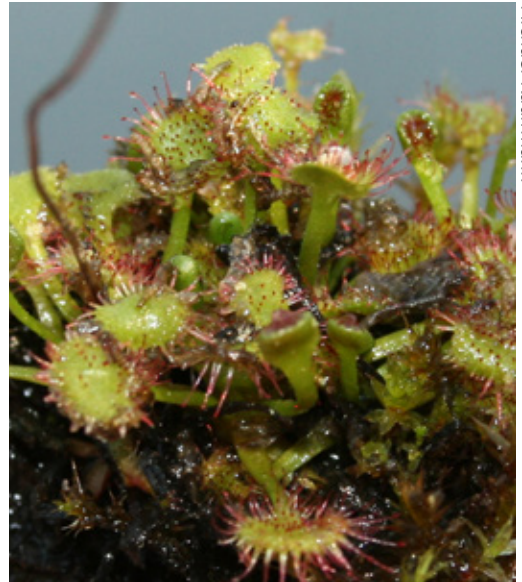
Arctostaphylos glandulosa ssp. *glandulosa* • Eastwood's or
crown manzanita • NS.

Arctostaphylos hispidula • Gasquet or Howell's manzanita • NS.

Arctostaphylos x *jepsonii* (*A. patula* x *A. viscida*) • Jepson's
manzanita • NS.

Arctostaphylos klamathensis • Klamath manzanita • ES.

Arctostaphylos malloryi • Mallory's manzanita • NS.



Drosera rotundifolia



Arbutus menziesii



Arctostaphylos patula



Arctostaphylos uva-ursi

Arctostaphylos manzanita ssp. *elegans* • Konacti manzanita • NS.

Arctostaphylos manzanita ssp. *glaucescens* • White-leaved manzanita • NS.

Arctostaphylos manzanita ssp. *manzanita* • Common manzanita • NS.

Arctostaphylos manzanita ssp. *roofii* • Roof's manzanita • NS.

Arctostaphylos manzanita ssp. *wieslanderi* • Wieslander's manzanita • NS.

Arctostaphylos x *media* (*A. columbiana* x *A. uva-ursi*) • Hybrid manzanita • NS.

Arctostaphylos nevadensis ssp. *knightii* • Knight's manzanita • ES.

Arctostaphylos nevadensis ssp. *nevadensis* • Pinemat, pinemat manzanita • NS.

Arctostaphylos nortensis • Del Norte manzanita • ES.

Arctostaphylos nummularia ssp. *mendocinoensis* • Fort Bragg or pygmy manzanita • ES.

Arctostaphylos nummularia ssp. *nummularia* • Fort Bragg, fire, or glossy-leaf manzanita • NS.

Arctostaphylos x *parvifolia* (*A. nevadensis* x *A. glandulosus*) • NS.

Arctostaphylos patula ssp. *patula* • Green-leaved or Greene's manzanita, snow brush • NS.

Arctostaphylos patula ssp. *gankinii* • Gankin's manzanita • NS.

Arctostaphylos stanfordiana ssp. *raichei* • Hopland or Raichei's manzanita • ES.

Arctostaphylos stanfordiana ssp. *stanfordiana* • Stanford's manzanita • NS.

Arctostaphylos uva-ursi • Bearberry, kinnikinnick, sand berry • NS.

Arctostaphylos viscida ssp. *pulchella* • Coast Range white-leaved manzanita • NS.

Arctostaphylos viscida ssp. *viscida* • Sierran white-leaved manzanita • NS.

Cassiope mertensiana ssp. *californica* • Mountain or moss heather • NS.

Cassiope mertensiana ssp. *ciliolata* • Mountain or moss heather • NS.

Cassiope mertensiana ssp. *mertensiana* • Mountain or moss heather • NS.

Chimaphila menziesii • Pipsissewa, little prince's-pine • NP.

Chimaphila umbellata ssp. *occidentalis* • Western prince's-pine, pipsissewa • NP.

Empetrum nigrum • Black crowberry • NS.

Erica lusitanica • Spanish or Portuguese heath, heather • IS.

Gaultheria humifusa • Alpine spicy, western, or alpine wintergreen • Native subshrub.

Gaultheria ovatifolia • Oregon spicy wintergreen, oval-leaved gaultheria • Native subshrub.

Gaultheria shallon • Salal • NS.

Hemitomes congestum • Cone flower, gnome plant • NP.



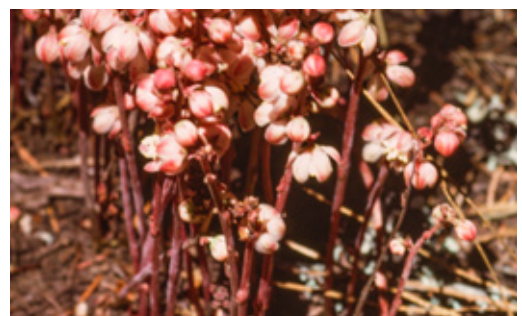
Gaultheria shallon



Kalmia polifolia



Monotropa uniflora



Pyrola picta

Hypopitys → *Monotropa*

Kalmia polifolia • Small-leaved kalmia, swamp-laurel • NS.

Ledum → *Rhododendron*

Leucothoë davisiae • Black-laurel, western-laurel, Sierra-laurel • NS.

Menziesia ferruginea • Pacific menziesia, mock azalea, rusty-leaf • NS.

Moneses uniflora • Forest wintergreen, wood nymph, wax flower, single delight • NP.

Monotropa hypopithys • Pinesap • NP.

Monotropa uniflora • Indian-pipe • NP.

Orthilia secunda • One-sided wintergreen, side bells • NP.

Phyllodoce breweri • Brewer's mountain heather • NS. Last collected in 1961. Extant?

Phyllodoce empetriformis • Pink mountain, Cascade, or red heather • NS.

Pityopus californica • California pinefoot • NP.

Pleuricospora fimbriolata • Fringed pinesap, Sierra sap • NP.

Pterospora andromedea • Pine drops • NP.

Pyrola (in part) → *Orthilia*

Pyrola aphylla • Leafless wintergreen • NP.

Pyrola asarifolia ssp. *asarifolia* • Bog wintergreen • NP.

Pyrola asarifolia ssp. *bracteata* • Oregon or long-bracted wintergreen • NP.

Pyrola crypta • Cryptic wintergreen • NP.

Pyrola dentata • Toothed wintergreen • NP.

Pyrola minor • Lesser wintergreen • NP.

Pyrola picta • White-veined shinleaf, red canker • NP.

Rhododendron columbianum • Western Labrador tea, trapper's tea • NS.

Rhododendron macrophyllum • California rose-bay, Pacific or California rhododendron • NS.

Rhododendron occidentale • Western azalea • NS.

Sarcodes sanguinea • Snow plant • NP.

Vaccinium caespitosum var. *caespitosum* • Dwarf huckleberry, dwarf bilberry • NS.

Vaccinium deliciosum • Cascade bilberry • NS.

Vaccinium membranaceum • Blue or thin-leaved huckleberry, mountain bilberry • NS.

Vaccinium ovatum • Evergreen huckleberry, California huckleberry • NS.

Vaccinium parvifolium • Red huckleberry, red bilberry • NS.

Vaccinium scoparium • Grouseberry, dwarf red whortleberry, little-leaved huckleberry • NS.

Vaccinium shastense ssp. *shastense* • Shasta Lake huckleberry • ES.

Vaccinium uliginosum • Western blueberry, bog bilberry • NS.

ESCALLONIACEAE – Escallonia Family

Traditionally included in *Saxifragaceae*.

Escallonia rubra • Red claws • IS. EO.



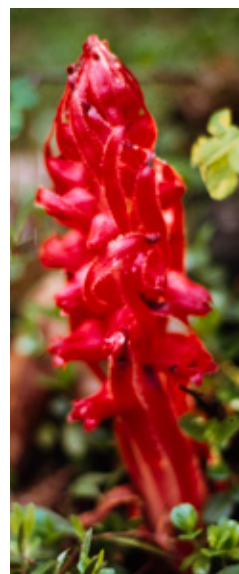
Rhododendron columbianum



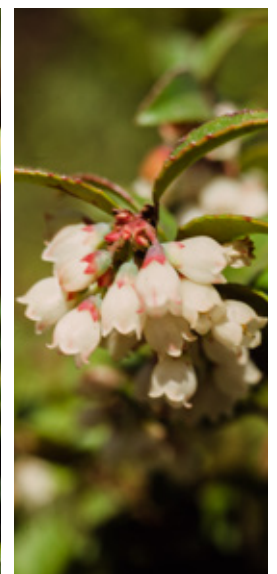
Rhododendron macrophyllum



Rhododendron occidentale



Sarcodes sanguinea



Vaccinium ovatum

EUPHORBIACEAE – Spurge or Euphorb Family

Chamaesyce → *Euphorbia*

Croton setigerus • Turkey-mullein, dove weed • NA. Often seen as a roadside weed.

Eremocarpus → *Croton*

Euphorbia crenulata • Chinese caps • NAP.

Euphorbia glyptosperma • Engraved spurge, engraved sandmat • NA.

Euphorbia helioscopia • Wart weed, sun spurge • IA.

Euphorbia lathyris • Caper or gopher spurge • IP.

Euphorbia maculata • Spotted or nodding spurge, spotted sandmat • IA.

Euphorbia marginata • Snow-on-the-mountain • IA • EO.

Euphorbia nutans • Eyebane • IA.

Euphorbia oblongata • Oblong spurge • IP.

Euphorbia ocellata ssp. *ocellata* • Ocellated spurge, ocellated sandmat • NA.

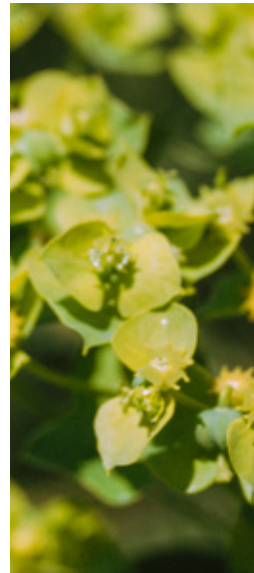
Euphorbia ocellata ssp. *rattanii* • Ocellated or Stony Creek spurge • NA.

Euphorbia peplus • Petty spurge • IA.

Euphorbia serpyllifolia ssp. *serpyllifolia* • Thyme-leaved spurge, gulf sandmat • NA.

Euphorbia spathulata • Reticulate-seeded spurge • NA.

Euphorbia virgata • Leafy spurge • IP.



Euphorbia virgata



Croton setigerus



Chrysolepis chrysophylla

FAGACEAE – Beech or Oak Family

Castanea dentata • Chestnut, American chestnut • IT. EO.

Castanopsis → *Chrysolepis*

Chrysolepis chrysophylla var. *chrysophylla* • Golden or giant chinquapin • NT.

Chrysolepis chrysophylla var. *minor* • Golden chinquapin • NST.

Chrysolepis sempervirens • Sierra or bush chinquapin • NS.

Chrysolepis → *Chrysolepis* (orthographic correction)

Lithocarpus (in part) → *Notholithocarpus*

Notholithocarpus densiflorus var. *densiflorus* • Tanoak • NT.

Notholithocarpus densiflorus var. *echinoides* • Shrub or dwarf tanoak • NS.

Quercus agrifolia var. *agrifolia* • Coast live oak • NT.

Quercus x *alvordiana* (*Q. douglasii* x *Q. john-tuckeri*) • Alvord oak • NT.

Quercus berberidifolia • Scrub oak • NS.

Quercus chrysolepis var. *chrysolepis* • Canyon live oak, maul oak • NT.

Quercus chrysolepis var. *nana* • Dwarf canyon live oak • NS.

Quercus douglasii • Blue oak • NT.

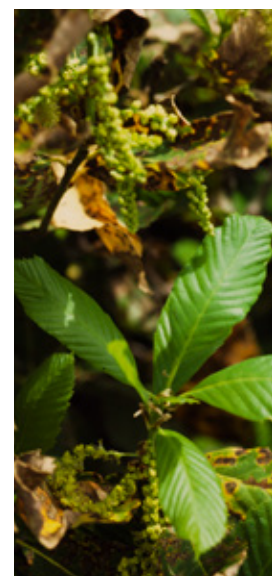
Quercus durata var. *durata* • Leather oak • NS.

Quercus x *eplingii* (*Q. douglasii* x *Q. garryana*) • Epling oak • NT.

Quercus x *ganderi* (*Q. agrifolia* x *Q. kelloggii*) • Gander oak • NT.



Notholithocarpus densiflorus



Quercus sadleriana

Quercus garryana var. *fruticosa* • Brewer oak • NS.

Quercus garryana var. *garryana* • Oregon white, Garry, or Oregon oak • NT.

Quercus garryana var. *semota* • Oregon white oak • NST.

Quercus john-tuckeri • Tucker oak • NS.

Quercus x *jolonensis* (*Q. douglasii* x *Q. lobata*) Jolon's oak • NT.

Quercus kelloggii • California black oak • NST.

Quercus lobata • Valley oak, roble, California white oak • NT.

Quercus x *moreha* (*Q. kelloggii* x *Q. wislizeni*) • Oracle oak • NT.

Quercus palmeri • Dunn's oak • NST.

Quercus parvula var. *shrevei* • Shreve's oak • NT.

Quercus sadleriana • Sadler or deer oak • NS.

Quercus x *subconvexa* (*Q. durata* x *Q. garryana*) • NST.

Quercus vacciniifolia • Huckleberry oak • NS.

Quercus wislizeni var. *frutescens* • Dwarf interior live oak • NS.

Quercus wislizeni var. *wislizeni* • Interior or Sierra live oak • NT.

FRANKENIACEAE – Frankenia Family

Frankenia salina • Alkali-heath, yerba reuma • NP. Known from two 1979 collections.

GARRYACEAE – Silk-Tassel Family

Garrya buxifolia • Dwarf tassel bush, box-leaved or dwarf silk-tassel • NS.

Garrya elliptica var. *elliptica* • Wavy-leaved or coast silk-tassel • NST.

Garrya flavescens • Ashy silk-tassel • NS.

Garrya fremontii • Fremont's silk-tassel, bear brush • NS.

GENTIANACEAE – Gentian Family

Excludes *Menyanthaceae*

Centaurium (in part) → *Zeltnera*

Centaurium erythraea • European centaurry • IA.

Centaurium tenuiflorum • Slender centaurry • IA.

Cicendia quadrangularis • American microcala, timwort • NA.

Frasera albicaulis var. *nitida* • White-stemmed or shining frasera • NP.

Frasera speciosa • Monument plant • NP.

Frasera umpquaensis • Umpqua or clustered green-gentian • NP.

Gentiana (in part) → *Gentianella* and *Gentianopsis*

Gentiana affinis var. *ovata* • Prairie or trapper's gentian • NP.

Gentiana calycosa • Explorer's gentian • NP.

Gentiana newberryi ssp. *newberryi* • Alpine gentian • NP.

Gentiana plurisetosa • Klamath gentian • NP.

Gentiana sceptrum • King's gentian • NP.

Gentiana setigera • Mendocino gentian • NP.



Quercus garryana



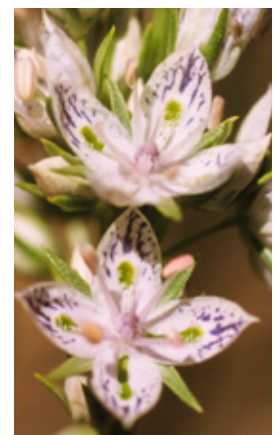
Quercus kelloggii



Quercus vacciniifolia

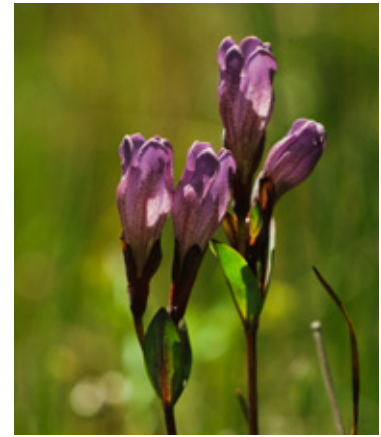


Garrya elliptica



Frasera albicaulis

Gentianella amarella ssp. *acuta* • Northern-gentian, felwort • NA.
Gentianopsis simplex • Hiker's-gentian • NP.
Menyanthes → *Menyanthaceae*
Microcala → *Cicendia*
Swertia (in part) → *Frasera*
Swertia perennis • Star swertia • NP.
Zeltnera davyi • Davy's centaury • NA. Last collected in 1952. Extant?
Zeltnera muehlenbergii • Monterey centaury • NA.
Zeltnera trichantha • Alkali centaury • NA.
Zeltnera venusta • Chanchalagua • NA.



Gentiana calycosa

GERANIACEAE – Geranium Family

California → *Erodium*
Erodium botrys • Broad-leaved filaree • IA.
Erodium brachycarpum • Short-fruited stork's-bill • IA.
Erodium cicutarium • Red-stemmed filaree • IA.
Erodium macrophyllum • Round-leaved stork's-bill • NAP.
Erodium moschatum • White-stemmed filaree, musk-clover • IAP.
Geranium bicknellii • Bicknell's geranium • NAP.
Geranium carolinianum • Carolina geranium • NA.
Geranium columbinum • Long-stalked geranium • IA.
Geranium core-core • Alderney crane's-bill • IP.
Geranium dissectum • Cut-leaved geranium • IA.
Geranium molle • Dove's-foot geranium • IA.
Geranium oreganum • Oregon geranium • NP.
Geranium pusillum • Small-flowered geranium • IA.
Geranium robertianum • Herb robert, robert geranium • IP.
Geranium solanderi • Solander's geranium • IP. Last: 1931. Extant?
Geranium viscosissimum • Sticky geranium • NP.
Geranium yeoi • Greater herb robert • IP.
Pelargonium capitatum • Herb-scented- or rose-scented-geranium • ISV.
Pelargonium grossularioides • Gooseberry-geranium • IP.
Pelargonium vitifolium • Grape-leaved-geranium • IS.



Gentiana setigera



Erodium botrys

GRAMINEAE (POACEAE) – Grass Family

Achnatherum → *Stipa*
Aegilops cylindrica • Jointed goat grass • IA.
Aegilops geniculata • Ovate goat grass • IA.
Aegilops neglecta • Three-awned goat grass • IA.
Aegilops triuncialis • Barbed goat grass • IA
X Agropogon lutosus (Agrostis stolonifera x Polypogon monspeliensis) • IP.
Agropyron (in part) → *Elymus*
Agropyron cristatum ssp. *pectinatum* • Crested wheat grass • IA.
Agrostis (in part) → *X Agropogon* and *Polypogon*
Agrostis blasdalei • Blasdale's bent grass • NP.
Agrostis capillaris • Colonial bent grass • IP.
Agrostis densiflora • California bent grass • NP.
Agrostis eliottiana • Elliott's or Sierra bent grass • NA.

Agrostis exarata • Spike bent grass • NP.
Agrostis hallii • Hall's bent grass • NP.
Agrostis hendersonii • Henderson's bent grass • NA.
Agrostis humilis • Mountain or alpine bent grass • NP.
Agrostis idahoensis • Idaho bent grass • NP.
Agrostis microphylla • Bent grass • NA.
Agrostis oregonensis • Oregon redtop • NP.
Agrostis pallens • Leafy bent grass • NP.
Agrostis scabra • Rough bent grass • NP.
Agrostis stolonifera • Creeping bent grass • IP.
Agrostis variabilis • Mountain bent grass • NP.
Aira caryophyllea • Silver hair grass • IA.
Aira elegans • Delicate hair grass • IA.
Aira praecox • Little or early hair grass • IA.
Alopecurus aequalis var. *aequalis* • Little meadow foxtail • NP.
Alopecurus carolinianus • Carolina foxtail • NA.
Alopecurus geniculatus • Water foxtail • NP.
Alopecurus pratensis ssp. *pratensis* • Foxtail • IP.
Alopecurus saccatus • Pacific meadow foxtail • NA.
Ammophila arenaria ssp. *arenaria* • European beach grass, maram • IP.
Andropogon (in part) → *Bothriochloa*
Andropogon glomeratus var. *scabriglumis* • Bushy bluestem • NP.
Andropogon virginicus var. *virginicus* • Broomsedge bluestem • IP.
Anthoxanthum aristatum ssp. *aristatum* • Vernal grass • IA.
Anthoxanthum nitens • Holy or vanilla grass • NP.
Anthoxanthum occidentale • California sweet grass • NP.
Anthoxanthum odoratum var. *odoratum* • Sweet vernal grass • IP.
Apera interrupta • Dense silky-bent • IA.
Aristida oligantha • Prairie or old field three-awn • NA.
Aristida ternipes var. *gentilis* • Hook three-awn • NP.
Arrhenatherum elatius • Tall oat grass • IP.
Arundo donax • Giant reed • IP.
Avena barbata • Slender oat • IA.
Avena fatua • Wild oat • IA.
Avena sativa • Oat, common oat • IA • Naturalized crop plant.
Beckmannia syzigachne • American slough grass • NP.
Bothriochloa ischaemum var. *songarica* • King's Ranch or yellow bluestem • IP.
Brachypodium distachyon • Purple false brome • IA.
Briza maxima • Large quaking grass, rattlesnake grass • IA.
Briza minor • Small quaking grass • IA.
Bromus arenarius • Australian chess • IA.
Bromus arizonicus • Arizona brome • NA.
Bromus arvensis ssp. *arvensis* • Field brome • IA.
Bromus berterioanus • Chilean chess • IA.



Ammophila arenaria



Anthoxanthum odoratum



Avena barbata

Bromus brizaeformis • Rattlesnake grass • IA.
Bromus carinatus • California or large-flowered brome • NP.
Bromus catharticus var. *catharticus* • Rescue grass • IAP.
Bromus catharticus var. *elatus* • Chilean brome • IA.
Bromus ciliatus • Fringed brome • NP.
Bromus commutatus • Hairy chess, meadow brome • IA.
Bromus diandrus • Ripgut or needle brome • IA.
Bromus erectus • English brome • IP.
Bromus hordeaceus ssp. *hordeaceus* • Soft brome, soft chess, soft cheat • IA.
Bromus hordeaceus ssp. *molliformis* • Soft brome • IA.
Bromus inermis ssp. *inermis* • Smooth brome • IP.
Bromus japonicus ssp. *japonicus* • Japanese brome • IA.
Bromus laevipes • Chinook or woodland brome • NP.
Bromus madritensis ssp. *madritensis* • Spanish brome, foxtail chess • IA.
Bromus madritensis ssp. *rubens* • Foxtail or red brome • IA.
Bromus maritimus • Maritime brome • NP.
Bromus orcuttianus • Orcutt's brome • NP.
Bromus racemosus • Smooth brome • IA.
Bromus secalinus var. *secalinus* • Chess, cheat grass • IA.
Bromus sterilis • Poverty or sterile brome • IA.
Bromus suksdorfii • Suksdorf's brome • NP.
Bromus tectorum • Downy brome, cheat grass • IA.
Bromus vulgaris • Narrow-leaved or Columbia brome • NP.
Calamagrostis bolander • Bolander's reed grass • NP.
Calamagrostis breweri • Brewer's reed grass • NP.
Calamagrostis canadensis var. *canadensis* • Bluejoint • NP.
Calamagrostis canadensis var. *langsdorffii* • Langsdorff's bluejoint • NP.
Calamagrostis foliosa • Leafy reed grass • EP.
Calamagrostis koelerioides • Tufted pine grass • NP.
Calamagrostis nutkaensis • Pacific reed grass • NP.
Calamagrostis ophitidis • Serpentine reed grass • NP.
Calamagrostis purpurascens var. *purpurascens* • Purple reed grass • NP.
Calamagrostis rubescens • Pine grass, pine reed grass • NP.
Calamagrostis stricta var. *inexpansa* • Northern reed grass • NP.
Chloris virgata • Feather finger grass • Naturalized (?) annual. Last collected in 1966. Extant?
Cinna latifolia • Wood reed grass, drooping wood reed • NP.
Cortaderia jubata • Jubata grass or purple pampas grass • IP. EO.
Cortaderia selloana • Uruguayan pampas grass • IP. EO.
Crypsis alopecuroides • Foxtail prickle grass • IA.
Crypsis schoenoides • Prickle grass, swamp-timothy, swamp grass • IA.
Crypsis vaginiflora • Sharp-leaved crypsis • IA.
Cynodon dactylon var. *dactylon* • Bermuda grass • IP.



Briza maxima



Bromus diandrus



Cortaderia jubata

Cynosurus cristatus • Crested dogtail • IP.
Cynosurus echinatus • Dogtail, hedgehog dogtail • IA.
Dactylis glomerata var. *glomerata* • Orchard grass • IP.
Danthonia (in part) → *Rytidosperma*
Danthonia californica • California oat grass • NP.
Danthonia decumbens • Common heath grass • IP.
Danthonia intermedia • Timber or wild mountain oat grass • NP.
Danthonia unispicata • One-spike or few-flowered wild oat grass • NP.
Deschampsia atropurpurea • Mountain hair grass • NP.
Deschampsia caespitosa ssp. *beringensis* • Tufted or coastal hair grass • NP.
Deschampsia caespitosa ssp. *caespitosa* • Tufted or mountain hair grass • NP.
Deschampsia caespitosa ssp. *holciformis* • Pacific hair grass • NP.
Deschampsia danthonioides • Annual hair grass • NA.
Deschampsia elongata • Slender hair grass • NP.
Dichanthelium → *Panicum*
Digitaria ischaemum var. *ischaemum* • Smooth crab grass • IA.
Digitaria sanguinalis • Hairy crab grass • IA.
Diplachne → *Leptochloa*
Distichlis spicata • Salt grass • NP.
Echinochloa colona • Awnless barnyard grass, jungle-rice • IA.
Echinochloa crus-galli var. *crus-galli* • Barnyard or water grass • IA.
Echinochloa crus-pavonis var. *crus-pavonis* • Gulf cockspur • IA.
Echinochloa esculenta • Japanese water grass or millet • NA. Known from a 1968 Del Norte Co. collection.
Ehrharta erecta • Upright veldt grass, panic veldt grass • IP.
X Elyhordeum macounii (*Elymus trachycaulus* x *Hordeum jubatum*) • Macoun's wild-rye • NP.
Elymus x *aristatus* (*E. elymoides* x *E. triticoides*) • Purple wheat grass • NP.
Elymus arizonicus • Arizona wild-rye • IP. Last collected in 1949. Extant?
Elymus californicus • California bottlebrush grass • NP.
Elymus caput-medusae ssp. *caput-medusae* • Medusa head • IA.
Elymus condensatus • Giant rye grass • NP. Last: 1932. Extant?
Elymus elongatus var. *elongatus* • Tall wheat grass • IP.
Elymus elymoides ssp. *californicus* • California squirrel-tail • NP.
Elymus elymoides ssp. *elymoides* • Common squirrel-tail • NP.
Elymus elymoides ssp. *hordeoides* • Western squirrel-tail • NP. Last collected in 1910. Extant?
Elymus glaucus ssp. *glaucus* • Blue wild-rye, western wild-rye • NP.
Elymus glaucus ssp. *virescens* • Virginia wild-rye • NP.
Elymus x *hansenii* (*E. glaucus* x *E. elymoides* or *E. multisetus*) • Hansen's squirrel-tail • NP.
Elymus hispidus • Wild-rye • IP.
Elymus lanceolatus ssp. *lanceolatus* • Thick-spike wild rye • NP.
Elymus mollis ssp. *mollis* • American dune grass, sea lyme grass • NP.
Elymus multisetus • Big squirrel-tail • NP.
Elymus pacificus • Pacific wild-rye • NP.
Elymus repens • Quack grass • IP.
Elymus smithii • Western wheat grass • NP. Last: 1936. Extant?
Elymus spicatus • Blue bunch wheat grass • NP.
Elymus stebbinsii • Stebbins' wheat grass • NP.
Elymus trachycaulus • Slender wheat grass • NP.

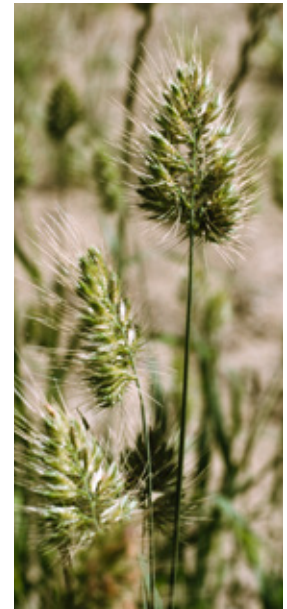
Elymus triticoides • Creeping wild-rye • NP.
Elymus x vancouverensis (*E. mollis* x *E. triticoides*)
 • Vancouver wild-rye • NP.
X Elysitania → *Elymus*
Elytrigia → *Elymus*
Eragrostis cilianensis • Stink or candy grass • IA.
Eragrostis curvula • Weeping love grass • IP.
Eragrostis hypnoides • Teal love grass, creeping love grass
 • NA.
Eragrostis mexicana ssp. *virescens* • Chilean love grass • NA.
Eragrostis minor • Little love grass • IA.
Eragrostis pectinacea var. *pectinacea* • Tufted love grass • NA.
Eragrostis pilosa var. *pilosa* • Indian love grass • IA.
Festuca altaica • Northern rough fescue • NP. Last: 1913.
 Extant?
Festuca arundinacea ssp. *arundinacea* • Alta, tall or meadow
 fescue • IP.
Festuca bromoides • Brome six-weeks grass • IA.
Festuca californica var. *californica* • California fescue • NP.
Festuca elmeri • Elmer's or Coast Range fescue • NP.
Festuca idahoensis • Idaho fescue • NP.
Festuca microstachys • Small six-weeks grass • NA.
Festuca myuros • Rat-tail six-weeks grass • IA.
Festuca occidentalis • Western fescue • NP.
Festuca octoflora • Eight-flowered six-weeks grass • NA.
Festuca perennis • English or perennial rye grass • IAP.
Festuca pratensis • Meadow fescue • IP.
Festuca rubra • Red fescue • NP.
Festuca subulata • Bearded or nodding fescue • NP.
Festuca subuliflora • Coast Range or crinkle-awn fescue • NP.
Festuca temulenta • Darnel, annual rye grass • IA.
Festuca trachyphylla • Hard fescue • IP.
Festuca viridula • Mountain bunch grass • NP.
Gastridium phleoides • Nit grass • IA.
Glyceria (in part) • *Torreyochloa*
Glyceria borealis • Northern manna grass • NP.
Glyceria declinata • Waxy manna grass • IP.
Glyceria elata • Tall manna grass, weak manna grass • NP.
Glyceria fluitans • Floating manna grass • IP.
Glyceria grandis var. *grandis* • American manna grass • NP.
Glyceria leptostachya • Davy's manna grass • NP.
Glyceria x occidentalis (*G. fluitans* x *G. leptostachya*)
 • Western manna grass • NP.
Glyceria striata • Ridged fowl manna grass • NP.
Grappophorum → *Trisetum*
Hainardia cylindrica • Thintail • IA. Last collected in 1938.
 Extant?
Hierochloë → *Anthoxanthum*
Holcus lanatus • Velvet grass • IP.



Elymus caput-medusae



Festuca arundinacea



Cynosurus echinatus



Festuca perennis



Festuca californica

Holcus mollis • Creeping velvet grass • IP.
Hordeum brachyantherum ssp. *brachyantherum* • Meadow barley • NP.
Hordeum brachyantherum ssp. *californicum* • California barley • NP.
Hordeum depressum • Alkali or low barley • NA.
Hordeum jubatum ssp. *jubatum* • Foxtail or squirrel-tail barley • NAP.
Hordeum marinum ssp. *gussoneanum* • Squirrel-tail grass • IA.
Hordeum murinum ssp. *glaucum* • Glaucous or smooth barley • IA.
Hordeum murinum ssp. *leporinum* • Hare or mouse barley • IA.
Hordeum murinum ssp. *murinum* • Wall barley • IA.
Hordeum vulgare • Barley • IA. →EC Also planted for erosion control.
Hystrix → *Elymus*
Imperata brevifolia • California satintail • NP. Known from a 1928 collection. Extant?
Kikuyuochloa clandestina • Kikuyu grass • IP.
Koeleria (in part) → *Rostraria*
Koeleria macrantha • June grass • NP.
Lagurus ovatus • Hare's tail • Naturalized (?) annual.
Lamarckia aurea • Goldentop • IA.
Leersia oryzoides • Rice cut grass • NP.
Leptochloa fusca ssp. *fascicularis* • Bearded sprangletop • NAP.
Leymus → *Elymus*
Lolium (in part) → *Festuca*
Lophochlaena (in part) → *Pleuropogon*
Melica aristata • Awned melic • NP.
Melica bulbosa • Western onion grass • NP.
Melica californica • California melic • NP.
Melica fugax • Little onion grass • NP.
Melica geyeri • Geyer's onion grass • NP.
Melica harfordii • Harford's melic • NP.
Melica imperfecta • Coast Range melic • NP.
Melica spectabilis • Purple or showy onion grass • NP.
Melica stricta var. *stricta* • Nodding melic • NP.
Melica subulata • Alaska onion grass • NP.
Melica torreyana • Torrey's melic • NP.
Monerma → *Hainardia*
Muhlenbergia andina • Foxtail or hairy muhly • NP.
Muhlenbergia asperifolia • Scratch grass, alkali muhly • NP.
Muhlenbergia filiformis • Slender or pull-up muhly • NA.
Muhlenbergia jonesii • Jones' or Modoc muhly • NP.
Muhlenbergia mexicana • Mexican muhly • NP.
Muhlenbergia minutissima • Least muhly • NA.
Muhlenbergia montana • Mountain muhly • NP.
Muhlenbergia richardsonis • Mat muhly • NP.
Nassella → *Stipa*
Orcuttia tenuis • Slender Orcutt's grass • NP.
Oryzopsis (in part) → *Stipa*
Panicum acuminatum var. *fasciculatum* • Western panic grass • NP.
Panicum acuminatum var. *lindheimeri* • Lindheimer's panic grass • NP.
Panicum capillare • Witch grass • NA.

Panicum dichotomiflorum var. *dichotomiflorum* • Fall panic grass • NA.

Panicum hillmanii • Hillman's panic grass • IA.

Panicum miliaceum • Proso or common millet • IA. Last: 1931. Extant?

Panicum oligosanthes var. *scribnerianum* • Scribner's panic grass • NP.

Parapholis incurva • Sickie grass • IA.

Parapholis strigosa • Sea hard grass • IA.

Pascopyrum → *Elymus*

Paspalum dilatatum • Dallis grass • IP.

Paspalum distichum • Knot grass • NP.

Phalaris angusta • Timothy canary grass • NA.

Phalaris aquatica • Harding grass • IP.

Phalaris arundinacea var. *arundinacea* • Reed canary grass • NP.

Phalaris californica • California canary grass • NP.

Phalaris canariensis • Canary grass • IA.

Phalaris caroliniana • Carolina canary grass • IA.

Phalaris lemmonii • Lemmon's canary grass • NA.

Phalaris minor • Mediterranean or little-seeded canary grass • IA.

Phalaris paradoxa • Hood canary grass • IA.

Phleum alpinum ssp. *alpinum* • Mountain timothy • NP.

Phleum pratense ssp. *pratense* • Timothy • IP.

Phragmites australis ssp. *americanus* • Common reed grass • NP.

Phragmites australis ssp. *australis* • Common reed grass • NP.

Phyllostachys aurea • Golden bamboo • IP. EO.

Piptatherum → *Stipa*

Piptochaetium → *Stipa*

Pleuropogon californicus var. *californicus* • Semaphore grass • NA.

Pleuropogon californicus var. *davyi* • Davy's semaphore grass • NA.

Pleuropogon hooverianus • Hoover's semaphore grass • NP.

Pleuropogon refractus • Nodding semaphore grass • NP.

Poa annua • Annual blue grass, winter grass • IA.

Poa bolanderi • Bolander's blue grass • NA.

Poa bulbosa • Bulbous blue grass • IP.

Poa compressa • Canada or Canadian blue grass • IP.

Poa confinis • Dune blue grass • NP.

Poa cusickii ssp. *cusickii* • Cusick's blue grass • NP.

Poa cusickii ssp. *epilis* • Skyline blue grass, mountain blue grass • NP.

Poa cusickii ssp. *purpurascens* • Cusick's or subalpine blue grass • NP.

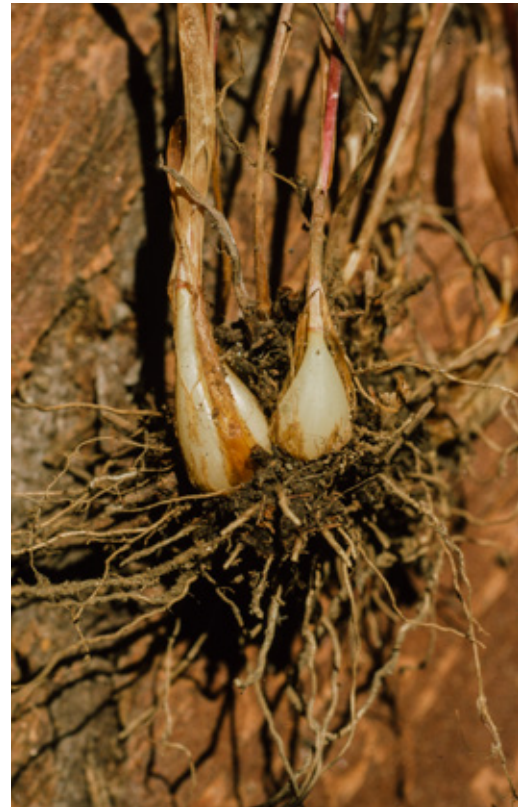
Poa douglasii • Seashore or sand dune blue grass • NP.

Poa howellii • Howell's blue grass • NA.

Poa infirma • Early meadow grass, weak blue grass • IA.



Holcus lanatus

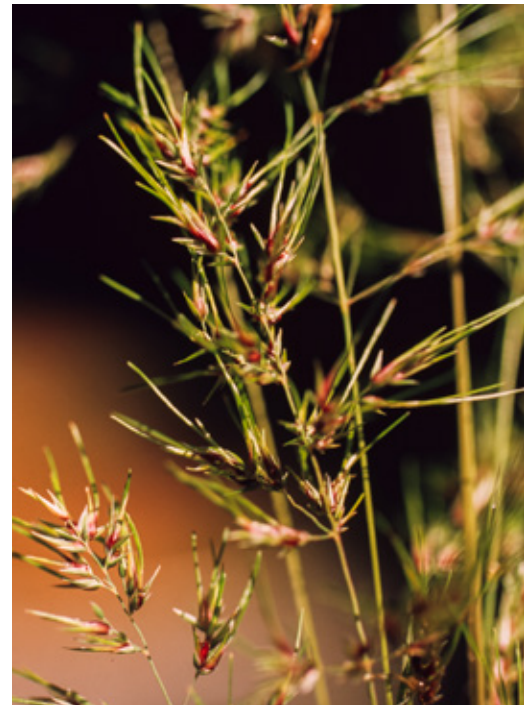


Melica bulbs



Pleuropogon californicus

Poa kelloggii • Kellogg's blue grass • NP.
Poa leptocoma ssp. *leptocoma* • Bog blue grass • NP.
Poa x limosa (*P. pratensis* x *P. secunda*) • Lassen County blue grass • NP.
Poa macrantha • Large-flowered sand dune blue grass • NP.
Poa nemoralis • Wood blue grass • IP. Last collected in 1926. Extant?
Poa palustris • Fowl or fowl meadow blue grass • IP.
Poa piperi • Piper's blue grass • NP.
Poa pratensis ssp. *pratensis* • Kentucky blue grass • IP.
Poa pringlei • Pringle's blue grass • NP.
Poa rhizomata • Timber blue grass • NP.
Poa secunda ssp. *juncifolia* • Alkali or big blue grass • NP.
Poa secunda ssp. *secunda* • Nevada, alkali, or one-sided blue grass • NP.
Poa trivialis ssp. *trivialis* • Rough blue grass • IP.
Poa unilateralis ssp. *unilateralis* • San Francisco blue grass • NP.
Poa wheeleri • Wheeler's blue grass • NP.
Polypogon (in part) → *X Agropogon*
Polypogon australis • Chilean rabbit's-foot grass • IP.
Polypogon interruptus • Ditch rabbit's-foot grass • NP.
Polypogon maritimus • Mediteranean or maritime rabbit's-foot grass • IA.
Polypogon monspeliensis • Annual rabbit's-foot grass • IA.
Polypogon viridis • Beardless rabbit's-foot grass, water bent grass • IP.
Pseudoroegneria → *Elymus*
Puccinellia (in part) → *Torreyochloa*
Puccinellia distans ssp. *distans* • European alkali grass • IA. Last collected in 1935. Extant?
Puccinellia howellii • Howell's alkali grass • EP.
Puccinellia lemmonii • Lemmon's alkali grass • NP.
Puccinellia nutkaensis • Alaska alkali grass • NP.
Puccinellia nuttalliana • Nuttall's alkali grass • NP.
Puccinellia pumila • Dwarf alkali grass • NP.
Puccinellia simplex • California or western alkali grass. NA. Known from a single 1999 collection in Colusa Co.
Rostraria cristata • Mediterranean or bristly hair grass • IA.
Rytidosperma penicillatum • Hairy-danthonia • IP.
Schedonorus → *Festuca*
Schismus barbatus • Mediterranean grass • IA.
Sclerochloa dura • Hard or fairground grass • IA.
Scribneria bolanderi • Scribner's grass • NA.
Secale cereale • Rye, cultivated rye • IA • Naturalized crop plant.
Setaria pumila ssp. *pumila* • Yellow foxtail, bristle grass • IA.
Setaria sphacelata • African bristle grass • IP.
Setaria viridis var. *viridis* • Green bristle grass, green foxtail • IA.



Poa bulbosa



Poa douglasii



Secale cereale

Sieglingia → *Danthonia*

Sitanion → *Elymus*

Sorghum bicolor • Sorghum, sorgo, milo • IA.

Sorghum halepense • Johnson grass • IP.

Spartina alterniflora • Smooth or salt-water cord grass • IP.
Last collected in 1989. Eradicated?

Spartina densiflora • Humboldt Bay or dense-flowered cord grass • IP.

Spartina foliosa • California cord grass • NP.

Sporobolus cryptandrus • Sand dropseed • IP.
Known from a single Siskiyou Co. 2009 collection.

Sporobolus indicus • Smut grass • IP. Last collected in 1969.
Extant?

Sporobolus vaginiflorus var. *vaginiflorus* • Poverty drop seed
• IA. [TJM2]

Stipa cernua • Nodding needle grass • NP.

Stipa lemmonii var. *lemmonii* • Lemmon's needle grass • NP.

Stipa lemmonii var. *pubescens* • Lemmon's needle grass • NP.

Stipa lepida • Small-flowered needle grass • NP.

Stipa lettermanii • Letterman's needle grass • NP.

Stipa miliacea ssp. *miliacea* • Smilo, smilo grass, millet
mountain-rice • IP.

Stipa nelsonii ssp. *dorei* • Subalpine needle grass • NP.

Stipa occidentalis var. *californica* • California needle grass • NP.

Stipa occidentalis var. *occidentalis* • Western needle grass
• NP.

Stipa occidentalis var. *pubescens* • Common western needle
grass • NP.

Stipa pulchra • Purple or nodding needle grass • NP. Official
state grass.

Stipa stillmanii • Stillman's needle grass • NP.

Stipa thurberiana • Thurber's needle grass • NP.

Taeniatherum → *Elymus*

Thinopyrum → *Elymus*

Torreyochloa erecta • Spiked false manna grass • NP.

Torreyochloa pallida var. *pauciflora* • Few-flowered or pale
false manna grass • NP.

Trisetum canescens • Tall trisetum • NP.

Trisetum cernuum • Nodding trisetum • NP.

Trisetum flavescens • Yellow oat grass • IP.
Last collected in 1917. Extant?

Trisetum spicatum • Spike trisetum • NP.

Trisetum wolfii • Wolf's or beardless trisetum • NP.

Triticum (in part) → *Aegilops*

Triticum aestivum ssp. *aestivum* • Wheat, bread wheat
• IA. EC.

Vahlodea → *Deschampsia*

Ventenata dubia • North Africa grass • IA.

Vulpia → *Festuca*



Puccinellia howellii



Stipa stillmanii

GROSSULARIACEAE – Gooseberry Family

Included traditionally in *Saxifragaceae*

- Ribes aureum* var. *aureum* • Golden currant • NS.
- Ribes aureum* var. *gracillimum* • Bugle currant • NS.
- Ribes binominatum* • Trailing gooseberry • NS.
- Ribes bracteosum* • Stink currant, skunk currant • NS.
- Ribes californicum* var. *californicum* • California currant, hill currant, hillside gooseberry • NS.
- Ribes cereum* var. *cereum* • Sheep or wax currant • NS.
- Ribes divaricatum* var. *pubiflorum* • Straggly currant, straggly bush • NS.
- Ribes inerme* var. *inerme* • White-stemmed or white gooseberry • NS.
- Ribes inerme* var. *klamathense* • Klamath gooseberry • NS.
- Ribes lacustre* • Swamp currant or gooseberry • NS.
- Ribes laxiflorum* • Trailing black or western black currant • NS.
- Ribes lobbii* • Gummy currant, Oregon or gummy gooseberry • NS.
- Ribes malvaceum* var. *malvaceum* • Chaparral or California black currant • NS.
- Ribes marshallii* • Marshall's currant, Hupa gooseberry • NS.
- Ribes menziesii* • Canyon gooseberry • NS.
- Ribes montigenum* • Western prickly currant, mountain gooseberry • NS.
- Ribes nevadense* • Sierra or mountain pink currant • NS.
- Ribes quercetorum* • Oak woods gooseberry • NS.
- Ribes roezlii* var. *amictum* • Mendocino gooseberry • NS.
- Ribes roezlii* var. *cruentum* • Klamath gooseberry • NS.
- Ribes roezlii* var. *roezlii* • Sierra gooseberry • NS.
- Ribes sanguineum* var. *glutinosum* • Winter or pink-flowered currant • NS.
- Ribes sanguineum* var. *sanguineum* • Red-flowering or blood currant • NS.
- Ribes velutinum* • Plateau gooseberry • NS.
- Ribes victoris* • Victor's gooseberry • NS.
- Ribes viscosissimum* • Sticky-flowering, sticky, or mountain currant • NS.

HALORAGACEAE – Milfoil Family

- Myriophyllum aquaticum* • Milfoil, parrot's-feather • IP.
- Myriophyllum hippuroides* • Western milfoil • NP.
- Myriophyllum sibiricum* • American or northern milfoil • NP.
- Myriophyllum spicatum* • Eurasian water milfoil • IP.
- Myriophyllum verticillatum* • Whorl-leaved milfoil • NP.



Ribes lobbii



Ribes malvaceum



Ribes sanguineum

HIPPOCASTANACEAE – Buckeye or Horse-chestnut Family

Included in *Sapindaceae* by some authors, as in TJM2
Aesculus californica • California buckeye or horse-chestnut
• NST.



Aesculus californica

HIPPURIDACEAE – Mare’s-Tail Family

Included in *Plantaginaceae* by some authors, as in TJM2
Hippuris vulgaris • Mare’s-tail • NP.

HYDRANGEACEAE – Hydrangea Family

Traditionally included in *Saxifragaceae*
Philadelphus lewisii • Lewis’-syringa, Lewis” mock-orange • NS.
Whipplea modesta • Yerba de selva, western whipplea, modesty • NS.



Philadelphus lewisii

HYDROCHARITACEAE – Frog-bit Family

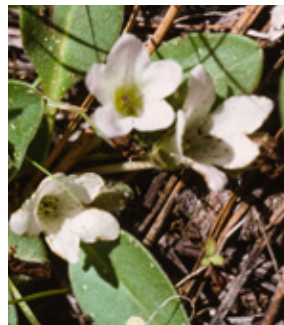
Includes *Najadaceae*
Egeria densa • Waterweed, elodea, Brazilian waterweed • IP.
Elodea (in part) → *Egeria*
Elodea canadensis • Waterweed • NP.
Elodea nuttallii • Nuttall’s waterweed • NP.
Hydrilla verticillata • Hydrilla, water-thyme • IP.
Limnobium laevigatum • American frog-bit • NP
Naias → *Najas* (orthographic correction)
Najas flexilis • Slender naiad, water nymph • NA.
Najas guadalupensis ssp. *guadalupensis* • Southern naiad, water nymph • NA.
Najas marina • Bushy pondweed, holly-leaved or spiny naiad, water nymph • NA.



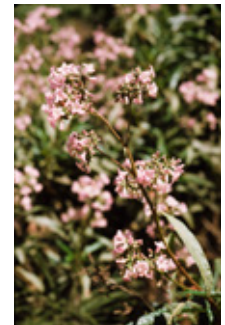
Whipplea modesta

HYDROCOTYLACEAE – Pennywort Family

Traditionally included in *Umbelliferae* or *Araliaceae*
Hydrocotyle ranunculoides • Floating marsh pennywort • NP.
Hydrocotyle verticillata • Whorled marsh pennywort • NP.
[TJM2]



Hesperochiron californicus



Eriodictyon californicum

HYDROPHYLLACEAE – Waterleaf Family

Included in *Boraginaceae* by some authors, as in TJM2
Draperia systyla • Violet draperia • NP.
Emmenanthe penduliflora var. *penduliflora* • Whispering bells
• NA.
Eriodictyon californicum • Yerba santa, California mountain balm • NS.
Eriodictyon lobbii • Lobb’s fiddle-leaf, matted yerba santa • NP.
Hesperochiron californicus • California monkey-fiddle • NP.
Hesperochiron pumilus • Dwarf hesperochiron, dwarf monkey-fiddle • NP.
Howellanthus dalesianus • Scott Mountain-phacelia • EP.
Hydrophyllum alpestre • Woollen-breeches • NP.



Howellanthus dalesianus

Hydrophyllum fendleri var. *albifrons* • Fendler's or white waterleaf • NP.

Hydrophyllum occidentale • California or western waterleaf • NP.

Hydrophyllum tenuipes • Pacific or slender waterleaf • NP.

Lemmonia → *Nama*

Nama (in part) → *Eriodictyon*

Nama californica • California fiddle-leaf • NA.

Nemophila heterophylla • Canyon nemophila • NA.

Nemophila hoplandensis • Hopland nemophila • EA.

Nemophila menziesii var. *atomaria* • White-flowered baby blue-eyes • NA.

Nemophila menziesii var. *menziesii* • Baby blue-eyes • NA.

Nemophila parviflora var. *austinae* • Woodland nemophila • NA.

Nemophila parviflora var. *parviflora* • Small-flowered nemophila • NA.

Nemophila pedunculata • Meadow nemophila • NA.

Phacelia (in part) → *Howellanthus*

Phacelia argentea • Sand dune phacelia • NP.

Phacelia bolanderi • Bolander's phacelia • NP.

Phacelia californica • Rock or California phacelia • NP.

Phacelia cicutaria var. *cicutaria* • Caterpillar phacelia • NA.

Phacelia ciliata var. *ciliata* • Great Valley phacelia • NA.

Phacelia corymbosa • Serpentine phacelia • NP.

Phacelia distans • Common phacelia, white-heliotrope • NA.

Phacelia divaricata var. *divaricata* • Divaricate phacelia • NA.

Phacelia egena • Kaweah River phacelia • NP.

Phacelia greenei • Scott Valley phacelia • EA.

Phacelia hastata ssp. *compacta* • Compact phacelia • NP.

Phacelia hastata ssp. *hastata* • Silver-leaved phacelia • NP.

Phacelia heterophylla ssp. *virgata* • Virgate phacelia • NP.

Phacelia imbricata ssp. *imbricata* • Imbricate phacelia • NP.

Phacelia insularis var. *continentis* • North Coast phacelia • NA.

Phacelia leonis • Siskiyou phacelia • NA.

Phacelia linearis • Linear-leaved phacelia • NA.

Phacelia malvaefolia var. *malvaeflora* • Stinging phacelia • NA.

Phacelia mutabilis • Changeable phacelia • NP.

Phacelia nemoralis ssp. *nemoralis* • Shade phacelia • NP.

Phacelia nemoralis ssp. *oregonensis* • Oregon phacelia • NP.

Phacelia pringlei • Pringle's phacelia • NA.

Phacelia procera • Tall phacelia • NP.

Phacelia racemosa • Racemose phacelia • NA.

Phacelia ramosissima • Branching phacelia • NP.

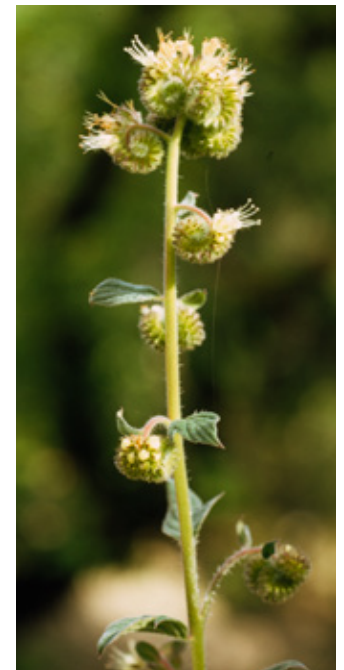
Phacelia rattanii • Rattan's phacelia • NA. Last collected in 1927. Extant?

Phacelia sericea var. *ciliosa* • Blue alpine phacelia • NP.

Phacelia suaveolens var. *suaveolens* • Sweet-scented phacelia • NA.



Phacelia greenei



Phacelia heterophylla



Hypericum anagaloides

- Phacelia tanacetifolia* • Fiddle neck, tansy phacelia • NA.
Romanzoffia californica • Suksdorf's romanzoffia, mist maiden
 • NP.
Romanzoffia sitchensis • Sitka romanzoffia • NP.
Romanzoffia tracyi • Tracy's romanzoffia • NP.

HYPERICACEAE – St. John's Wort Family

- Included in *Clusiaceae* or *Guttiferae* by some authors
Hypericum anagalloides • Tinker's penny, creeping St. John's
 wort • NAP.
Hypericum calycinum • Aaron's-beard • IS. EO. Last: 1965.
 Extant?
Hypericum concinnum • Gold-wire • NP.
Hypericum hookerianum • Hooker's St. John's wort • IS.
Hypericum perforatum ssp. *perforatum* • Klamath weed, St.
 John's wort • IAP.
Hypericum scouleri ssp. *scouleri* • Scouler's St. John's wort
 • NP.



Hypericum perforatum

IRIDACEAE – Iris Family

- Chasmanthe floribunda* • African corn flag • IP. EO.
Crocsmia x crocosmiiflora (*C. aurea* x *C. pottsii*) • Montbretia
 • IP • EO.
Iris bracteata • Siskiyou iris • NP.
Iris chrysophylla • Yellow-flowered iris • NP.
Iris douglasiana • Douglas' or mountain iris • NP.
Iris fernaldii • Fernald's iris • NP. EO.
Iris innominata • Del Norte County iris • NP.
Iris longipetala • Long-petaled or coast iris • NP.
Iris macrosiphon • Slender-tubed or ground iris • NP.
Iris missouriensis • Western blue-flag • NP.
Iris purdyi • Purdy's iris • NP.
Iris tenax ssp. *klamathensis* • Orleans iris • EP.
Iris tenuissima ssp. *purdyiformis* • Long-tubed iris • NP.
Iris tenuissima ssp. *tenuissima* • Long-tubed iris • NP.
Iris thompsonii • Thompson's iris • NP.
Ixia maculata • African corn-lily • IP. EO.
Olsynium douglasii var. *douglasii* • Douglas' blue-eyed-grass,
 purple-eyed-grass, grass widows • NP.
Romulea rosea var. *australis* • Rosy sand-crocus • IP.
Sisyrinchium (in part) → *Olsynium*
Sisyrinchium bellum • California blue-eyed-grass • NP.
Sisyrinchium californicum • Golden-eyed-grass • NP.
Sisyrinchium elmeri • Elmer's blue-eyed-grass • NP.
Sisyrinchium hitchcockii • Hitchcock's blue-eyed-grass • NP.
 Last collected in 1938. Extant?
Sisyrinchium idahoense var. *idahoense* • Idaho blue-eyed-
 grass • NP.



Iris innominata



Iris tenax



Juglans hindsii

Sparaxis tricolor • Harlequin flower, three-colored wand flower
• IP. EO.

Watsonia meriana • Watsonia, bugle-lily • IP. EO.

JUGLANDACEAE – Walnut Family

Juglans hindsii • Northern California walnut, Hinds' walnut
• NT. EO.

Juglans hindsii x *J. nigra* • Black walnut-northern California
walnut hybrid.

Juglans nigra • Black walnut • IT. Known from a single 1975
collection.

JUNCACEAE – Rush Family

Juncus acuminatus • Sharp-fruited rush • NP.

Juncus ambiguus • Seaside or frog rush • IA.

Juncus articulatus ssp. *articulatus* • Articulated rush • NP.
[TJM2]

Juncus balticus ssp. *ater* • Baltic rush • NP.

Juncus bolanderi • Bolander's rush • NP.

Juncus breweri • Brewer's rush • NP.

Juncus bufonius var. *bufonius* • Toad rush • NA.

Juncus bufonius var. *congestus* • Clustered toad rush • IA.

Juncus bufonius var. *occidentalis* • Western toad rush • NA.

Juncus bulbosus • Bulbous rush • IP.

Juncus capitatus • Leafy-bracted dwarf rush • IA.

Juncus confusus • Colorado rush • NP.

Juncus covillei • Coville's rush • NP.

Juncus drummondii • Drummond's rush • NP.

Juncus dubius • Mariposa rush • NP.

Juncus dudleyi • Dudley's rush • NP.

Juncus effusus ssp. *effusus* • Common, soft, bog, or lamp rush
• NP.

Juncus effusus ssp. *pacificus* • Pacific rush • NP.

Juncus ensifolius • Dagger-leaved rush • NP.

Juncus exiguus • Soft or bog rush • NP.

Juncus falcatus var. *falcatus* • Falcate rush • NP.

Juncus falcatus var. *sitchensis* • Falcate or dune rush • NP.

Juncus hemiendytus var. *hemiendytus* • Hermann's dwarf rush • NA.

Juncus hesperius • Wart-fruited, coast, or bog rush • NP.

Juncus howellii • Howell's rush • NP.

Juncus interior • inland rush • NP.

Juncus kelloggii • Kellogg's rush • NA.

Juncus laccatus • Slender soft rush • NP.

Juncus leiospermus var. *leiospermus* • Red Bluff dwarf rush • NA.

Juncus lescurii • Salt rush • NP.

Juncus mertensianus • Mertens' rush • NP.

Juncus mexicanus • Mexican rush • NP.

Juncus nevadensis var. *inventus* • Dune rush • NP. Last: 1965. Extant?

Juncus nevadensis var. *nevadensis* • Sierra rush • NP.



Juncus mertensianus



Luzula parviflora

Juncus occidentalis • Western rush • NP.
Juncus orthophyllus • Straight-leaved rush • NP.
Juncus oxymyris • Pointed rush • NP.
Juncus parryi • Parry's rush • NP.
Juncus patens • Spreading or common rush • NP.
Juncus phaeocephalus var. *paniculatus* • Panicked rush • NP.
Juncus phaeocephalus var. *phaeocephalus* • Brown-headed rush • NP.
Juncus planifolius • New Zealand or flat-leaved rush • IP.
Juncus regelii • Regel's rush • NP.
Juncus saximontanus • Rocky Mountain rush • NP.
Juncus supiniformis • Hair-leaved rush • NP.
Juncus tenuis • Yard rush • NP.
Juncus torreyi • Torrey's rush • NP.
Juncus triformis • Yosemite dwarf rush • NA. Last collected in 1866. Extant?
Juncus trilocularis • Foothill rush • NP.
Juncus uncialis • Inch-high rush • NA. Last collected in 1957. Extant?
Juncus xiphioides • Iris-leaved rush • NP.
Luzula campestris • Field woodrush • IP. Last collected in 1959. Extant?
Luzula cascadiensis • Cascades woodrush • NP.
Luzula comosa var. *comosa* • Pacific wood rush • NP.
Luzula comosa var. *laxa* • Pacific wood rush • NP.
Luzula divaricata • Forked wood rush • NP.
Luzula glabrata • Smooth wood rush • NP. Last collected in 1966. Extant?
Luzula macrantha • Prairie or long-anthered wood rush • NP.
Luzula multiflora ssp. *multiflora* • NP.
Luzula parviflora ssp. *fastigiata* • Small-flowered wood rush • NP.
Luzula parviflora ssp. *parviflora* • Small-flowered wood rush • NP.
Luzula piperi • Piper's wood rush • NP. Last collected in 1966. Extant?
Luzula spicata • Spiked wood rush • NP.
Luzula subcongesta • Donner wood rush • NP.
Luzula subsessilis • Short-stalked wood rush • NP.

JUNCAGINACEAE – Arrow-Grass Family

Includes *Lilaeaceae*

Lilaea → *Triglochin*

Triglochin maritima • Seaside arrow-grass • NP.
Triglochin scilloides • Flowering-quillwort • IA.
Triglochin striata • Three-ribbed arrow-grass • NP.

LABIATAE (LAMIACEAE) – Mint Family

Agastache urticifolia • Nettle-leaved horse mint • NP.
Clinopodium douglasii • Yerba buena, Oregon tea • NS.
Glechoma hederacea • Ground-ivy, creeping charlie, gill-over-the-ground • IP.
Lamiastrum galeobdolon • Yellow archangel • IP.
Lamium amplexicaule • Dead-nettle, henbit, giraffe's-head • IA.
Lamium purpureum • Red dead-nettle, red henbit • IA.



Triglochin maritima

Lavandula stoechas • Spanish lavender • IP. Known from a single 2008 collection.

Lycopus americanus • Water-horehound, gypsy-horehound • NP.

Lycopus uniflorus • Northern bugle weed • NP.

Marrubium vulgare • Horehound, hoarhound • IP.

Melissa officinalis • Lemon balm • IP.

Mentha aquatica • Water mint • IP. EO. Last collected in 1947. Extant?

Mentha arvensis • Tule, field, or wild mint • IP. EO. Last: 1937. Extant?

Mentha canadensis • American wild mint • NP.

Mentha x gracilis (*M. arvensis* x *M. spicata*) • Scotch spearmint • IP. Based on a single 1964 collection. Extant? EO.

Mentha x piperita (*M. aquatica* x *M. spicata*) • Peppermint • IP. [TJM2]

Mentha pulegium • Pennyroyal • IP.

Mentha x smithiana (*M. aquatica* x *M. arvensis*) • Red-stemmed mint • IP. EO. [TJM2]

Mentha spicata • Spearmint • IP.

Mentha suaveolens • Apple mint • IP. Last collected in 1943. Extant?

Monardella breweri ssp. *lanceolata* • Brewer's mountain mint • NA.

Monardella douglasii ssp. *douglasii* • Douglas' mountain mint or balm • NA.

Monardella odoratissima ssp. *glauca* • Mountain mint or balm • NP.

Monardella odoratissima ssp. *odoratissima* • Alpine mountain balm • NP.

Monardella odoratissima ssp. *pallida* • Mountain mint • NP.

Monardella odoratissima ssp. *pinetorum* • Mountain mint • NP. Last collected in 1948. Extant?

Monardella purpurea • Purple mountain mint • NP.

Monardella sheltonii • Shelton's mountain mint, mountain balm • NP.

Monardella siskiyouensis • Siskiyou mountain min • EP.

Monardella villosa ssp. *franciscana* • Coyote mint • NP.

Monardella villosa ssp. *globosa* • Robust coyote mint • NP.

Monardella villosa ssp. *subserrata* • Coyote mint • NP.

Monardella villosa ssp. *villosa* • Coyote mint • NP.

Monardella viridis • Green coyote mint • NP. Last: 1897. Extant?

Nepeta cataria • Catnip • IAP.

Origanum vulgare ssp. *hirtum* • Greek oregano • IAP. EFP. [TJM2]

Pogogyne douglasii ssp. *douglasii* • Douglas' pogogyne • NA.

Pogogyne douglasii ssp. *parviflora* • Douglas' pogogyne • NA.

Pogogyne serpylloides • Thyme-like pogogyne or mesa mint • NA.

Pogogyne zizyphoroides • Sacramento pogogyne • NA.

Prunella vulgaris var. *lanceolata* • Self-heal • NP.

Prunella vulgaris var. *vulgaris* • Self-heal, heal-all • IP.

Pycnanthemum californicum • Sierra mint • NP.

Salvia columbariae • Chia • NA.

Salvia dorrii var. *incana* • Fleshy sage • NS.

Salvia sonomensis • Creeping sage • NSS.

Salvia virgata • Meadow wand sage • IP.

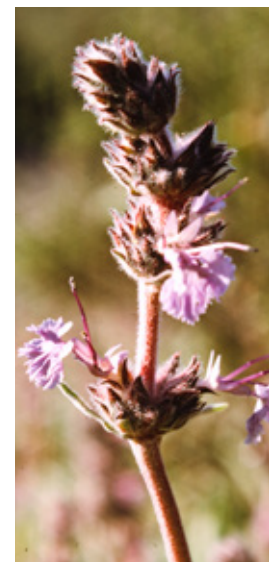
Satureja (in part) → *Clinopodium*



Monardella odoratissima



Prunella vulgaris



Salvia sonomensis

Scutellaria angustifolia • Narrow-leaved skullcap • NP. Last collected in 1948. Extant?

Scutellaria antirrhinoides • Snapdragon skullcap • NP.

Scutellaria californica • California skullcap • NP.

Scutellaria galericulata • Marsh skullcap • NP. Last: 1894. Extant?

Scutellaria nana • Dwarf skullcap • NP.

Scutellaria siphocampyloides • Gray-leaved skullcap • NP.

Scutellaria tuberosa • Danny's skullcap • NP.

Stachys ajugoides • Bugle hedge-nettle • NP.

Stachys albens • White hedge-nettle • NP.

Stachys arvensis • Hedge-nettle, field woundwort • IA.

Stachys bergii • Berg's hedge-nettle • EP.

Stachys bullata • Hedge-nettle • NP.

Stachys chamissonis var. *chamissonis* • Coast hedge-nettle, swamp stachys • NP.

Stachys mexicana • Emerson's hedge-nettle • NP.

Stachys pilosa • Prairie woundwort • NP.

Stachys pycnantha • Short-spiked hedge-nettle • NP.

Stachys rigida ssp. *quercetorum* • Rough hedge-nettle • NP.

Stachys rigida ssp. *rigida* • Bugle hedge-nettle • NP.

Stachys stricta • Sonoma hedge-nettle • NP.

Teucrium fruticans • Shrubby germander • IS. EO.

Trichostema lanatum • Woolly bluecurls • NS.

Trichostema lanceolatum • Turpentine weed, common bluecurls • NA.

Trichostema laxum • Vinegar weed, camphor weed • NA.

Trichostema oblongum • Mountain bluecurls • NA.

Trichostema simulatum • Siskiyou bluecurls • NA.

LAURACEAE – Laurel Family

Laurus nobilis • Sweet bay, Grecian laurel • IT. EO.

Umbellularia californica var. *californica* • California bay, pepper or myrtle wood • NST.

LEGUMINOSAE (FABACEAE) – Bean, Legume, or Pea Family

Includes *Caesalpiniaceae*, *Mimosaceae*, and *Papilionaceae*

Acacia dealbata • Silver green wattle • IT. EO.

Acacia melanoxylon • Black acacia, blackwood wattle • IT. EO.

Acmispon → *Lotus*

Amorpha californica var. *californica* • False indigo • NS.

Astragalus accidens var. *hendersonii* • Rouge River rattleweed • NP.

Astragalus agnicidus • Humboldt milkvetch • EP.

Astragalus asymmetricus • San Joaquin milkvetch • NP.

Astragalus breweri • Brewer's milkvetch, Sonoma loco • NA.

Astragalus californicus • Klamath Basin rattleweed • NP.

Astragalus clevelandii • Cleveland's milkvetch, canyon loco • NP.



Stachys chamissonis



Umbellularia californica



Astragalus whitneyi

Michael Kauffmann

Astragalus curvicaarpus var. *curvicaarpus* • Curve-podded milkvetch • NP.

Astragalus gambelianus • Gambell's dwarf locoweed, little bill loco • NA.

Astragalus inversus • Susanville milkvetch • NP. Last: 1935. Extant?

Astragalus lentiginosus var. *lentiginosus* • Freckled milkvetch • NS.

Astragalus nuttallii var. *virgatus* • Nuttall's locoweed • NP.

Astragalus obscurus • Arcane milkvetch • NP.

Astragalus pauperculus • Depauperate milkvetch • NA.

Astragalus purshii var. *purshii* • Woolly-pod milkvetch, tufted loco, Pursh's woolly-pod • NP.

Astragalus purshii var. *tinctus* • Pursh's milk-vetch • NP.

Astragalus pycnostachyus var. *pycnostachyus* • Marsh locoweed • NP.

Astragalus rattanii var. *jepsonianus* • Jepson's milkvetch • NA.

Astragalus rattanii var. *rattanii* • Rattan's milkvetch, Humboldt loco • EA.

Astragalus tener var. *ferrisiae* • Ferris' milkvetch • NA.

Astragalus umbraticus • Bald Mountain milkvetch, wood loco • NP.

Astragalus whitneyi var. *lenophyllus* • woolly-leaved milkvetch • NP. Last collected in 1934. Extant?

Astragalus whitneyi var. *siskiyouensis* • Siskiyou locoweed • NP.

Cercis occidentalis • Western redbud, Judas tree • NST.

Cytisus (in part) → *Genista*

Cytisus multiflorus • Spanish or Portuguese broom • IS. EO. Last collected in 1964. Extant?

Cytisus scoparius var. *scoparius* • Scotch broom • IS.

Genista linifolia • Mediterranean broom • IS.

Genista monspesulana • French broom • IS.

Glycyrrhiza lepidota • Wild or American licorice • NP.

Hoita macrostachya • Large leather root • NP.

Hosackia → *Lotus*

Lathyrus angulatus • Angled pea • IV.

Lathyrus biflorus • Two-flowered pea • Endemic vine.

Lathyrus bijugatus • Pinewoods vetch, dry park pea • NV. Known from a single disjunct collection. Extant?

Lathyrus brownii • Brush pea • NV.

Lathyrus cicera • Red pea • IV.

Lathyrus delnorticus • Del Norte pea • NV.

Lathyrus glandulosus • Sticky pea • Endemic vine.

Lathyrus hirsutus • Caley pea • IV.

Lathyrus japonicus • Beach pea • NV.

Lathyrus jepsonii ssp. *californicus* • Jepson's pea • NV.

Lathyrus lanszwertii var. *aridus* • Nevada or mountain pea • NV.

Lathyrus lanszwertii var. *brownii* • Brown's pea • NV. Last collected in 1918. Extant?

Lathyrus lanszwertii var. *lanszwertii* • Lanszwert's pea • NV.



Cercis occidentalis



Cytisus scoparius

Lathyrus lanszwertii var. *tracyi* • Tracy's pea • Endemic vine.
Lathyrus latifolius • Everlasting pea, perennial sweet pea • IV. EO.
Lathyrus littoralis • Silky or beach pea • IV.
Lathyrus nevadensis ssp. *nevadensis* • Nevada or Sierra pea • NV.
Lathyrus odoratus • Sweet pea • IV. EO.
Lathyrus palustris • Marsh pea • NV.
Lathyrus polyphyllus • Oregon pea • NV.
Lathyrus sphaericus • Grass pea • IV.
Lathyrus sulphureus • Brewer's or snub pea • NV.
Lathyrus tingitinus • Tangier pea • IV.
Lathyrus torreyi • Redwood or Torrey's pea • NV.
Lathyrus vestitus ssp. *bolanderi* • Pacific pea, Pacific vetchling • NV.
Lathyrus vestitus ssp. *ochropetalus* • Pacific pea, Pacific vetchling • NV.
Lathyrus vestitus ssp. *vestitus* • Pacific pea, Pacific vetchling • NV.
Lotus aboriginus • Rosy bird's-foot trefoil • NP.
Lotus angustissimus • Trefoil • IA.
Lotus corniculatus • Bird's-foot trefoil • IP.
Lotus crassifolia var. *crassifolia* • Broad-leaved trefoil, buck lotus • NP.
Lotus denticulatus • Toothed trefoil, north or river-bar lotus • NA.
Lotus formosissimus • Witch's teeth, seaside bird's-foot terfoil • NP.
Lotus grandiflorus var. *grandiflorus* • Large-leaved trefoil, chaparral lotus • NP.
Lotus grandiflorus var. *macranthus* • Chaparral bird's-foot trefoil • NP.
Lotus heermannii var. *orbicularis* • Heermann's bird's-foot trefoil • NP.
Lotus humistratus • Colchita, foothill bird's-foot trefoil • NA.
Lotus junceus var. *biolettii* • Biolett's rush-broom • NP.
Lotus micranthus • Short-flowered bird's-foot trefoil • NA.
Lotus nevadensis var. *davidsonii* • Davidson's bird's-foot trefoil • NP.
Lotus nevadensis var. *nevadensis* • Sierra Nevada bird's-foot trefoil • NP.
Lotus oblongifolius var. *oblongifolius* • Narrow-leaved trefoil • NP.
Lotus pinnatus • Pinnate-leaved trefoil, meadow lotus • NP.
Lotus rubriflorus • Red-flowered trefoil • NA.
Lotus scoparius var. *scoparius* • Trefoil, deer weed • NP.
Lotus stipularis var. *ottleyi* • Balsam lotus, balsam bird's-foot trefoil • NP.
Lotus stipularis var. *stipularis* • Stipulate trefoil, balsam lotus • NP.



Lathyrus latifolius



Lotus corniculatus



Lupinus arboreus



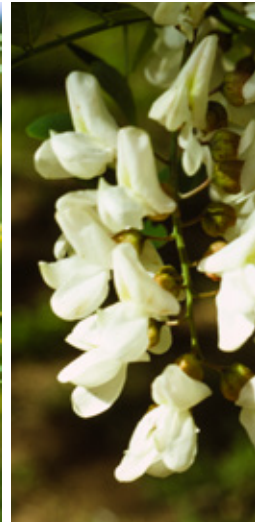
Lupinus polyphyllus

Lotus tenuis • Narrow-leaved bird's-foot trefoil • IP. Last collected in 1964. Extant?
Lotus unifoliolatus var. *unifoliolatus* • American bird's-foot trefoil • NA.
Lotus wrangelianus • Chilean bird's-foot trefoil • NA.
Lotus yollabolliensis • Yolla Bolly Mountains trefoil • EP.
Lupinus adsurgens var. *adsurgens* • Drew's silky lupine • NP.
Lupinus adsurgens var. *lilacinus* • Drew's silky lupine • NP.
Lupinus adsurgens var. *undulatus* • Drew's silky lupine • NP.
Lupinus affinis • Fleshy lupine • NA.
Lupinus albicaulis var. *albicaulis* • Sickle-keeled lupine • NP.
Lupinus albicaulis var. *shastensis* • Shasta lupine • NA.
Lupinus albifrons var. *albifrons* • Silver or white-leaved bush lupine • NS.
Lupinus albifrons var. *collinus* • Silver or white-leaved bush lupine • NS.
Lupinus albifrons var. *eminens* • Silver or white-leaved bush lupine • NS.
Lupinus albifrons var. *flumineus* • Silver or white-leaved bush lupine • NS.
Lupinus andersonii • Anderson's lupine • NP.
Lupinus antoninus • Anthony Peak lupine • EP.
Lupinus arboreus var. *arboreus* • Tree or yellow-flowered bush lupine • IS.
Lupinus argenteus var. *argenteus* • Silvery lupine • NP.
Lupinus bicolor • Lindley's, annual, dove, or miniature lupine • NA.
Lupinus breweri var. *breweri* • Brewer's or mat lupine • NP.
Lupinus constancei • Lassic's lupine • EP.
Lupinus croceus var. *croceus* • Mount Eddy lupine • EP.
Lupinus croceus var. *pilosellus* • Mount Eddy lupine • EP.
Lupinus densiflorus var. *aureus* • White-whorled lupine • NP.
Lupinus densiflorus var. *densiflorus* • White-whorled lupine • NP.
Lupinus densiflorus var. *palustris* • White-whorled lupine • NP.
Lupinus elmeri • Elmer's lupine • EP.
Lupinus formosus var. *formosus* • Summer, late or lunara lupine • NP.
Lupinus formosus var. *robustus* • Summer lupine • NP.
Lupinus grayi • Gray's lupine • NP. Last collected in 1950. Extant?
Lupinus klamathensis • Klamath lupine • EP.
Lupinus lapidicola • Mount Eddy or Heller's lupine • EP.
Lupinus latifolius ssp. *latifolius* • Broad-leaved lupine • NP.
Lupinus latifolius ssp. *viridifolius* • Broad-leaved lupine • NP.
Lupinus lepidus var. *confertus* • Dwarf lupine • NP. Last: 1955. Extant?
Lupinus leucophyllus • Western, woolly-leaved, or poison lupine • NP.
Lupinus littoralis • Seashore lupine, Chinook-licorice • NP.
Lupinus luteolus • Keller's or butter lupine • NA.
Lupinus milo-bakeri • Milo Baker's lupine • EA.
Lupinus nanus • Douglas' annual lupine • NA.
Lupinus obtusilobus • Blunt-lobed lupine • NP.
Lupinus onustus • Plumas or ground lupine • NP.
Lupinus pachylobus • Big-podded lupine • NA.
Lupinus polycarpus • Small-flowered lupine • NA.
Lupinus polyphyllus var. *burkei* • Big-leaved or blue pod lupine • NP.
Lupinus polyphyllus var. *pallidipes* • Big-leaved or blue pod lupine • NP.
Lupinus polyphyllus var. *polyphyllus* • Big-leaved or blue pod lupine • NP.
Lupinus rivularis • Riverbank, canyon, or nine finger lupine • NSS.

Lupinus sellulus var. *artulus* • Donner Lake lupine • NP.
Lupinus sellulus var. *lobbii* • Donner Lake lupine • NP.
Lupinus sellulus var. *medius* • Donner Lake lupine • NP.
Lupinus sellulus var. *sellulus* • Donner Lake lupine • NP.
Lupinus sellulus var. *ursinus* • Donner Lake lupine • NP.
Lupinus sericatus • Cobb Mountain or satin lupine • NP.
Lupinus subvexus var. *transmontana* • Valley lupine • NA. Last collected in 1903. Extant?
Lupinus subvexus var. *subvexus* • Valley lupine • NA.
Lupinus succulentus • Succulent annual or arroyo lupine • NAP.
Lupinus tracyi • Tracy's lupine • NP.
Lupinus vallicola ssp. *apricus* • Open lupine • NA.
Lupinus vallicola ssp. *vallicola* • Open lupine • NA.
Lupinus variicolor • Varied, particolored, or varicolored lupine • NP.
Medicago arabica • Spotted medick, spotted bur-clover • IA.
Medicago lupulina • Black medick • IA.
Medicago minima • Bur medick • IA.
Medicago polymorpha • Bur clover • IA.
Medicago praecox • Mediterranean medick • IA.
Medicago sativa • Alfalfa, lucerne • IP. EC.
Melilotus indicus • Sour clover • IP.
Melilotus officinalis • Yellow sweet clover • IP.
Pediomelum californicum • California Indian breadroot • NP.
Pickeringia montana ssp. *montana* • Chaparral pea, stingaree bush • NS.
Pisum sativum • Common, garden, or English pea • N(?)A. EFP. Last collected in 1899.
Psoralea (in part) → *Hoita*, *Pediomelum*, and *Rupertia*
Robinia pseudoacacia • Black locust • IT. EO.
Rupertia physodes • California-tea, forest scurf pea • NP.
Sesbania punicea • Rattlebox • IS.
Spartium junceum • Spanish broom • IS.
Teline → *Genista*
Thermopsis californica var. *argentea* • silvery false lupine • NP.
Thermopsis californica var. *californica* • California golden-banner or false lupine • NP.
Thermopsis gracilis • Slender golden-banner, slender false lupine • NP.
Thermopsis robusta • Showy golden-banner, robust or showy false lupine • NP.
Trifolium albopurpureum • Common Indian or rancheria clover • NA.
Trifolium arvense • Rabbit-foot clover • IA.
Trifolium barbigerum var. *andrewsii* • Gray's clover • NA.
Trifolium barbigerum var. *barbigerum* • Bearded clover • NA.
Trifolium bifidum var. *bifidum* • Pinole or notch-leaved clover • NA.
Trifolium bifidum var. *dicipiens* • Pinole or notch-leaved clover • NA.



Melilotus officinalis



Robinia pseudoacacia



Trifolium incarnatum

Trifolium breweri • Brewer's or forest clover • NP.
Trifolium buckwestiorum • Santa Cruz clover • NA.
Trifolium campestre • Field or hop clover • IA.
Trifolium cernuum • Nodding clover • IA.
Trifolium ciliolatum • Foothill clover • NA.
Trifolium cyathiferum • Bowl or mountain clover • NA.
Trifolium depauperatum var. *amplectans* • balloon sack clover • NA.
Trifolium depauperatum var. *depauperatum* • Dwarf balloon sack or bladder clover • NA.
Trifolium depauperatum var. *stenophyllum* • Dwarf balloon sack or bladder clover • NA.
Trifolium depauperatum var. *truncatum* • Truncate sack clover • NA.
Trifolium dichotomum • Branched Indian clover • NA.
Trifolium dubium • Suckling clover, shamrock • IA.
Trifolium eriocephalum var. *eriocephalum* • Woolly-headed clover • NP.
Trifolium fragiferum • Strawberry clover • IP.
Trifolium fucatum • Sour, bull, or puff clover • NA.
Trifolium glomeratum • Clustered clover • IA.
Trifolium gracilentum var. *gracilentum* • Pin-point clover • NA.
Trifolium hirtum • Rose clover • IA.
Trifolium howellii • Howell's or canyon clover • NP.
Trifolium hybridum • Alsike or Alsatian clover • IAP.
Trifolium hydrophilum • Water sack clover • NA. Last: 1955. Extant?
Trifolium incarnatum • Crimson, French, Italian, or CalTrans clover • IA.
Trifolium longipes ssp. *elmeri* • Elmer's clover • NP.
Trifolium longipes ssp. *hansenii* • Hansen's clover • NP.
Trifolium longipes ssp. *oreganum* • Oregon clover • NP.
Trifolium longipes ssp. *shastense* • Shasta clover • NP.
Trifolium macraei • Chile clover • NA.
Trifolium macrocephalum • Big-headed clover • NP.
Trifolium microcephalum • Small-headed or maiden clover • NA.
Trifolium microdon • Valparaiso or square-headed clover • NA.
Trifolium obtusiflorum • Creek or clammy clover • NA.
Trifolium oliganthum • Few-flowered or lanky clover • NA.
Trifolium olivaceum • Olive clover • NA.
Trifolium pratense • Red clover • IP.
Trifolium productum • Shasta clover • NP.
Trifolium repens • White clover • IP.
Trifolium resupinatum • Reversed clover • IA.
Trifolium siskiyouense • Siskiyou clover • NP. Known from a single 1892 Siskiyou Co., collection.
 Extant?
Trifolium striatum • Knotted clover • IA.
Trifolium subterraneum • Subterranean clover • IA.
Trifolium tomentosum • Woolly clover • IA. [TJM2]
Trifolium trichocalyx • Monterey clover • NA.
Trifolium variegatum var. *geminiflorum* • White-tipped clover • IA.
Trifolium variegatum var. *major* • White-tipped clover • IA.
Trifolium variegatum var. *variegatum* • White-tipped clover • IA.
Trifolium vesiculosum • Arrow-leaved clover • IA.
Trifolium willdenowii • Willdenow's or spring bank clover • NA.

Trifolium wormskioldii • Wormskiold's, cow, or coast clover • NP.
Trigonella corniculata • Fenugreek • IA. Escaped food crop. Last collected
Ulex europaeus • Gorse, furze, prickly-broom • IS.
Vicia americana ssp. *americana* • American vetch • NP.
Vicia benghalensis • Purple vetch • IA.
Vicia cracca ssp. *cracca* • Cow, blue, or bird vetch, cat peas • IP. EC.
Vicia faba • Broad, horse or fava bean • IA. EC. Last: 1940. Extant?
Vicia gigantea • Giant vetch • NP.
Vicia hassei • Hasse's vetch • NA.
Vicia hirsuta • Hairy vetch, tare, tine tare • IA.
Vicia ludoviciana ssp. *ludoviciana* • Louisiana vetch • NA.
Vicia lutea • Smooth yellow vetch • IA.
Vicia sativa ssp. *nigra* • Narrow-leaved vetch • IA.
Vicia sativa ssp. *sativa* • Common or spring vetch • IA.
Vicia tetrasperma • Slender tare, lentil or sparrow vetch • IA.
Vicia villosa ssp. *varia* • Winter vetch • IA.
Vicia villosa ssp. *villosa* • Hairy, winter, or woolly vetch • IA.



Ulex europaeus

LEMNACEAE – Duckweed Family

Included in *Araceae* by some authors, as in TJM2

Landoltia → *Spirodela*

Lemna gibba • Swollen duckweed • NP.
Lemna minor • Common duckweed • NP.
Lemna minuta • Least duckweed • NP.
Lemna trisulca • Star duckweed • NP.
Lemna turionifera • Turion duckweed • NP.
Lemna valdiviana • Valdivia duckweed • NP.
Spirodela polyrrhiza • Common duckmeat • NP.
Spirodela punctata • Dotted duckmeat • NP.
Wolffia borealis • Mud-midget, bogmat • NP.
Wolffiella lingulata • Long-tongued bogmat • NP. [TJM2]
Wolffiella oblonga • Saber bogmat, mud midget • NP.
 [TJM2]

LENTIBULARIACEAE – Bladderwort Family

Pinguicula macroceras • Horned or California butterwort
 • NP.
Utricularia gibba • Swollen-spurred bladderwort • IAP.
Utricularia minor • Lesser bladderwort • NP.
Utricularia vulgaris ssp. *macrorhiza* • Common, horned, or
 greater bladderwort • NP.
Utricularia subulata • Zig-zag bladderwort • NAP.



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Pinguicula macroceras

LILIACEAE – Lily Family

Most students of plant families agree that the traditional circumscription of *Liliaceae* is much too broad. Recent anatomical, chemical, genetic, and molecular studies argue for the recognition of a number of segregate families, many of them once regarded as subfamilies. Their number and delimitation vary widely from one author to the next. Compare, for instance, the treatment of *Liliaceae* in the two editions of The Jepson Manual with that in the new Flora of Oregon. Depending on the treatment used, the 34 genera of traditional *Liliaceae* found in northwestern California could be placed in 29 families. Because the recognition of segregate families remains unsettled, we have chosen to retain the broader concept of the family, but to put in brackets beside each generic name an alternative based in large part on the recommendations of the the Angiosperm Phylogeny Group.

Allium [Amaryllidaceae]

Allium acuminatum • Hooker's onion • NP.

Allium amplexans • Narrow-leaved onion • NP.

Allium bisceptrum var. *bisceptrum* • Twin-crested onion • NP.
Last collected in 1939. Extant?

Allium bolanderi var. *bolanderi* • Bolander's onion • NP.

Allium bolanderi var. *mirabile* • Bolander's onion • NP.

Allium campanulatum • Sierra or dusky onion • NP.

Allium cratericola • Dwarf or Cascade onion • NP.

Allium dichlamydeum • Coastal onion • NP.

Allium falcifolium • Scythe-leaved onion • NP.

Allium fimbriatum var. *fimbriatum* • Fringed onion • NP.

Allium fimbriatum var. *purdyi* • Purdy's onion • NP.

Allium hoffmanii • Beegum onion • EP.

Allium membranaceum • Papery onion • NP.

Allium neapolitanum • White garlic • IP.

Allium obtusum var. *obtusum* • Red Sierra onion • NP.

Allium paniculatum var. *paniculatum* • Mediterranean onion • IP.
[TJM2]

Allium parvum • Dwarf onion • NP.

Allium peninsulare var. *franciscanum* • San Francisco onion • NP.

Allium peninsulare var. *peninsulare* • Mexicale onion • NP.

Allium porrum • Leek • IP. EFP. Known from a single 1981 collection.
Naturalized?

Allium serra • Jeweled onion • NP.

Allium siskiyouense • Siskiyou onion • NP.

Allium tolmiei var. *tolmiei* • Flat-leaved onion • NP.

Allium triquetrum • Three-cornered leek • IP.

Allium unifolium • One-leaved onion • NP.

Allium validum • Swamp or Pacific onion • NP.

Allium vineale ssp. *vineale* • Wild-garlic • IP.

Anticlea → *Stenanthium* and *Zigadenus*

Asparagus [Asparagaceae]

Asparagus officinalis ssp. *officinalis* • Asparagus • IP. ECP. EO.

Brodiaea [Asparagaceae]

Brodiaea (in part) → *Dichelostemma* and *Triteleia*



Allium falcifolium



Allium hoffmanii



Allium triquetrum



Brodiaea rosea

Brodiaea californica • California brodiaea • NP.
Brodiaea coronaria • Harvest brodiaea • NP.
Brodiaea elegans ssp. *elegans* • Elegant or harvest brodiaea • NP.
Brodiaea leptandra • Narrow-flowered brodiaea • NP.
Brodiaea matsonii • Sulphur Creek brodiaea • EP.
Brodiaea minor • Vernal pool brodiaea • NP.
Brodiaea rosea • Indian Valley brodiaea • NP.
Brodiaea stellaris • Star-flowered brodiaea • NP.
Brodiaea terrestris ssp. *terrestris* • Dwarf or ground brodiaea • NP.
Calochortus [Liliaceae]
Calochortus albus • Satin bells, fairy lantern, white globe lily • NP.
Calochortus amabilis • Golden fairy lantern, Diogenes' lantern • NP.
Calochortus coeruleus • Cat's-ear, blue star-tulip, beaver's-tail-grass • NP.
Calochortus elegans var. *nanus* • Elegant cat's-ear, star-tulip • NP.
Calochortus greenei • Greene's mariposa lily • NP.
Calochortus luteus • Yellow mariposa • NP.
Calochortus monanthus • Single-flowered mariposa lily • EP. Known only from an 1876 Siskiyou Co. collection. Extant?
Calochortus nudus • Naked star-tulip • NP.
Calochortus persistens • Siskiyou mariposa lily • NP.
Calochortus splendens • Pink mariposa • NP. [TJM2]
Calochortus superbis • Yellow mariposa • NP.
Calochortus syntrophus • Callahan's mariposa lily • NP.
Calochortus tolmiei • Tolmie's star-tulip, pussy-ears • NP.
Calochortus umbellatus • Oakland star-tulip • NP.
Calochortus uniflorus • Large-flowered star-tulip • NP.
Calochortus vestae • Coast range mariposa • NP.
Camassia [Asparagaceae]
Camassia leichtlinii ssp. *suksdorfii* • Suksdorf's camassia • NP.
Camassia quamash ssp. *breviflora* • Small camassia • NP.
Camassia quamash ssp. *linearis* • Small camassia • NP.
Camassia quamash ssp. *walpolei* • Small camassia • NP. Last collected in 1941. Extant?
Chlorogalum [Asparagaceae]
Chlorogalum angustifolium • Narrow-leaved soap plant • NP.
Chlorogalum pomeridianum ssp. *austro-oreganum* • Southern Oregon amole • NP.
Chlorogalum pomeridianum var. *minus* • Wavy-leaved soap plant • NP.
Chlorogalum pomeridianum var. *pomeridianum* • Wavy-leaved soap plant, amole • NP.
Clintonia [Liliaceae]
Clintonia andrewsiana • Red clintonia • NP.
Clintonia uniflora • Bride's bonnet, queen's cup • NP.
Cordyline [Asparagaceae]
Cordyline australis • Cabbage tree, cabbage-palm • IT. EO.
Dichelostemma [Asparagaceae]
Dichelostemma capitatum ssp. *capitatum* • Blue dicks • NP.
Dichelostemma congestum • Ookow • NP.
Dichelostemma ida-maia • Firecracker flower • NP.
Dichelostemma multiflorum • Wild-hyacinth • NP.
Dichelostemma x *venustum* (*D. congestum* x *D. ida-maia*) • Rose firecracker flower • EP.



Calochortus tolmiei



Erythronium citrinum



Lilium bolanderi

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Clintonia andrewsiana



Fritillaria glauca

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Lilium pardalinum



Dichelostemma ida-maia

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Fritillaria purdyi



Lilium occidentale



Lilium rubescens

Dichelostemma volubile • Twining snake lily, twining brodiaea • NV.

Disporum → *Prosartes*

Erythronium [Liliaceae]

Erythronium californicum • California fawn lily • NP.

Erythronium citrinum var. *citrinum* • Lemon-colored or cream fawn lily • NP.

Erythronium citrinum var. *roderickii* • Roderick's fawn lily • EP.

Erythronium grandiflorum ssp. *grandiflorum* • Glacier lily • NP.

Erythronium helenae • Saint Helena fawn lily • NP.

Erythronium hendersonii • Henderson's fawn lily • NP.

Erythronium klamathense • Klamath fawn lily. NP.

Erythronium multiscapideum • Sierra fawn lily • NP. Last collected in 1917. Extant?

Erythronium oregonum • Oregon or giant white fawn lily • NP.

Erythronium purpurascens • Purple fawn lily • NP.

Erythronium revolutum • Coast fawn lily • NP.

Erythronium shastense • Shasta Lake fawn lily • EP.

Fritillaria [Liliaceae]

Fritillaria affinis • Mission bells, checker lily • NP.

Fritillaria agrestis var. *agrestis* • Stink bells • NP.

Fritillaria atropurpurea • Purple fritillary • NP.

Fritillaria biflora var. *biflora* • Black fritillary, mission bells, chocolate lily • NP.

Fritillaria eastwoodiae • Eastwood's or Butte County fritillary • NP.

Fritillaria gentneri • Gilkey's fritillary or mission bells • NP.

Fritillaria glauca • Siskiyou fritillary • NP.

Fritillaria pluriflora • Adobe lily • NP.

Fritillaria pudica • Yellow fritillary, yellow bell • NP.

Fritillaria purdyi • Purdy's fritillary • NP.

Fritillaria recurva • Scarlet fritillary • NP.

Hastingsia • [Asparagaceae]

Hastingsia alba • White rush-lily • NP.

Kniphofia [Asphodelaceae]

Kniphofia uvaria • Redhot-poker, torch lily, poker plant • IP. EO.

Leucocrinum [Asparagaceae]

Leucocrinum montanum • star or sand lily • NP. [TJM2]

Leucojum [Amaryllidaceae]

Leucojum aestivum ssp. *aestivum* • Summer snowflake • IP.
EO.

Lilium [Liliaceae]

Lilium bolanderi • Bolander's lily • NP.

Lilium columbianum • Columbia, Oregon, or tiger lily • NP.

Lilium humboldtii ssp. *humboldtii* • Humboldt lily • NP.

Lilium kelleyanum • Kelley's lily • NP.

Lilium kelloggii • Kellogg's lily • NP.

Lilium maritimum • Coast lily • NP.

Lilium occidentale • Western or Eureka lily • NP.

Lilium pardalinum ssp. *pardalinum* • Leopard lily, tiger lily • NP.

Lilium pardalinum ssp. *shastense* • Shasta lily • NP.

Lilium pardalinum ssp. *vollmeri* • Vollmer's lily • NP.



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Lilium kelloggii

Lilium pardalinum ssp. *wigginsii* • Wiggins' lily • NP.
Lilium rubescens • Redwood, lilac, chaparral, or chamise lily
 • NP.
Lilium washingtonianum ssp. *purpurascens* • Purple-flowered Shasta or Cascade lily • NP.
Lilium washingtonianum ssp. *washingtonianum*
 • Washington lily • NP.
Maianthemum [Asparagaceae]
Maianthemum dilatatum • False lily-of-the-valley, bead lily
 • NP.
Maianthemum racemosum • Feathery false lily-of-the-valley
 • NP.
Maianthemum stellatum • False Solomon's-seal, star flower
 • NP.
Muilla [Asparagaceae]
Muilla maritima • Common or sea muilla • NP. [TJM2]
Muscari [Asparagaceae]
Muscari armeniacum • Grape-hyacinth • IP. Known from on a single 1976 collection.
Muscari botryoides • Common grape-hyacinth • IP. EO.
Narcissus [Amaryllidaceae]
Narcissus pseudonarcissus • Daffodil, narcissus • IP. EO.
Narcissus tazetta • Bunch-flowered narcissus • IP. EO.
Narthecium [Nartheciaceae]
Narthecium californicum • Bog-asphodel • NP.
Odontostomum → *Tecophilaeaceae*
Ornithogalum [Asparagaceae]
Ornithogalum umbellatum • Star-of-Bethlehem • IP. EO.
Prosartes [Liliaceae]
Prosartes hookeri • Hooker's or hairy fairy bells, drops-of-gold • NP.
Prosartes parvifolia • Siskiyou bells • NP.
Prosartes smithii • Large-flowered fairy bells, fairy lanterns
 • NP.
Pseudotrillium → *Trillium*
Scoliopus [Liliaceae]
Scoliopus bigelovii • Slink pod, foetid adder's-tongue, slink lily • NP.
Smilacina → *Maianthemum*
Smilax → *Smilacaceae*
Stenanthium [Melanthiaceae]
Stenanthium occidentale • Western feather bells • NP.
Streptopus [Liliaceae]
Streptopus amplexifolius • Twisted stalk, liver berry • NP.
Tofieldia → *Triantha*
Toxicoscordion → *Zigadenus*
Triantha [Tofieldiaceae]
Triantha occidentalis ssp. *occidentalis* • Sticky false asphodel • NP.
Trillium [Melanthiaceae]



Maianthemum dilatatum



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Narthecium californicum

Proserartes smithii



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Scoliopus bigelovii

Trillium albidum var. *albidum* • Giant white trillium or wake robin • NP.

Trillium angustipetalum • Narrow-petaled wake robin • NP.

Trillium chloropetalum • Giant wake robin, giant trillium • NP.

Trillium kurabayashii • Kurabayash's wake robin • NP.

Trillium ovatum ssp. *oettingeri* • Salmon Mountains wake robin • NP.

Trillium ovatum ssp. *ovatum* • Western wake robin, wood trillium • NP.

Trillium rivale • Brook wake robin • NP.

Triteleia [Asparagaceae]

Triteleia bridgesii • Bridges' wake robin • NP.

Triteleia crocea • Yellow triteleia • NP.

Triteleia grandiflora • Wild-hyacinth, blue lily • NP.

Triteleia hendersonii • Henderson's triteleia • NP.

Triteleia hyacinthina • Wild-hyacinth, white brodiaea, fool's-onion • NP.

Triteleia ixioides ssp. *anilina* • Pretty face • NP.

Triteleia ixioides ssp. *scabra* • Pretty face • NP.

Triteleia laxa • Ithuriel's spear, common triteleia, grass nut • NP.

Triteleia lugens • Coast range triteleia • NP.

Triteleia peduncularis • Long-rayed triteleia • NP.

Veratrum [Melanthiaceae]

Veratrum californicum var. *californicum* • False hellebore, corn-lily, skunk-cabbage • NP.

Veratrum californicum var. *caudatum* • Cascade false hellebore • NP.

Veratrum fimbriatum • Fringed false hellebore • NP.

Veratrum insolitum • Siskiyou false hellebore • NP.

Veratrum viride var. *eschscholzianum* • Green false hellebore, green skunk-cabbage • NP.

Xerophyllum [Melanthiaceae]

Xerophyllum tenax • Bear-grass, western turkey-beard, elk-grass, fire-lily, Indian basket-grass • NP.

Zigadenus [Melanthiaceae]

Zigadenus fontanus • Marsh zygadene • NP.

Zigadenus fremontii • Chaparral death-camas, star zygadene • NP.

Zigadenus micranthus • Small-flowered death-camas • NP.

Zigadenus paniculatus • Foot-hill death-camas, sand-corn • NP.

Zigadenus venenosus var. *venenosus* • Meadow death-camas • NP.

Zygodenus → *Zigadenus* (orthographic correction)

LIMNANTHACEAE – Meadowfoam Family

Floerkea proserpinacoides • False mermaid • NA.

Limnanthes alba ssp. *alba* • White meadowfoam • NA.

Limnanthes alba ssp. *versicolor* • White meadowfoam • NA.



Trillium kurabayashii



Veratrum californicum



Xerophyllum tenax



Zigadenus fremontii

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Limnanthes bakeri • Baker's meadowfoam • EA.
Limnanthes douglasii ssp. *douglasii* • Douglas' meadowfoam • NA.
Limnanthes douglasii ssp. *nivea* • Douglas' meadowfoam • NA.
Limnanthes douglasii ssp. *rosea* • Douglas' meadowfoam • NA.
Limnanthes douglasii ssp. *striata* • Foothill meadowfoam • NA.
Limnanthes floccosa ssp. *bellingeri* • Bellinger's meadowfoam • NA.
Limnanthes floccosa ssp. *floccosa* • Woolly meadowfoam • NA.

LINACEAE – Flax Family

Hesperolinon adenophyllum • Glandular dwarf-flax • EA.
Hesperolinon bicarpellatum • Two-carpellate dwarf-flax • NA.
Hesperolinon californicum • California dwarf-flax • NA.
Hesperolinon clevelandii • Cleveland's dwarf-flax, canyon-flax • NA.
Hesperolinon didymocarpum • Lake County dwarf-flax • EA.
Hesperolinon disjunctum • Dwarf-flax • NA.
Hesperolinon drymarioides • Dwarf-flax, foothill-flax • NA.
Hesperolinon micranthum • Small-flowered dwarf-flax • NA.
Hesperolinon sharsmithiae • Sharsmith's dwarf-flax • NA. Known from a single 2014 collection.
Hesperolinon spergulinum • Slender dwarf-flax • NA.
Hesperolinon tehamense • Tehama dwarf-flax • EA.
Linum (in part) → *Hesperolinon* and *Sclerolinon*
Linum bienne • Narrow-leaved flax • IP.
Linum grandiflorum • Large-flowered flax • IA. EO.
Linum lewisii var. *lewisii* • Western blue flax • NP.
Linum usitatissimum • Flax, cultivated flax • IA. EO. EC (fiber).
Sclerolinon digynum • Northwestern yellow-flax. NA. Last collected in 1936. Extant?

LOASACEAE – Blazing Star or Loasa Family

Mentzelia dispersa • Bushy blazing star, stick-leaf • NA.
Mentzelia laevicaulis var. *laevicaulis* • Smooth-stemmed blazing star • NP.
Mentzelia lindleyi • Lindley's blazing star • NA.
Mentzelia micrantha • Small-flowered stick-leaf • NA.



Mentzelia laevicaulis

LYTHRACEAE – Loosestrife Family

Ammannia robusta • Valley red stem • NA.
Lythrum californicum • California loosestrife • NP.
Lythrum hyssopifolia • Grass poly, hyssop loosestrife • IAP.
Lythrum salicaria • Purple loosestrife • IP.
Lythrum tribracteatum • Three-bracted loosestrife • IA.
Rotala ramosior • Lowland rotala • NA. Known from a single 1949 collection in Lake Co. Extant?

MALVACEAE – Cotton or Mallow Family

Excludes the closely related *Sterculiaceae*

Abutilon theophrasti • Velvet leaf • IA. [TJM2]
Fremontodendron → *Sterculiaceae*
Hibiscus trionum • Flower-of-an-hour • IA. Last collected in 1936. Extant?

Iliamna bakeri • Baker's globe mallow, Baker's wild hollyhock
• NP.

Iliamna latibracteata • California globe mallow, California wild hollyhock • NP.

Iliamna rivularis var. *rivularis* • Stream bank wild-hollyhock
• NPSS.

Lavatera (in part) → *Malva*

Lavatera cretica • Cretan or Cornish mallow • IAP.

Malacothamnus fasciculatus • Mendocino bush mallow • NS.

Malacothamnus fremontii • Fremont's bush mallow • NS.
[TJM2]

Malacothamnus hallii • Hall's bush mallow • NS.

Malacothamnus jonesii • Jones' bush mallow • NS. [TJM2]

Malacothamnus mendocinensis • Mendocino bush mallow
• NSS. Last collected in 1939. Extant?

Malva arborea • Tree mallow • IS. [TJM2]

Malva neglecta • Common mallow • IAP.

Malva nicaeensis • Bull mallow • IAP.

Malva parviflora • Cheeseweed • IA.

Malva sylvestris • High mallow • IP. [TJM2]

Malvella leprosa • Alkali weed, white mallow • NA. Last collected in 1842. Extant?

Modiola caroliniana • Bristly or wheel mallow • IAP.

Sida (in part) → *Malvella*

Sidalcea asprella ssp. *asprella* • Dwarf checkerbloom • NP.

Sidalcea asprella ssp. *nana* • Dwarf checkerbloom • NP.

Sidalcea calycosa ssp. *calycosa* • Annual sidalcea, swamp checker • NAP.

Sidalcea calycosa ssp. *rhizomata* • Point Reyes sidalcea • NP.

Sidalcea celata • Redding checkerbloom • NP.

Sidalcea diploscypha • Fringed or cup sidalcea • NA.

Sidalcea elegans • Del Norte checkerbloom • NP.

Sidalcea glaucescens • Waxy checkerbloom • NP.

Sidalcea hartwegii • Hartweg's or valley sidalcea • NA.

Sidalcea hickmanii ssp. *pillsburiensis* • Hickman's sidalcea
• EP.

Sidalcea hirsuta • Hairy checkerbloom • NA.

Sidalcea keckii • Keck's checkerbloom • NA.

Sidalcea malachroides • Maple-leaved sidalcea, coast checker
• NP.

Sidalcea malvaeflora ssp. *laciniata* • Dwarf checkerbloom • NP.

Sidalcea malvaeflora ssp. *malvaeflora* • Dwarf checkerbloom
• NP.

Sidalcea malvaeflora ssp. *patula* • Siskiyou dwarf checkerbloom
• NP.

Sidalcea malvaeflora ssp. *purpurea* • Purple checkerbloom
• NP.

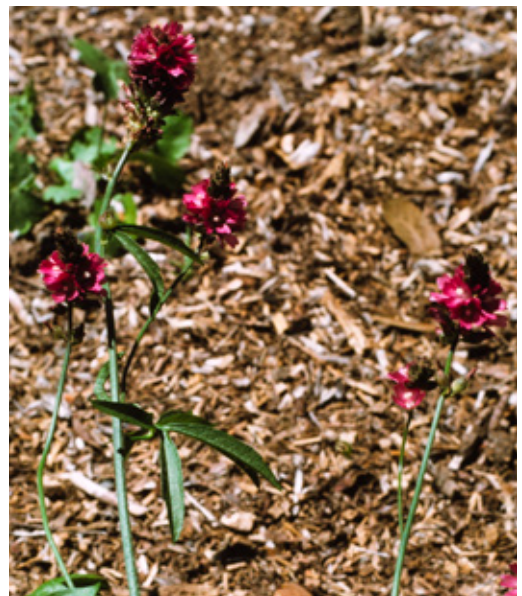
Sidalcea malvaeflora ssp. *rostrata* • Sea cliff checkerbloom
• NP. Last collected in 1975. Extant?



Limnanthes douglasii



Sidalcea malvaeflora



Sidalcea oregana



Menyanthes trifoliata

Sidalcea oregana ssp. *eximia* • Oregon sidalcea, Oregon checker • EP.

Sidalcea oregana ssp. *hydrophila* • Oregon checkerbloom • NP.

Sidalcea oregana ssp. *oregana* • Oregon sidalcea, Oregon checkerbloom • NP.

Sidalcea oregana ssp. *spicata* • Oregon checkerbloom • NP.

Sidalcea setosa • Bristly checkerbloom, Oregon sidalcea or checkerbloom • NP.

MARTYNIACEAE – Martynia Family

Proboscidea louisianica ssp. *louisianica* • Unicorn plant, devil's-claw • IA. EO.

MELIANTHACEAE – Melianthus or Honey Bush Family

Melianthus • major • Honey bush • IS. EO.

MENYANTHACEAE – Bogbean or Buckbean Family

Included traditionally in *Gentianaceae*

Menyanthes trifoliata • Buck or bog bean • NP.

MOLLUGINACEAE – Carpet Weed Family

Glinus lotoides • Sweet juice • IA.

Mollugo verticillata • Indian-chickweed, carpet weed • IA.

MORACEAE – Mulberry Family

Ficus carica • Cultivated or edible fig • IST. EO. EFP.

Morus alba • White mulberry • IT.

MYOPORACEAE – Myoporum Family

Included in *Scrophulariaceae* by some authors, as in TJM2.

Myoporum laetum • Myoporum, Ngaio tree • Sparingly IST. • EO.

MYRICACEAE – Wax-Myrtle Family

Morella → *Myrica*

Myrica californica • Pacific or California wax-myrtle, Pacific bayberry • NST.

MYRTACEAE – Eucalyptus or Myrtle Family

Eucalyptus globulus • Blue gum • IT. EO.

Eucalyptus tereticornis • Forest red or slaty gum • IT. EO.

NYCTAGINACEAE – Four-O'Clock Family

Abronia latifolia • Sand-verbena • NP.

Abronia maritima • Seaside abronia • NP. Last collected in 1939. Extant?

Abronia umbellata ssp. *breviflora* • Beach or pink sand-verbena • NA.

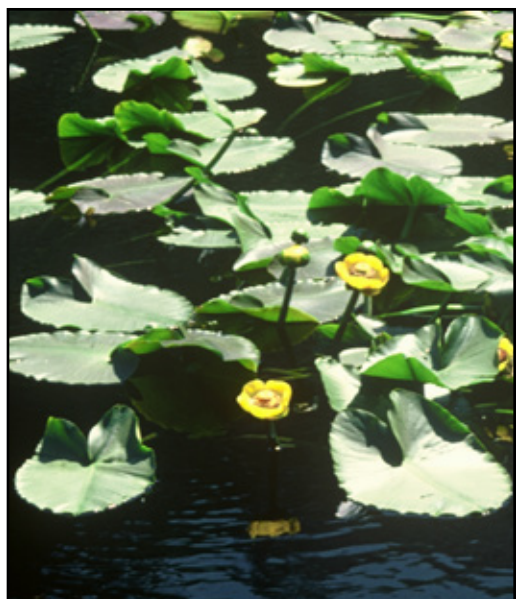
Mirabilis greenei • Greene's or Siskiyou four-o'clock • EP.



Ficus carica *Myrica californica*



Abronia latifolia



Nuphar polysepala

NYMPHAEACEAE – Water-Lily Family

Includes *Nupharaceae*

Nuphar polysepala • Indian or yellow pond-lily, wokus, cow-lily, yellow water-lily, spadderdock • NP.

Nymphaea alba • European white water-lily • IP. EO.

Nymphaea odorata ssp. *odorata* • White or fragrant water-lily • IP. EO.

OLEACEAE – Ash or Olive Family

Forestiera pubescens • Desert-olive • NT.

Fraxinus dipetala • California flowering or foothill ash • NST.

Fraxinus latifolia • Oregon ash • NT.

Ligustrum lucidum • Chinese privet • IST. [TJM2]

Ligustrum ovalifolium • California privet • IS. EO.

ONAGRACEAE – Evening-Primrose Family

Boisduvalia → *Epilobium*

Camissonia cheiranthifolia ssp. *cheiranthifolia* • Beach-primrose, dune sun-cups • NP.

Camissonia contorta • Plains evening-primrose • NA.

Camissonia graciliflora • Hill sun-cups • NA.

Camissonia hirtella • Santa Cruz Island sun-cups • NA.

Camissonia intermedia • Intermediate sun-cups • NA.

Camissonia lacustris • Grassland sun-cups • NA.

Camissonia ovata • Golden eggs • NP.

Camissonia strigulosa • Sandy soil sun-cups • NA.

Camissoniopsis → *Camissonia*

Chamerion angustifolium ssp. *circumvagum* • Fireweed • NP.

Chamerion latifolium • Broad-leaved fireweed • NP.

Circaea alpina ssp. *pacifica* • Enchanter's-nightshade • NP.

Clarkia affinis • Chaparral clarkia • NA.

Clarkia amoena ssp. *amoena* • Farewell-to-spring, summer's darling • NA.

Clarkia amoena ssp. *huntiana* • Farewell-to-spring • NA.

Clarkia amoena ssp. *whitneyi* • Whitney's farewell-to-spring • EA.

Clarkia borealis ssp. *arida* • Shasta clarkia • NA.

Clarkia borealis ssp. *borealis* • Northern clarkia • EA.

Clarkia concinna ssp. *concinna* • Lovely clarkia, red ribbons • NA.

Clarkia davyi • Davy's clarkia • NA.

Clarkia gracilis ssp. *albicaulis* • White-stemmed clarkia • NA.

Clarkia gracilis ssp. *gracilis* • Slender clarkia • NA.

Clarkia gracilis ssp. *sonomensis* • Sonoma godetia • NA.

Clarkia gracilis ssp. *tracyi* • Tracy's clarkia • NA.

Clarkia heterandra • Butterfly weed • NA.

Clarkia lassenensis • Lassen godetia • NA.

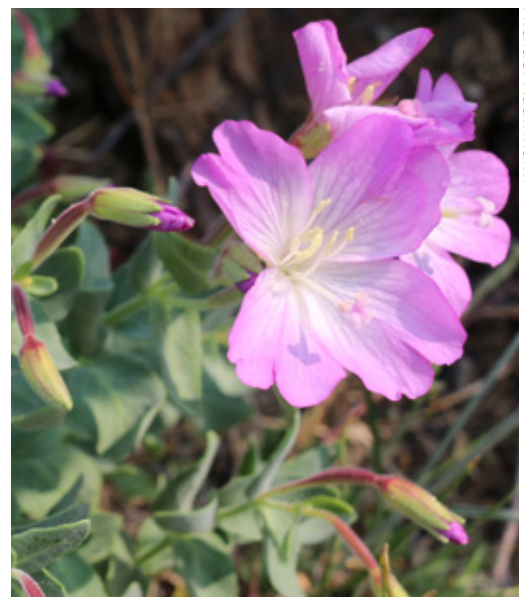
Clarkia modesta • Waltham Creek clarkia • NA.



Fraxinus dipetala



Camissonia cheiranthifolia



Epilobium siskiyouense

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Clarkia purpurea ssp. *purpurea* • Winecup clarkia • NA.
Clarkia purpurea ssp. *quadrivulnera* • Winecup clarkia • NA.
Clarkia purpurea ssp. *viminea* • Winecup clarkia • NA.
Clarkia rhomboidea • Diamond clarkia • NA.
Clarkia stellata • Lake Almanor clarkia • NA. [TJM2]
Clarkia unguiculata • Elegant clarkia or fairy-fan • NA.
Epilobium (in part) → *Chamerion*
Epilobium anagallidifolium • Purple cotton weed • NP.
Epilobium brachycarpum • Tall annual willow herb • NA.
Epilobium campestre • Smooth willow herb • NA.
Epilobium canum ssp. *canum* • California-fuchsia, zauschneria, hummingbird trumpet • NP-shrub.
Epilobium canum ssp. *latifolium* • California-fuchsia, zauschneria • NP.
Epilobium ciliatum ssp. *ciliatum* • Fringed willow herb • NP.
Epilobium ciliatum ssp. *glandulosum* • Fringed willow herb • NP.
Epilobium ciliatum ssp. *watsonii* • Fringed willow herb • NP.
Epilobium clavatum • Talus willow herb • NP.
Epilobium densiflorum • Dense-flowered willow herb • NA.
Epilobium foliosum • California willow herb • NA.
Epilobium glaberrimum ssp. *fastigiatum* • Glaucous willow herb • NP.
Epilobium glaberrimum ssp. *glaberrimum* • Cliff cotton weed • NP.
Epilobium hallianum • Glandular willow herb • NP.
Epilobium hornemannii ssp. *hornemannii* • Hornemann's willow herb • NP.
Epilobium lactiflorum • White-flowered willow herb • NP.
Epilobium leptophyllum • Bog willow herb • IP. [TJM2]
Epilobium luteum • Yellow willow herb • NP.
Epilobium minutum • Minute willow herb, chaparral cotton weed • NA.
Epilobium nivium • Snow Mountain willow herb • EP.
Epilobium oreganum • Oregon fireweed • NP.
Epilobium oregonense • Oregon willow herb, Oregon cotton weed • NP.
Epilobium pallidum • Large-flowered spike-primrose • NA. Last collected in 1936. Extant?
Epilobium rigidum • Siskiyou Mountains willow herb, creek-fringe • NP.
Epilobium septentrionale • Humboldt County-fuchsia • EP.
Epilobium siskiyouense • Siskiyou fireweed • NP.
Epilobium torreyi • Torrey's fireweed • NA.
Fuchsia magellanica • Hardy fuchsia • IS. EO.
Gaura (in part) → *Clarkia*
Gayophytum diffusum ssp. *diffusum* • Spreading ground smoke • NA.
Gayophytum diffusum ssp. *parviflorum* • Spreading ground smoke • NA.



Fuchsia magellanica



Calypso bulbosa



Cephalanthera austiniae

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Gayophytum heterozygum • Zig-zag ground smoke • NA.
Gayophytum humile • Dwarf ground smoke • NA.
Gayophytum racemosum • Black-Foot ground smoke • NA.
Gayophytum ramosissimum • Pinyon ground smoke • NA.
Heterogaura → *Clarkia*
Ludwigia hexapetala • Uruguyan primrose-willow • IP-shrub.
Ludwigia palustris • Marsh-purslane, water-strife • NP.
Ludwigia peploides ssp. *peploides* • Floating primrose-willow
 • NP.
Oenothera biennis • Common evening-primrose • IP. [TJM2]
Oenothera elata ssp. *hirsutissima* • Hooker's evening-primrose
 • NP.
Oenothera elata ssp. *hookeri* • Hooker's evening-primrose
 • NP.
Oenothera glazioviana • Red-sepaled evening-primrose • IP.
Oenothera villosa ssp. *strigosa* • Hairy evening-primrose • NP.
Oenothera wolfii • Wolf's evening-primrose • NP.
Taraxia → *Camissonia*
Tetrapteron → *Camissonia*
Zauschneria → *Epilobium*

ORCHIDACEAE – Orchid Family

Calypso bulbosa var. *occidentalis* • Calypso orchid, fairy slipper
 • NP.
Cephalanthera austini • Phantom or snow orchid • NP.
Corallorhiza maculata var. *maculata* • Spotted coral root • NP.
Corallorhiza maculata var. *occidentalis* • Spotted coral root • NP.
Corallorhiza mertensiana • Merten's or western coral root • NP.
Corallorhiza striata • Striped coral root • NP.
Cypripedium californicum • California lady's-slipper • NP.
Cypripedium fasciculatum • Clustered lady's-slipper • NP.
Cypripedium montanum • Mountain lady's-slipper • NP.
Eburophyton → *Cephalanthera*
Epipactis gigantea • Stream orchis, giant helleborine, chatter-
 box • NP.
Goodyera oblongifolia • Rattlesnake-plantain • NP.
Habenaria (in part) → *Piperia* and *Platanthera*
Listera banksiana • Northwestern twayblade • NP.
Listera convallarioides • Broad-lipped twayblade • NP.
Listera cordata • Western heart-leaved twayblade • NP.
Neottia → *Listera*
Piperia candida • White-flowered rein orchid • NP.
Piperia colemanii • Coleman's rein orchid • NP.
Piperia elegans ssp. *elegans* • Elegant piperia • NP.
Piperia elongata • Dense-flowered rein orchid • NP.
Piperia leptopetala • Narrow-petaled rein orchid • NP.
Piperia michaelii • Purple-flowered rein orchid • NP.
Piperia transversa • Royal rein orchid, flat-spurred piperia • NP.
Piperia unalascensis • Alaska piperia, northern piperia • NP.



Corallorhiza striata



Cypripedium californicum



Epipactis gigantea

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Platanthera (in part) → *Piperia*

Platanthera dilatata var. *leucostachys* • White-flowered bog orchid, bog candles • NP.

Platanthera sparsiflora • Sparse-flowered bog orchid • NP.

Platanthera stricta • Slender bog orchid • NP.

Spiranthes porrifolia • Western ladies'-tresses • NP.

Spiranthes romanzoffiana • Hooded ladies'-tresses • NP.

OXALIDACEAE – Oxalis or Sorrel Family

Oxalis articulata ssp. *rubra* • Window box wood sorrel • IP. EO.

Oxalis corniculata • Yellow oxalis, creeping wood sorrel • IP.

Oxalis hirta • Tropical wood sorrel • IP.

Oxalis incarnata • Crimson wood sorrel • IP.

Oxalis oregana • Redwood sorrel, Oregon wood sorrel • NP.

Oxalis pes-caprae • Bermuda-buttercup • IP. EO.

Oxalis pilosa • Radish-root wood sorrel • NP.

Oxalis purpurea • Purple wood sorrel • IP.

Oxalis rubra • Red oxalis • IP.

Oxalis suksdorfii • Suksdorf's wood sorrel • NP.

Oxalis trilliifolia • Trillium-leaved wood sorrel • NP.

PAEONIACEAE – Peony Family

Traditionally included in *Ranunculaceae*

Paeonia brownii • Western peony • NP.

PAPAVERACEAE – Poppy Family

Includes *Fumariaceae*

Argemone munita ssp. *munita* • Prickly poppy • NAP.

Argemone munita ssp. *rotundata* • Prickly poppy, chicalote • NAP.

Dendromecon rigida • Tree or bush poppy • NS.

Dicentra (in part) → *Ehrendorferia*

Dicentra formosa ssp. *formosa* • Pacific bleeding heart • NP.

Dicentra formosa ssp. *oregana* • Oregon bleeding heart • NP.

Dicentra pauciflora • Few-flowered bleeding heart • NP.

Dicentra uniflora • Steer's head • NP.

Ehrendorferia chrysantha • Golden ear-drops • NP.

Eschscholzia caespitosa • Tufted poppy • NA.

Eschscholzia californica ssp. *californica* • California poppy • NAP.

Eschscholzia hypocoides • San Benito poppy • NA.

Eschscholzia lobbii • Rough-seeded eschscholzia, frying pans • NA.

Fumaria capreolata • White ramping fumitory • IA.

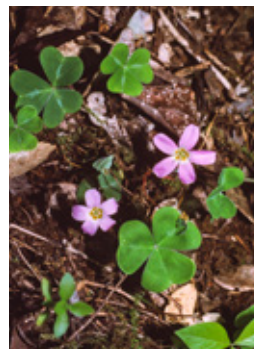
Fumaria officinalis • Drug fumitory • IA.

Papaver heterophyllum • Wind poppy • NA.

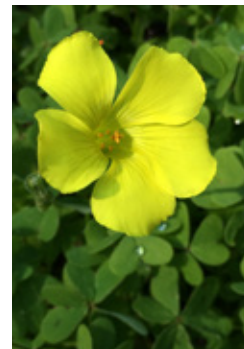
Papaver rhoeas • Corn poppy • IA. EO.

Papaver somniferum • Opium poppy • IA. EO.

Platystemon californicus • Cream cups • NA.



Oxalis oregana



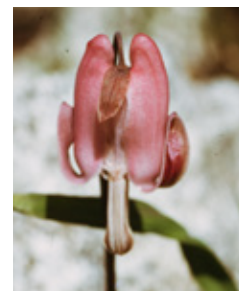
Oxalis pes-caprae



Argemone munita



Platystemon californicus



Dicentra pauciflora



Eschscholzia californica



Papaver rhoeas

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Allison Poklemba

Allison Poklemba

Romneya trichocalyx • Matilija poppy • NS.
Stylomecon → *Papaver*

PARNASSIACEAE – Grass-of-Parnassus Family

Included traditionally in *Saxifragaceae* and more recently in *Celastraceae*

Parnassia cirrata var. *intermedia* • Cascade grass-of-Parnassus • NP.

Parnassia fimbriata var. *fimbriata* • Fringed grass-of-Parnassus • NP.

Parnassia palustris • California grass-of-Parnassus • NP.



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Parnassia palustris

PHYTOLACCACEAE – Pokeweed Family

Phytolacca americana var. *americana* • Pokeweed, poke, poke-berry • IP.



Phytolacca americana

PITTIOSPORACEAE – Boxwood Family

Pittosporum tenuifolium • Pittosporum, tawhiwhi • IT. EO.

PLANTAGINACEAE – Plantago or Plantain Family

We retain the traditional concept of the family, with the single genus *Plantago* in our flora. The family has been included in *Scrophulariaceae*. But more recently its concept has been much expanded by some authors to include *Acanthaceae*, *Bignoniaceae*, *Callitrichaceae*, *Gesneriaceae*, *Hippuridaceae*, *Labiatae*, much of *Scrophulariaceae*, and *Verbenaceae*. TJM2 goes only part way down this path.

Antirrhinum → *Scrophulariaceae*

Callitriche → *Callitrichaceae*

Collinsia → *Scrophulariaceae*

Cymbalaria → *Scrophulariaceae*

Digitalis → *Scrophulariaceae*

Gratiola → *Scrophulariaceae*

Hippuris → *Hippuridaceae*

Keckiella → *Scrophulariaceae*

Kickxia → *Scrophulariaceae*

Linaria → *Scrophulariaceae*

Lindernia → *Scrophulariaceae*

Nothochelone → *Scrophulariaceae*

Nuttallanthus → *Scrophulariaceae*

Penstemon → *Scrophulariaceae*

Plantago aristata • Bristly plantain, large-bracted plantain • IA.

Plantago coronopus • Crowfoot, cut-leaved, or buck-horn plantain • IAP.

Plantago elongata ssp. *elongata* • Coast plantain • NA.

Plantago erecta • California dwarf plantain • NA.

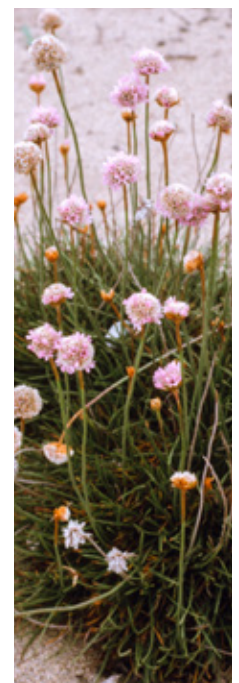
Plantago eriopoda • Saline or red-woolly plantain • NP.

Plantago lanceolata • English plantain • IP.

Plantago major • Common, buckhorn, broad-leaved or great plantain, rib wort • IP.



Plantago lanceolata



Armeria maritima

Plantago maritima • California plantain • NP.
Plantago patagonica • Woolly plantain • NA.
 Last collected in 1945. Extant?
Plantago subnuda • Tall coastal plantain • NP.
Plantago virginica • Pale-seeded plantain • IAP.
Synthyris → *Scrophulariaceae*
Tonella → *Scrophulariaceae*
Veronica → *Scrophulariaceae*

PLATANACEAE – Plane Tree or Sycamore Family

Platanus racemosa • California or western sycamore, California plane tree • IT.



Gilia tricolor

PLUMBAGINACEAE – Plumbago or Thrift Family

Armeria maritima ssp. *californica* • Sea or California thrift, sea-pink • NP.
Limonium californicum var. *californicum* • Sea-lavender, marsh-rosemary • NP.

POLEMONIACEAE – Phlox Family

Allophyllum (in part) → *Navarretia*
Allophyllum divaricatum • Purple false gilia • NA.
Allophyllum gilioides ssp. *gilioides* • Straggling-gilia • NA.
Allophyllum gilioides ssp. *violaceum* • Dense false gilia • NA.
Collomia diversifolia • Serpentine collomia • NA.
Collomia grandiflora • Large-flowered collomia • NA.
Collomia heterophylla • Varied-leaved collomia • NA.
Collomia linearis • Narrow-leaved collomia • NA.
Collomia tinctoria • Yellow-staining collomia • NA.
Collomia tracyi • Tracy's collomia • NA.
Eriastrum abramsii • Abrams' eriastrum or woolly-star • NA.
Eriastrum brandegeae • Brandegee's eriastrum • NA.
Eriastrum tracyi • Tracy's eriastrum • NP.
Gilia (in part) → *Aliciella*, *Allophyllum*, and *Navarretia*
Gilia capitata ssp. *capitata* • Globe or blue-headed gilia • NA.
Gilia capitata ssp. *pacifica* • Pacific gilia • NA.
Gilia capitata ssp. *tomentosa* • Blue-headed gilia • NA.
Gilia clivorum • Purple-spotted gilia • NA.
Gilia millefoliata • Many-leaved gilia • NA.
Gilia tricolor ssp. *diffusa* • Bird's-eye gilia • NA. Last: 1948. Extant?
Gilia tricolor ssp. *tricolor* • Tricolored gilia, bird's-eyes • NA.
Gymnosteris parvula • Small-flowered gymnosteris • NA. Known from a single 1969 collection. Extant?
Ipomopsis aggregata ssp. *aggregata* • Scarlet-gilia • NP.
Ipomopsis congesta ssp. *congesta* • Ball-headed-gilia • NP.
Leptodactylon (in part) → *Linanthus*
Leptosiphon acicularis • Bristly-linanthus • NA.
Leptosiphon ambiguus • Serpentine-linanthus • NA. Last: 1934. Extant?
Leptosiphon androsaceus • Shower-gilia • NA.
Leptosiphon bicolor • True baby-stars • NA.
Leptosiphon bolanderi • Bolander's-linanthus • NA.

Leptosiphon ciliatus • Whisker-brush • NA.
Leptosiphon croceus • Coast yellow leptosiphon • NA. Last collected in 1954. Extant?
Leptosiphon filipes • Filiform-linanthus • NA.
Leptosiphon grandiflorus • Large-flowered-linanthus • NA.
Leptosiphon harknessii • Harkness' flax flower • NA.
Leptosiphon jepsonii • Jepson's leptosiphon • NA.
Leptosiphon latisectus • Coast Range-linanthus • NA.
Leptosiphon liniflorus • Narrow-leaved flax flower • NA.
Leptosiphon minimus • Bicolored flax flower, true baby stars • NA.
Leptosiphon nuttallii ssp. *howellii* • Mount Tedoc-linanthus • EP.
Leptosiphon nuttallii ssp. *nuttallii* • Nuttall's-linanthus, bush-gilia • NP.
Leptosiphon parviflorus • Variable-linanthus • NA.
Leptosiphon pygmaeus ssp. *continentalis* • Pigmy-linanthus • NA.



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Leptosiphon nuttallii

Leptosiphon rattanii • Rattan's-linanthus • NA.
Linanthus (in part) → *Leptosiphon*
Linanthus dichotomus ssp. *dichotomus* • Evening snow • NA.
Linanthus dichotomus ssp. *meridianus* • Evening snow • NA.
Linanthus pungens • Granite prickly-phlox • NP.
Microsteris gracilis • Annual- or slender-phlox • NA.
Navarretia atractyloides • Holly-leaved pincushion plant • NA.
Navarretia capillaris • Miniature false gilia • NA.
Navarretia cotulifolia • Cotula-leaved pincushion plant • NA.
Navarretia divaricata ssp. *divaricata* • Mountain pincushion plant • NA.
Navarretia divaricata ssp. *vividior* • Mountain pincushion plant • NA.
Navarretia heterandra • Tehama pincushion plant • NA.
Navarretia heterodoxa • Calistoga pincushion plant • NA. Undated historical collection. Extant?
Navarretia intertexta • Needle-leaved pincushion plant • NA.
Navarretia jepsonii • Jepson's pincushion plant • NA.
Navarretia leptalea ssp. *leptalea* • Bridge's pincushion plant • NA.
Navarretia leucocephala ssp. *bakeri* • White-flowered pincushion plant • NA.
Navarretia leucocephala ssp. *leucocephala* • White-flowered pincushion plant • NA.
Navarretia leucocephala var. *minima* • Least pincushion plant • NA. Last collected in 1928. Extant?
Navarretia leucocephala ssp. *pauciflora* • Few-flowered pincushion plant • NA.
Navarretia leucocephala ssp. *pleiantha* • Many-flowered pincushion plant • NA.
Navarretia linearifolia ssp. *linearifolia* • Alva Day's pincushion plant • NA.
Navarretia linearifolia ssp. *pinnatisecta* • Alva Day's pincushion plant • NA.
Navarretia mellita • Honey-scented pincushion plant • NA.
Navarretia myersii ssp. *deminuta* • Small pin-cushion pincushion plant • EA.
Navarretia myersii ssp. *myersii* • Meyers' pin-cushion pincushion plant • NA.
Navarretia nigelliformis ssp. *nigelliformis* • Adobe navarretia • NA.
Navarretia nigelliformis ssp. *radians* • Shining navarretia • NA.
Navarretia paradoxinota • Porter's or paradox navarretia • NA.
Navarretia propinqua • Needle-leaved pincushion plant • NA.
Navarretia pubescens • Downy pincushion plant • NA.
Navarretia squarrosa • Skunkweed • NA.

Navarretia subuligera • Awl-leaved pincushion plant • NA.
Navarretia tagetina • Marigold pincushion plant • NA.
Navarretia viscidula ssp. *purpurea* • Sticky pincushion plant
 • NA.
Navarretia viscidula ssp. *viscidula* • Sticky pincushion plant
 • NA.
Phlox (in part) → *Microsteris*
Phlox adsurgens • Woodland or periwinkle phlox • NS.
Phlox austromontana ssp. *austromontana* • Mountain phlox
 • NP.
Phlox diffusa • Spreading phlox • NP.
Phlox douglasii • Tufted or Columbia phlox • NP.
Phlox hirsuta • Yreka phlox • EP.
Phlox hoodii ssp. *canescens* • Carpet phlox • NP.
Phlox longifolia • Long-leaved phlox • NS. Based on a single
 1949 collection. Extant?
Phlox speciosa • Showy phlox • NP.
Polemonium californicum • Low polemonium • NP.
Polemonium carneum • Great polemonium, royal sky pilot
 • NP.
Polemonium eddyense • Mount Eddy jacob's-ladder • EP.
Polemonium micranthum • Annual polemonium • NA.
Polemonium occidentale • Western polemonium • NP.
Polemonium pulcherrimum var. *pilosum* • Beautiful jacob's-
 ladder • NP. Last collected in 1955. Extant?
Polemonium pulcherrimum var. *pulcherrimum* • Showy
 polemonium • NP.
Polemonium pulcherrimum var. *shastense* • Mount Shasta
 Jacob's-ladder • NP.



Phlox diffusa



Polemonium eddyense

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POLYGALACEAE – Milkwort Family

Polygala (in part) → *Rhinotropis*
Rhinotropis californica • Common milkwort, coast or California polygala • NP.
Rhinotropis cornuta var. *cornuta* • Sierra milkwort, Sierra or horned polygala • NP.

POLYGONACEAE – Knotweed or Smartweed Family

Aconogonon → *Polygonum*
Bistorta → *Polygonum*
Chorizanthe clevelandii • Cleveland's chorizanthé • NA.
Chorizanthe douglasii • Douglas's spine flower • NA. Based on a 1980 collection from Mendocino Co.
Chorizanthe howellii • Howell's spine flower • EA.
Chorizanthe membranacea • Pink spine flower • NA.
Chorizanthe polygonoides var. *polygonoides* • Knotweed spine flower • NA.
Chorizanthe stellulata • Scarlet spine flower • NA.
Eriogonum alpinum • Trinity buckwheat • EP.
Eriogonum compositum var. *compositum* • Composite or large-leaved buckwheat • NP.
Eriogonum congdonii • Congdon's buckwheat • EP.
Eriogonum dasyanthemum • Many-flowered buckwheat • NA.
Eriogonum diclinum • Jaynes Canyon buckwheat • NP.
Eriogonum douglasii var. *meridionale* • Douglas' wild buckwheat • NP.

Eriogonum elatum var. *elatum* • Tall or woolly buckwheat • NP.
Eriogonum elatum var. *villosum* • Woolly buckwheat • NP.
Eriogonum fasciculatum var. *foliolosum* • California buckwheat
• IS.

Eriogonum hirtellum • Klamath Mountains buckwheat • EP.
Eriogonum hirtiflorum • Hairy-flowered buckwheat • NA.
Eriogonum inerme var. *inerme* • Unarmed buckwheat • NA.
Last collected in 1963. Extant?

Eriogonum kelloggii • Kellogg's buckwheat • EP.
Eriogonum latifolium • Coast buckwheat • NP.
Eriogonum libertini • Dubakella Mountain buckwheat • EP.
Eriogonum lobbii var. *lobbii* • Lobb's buckwheat • NP.
Eriogonum luteolum var. *caninum* • Golden carpet buckwheat
• NA.

Eriogonum luteolum var. *luteolum* • Golden carpet buckwheat
• NA.

Eriogonum marifolium var. *cupulatum* • McCloud wild buck-
wheat • NP. Last collected in 1914. Extant?

Eriogonum marifolium var. *marifolium* • Marum-leaved buck-
wheat • NP.

Eriogonum nervulosum • Snow Mountain buckwheat • NP.

Eriogonum niveum • Snow buckwheat • NP. Last collected in
1935. Extant?

Eriogonum nudum var. *auriculatum* • Naked-stemmed buck-
wheat • NP.

Eriogonum nudum var. *deductum* • Naked-stemmed buck-
wheat • NP.

Eriogonum nudum var. *nudum* • Naked-stemmed buckwheat, tibinagua • NP.

Eriogonum nudum var. *oblongifolium* • Harford's naked-stemmed buckwheat • NP.

Eriogonum nudum var. *paralinum* • Naked-stemmed or Del Norte buckwheat • NP.

Eriogonum nudum var. *pubiflorum* • Naked-stemmed buckwheat • NP.

Eriogonum ovalifolium var. *purpureum* • Cushion buckwheat • NP.

Eriogonum parvifolium • Seacliff wild buckwheat • NS.

Eriogonum pendulum • Waldo buckwheat • NS.

Eriogonum pyrolifolium var. *coryphaeum* • Hairy Shasta buckwheat • NP. [TJM2]

Eriogonum roseum var. *roseum* • Virgate buckwheat • NA.

Eriogonum siskiyouense • Siskiyou buckwheat • EP.

Eriogonum spergulinum var. *reddingianum* • Spurry buckwheat • NA.

Eriogonum strictum var. *greenei* • Greene's buckwheat • EP.

Eriogonum strictum var. *proliferum* • Proliferous buckwheat • NA.

Eriogonum ternatum • Ternate or Waldo buckwheat • NP.

Eriogonum tripodum • Tripod buckwheat • NP.

Eriogonum umbellatum var. *argus* • Sulfur-flowered buckwheat • NP.

Eriogonum umbellatum var. *bahiiiforme* • Sulfur-flowered buckwheat • NP.

Eriogonum umbellatum var. *ellipticum* • Starry sulphur flower • NP.

Eriogonum umbellatum var. *dumosum* • American Valley sulfur flower • NS.

Eriogonum umbellatum var. *furcosum* • Sulfur-flowered buckwheat • NP.

Eriogonum umbellatum var. *goodmanii* • Goodman's buckwheat • NP.

Eriogonum umbellatum var. *humistratum* • Mt. Eddy buckwheat • NP.

Eriogonum umbellatum var. *lautum* • Scott Valley sulfur flower • EP.



Eriogonum lobbii



Eriogonum umbellatum

Eriogonum umbellatum var. *modocense* • Sulfur-flowered buckwheat • NPSS.

Eriogonum umbellatum var. *nelsoniorum* • Nelsons' sulfur flower • EP.

Eriogonum umbellatum var. *polyanthum* • American River sulphur flower • NP.

Eriogonum umbellatum var. *smallianum* • Small's sulfur flower • EP.

Eriogonum umbellatum var. *speciosum* • Sulfur-flowered buckwheat • NP.

Eriogonum ursinum var. *erubescens* • Blushing wild buckwheat • EP.

Eriogonum ursinum var. *ursinum* • Bear Valley wild buckwheat • NP.

Eriogonum vimineum • Wicker buckwheat • NA.

Eriogonum wrightii var. *trachygonum* • Wright's buckwheat • NP.

Fallopia → *Polygonum*

Muehlenbeckia complexa • Maidenhair vine, wire plant • IV. EO.

Oxyria digyna • Mountain-sorrel • NP.

Persicaria → *Polygonum*

Polygonum amphibium • Water smart weed • NP.

Polygonum argyrocoleon • Silver-leaved or Persian knotweed • IA.

Polygonum aviculare ssp. *aviculare* • Knotweed • IP.

Polygonum aviculare ssp. *buxiforme* • Knotweed • NP. Last collected in 1908. Extant?

Polygonum aviculare ssp. *depressum* • Knotweed • IP.

Polygonum bistortoides • Western bistort, smoke weed, lady's-thumb • NP.

Polygonum x bohemicum • Bohemian knotweed • IP. Known from a 1958 collection in Del Norte Co.

Polygonum bolanderi • Bolander's knotweed • NP-shrub.

Polygonum californicum • California knotweed • NA.

Polygonum capitatum • Pink-headed smartweed • IP • EO.

Polygonum convolvulus • Black bindweed • IV.

Polygonum cuspidatum • Japanese knotweed • IS.

Polygonum davisiae var. *davisiae* • Davis' knotweed • NP.

Polygonum davisiae var. *glabrum* • Newberry's knotweed • NP.

Polygonum douglasii • Douglas' knotweed • NA.

Polygonum fowleri ssp. *fowleri* • Fowler's knotweed • NP. Known from a 1975 collection. Extant?

Polygonum hydropiper • Marsh-pepper smartweed, water-pepper • IA.

Polygonum hydropiperoides • Swamp smartweed • NP.

Polygonum lapathifolium • Dock-leaved smartweed, willow weed • NA.

Polygonum majus • Large knotweed • NA.

Polygonum minimum • Leafy dwarf knotweed • NA.

Polygonum nuttallii • Nuttall's knotweed • NA.

Polygonum paronychia • Beach knotweed • NPSS.

Polygonum parryi • Parry's or prickly knotweed • NA.



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Polygonum bistortoides



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Polygonum davisiae



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Polygonum phytolaccifolium

Polygonum pensylvanicum • Pennsylvania smartweed, pink weed • IA.

Polygonum persicaria • Lady's thumb, redshank • IAP.

Polygonum phytolaccifolium • Poke knotweed • NP.

Polygonum polygaloides ssp. *confertiflorum* • White-margined knotweed • NA.

Polygonum polygaloides ssp. *kelloggii* • Kellogg's knotweed • NA.

Polygonum polystachyum • Himalayan knotweed • IP • EO.

Polygonum punctatum • Dotted smart weed • NA.

Polygonum sachalinensis • Giant knot weed • IP.

Polygonum sawatchense ssp. *oblivium* • Sawatch Range knotweed • NP.

Polygonum sawatchense ssp. *sawatchense* • Sawatch Range knotweed • NP.

Polygonum shastense • Shasta knotweed • NP.

Polygonum spergulariiforme • Fall or spurry knot weed • NA.

Pterostegia drymarioides • Woodland thread-stem • IA.

Rumex acetosella • Sheep sorrel, red sorrel • IP.

Rumex californicus • California willow dock • NP.

Rumex conglomeratus • Green or clustered dock • IP.

Rumex crassus • Fleshy willow dock • NP.

Rumex crispus var. *crispus* • Curly dock • IP.

Rumex fueginus • Golden dock • NAP.

Rumex obtusifolius • Bitter dock • IP.

Rumex occidentalis • Western dock • NP.

Rumex persicarioides • Smartweed dock • NAP.

Rumex pulcher • Dock, fiddle dock • IP.

Rumex salicifolius • Willow-leaved dock • NP.

Rumex transitorius • Pacific willow dock • NP.

Rumex triangulivalvis • White or triangular-valved dock • NP.



Rumex acetosella

PONTEDERIACEAE – Pickerel Weed Family

Eichhornia crassipes • Water-hyacinth • IP. Known from a single 2000 collection.

Heteranthera dubia • Grass-leaved mud-plantain, water star-grass • NAP.

PORTULACACEAE – Purslane Family

Recent studies support the transfer of all of the plants in this family, other than *Portulaca*, to *Montiaceae*.

Calandrinia breweri • Brewer's red maids • NA.

Calandrinia ciliata • Red maids • NA.

Calyptridium monospermum • One-seeded pussy-paws • NP.

Calyptridium quadripetalum • Four-petaled pussy-paws • NA.

Calyptridium umbellatum • Mt. Hood pussy-paws • NP.

Claytonia (in part) → *Montia*

Claytonia cordifolia • Heart-leaved spring beauty • NP.

Claytonia exigua ssp. *exigua* • Serpentine spring beauty • NA.

Claytonia exigua ssp. *glauca* • Serpentine spring beauty • NA.

Claytonia gypsophiloides • Coast range claytonia • NA.

Claytonia lanceolata • Western spring beauty • NP.



Calyptridium umbellatum

Claytonia nevadensis • Sierra Nevada claytonia • NP.

Claytonia obovata • Rydberg's spring beauty • NP.

Claytonia palustris • Marsh claytonia • NP.

Claytonia parviflora ssp. *parviflora* • Stream bank spring beauty • NA.

Claytonia perfoliata ssp. *intermontana* • Intermountain miner's-lettuce • NA.

Claytonia perfoliata ssp. *mexicana* • Miner's-lettuce • NA.

Claytonia perfoliata ssp. *perfoliata* • Miner's-lettuce, Indian-lettuce • NA.

Claytonia rubra ssp. *depressa* • Red-stemmed spring beauty • NA.

Claytonia rubra ssp. *rubra* • Red-stemmed spring beauty • NA.

Claytonia saxosa • Brandegee's spring beauty • NA.

Claytonia serpenticola • Serpentine spring beauty • NP. Last collected in 1909. Extant?

Claytonia sibirica • Siberian montia, candy flower • NAP.

Claytonia umbellata • Great Basin spring beauty • NP. Known from a single 1988 collection.

Claytonia washingtoniana • Lake Washington spring beauty • NA.

Lewisia cantelovii • Cantelow's bitter root • NP.

Lewisia cotyledon var. *cotyledon* • Siskiyou lewisia, cliff maids • NP.

Lewisia cotyledon var. *heckneri* • Heckner's lewisia • EP.

Lewisia cotyledon var. *howellii* • Howell's lewisia • NP.

Lewisia kelloggii ssp. *hutchisonii* • Hutchison's lewisia • NP.

Lewisia leeana • Lee's or quill-leaved lewisia • NP.

Lewisia nevadensis • Nevada lewisia • NP.

Lewisia oppositifolia • Opposite-leaved lewisia • NP.

Lewisia pygmaea ssp. *pygmaea* • Alpine or dwarf lewisia • NP.

Lewisia rediviva ssp. *rediviva* • Bitter root • NP.

Lewisia stebbinsii • Stebbins' lewisia • EP.

Lewisia triphylla • Three-leaved lewisia • NP.

Lewisia x *whiteae* (*L. cotyledon* x *L. leeana*) • Purdy's lewisia • NP.

Montia (in part) → *Claytonia*

Montia chamissoi • Toad-lily, Chamisso's miner's-lettuce • NP.

Montia dichotoma • Dwarf miner's-lettuce • NA.

Montia diffusa • Diffuse or branching miner's-lettuce • NA.

Montia fontana • Water-chickweed, water miner's-lettuce, blinks • NA.

Montia howellii • Howell's miner's-lettuce • NA.

Montia linearis • Linear-leaved miner's-lettuce • NA.

Montia parvifolia • Small-leaved miner's-lettuce • NP.

Portulaca oleracea • Purslane, little hog weed, verdolaga, moss-rose • IA.



Claytonia saxosa



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Claytonia sibirica



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Lewisia cotyledon



Lewisia rediviva

POTAMOGETONACEAE – Pondweed Family

Includes *Zannichelliaceae*

Potamogeton (in part) → *Stuckenia*

- Potamogeton alpinus* • Alpine or reddish pondweed • NP.
- Potamogeton amplifolius* • Large-leaved pondweed • NP.
- Potamogeton crispus* • Curled-leaved pondweed • IP.
- Potamogeton diversifolius* • Rafinesque's pondweed • NP.
- Potamogeton epihydrus* • Ribbon-leaved pondweed • NP.
- Potamogeton foliosus* var. *fibrillosus* • Leafy pondweed • NAP.
- Potamogeton foliosus* var. *foliosus* • Leafy pondweed • NAP.
- Potamogeton gramineus* • Grass-leaved pondweed • NP.
- Potamogeton illinoensis* • Illinois or shining pondweed • NP.
- Potamogeton natans* • Floating pondweed • NP.
- Potamogeton nodosus* • American or long-leaved pondweed • NP.
- Potamogeton pusillus* ssp. *pusillus* • Small or slender pondweed • NP.
- Potamogeton pusillus* ssp. *tenuissimus* • Small or slender pondweed • NP.
- Potamogeton richardsonii* • Richardson's pondweed • NP.
- Potamogeton robbinsii* • Robbin's or fern pondweed • NP.
- Potamogeton zosteriformis* • Eel-grass or flat-stemmed pondweed • NP.
- Stuckenia filiformis* ssp. *alpina* • Thread-leaved pondweed • NP.
- Stuckenia pectinata* • Sago or fennel-leaved pondweed • NP.
- Zannichellia palustris* • Horned-pondweed, grass-wrack • NP.

PRIMULACEAE – Primrose Family

Includes *Myrsinaceae*, as defined in TJM2

- Anagallis arvensis* var. *arvensis* • Scarlet pimpernel, poor man's weather-glass • IA.
- Anagallis minima* • Chaff weed • NA. [TJM2]
- Anagallis monelli* • Blue pimpernel • IP.
- Androsace elongata* ssp. *acuta* • California rock-jasmine • NA.
- Centunculus* → *Anagallis*
- Dodecatheon alpinum* ssp. *alpinum* • Alpine shooting star • NP.
- Dodecatheon alpinum* ssp. *majus* • Shooting star • NP.
- Dodecatheon clevelandii* var. *patulum* • Padre's shooting star • NP.
- Dodecatheon hendersonii* • Henderson's shooting star, California mosquito bills, sailor caps • NP.
- Dodecatheon jeffreyi* ssp. *jeffreyi* • Jeffrey's shooting star, Sierra sailor caps • NP.
- Glaux maritima* • Sea milkwort, black saltwort • NP.
- Lysimachia* (in part) → *Anagallis*, *Glaux*, and *Trientalis*
- Lysimachia nummularia* • Creeping jenny • IP. Known from a single 1967 collection. Extant?
- Lysimachia thrysiflora* • Tufted loosestrife • NP. [TJM2]
- Primula* (in part) → *Dodecatheon*
- Primula suffrutescens* • Sierra primula, Sierra primrose • NP.
- Trientalis europaea* • Arctic star flower • NP.
- Trientalis latifolia* ssp. *arctica* • Broad-leaved or Pacific star flower • NP.



Anagallis arvensis



Coptis laciniata



Dodecatheon hendersonii



Aconitum columbianum



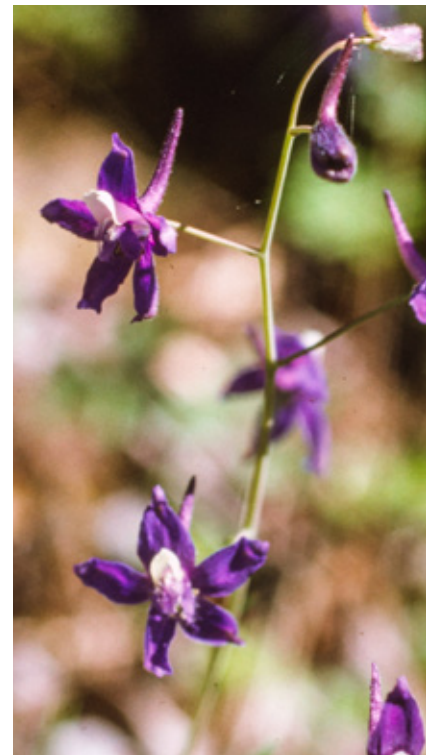
Actaea rubra



Anemone drummondii



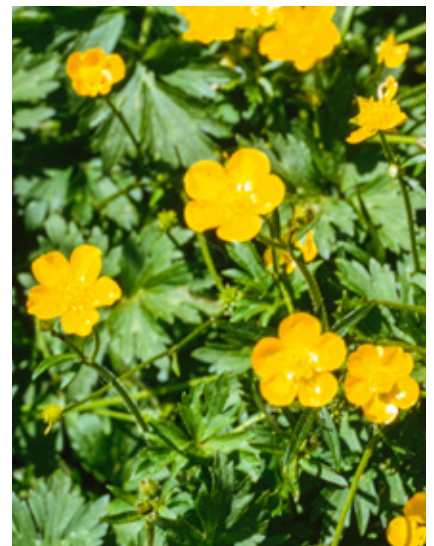
Clematis lasiantha



Delphinium nuttallianum



Ranunculus occidentalis



Ranunculus repens

RANUNCULACEAE – Crowfoot or Buttercup Family

Aconitum columbianum ssp. *columbianum* • Columbia monk's-hood, aconite, wolf's bane • NP.

Aconitum columbianum ssp. *viviparum* • Western monk's-hood • NP.

Actaea rubra ssp. *arguta* • Baneberry • NP.

Anemone deltoidea • Columbia wind flower • NP.

Anemone drummondii var. *drummondii* • Drummond's wind flower • NP.

Anemone grayi • Western wind flower • NP.

Anemone lyallii • Lyall's or western wood anemone • NP.

Anemone multifida var. *multifida* • Pacific anemone • NP.

Anemone occidentalis • Western pasque flower • NP.

Anemone oregana var. *oregana* • Oregon wind flower, wood anemone • NP.

Aquilegia eximia • Van Houtte's or serpentine columbine • NP.

Aquilegia formosa • Crimson columbine • NP.

Caltha leptosepala • Marsh-marigold • NP.

Caltha palustris var. *palustris* • Marsh-buttercup • IP.

Clematis lasiantha • Chaparral clematis, pipe-stem • NV.

Clematis ligusticifolia • Western virgin's-bower, traveler's joy • NV.

Consolida ajacis • Rocket larkspur • IA. [TJM2]

Coptis laciniata • Oregon gold thread • NP.

Delphinium (in part) → *Consolida*

Delphinium andersonii • Anderson's larkspur • NP.

Delphinium antoninum • Anthony Peak larkspur • NP.

Delphinium decorum ssp. *decorum* • Smooth or coast larkspur • NP.

Delphinium decorum ssp. *tracyi* • Tracy's larkspur • NP.

Delphinium depauperatum • Dwarf larkspur • NP.

Delphinium glaucum • Mountain larkspur • NP.

Delphinium gracilentum • Greene's or slender larkspur • NP.

Delphinium hansenii ssp. *hansenii* • Hansen's larkspur • NP.

Delphinium hesperium ssp. *hesperium* • Western larkspur • NP.

Delphinium hesperium ssp. *pallidum* • Pale-flowered western larkspur • NP.

Delphinium nudicaule • Red or orange larkspur • NP.

Delphinium nuttallianum • Nuttall's, dwarf, slim or meadow larkspur • NP.

Delphinium patens ssp. *patens* • Zig-zag larkspur • NP.

Delphinium trolliifolium • Cow poison, poison larkspur • NP.

Delphinium uliginosum • Swamp or bog larkspur • NP.

Delphinium variegatum ssp. *variegatum* • Royal larkspur • NP.

Enemion occidentale • Western rue-anemone • NP.

Enemion stipitatum • Siskiyou rue-anemone • NP.

Isopyrum → *Enemion*

Myosurus apetalus var. *montanus* • Bristly mouse-tail • NA.

Myosurus minimus • Tiny mouse-tail • NA.

Pulsatilla → *Anemone*

Ranunculus alismaefolius var. *alismellus* • Water-plantain buttercup • NP.

Ranunculus alismaefolius var. *alismaefolius* • Water-plantain buttercup • NP.

Ranunculus alismaefolius var. *hartwegii* • Hartweg's buttercup • NP.

Ranunculus aquatilis var. *aquatilis* • Water buttercup • NP.

Ranunculus aquatilis var. *diffusus* • Water buttercup • NP.

Ranunculus arvensis • Corn crowfoot, hunger weed • IAP.

Ranunculus bulbosus • Bulbous buttercup • IP. Last collected 1938. Extant?
Ranunculus californicus var. *californicus* • California buttercup • NP.
Ranunculus californicus var. *cuneatus* • California buttercup • NP.
Ranunculus canus var. *canus* • Sacramento Valley buttercup • NP.
Ranunculus cymbalaria • Alkali buttercup • NP.
Ranunculus eschscholtzii var. *eschscholtzii* • Eschscholtz's buttercup • NP.
Ranunculus eschscholtzii var. *suksdorfii* • Suksdorf's buttercup • NP.
Ranunculus flabellaris • Yellow water buttercup • NP.
Ranunculus flammula var. *flammula* • Creeping buttercup, spearwort • NP.
Ranunculus flammula var. *ovalis* • Creeping buttercup, spearwort • NP.
Ranunculus glaberrimus var. *glaberrimus* • Sagebrush buttercup • NP.
Ranunculus gormanii • Gorman's buttercup • NP.
Ranunculus hebecarpus • Delicate buttercup • NA.
Ranunculus lobbii • Lobb's buttercup • NA.
Ranunculus longirostris • Long-beaked water crowfoot • NP.
Ranunculus muricatus • Spiny-fruited or prickly-fruited buttercup • IAP.
Ranunculus occidentalis var. *dissectus* • Western buttercup • NP.
Ranunculus occidentalis var. *howellii* • Howell's buttercup • NP.
Ranunculus occidentalis var. *occidentalis* • Western buttercup • NP.
Ranunculus occidentalis var. *ultramontanus* • Western buttercup • NP.
Ranunculus orthorhynchus var. *bloomeri* • Bloomer's buttercup • NP.
Ranunculus orthorhynchus var. *orthorhynchus* • Straight-beaked buttercup • NP.
Ranunculus orthorhynchus var. *platyphyllus* • Straight-beaked buttercup • NP.
Ranunculus parviflorus • Small-flowered buttercup • IA.
Ranunculus populago • Cusick's buttercup • NP.
Ranunculus pusillus • Low buttercup, spearwort • NP.
Ranunculus repens • Creeping buttercup, creeping crowfoot • IP.
Ranunculus sardous • Hairy buttercup • IAP.
Ranunculus sceleratus var. *multifidus* • Cursed crowfoot • NA.
Ranunculus uncinatus • Woodland buttercup • NP.
Thalictrum fendleri var. *fendleri* • Fendler's meadow-rue • NP. [TJM2]
Thalictrum fendleri var. *polycarpum* • Fendler's meadow-rue • NP.
Thalictrum occidentale • Western meadow-rue • NP.
Thalictrum sparsiflorum • Few-flowered meadow-rue • NP.
Trautvetteria caroliniensis • False bugbane • NP.

RESEDACEAE – Mignonette Family

Reseda lutea • Yellow mignonette • IP. Last collected in 1957. Extant?
Reseda luteola • Dyer's rocket, weld • IP.

RHAMNACEAE – Buckthorn Family

Ceanothus arcuatus • Arching ceanothus • NS.
Ceanothus confusus • Rincon Ridge ceanothus • NS.
Ceanothus cordulatus • Whitethorn or snow brush • NS.
Ceanothus cuneatus var. *cuneatus* • Buck brush, wedge-leaved ceanothus • NS.
Ceanothus cuneatus var. *ramulosus* • Buck brush, wedge-leaved ceanothus • NS.
Ceanothus divergens • Calistoga ceanothus • NS.
Ceanothus diversifolius • Pine mat, trailing ceanothus • NS.



Ceanothus jepsonii



Frangula californica



Cercocarpus betuloides



Ceanothus lemmonii



Rhamnus alnifolia



Dasiphora fruticosa



Ceanothus prostratus var. *prostratus*



Aruncus dioicus



Heteromeles arbutifolia

Ceanothus foliosus var. *foliosus* • Wavy-leaved ceanothus • NS.
Ceanothus foliosus var. *vineatus* • Vine Hill ceanothus • NS.
Ceanothus gloriosus var. *exaltatus* • Glory bush • NS.
Ceanothus gloriosus var. *gloriosus* • Point Reyes ceanothus, glory mat • NS.
Ceanothus incanus • Coast or Mendocino whitethorn • NS.
Ceanothus integerrimus var. *macrothyrsus* • Deer brush • NS.
Ceanothus jepsonii • Jepson's ceanothus, musk bush • NS.
Ceanothus lemmonii • Lemmon's ceanothus, Plumas bush • NS.
Ceanothus x *lorenzenii* (*C. cordulatus* x *C. velutinus*) • Lorenzen's ceanothus • NS.
Ceanothus oliganthus ssp. *oliganthus* • Hairy ceanothus • NS.
Ceanothus oliganthus ssp. *sorediatus* • Jim brush • NS.
Ceanothus parryi • Lady bush, Parry's ceanothus • NS.
Ceanothus pinetorum • Coville's ceanothus, Kern River buck brush • NS.
Ceanothus prostratus var. *occidentalis* • Prostrate ceanothus • NS. Last collected in 1951. Extant?
Ceanothus prostratus var. *prostratus* • Mahala mat • NS.
Ceanothus pumilus • Siskiyou ceanothus, sea mat • NS.
Ceanothus purpureus • Holly-leaved ceanothus • NS.
Ceanothus sanguineus • Northern buck brush, Oregon-tea tree, red-stemmed ceanothus • NS.
Ceanothus thrysiflorus var. *griseus* • Carmel ceanothus • NS.
Ceanothus thrysiflorus var. *thrysiflorus* • Blue blossom, blue brush • NS.
Ceanothus velutinus • Tobacco brush, sticky-laurel, snow brush • NS.
Frangula californica ssp. *californica* • California coffee berry, coast coffee berry • NS.
Frangula californica ssp. *crassifolia* • Thick-leaved coffee berry • NS.
Frangula californica ssp. *occidentalis* • California coffee berry • NS.
Frangula californica ssp. *tomentella* • Chaparral or hoary coffee berry • NS.
Frangula purshiana ssp. *annonifolia* • Cascara • NS.
Frangula purshiana ssp. *purshiana* • Cascara, cascara sagrada • NS.
Frangula rubra ssp. *modocensis* • Modoc coffee berry • NS. Last collected in 1942. Extant?
Frangula rubra ssp. *obtusissima* • Obtuse coffee berry • NS.
Frangula rubra ssp. *rubra* • Sierra coffee berry • NS.
Rhamnus (in part) → *Frangula*
Rhamnus crocea var. *crocea* • Spiny red berry • NS.
Rhamnus ilicifolia • Holly-leaved buckthorn, holly-leaved coffee berr • NS.

ROSACEAE – Rose Family

Acaena nova-zelandiae • Bididi-biddi • IP.
Adenostoma fasciculatum var. *fasciculatum* • Chamise, greasewood • NS.
Agrimonia gryposepala • Tall hairy or common agrimony • NP.
Alchemilla (in part) → *Aphanes*
Amelanchier alnifolia var. *pumila* • Dwarf service berry • NS.
Amelanchier alnifolia var. *semiintegrifolia* • Western service berry • NS.
Amelanchier utahensis var. *utahensis* • Utah service berry • NS.
Aphanes arvensis • field parsley piert • IA. Last collected in 1935. Extant?
Aphanes macrosepala • Elongate-sepalled piert. NA. Known from a 1952 collection. Extant?
Aphanes occidentalis • Lady's mantle, dew cup • NA.
Argentina → *Potentilla*
Aruncus dioicus var. *acuminatus* • Goat's-beard, western bride's feather • NP.
Cercocarpus betuloides var. *betuloides* • California or birch-leaved mountain-mahogany • NS.

Cercocarpus ledifolius var. *intermontanus* • Curl-leaved mountain-mahogany • NS.

Cercocarpus ledifolius var. *intricatus* • Little-leaved or dwarf mountain-mahogany • NS.

Cercocarpus ledifolius var. *ledifolius* • Curl-leaved mountain-mahogany • NS.

Chaenomeles (in part) → *Pseudocydonia*

Chamaebatiaria millefolium • Desert sweet. NS. [TJM2]

Comarum palustre • Marsh cinquefoil, purple marshlocks, marsh cow berry • NP.

Cotoneaster franchetii • Franchet's or orange cotoneaster • IS. EO.

Cotoneaster horizontalis • Rock spray, wall or herringbone cotoneaster • IS. EO.

Cotoneaster lacteus • Milk-flowered cotoneaster • IS. EO.

Cotoneaster pannosus • Silver-leaved cotoneaster • IS.

Cotoneaster simonsii • Simon's or Himalayan cotoneaster • IS.

Crataegus douglasii • Douglas' hawthorn, western black haw • NST.

Crataegus gaylussacia • Huckleberry, black or Suksdorf's hawthorn • NST.

Crataegus monogyna • English hawthorn • IS.

Cydonia (in part) → *Pseudocydonia*

Dasiphora fruticosa ssp. *floribunda* • Shrubby cinquefoil • NS.

Drymocallis glandulosa var. *glandulosa* • Douglas' wood beauty • NP.

Drymocallis glandulosa var. *reflexa* • Greene's wood beauty • NP.

Drymocallis glandulosa var. *wrangelliana* • coast wood beauty • NP.

Drymocallis hansenii • Hansen's wood beauty • NP.

Drymocallis lactea var. *austiniae* • Austin's woody beauty • NP.

Drymocallis lactea var. *lactea* • Sierran wood beauty • NP.

Drymocallis pseudorupestris var. *saxicola* • Cliff woody beauty • NP.

Drymocallis rhomboidea • Siskiyou or globose wood beauty • NP.

Fragaria chiloensis • Beach strawberry, Chilean strawberry • NP.

Fragaria vesca • Wood strawberry • NP.

Fragaria virginiana • Mountain strawberry • NP.

Geum aleppicum • Aleppo avens • NP.

Geum macrophyllum var. *macrophyllum* • Large-leaved avens • NP.

Geum macrophyllum var. *perincisum* • Large-leaved avens • NP.

Geum triflorum var. *ciliatum* • Prairie smoke, purple avens • NP. Last collected in 1939. Extant?

Heteromeles arbutifolia • Toyon, Christmas berry, Christmas-holly • NST.

Holodiscus discolor var. *discolor* • Ocean spray, cream bush • NS.

Holodiscus microphyllus var. *glabrescens* • Ocean spray, cream bush • NS.

Holodiscus microphyllus var. *microphyllus* • Ocean spray, cream bush • NS.

Holodiscus microphyllus var. *sericeus* • Ocean spray, cream bush • NS.

Horkelia bolanderi • Bolander's horkelia, border honey-dew • EP.



Fragaria chiloensis



Holodiscus microphyllus



Horkelia tridentata

Horkelia californica var. *californica* • California horkelia, California honey-dew • NP.
Horkelia californica var. *elata* • Tall horkelia • NP.
Horkelia congesta var. *congesta* • Shaggy horkelia • NP.
Horkelia congesta var. *nemorosa* • Josephine horkelia • NP. Known from a single 1935 collection.
 Extant?
Horkelia daucifolia var. *daucifolia* • Carrot-leaved horkelia, yellow honey-dew • NP.
Horkelia daucifolia var. *indicta* • Jepson's horkelia • NP.
Horkelia fusca var. *parviflora* • Dusky horkelia • NP.
Horkelia hendersonii • Henderson's horkelia • NP.
Horkelia howellii • Howell's horkelia • NP.
Horkelia marinensis • Point Reyes horkelia • NP.
Horkelia sericata • Howell's horkelia, silky honey-dew • NP.
Horkelia tenuiloba • Thin-lobed horkelia • NP.
Horkelia tridentata var. *flavescens* • Three-toothed horkelia • NP.
Horkelia tridentata var. *tridentata* • Three-toothed horkelia • NP.
Ivesia gordonii var. *alpicola* • Gordon's ivesia, alpine ivesia • NP.
Ivesia gordonii var. *ursinorum* • Gordon's ivesia • NP.
Ivesia longibracteata • Castle Crags ivesia • EP.
Ivesia pickeringii • Pickering's or silk ivesia • EP.
Luetkea pectinata • Partridge's-foot • NS.
Malus fusca • Oregon crab apple • NST.
Malus pumila • Cultivated or sweet apple • IT.
Malus sylvestris • European crab apple. IST. EFP. Known from a 1950 collection in Humboldt Co.
Neviusia cliftonii • Shasta snow-wreath • ES.
Oemleria cerasiformis • Oso berry, Indian-plum • NS.
Osmaronia → *Oemleria*
Pentaphylloides → *Dasiphora*
Photinia (in part) → *Heteromeles*
Physocarpus capitatus • Pacific or western nine-bark • NS.
Potentilla (in part) → *Comarum*, *Dasiphora*, and *Drymocallis*
Potentilla anglica • English cinquefoil • IP. Last: 1936. Extant?
Potentilla anserina ssp. *anserina* • Common silver weed • NP.
Potentilla anserina ssp. *pacifica* • Pacific silver weed • NP.
Potentilla breweri • Brewer's cinquefoil • NP.
Potentilla bruceae • Bruce's cinquefoil. NP.
Potentilla cristae • Crested cinquefoil • EP.
Potentilla drummondii • Drummond's or mountain cinquefoil • NP.
Potentilla flabellifolia • Mount Rainier cinquefoil, alpine fan-foil • NP.
Potentilla gracilis var. *fastigiatus* • Slender cinquefoil • NP.
Potentilla gracilis var. *gracilis* • Slender or silver cinquefoil • NP.
Potentilla millefolia var. *klamathensis* • Many-leaved, cut-leaved, or feather cinquefoil • NP.
Potentilla millefolia var. *millefolia* • Many-leaved, cut-leaved, or feather cinquefoil • NP.
Potentilla rivalis • Brook cinquefoil, river cinquefoil • NAP.
Poteridium → *Sanguisorba*



Ivesia pickeringii



Oemleria cerasiformis

Michael Kaufmann



Physocarpus capitatus

Poterium → *Sanguisorba*

Prunus avium • Sweet cherry • IT. EO.

Prunus cerasifera • Cherry plum • IT. EO. Last collected in 1955. Extant?

Prunus dulcis • Almond • IT • IT. EFP.

Prunus emarginata var. *emarginata* • Bitter cherry • NST.

Prunus emarginata var. *mollis* • Bitter cherry • NST.

Prunus laurocerasus • English-laurel • IS. EO.

Prunus persica • Peach • IT. Escaped fruit tree.

Prunus subcordata var. *subcordata* • Klamath plum, Sierra plum • NS.

Prunus virginiana var. *demissa* • Western choke cherry • NS.

Pseudocdonia sinensis • False quince, Chinese-quince • IT. EO.

Purshia tridentata var. *tridentata* • Antelope bush, bitter brush • NS.

Pyracantha angustifolia • Slender firethorn, woolly firethorn • IS. EO.

Pyracantha fortuneana • Chinese fire thorn • IS. EO.

Pyracantha koidzumii • Taiwan firethorn • IS. EO.

Pyrus communis • Pear, common pear • IT. Escaped fruit tree.

Rosa bridgesii • Pygmy or Sierran dwarf ground rose • NS.

Rosa californica • California rose, California wild rose • NS.

Rosa canina • Dog rose • IS.

Rosa gymnocarpa var. *gymnocarpa* • Wood rose • NS.

Rosa gymnocarpa var. *serpentina* • Gasquet rose • NS.

Rosa multiflora • Multiflora rose • IS. [TJM2]

Rosa nutkana ssp. *macdougallii* • Macdougall's rose • NS.

Rosa nutkana ssp. *nutkana* • Nootka rose • NS.

Rosa pinetorum • Pine rose • NS.

Rosa pisocarpa ssp. *ahartii* • Ahart's cluster rose • NS.

Rosa pisocarpa ssp. *pisocarpa* • Mortar or cluster rose • NS.

Rosa rubiginosa • Eglantine, sweet-brier • IS.

Rosa spithamea • Coastal ground rose • NS.

Rosa woodsii ssp. *ultramontana* • Interior or montane rose • NS.

Rubus armeniacus • Himalaya berry, Himalayan blackberry • IS.

Rubus glaucifolius • Wax-leaved raspberry • NS.

Rubus laciniatus • Cut-leaved, common or evergreen bramble, cut-leaved blackberry • IS.

Rubus lasiococcus • Dwarf bramble, rough-fruited raspberry • NP.

Rubus leucodermis • Western or white-stemmed raspberry • NS.

Rubus nivalis • Snow dwarf bramble • NP.

Rubus parviflorus var. *parviflorus* • Western thimble berry • NS.

Rubus parviflorus var. *velutinus* • Western thimble berry • NS.

Rubus pensilvanicus • Pennsylvania blackberry • IS.

Rubus praecox • Precocious blackberry • IS. Last collected in Humboldt Co. in 1935.

Rubus spectabilis var. *spectabilis* • Salmon berry • NS.



Michael Kauffmann

Prunus emarginata



Rosa gymnocarpa



Rubus ursinus



Spiraea splendens

- Rubus ulmifolius* var. *anoplothyrsus* • Elm-leaved blackberry
• IS. [TJM2]
- Rubus ulmifolius* var. *ulmifolius* • Elm-leaved blackberry • IS.
[TJM2]
- Rubus ursinus* ssp. *macropetalus* • California or Pacific black-
berry • NV.
- Rubus ursinus* ssp. *ursinus* • California or Pacific blackberry
• NV.
- Sanguisorba annua* • Western burnet • NAP. Last: 1910.
Extant?
- Sanguisorba minor* ssp. *balearica* • Garden burnet • IP.
- Sanguisorba occidentalis* • Western great burnet • NAP.
- Sibbaldia procumbens* • Creeping sibbaldia • NP.
- Sorbaria kirilowii* • Giant false spirea • IS. EO.
- Sorbus californica* • California mountain-ash • NS.
- Sorbus scopulina* • Western mountain-ash • NS.
- Sorbus sitchensis* var. *grayi* • Dwarf or western mountain-ash,
rowan • NS.
- Sorbus sitchensis* var. *sitchensis* • Sitka mountain-ash • NS.
- Spiraea douglasii* var. *douglasii* • Douglas' spirea • NS.
- Spiraea splendens* var. *splendens* • Rose-colored meadow-
sweet, mountain spirea • NS.

RUBIACEAE – Madder Family

- Cephalanthus occidentalis* var. *californicus* • Button bush,
button-willow • NS.
- Crucianella angustifolia* • Crosswort • IA.
- Galium ambiguum* ssp. *ambiguum* • Yolla Bolly bedstraw • NP.
- Galium ambiguum* ssp. *siskiyouense* • Siskiyou bedstraw • EP.
- Galium andrewsii* ssp. *andrewsii* • Phlox-leaved bedstraw • NP.
- Galium aparine* • Bedstraw, goose-grass, cleavers • NA.
- Galium bifolium* • Low mountain bedstraw • NA.
- Galium bolanderi* • Bolander's bedstraw • NP.
- Galium boreale* • Northern bedstraw • NP.
- Galium californicum* ssp. *californicum* • California bedstraw
• NP.
- Galium divaricatum* • Lamarck's bedstraw • IA.
- Galium glabrescens* ssp. *glabrescens* • Castle Lake bedstraw • NP.
- Galium grayanum* var. *grayanum* • Gray's bedstraw • NP.
- Galium grayanum* var. *nanum* • Gray's bedstraw • NP.
- Galium mexicanum* var. *asperulum* • Mexican bedstraw • NV.
- Galium mollugo* • Wild madder, smooth bedstraw • IP.
- Galium murale* • tiny bedstraw • IA. [TJM2]
- Galium muricatum* • Humboldt bedstraw • NP.
- Galium oregonum* • Oregon bedstraw • NP.
- Galium parisiense* • Wall bedstraw • IA.
- Galium porrigens* var. *porrigens* • Climbing or graceful bedstraw • NSV.
- Galium porrigens* var. *tenuis* • Climbing or graceful bedstraw • NP vine.
- Galium serpenticum* ssp. *scotticum* • Scott Mountain bedstraw • EP.
- Galium sparsiflorum* ssp. *glabrius* • Sequoia bedstraw • NP-shrub.



Cephalanthus occidentalis



Galium ambiguum ssp. *ambiguum*



Galium boreale

Galium tricornutum • Rough-fruited corn bedstraw • NA.
Galium trifidum ssp. *columbianum* • Trifid bedstraw • NAP.
Galium trifidum ssp. *subbiflorum* • Trifid bedstraw • NV.
Galium triflorum • Fragrant or sweet-scented bedstraw • NP.
Kelloggia galioides • Milky kelloggia • NP.
Sherardia arvensis • Field madder, blue field madder • IA.

RUPPIACEAE – Ditch-Grass Family

Ruppia cirrhosa • Spiral ditch-grass • NP.
Ruppia maritima • Ditch-grass, widgeon-grass • NP.

RUTACEAE – Rue Family

Ptelea crenulata • California hop tree, wafer-ash • NS.

SALICACEAE – Willow Family

Populus alba • White or silver poplar • IT.
Populus fremontii ssp. *fremontii* • Alamo, Fremont's cottonwood • NT.
Populus x parryi (*P. trichocarpa* x *P. fremontii*) • Parry's cottonwood • NT.
Populus tremuloides • Quaking aspen • NT.
Populus trichocarpa • Black cottonwood • NT.
Salix alba • White willow • IT.
Salix bebbiana • Bebb's willow • NST. Known from a single undated historical collection. Extant?
Salix boothii • Booth's willow • NS.
Salix breweri • Brewer's willow • NS.
Salix delnortensis • Del Norte willow • NS.
Salix eastwoodiae • Sierra or Eastwood's willow • NS.
Salix exigua var. *hindsiana* • Narrow-leaved, sandbar, or valley willow • NS.
Salix gooddingii • Goodding's black willow • NT.
Salix hookeriana • Coastal, dune, or Hooker's willow • NS.
Salix jepsonii • Jepson's willow • NS.
Salix laevigata • Red willow • NT.
Salix lasiandra var. *caudata* • Tail- or green-leaved willow • NST.
Salix lasiandra var. *lasiandra* • Pacific, yellow, or shining willow • NST.
Salix lasiolepis • Arroyo willow • NS.
Salix lemmonii • Lemmon's willow • NS.
Salix ligulifolia • Strap-leaved willow • NS. Last collected in 1936. Extant?
Salix melanopsis • Dusky or long-leaved willow • NS.
Salix prolixa • Mackenzie's willow • NS. Known from a single 1914 collection. Extant?
Salix purpurea • Purple osier or basket willow • IST. Last collected in 1920. Extant?
Salix x rubens (*S. alba* x *S. fragilis*) • Crack willow • IT.
Salix scouleriana • Scouler's or Nuttall's willow • NT.
Salix sitchensis • Sitka or velvet willow • NS.
Salix tracyi • Tracy's willow • NST.



Salix delnortensis



Comandra umbellata

SANTALACEAE – Sandalwood Family

Includes *Comandraceae* and excludes *Viscaceae*

Arceuthobium → *Viscaceae*

Comandra umbellata ssp. *californica* • Bastard toadflax • NP.

Phoradendron → *Viscaceae*

SARRACENIACEAE – Pitcher Plant Family

Darlingtonia californica • California pitcher plant, cobra-lily, darlingtonia • NP.

Sarracenia purpurea • Purple pitcher plant • N(?)P. EO.
Planted? [TJM2]

SAURURACEAE – Lizard’s-Tail Family

Anemopsis californica • Yerba mansa • NP.

SAXIFRAGACEAE – Saxifrage Family

Excludes *Grossulariaceae*, *Hydrangeaceae*, and *Parnassiaceae*

Bensoniella oregona • Oregon bensoniella • NP.

Boykinia major • Mountain boykinia • NP.

Boykinia occidentalis • Coast boykinia, brook foam • NP.

Cascadia → *Saxifraga*

Chrysosplenium glechomaefolium • Pacific carpet weed, golden-saxifrage • NP.

Darmera peltata • Indian-rhubarb, umbrella plant, shield leaf • NP.

Hemieva → *Suksdorfia*

Heuchera chlorantha • Green-flowered alum root • NP. Known from a single 1992 collection.

Heuchera cylindrica • Poker alum root • NP. Known from a single 1975 collection.

Heuchera merriamii • Merriam’s alum root • NP.

Heuchera micrantha • Small-flowered or crevice alum root • NP.

Heuchera pilosissima • Seaside or coast alum root • NP.

Heuchera rubescens • Pink alum root, jack-of-the-rocks • NP.

Lithophragma affine ssp. *affine* • Woodland star • NP.

Lithophragma bolanderi • Bolander’s fringe-cup • NP.

Lithophragma campanulatum • Woodland star • NP.

Lithophragma glabrum • Smooth fringe-cup • NP.

Lithophragma heterophyllum • Hillside woodland star • NP.

Lithophragma parviflorum var. *parviflorum* • Prairie woodland star, star flower • NP.

Lithophragma parviflorum var. *trifoliatum* • Prairie woodland star • NP.

Lithophragma tenellum • Slender woodland star • NP.

Micranthes → *Saxifraga*

Mitella breweri • Brewer’s or feathery mitrewort • NP.

Mitella caulescens • Leafy-stemmed mitrewort • NP.

Mitella diversifolia • Angle-stemmed mitrewort • NP.

Mitella ovalis • Coastal mitrewort • NP.



Darlingtonia californica



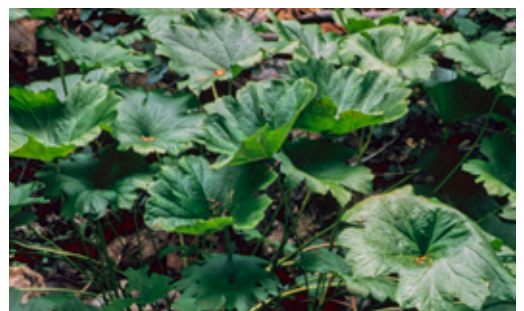
Anemopsis californica



Bensoniella oregona



Mitella diversifolia



Darmera peltata

Mitella pentandra • Alpine or five-pointed mitrewort, Bishop's cap • NP.

Mitella trifida var. *trifida* • Three-toothed mitrewort • NP.

Mitellastra → *Mitella*

Ozomelis → *Mitella*

Parnassia → *Parnassiaceae*

Pectiantia ` *Mitella*

Peltiphyllum → *Darmera*

Philadelphus → *Hydrangeaceae*

Ribes → *Grossulariaceae*

Saxifraga (in part) → *Saxifragopsis*

Saxifraga aprica • Sierra saxifrage • NP.

Saxifraga bryophora var. *bryophora* • Bud saxifrage • NP.

Saxifraga caespitosa ssp. *caespitosa* • Tufted alpine saxifrage • NP.

Saxifraga californica • California saxifrage • NP.

Saxifraga ferruginea var. *ferruginea* • Alaska or rusty saxifrage • NP.

Saxifraga howellii • Howell's saxifrage • NP.

Saxifraga integrifolia • Hooker's or northwest saxifrage • NP.

Saxifraga marshallii • Marshall's or Hoopa saxifrage • NP.

Saxifraga mertensiana • Wood or Merten's saxifrage • NP.

Saxifraga nidifica var. *claytoniifolia* • Fleshy-leaved or brittle-leaved saxifrage • NP.

Saxifraga nidifica var. *nidifica* • Peak or nesting saxifrage • NP.

Saxifraga nuttallii • Nuttall's saxifrage • NP.

Saxifraga odontoloma • Stream bank saxifrage • NP.

Saxifraga oregana • Bog, Oregon, or marsh saxifrage • NP.

Saxifraga tolmiei • Alpine saxifrage • NP.

Saxifragopsis fragarioides • Joint-leaved or strawberry saxifrage • NP.

Suksdorfia ranunculifolia • Buttercup-leaved mock brook foam • NP.

Tellima grandiflora • Fringe cups • NP.

Tiarella trifoliata var. *trifoliata* • Lace flower, three-leaved coolwort, foam flower • NP.

Tiarella trifoliata var. *unifoliata* • Lace flower, western coolwort, sugar-scoop • NP.

Tolmiea menziesii • Youth-on-age, mother-of-thousands, piggyback or pig-a-back plant • NP.

Whipplea → *Hydrangeaceae*



Saxifraga mertensiana



Tolmiea menziesii

SCROPHULARIACEAE – Snapdragon or Scroph Family

We accept an expanded concept of the family. It is a part of a complex that involves a number of families that are notoriously difficult to separate. We depart from the treatment in TJM2 in not transferring any taxa to *Plantaginaceae*, and in recognizing *Buddlejaceae*, *Callitrichaceae*, and *Hippuridaceae* as separate families. We follow Takhtajan and others in expanding the traditional *Scrophulariaceae* to include *Orobanchaceae* and *Phrymaceae*.

Antirrhinum cornutum • Spurred snapdragon • NA.

Antirrhinum kelloggii • Kellogg's snapdragon • NA. [TJM2]

Antirrhinum subcordatum • Dimorphic snapdragon • NA.

Antirrhinum vexillocalyculatum ssp. *breweri* • Brewer's snapdragon • NA.

Antirrhinum vexillocalyculatum ssp. *vexillocalyculatum* • Wiry snapdragon • NA.

Antirrhinum virga • Twig-like snapdragon • NP.

Aphyllon (in part) → *Orobanche*, except for the following where a combination is unavailable.

Aphyllon epigalium ssp. *epigalium* • NP.

Bellardia (in part) → *Parentucellia*

Bellardia trixago • *Bellardia* • IP.

Boschniakia hookeri • Vancouver ground cone, small ground cone
• NP.

Boschniakia strobilacea • California ground cone • NP.

Buddleja → *Buddlejaceae*

Castilleja affinis ssp. *affinis* • Lay and Collie's Indian paintbrush • NP.

Castilleja affinis ssp. *litoralis* • Coast Indian paintbrush • NP.

Castilleja ambigua ssp. *ambigua* • Paintbrush owl's-clover • NA.

Castilleja ambigua ssp. *humboldtiensis* • Humboldt Bay owl's-clover
• NA.

Castilleja applegatei var. *pinetorum* • Wavy-leaved Indian paintbrush
• NP.

Castilleja arachnoidea • Cobwebby Indian paintbrush • NP.

Castilleja attenuata • Narrow-leaved owl's-clover, valley tassels • NA.

Castilleja brevilobata • Short-lobed Indian paintbrush • NP.

Castilleja campestris ssp. *campestris* • Vernal pools Indian paintbrush • NA.

Castilleja densiflora ssp. *densiflora* • Dense-flowered Indian paintbrush • NA.

Castilleja elata • Great, giant red Indian, or Siskiyou Indian paintbrush
• NP.

Castilleja exserta ssp. *exserta* • Common owl's-clover • NA.

Castilleja exserta ssp. *latifolia* • Purple owl's-clover • NA.

Castilleja foliolosa • Woolly Indian paintbrush • NP.

Castilleja hispida ssp. *brevilobata* • Short-lobed Indian paintbrush
• NP.

Castilleja lacera • Cut-leaved Indian paintbrush • NA.

Castilleja martinii • Wavy-leaved Indian paintbrush • NP.

Castilleja mendocinensis • Mendocino coast Indian paintbrush • EP.

Castilleja miniata ssp. *elata* • Siskiyou Indian paintbrush • NP.

Castilleja miniata ssp. *miniata* • Great or giant red Indian paintbrush
• NP.

Castilleja minor ssp. *spiralis* • Large-flowered Indian paintbrush
• NA.

Castilleja pilosa • Parrot-headed Indian paintbrush • NP.

Castilleja pruinosa • Frosted Indian paintbrush • Native perennial.

Castilleja rubicundula ssp. *lithospermoides* • Cream sacs • NA.

Castilleja rubicundula ssp. *rubicundula* • Cream sacs • NA.

Castilleja schizotricha • Split-hair Indian paintbrush • NP.

Castilleja subinclusa ssp. *franciscana* • Long-leaved Indian paintbrush
• NP.

Castilleja tenuis • Hairy owl's-clover • NA.

Castilleja wightii ssp. *wightii* • Wight's Indian paintbrush • NP.

Chloropyron → *Cordylanthus*

Collinsia bartsiiifolia var. *bartsiiifolia* • White Chinese houses • NA.

Collinsia corymbosa • Round-headed Chinese houses • NA.



Castilleja ambigua



Castilleja exserta



Collinsia greenei

Collinsia grandiflora • Large-flowered blue-eyed Mary • NA.
Collinsia greenei • Greene's blue-eyed Mary, mountain blue-eyed Mary • NA.
Collinsia heterophylla var. *heterophylla* • Purple-and-white-Chinese-houses • NA. [TJM2]
Collinsia linearis • Chinese houses • NA.
Collinsia parviflora • Small-flowered blue-eyed Mary • NA.
Collinsia rattanii ssp. *rattanii* • Rattan's blue-eyed Mary • NA.
Collinsia sparsiflora var. *arvensis* • Spinster's blue-eyed Mary • NA.
Collinsia sparsiflora var. *bruceae* • Spinster's blue-eyed Mary • NA. Last collected in 1962. Extant?
Collinsia sparsiflora var. *collina* • Spinster's blue-eyed Mary • NA.
Collinsia sparsiflora var. *sparsiflora* • Spinster's blue-eyed Mary • NA.
Collinsia tinctoria • Tincture plant • NA.
Collinsia torreyi var. *latifolia* • Torrey's blue-eyed Mary • NA.
Collinsia torreyi var. *torreyi* • Torrey's blue-eyed Mary • NA.
Collinsia torreyi var. *wrightii* • Wright's blue-eyed Mary • NA.
Cordylanthus maritimus ssp. *palustris* • Point Reyes bird's-beak • NA.
Cordylanthus pilosus ssp. *hansenii* • Hairy bird's-beak • NA.
Cordylanthus pilosus ssp. *pilosus* • Hairy bird's-beak • NA.
Cordylanthus pringlei • Pringle's bird's-beak • NA.
Cordylanthus tenuis ssp. *brunneus* • Serpentine bird's-beak • NA.
Cordylanthus tenuis ssp. *pallescens* • Pallid bird's-beak • EA.
Cordylanthus tenuis ssp. *tenuis* • Slender bird's-beak • NA.
Cordylanthus tenuis ssp. *viscidus* • Sticky bird's-beak • NA.
Cymbalaria muralis • Kenilworth-ivy • IP. EO.
Digitalis purpurea • Foxglove, purple foxglove • IP. EO.
Erythranthe (in part) → *Mimulus* (except where appropriate combinations have not been published)
Erythranthe taylorii • Taylor's monkey flower • EA.
Erythranthe trinitiensis • Trinity Alps monkey flower • EA.
Diplacus → *Mimulus*
Gratiola ebracteata • Bractless hedge-hyssop • NA.
Gratiola heterosepala • Boggs Lake hedge-hyssop • NA.
Gratiola neglecta • Clammy hedge-hyssop • NA.
Hebe speciosa • New Zealand or showy hebe • IS. EO.
Keckiella breviflora var. *glabrisepala* • Bush-penstemon, gaping-penstemon • NS.
Keckiella corymbosa • Beard tongue, bush-penstemon, red keckiella • NS.
Keckiella lemmonii • Bush-penstemon, bush beard tongue • NS.
Kickxia elatine • Sharp-leaved fluellin • IA.
Kickxia spuria • Round-leaved cancerwort • IA.
Kopsiopsis → *Boschniakia*
Limosella acaulis • Mudwort • NA. [TJM2]
Linaria (in part) → *Nuttallanthus*
Linaria dalmatica • Dalmatian toadflax • NP. EO.
Linaria vulgaris • Butter-and-eggs, yellow or common toadflax • IP.
Lindernia dubia • Short-stalked lindernia, false pimpernel • NA.



Digitalis purpurea



Linaria dalmatica



Mimulus aurantiacus

Mimetanthe → *Mimulus*

- Mimulus alsinoides* • Chickweed monkey flower • NA.
- Mimulus androsaceus* • Androsace monkey flower • NA.
- Mimulus angustatus* • Narrow-leaved pansy monkey flower • NA.
- Mimulus aurantiacus* var. *aurantiacus* • Orange or northern bush monkey flower • NS.
- Mimulus bicolor* • Yellow-and-white monkey flower • NA.
- Mimulus bolanderi* • Bolander's monkey flower • NA.
- Mimulus breweri* • Brewer's monkey flower • NA.
- Mimulus cardinalis* • Scarlet monkey flower • NP.
- Mimulus congdonii* • Congdon's monkey flower • NA.
- Mimulus dentatus* • Tooth-leaved monkey flower • NP.
- Mimulus douglasii* • Purple mouse-ears • NA.
- Mimulus floribundus* • Floriferous mouse-ears • NA.
- Mimulus guttatus* • Seep monkey flower • NAP.
- Mimulus kelloggii* • Kellogg's monkey flower • NA.
- Mimulus latidens* • Broad-toothed monkey flower • NA.
- Mimulus layneae* • Layne's or serpentine monkey flower • NA.
- Mimulus lewisii* • Great purple monkey flower • NP.
- Mimulus moschatus* • Musk monkey flower • NP.
- Mimulus nanus* ssp. *jepsonii* • Jepson's monkey flower • NA. [TJM2]
- Mimulus nanus* ssp. *nanus* • Dwarf purple monkey flower • NA.
- Mimulus nudatus* • Bare monkey flower • NA.
- Mimulus pilosus* • Downy monkey flower • NA.
- Mimulus primuloides* var. *linearifolius* • Linear-leaved monkey flower • EP.
- Mimulus primuloides* var. *primuloides* • Primrose monkey flower • NP.
- Mimulus pulsiferae* • Candelabrum monkey flower • NA.
- Mimulus rattanii* • Rattan's monkey flower • NA.
- Mimulus sookensis* • Shy monkey flower • NA.
- Mimulus tilingii* • Larger mountain monkey flower • NP.
- Mimulus tricolor* • Tri-colored monkey flower • NA.

Myoporum → *Myoporaceae*

Neogaerrhinum → *Antirrhinum*

- Nothochelone nemorosa* • Woodland beardtongue • NS.
- Nuttallanthus canadensis* • Old-field or blue toadflax • NAP.
- Nuttallanthus texanus* • Texas toadflax • NAP.
- Orobanche bulbosa* • Chaparral broomrape • NP.
- Orobanche californica* ssp. *californica* • California broomrape • NP.
- Orobanche californica* ssp. *grayana* • California broomrape • NP.
- Orobanche californica* ssp. *jepsonii* • Jepson's broomrape • NP.
- Orobanche fasciculata* • Clustered broomrape • NP.
- Orobanche pinorum* • Pine broomrape • NP.
- Orobanche uniflora* • Naked broomrape • NP.
- Orobanche valida* ssp. *howellii* • Howell's broomrape • NP.
- Orobanche vallicola* • Hillside broomrape • NP. Last: 1896. Extant?
- Orthocarpus* (in part) → *Castilleja* and *Triphysaria*
- Orthocarpus bracteosus* • Rosy owl's-clover • NA.
- Orthocarpus cuspidatus* ssp. *copelandii* • Copeland's owl's-clover • NA.
- Orthocarpus cuspidatus* ssp. *cuspidatus* • Siskiyou Mountains owl's-clover • NA.

Orthocarpus imbricatus • Mountain owl's-clover • NA.
Orthocarpus pachystachyus • Shasta owl's-clover • EA.
Parentucellia viscosa • Yellow gland weed, yellow or sticky-bartsia • IA.
Pedicularis attollens • Little elephant's-head • NP.
Pedicularis aurantiaca • Indian warrior • NP.
Pedicularis bracteosa var. *flavida* • Cascade Mountains lousewort • NP.
Pedicularis contorta • Curved-beak lousewort • NP.
Pedicularis densiflora ssp. *densiflora* • Indian warrior • NP.
Pedicularis groenlandica • Elephant's head • NP.
Pedicularis howellii • Howell's lousewort • NP.
Pedicularis racemosa • Leafy or sickle-topped lousewort • NP.
Pedicularis semibarbata var. *semibarbata* • Pine woods or dwarf lousewort • NP.
Penstemon (in part) → *Keckiella* and *Nothochelone*
Penstemon anguineus • Siskiyou penstemon • NP.
Penstemon azureus ssp. *angustissimus* • Azure or skyblue penstemon • NP.
Penstemon azureus ssp. *azureus* • Azure penstemon • NP.
Penstemon centranthifolius • Scarlet bugler • NPSS. Last collected in 1950. Extant?
Penstemon cinereus • Gray beardtongue • NP.
Penstemon cinicola • Ash beardtongue • NP.
Penstemon davidsonii var. *davidsonii* • Davidson's penstemon, timberline beardtongue • NP.
Penstemon deustus var. *deustus* • Hot rock penstemon • NP.
Penstemon deustus var. *suffrutescens* • Hot rock or scabland penstemon • NP.
Penstemon filiformis • Thread-leaved penstemon • EP.
Penstemon heterophyllus ssp. *heterophyllus* • Foothill or chaparral penstemon • NP.
Penstemon heterophyllus ssp. *purdyi* • Purdy's penstemon • NP.
Penstemon humilis ssp. *humilis* • Low beardtongue • NP.
Penstemon laetus ssp. *leptosepalus* • Western gray beardtongue • NP.
Penstemon laetus ssp. *sagittatus* • Mountain blue penstemon • NP.
Penstemon newberryi var. *berryi* • Berry's penstemon, pride-of-the-mountains • NP.
Penstemon newberryi var. *newberryi* • Mountain pride • NP.
Penstemon newberryi var. *sonomensis* • Sonoma beardtongue, Sonoma penstemon • NP.
Penstemon parvulus • Small azure penstemon • NP.
Penstemon procerus var. *brachyanthus* • Small-flowered or pincushion penstemon • NP.
Penstemon procerus var. *formosus* • Small-flowered or pincushion penstemon • NP.
Penstemon purpusii • Snow Mountain or Purpus' penstemon • EP.



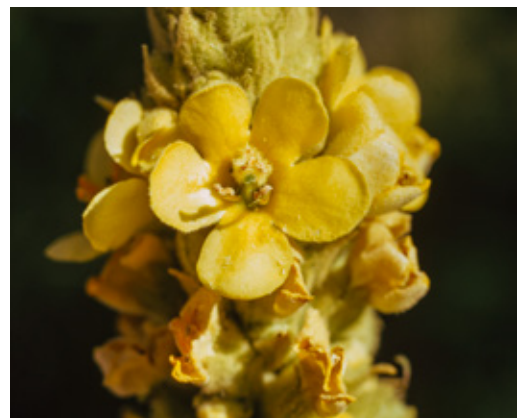
Pedicularis densiflora



Penstemon davidsonii



Penstemon newberryi



Verbascum thapsus

Penstemon rattanii ssp. *rattanii* • Rattan's penstemon • NP.
Penstemon roezlii • Juniper-scrub beardtongue • NP.
Penstemon rupicola • Rock penstemon • NP.
Penstemon rydbergii var. *oreocharis* • Rydberg's penstemon • NP.
Penstemon speciosus • Showy penstemon • NP.
Penstemon tracyi • Tracy's penstemon • EP.
Sairocarpus → *Antirrhinum*
Scrophularia californica • Bee plant, California figwort • NP.
Scrophularia lanceolata • Hare figwort • NP.
Scrophularia oregana • Oregon figwort • NP. Last: 1940. Extant?
Synthyris cordata • Serpentine snow queen • NP.
Synthyris reniformis • Snow queen • NP.
Tonella tenella • Small-flowered tonella • NA.
Triphysaria eriantha ssp. *eriantha* • Butter-and-eggs, Johnny tuck • NA.
Triphysaria eriantha ssp. *rosea* • Butter-and-eggs, Johnny tuck • NA.
Triphysaria pusilla • Dwarf owl's-clover • NA.
Triphysaria versicolor ssp. *faucibarbata* • Smooth owl's-clover • NA.
Triphysaria versicolor ssp. *versicolor* • Owl's-clover • NA.
Verbascum blattaria • Moth mullein • IP.
Verbascum thapsus • Common, flannel, or woolly mullein • IP.
Verbascum virgatum • Virgate or wand mullein • IP.
Veronica (in part) → *Synthyris*
Veronica americana • American brooklime • NP.
Veronica anagallis-aquatica • Great water speedwell • IP.
Veronica arvensis • Corn speedwell • IA.
Veronica californica • Snow queen • NP.
Veronica catenata • Chain speedwell • IP.
Veronica copelandii • Copeland's speedwell • EP.
Veronica filiformis • Slender speedwell • IP. Last collected in 1966. Extant?
Veronica peregrina • Neckweed • NA.
Veronica persica • Persian, bird's-eye or large field speedwell • IA.
Veronica scutellata • Marsh, skullcap or grass-leaved speedwell • NP.
Veronica serpyllifolia • Thyme-leaved speedwell • NP.
Veronica triphyllos • Fingered speedwell • IA.
Veronica wormskjoldii • American alpine speedwell • NP.

SIMAROUBACEAE – Quassia Family

Ailanthus altissima • Tree-of-heaven, ailanthus, Chinese-sumac tree • IST.

SMILACACEAE – Greenbrier Family

Traditionally included in *Liliaceae*

Smilax californica • California greenbrier • NV.
Smilax jamesii • English Peak greenbrier • EV.



Ailanthus altissima

SOLANACEAE – Nightshade or Potato Family

Cestrum fasciculatum • Early-flowering jessamine, red cestrum • IS.

Chamaesarache → *Leucophysalis*

Datura stramonium • Jimson weed, thorn-apple • IA.

Datura wrightii • Sacred thorn-apple • NAP.

Hyoscyamus niger • Black henbane • IAP. Last collected in 1931. Extant?

Leucophysalis nana • Dwarf false ground-cherry • NP.

Lycium barbarum • Matrimony vine • IS.

Lycopersicon → *Solanum*

Nicotiana acuminata var. *multiflora* • Wild tobacco • IA.

Nicotiana attenuata • Coyote tobacco • NA.

Nicotiana glauca • Tree or Mexican tobacco • IS.

Nicotiana quadrivalvis var. *bigelovii* • Indian tobacco • NA.

Physalis longifolia var. *longifolia* • Long-leaved ground-cherry • IP.

Physalis pubescens var. *integrifolia* • Husk-tomato • IA. Last collected in 1945. Extant?

Salpichroa organifolia • Lily-of-the-valley vine • IV.

Solanum americanum • American nightshade • NAP.

Solanum aviculare • Kangaroo-apple • IS. EO.

Solanum carolinense • Carolina horse-nettle • IP. [TJM2]

Solanum douglasii • Green-spot nightshade • IP.

Solanum furcatum • South American black or forked nightshade • IP.

Solanum lycopersicum • Tomato • IAP. EFP. Last collected in 1948. Extant?

Solanum nigrum • European black nightshade • IAP.

Solanum parishii • Parish's nightshade • NP.

Solanum physalifolium • Hoe or ground-cherry nightshade • IA.

Solanum rostratum • Buffalo bur • IA.

Solanum umbelliferum • Blue witch, blue nightshade • NP.

Solanum xanti • Purple nightshade • NS.

STAPHYLEACEAE – Bladdernut Family

Staphylea bolanderi • Sierra bladdernut • NS.

STERCULIACEAE – Cacao Family

Included in the closely related *Malvaceae* by some authors, as in TJM2

Fremontia → *Fremontodendron*

Fremontodendron californicum • California flannel bush, fremontia • NS.

STYRACACEAE – Styrax or Storax Family

Styrax redivivus • Storax, styrax, snowdrop bush • NST.

TAMARICACEAE – Salt-Cedar or Tamarisk Family

Tamarix parviflora • Salt-cedar, small-flowered tamarisk • IS.

Tamarix ramosissima • Salt-cedar, tamarisk • IS.

TECOPHILAEACEAE – Doll's-lily Family

Traditionally included in *Liliaceae*

Odontostomum hartwegii • Hartweg's doll's-lily • NP.



Smilax californica



Solanum rostratum



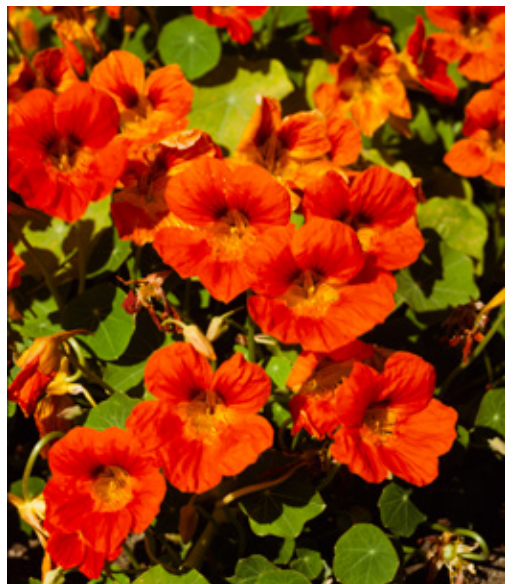
Tamarix ramosissima



Datura wrightii



Fremontodendron californicum



Tropaeolum majus



Nicotiana glauca



Styrax redivivus



Typha domingensis

TROPAEOLACEAE – Nasturtium Family

Tropaeolum majus • Nasturtium, garden nasturtium • IAP. EO.

TYPHACEAE – Cat-Tail Family

Includes *Sparganiaceae*

Sparganium angustifolium • Narrow-leaved bur-reed • NP.

Sparganium emersum • Unbranched or green bur-reed • NP.

Sparganium eurycarpum ssp. *eurycarpum* • Broad-fruited bur-reed
• NP. [TJM2]

Sparganium eurycarpum ssp. *greenii* • NP • Greene's bur-reed.
Last collected in 1949. Extant?

Sparganium natans • Small bur-reed • NP.

Typha angustifolia • Narrow-leaved cat-tail • NP.

Typha domingensis • Domingan or southern cat-tail • NP.

Typha latifolia • Broad-leaved cat-tail • NP.

UMBELLIFERAE (APIACEAE) – Carrot or Umbel Family

Excludes *Hydrocotylaceae*

Ammi majus • Bishop's weed • IAP.

Anethum graveolens • Dill • IA. Escaped food plant.

Angelica arguta var. *arguta* • Lyall's angelica • NP.

Angelica breweri • Brewer's angelica • NP.

Angelica californica • California angelica • NP.

Angelica genuflexa • Kneeling angelica • NP.

Angelica hendersonii • Henderson's angelica • NP.

Angelica lucida • Sea watch, seacoast angelica • NP.

Angelica tomentosa • California or wood angelica • NP.

Anthriscus caucalis • Bur-chervil • IA.

Apiastrum angustifolium • Wild-celery, mock parsley • NA.

Apium (in part) → *Cyclospermum*

Apium graveolens var. *dulce* • Celery • IAP. EFP. Known from a
single 1973 collection.

Berula erecta • Cut-leaved water-parsnip • NP.

Bowlesia incana • Hoary bowlesia • NP. Last collected in 1869.
Extant?

Caucalis → *Yabea*

Cyclospermum → *Cyclospermum* (orthographic correction)

Cicuta douglasii • Western water hemlock • NP.

Cicuta maculata var. *angustifolia* • Spotted water hemlock • NP.

Conioselinum pacificum • Hemlock-parsley • NP.

Conium maculatum • Poison hemlock, spotted hemlock • IP.

Coriandrum sativum • Coriander, cilantro • IA. Escaped food plant.

Cyclospermum leptophyllum • Marsh-parsley • IA.

Cymopterus terebinthinus var. *californicus* • Terpentine wave-wing
• NP.

Daucus carota • Wild carrot, carrot, Queen Anne's lace • IP.

Daucus pusillus • Rattlesnake weed • NA.

Eryngium aristulatum var. *aristulatum* • Jepson's eryngo • NP.

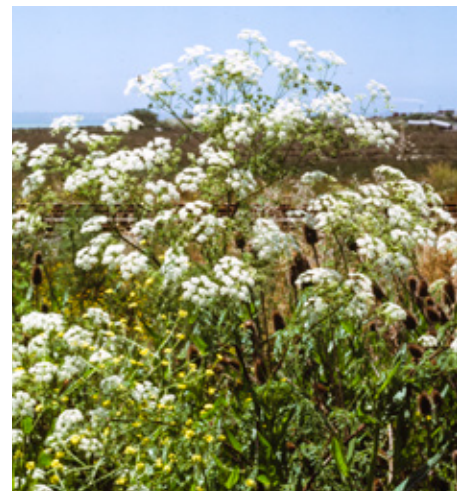
Eryngium armatum • Prickly eryngo, coyote-thistle • NP.



Cicuta maculata



Cicuta maculata



Conium maculatum



Conium maculatum

Eryngium articulatum • Bee-thistle, bee eryngo • NP.
Eryngium constancei • Loch Lomond button-celery • NP.
Foeniculum vulgare • Fennel, sweet fennel • IP. EFP.
Glehnia littoralis ssp. *leiocarpa* • American glehnia, beach silvertop • NP.
Heracleum maximum • Cow-parsnip, giant cow-parsnip • NP.
Hydrocotyle → *Hydrocotylaceae*
Ligusticum apiifolium • Celery-leaved lovage • NP.
Ligusticum californicum • California ligusticum • NP.
Ligusticum grayi • Gray's ligusticum, sheep-lovage • NP.
Lilaeopsis occidentalis • Western lilaeopsis, grasswort • NP.
Lomatium bicolor var. *leptocarpum* • Wasatch desert-parsley • NP
Lomatium californicum • California lomatium, chu-chu-pate • NP.
Lomatium caruifolium var. *caruifolium* • Caraway-leaved desert-parsley, alkali-parsnip • NP.
Lomatium caruifolium var. *denticulatum* • Caraway-leaved lomatium • NP.
Lomatium ciliolatum • Yolla Bolly lomatium • NP.
Lomatium dasycarpum ssp. *dasycarpum* • Woolly-fruited lace-parsnip • NP.
Lomatium dasycarpum ssp. *tomentosum* • Woolly-fruited lace-parsnip • NP.
Lomatium dissectum var. *dissectum* • Fern-leaved lomatium, ritual root • NP.
Lomatium dissectum var. *multifidum* • Carrot-leaved lomatium • NP.
Lomatium engelmannii • Engelmann's lomatium • NP.
Lomatium hallii • Hall's lomatium • NP.
Lomatium hooveri • Hoover's lomatium or desert-parsley • NP.
Lomatium howellii • Howell's lomatium • NP.
Lomatium macrocarpum • Large-fruited lomatium, sheep-parsnip • NP.
Lomatium marginatum var. *marginatum* • Hartweg's lomatium, Butte desert-parsley • NP.
Lomatium marginatum var. *purpureum* • Butte desert-parsley • NP.
Lomatium martindalei • Coast Range lomatium • NP.
Lomatium nudicaule • Pestle-parsnip, naked-stemmed lomatium • NP.
Lomatium peckianum • Peck's lomatium • NP.
Lomatium piperi • Piper's lomatium, Indian biscuit • NP.
Lomatium repostum • Napa lomatium • NP.
Lomatium tracyi • Tracy's lomatium • NP.
Lomatium triternatum var. *macrocarpum* • Nine-leaved biscuit root • NP.
Lomatium triternatum var. *triternatum* • Lewis' lomatium, buck-parsnip • NP.
Lomatium utriculatum • Common or bladder lomatium, hog-fennel • NP.



Daucus carota



Heracleum maximum



Lomatium californicum

Lomatium vaginatum • Sheathed lomatium • NP.
Oenanthe pimpinelloides • Water dropwort, oenanthe • IP. Last collected in 1950. Extant?
Oenanthe sarmentosa • Water dropwort, water-parsley, Pacific oenanthe • NP.
Orogenia fusiformis • California orogenia, Indian-potato • NP.
Osmorhiza berteroi • Mountain sweet-cicely • NP.
Osmorhiza occidentalis • Western sweet-cicely • NP.
Osmorhiza purpurea • Purple sweet-cicely • NP.
Oxypolis occidentalis • Cowbane, Pacific cowbane • NP.
Pastinaca sativa • Wild parsnip, parsnip • IP. EFP.
Perideridia bolanderi ssp. *bolanderi* • Bolander's yampah • NP.
Perideridia gairdneri ssp. *borealis* • Gairdner's yampah • NP.
Perideridia gairdneri ssp. *gairdneri* • Gairdner's or common yampah • NP.
Perideridia howellii • Howell's yampah • NP.
Perideridia kelloggii • Kellogg's yampah • NP.
Perideridia leptocarpa • Narrow-seeded yampah • EP.
Perideridia oregana • Oregon yampah • NP.
Perideridia parishii ssp. *latifolia* • Parish's yampah • NP.
Sanicula arctopoides • Bear's-foot sanicle, footsteps-of-spring, yellow mats • NP.
Sanicula bipinnata • Poison sanicle • NP.
Sanicula bipinnatifida • Purple sanicle, shoe buttons • NP.
Sanicula crassicaulis • Pacific sanicle • NP.
Sanicula graveolens • Sierra sanicle • NP.
Sanicula laciniata • Coast sanicle • NP.
Sanicula peckiana • Peck's sanicle • NP.
Sanicula tracyi • Tracy's sanicle • NP.
Sanicula tuberosa • Tuberous sanicle, turkey-pea • NP.
Scandix pecten-veneris • Shepherd's needle, Venus' comb or needle, lady's comb • IA.
Sium suave var. *suave* • Water-parsnip, hemlock water-parsnip • NP.
Sphenosciadium capitellatum • Swamp white heads, ranger's-buttons • NP.
Tauschia glauca • Glauous tauschia, glauous umbrellawort • NP.
Tauschia hartwegii • Hartweg's umbrellawort • NP.
Tauschia howellii • Howell's tauschia, Howell's umbrellawort • NP.
Tauschia kelloggii • Kellogg's tauschia, Kellogg's umbrellawort • NP.
Torilis arvensis ssp. *arvensis* • Spreading hedge-parsley • IA.
Torilis arvensis ssp. *heterophylla* • Purple field or spreading hedge-parsley • IA.
Torilis nodosa • Knotted hedge-parsley • IA.
Yabea microcarpa • False hedge-parsley • NA.

URTICACEAE – Nettle Family

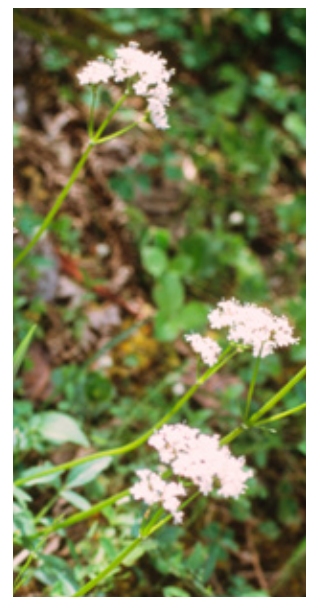
Hesperocnide tenella • Western stinging nettle • NA.
Parietaria pensylvanica • Pellitory • NA. Known from a single 1926 collection. Extant?
Urtica dioica ssp. *gracilis* • Stinging nettle • NP.



Urtica dioica



Centranthus ruber



Valeriana sitchensis

Urtica dioica ssp. *holosericea* • Creek or hoary nettle • NP.
Urtica urens • Small or dwarf nettle • IA.

VALERIANACEAE – Valerian Family

Centranthus ruber ssp. *ruber* • Red-valerian, Jupiter’s-beard
• IAP.

Kentranthus → *Centranthus* (orthographic correction)

Plectritis ciliosa ssp. *ciliosa* • Long-spurred sea blush • NA. Last collected in 1949. Extant?

Plectritis ciliosa ssp. *insignis* • Long-spurred sea blush • NA.

Plectritis congesta ssp. *brachystemon* • Short-spurred sea blush
• NA.

Plectritis congesta ssp. *congesta* • Pink sea blush • NA.

Plectritis congesta ssp. *nitida* • Decumbent sea blush • NA.
Last collected in 1949. Extant?

Plectritis macrocera ssp. *grayi* • White or Gray’s sea blush • NA.

Plectritis macrocera ssp. *macrocera* • Long-horned sea blush
• NA.

Valeriana californica • California valerian • NP.

Valeriana scouleri • Scouler’s valerian • NP.

Valeriana sitchensis • Mountain-heliotrope, Sitka valerian • NP.

Valerianella locusta • Lamb’s-lettuce, corn salad • IA.

VERBENACEAE – Verbena or Vervain Family

Phyla lanceolata • Lance-leaved fog fruit • NP. Last collected in 1945. Extant?

Phyla nodiflora • Mat-grass • IP.

Verbena bracteata • Big-bracted verbena • NAP. Known from a single 1940 collection. Extant?

Verbena lasiostachys var. *lasiostachys* • Western verbena or vervain • NP.

Verbena lasiostachys var. *scabrida* • Western verbena or vervain • NP.

Verbena menthifolia • Mint vervain • NP.

Verbena officinalis • Vervain, herb-of-the-cross • IP. Last collected in 1980. Extant ?

VIOLACEAE – Violet Family

Viola adunca ssp. *adunca* • Western dog or western long-spurred violet • NP.

Viola arvensis • European field or wild pansy • IA. Known from a single 1948 collection. Extant?

Viola bakeri • Baker’s violet • NP.

Viola beckwithii • Beckwith’s or Great Basin violet • NP.

Viola cuneata • Wedge-leaved or northern two-eyed violet • NP.

Viola douglasii • Golden violet, gold violet • NP.

Viola glabella • Stream, smooth, yellow, woodland, or pioneer violet • NP.

Viola hallii • Hall’s or Oregon pansy • NP.

Viola howellii • Howell’s violet • NP.

Viola langsдорffii • Langsdorff’s or Aleutian violet • NP.

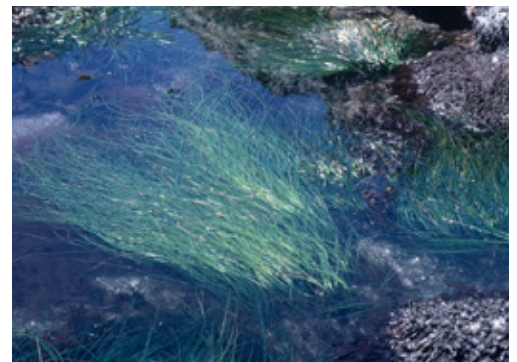


Viola lanceolata

Viola ocellata



Vitis californica



Phyllospadix sp.



Tribulus terrestris

Viola lobata ssp. *integrifolia* • Moose-horn violet • NP.
Viola lobata ssp. *lobata* • Pine violet, yellow wood violet, wood violet • NP.
Viola macloskeyi ssp. *macloskeyi* • Macloskey's, small white or western wood violet • NP.
Viola macloskeyi ssp. *pallens* • Small white violet • NP.
Viola nephrophylla • Northern bog violet • NP.
Viola ocellata • Two-eyed violet, pinto pansy, western heart's ease • NP.
Viola odorata • Sweet blue violet • IP.
Viola palustris var. *palustris* • Marsh violet • NP.
Viola pedunculata ssp. *pedunculata* • California golden violet, grass pansy, Johnny jump-up • NP.
Viola pinetorum ssp. *pinetorum* • Mountain yellow violet • NP.
Viola praemorsa ssp. *linguifolia* • Upland yellow violet • NP.
Viola praemorsa ssp. *praemorsa* • Astoria or upland yellow violet • NP.
Viola primulifolia ssp. *occidentalis* • Western bog violet • NP.
Viola purpurea ssp. *dimorpha* • Purple-tinged violet • NP.
Viola purpurea ssp. *integrifolia* • Purple-tinged violet • NP.
Viola purpurea ssp. *purpurea* • Purple-tinged, pine, or mountain violet • NP.
Viola purpurea ssp. *quercetorum* • Oak woods violet • NP.
Viola purpurea ssp. *venosa* • Purple-marked yellow violet • NP.
Viola sempervirens • Redwood or evergreen violet • NP.
Viola sheltonii • Shelton's or fan violet • NP.

VISCACEAE – Mistletoe Family

Included in *Santalaceae* by some recent authors.

Arceuthobium abietinum ssp. *wiensii* • Klamath fir dwarf mistletoe • NP.
Arceuthobium americanum • American mistletoe • NSS. Known from a single 1908 collection. Extant?
Arceuthobium campylopodum • Western dwarf mistletoe • NP.
Arceuthobium douglasii • Douglas-fir dwarf mistletoe • NP.
Phoradendron bolleanum • Rough mistletoe • NS.
Phoradendron juniperinum • Juniper or incense-cedar mistletoe • NS.
Phoradendron leucarpum ssp. *macrophyllum* • Big-leaved or Colorado Desert mistletoe • NS.
Phoradendron leucarpum ssp. *tomentosum* • Hairy, common, or oak mistletoe • NS.



Arceuthobium campylopodum

VITACEAE – Grape Family

Vitis californica • California wild grape • NV.
Vitis vinifera • Wine grape • IV. EFP. Known from a single 1945 collection. Extant?

ZOSTERACEAE – Eel-Grass Family

Nanozostera japonica • Japanese surf-grass • IP.
Phyllospadix scouleri • Scouler's surf-grass • NP.
Phyllospadix torreyi • Torrey's surf-grass • NP.
Zostera (in part) → *Nanozostera*
Zostera japonica • Japanese surf-grass • IP.
Zostera marina • Eel-grass, sea wrack • NP.

ZYGOPHYLLACEAE – Caltrop Family

Tribulus terrestris • Puncture vine, goat's-head, devil's weed • IA.

CAN'T FIND A FAMILY?

FERNS

Adiantaceae → Pteridaceae
Aspidiaceae (in part) → Dryopteridaceae
Aspidiaceae (in part) → Thelypteridaceae
Azollaceae → Salviniaceae
Polypodiaceae (in part) → Aspleniaceae
Polypodiaceae (in part) → Blechnaceae
Polypodiaceae (in part) → Dryopteridaceae
Polypodiaceae (in part) → Pteridaceae

CONIFERS

Taxodiaceae → Cupressaceae

FLOWERING PLANTS

Adoxaceae (in part) → Caprifoliaceae
Adoxaceae (in part) → Caprifoliaceae
Aesculaceae → Hippocastanaceae
Agavaceae → Liliaceae
Alliaceae → Liliaceae
Amaryllidaceae → Liliaceae
Apiaceae → Umbelliferae
Asclepiadaceae → Apocynaceae
Asparagaceae → Liliaceae
Asphodelaceae → Liliaceae
Asteraceae → Compositae
Brassicaceae → Cruciferae
Caesalpiniaceae → Leguminosae
Calochortaceae → Liliaceae
Camassiaceae → Liliaceae
Cannabinaceae → Cannabaceae
Capparaceae → Cleomaceae
Comandraceae → Santalaceae
Corylaceae → Betulaceae
Cuscutaceae → Convolvulaceae
Dichondraceae → Convolvulaceae
Ehretiaceae → Hydrophyllaceae
Empetraceae → Ericaceae
Fabaceae → Leguminosae
Fritillariaceae → Liliaceae
Fumariaceae → Papaveraceae
Guttiferae → Hypericaceae
Illecebraceae → Caryophyllaceae
Lamiaceae → Labiatae

Laxmanniaceae → Liliaceae
Lilaeaceae → Juncaginaceae
Linderniaceae → Scrophulariaceae
Linnaeaceae → Caprifoliaceae
Lobeliaceae → Campanulaceae
Loganiaceae → Scrophulariaceae
Loranthaceae → Viscaceae
Lysimachiaceae → Primulaceae
Melanthiaceae → Liliaceae
Mimosaceae → Leguminosae
Monotropaceae → Ericaceae
Montiaceae → Portulacaceae
Myrsinaceae → Primulaceae
Naiadaceae → Hydrocharitaceae
Najadaceae → Hydrocharitaceae
Namaceae → Hydrophyllaceae
Narcissaceae → Liliaceae
Nartheciaceae → Liliaceae
Nupharaceae → Nymphaeaceae
Orobanchaceae → Scrophulariaceae
Papilionaceae → Leguminosae
Pedaliaceae → Martyniaceae
Philadelphaceae → Hydrangeaceae
Phrymaceae → Scrophulariaceae
Phrymataceae → Scrophulariaceae
Piperaceae → Saururaceae
Poaceae → Gramineae
Podophyllaceae → Berberidaceae
Pyrolaceae → Ericaceae
Ribaceae → Grossulariaceae
Ruscaceae → Liliaceae
Sapindaceae (in part) → Aceraceae
Sapindaceae (in part) → Hippocastanaceae
Scheuchzeriaceae → Juncaginaceae
Scoliopaceae → Liliaceae
Sparganiaceae → Typhaceae
Tetragoniaceae → Aizoaceae
Themidaceae → Liliaceae
Trilliaceae → Liliaceae
Vacciniaceae → Ericaceae
Vallisneriaceae → Hydrocharitaceae
Xanthorrhaceae → Liliaceae
Xerophyllaceae → Melanthiaceae
Zanichelliaceae → Potamogetonaceae

Revised: 5 August 2018

SECTION 2.2 — COMMON NAMES OF FAMILIES

LYCOPHYTES

Club-moss	Lycopodiaceae	Arrowhead	Alismataceae	Crowberry	Ericaceae
Quillwort	Isoëtaceae	Arum	Araceae	Crowfoot	Ranunculaceae
Spike-moss	Selaginellaceae	Ash	Oleaceae	Crucifer	Cruciferae
		Asparagus	Liliaceae	Cucurbit	Cucurbitaceae
		Asphodel	Liliaceae	Currant	Grossulariaceae
		Aster	Compositae		
		Avocado	Lauraceae	Daisy	Compositae

FERNS

Adder's-tongue	Ophioglossaceae	Balsam	Balsaminaceae	Ditch-grass	Ruppiaceae
Bracken fern	Dennstaedtiaceae	Barberry	Berberidaceae	Dodder	Convolvulaceae
Bladder fern	Cystopteridaceae	Bastard toadflax	Santalaceae	Dogbane	Apocynaceae
Brake fern	Pteridaceae	Bean	Leguminosae	Dogwood	Cornaceae
Brittle fern	Cystopteridaceae	Beech	Fagaceae	Doll's-lily	Tecophilaeaceae
Cliff fern	Woodsiaceae	Bee plant	Cleomaceae	Duckweed	Lemnaceae
Cliff brake fern	Pteridaceae	Bellflower	Campanulaceae	Durango root	Datisceae
Deer fern	Blechnaceae	Bignon [-ia]	Bignoniaceae	Dutchman's pipe	Aristolochiaceae
Floating fern	Salviniaceae	Bindweed	Convolvulaceae		
Holly fern	Dryopteridaceae	Birch	Betulaceae	Ebony	Ebenaceae
Horsetail	Equisetaceae	Birthwort	Aristolochiaceae	Eel-grass	Zosteraceae
Lady fern	Athyriaceae	Bittersweet	Celastraceae	Elderberry	Caprifoliaceae
Moonwort fern	Ophioglossaceae	Bladdernut	Staphyleaceae	Escallonia	Escalloniaceae
Mosquito fern	Salviniaceae	Bladderwort	Lentibulariaceae	Eucalyptus	Myrtaceae
Polypody fern	Polypodiaceae	Blazing star	Loasaceae	Euphorb	Euphorbiaceae
Scouring-rush	Equisetaceae	Bluebell	Campanulaceae	Evening-primrose	Onagraceae
Spleenwort	Aspleniaceae	Bogbean	Menyanthaceae		
Sword fern	Dryopteridaceae	Borage	Boraginaceae	False mermaid	Limnanthaceae
Water-clover fern	Marsileaceae	Boxwood	Pittosporaceae	Fig	Moraceae
Wood fern	Thelypteridaceae	Brodiaea	Liliaceae	Flax	Linaceae
		Broomrape	Scrophulariaceae	Forget-me-not	Boraginaceae
		Buckbean	Menyanthaceae	Foxglove	Scrophulariaceae
		Buckeye	Hippocastanaceae	Frankenia	Frankeniaceae
		Buckthorn	Rhamnaceae	Frog's bit	Hydrocharitaceae
		Bur-reed	Typhaceae	Four-o'clock	Nyctaginaceae
		Buttercup	Ranunculaceae	Fumitory	Papaveraceae
		Butterfly bush	Buddlejaceae		
		Cacao	Sterculiaceae	Gentian	Gentianaceae
		Cactus	Cactaceae	Geranium	Geraniaceae
		Caltrop	Zygophyllaceae	Ginseng	Araliaceae
		Cape pondweed	Aponogetonaceae	Gooseberry	Grossulariaceae
		Carnation	Caryophyllaceae	Goosefoot	Chenopodiaceae
		Carpet weed	Molluginaceae	Gourd	Cucurbitaceae
		Carrot	Umbelliferae	Grape	Vitaceae
		Cashew	Anacardiaceae	Grass	Gramineae
		Catalpa	Bignoniaceae	Grass-of-Parnassus	Parnassiaceae
		Cat-tail	Typhaceae	Grass wrack	Potamogetonaceae
		Century plant	Liliaceae	Greenbrier [-briar]	Smilacaceae
		Chain fern	Blechnaceae	Harebell	Campanulaceae
		Chenopod	Chenopodiaceae	Heath	Ericaceae
		Cotton	Malvaceae	Hemp	Cannabaceae
		Crossosoma	Crossosomataceae	Hickory	Juglandaceae

FLOWERING PLANTS

Agave	Liliaceae				
Alder	Betulaceae				
Aloe	Liliaceae				
Amaranth	Amaranthaceae				
Amaryllis	Liliaceae				
Aralia	Araliaceae				
Aroid	Araceae				
Arrow-grass	Juncaginaceae				

Holly	Aquifoliaceae			Sorrel	Oxalidaceae
Honey bush	Melianthaceae	Oak	Fagaceae	Spice bush	Calycanthaceae
Honeysuckle	Caprifoliaceae	Oleaster	Elaeagnaceae	Spindle tree	Celastraceae
Hops	Cannabaceae	Olive	Oleaceae	Spider flower	Cleomaceae
Horned pondweed	Potamogetonaceae	Onion	Liliaceae	Spiderwort	Commelinaceae
Hornwort	Ceratophyllaceae	Orchid	Orchidaceae	Spikenard	Araliaceae
Horse chestnut	Hippocastanaceae	Orpine	Crassulaceae	Spurge	Euphorbiaceae
Hyacinth	Liliaceae	Oxalis	Oxalidaceae	Squash	Cucurbitaceae
Hydrangea	Hydrangeaceae			Staff tree	Celastraceae
Hydrophyll	Hydrophyllaceae	Peony	Paeoniaceae	Starwort	Callitrichaceae
		Parsley	Umbelliferae	Stinging nettle	Urticaceae
Ice plant	Aizoaceae	Pea	Leguminosae	St. John's wort	Hypericaceae
Indian-chickweed	Molluginaceae	Pennywort	Hydrocotylaceae	Stonecrop	Crassulaceae
Indian pipe	Ericaceae	Philodendron	Araceae	Storax	Styracaceae
Iris	Iridaceae	Phlox	Polemoniaceae	Styrax	Styracaceae
Ivy	Araliaceae	Pickrel weed	Pontederiaceae	Sumac	Anacardiaceae
		Pigweed	Amaranthaceae	Sundew	Droseraceae
Jewel weed	Balsaminaceae	Pink	Caryophyllaceae	Sunflower	Compositae
		Pitcher plant	Sarraceniaceae	Sweet flag	Acoraceae
Knotweed	Polygonaceae	Pittosporum	Pittosporaceae	Sweetgale	Myricaceae
		Plane tree	Platanaceae	Sycamore	Platanaceae
Laurel	Lauraceae	Plantago	Plantaginaceae		
Leadwort	Plumbaginaceae	Plantain	Plantaginaceae	Tamarisk	Tamaricaceae
Legume	Leguminosae	Plumbago	Plumbaginaceae	Teasel	Dipsacaceae
Lily	Liliaceae	Poison-oak	Anacardiaceae	Thrift	Plumbaginaceae
Lizard's-tail	Saururaceae	Pokeweed	Phytolaccaceae	Touch-me-not	Balsaminaceae
Loasa	Loasaceae	Pondweed	Potamogetonaceae	Trillium	Liliaceae
Lobelia	Campanulaceae	Poplar	Salicaceae	Trumpet Creeper	Bignoniaceae
Loosestrife	Lythraceae	Poppy	Papaveraceae	Twinflower	Caprifoliaceae
		Potato	Solanaceae		
Madder	Rubiaceae	Primrose	Primulaceae	Umbel	Umbelliferae
Mahogany	Meliaceae			Unicorn plant	Martyniaceae
Mallow	Malvaceae	Pulse	Leguminosae		
Maple	Aceraceae	Pumpkin	Cucurbitaceae	Valerian	Valerianaceae
Mare's-tail	Hippuridaceae	Purslane	Portulacaceae	Verbena	Verbenaceae
Marijuana	Cannabaceae			Vervain	Verbenaceae
Martynia	Martyniaceae	Quassia	Simaroubaceae	Violet	Violaceae
Meadowfoam	Limnanthaceae				
Melianthus	Melianthaceae	Rock-rose	Cistaceae	Walnut	Juglandaceae
Mignonette	Resedaceae	Rose	Rosaceae	Water-hawthorn	Aponogetonaceae
Milfoil	Haloragaceae	Rue	Rutaceae	Waterleaf	Hydrophyllaceae
Milkweed	Apocynaceae	Rush	Juncaceae	Water-lily	Nymphaeaceae
Milkwort	Polygalaceae	Russian-olive	Elaeagnaceae	Water milfoil	Haloragaceae
Mint	Labiatae			Water nymph	Hydrocharitaceae
Mistletoe	Viscaceae	Salt-cedar	Tamaricaceae	Water-parsnip	Hydrocotylaceae
Morning-glory	Convolvulaceae	Sandalwood	Santalaceae	Water-plantain	Alismataceae
Mulberry	Moraceae	Saxifrage	Saxifragaceae	Water-starwort	Callitrichaceae
Mustard	Cruciferae	Scroph	Scrophulariaceae	Waterwort	Elatinaceae
Myoporum	Myoporaceae	Sedge	Cyperaceae	Wax myrtle	Myricaceae
Myrtle	Myrtaceae	Silk-tassel	Garryaceae	Willow	Salicaceae
		Silverbell	Styracaceae	Wintergreen	Ericaceae
Naiad	Hydrocharitaceae	Smartweed	Polygonaceae	Wood sorrel	Oxalidaceae
Nasturtium	Tropaeolaceae	Smilax	Smilacaceae		
Nettle	Urticaceae	Snapdragon	Scrophulariaceae		
Nightshade	Solanaceae	Soapberry	Sapindaceae		

SECTION 2.3 – COMMON NAMES OF PLANTS

Aaron's-beard	<i>Hypericum</i> • Hypericaceae	Baby blue-eyes	<i>Nemophila</i> • Hydrophyllaceae
Abronia	<i>Abronia</i> • Nyctaginaceae	Baby's breath	<i>Gypsophila</i> • Caryophyllaceae
Acacia	<i>Acacia</i> • Leguminosae	Babystars	<i>Linanthus</i> • Polemoniaceae
Aconite	<i>Aconitum</i> • Ranunculaceae	Baccharis	<i>Baccharis</i> • Compositae
Adder's-tongue	<i>Scoliopus</i> • Liliaceae	Bachelor's button	<i>Centaurea</i> • Compositae
Adder's-tongue fern	<i>Botrychium</i> • Ophioglossaceae	Baeria	<i>Lasthenia</i> • Compositae
Adobe lily	<i>Fritillaria</i> • Liliaceae	Ball-headed-gilia	<i>Ipomopsis</i> • Polemoniaceae
Ageratum	<i>Ageratum</i> • Compositae	Balm	<i>Melissa</i> • Labiatae
Agoseris	<i>Agoseris</i> • Compositae	Balm	<i>Monardella</i> • Labiatae
Agrimony	<i>Agrimonia</i> • Rosaceae	Balsamroot	<i>Balsamorhiza</i> • Compositae
Ailanthus	<i>Ailanthus</i> • Simaroubaceae	Bamboo	<i>Phyllostachys</i> • Gramineae
Alamo	<i>Populus</i> • Salicaceae	Baneberry	<i>Actaea</i> • Ranunculaceae
Yellow-cedar	<i>Chamaecyparis</i> • Cupressaceae	Barberry	<i>Berberis</i> • Berberidaceae
Alaska-cedar	<i>Callitropsis</i> • Cupressaceae	Barberry	<i>Mahonia</i> • Berberidaceae
Alder	<i>Alnus</i> • Betulaceae	Barley	<i>Hordeum</i> • Gramineae
Alfalfa	<i>Medicago</i> • Leguminosae	Barnyard grass	<i>Echinochloa</i> • Gramineae
Alkali grass	<i>Puccinellia</i> • Gramineae	Bassia	<i>Bassia</i> • Chenopodiaceae
Alkali weed	<i>Cressa</i> • Convolvulaceae	Bastard toadflax	<i>Comandra</i> • Santalaceae
Alkali weed	<i>Malvella</i> • Malvaceae	Bay tree	<i>Umbellularia</i> • Lauraceae
Alkali-heath	<i>Frankenia</i> • Frankeniaceae	Bayberry	<i>Morella</i> • Myricaceae
Alkali-mallow	<i>Malvella</i> • Malvaceae	Beach bur	<i>Ambrosia</i> • Compositae
Alkali-parsnip	<i>Lomatium</i> • Umbelliferae	Beach grass	<i>Elymus</i> • Gramineae
Alkanet	<i>Amsinckia</i> • Boraginaceae	Beach sage	<i>Artemisia</i> • Compositae
Allocarya	<i>Plagiobothrys</i> • Boraginaceae	Beach wormwood	<i>Artemisia</i> • Compositae
Allseed	<i>Polycarpon</i> • Caryophyllaceae	Beach-primrose	<i>Camissonia</i> • Onagraceae
Almond	<i>Prunus</i> • Rosaceae	Beaked-rush	<i>Rhynchospora</i> • Cyperaceae
Alpine gold	<i>Hulsea</i> • Compositae	Bear brush	<i>Garrya</i> • Garryaceae
Alpine lake agoseris	<i>Nothocalais</i> • Compositae	Bear-grass	<i>Xerophyllum</i> • Liliaceae
Alpine-aster	<i>Oreostemma</i> • Compositae	Bearberry	<i>Arctostaphylos</i> • Ericaceae
Alum root	<i>Heuchera</i> • Saxifragaceae	Beard grass	<i>Polypogon</i> • Gramineae
Alyssum	<i>Alyssum</i> • Cruciferae	Beard grass	<i>X Agropogon</i> • Gramineae
Amaranth	<i>Amaranthus</i> • Amaranthaceae	Beard-tongue	<i>Keckiella</i> • Scrophulariaceae
American-aster	<i>Symphotrichum</i> • Compositae	Beard-tongue	<i>Nothochelone</i> • Scrophulariaceae
Amole	<i>Chlorogalum</i> • Liliaceae	Beard-tongue	<i>Penstemon</i> • Scrophulariaceae
Androsace	<i>Androsace</i> • Primulaceae	Beavertail-grass	<i>Calochortus</i> • Liliaceae
Anemone	<i>Anemone</i> • Ranunculaceae	Bedstraw	<i>Galium</i> • Rubiaceae
Angelica	<i>Angelica</i> • Umbelliferae	Bee plant	<i>Scrophularia</i> • Scrophulariaceae
Annual fescue	<i>Festuca</i> • Gramineae	Bee-thistle	<i>Eryngium</i> • Umbelliferae
Antelope b[r]ush	<i>Purshia</i> • Rosaceae	Beggar-ticks	<i>Bidens</i> • Compositae
Apple	<i>Malus</i> • Rosaceae	Belladonna lily	<i>Amaryllis</i> • Liliaceae
Archangel	<i>Lamiaeum</i> • Labiatae	Bellardia	<i>Bellardia</i> • Orobanchaceae
Arnica	<i>Arnica</i> • Compositae	Bensonia	<i>Bensoniella</i> • Saxifragaceae
Arrow-grass	<i>Triglochin</i> • Hydrocharitaceae	Bensoniella	<i>Bensoniella</i> • Saxifragaceae
Arrowhead	<i>Sagittaria</i> • Alismataceae	Bent grass	<i>Agrostis</i> • Gramineae
Artichoke	<i>Cynara</i> • Compositae	Bergia	<i>Bergia</i> • Elatinaceae
Artichoke thistle	<i>Cynara</i> • Compositae	Bermuda grass	<i>Cynodon</i> • Gramineae
Arum	<i>Arum</i> • Araceae	Bermuda-buttercup	<i>Oxalis</i> • Oxalidaceae
Ash	<i>Fraxinus</i> • Oleaceae	Biddi-biddi	<i>Acaena</i> • Rosaceae
Asparagus	<i>Asparagus</i> • Liliaceae	Big root	<i>Marah</i> • Cucurbitaceae
Aspen	<i>Populus</i> • Salicaceae	Big tree	<i>Sequoiadendron</i> • Cupressaceae
Aster	<i>Aster</i> • Compositae	Bilberry	<i>Vaccinium</i> • Ericaceae
Aster	<i>Eucephalus</i> • Compositae	Bind weed	<i>Calystegia</i> • Convolvulaceae
Aster	<i>Eurybia</i> • Compositae	Bind weed	<i>Convolvulus</i> • Convolvulaceae
Aster	<i>Oreostemma</i> • Compositae	Bind weed	<i>Polygonum</i> • Polygonaceae
Aster	<i>Sericocarpus</i> • Compositae	Bird's-beak	<i>Cordylanthus</i> • Orobanchaceae
Aster	<i>Symphotrichum</i> • Compositae	Bird's-eyes	<i>Gilia</i> • Polemoniaceae
Asthma weed	<i>Erigeron</i> • Compositae	Bird's-foot fern	<i>Pellaea</i> • Pteridaceae
Avalanche lily	<i>Erythronium</i> • Liliaceae	Birthwort	<i>Aristolochia</i> • Aristolochiaceae
Avens	<i>Geum</i> • Rosaceae	Biscuit root	<i>Lomatium</i> • Umbelliferae
Azalea	<i>Rhododendron</i> • Ericaceae	Bishop's cap	<i>Mitella</i> • Saxifragaceae
		Bishop's weed	<i>Ammi</i> • Umbelliferae

Bistort	<i>Polygonum</i> • Polygonaceae	Brittle scale	<i>Atriplex</i> • Chenopodiaceae
Bitter brush	<i>Purshia</i> • Rosaceae	Brodiaea	<i>Brodiaea</i> • Liliaceae
Bitter root	<i>Lewisia</i> • Portulacaceae	Brodiaea	<i>Dichelostemma</i> • Liliaceae
Bitter-cress	<i>Cardamine</i> • Cruciferae	Brodiaea	<i>Triteleia</i> • Liliaceae
Black haw	<i>Crataegus</i> • Rosaceae	Brome	<i>Bromus</i> • Gramineae
Black locust	<i>Robinia</i> • Leguminosae	Brook foam	<i>Boykinia</i> • Saxifragaceae
Black-bindweed	<i>Polygonum</i> • Polygonaceae	Brook foam	<i>Suksdorfia</i> • Saxifragaceae
Black-eyed Susan	<i>Rudbeckia</i> • Compositae	Brooklime	<i>Veronica</i> • Scrophulariaceae
Black-laurel	<i>Leucothoë</i> • Ericaceae	Broom	<i>Cytisus</i> • Leguminosae
Black-salsify	<i>Scorzonera</i> • Compositae	Broom	<i>Genista</i> • Leguminosae
Blackberry	<i>Rubus</i> • Rosaceae	Broom	<i>Spartium</i> • Leguminosae
Bladder pod	<i>Physaria</i> • Cruciferae	Broomrape	<i>Orobanche</i> • Scrophulariaceae
Bladder-campion	<i>Silene</i> • Caryophyllaceae	Brownies	<i>Scoliopus</i> • Liliaceae
Bladdernut	<i>Staphylea</i> = Staphyleaceae	Buck bean	<i>Menyanthes</i> • Menyanthaceae
Bladderwort	<i>Utricularia</i> • Lentibulariaceae	Buck brush	<i>Ceanothus</i> • Rhamnaceae
Blazing star	<i>Mentzelia</i> • Loasaceae	Buck-parsnip	<i>Lomatium</i> • Umbelliferae
Bleeding hearts	<i>Dicentra</i> • Papaveraceae	Buckeye	<i>Aesculus</i> • Hippocastanaceae
Blennosperma	<i>Blennosperma</i> • Compositae	Buckthorn	<i>Frangula</i> • Rhamnaceae
Blessed thistle	<i>Centaurea</i> • Compositae	Buckthorn	<i>Rhamnus</i> • Rhamnaceae
Blinks	<i>Montia</i> • Portulacaceae	Buckwheat	<i>Eriogonum</i> • Polygonaceae
Blow wives	<i>Achyrochaena</i> • Compositae	Buffalo berry	<i>Shepherdia</i> • Elaeagnaceae
Blue blossom	<i>Ceanothus</i> • Rhamnaceae	Buffalo bur	<i>Solanum</i> • Solanaceae
Blue brush	<i>Ceanothus</i> • Rhamnaceae	Bugle weed	<i>Lycopus</i> • Labiatae
Blue bunch grass	<i>Festuca</i> • Gramineae	Bugle-lily	<i>Watsonia</i> • Iridaceae
Blue dicks	<i>Dichelostemma</i> • Liliaceae	Bulrush	<i>Bolboschoenus</i> • Cyperaceae
Blue grass	<i>Poa</i> • Gramineae	Bulrush	<i>Isolepis</i> • Cyperaceae
Blue lily	<i>Triteleia</i> • Liliaceae	Bulrush	<i>Schoenoplectus</i> • Cyperaceae
Blue pod	<i>Lupinus</i> • Leguminosae	Bulrush	<i>Scirpus</i> • Cyperaceae
Blue weed	<i>Echium</i> • Boraginaceae	Bunch grass	<i>Festuca</i> • Gramineae
Blue witch	<i>Solanum</i> • Solanaceae	Bunchberry	<i>Cornus</i> • Cornaceae
Blue-eyed Mary	<i>Collinsia</i> • Scrophulariaceae	Bur head	<i>Echinodorus</i> • Alismataceae
Blue-eyed-grass	<i>Olsynium</i> • Iridaceae	Bur weed	<i>Ambrosia</i> • Compositae
Blue-eyed-grass	<i>Sisyrinchium</i> • Iridaceae	Bur weed	<i>Soliva</i> • Compositae
Blue-flag	<i>Iris</i> • Iridaceae	Bur-chervil	<i>Anthriscus</i> • Umbelliferae
Blueberry	<i>Vaccinium</i> • Ericaceae	Bur-clover	<i>Medicago</i> • Leguminosae
Bluecups	<i>Githopsis</i> • Campanulaceae	Bur-marigold	<i>Bidens</i> • Compositae
Bluecurls	<i>Trichostema</i> • Labiatae	Bur-reed	<i>Sparganium</i> • Typhaceae
Bluegum	<i>Eucalyptus</i> • Myrtaceae	Burdock	<i>Arctium</i> • Compositae
Bluejacket	<i>Tradescantia</i> • Commelinaceae	Burn weed	<i>Senecio</i> • Compositae
Bluejoint	<i>Calamagrostis</i> • Gramineae	Burnet	<i>Sanguisorba</i> • Rosaceae
Bluff-lettuce	<i>Dudleya</i> • Crassulaceae	Burning bush	<i>Euonymus</i> • Celastraceae
Bog bean	<i>Menyanthes</i> • Menyanthaceae	Bush mallow	<i>Malacothamnus</i> • Malvaceae
Bog candles	<i>Platanthera</i> • Orchidaceae	Bush-penstemon	<i>Keckiella</i> • Scrophulariaceae
Bog orchid	<i>Platanthera</i> • Orchidaceae	Butter weed	<i>Packera</i> • Compositae
Bog-asphodel	<i>Narthecium</i> • Nartheciaceae	Butter weed	<i>Senecio</i> • Compositae
Bogmat	<i>Wolffia</i> • Lemnaceae	Butter-and-eggs	<i>Linaria</i> • Scrophulariaceae
Bogmat	<i>Wolffiella</i> • Lemnaceae	Butter-and-eggs	<i>Triphysaria</i> • Scrophulariaceae
Boisduvalia	<i>Boisduvalia</i> • Onagraceae	Buttercup	<i>Ranunculus</i> • Ranunculaceae
Borage	<i>Borago</i> • Boraginaceae	Butterfly bush	<i>Buddleja</i> • Buddlejaceae
Bouncing bet	<i>Saponaria</i> • Caryophyllaceae	Butterfly weed	<i>Heterogaura</i> • Onagraceae
Bowlesia	<i>Bowlesia</i> • Umbelliferae	Butterwort	<i>Pinguicula</i> • Lentibulariaceae
Boxelder	<i>Acer</i> • Aceraceae	Button bush	<i>Cephalanthus</i> • Rubiaceae
Boxwood	<i>Paxistima</i> • Celastraceae	Button-celery	<i>Eryngium</i> • Umbelliferae
Boykinia	<i>Boykinia</i> • Saxifragaceae	Button-willow	<i>Cephalanthus</i> • Rubiaceae
Bracke[n] fern	<i>Pteridium</i> • Dennstaedtiaceae		
Bramble	<i>Rubus</i> • Rosaceae	Cabbage	<i>Brassica</i> • Cruciferae
Brass buttons	<i>Cotula</i> • Compositae	Cabbage tree	<i>Cordyline</i> • Liliaceae
Bread wheat	<i>Triticum</i> • Gramineae	Cabbage-palm	<i>Cordyline</i> • Liliaceae
Breadroot	<i>Pediomelum</i> • Leguminosae	Calf's-head	<i>Darlingtonia</i> • Sarraceniaceae
Brickellia	<i>Brickellia</i> • Compositae	Calico flower	<i>Downingia</i> • Campanulaceae
Bride's bonnet	<i>Clintonia</i> • Liliaceae	California bay	<i>Umbellularia</i> • Lauraceae
Bride's feather	<i>Aruncus</i> • Rosaceae	California mustard	<i>Caulanthus</i> • Cruciferae
Bristle grass	<i>Setaria</i> • Gramineae	California pinefoot	<i>Pityopus</i> • Ericaceae
Bristly-mallow	<i>Modiola</i> • Malvaceae	California snakeroot	<i>Aristolochia</i> • Aristolochiaceae
Brittle fern	<i>Cystopteris</i> • Cystopteridaceae	California-aster	<i>Corethrogyne</i> • Compositae

California-chicory	<i>Rafinesquia</i> • Compositae	Chickweed	<i>Stellaria</i> • Caryophyllaceae
California-fuchsia	<i>Epilobium</i> • Onagraceae	Chicory	<i>Cichorium</i> • Compositae
California-laurel	<i>Umbellularia</i> • Lauraceae	Childing pink	<i>Petrorhagia</i> • Caryophyllaceae
California-nutmeg	<i>Torreya</i> • Taxaceae	China berry	<i>Melia</i> • Meliaceae
California-poppy	<i>Eschscholzia</i> • Papaveraceae	Chinese caps	<i>Euphorbia</i> • Euphorbiaceae
California-tea	<i>Rupertia</i> • Leguminosae	Chinese houses	<i>Collinsia</i> • Scrophulariaceae
Calla-lily	<i>Zantedeschia</i> • Araceae	Chinese sumac tree	<i>Ailanthus</i> • Simaroubaceae
Calliopsis	<i>Coreopsis</i> • Compositae	Chinese-quince	<i>Pseudocydonia</i> • Rosaceae
Calycadenia	<i>Calycadenia</i> • Compositae	Chinook-licorice	<i>Lupinus</i> • Leguminosae
Calypso orchid	<i>Calypso</i> • Orchidaceae	Chinquapin	<i>Chrysolepis</i> • Fagaceae
Camassia	<i>Camassia</i> • Liliaceae	Chocolate lily	<i>Fritillaria</i> • Liliaceae
Camphor weed	<i>Trichostema</i> • Labiatae	Choke cherry	<i>Prunus</i> • Rosaceae
Campion	<i>Silene</i> • Caryophyllaceae	Chorizanthe	<i>Chorizanthe</i> • Polygonaceae
Canary grass	<i>Phalaris</i> • Gramineae	Christmas berry	<i>Heteromeles</i> • Rosaceae
Cancerwort	<i>Kickxia</i> • Scrophulariaceae	Christmas-holly	<i>Heteromeles</i> • Rosaceae
Canchalagua	<i>Centaurium</i> • Gentianaceae	Chrysanthemum	<i>Chrysanthemum</i> • Compositae
Candy flower	<i>Claytonia</i> • Portulacaceae	Chrysanthemum	<i>Glebionis</i> • Compositae
Candy grass	<i>Eragrostis</i> • Gramineae	Chu-chu-pate	<i>Lomatium</i> • Umbelliferae
Canoe-cedar	<i>Thuja</i> • Cupressaceae	Chufa	<i>Cyperus</i> • Cyperaceae
Canyon-flax	<i>Hesperolinon</i> • Linaceae	Cilantro	<i>Coriandrum</i> • Umbelliferae
Cape pondweed	<i>Aponogeton</i> • Aponogetonaceae	Cinquefoil	<i>Comarum</i> • Rosaceae
Cape weed	<i>Arctotheca</i> • Compositae	Cinquefoil	<i>Dasiphora</i> • Rosaceae
Cape-ivy	<i>Delairia</i> • Compositae	Cinquefoil	<i>Drymocallis</i> • Rosaceae
Cardoon	<i>Cynara</i> • Compositae	Cinquefoil	<i>Potentilla</i> • Rosaceae
Carpet weed	<i>Chrysosplenium</i> • Saxifragaceae	Clammy weed	<i>Polanisia</i> • Cleomaceae
Carpet weed	<i>Mollugo</i> • Molluginaceae	Clarkia	<i>Clarkia</i> • Onagraceae
Carrot	<i>Daucus</i> • Umbelliferae	Cleavers	<i>Galium</i> • Rubiaceae
Cascara	<i>Frangula</i> • Rhamnaceae	Clematis	<i>Clematis</i> • Ranunculaceae
Cascara sagrada	<i>Frangula</i> • Rhamnaceae	Cliff brake fern	<i>Pellaea</i> • Pteridaceae
Castor bean	<i>Ricinus</i> • Euphorbiaceae	Cliff maids	<i>Lewisia</i> • Portulacaceae
Cat's-ear	<i>Calochortus</i> • Liliaceae	Clintonia	<i>Clintonia</i> • Liliaceae
Cat's-ear	<i>Hypochaeris</i> • Compositae	Clocks	<i>Erodium</i> • Geraniaceae
Cat's-eye	<i>Cryptantha</i> • Boraginaceae	Clotbur	<i>Xanthium</i> • Compositae
Cat-tail	<i>Typha</i> • Typhaceae	Clover	<i>Medicago</i> • Leguminosae
Catalpa	<i>Catalpa</i> • Bignoniaceae	Clover	<i>Melilotus</i> • Leguminosae
Catchfly	<i>Silene</i> • Caryophyllaceae	Clover	<i>Trifolium</i> • Leguminosae
Catnip	<i>Nepeta</i> • Labiatae	Club-moss	<i>Lycopodium</i> • Lycopodiaceae
Ceanothus	<i>Ceanothus</i> • Rhamnaceae	Club-rush	<i>Schoenoplectus</i> • Cyperaceae
Celery	<i>Apium</i> • Umbelliferae	Cluster-lily	<i>Brodiaea</i> • Liliaceae
Centuary	<i>Centaurium</i> • Gentianaceae	Cluster-lily	<i>Dichelostemma</i> • Liliaceae
Cestrum	<i>Cestrum</i> • Solanaceae	Coast[-al] redwood	<i>Sequoia</i> • Cupressaceae
Chaenactis	<i>Chaenactis</i> • Compositae	Cobra-lily	<i>Darlingtonia</i> • Sarraceniaceae
Chaff weed	<i>Anagallis</i> • Primulaceae	Cochlearia	<i>Cochlearia</i> • Cruciferae
Chain fern	<i>Woodwardia</i> • Blechnaceae	Cocklebur	<i>Xanthium</i> • Compositae
Chamise	<i>Adenostoma</i> • Rosaceae	Cockspur	<i>Echinochloa</i> • Gramineae
Chamomile	<i>Anthemis</i> • Compositae	Coffee berry	<i>Frangula</i> • Rhamnaceae
Chamomile	<i>Chamaemulum</i> • Compositae	Coffee fern	<i>Pellaea</i> • Pteridaceae
Chanchalagua	<i>Centaurium</i> • Gentianaceae	Cola de mico	<i>Heliotropium</i> • Boraginaceae
Chaparral broom	<i>Baccharis</i> • Compositae	Colchita	<i>Lotus</i> • Leguminosae
Chaparral pea	<i>Pickeringia</i> • Leguminosae	Collomia	<i>Collomia</i> • Polemoniaceae
Charlock	<i>Raphanus</i> • Cruciferae	Colt's-foot	<i>Petasites</i> • Compositae
Charlock	<i>Sinapis</i> • Cruciferae	Columbine	<i>Aquilegia</i> • Ranunculaceae
Chatterbox	<i>Epipactis</i> • Orchidaceae	Combseed	<i>Pectocarya</i> • Boraginaceae
Cheat grass	<i>Bromus</i> • Gramineae	Comfrey	<i>Symphytum</i> • Boraginaceae
Checker lily	<i>Fritillaria</i> • Liliaceae	Cone flower	<i>Hemitomes</i> • Ericaceae
Checkerbloom	<i>Sidalcea</i> • Malvaceae	Cone flower	<i>Rudbeckia</i> • Compositae
Cheeseweed	<i>Malva</i> • Malvaceae	Coolwort	<i>Tiarella</i> • Saxifragaceae
Cherry	<i>Prunus</i> • Rosaceae	Coon's-tail	<i>Ceratophyllum</i> • Ceratophyllaceae
Cherry-laurel	<i>Prunus</i> • Rosaceae	Coral root	<i>Corallorhiza</i> • Orchidaceae
Chess	<i>Bromus</i> • Gramineae	Cord grass	<i>Spartina</i> • Gramineae
Chestnut	<i>Castanea</i> • Fagaceae	Coreopsis	<i>Coreopsis</i> • Compositae
Chia	<i>Salvia</i> • Labiatae	Corethrogyne	<i>Corethrogyne</i> • Compositae
Chicken-claws	<i>Sarcocornia</i> • Chenopodiaceae	Coriander	<i>Coriandrum</i> • Umbelliferae
Chickweed	<i>Cerastium</i> • Caryophyllaceae	Corn cockle	<i>Agrostemma</i> • Caryophyllaceae
Chickweed	<i>Holosteum</i> • Caryophyllaceae	Corn daisy	<i>Glebionis</i> • Compositae

Corn flag	<i>Chasmanthe</i> • Iridaceae	Deer brush	<i>Ceanothus</i> • Rhamnaceae
Corn flower	<i>Centaurea</i> • Compositae	Deer fern	<i>Blechnum</i> • Blechnaceae
Corn lily	<i>Veratrum</i> • Liliaceae	Deer foot	<i>Achlys</i> • Berberidaceae
Corn mint	<i>Mentha</i> • Labiatae	Deer grass	<i>Muhlenbergia</i> • Gramineae
Corn salad	<i>Valerianella</i> • Valerianaceae	Deer tongue	<i>Swertia</i> • Gentianaceae
Corn spurry	<i>Spergula</i> • Caryophyllaceae	Deer weed	<i>Lotus</i> • Leguminosae
Corn-chrysanthemum	<i>Glebionis</i> • Compositae	Deer's ears	<i>Swertia</i> • Gentianaceae
Corn-lily	<i>Ixia</i> • Iridaceae	Deer-potato	<i>Triteleia</i> • Liliaceae
Corn-marigold	<i>Glebionis</i> • Compositae	Deptford pink	<i>Dianthus</i> • Caryophyllaceae
Costmary	<i>Tanacetum</i> • Compositae	Desert mustard	<i>Sisymbrium</i> • Cruciferae
Cotoneaster	<i>Cotoneaster</i> • Rosaceae	Desert-dandelion	<i>Malacothrix</i> • Compositae
Cotton batting plant	<i>Pseudognaphalium</i> • Compositae	Desert-olive	<i>Forestiera</i> • Oleaceae
Cotton sedge	<i>Eriophorum</i> • Cyperaceae	Desert-parsley	<i>Lomatium</i> • Umbelliferae
Cotton weed	<i>Epilobium</i> • Onagraceae	Devil's weed	<i>Tribulus</i> • Zygophyllaceae
Cotton weed	<i>Micropus</i> • Compositae	Devil's-claw	<i>Proboscidea</i> • Martyniaceae
Cotton weed	<i>Stylocline</i> • Compositae	Devil's-lettuce	<i>Amsinckia</i> • Boraginaceae
Cotton-grass	<i>Calliscirpus</i> • Cyperaceae	Dew cup	<i>Alchemilla</i> • Rosaceae
Cotton-grass	<i>Eriophorum</i> • Cyperaceae	Dichondra	<i>Dichondra</i> • Convolvulaceae
Cotton-rose	<i>Filago</i> • Compositae	Dill	<i>Anethum</i> • Umbelliferae
Cotton-rose	<i>Logfia</i> • Compositae	Distaff thistle	<i>Carthamus</i> • Compositae
Cottonwood	<i>Populus</i> • Salicaceae	Ditch-grass	<i>Ruppia</i> • Ruppiales
Cow berry	<i>Comarum</i> • Rosaceae	Dobie pod	<i>Tropidocarpum</i> • Cruciferae
Cow cockle	<i>Vaccaria</i> • Caryophyllaceae	Dock	<i>Rumex</i> • Polygonaceae
Cow cress	<i>Lepidium</i> • Cruciferae	Dodder	<i>Cuscuta</i> • Convolvulaceae
Cow herb	<i>Vaccaria</i> • Caryophyllaceae	dog berry	<i>Cornus</i> • Cornaceae
Cow-lily	<i>Nuphar</i> • Nymphaeaceae	Dog-fennel	<i>Anthemis</i> • Compositae
Cow-parsnip	<i>Heracleum</i> • Umbelliferae	Dog-fennel	<i>Chamaemulum</i> • Compositae
Cowbane	<i>Oxypolis</i> • Umbelliferae	Dogbane	<i>Apocynum</i> • Apocynaceae
Coyote b[r]ush	<i>Baccharis</i> • Compositae	Dogtail	<i>Cynosurus</i> • Gramineae
Coyote mint	<i>Monardella</i> • Labiatae	Dogtooth-violet	<i>Erythronium</i> • Liliaceae
Coyote-thistle	<i>Eryngium</i> • Umbelliferae	Dogwood	<i>Cornus</i> • Cornaceae
Crab grass	<i>Digitaria</i> • Gramineae	Doll's-lily	<i>Odontostomum</i> • Tecophilaeaceae
Crane's-bill	<i>Geranium</i> • Geraniaceae	Douglas-fir	<i>Pseudotsuga</i> • Pinaceae
Crassula	<i>Crassula</i> • Crassulaceae	Dove weed	<i>Croton</i> • Euphorbiaceae
Cream bush	<i>Holodiscus</i> • Rosaceae	Downingia	<i>Downingia</i> • Campanulaceae
Cream cups	<i>Platystemon</i> • Papaveraceae	Draba	<i>Draba</i> • Cruciferae
Cream sacs	<i>Castilleja</i> • Orobanchaceae	Draperia	<i>Draperia</i> • Hydrophyllaceae
Creek fringe	<i>Epilobium</i> • Onagraceae	Drop seed	<i>Sporobolus</i> • Gramineae
Creeping charlie	<i>Glechoma</i> • Labiatae	Drops-of-gold	<i>Prosartes</i> • Liliaceae
Creeping jenny	<i>Lysimachia</i> • Primulaceae	Dropwort	<i>Oenanthe</i> • Umbelliferae
Cretan weed	<i>Hedypnois</i> • Compositae	Duckmeat	<i>Spirodela</i> • Lemnaceae
Crosswort	<i>Crucianella</i> • Rubiaceae	Duckweed	<i>Lemna</i> • Lemnaceae
Crowberry	<i>Empetrum</i> • Ericaceae	Duckweed fern	<i>Azolla</i> • Salviniaceae
Crowfoot	<i>Ranunculus</i> • Ranunculaceae	Dudleya	<i>Dudleya</i> • Crassulaceae
Crown daisy	<i>Glebionis</i> • Compositae	Dune grass	<i>Elymus</i> • Gramineae
Crypsis	<i>Crypsis</i> • Gramineae	Durango root	<i>Datisca</i> • Datisceae
Cryptantha	<i>Cryptantha</i> • Boraginaceae	Dusty maidens	<i>Chaenactis</i> • Compositae
Cudweed	<i>Euchiton</i> • Compositae	Dutchman's pipe	<i>Aristolochia</i> • Aristolochiaceae
Cudweed	<i>Gamochaeta</i> • Compositae	Dwarf mistletoe	<i>Arceuthobium</i> • Santalaceae
Cudweed	<i>Gnaphalium</i> • Compositae	Dwarf rush	<i>Juncus</i> • Juncaceae
Cudweed	<i>Hesperevax</i> • Compositae	Dwarf-flax	<i>Hesperolinon</i> • Linaceae
Cudweed	<i>Pseudognaphalium</i> • Compositae	Dwarf-sage	<i>Scutellaria</i> • Labiatae
Currant	<i>Ribes</i> • Grossulariaceae	Dwarf-sunflower	<i>Helianthella</i> • Compositae
Cut grass	<i>Leersia</i> • Gramineae	Dyer's rocket	<i>Reseda</i> • Resedaceae
Daffodil	<i>Narcissus</i> • Iridaceae	Dyer's woad	<i>Isatis</i> • Cruciferae
Dagger pod	<i>Phoenicaulis</i> • Cruciferae		
Daisy	<i>Erigeron</i> • Compositae	Eel-grass	<i>Zostera</i> • Zosteraceae
Dallis grass	<i>Paspalum</i> • Gramineae	Elder	<i>Sambucus</i> • Caprifoliaceae
Dame's rocket	<i>Hesperis</i> • Cruciferae	Elderberry	<i>Sambucus</i> • Caprifoliaceae
Dandelion	<i>Taraxacum</i> • Compositae	Elecampane	<i>Inula</i> • Compositae
Darlingtonia	<i>Darlingtonia</i> • Sarraceniaceae	Elephant's-head	<i>Pedicularis</i> • Scrophulariaceae
Darnel	<i>Lolium</i> • Gramineae	Elk-clover	<i>Aralia</i> • Araliaceae
Datura	<i>Datura</i> • Solanaceae	Elk-grass	<i>Xerophyllum</i> • Liliaceae
Dead-nettle	<i>Lamium</i> • Labiatae	Elodea	<i>Elodea</i> • Hydrocharitaceae
Death-camas	<i>Zigadenus</i> • Liliaceae	Enchanter's-nightshade	<i>Circaea</i> • Onagraceae

English daisy	<i>Bellis</i> • Compositae	Filago	<i>Filago</i> • Compositae
English ivy	<i>Hedera</i> • Araliaceae	Filago	<i>Logfia</i> • Compositae
English-laurel	<i>Prunus</i> • Rosaceae	Filaree	<i>Erodium</i> • Geraniaceae
Eriastrum	<i>Eriastrum</i> • Polemoniaceae	Filbert	<i>Corylus</i> • Betulaceae
Eryngo	<i>Eryngium</i> • Umbelliferae	Finger grass	<i>Chloris</i> • Gramineae
Eschscholzia	<i>Eschscholzia</i> • Papaveraceae	Fire	<i>Abies</i> • Pinaceae
Eupatorium	<i>Ageratina</i> • Compositae	Fire lily	<i>Xerophyllum</i> • Liliaceae
Evax	<i>Hesper-evax</i> • Compositae	Firecracker flower	<i>Dichelostemma</i> • Liliaceae
Evening snow	<i>Linanthus</i> • Polemoniaceae	Firecracker plant	<i>Dichelostemma</i> • Liliaceae
Evening-primrose	<i>Camissonia</i> • Onagraceae	Fireweed	<i>Amsinckia</i> • Boraginaceae
Evening-primrose	<i>Oenothera</i> • Onagraceae	Fireweed	<i>Chamerion</i> • Onagraceae
Everlasting	<i>Gamochaeta</i> • Compositae	Fireweed	<i>Epilobium</i> • Onagraceae
Eyebane	<i>Euphorbia</i> • Euphorbiaceae	Fireweed	<i>Erechtites</i> • Compositae
Eyelash weed	<i>Blepharipappus</i> • Compositae	Fireweed	<i>Kochia</i> • Chenopodiaceae
		Fishhooks	<i>Ancistrocarphus</i> • Compositae
Fairground grass	<i>Sclerochloa</i> • Gramineae	Five-finger fern	<i>Adiantum</i> • Pteridaceae
Fairy bells	<i>Prosartes</i> • Liliaceae	Flannel bush	<i>Fremontodendron</i> • Sterculiaceae
Fairy lantern	<i>Calochortus</i> • Liliaceae	Flat pod	<i>Idaho</i> • Cruciferae
Fairy lantern	<i>Prosartes</i> • Liliaceae	Flat sedge	<i>Cyperus</i> • Cyperaceae
Fairy slipper	<i>Calypto</i> • Orchidaceae	Flat sedge	<i>Isolepis</i> • Cyperaceae
Fairy-fan	<i>Clarkia</i> • Onagraceae	Flat-tops	<i>Eriogonum</i> • Polygonaceae
False agoseris	<i>Nothocalais</i> • Compositae	Flax	<i>Linum</i> • Linaceae
False asphodel	<i>Triantha</i> • Liliaceae	Flax flower	<i>Linanthus</i> • Polemoniaceae
False brome	<i>Brachypodium</i> • Gramineae	Fleabane	<i>Erigeron</i> • Compositae
False buckwheat	<i>Eriogonum</i> • Polygonaceae	Flix weed	<i>Descurainia</i> • Cruciferae
False bugbane	<i>Trautvetteria</i> • Ranunculaceae	Flower-of-an-hour	<i>Hibiscus</i> • Malvaceae
False chamomile	<i>Tripleurospermum</i> • Compositae	Flowering-quillwort	<i>Triglochin</i> • Hydrocharitaceae
False dandelion	<i>Nothocalais</i> • Compositae	Fluellin	<i>Kickxia</i> • Scrophulariaceae
False flax	<i>Camelina</i> • Cruciferae	Foam flower	<i>Tiarella</i> • Saxifragaceae
False gilia	<i>Allophyllum</i> • Polemoniaceae	Foetid adder's-tongue	<i>Scoliopus</i> • Liliaceae
False golden-aster	<i>Heterotheca</i> • Compositae	Fog fruit	<i>Phyla</i> • Verbenaceae
False ground-cherry	<i>Leucophysalis</i> • Solanaceae	Fool's onion	<i>Triteleia</i> • Liliaceae
False hellebore	<i>Veratrum</i> • Liliaceae	Foothill-flax	<i>Hesperolinon</i> • Linaceae
False indigo	<i>Amorpha</i> • Leguminosae	Footsteps-of-spring	<i>Sanicula</i> • Umbelliferae
False lily-of-the-valley	<i>Maianthemum</i> • Liliaceae	Forget-me-not	<i>Myosotis</i> • Boraginaceae
False lupine	<i>Thermopsis</i> • Leguminosae	Forsellesia	<i>Forsellesia</i> • Crossosomataceae
False mayweed	<i>Tripleurospermum</i> • Compositae	Four-o'clock	<i>Mirabilis</i> • Nyctaginaceae
False mermaid	<i>Floerkea</i> • Limnanthaceae	Foxglove	<i>Digitalis</i> • Scrophulariaceae
False mule's-ear	<i>Agnorhiza</i> • Compositae	Foxtail	<i>Alopecurus</i> • Gramineae
False pimpernel	<i>Lindernia</i> • Scrophulariaceae	Foxtail	<i>Hordeum</i> • Gramineae
False quince	<i>Pseudocydonia</i> • Rosaceae	Foxtail	<i>Setaria</i> • Gramineae
False Solomon's-seal	<i>Maianthemum</i> • Liliaceae	Fragile fern	<i>Cystopteris</i> • Cystopteridaceae
False spirea [-aea]	<i>Sorbaria</i> • Rosaceae	Fremontia	<i>Fremontodendron</i> • Sterculiaceae
False Venus' looking glass	<i>Legenere</i> • Campanulaceae	Fringe cup	<i>Lithophragma</i> • Saxifragaceae
Fanwort	<i>Cabomba</i> • Cabombaceae	Fringe cup[s]	<i>Tellima</i> • Saxifragaceae
Fan-foil	<i>Potentilla</i> • Rosaceae	Fringe pod	<i>Thysanocarpus</i> • Cruciferae
Farewell-to-spring	<i>Clarkia</i> • Onagraceae	Fritillary	<i>Fritillaria</i> • Liliaceae
Fat-hen	<i>Atriplex</i> • Chenopodiaceae	Frogbit	<i>Limnobium</i> • Hydrocharitaceae
Father-and-child plant	<i>Euchiton</i> • Compositae	Frying pans	<i>Eschscholzia</i> • Papaveraceae
Fawn lily	<i>Erythronium</i> • Liliaceae	Fuchsia	<i>Epilobium</i> • Onagraceae
Feather bells	<i>Stenanthium</i> • Liliaceae	Fuchsia	<i>Fuchsia</i> • Onagraceae
Feather weed	<i>Gamochaeta</i> • Compositae	Fumitory	<i>Fumaria</i> • Papaveraceae
Feather-geranium	<i>Chenopodium</i> • Chenopodiaceae	Furze	<i>Ulex</i> • Leguminosae
Felwort	<i>Gentianella</i> • Gentianaceae		
Fennel	<i>Foeniculum</i> • Umbelliferae	Garden rocket	<i>Eruca</i> • Cruciferae
Fenugreek	<i>Trigonella</i> • Leguminosae	Garlic	<i>Allium</i> • Liliaceae
Fescue	<i>Festuca</i> • Gramineae	Gentian	<i>Gentiana</i> • Gentianaceae
Fiddle neck	<i>Amsinckia</i> • Boraginaceae	Gentian	<i>Gentianella</i> • Gentianaceae
Fiddle neck	<i>Phacelia</i> • Hydrophyllaceae	Geranium	<i>Geranium</i> • Geraniaceae
Fiddle-leaf	<i>Nama</i> • Hydrophyllaceae	German-ivy	<i>Senecio</i> • Compositae
Field madder	<i>Sherardia</i> • Rubiaceae	Germander	<i>Teucrium</i> • Labiatae
Field parsley piert	<i>Aphanes</i> • Rosaceae	Giant helleborine	<i>Epipactis</i> • Orchidaceae
Fiesta flower	<i>Pholistoma</i> • Hydrophyllaceae	Giant sequoia	<i>Sequoiadendron</i> • Cupressaceae
Fig	<i>Ficus</i> • Moraceae	Gilia	<i>Aliciella</i> • Polemoniaceae
Figwort	<i>Scrophularia</i> • Scrophulariaceae	Gilia	<i>Allophyllum</i> • Polemoniaceae

Gilia	<i>Gilia</i> • Polemoniaceae	Ground cone	<i>Boschniakia</i> • Scrophulariaceae
Gill-over-the-ground	<i>Glechoma</i> • Labiatae	Ground smoke	<i>Gayophytum</i> • Onagraceae
Gily-flower	<i>Allophyllum</i> • Polemoniaceae	Ground-cherry	<i>Physalis</i> • Solanaceae
Giraffe-head	<i>Lamium</i> • Labiatae	Ground-ivy	<i>Glechoma</i> • Labiatae
Glacier lily	<i>Erythronium</i> • Liliaceae	Ground-pine	<i>Lycopodium</i> • Lycopodiaceae
Gland weed	<i>Parentucellia</i> • Scrophulariaceae	Groundsel	<i>Packera</i> • Compositae
Glasswort	<i>Lilaeopsis</i> • Umbelliferae	Groundsel	<i>Senecio</i> • Compositae
Glasswort	<i>Salicornia</i> • Chenopodiaceae	Groundsel	<i>Solidago</i> • Compositae
Glasswort	<i>Sarcocornia</i> • Chenopodiaceae	Grouseberry	<i>Vaccinium</i> • Ericaceae
Glehnia	<i>Glehnia</i> • Umbelliferae	Gum	<i>Eucalyptus</i> • Myrtaceae
Globe lily	<i>Calochortus</i> • Liliaceae	Gum plant	<i>Grindelia</i> • Compositae
Globe mallow	<i>Iliamna</i> • Malvaceae	Gum weed	<i>Grindelia</i> • Compositae
Glory bush	<i>Ceanothus</i> • Rhamnaceae	Gymnosteris	<i>Gymnosteris</i> • Polemoniaceae
Glory mat	<i>Ceanothus</i> • Rhamnaceae		
Gnome plant	<i>Hemitomes</i> • Ericaceae	Hair grass	<i>Aira</i> • Gramineae
Goat grass	<i>Aegilops</i> • Gramineae	Hair grass	<i>Deschampsia</i> • Gramineae
Goat's-beard	<i>Aruncus</i> • Rosaceae	Hair grass	<i>Rostraria</i> • Gramineae
Goat's-beard	<i>Tragopogon</i> • Compositae	Hair sedge	<i>Bulbostylis</i> • Cyperaceae
Goat-head	<i>Tribulus</i> • Zygophyllaceae	Hairy-danthonia	<i>Rytidosperma</i> • Gramineae
Godetia	<i>Clarkia</i> • Onagraceae	Half-chaff sedge	<i>Liposperma</i> • Cyperaceae
Gold-wire	<i>Hypericum</i> • Hypericaceae	Haplopappus	<i>Ericameria</i> • Compositae
Goldback fern	<i>Pentagramma</i> • Pteridaceae	Haplopappus	<i>Hazardia</i> • Compositae
Golden bush	<i>Ericameria</i> • Compositae	Hard fern	<i>Blechnum</i> • Blechnaceae
Golden ear-drops	<i>Ehrendorferia</i> • Papaveraceae	Hard grass	<i>Aegilops</i> • Gramineae
Golden eggs	<i>Camissonia</i> • Onagraceae	Hard grass	<i>Sclerochloa</i> • Gramineae
Golden fleece	<i>Ericameria</i> • Compositae	Hard-tack	<i>Cercocarpus</i> • Rosaceae
Golden lily bells	<i>Calochortus</i> • Liliaceae	Hardheads	<i>Centaurea</i> • Compositae
Golden marguerite	<i>Cota</i> • Compositae	Harding grass	<i>Phalaris</i> • Gramineae
Golden saxifrage	<i>Chrysosplenium</i> • Saxifragaceae	Hare's tail grass	<i>Lagurus</i> • Gramineae
Golden thread	<i>Cuscuta</i> • Convolvulaceae	Hare-leaf	<i>Lagophylla</i> • Compositae
Golden weed	<i>Pyrrocoma</i> • Compositae	Harebell	<i>Campanula</i> • Campanulaceae
Golden weed	<i>Tonestus</i> • Compositae	Harlequin flower	<i>Sparaxis</i> • Iridaceae
Golden-aster	<i>Heterotheca</i> • Compositae	Hawk's-beard	<i>Crepis</i> • Compositae
Golden-banner	<i>Thermopsis</i> • Leguminosae	Hawkbit	<i>Leontodon</i> • Compositae
Golden-eyed-grass	<i>Sisyrinchium</i> • Iridaceae	Hawkweed	<i>Hieracium</i> • Compositae
Golden-yarrow	<i>Eriophyllum</i> • Compositae	Hawthorn	<i>Crataegus</i> • Rosaceae
Goldenrod	<i>Euthamia</i> • Compositae	Hazel	<i>Corylus</i> • Betulaceae
Goldenrod	<i>Solidago</i> • Compositae	Hazelnut	<i>Corylus</i> • Betulaceae
Goldfields	<i>Lasthenia</i> • Compositae	Heal-all	<i>Prunella</i> • Labiatae
Gold flower	<i>Hymenoxys</i> • Compositae	Heart's-bursting-with-love	<i>Euonymus</i> • Celastraceae
Goldthread	<i>Coptis</i> • Ranunculaceae	Heart's-ease	<i>Viola</i> • Violaceae
Goose grass	<i>Eleusine</i> • Gramineae	Heath	<i>Erica</i> • Ericaceae
Goose-grass	<i>Galium</i> • Rubiaceae	Heath grass	<i>Danthonia</i> • Gramineae
Gooseberry	<i>Ribes</i> • Grossulariaceae	Heather	<i>Cassiope</i> • Ericaceae
Goosefoot	<i>Chenopodium</i> • Chenopodiaceae	Heather	<i>Erica</i> • Ericaceae
Goosefoot	<i>Dysphania</i> • Chenopodiaceae	Heather	<i>Phyllodoce</i> • Ericaceae
Gorse	<i>Ulex</i> • Leguminosae	Hebe	<i>Hebe</i> • Scrophulariaceae
Grape	<i>Vitis</i> • Vitaceae	Hedge mustard	<i>Sisymbrium</i> • Cruciferae
Grape fern	<i>Botrychium</i> • Ophioglossaceae	Hedge-hyssop	<i>Gratiola</i> • Scrophulariaceae
Grape-hyacinth	<i>Muscari</i> • Liliaceae	Hedge-nettle	<i>Stachys</i> • Labiatae
Grass	<i>Cannabis</i> • Cannabaceae	Hedge-parsley	<i>Torilis</i> • Umbelliferae
Grass nut	<i>Triteleia</i> • Liliaceae	Helianthella	<i>Helianthella</i> • Compositae
Grass pink	<i>Petrorhagia</i> • Caryophyllaceae	Heliotrope	<i>Heliotropium</i> • Boraginaceae
Grass poly	<i>Lythrum</i> • Lythraceae	Helleborine	<i>Epipactis</i> • Orchidaceae
Grass widows	<i>Olsynium</i> • Iridaceae	Hemicarpha	<i>Hemicarpha</i> • Cyperaceae
Grass-of-Parnassus	<i>Parnassia</i> • Parnassiaceae	Hemlock	<i>Cicuta</i> • Umbelliferae
Grass-wrack	<i>Zannichellia</i> • Potamogetonaceae	Hemlock	<i>Conium</i> • Umbelliferae
Grasswort	<i>Lilaeopsis</i> • Umbelliferae	Hemlock	<i>Tsuga</i> • Pinaceae
Greasewood	<i>Adenostoma</i> • Rosaceae	Hemlock-parsley	<i>Conioselinum</i> • Umbelliferae
Green everlasting	<i>Gnaphalium</i> • Compositae	Henbane	<i>Hyoscyamus</i> • Solanaceae
Green mint	<i>Monardella</i> • Labiatae	Henbit	<i>Lamium</i> • Labiatae
Greenbriar [-ier]	<i>Smilax</i> • Smilacaceae	Hens-and-chickens	<i>Dudleya</i> • Crassulaceae
Greenland cochlearia	<i>Cochlearia</i> • Cruciferae	Herb robert	<i>Geranium</i> • Geraniaceae
Grindelia	<i>Grindelia</i> • Compositae	Herb-of-the-cross	<i>Verbena</i> • Verbenaceae
Gromwell	<i>Lithospermum</i> • Boraginaceae	Herba impia	<i>Filago</i> • Compositae

Hiker's-gentian	<i>Gentianopsis</i> • Gentianaceae	Jack-go-to-bed-at-noon	<i>Tragopogon</i> • Compositae
High mallow	<i>Malvella</i> • Malvaceae	Jack-of-the-rocks	<i>Heuchera</i> • Saxifragaceae
Hill star	<i>Lithophragma</i> • Saxifragaceae	Jacob's ladder	<i>Polemonium</i> • Polemoniaceae
Himalaya berry	<i>Rubus</i> • Rosaceae	Jaumea	<i>Jaumea</i> • Compositae
Hoary cress	<i>Lepidium</i> • Cruciferae	Jerusalem-oak	<i>Chenopodium</i> • Chenopodiaceae
Hoary mustard	<i>Hirschfeldia</i> • Cruciferae	Jessamine	<i>Cestrum</i> • Solanaceae
Hoary-aster	<i>Dieteria</i> • Compositae	Jewel flower	<i>Streptanthus</i> • Cruciferae
Hog weed	<i>Portulaca</i> • Portulacaceae	Jewel weed	<i>Impatiens</i> • Balsaminaceae
Hog-fennel	<i>Lomatium</i> • Umbelliferae	Jim brush	<i>Ceanothus</i> • Rhamnaceae
Holly	<i>Ilex</i> • Aquifoliaceae	Jimson weed	<i>Datura</i> • Solanaceae
Holly fern	<i>Polystichum</i> • Dryopteridaceae	Johnny jump-up	<i>Viola</i> • Violaceae
Hollyhock	<i>Iliamna</i> • Malvaceae	Johnny tuck	<i>Triphysaria</i> • Scrophulariaceae
Honesty	<i>Lunaria</i> • Cruciferae	Johnson grass	<i>Sorghum</i> • Gramineae
Honey bush	<i>Melianthus</i> • Melianthaceae	Jubata grass	<i>Cortaderia</i> • Gramineae
Honey-dew	<i>Horkelia</i> • Rosaceae	Judas tree	<i>Cercis</i> • Leguminosae
Honeysuckle	<i>Lonicera</i> • Caprifoliaceae	June grass	<i>Koeleria</i> • Gramineae
Hop tree	<i>Ptelea</i> • Rutaceae	Jungle-rice	<i>Echinochloa</i> • Gramineae
Hops	<i>Humulus</i> • Cannabaceae	Juniper	<i>Juniperus</i> • Cupressaceae
Horehound	<i>Lycopus</i> • Labiatae	Jupiter's-beard	<i>Centranthus</i> • Valerianaceae
Horehound	<i>Marrubium</i> • Labiatae		
Horkelia	<i>Horkelia</i> • Rosaceae		
Horned pondweed	<i>Zannichellia</i> • Potamogetonaceae	Kalmia	<i>Kalmia</i> • Ericaceae
Hornwort	<i>Ceratophyllum</i> • Ceratophyllaceae	Kangaroo-apple	<i>Solanum</i> • Solanaceae
Horse brush	<i>Tetradymia</i> • Compositae	Kelloggia	<i>Kelloggia</i> • Rubiaceae
Horse mint	<i>Agastache</i> • Labiatae	Kenilworth-ivy	<i>Cymbalaria</i> • Scrophulariaceae
Horse-chestnut	<i>Aesculus</i> • Hippocastanaceae	Kikuyu grass	<i>Kikuyuochloa</i> • Gramineae
Horse-nettle	<i>Solanum</i> • Solanaceae	Kinnikinnick	<i>Arctostaphylos</i> • Ericaceae
Horsemint	<i>Agastache</i> • Labiatae	Klamath weed	<i>Hypericum</i> • Hypericaceae
Horseradish	<i>Armoracia</i> • Cruciferae	Knapweed	<i>Acroptilon</i> • Compositae
Horsetail	<i>Equisetum</i> • Equisetaceae	Knapweed	<i>Centaurea</i> • Compositae
Horseweed	<i>Conyza</i> • Compositae	Knawel	<i>Scleranthus</i> • Caryophyllaceae
Hottentot-fig	<i>Carpobrotus</i> • Aizoaceae	Knot grass	<i>Paspalum</i> • Gramineae
Hound's-tongue	<i>Cynoglossum</i> • Boraginaceae	Knot-grass	<i>Scleranthus</i> • Caryophyllaceae
Huckleberry	<i>Vaccinium</i> • Ericaceae	Knot weed	<i>Polygonum</i> • Polygonaceae
Hulsea	<i>Hulsea</i> • Compositae	Kotolo	<i>Asclepias</i> • Apocynaceae
Humingbird trumpet	<i>Epilobium</i> • Onagraceae		
Hunger weed	<i>Ranunculus</i> • Ranunculaceae	Labrador-tea	<i>Rhododendron</i> • Ericaceae
Husk-tomato	<i>Physalis</i> • Solanaceae	Lace fern	<i>Aspidotis</i> • Pteridaceae
Hutchinsia	<i>Hornungia</i> • Cruciferae	Lace flower	<i>Tiarella</i> • Saxifragaceae
Hydrilla	<i>Hydrilla</i> • Hydrocharitaceae	Lace pod	<i>Thysanocarpus</i> • Cruciferae
		Lace-parsnip	<i>Lomatium</i> • Umbelliferae
Iceplant	<i>Mesembryanthemum</i> • Aizoaceae	Ladies-tobacco	<i>Pseudognaphalium</i> • Compositae
Incense-cedar	<i>Calocedrus</i> • Pinaceae	Ladies-tongue mustard	<i>Athysanus</i> • Cruciferae
Indian basket-grass	<i>Xerophyllum</i> • Liliaceae	Lady fern	<i>Athyrium</i> • Athyriaceae
Indian bean	<i>Catalpa</i> • Bignoniaceae	Lady's comb	<i>Scandix</i> • Umbelliferae
Indian biscuit	<i>Lomatium</i> • Umbelliferae	Lady's mantle	<i>Alchemilla</i> • Rosaceae
Indian breadroot	<i>Pediomelum</i> • Leguminosae	Lady's-slipper orchid	<i>Cypripedium</i> • Orchidaceae
Indian head-dress	<i>Tracyina</i> • Compositae	Lady's-thumb	<i>Polygonum</i> • Polygonaceae
Indian pink	<i>Silene</i> • Caryophyllaceae	Lady's-tresses	<i>Spiranthes</i> • Orchidaceae
Indian pipe	<i>Monotropa</i> • Ericaceae	Lamb's-lettuce	<i>Valerianella</i> • Valerianaceae
Indian warrior	<i>Pedicularis</i> • Scrophulariaceae	Lamb's-quarters	<i>Chenopodium</i> • Chenopodiaceae
Indian's dream	<i>Aspidotis</i> • Pteridaceae	Lantern	<i>Calochortus</i> • Liliaceae
Indian-chickweed	<i>Mollugo</i> • Molluginaceae	Larkspur	<i>Consolida</i> • Ranunculaceae
Indian-hemp	<i>Apocynum</i> • Apocynaceae	Larkspur	<i>Delphinium</i> • Ranunculaceae
Indian-plum	<i>Oemleria</i> • Rosaceae	Lasthenia	<i>Lasthenia</i> • Compositae
Indian-poke	<i>Veratrum</i> • Liliaceae	Lateral bulrush	<i>Isolepis</i> • Cyperaceae
Indian-potato	<i>Orogenia</i> • Umbelliferae	Laurel	<i>Laurus</i> • Lauraceae
Indian-potato	<i>Sagittaria</i> • Alismataceae	Laurustinus	<i>Viburnum</i> • Caprifoliaceae
Indian-rhubarb	<i>Darmera</i> • Saxifragaceae	Layia	<i>Layia</i> • Compositae
Innocence	<i>Collinsia</i> • Scrophulariaceae	Leather root	<i>Hoita</i> • Leguminosae
Inside-out flower	<i>Vancouveria</i> • Berberidaceae	Leek	<i>Allium</i> • Liliaceae
Iris	<i>Iris</i> • Iridaceae	Leopard bane	<i>Arnica</i> • Compositae
Ithuriel's spear	<i>Triteleia</i> • Liliaceae	Lesquerella	<i>Lesquerella</i> • Cruciferae
Ivesia	<i>Ivesia</i> • Rosaceae	Lessingia	<i>Lessingia</i> • Compositae
Ivy	<i>Hedera</i> • Araliaceae	Lettuce	<i>Lactuca</i> • Compositae

Lewis'-syringa	<i>Philadelphus</i> • Hydrangeaceae	Marlahan mustard	<i>Isatis</i> • Cruciferae
Lewisia	<i>Lewisia</i> • Portulacaceae	Marsh cress	<i>Rorippa</i> • Cruciferae
Licorice	<i>Glycyrrhiza</i> • Leguminosae	Marsh-buttercup	<i>Caltha</i> • Ranunculaceae
Licorice fern	<i>Polypodium</i> • Polypodiaceae	Marsh-marigold	<i>Caltha</i> • Ranunculaceae
Licorice plant	<i>Helichrysum</i> • Compositae	Marsh-parsley	<i>Cyclospermum</i> • Umbelliferae
Ligusticum	<i>Ligusticum</i> • Umbelliferae	Marsh-pennywort	<i>Hydrocotyle</i> • Hydrocotylaceae
Lilac bush	<i>Aubrieta</i> • Cruciferae	Marsh-purslane	<i>Ludwigia</i> • Onagraceae
Lilaeopsis	<i>Lilaeopsis</i> • Umbelliferae	Marsh-rosemary	<i>Limonium</i> • Plumbaginaceae
Lily	<i>Lilium</i> • Liliaceae	Marshlocks	<i>Comarum</i> • Rosaceae
Lily bell	<i>Calochortus</i> • Liliaceae	Mat-grass	<i>Phyla</i> • Verbenaceae
Lily-of-the-valley vine	<i>Salpichroa</i> • Solanaceae	Matchweed	<i>Gutierrezia</i> • Compositae
Linanthus	<i>Leptosiphon</i> • Polemoniaceae	Matilija poppy	<i>Romneya</i> • Papaveraceae
Linanthus	<i>Linanthus</i> • Polemoniaceae	Matrimony vine	<i>Lycium</i> • Solanaceae
Lindernia	<i>Lindernia</i> • Scrophulariaceae	Mayweed	<i>Anthemis</i> • Compositae
Lip fern	<i>Cheilanthes</i> • Pteridaceae	Meadow salsify	<i>Tragopogon</i> • Compositae
Live-forever	<i>Dudleya</i> • Crassulaceae	Meadow sweet	<i>Spiraea</i> • Rosaceae
Liver berry	<i>Streptopus</i> • Liliaceae	Meadow-rue	<i>Thalictrum</i> • Ranunculaceae
Lizard tail	<i>Eriophyllum</i> • Compositae	Meadowfoam	<i>Limnanthes</i> • Limnanthaceae
Loco	<i>Astragalus</i> • Leguminosae	Meconella	<i>Meconella</i> • Papaveraceae
Locoweed	<i>Astragalus</i> • Leguminosae	Medick	<i>Medicago</i> • Leguminosae
Locoweed	<i>Datura</i> • Solanaceae	Medusa head	<i>Elymus</i> • Gramineae
Locust	<i>Robinia</i> • Leguminosae	Melic	<i>Melica</i> • Gramineae
Loeflingia	<i>Loeflingia</i> • Caryophyllaceae	Menziesia	<i>Menziesia</i> • Ericaceae
Loma prieta	<i>Hoita</i> • Leguminosae	Merlin-grass	<i>Isoëtes</i> • Isoëtaceae
Lomatium	<i>Lomatium</i> • Umbelliferae	Merriam grass	<i>Elymus</i> • Gramineae
London rocket	<i>Sisymbrium</i> • Cruciferae	Mesa mint	<i>Pogogyne</i> • Labiatae
Long-tailed-ginger	<i>Asarum</i> • Aristolochiaceae	Mexican balsamea	<i>Epilobium</i> • Onagraceae
Loosestrife	<i>Lysimachia</i> • Primulaceae	Mexican tea	<i>Dysphania</i> • Chenopodiaceae
Loosestrife	<i>Lythrum</i> • Lythraceae	Michaelmas daisy	<i>Symphotrichum</i> • Compositae
Lotus	<i>Lotus</i> • Leguminosae	Microcala	<i>Cicendia</i> • Gentianaceae
Lousewort	<i>Pedicularis</i> • Orobanchaceae	Microseris	<i>Microseris</i> • Compositae
Lovage	<i>Ligusticum</i> • Umbelliferae	Mignonette	<i>Reseda</i> • Resedaceae
Love grass	<i>Eragrostis</i> • Gramineae	Milfoil	<i>Achillea</i> • Compositae
Lucerne	<i>Medicago</i> • Leguminosae	Milfoil	<i>Myriophyllum</i> • Haloragaceae
Luina	<i>Luina</i> • Compositae	Milk maids	<i>Cardamine</i> • Cruciferae
Lungwort	<i>Mertensia</i> • Boraginaceae	Milk thistle	<i>Silybum</i> • Compositae
Lupine	<i>Lupinus</i> • Leguminosae	Milkvetch	<i>Astragalus</i> • Leguminosae
Lyme grass	<i>Elymus</i> • Gramineae	Milkweed	<i>Asclepias</i> • Apocynaceae
Macronema	<i>Ericameria</i> • Compositae	Milkwort	<i>Glaux</i> • Primulaceae
Madrona	<i>Arbutus</i> • Ericaceae	Milkwort	<i>Rhinotropis</i> • Polygalaceae
Madrone	<i>Arbutus</i> • Ericaceae	Milkwort	<i>Tolpis</i> • Compositae
Madroño	<i>Arbutus</i> • Ericaceae	Milo	<i>Sorghum</i> • Gramineae
Mahala mats	<i>Ceanothus</i> • Rhamnaceae	Miner's-lettuce	<i>Claytonia</i> • Portulacaceae
Mahonia	<i>Berberis</i> • Berberidaceae	Miner's-lettuce	<i>Montia</i> • Portulacaceae
Maiden's-tears	<i>Silene</i> • Caryophyllaceae	Miner's-pepper	<i>Lepidium</i> • Cruciferae
Maidenhair fern	<i>Adiantum</i> • Pteridaceae	Mint	<i>Mentha</i> • Labiatae
Maidenhair vine	<i>Muhlenbeckia</i> • Polygonaceae	Mint	<i>Monardella</i> • Labiatae
Malacothrix	<i>Malacothrix</i> • Compositae	Mission bells	<i>Fritillaria</i> • Liliaceae
Mallow	<i>Lavatera</i> • Malvaceae	Mist maiden	<i>Romanzoffia</i> • Hydrophyllaceae
Mallow	<i>Malacothamnus</i> • Malvaceae	Mistletoe	<i>Phoradendron</i> • Santalaceae
Mallow	<i>Malva</i> • Malvaceae	Mitrewort	<i>Mitella</i> • Saxifragaceae
Mallow	<i>Malvella</i> • Malvaceae	Mock azalea	<i>Menziesia</i> • Ericaceae
Mallow	<i>Modiola</i> • Malvaceae	Mock leopard's bane	<i>Arnica</i> • Compositae
Mallow	<i>Glyceria</i> • Gramineae	Mock orange	<i>Philadelphus</i> • Hydrangeaceae
Manna grass	<i>Torreyochloa</i> • Gramineae	Mock orange	<i>Pittosporum</i> • Pittosporaceae
Manna grass	<i>Marah</i> • Cucurbitaceae	Mock parsley	<i>Apiastrum</i> • Umbelliferae
Manroot	<i>Arctostaphylos</i> • Ericaceae	Modesty	<i>Whipplea</i> • Hydrangeaceae
Manzanita	<i>Acer</i> • Aceraceae	Money plant	<i>Lunaria</i> • Cruciferae
Maple	<i>Ammophila</i> • Gramineae	Monk's-hood	<i>Aconitum</i> • Ranunculaceae
Maram	<i>Hippuris</i> • Hippuridaceae	Monkey flower	<i>Erythranthe</i> • Scrophulariaceae
Mare's-tail	<i>Tagetes</i> • Compositae	Monkey flower	<i>Mimulus</i> • Scrophulariaceae
Marigold	<i>Cannabis</i> • Cannabaceae	Monkey-fiddle	<i>Hesperochiron</i> • Hydrophyllaceae
Marijuana	<i>Calochortus</i> • Liliaceae	Montbretia	<i>Crocasmia</i> • Iridaceae
Mariposa	<i>Calochortus</i> • Liliaceae	Montia	<i>Claytonia</i> • Portulacaceae
Mariposa lily		Montia	<i>Montia</i> • Portulacaceae

Monument plant	<i>Frasera</i> • Gentianaceae	Ngaio	<i>Myoporum</i> • Myoporaceae
Moonwort	<i>Botrychium</i> • Ophioglossaceae	Nightshade	<i>Solanum</i> • Solanaceae
Morning-glory	<i>Calystegia</i> • Convolvulaceae	Nine fingers	<i>Lupinus</i> • Leguminosae
Morning-glory	<i>Convolvulus</i> • Convolvulaceae	Ninebark	<i>Physocarpus</i> • Rosaceae
Mosquito bills	<i>Dodecatheon</i> • Primulaceae	Nipplewort	<i>Lapsana</i> • Compositae
Mosquito fern	<i>Azolla</i> • Salviniaceae	Nit grass	<i>Gastridium</i> • Gramineae
Moss heather	<i>Cassiope</i> • Ericaceae	North Africa grass	<i>Ventenata</i> • Gramineae
Moss-rose	<i>Portulaca</i> • Portulacaceae	Northern gentian	<i>Gentianella</i> • Gentianaceae
Mother-of-thousands	<i>Tolmiea</i> • Saxifragaceae	Nut-grass	<i>Cyperus</i> • Cyperaceae
Mountain balm	<i>Eriodictyon</i> • Hydrophyllaceae	Oak	<i>Quercus</i> • Fagaceae
Mountain balm	<i>Monardella</i> • Labiatae	Oat	<i>Avena</i> • Gramineae
Mountain crown	<i>Oreostemma</i> • Compositae	Oat grass	<i>Arrhenatherum</i> • Gramineae
Mountain lover	<i>Paxistima</i> • Celastraceae	Oat grass	<i>Danthonia</i> • Gramineae
Mountain mint	<i>Monardella</i> • Labiatae	Oat grass	<i>Trisetum</i> • Gramineae
Mountain pride	<i>Penstemon</i> • Scrophulariaceae	Oat grass	<i>Holodiscus</i> • Rosaceae
Mountain-ash	<i>Sorbus</i> • Rosaceae	Ocean spray	<i>Oenanthe</i> • Umbelliferae
Mountain-balm	<i>Eriodictyon</i> • Hydrophyllaceae	Oenanthe	<i>Senecio</i> • Compositae
Mountain-dandelion	<i>Agoseris</i> • Compositae	Old-man-in-the-spring	<i>Nerium</i> • Apocynaceae
Mountain-grape	<i>Berberis</i> • Berberidaceae	Oleander	<i>Allium</i> • Liliaceae
Mountain-heather	<i>Cassiope</i> • Ericaceae	Onion	<i>Melica</i> • Gramineae
Mountain-heather	<i>Chimaphila</i> • Ericaceae	Onion grass	<i>Dichelostemma</i> • Liliaceae
Mountain-heliotrope	<i>Valeriana</i> • Valerianaceae	Ookow	<i>Atriplex</i> • Chenopodiaceae
Mountain-hemp	<i>Apocynum</i> • Apocynaceae	Orach[-e]	<i>Dactylis</i> • Gramineae
Mountain-mahogany	<i>Cercocarpus</i> • Rosaceae	Orchard grass	<i>Orcuttia</i> • Gramineae
Mountain-rice	<i>Stipa</i> • Gramineae	Orcutt's grass	<i>Clinopodium</i> • Labiatae
Mountain-sorrel	<i>Oxyria</i> • Polygonaceae	Oregon tea	<i>Ceanothus</i> • Rhamnaceae
Mountain-timothy	<i>Phleum</i> • Gramineae	Oregon tea-tree	<i>Mahonia</i> • Berberidaceae
Mourning bride	<i>Scabiosa</i> • Dipsacaceae	Oregon-grape	<i>Umbellularia</i> • Lauraceae
Mouse ear cress	<i>Arabidopsis</i> • Cruciferae	Oregon-myrtle	<i>Orogenia</i> • Umbelliferae
Mouse-ears	<i>Mimulus</i> • Scrophulariaceae	Orogenia	<i>Sedum</i> • Crassulaceae
Mouse-tail	<i>Myosurus</i> • Ranunculaceae	Orpine	<i>Cornus</i> • Cornaceae
Mud-midget	<i>Wolffia</i> • Lemnaceae	Osier	<i>Oemleria</i> • Rosaceae
Mud-midget	<i>Wolffiella</i> • Lemnaceae	Oso berry	<i>Hornungia</i> • Cruciferae
Mud-plantain	<i>Heteranthera</i> • Pontederiaceae	Oval purse	<i>Hymenoxys</i> • Compositae
Mudwort	<i>Limosella</i> • Scrophulariaceae	Owl's-claws	<i>Castilleja</i> • Scrophulariaceae
Mugwort	<i>Artemisia</i> • Compositae	Owl's-clover	<i>Orthocarpus</i> • Scrophulariaceae
Muhly	<i>Muhlenbergia</i> • Gramineae	Owl's-clover	<i>Triphysaria</i> • Scrophulariaceae
Muilla	<i>Muilla</i> • Liliaceae	Owl's-clover	<i>Leucanthemum</i> • Compositae
Mule fat	<i>Baccharis</i> • Compositae	Ox-eye daisy	<i>Oxalis</i> • Oxalidaceae
Mule's- ears	<i>Wyethia</i> • Compositae	Oxalis	<i>Helminthotheca</i> • Compositae
Mullein	<i>Verbascum</i> • Scrophulariaceae	Ox-tongue	<i>Tragopogon</i> • Compositae
Mullein pink	<i>Lychnis</i> • Caryophyllaceae	Oyster plant	
Musk bush	<i>Ceanothus</i> • Rhamnaceae		
Musk flower	<i>Mimulus</i> • Scrophulariaceae	Pacific oenanthe	<i>Oenanthe</i> • Umbelliferae
Musk-clover	<i>Erodium</i> • Geraniaceae	Pacific wax-myrtle	<i>Morella</i> • Myricaceae
Mustard	<i>Brassica</i> • Cruciferae	Paeony	<i>Paeonia</i> • Paeoniaceae
Mustard	<i>Descurainia</i> • Cruciferae	Paintbrush	<i>Castilleja</i> • Scrophulariaceae
Mustard	<i>Hirschfeldia</i> • Cruciferae	Palma Christa	<i>Ricinus</i> • Euphorbiaceae
Mustard	<i>Sisymbrium</i> • Cruciferae	Pampas grass	<i>Cortaderia</i> • Gramineae
Muster-John-Henry	<i>Tagetes</i> • Compositae	Panal	<i>Cypselea</i> • Aizoaceae
Myoporum	<i>Myoporum</i> • Myoporaceae	Panic grass	<i>Panicum</i> • Gramineae
Myrtlewood	<i>Umbellularia</i> • Lauraceae	Pansy	<i>Viola</i> • Violaceae
		Parrot's-feather	<i>Myriophyllum</i> • Haloragaceae
Naiad	<i>Najas</i> • Hydrocharitaceae	Parsley	<i>Lomatium</i> • Umbelliferae
Nailwort	<i>Paronychia</i> • Caryophyllaceae	Parsley	<i>Petroselinum</i> • Umbelliferae
Naked lady	<i>Amaryllis</i> • Liliaceae	Parsley fern	<i>Cryptogramma</i> • Pteridaceae
Narcissus	<i>Narcissus</i> • Iridaceae	Parsnip	<i>Pastinaca</i> • Umbelliferae
Nasturtium	<i>Tropaeolum</i> • Tropaeolaceae	Partridge-foot	<i>Leutkea</i> • Rosaceae
Navarretia	<i>Navarretia</i> • Polemoniaceae	Pasque flower	<i>Anemone</i> • Ranunculaceae
Neck weed	<i>Veronica</i> • Scrophulariaceae	Path finder	<i>Adenocaulon</i> • Compositae
Nemacladus	<i>Nemacladus</i> • Campanulaceae	Pea	<i>Lathyrus</i> • Leguminosae
Nemophila	<i>Nemophila</i> • Hydrophyllaceae	Pea	<i>Pisum</i> • Leguminosae
Nest straw	<i>Stylocline</i> • Compositae	Peach	<i>Prunus</i> • Rosaceae
Nettle	<i>Urtica</i> • Urticaceae	Pearl flower	<i>Heterocodon</i> • Campanulaceae
New Zealand-spinach	<i>Tetragonia</i> • Aizoaceae	Pearlwort	<i>Sagina</i> • Caryophyllaceae

Pearly everlasting	<i>Anaphalis</i> • Compositae	Polemonium	<i>Polemonium</i> • Polemoniaceae
Pectocarya	<i>Pectocarya</i> • Boraginaceae	Polygala	<i>Rhinotropis</i> • Polygalaceae
Pellitory	<i>Parietaria</i> • Urticaceae	Polypody fern	<i>Polypodium</i> • Polypodiaceae
Penny cress	<i>Noccaea</i> • Cruciferae	Pond-lily	<i>Nuphar</i> • Nymphaeaceae
Penny cress	<i>Thlaspi</i> • Cruciferae	Pondweed	<i>Najas</i> • Hydrocharitaceae
Pennyroyal	<i>Mentha</i> • Labiatae	Pondweed	<i>Potamogeton</i> • Potamogetonaceae
Pennywort	<i>Hydrocotyle</i> • Hydrocotylaceae	Ponys-foot	<i>Dichondra</i> • Convolvulaceae
Penstemon	<i>Penstemon</i> • Scrophulariaceae	Poor man's weather-glass	<i>Anagallis</i> • Primulaceae
Peony	<i>Paeonia</i> • Paeoniaceae	Popcorn flower	<i>Plagiobothrys</i> • Boraginaceae
Pepper	<i>Lepidium</i> • Cruciferae	Poplar	<i>Populus</i> • Salicaceae
Pepper-grass	<i>Lepidium</i> • Cruciferae	Poppy	<i>Eschscholzia</i> • Papaveraceae
Peppermint	<i>Mentha</i> • Labiatae	Poppy	<i>Papaver</i> • Papaveraceae
Pepperweed	<i>Lepidium</i> • Cruciferae	Port Orford-cedar	<i>Chamaecyparis</i> • Cupressaceae
Pepperwood	<i>Umbellularia</i> • Lauraceae	Possession vine	<i>Convolvulus</i> • Convolvulaceae
Pepperwort	<i>Lepidium</i> • Cruciferae	Pot	<i>Cannabis</i> • Cannabaceae
Periwinkle	<i>Vinca</i> • Apocynaceae	Prairie star	<i>Lithophragma</i> • Saxifragaceae
Persian-lilac	<i>Melia</i> • Meliaceae	Pretty face	<i>Triteleia</i> • Liliaceae
Persimmon	<i>Diospyros</i> • Ebenaceae	Prickly broom	<i>Ulex</i> • Leguminosae
Petunia	<i>Petunia</i> • Solanaceae	Prickly soliva	<i>Soliva</i> • Compositae
Phacelia	<i>Howellanthus</i> • Hydrophyllaceae	Prickly-phlox	<i>Linanthus</i> • Polemoniaceae
Phacelia	<i>Phacelia</i> • Hydrophyllaceae	Prickly-poppy	<i>Argemone</i> • Papaveraceae
Phantom orchid	<i>Cephalanthera</i> • Orchidaceae	Pride-of-the-mountains	<i>Penstemon</i> • Scrophulariaceae
Phlox	<i>Phlox</i> • Polemoniaceae	Primrose	<i>Primula</i> • Primulaceae
Pickle weed	<i>Salicornia</i> • Chenopodiaceae	Primrose-willow	<i>Ludwigia</i> • Onagraceae
Piert	<i>Aphanes</i> • Rosaceae	Primula	<i>Primula</i> • Primulaceae
Pig-a-back plant	<i>Tolmiea</i> • Saxifragaceae	Prince's-pine	<i>Chimaphila</i> • Ericaceae
Piggyback plant	<i>Tolmiea</i> • Saxifragaceae	Privet	<i>Ligustrum</i> • Oleaceae
Pigmy cypress	<i>Cupressus</i> • Cupressaceae	Psoralea	<i>Pediomelum</i> • Leguminosae
Pigmy daisy	<i>Pentachaeta</i> • Compositae	Ptilory	<i>Stephanomeria</i> • Compositae
Pigmy weed	<i>Crassula</i> • Crassulaceae	Puccoon	<i>Lithospermum</i> • Boraginaceae
Pigweed	<i>Amaranthus</i> • Amaranthaceae	Puncture vine	<i>Tribulus</i> • Zygophyllaceae
Pigweed	<i>Chenopodium</i> • Chenopodiaceae	Purple mustard	<i>Chorispora</i> • Cruciferae
Pillwort	<i>Pilularia</i> • Marsileaceae	Purple-eyed-grass	<i>Olsynium</i> • Iridaceae
Pimpernel	<i>Anagallis</i> • Primulaceae	Purslane	<i>Portulaca</i> • Portulacaceae
Pincushion	<i>Chaenactis</i> • Compositae	Pusley	<i>Portulaca</i> • Portulacaceae
Pincushion plant	<i>Navarretia</i> • Polemoniaceae	Pussy-ears	<i>Calochortus</i> • Liliaceae
Pine	<i>Pinus</i> • Pinaceae	Pussy-paws	<i>Calyptridium</i> • Portulacaceae
Pine drops	<i>Pterospora</i> • Ericaceae	Pussy-toes	<i>Antennaria</i> • Compositae
Pine grass	<i>Calamagrostis</i> • Gramineae	Pyrocoma	<i>Pyrocoma</i> • Compositae
Pine mat	<i>Ceanothus</i> • Rhamnaceae	Quack grass	<i>Elymus</i> • Gramineae
Pine sap	<i>Monotropa</i> • Ericaceae	Quaking aspen	<i>Populus</i> • Salicaceae
Pineapple weed	<i>Matricaria</i> • Compositae	Quaking grass	<i>Briza</i> • Gramineae
Pinefoot	<i>Pityopus</i> • Ericaceae	Queen Anne's lace	<i>Daucus</i> • Umbelliferae
Pinesap	<i>Monotropa</i> • Ericaceae	Queen's cup	<i>Clintonia</i> • Liliaceae
Pinesap	<i>Pleurocospora</i> • Ericaceae	Quillwort	<i>Isoetes</i> • Isoëtaceae
Pink	<i>Silene</i> • Caryophyllaceae	Rabbit brush	<i>Chrysothamnus</i> • Compositae
Pipe vine	<i>Aristolochia</i> • Aristolochiaceae	Rabbit bush	<i>Ericameria</i> • Compositae
Piperia	<i>Piperia</i> • Orchidaceae	Rabbit's-foot	<i>Lagophylla</i> • Compositae
Pipsissiwa	<i>Chimaphila</i> • Ericaceae	Rabbit's-foot grass	<i>Polypogon</i> • Gramineae
Pitcher plant	<i>Darlingtonia</i> • Sarraceniaceae	Rabbit-tobacco	<i>Pseudognaphalium</i> • Compositae
Pitcher plant	<i>Sarracenia</i> • Sarraceniaceae	Radish	<i>Raphanus</i> • Cruciferae
Pitcher-sage	<i>Lepechinia</i> • Labiatae	Ragweed	<i>Ambrosia</i> • Compositae
Pittosporum	<i>Pittosporum</i> • Pittosporaceae	Ragwort	<i>Packera</i> • Compositae
Plane tree	<i>Platanus</i> • Platanaceae	Ragwort	<i>Senecio</i> • Compositae
Plantain	<i>Plantago</i> • Plantaginaceae	Raillardella	<i>Raillardella</i> • Compositae
Plectritis	<i>Plectritis</i> • Valerianaceae	Ranger's-buttons	<i>Sphenosciadium</i> • Umbelliferae
Plum	<i>Prunus</i> • Rosaceae	Rape	<i>Brassica</i> • Cruciferae
Plumas bush	<i>Ceanothus</i> • Rhamnaceae	Raspberry	<i>Rubus</i> • Rosaceae
Pogogyne	<i>Pogogyne</i> • Labiatae	Rattlebox	<i>Sesbania</i> • Leguminosae
Poison-hemlock	<i>Conium</i> • Umbelliferae	Rattlesnake fern	<i>Botrychium</i> • Ophioglossaceae
Poison-oak	<i>Toxicodendron</i> • Anacardiaceae	Rattlesnake grass	<i>Briza</i> • Gramineae
Poke	<i>Phytolacca</i> • Phytolaccaceae	Rattlesnake grass	<i>Bromus</i> • Gramineae
Pokeberry	<i>Phytolacca</i> • Phytolaccaceae	Rattlesnake weed	<i>Daucus</i> • Umbelliferae
Pokeweed	<i>Phytolacca</i> • Phytolaccaceae		
Poker plant	<i>Kniphofia</i> • Liliaceae		

Rattlesnake-plantain	<i>Goodyera</i> • Orchidaceae	Sage	<i>Artemisia</i> • Compositae
Rattleweed	<i>Astragalus</i> • Leguminosae	Sage	<i>Salvia</i> • Labiatae
Red canker	<i>Pyrola</i> • Ericaceae	Sagebrush	<i>Artemisia</i> • Compositae
Red claws	<i>Escallonia</i> • Escalloniaceae	Sagewort	<i>Artemisia</i> • Compositae
Red maids	<i>Calandrinia</i> • Portulacaceae	Sailor caps	<i>Dodecatheon</i> • Primulaceae
Red osier	<i>Cornus</i> • Cornaceae	Salal	<i>Gaultheria</i> • Ericaceae
Red ribbons	<i>Clarkia</i> • Onagraceae	Salmon berry	<i>Rubus</i> • Rosaceae
Red stem	<i>Ammannia</i> • Lythraceae	Salsify	<i>Scorzonera</i> • Compositae
Red-cedar	<i>Thuja</i> • Cupressaceae	Salsify	<i>Tragopogon</i> • Compositae
Red-flush	<i>Lampranthus</i> • Aizoaceae	Salt bush	<i>Atriplex</i> • Chenopodiaceae
Red-heather	<i>Phyllodoce</i> • Ericaceae	Salt grass	<i>Distichlis</i> • Gramineae
Red-valerian	<i>Centranthus</i> • Valerianaceae	Salt weed	<i>Atriplex</i> • Chenopodiaceae
Redberry	<i>Rhamnus</i> • Rhamnaceae	Salt-cedar	<i>Tamarix</i> • Tamaricaceae
Redbud	<i>Cercis</i> • Leguminosae	Saltwort	<i>Glaux</i> • Primulaceae
Redhot poker	<i>Kniphofia</i> • Liliaceae	Saltwort	<i>Salicornia</i> • Chenopodiaceae
Redroot	<i>Amaranthus</i> • Amaranthaceae	Samphire	<i>Salicornia</i> • Chenopodiaceae
Redscale	<i>Atriplex</i> • Chenopodiaceae	Samphire	<i>Sarcocornia</i> • Chenopodiaceae
Redtop	<i>Agrostis</i> • Gramineae	Sand lily	<i>Leucocrinum</i> • Liliaceae
Redwood	<i>Sequoia</i> • Cupressaceae	Sand pigmy	<i>Crassula</i> • Crassulaceae
Redwood-ivy	<i>Vancouveria</i> • Berberidaceae	Sand spurrey	<i>Spergularia</i> • Caryophyllaceae
Reed grass	<i>Arundo</i> • Gramineae	Sand weed	<i>Athysanus</i> • Cruciferae
Reed grass	<i>Calamagrostis</i> • Gramineae	Sand-corn	<i>Zigadenus</i> • Liliaceae
Reed grass	<i>Cinna</i> • Gramineae	Sand-crocus	<i>Romulea</i> • Iridaceae
Reed grass	<i>Phragmites</i> • Gramineae	Sand-lily	<i>Leucocrinum</i> • Liliaceae
Rescue grass	<i>Bromus</i> • Gramineae	Sand-verbena	<i>Abronia</i> • Nyctaginaceae
Resin weed	<i>Grindelia</i> • Compositae	Sandberry	<i>Arctostaphylos</i> • Ericaceae
Rhododendron	<i>Rhododendron</i> • Ericaceae	Sandmat	<i>Cardionema</i> • Caryophyllaceae
Ribwort	<i>Plantago</i> • Plantaginaceae	Sandmat	<i>Euphorbia</i> • Euphorbiaceae
Rice cut grass	<i>Leersia</i> • Gramineae	Sandwort	<i>Arenaria</i> • Caryophyllaceae
Ritual root	<i>Lomatium</i> • Umbelliferae	Sandwort	<i>Minuartia</i> • Caryophyllaceae
Roble	<i>Quercus</i> • Fagaceae	Sanicle	<i>Sanicula</i> • Umbelliferae
Rock brake	<i>Cryptogramma</i> • Pteridaceae	Satin bells	<i>Calochortus</i> • Liliaceae
Rock cress	<i>Arabis</i> • Cruciferae	Satintail	<i>Imperata</i> • Gramineae
Rock cress	<i>Boechemera</i> • Cruciferae	Sawwort	<i>Saussurea</i> • Compositae
Rock cress	<i>Hornungia</i> • Cruciferae	Saxifrage	<i>Saxifraga</i> • Saxifragaceae
Rock cress	<i>Planodes</i> • Cruciferae	Scarlet bugler	<i>Penstemon</i> • Scrophulariaceae
Rock-jasmine	<i>Androsace</i> • Primulaceae	Scarlet pimpernel	<i>Anagallis</i> • Primulaceae
Rock-rose	<i>Helianthemum</i> • Cistaceae	Scarlet-gilia	<i>Ipomopsis</i> • Polemoniaceae
Rock-spiraea	<i>Holodiscus</i> • Rosaceae	Scent bottle	<i>Platanthera</i> • Orchidaceae
Rocket	<i>Eruca</i> • Cruciferae	Scorpion-grass	<i>Myosotis</i> • Boraginaceae
Rocket	<i>Hesperis</i> • Cruciferae	Scorzonella	<i>Microriseris</i> • Compositae
Romanzoffia	<i>Romanzoffia</i> • Hydrophyllaceae	Scotch thistle	<i>Onopordum</i> • Compositae
Rose	<i>Rosa</i> • Rosaceae	Scott Mtn.-phacelia	<i>Howellanthus</i> • Hydrophyllaceae
Rose campion	<i>Silene</i> • Caryophyllaceae	Scouring-rush	<i>Equisetum</i> • Equisetaceae
Rose-bay	<i>Rhododendron</i> • Ericaceae	Scribner's grass	<i>Scribneria</i> • Gramineae
Rosette grass	<i>Panicum</i> • Gramineae	Scurf pea	<i>Rupertia</i> • Leguminosae
Rosilla	<i>Helenium</i> • Compositae	Scurvy-grass	<i>Cochlearia</i> • Cruciferae
Rosin weed	<i>Calycadenia</i> • Compositae	Sea blush	<i>Plectritis</i> • Valerianaceae
Rotala	<i>Rotala</i> • Lythraceae	Sea hard grass	<i>Parapholis</i> • Gramineae
Rowan	<i>Sorbus</i> • Rosaceae	Sea lyme grass	<i>Elymus</i> • Gramineae
Rubber weed	<i>Hymenoxys</i> • Compositae	Sea mat	<i>Ceanothus</i> • Rhamnaceae
Rue	<i>Ruta</i> • Rutaceae	Sea milkwort	<i>Glaux</i> • Primulaceae
Rue-anemone	<i>Enemion</i> • Ranunculaceae	Sea muilla	<i>Muilla</i> • Liliaceae
Running-pine	<i>Lycopodium</i> • Lycopodiaceae	Sea rocket	<i>Cakile</i> • Cruciferae
Rupturewort	<i>Herniaria</i> • Caryophyllaceae	Sea scale	<i>Atriplex</i> • Chenopodiaceae
Rush	<i>Juncus</i> • Juncaceae	Sea thrift	<i>Armeria</i> • Plumbaginaceae
Rush-broom	<i>Lotus</i> • Leguminosae	Sea watch	<i>Angelica</i> • Umbelliferae
Rush-lily	<i>Hastingsia</i> • Liliaceae	Sea wrack	<i>Zostera</i> • Zosteraceae
Rush-rose	<i>Crocantemum</i> • Cistaceae	Sea-blite	<i>Suaeda</i> • Chenopodiaceae
Russian thistle	<i>Salsola</i> • Chenopodiaceae	Sea-fig	<i>Carpobrotus</i> • Aizoaceae
Rust-rose	<i>Helianthemum</i> • Cistaceae	Sea-lavender	<i>Limonium</i> • Plumbaginaceae
Rusty-leaf	<i>Menziesia</i> • Ericaceae	Sea-lettuce	<i>Dudleya</i> • Crassulaceae
Rye	<i>Secale</i> • Gramineae	Sea-pink	<i>Armeria</i> • Plumbaginaceae
Rye grass	<i>Elymus</i> • Gramineae	Sea-spinach	<i>Tetragonia</i> • Aizoaceae
Rye grass	<i>Festuca</i> • Gramineae		

Sedge	<i>Carex</i> • Cyperaceae	Snow brush	<i>Arctostaphylos</i> • Ericaceae
Sedge	<i>Scirpus</i> • Cyperaceae	Snow brush	<i>Ceanothus</i> • Rhamnaceae
Sedum	<i>Sedum</i> • Crassulaceae	Snow orchid	<i>Cephalanthera</i> • Orchidaceae
Self-heal	<i>Prunella</i> • Labiatae	Snow plant	<i>Sarcodes</i> • Ericaceae
Semaphore grass	<i>Pleuropogon</i> • Gramineae	Snow queen	<i>Veronica</i> • Scrophulariaceae
Senecio	<i>Delairea</i> • Compositae	Snow-drop bush	<i>Styrax</i> • Styracaceae
Senecio	<i>Packera</i> • Compositae	Snow-on-the-mountain	<i>Euphorbia</i> • Euphorbiaceae
Service berry	<i>Senecio</i> • Compositae	Snow-wreath	<i>Neviusia</i> • Rosaceae
Shad flower	<i>Amelanchier</i> • Rosaceae	Snowberry	<i>Symphoricarpos</i> • Caprifoliaceae
Shamrock	<i>Draba</i> • Cruciferae	Snowdrops	<i>Plagiobothrys</i> • Boraginaceae
Shasta daisy	<i>Trifolium</i> • Leguminosae	Soap plant	<i>Chlorogalum</i> • Liliaceae
Shasta snow-wreath	<i>Leucanthemum</i> • Compositae	Soapwort	<i>Saponaria</i> • Caryophyllaceae
Shasta-aster	<i>Neviusia</i> • Rosaceae	Solomon's-lily	<i>Arum</i> • Araceae
Sheep-parsnip	<i>Dieteria</i> • Compositae	Sorgo	<i>Sorghum</i> • Gramineae
Shepherd's needle	<i>Lomatium</i> • Umbelliferae	Sorrel	<i>Rumex</i> • Polygonaceae
Shepherd's purse	<i>Scandix</i> • Umbelliferae	Sour-grass	<i>Oxalis</i> • Oxalidaceae
Shield cress	<i>Capsella</i> • Cruciferae	Sow-thistle	<i>Sonchus</i> • Compositae
Shield fern	<i>Lepidium</i> • Cruciferae	Spadderdock	<i>Nuphar</i> • Nymphaeaceae
Shield leaf	<i>Dryopteris</i> • Dryopteridaceae	Spanish-thistle	<i>Xanthium</i> • Compositae
Shinleaf	<i>Darmera</i> • Saxifragaceae	Spear scale	<i>Atriplex</i> • Chenopodiaceae
Shoe buttons	<i>Pyrola</i> • Ericaceae	Spearmint	<i>Mentha</i> • Labiatae
Shooting star	<i>Sanicula</i> • Umbelliferae	Spearwort	<i>Ranunculus</i> • Ranunculaceae
Sickle grass	<i>Dodecatheon</i> • Primulaceae	Speedwell	<i>Veronica</i> • Scrophulariaceae
Sidalcea	<i>Parapholis</i> • Gramineae	Spice bush	<i>Calycanthus</i> • Calycanthaceae
Side bells	<i>Sidalcea</i> • Malvaceae	Spiderwort	<i>Tradescantia</i> • Commelinaceae
Sierra cress	<i>Orthilia</i> • Ericaceae	Spig nut	<i>Aralia</i> • Araliaceae
Sierra hare	<i>Cardamine</i> • Cruciferae	Spike-moss	<i>Selaginella</i> • Selaginellaceae
Sierra mint	<i>Carex</i> • Cyperaceae	Spike-primrose	<i>Epilobium</i> • Onagraceae
Sierra redwood	<i>Salvia</i> • Labiatae	Spike-rush	<i>Eleocharis</i> • Cyperaceae
Sierra sap	<i>Sequoiadendron</i> • Cupressaceae	Spikenard	<i>Aralia</i> • Araliaceae
Sierra-laurel	<i>Pleuricospora</i> • Ericaceae	Spike weed	<i>Centromadia</i> • Compositae
Sierra-mint	<i>Leucothoë</i> • Ericaceae	Spine flower	<i>Chorizanthe</i> • Polygonaceae
Silk-tassel	<i>Pycnanthemum</i> • Labiatae	Spine weed	<i>Centromadia</i> • Compositae
Silver weed	<i>Garrya</i> • Garryaceae	Spirea	<i>Spiraea</i> • Rosaceae
Silverpuffs	<i>Potentilla</i> • Rosaceae	Spleenwort	<i>Asplenium</i> • Aspleniaceae
Silverpuffs	<i>Microseris</i> • Compositae	Spoke pod	<i>Thysanocarpus</i> • Cruciferae
Silvertop	<i>Uropappus</i> • Compositae	Spoonwort	<i>Cochlearia</i> • Cruciferae
Single delight	<i>Glehnia</i> • Umbelliferae	Spotted-hemlock	<i>Cicuta</i> • Umbelliferae
Siskiyou bells	<i>Moneses</i> • Ericaceae	Spotted-hemlock	<i>Conium</i> • Umbelliferae
Siskiyou mint	<i>Prosartes</i> • Liliaceae	Sprangletop	<i>Leptochloa</i> • Gramineae
Six-weeks grass	<i>Monardella</i> • Labiatae	Spring beauty	<i>Claytonia</i> • Portulacaceae
Skeleton weed	<i>Festuca</i> • Gramineae	Spring beauty	<i>Montia</i> • Portulacaceae
Skullcap	<i>Chondrilla</i> • Compositae	Spring gold	<i>Crocidium</i> • Compositae
Skunk bush	<i>Scutellaria</i> • Labiatae	Spruce	<i>Picea</i> • Pinaceae
Skunk flower	<i>Rhus</i> • Anacardiaceae	Spurge	<i>Euphorbia</i> • Euphorbiaceae
Skunk-cabbage	<i>Ipomopsis</i> • Polemoniaceae	Spurr[e]y	<i>Spergula</i> • Caryophyllaceae
Skunk-cabbage	<i>Lysichiton</i> • Araceae	Squaw bush	<i>Rhus</i> • Anacardiaceae
Skunkweed	<i>Veratrum</i> • Liliaceae	Squaw carpet	<i>Ceanothus</i> • Rhamnaceae
Sky pilot	<i>Navarretia</i> • Polemoniaceae	Squaw mat	<i>Ceanothus</i> • Rhamnaceae
Sky rocket	<i>Polemonium</i> • Polemoniaceae	Squaw-lettuce	<i>Hydrophyllum</i> • Hydrophyllaceae
Sleepy-daisy	<i>Ipomopsis</i> • Polemoniaceae	Squirreltail	<i>Elymus</i> • Gramineae
Slink lily	<i>Xanthisma</i> • Compositae	Squirreltail	<i>Hordeum</i> • Gramineae
Slink pod	<i>Scoliopus</i> • Liliaceae	St. John's wort	<i>Hypericum</i> • Hypericaceae
Slough grass	<i>Scoliopus</i> • Liliaceae	Stagger weed	<i>Delphinium</i> • Ranunculaceae
Smart weed	<i>Beckmannia</i> • Gramineae	Star flower	<i>Lithophragma</i> • Saxifragaceae
Smilo	<i>Polygonum</i> • Polygonaceae	Star flower	<i>Maianthemum</i> • Liliaceae
Snake lily	<i>Stipa</i> • Gramineae	Star flower	<i>Trientalis</i> • Primulaceae
Snakeroot	<i>Dichelostemma</i> • Liliaceae	Star mustard	<i>Coincya</i> • Cruciferae
Snakeroot	<i>Ageratina</i> • Compositae	Star thistle	<i>Centaurea</i> • Compositae
Snakeroot	<i>Aristolochia</i> • Aristolochiaceae	Star-grass	<i>Heteranthera</i> • Pontederiaceae
Snake weed	<i>Sanicula</i> • Umbelliferae	Star-lily	<i>Leucocrinum</i> • Liliaceae
Snapdragon	<i>Polygonum</i> • Polygonaceae	Star-of-Bethlehem	<i>Ornithogalum</i> • Liliaceae
Snap weed	<i>Antirrhinum</i> • Scrophulariaceae	Star-tulip	<i>Calochortus</i> • Liliaceae
Sneeze weed	<i>Impatiens</i> • Balsaminaceae	Starwort	<i>Callitriche</i> • Callitrichaceae
	<i>Helenium</i> • Compositae	Starwort	<i>Pseudostellaria</i> • Caryophyllaceae

Starwort	<i>Stellaria</i> • Caryophyllaceae	Tamarisk	<i>Tamarix</i> • Tamaricaceae
Steer's head	<i>Dicentra</i> • Papaveraceae	Tanoak	<i>Notholithocarpus</i> • Fagaceae
Stenanthium	<i>Stenanthium</i> • Liliaceae	Tansy	<i>Tanacetum</i> • Compositae
Stephanomeria	<i>Stephanomeria</i> • Compositae	Tansy mustard	<i>Descurainia</i> • Cruciferae
Stick-leaf	<i>Mentzelia</i> • Loasaceae	Tare	<i>Vicia</i> • Leguminosae
Stick-tight	<i>Bidens</i> • Compositae	Tarplant	<i>Hemizonia</i> • Compositae
Stickseed	<i>Hackelia</i> • Boraginaceae	Tarweed	<i>Centromadia</i> • Compositae
Stick weed	<i>Hemizonia</i> • Compositae	Tarweed	<i>Deinandra</i> • Compositae
Sticky seed	<i>Blennosperma</i> • Compositae	Tarweed	<i>Harmonia</i> • Compositae
Sticky-bartsia	<i>Parentucellia</i> • Scrophulariaceae	Tarweed	<i>Hemizonella</i> • Compositae
Sticky-laurel	<i>Ceanothus</i> • Rhamnaceae	Tarweed	<i>Hemizonia</i> • Compositae
Stingaree bush	<i>Pickeringia</i> • Leguminosae	Tarweed	<i>Kyhosia</i> • Compositae
Stinkwort	<i>Dittrichia</i> • Compositae	Tarweed	<i>Madia</i> • Compositae
Stink bells	<i>Fritillaria</i> • Liliaceae	Tarweed	<i>Garrya</i> • Garryaceae
Stink grass	<i>Eragrostis</i> • Gramineae	Tassel bush	<i>Tauschia</i> • Umbelliferae
Stink weed	<i>Anthemis</i> • Compositae	Tauschia	<i>Pittosporum</i> • Pittosporaceae
Stinking willie	<i>Senecio</i> • Compositae	Tawhiwhi	<i>Dipsacus</i> • Dipsacaceae
Stock	<i>Mathiola</i> • Cruciferae	Teasel	<i>Heterotheca</i> • Compositae
Stonecrop	<i>Parvisedum</i> • Crassulaceae	Telegraph weed	<i>Echinodorus</i> • Alismataceae
Stonecrop	<i>Rhodiola</i> • Crassulaceae	Texas mud baby	<i>Arabidopsis</i> • Cruciferae
Stonecrop	<i>Sedum</i> • Crassulaceae	Thale cress	<i>Thelypodium</i> • Cruciferae
Storax	<i>Styrax</i> • Styracaceae	Thelypody	<i>Rubus</i> • Rosaceae
Stork's-bill	<i>Erodium</i> • Geraniaceae	Thimble berry	<i>Hainardia</i> • Gramineae
Straggle bush	<i>Ribes</i> • Grossulariaceae	Thintail grass	<i>Carduus</i> • Compositae
Strawberry	<i>Fragaria</i> • Rosaceae	Thistle	<i>Centaurea</i> • Compositae
Strawberry-blite	<i>Chenopodium</i> • Chenopodiaceae	Thistle	<i>Cirsium</i> • Compositae
Stream orchis	<i>Epipactis</i> • Orchidaceae	Thistle	<i>Onopordum</i> • Compositae
String flower	<i>Silene</i> • Caryophyllaceae	Thistle	<i>Silybum</i> • Compositae
Styrax	<i>Styrax</i> • Styracaceae	Thistle	<i>Sonchus</i> • Compositae
Succory	<i>Chondrilla</i> • Compositae	Thistle	<i>Datura</i> • Solanaceae
Succory	<i>Cichorium</i> • Compositae	Thorn-apple	<i>Bupleurum</i> • Umbelliferae
Sugar bush	<i>Rhus</i> • Anacardiaceae	Thorow-wax	<i>Triodanis</i> • Campanulaceae
Sugar stick	<i>Allotropa</i> • Ericaceae	Thread plant	<i>Pterostegia</i> • Polygonaceae
Sugar sumac	<i>Rhus</i> • Anacardiaceae	Thread stem	<i>Aristida</i> • Gramineae
Sugar-scoop	<i>Tiarella</i> • Saxifragaceae	Three-awn grass	<i>Schoenoplectus</i> • Cyperaceae
Sulphur flower	<i>Eriogonum</i> • Polygonaceae	Three-square	<i>Armeria</i> • Plumbaginaceae
Summer snowflake	<i>Leucojum</i> • Liliaceae	Thrift	<i>Eriogonum</i> • Polygonaceae
Summer's darling	<i>Clarkia</i> • Onagraceae	Tibinagua	<i>Ceanothus</i> • Rhamnaceae
Summer-lilac	<i>Buddleja</i> • Buddlejaceae	Tick brush	<i>Agrostis</i> • Gramineae
Sun-cups	<i>Camissonia</i> • Onagraceae	Tickle grass	<i>Coreopsis</i> • Compositae
Sun-rose	<i>Aptenia</i> • Aizoaceae	Tickseed	<i>Leptosyne</i> • Compositae
Sun-rose	<i>Crocanthemum</i> • Cistaceae	Tickseed	<i>Layia</i> • Compositae
Sundew	<i>Drosera</i> • Droseraceae	Tidy tips	<i>Phleum</i> • Gramineae
Sunflower	<i>Helianthus</i> • Compositae	Timothy	<i>Cicendia</i> • Gentianaceae
Surf-grass	<i>Phyllospadix</i> • Zosteraceae	Timwort	<i>Collinsia</i> • Scrophulariaceae
Surfing-daisy	<i>Tripleurospermum</i> • Compositae	Tincture plant	<i>Hypericum</i> • Hypericaceae
Swamp checker	<i>Sidalcea</i> • Malvaceae	Tinker's penny	<i>Antirrhinum</i> • Scrophulariaceae
Swamp white heads	<i>Sphenosciadium</i> • Umbelliferae	Toad's-mouth	<i>Montia</i> • Portulacaceae
Swamp-laurel	<i>Kalmia</i> • Ericaceae	Toad-lily	<i>Linaria</i> • Scrophulariaceae
Swamp-timothy	<i>Crypsis</i> • Gramineae	Toadflax	<i>Nuttallanthus</i> • Scrophulariaceae
Sweet bay	<i>Laurus</i> • Lauraceae	Toadflax	<i>Nicotiana</i> • Solanaceae
Sweet bush	<i>Calycanthus</i> • Calycanthaceae	Tobacco	<i>Ceanothus</i> • Rhamnaceae
Sweet clover	<i>Melilotus</i> • Leguminosae	Tobacco brush	<i>Centaurea</i> • Compositae
Sweet fennel	<i>Foeniculum</i> • Umbelliferae	Tocalote	<i>Triantha</i> • Liliaceae
Sweet flag	<i>Acorus</i> • Acoraceae	Tofieldia	<i>Solanum</i> • Solanaceae
Sweet grass	<i>Anthoxanthum</i> • Gramineae	Tomato	<i>Tonella</i> • Scrophulariaceae
Sweet juice	<i>Glinus</i> • Molluginaceae	Tonella	<i>Tonestus</i> • Compositae
Sweet shrub	<i>Calycanthus</i> • Calycanthaceae	Tonestus	<i>Ammi</i> • Umbelliferae
Sweet-alyssum	<i>Lobularia</i> • Cruciferae	Toothpick weed	<i>Cardamine</i> • Cruciferae
Sweet-brier [-briar]	<i>Rosa</i> • Rosaceae	Toothwort	<i>Kniphofia</i> • Liliaceae
Sweet-cicely	<i>Osmorhiza</i> • Umbelliferae	Torch lily	<i>Torreya</i> • Taxaceae
Swertia	<i>Swertia</i> • Gentianaceae	Torreya	<i>Arabis</i> • Cruciferae
Sword fern	<i>Polystichum</i> • Dryopteridaceae	Tower mustard	<i>Heteromeles</i> • Rosaceae
Sycamore	<i>Platanus</i> • Platanaceae	Toyon	<i>Tracyina</i> • Compositae
Syringa	<i>Philadelphus</i> • Hydrangeaceae	Tracyina	

Trail plant	<i>Adenocaulon</i> • Compositae	Wallflower	<i>Erysimum</i> • Cruciferae
Trapper's-tea	<i>Rhododendron</i> • Ericaceae	Wallflower-cabbage	<i>Coincya</i> • Cruciferae
Traveler's joy	<i>Clematis</i> • Ranunculaceae	Walnut	<i>Juglans</i> • Juglandaceae
Tree mallow	<i>Lavatera</i> • Malvaceae	Wand flower	<i>Sparaxis</i> • Iridaceae
Tree poppy	<i>Dendromecon</i> • Papaveraceae	Wappato	<i>Sagittaria</i> • Alismataceae
Tree-of-heaven	<i>Ailanthus</i> • Simaroubaceae	Wart cress	<i>Coronopus</i> • Cruciferae
Trefoil	<i>Lotus</i> • Leguminosae	Wart weed	<i>Euphorbia</i> • Euphorbiaceae
Trillium	<i>Trillium</i> • Liliaceae	Water bent grass	<i>Polyopogon</i> • Gramineae
Trisetum	<i>Trisetum</i> • Gramineae	Water birch	<i>Betula</i> • Betulaceae
Triteleia	<i>Triteleia</i> • Liliaceae	Water cress	<i>Nasturtium</i> • Cruciferae
Tropical white weed	<i>Ageratum</i> • Compositae	Water dropwort	<i>Oenanthe</i> • Umbelliferae
Trumpet fire weed	<i>Lactuca</i> • Compositae	Water fire	<i>Elatine</i> • Elatinaceae
Tule	<i>Scirpus</i> • Cyperaceae	Water grass	<i>Echinochloa</i> • Gramineae
Tule-potato	<i>Sagittaria</i> • Alismataceae	Water hemlock	<i>Cicuta</i> • Umbelliferae
Tumble mustard	<i>Sisymbrium</i> • Cruciferae	Water nymph	<i>Najas</i> • Hydrocharitaceae
Tumble weed	<i>Salsola</i> • Chenopodiaceae	Water pigmy	<i>Crassula</i> • Crassulaceae
Tumbling mustard	<i>Sisymbrium</i> • Cruciferae	Water shield	<i>Brasenia</i> • Cabombaceae
Tuna	<i>Optunia</i> • Cactaceae	Water star-grass	<i>Heteranthera</i> • Pontederiaceae
Tundra mountain crown	<i>Oreostemma</i> • Compositae	Water strife	<i>Ludwigia</i> • Onagraceae
Tundra-aster	<i>Oreostemma</i> • Compositae	Water weed	<i>Elodea</i> • Hydrocharitaceae
Turkey-beard	<i>Xerophyllum</i> • Liliaceae	Water weed	<i>Polygonum</i> • Polygonaceae
Turkey-mullein	<i>Croton</i> • Euphorbiaceae	Water-clover	<i>Marsilea</i> • Marsileaceae
Turkey-pea	<i>Sanicula</i> • Umbelliferae	Water-hawthorn	<i>Aponogeton</i> • Aponogetonaceae
Turpentine weed	<i>Trichostema</i> • Labiatae	Water-lily	<i>Nuphar</i> • Nymphaeaceae
Twayblade	<i>Listera</i> • Orchidaceae	Water-lily	<i>Nymphaea</i> • Nymphaeaceae
Twinberry	<i>Lonicera</i> • Caprifoliaceae	Water-parsley	<i>Oenanthe</i> • Umbelliferae
Twinflower	<i>Linnaea</i> • Caprifoliaceae	Water-parsnip	<i>Berula</i> • Umbelliferae
Twisted stalk	<i>Streptopus</i> • Liliaceae	Water-parsnip	<i>Sium</i> • Umbelliferae
		Water-pepper	<i>Polygonum</i> • Polygonaceae
Umbrella milkwort	<i>Tolpis</i> • Compositae	Water-plantain	<i>Alisma</i> • Alismataceae
Umbrella plant	<i>Darmera</i> • Saxifragaceae	Water-thyme	<i>Hydrilla</i> • Hydrocharitaceae
Umbrella sedge	<i>Cyperus</i> • Cyperaceae	Waterleaf	<i>Hydrophyllum</i> • Hydrophyllaceae
Umbrellawort	<i>Tauschia</i> • Umbelliferae	Watermeal	<i>Wolffia</i> • Lemnaceae
Unicorn plant	<i>Proboscidea</i> • Martyniaceae	Waterwort	<i>Elatine</i> • Elatinaceae
		Watsonia	<i>Watsonia</i> • Iridaceae
Valerian	<i>Valeriana</i> • Valerianaceae	Wattle	<i>Acacia</i> • Leguminosae
Valley tassels	<i>Castilleja</i> • Scrophulariaceae	Wave-wing	<i>Cymopterus</i> • Umbelliferae
Vancouveria	<i>Vancouveria</i> • Berberidaceae	Wax flower	<i>Moneses</i> • Ericaceae
Vanilla grass	<i>Anthoxanthum</i> • Gramineae	Wax-myrtle	<i>Myrica</i> • Myricaceae
Vanilla leaf	<i>Achlys</i> • Berberidaceae	Waxy-dogbane	<i>Cycladenia</i> • Apocynaceae
Veldt grass	<i>Ehrharta</i> • Gramineae	Weld	<i>Reseda</i> • Resedaceae
Velvet grass	<i>Holcus</i> • Gramineae	Western birch	<i>Betula</i> • Betulaceae
Velvet leaf	<i>Abutilon</i> • Malvaceae	Western juniper	<i>Juniper</i> • Cupressaceae
Venus flytrap	<i>Dionaea</i> • Droseraceae	Western-laurel	<i>Leucothoe</i> • Ericaceae
Venus' comb	<i>Scandix</i> • Umbelliferae	Wheat	<i>Triticum</i> • Gramineae
Venus' looking-glass	<i>Triodanis</i> • Campanulaceae	Wheat grass	<i>Agropyron</i> • Gramineae
Venus' needle	<i>Scandix</i> • Umbelliferae	Wheat grass	<i>Elymus</i> • Gramineae
Verbena	<i>Verbena</i> • Verbenaceae	Wheel mallow	<i>Modiola</i> • Malvaceae
Verdolaga	<i>Portulaca</i> • Portulacaceae	Whipplea	<i>Whipplea</i> • Hydrangeaceae
Vernal grass	<i>Anthoxanthum</i> • Gramineae	Whisker-brush	<i>Linanthus</i> • Polemoniaceae
Vervain	<i>Verbena</i> • Verbenaceae	Whispering bells	<i>Emmenanthe</i> • Hydrophyllaceae
Vetch	<i>Vicia</i> • Leguminosae	White crown	<i>Holozonia</i> • Compositae
Vetchling	<i>Lathyrus</i> • Leguminosae	White heads	<i>Sphenosciadium</i> • Umbelliferae
Viburnum	<i>Viburnum</i> • Caprifoliaceae	White top	<i>Lepidium</i> • Cruciferae
Victorian box	<i>Pittosporum</i> • Pittosporaceae	White-heliotrope	<i>Phacelia</i> • Hydrophyllaceae
Vinegar weed	<i>Trichostema</i> • Labiatae	White-topped-aster	<i>Sericocarpus</i> • Compositae
Violet	<i>Viola</i> • Violaceae	Whitethorn	<i>Ceanothus</i> • Rhamnaceae
Violet cress	<i>Ionopsidium</i> • Cruciferae	White weed	<i>Ageratum</i> • Compositae
Viper's-grass	<i>Scorzonera</i> • Compositae	Whitlow-grass	<i>Draba</i> • Cruciferae
Virgin's-bower	<i>Clematis</i> • Ranunculaceae	Whortleberry	<i>Vaccinium</i> • Ericaceae
		Widgeon-grass	<i>Ruppia</i> • Ruppiceae
Wafer-ash	<i>Ptelea</i> • Rutaceae	Wild grape	<i>Vitis</i> • Vitaceae
Wake robin	<i>Trillium</i> • Liliaceae	Wild madder	<i>Galium</i> • Rubiaceae
Waldo daisy	<i>Erigeron</i> • Compositae	Wild succory	<i>Cichorium</i> • Compositae
		Wild-buckwheat	<i>Eriogonum</i> • Polygonaceae

Wild-buckwheat	<i>Polygonum</i> • Polygonaceae	Woolly-heads	<i>Psilocarphus</i> • Compositae
Wild-celery	<i>Apiastrum</i> • Umbelliferae	Woolly-pod	<i>Astragalus</i> • Leguminosae
Wild-cucumber	<i>Marah</i> • Cucurbitaceae	Woolly-star	<i>Eriastrum</i> • Polemoniaceae
Wild-ginger	<i>Asarum</i> • Aristolochiaceae	Woolly-sunflower	<i>Eriophyllum</i> • Compositae
Wild-hollyhock	<i>Iliamna</i> • Malvaceae	Wormseed	<i>Chenopodium</i> • Chenopodiaceae
Wild-hyacinth	<i>Dichelostemma</i> • Liliaceae	Wormseed	<i>Dysphania</i> • Chenopodiaceae
Wild-hyacinth	<i>Triteleia</i> • Liliaceae	Wormwood	<i>Artemisia</i> • Compositae
Wild-rice	<i>Zizania</i> • Gramineae	Woundwort	<i>Stachys</i> • Labiatae
Wild-rye	<i>Elymus</i> • Gramineae		
Willow	<i>Salix</i> • Salicaceae	Yampah	<i>Perideridia</i> • Umbelliferae
Willow herb	<i>Epilobium</i> • Onagraceae	Yarrow	<i>Achillea</i> • Compositae
Willow weed	<i>Polygonum</i> • Polygonaceae	Yellow cress	<i>Rorippa</i> • Cruciferae
Wind flower	<i>Anemone</i> • Ranunculaceae	Yellow mats	<i>Sanicula</i> • Umbelliferae
Wind poppy	<i>Stylomecon</i> • Papaveraceae	Yellow mustard	<i>Guillenia</i> • Cruciferae
Winter cress	<i>Barbarea</i> • Cruciferae	Yellow pincushion	<i>Chaenactis</i> • Compositae
Winter grass	<i>Poa</i> • Gramineae	Yellow weed	<i>Parentucellia</i> • Scrophulariaceae
Wintergreen	<i>Gaultheria</i> • Ericaceae	Yellow-flax	<i>Sclerolinon</i> • Linaceae
Wintergreen	<i>Moneses</i> • Ericaceae	Yellow-oat	<i>Trisetum</i> • Gramineae
Wintergreen	<i>Orthilia</i> • Ericaceae	Yellow-yarrow	<i>Eriophyllum</i> • Compositae
Wintergreen	<i>Pyrola</i> • Ericaceae	Yerba buena	<i>Clinopodium</i> • Labiatae
Wire plant	<i>Muhlenbeckia</i> • Polygonaceae	Yerba de chivato	<i>Clematis</i> • Ranunculaceae
Wire-grass	<i>Eleocharis</i> • Cyperaceae	Yerba de selva	<i>Whippleya</i> • Hydrangeaceae
Wire-lettuce	<i>Stephanomeria</i> • Compositae	Yerba estera	<i>Elatine</i> • Elatinaceae
Witch grass	<i>Panicum</i> • Gramineae	Yerba fango	<i>Elatine</i> • Elatinaceae
Witch's-teeth	<i>Lotus</i> • Leguminosae	Yerba mansa	<i>Anemopsis</i> • Saururaceae
Woad	<i>Isatis</i> • Cruciferae	Yerba reuma	<i>Frankenia</i> • Frankeniaceae
Wokas	<i>Nuphar</i> • Nymphaeaceae	Yerba santa	<i>Eriodictyon</i> • Boraginaceae
Wolf's-bane	<i>Aconitum</i> • Ranunculaceae	Yew	<i>Taxus</i> • Taxaceae
Wood beauty	<i>Drymocallis</i> • Rosaceae	Youth-on-age	<i>Tolmiea</i> • Saxifragaceae
Wood cress	<i>Cardamine</i> • Cruciferae		
Wood fern	<i>Dryopteris</i> • Dryopteridaceae	Zauschneria	<i>Epilobium</i> • Onagraceae
Wood fern	<i>Thelypteris</i> • Thelypteridaceae	Zi[y]gadene	<i>Zigadenus</i> • Liliaceae
Wood nymph	<i>Moneses</i> • Ericaceae		
Wood sorrel	<i>Oxalis</i> • Oxalidaceae		
Wood-aster	<i>Eurybia</i> • Compositae		
Woodland star	<i>Lithophragma</i> • Saxifragaceae		
Woodrush	<i>Luzula</i> • Juncaceae		
Woodsia	<i>Woodsia</i> • Woodsiaceae		
Woollen breeches	<i>Hydrophyllum</i> • Hydrophyllaceae		

SECTION 2.4 – ENDEMIC PLANTS

For a definition of endemism and a general discussion, look in the “Plant Life” section of the introduction. Our primary (and essential) source of distribution data is the Consortium of California Herbaria, along with the U. S. D. A. Plants Database and the Biota of North America Program. We have excluded a few anomalous reports, especially historical ones, from specimens taken far out of range.

FERN S

Adiantum shastense • SHA

FLOWERING PLANTS

Berberidaceae

Mahonia nervosa var. *mendocinensis*
• MEN

Boraginaceae

Plagiobothrys lithocaryus • LAK, MEN

Campanulaceae

Campanula shetleri • SHA, SIS

Caryophyllaceae

Minuartia decumbens • TRI
Minuartia rosei • SHA, TEH, TRI
Minuartia stolonifera • SIS
Silene campanulata ssp. *campanulata*
• COL, DNT, HUM, MEN, SIS, TEH, TRI
Silene marmorensis • HUM, SIS
Silene salmonacea • TRI
Silene serpentinicola • DNT

Compositae

Ageratina shastense • SHA, SIS
Antennaria sawyeri • TRI
Ericameria ophitidis • SHA, TEH, TRI
Erigeron foliosus var. *mendocinus*
• DNT, HUM, MEN, SIS
Erigeron maniopotamicus • HUM, TRI
Harmonia doris-nilesiae • SHA, TEH, TRI
Harmonia guggolziorum • MEN
Harmonia stebbinsii • SHA, TEH, TRI
Hemizonia congesta ssp. *tracyi* • HUM,
MEN, TRI
Pyrrocoma racemosa ssp. *pinetorum*
• SIS, TRI

Raillardella pringlei • SIS, TRI
Rudbeckia klamathensis
• DNT, HUM, SHA, SIS, TRI
Wyethia longicaulis • HUM, MEN, TRI

Convolvulaceae

Calystegia collina ssp. *tridactylosa*
• LAK, MEN

Crassulaceae

Sedella leiocarpa • LAK
Sedum citrinum • DNT
Sedum eastwoodiae • MEN
Sedum flavidum • COL, GLN, HUM, TRI
Sedum kiersteadiae • SHA, SIS, TRI
Sedum laxum var. *flavidum*
• DNT, GLN, HUM, SHA, SIS, TEH, TRI
Sedum laxum var. *latifolium* • DNT
Sedum marmorense • SIS
Sedum obtusatum ssp. *retusum*
• COL, DNT, GLN, HUM, LAK, MEN, SIS,
TRI
Sedum paradisum ssp. *paradisum* • SHA,
TRI
Sedum patens • DNT
Sedum rubiginosum • TEH
Sedum sanhedrinum • GLN, LAK, MEN, TEH

Cruciferae

Arabis rigidissima var. *rigidissima* • SIS, TRI
Arabis rollei • SIS
Boechera serpticola • SHA, TRI
Boechera ultra-alsa • LAK
Draba carnosula • DNT, SIS, TRI
Draba pterosperma • SIS
Noccaea fendleri ssp. *californica*
• HUM, MEN, SIS, TRI
Streptanthus barbatus • SIS, TEH, TRI
Streptanthus oblancoolatus • TRI
Streptanthus vernalis • LAK

Ericaceae

Arctostaphylos x *cinerea* • DNT
Arctostaphylos klamathensis • SHA, SIS,
TRI
Arctostaphylos nortensis • DNT
Arctostaphylos nummularia ssp.
mendocinensis • MEN
Arctostaphylos nevadensis ssp. *knightii*
• DNT, HUM, SIS

Arctostaphylos stanfordiana ssp. *raichei*

- LAK, MEN

Vaccinium shastense ssp. *shastense*

- SHA

Gramineae

Calamagrostis foliosa • DNT, HUM, MEN

Puccinellia howellii • SHA

Hydrophyllaceae

Howellanthus dalesianus • SIS, TRI

Nemophila hoplandensis • MEN

Phacelia greenei • SIS, TRI

Iridaceae

Iris tenax ssp. *klamathensis*

- HUM, SIS, TRI

Labiatae

Monardella siskiyouensis = SIS

Stachys bergii • DNT, HUM, TRI

Leguminosae

Astragalus agnicidus • HUM, MEN

Astragalus rattanii var. *rattanii*

- GLN, HUM, LAK, MEN, TRI

Lathyrus biflorus • HUM

Lathyrus glandulosus • HUM, MEN

Lotus yollabolliensis • HUM, TRI

Lupinus antoninus • LAK, MEN, TRI

Lupinus constancei • HUM, TRI

Lupinus croceus var. *croceus* • SIS, TRI

Lupinus croceus var. *pilosellus*

- SHA, SIS, TRI

Lupinus elmeri var. *elmeri* • HUM, TRI

Lupinus lapidicola • DNT, HUM, SIS, TRI

Lupinus milo-bakeri • MEN

Liliaceae

Allium hoffmanii • HUM, SHA, TEH, TRI

Brodiaea matsonii • SHA

Calochortus monanthus • SIS

Dichelostemma x *venustum*

- DNT, HUM, TRI

Erythronium citrinum var. *roderickii*

- SHA, TRI

Erythronium shastense • SHA

Triteleia crocea var. *modesta* • SIS, TRI

Limnanthaceae

Limnanthes bakeri • MEN

Linaceae

Hesperolinon adenophyllum

- HUM, LAK, MEN

Hesperolinon didymocarpum • COL, LAK

Hesperolinon tehamense

- GLN, TEH

Malvaceae

Sidalcea hickmanii ssp. *pillsburiensis* • LAK

Nyctaginaceae

Mirabilis greenei • COL, GLN, SIS, TEH

Onagraceae

Clarkia amoena ssp. *whitneyi*

- HUM, MEN

Clarkia borealis ssp. *borealis* • SHA, TRI

Epilobium nivium

- COL, GLN, LAK, MEN, TRI

Epilobium septentrionale

- HUM, MEN, SIS, TRI

Polemoniaceae

Leptosiphon nuttallii ssp. *howellii* • TEH

Navarretia myersii ssp. *deminuta* • LAK

Phlox hirsuta • SIS

Polemonium eddyense • SIS

Polygonaceae

Chorizanthe howellii • MEN

Eriogonum alpinum • SIS, TRI

Eriogonum congdonii • SHA, SIS, TRI

Eriogonum hirtellum • DNT, SIS

Eriogonum kelloggii • MEN

Eriogonum libertini • SHA, SIS, TEH, TRI

Eriogonum siskiyouense • SIS, TRI

Eriogonum umbellatum var. *lautum* • SIS

Eriogonum umbellatum var. *nelsoniorum*

- HUM, TRI

Eriogonum ursinum var. *erubescens*

- SHA, SIS, TRI

Portulacaceae

Lewisia cotyledon var. *heckneri*

- DNT, HUM, SHA, SIS, TRI

Lewisia stebbinsii • MEN

Rosaceae

Horkelia bolanderi • LAK, MEN

Ivesia longibracteata • SHA, SIS

Ivesia pickeringii • SIS, TRI

Neviusia cliftonii • SHA

Potentilla cristae • SIS, TRI

Rubiaceae

Galium serpticum ssp. *scotticum*

- SIS, TRI

Scrophulariaceae

Castilleja mendocinensis • HUM, MEN

Cordylanthus tenuis var. *pallenscens* • SIS

Erythranthe taylorii • SHA

Erythranthe trinitiensis • HUM, SIS, TRI

Mimulus primuloides var. *linearifolius*

- SHA, SIS, TRI

Orthocarpus pachystachyus • SIS

Penstemon filiformis

- LAK, SHA, SIS, TRI

Penstemon purpusii

- COL, GLN, HUM, LAK, MEN, SHA, SIS, TRI

Penstemon tracyi • SIS, TRI

Veronica copelandii • SIS, TRI

Umbelliferae

Perideridia leptocarpa • SIS, TRI

PLANTS ENDEMIC TO A SINGLE COUNTY

Del Norte County

Arctostaphylos x cinerea

Arctostaphylos nortensis

Sedum citrinum

Sedum laxum var. *latifolium*

Sedum patens

Silene serpentinicola

Humboldt County

Lathyrus biflorus

Lake County

Boechera ultra-alsa

Navarretia myersii ssp. *deminuta*

Sedella leiocarpa

Sidalcea hickmanii ssp. *pillsburiensis*

Streptanthus vernalis

Mendocino County

Arctostaphylos nummularia ssp. *mendocinensis*

Chorizanthe howellii

Eriogonum kelloggii

Harmonia guggolziorium

Lewisia stebbinsii

Limnanthes bakeri

Lupinus milo-bakeri

Mahonia nervosa var. *mendocinensis*

Nemophila hoplandensis

Sedum eastwoodiae

Shasta County

Adiantum shastense

Brodiaea matsonii

Erythranthe taylorii

Erythronium shastense

Neviusia cliftonii

Puccinellia howellii

Vaccinium shastense ssp. *shastense*

Siskiyou County

Arabis rollei

Calochortus monanthus

Cordylanthus tenuis ssp. *pallenscens*

Draba pterosperma

Eriogonum umbellatum var. *lautum*

Minuartia stolonifera

Monardella siskiyouensis

Orthocarpus pachystachyus

Phlox hirsuta

Polemonium eddyense

Sedum marmoreense

Tehama County

Leptosiphon nuttallii ssp. *howellii*

Sedum rubiginosum

Trinity County

Antennaria sawyeri

Minuartia decumbens

Silene salmonacea

Streptanthus oblancheolatus

ENDEMICS EXTENDING INTO SOUTHWESTERN OREGON

In the introduction to his *Manual of the Flowering Plants of California*, Willis Linn Jepson recognized that the assemblage of plants that characterized our state's flora extended beyond its political boundaries to include southwestern Oregon, a small portion of western Nevada, and the northern portion of Baja California, Mexico. This expanded region became known as the California Floristic Province. It is a useful phyto-geographic concept. We may recognize state and national boundaries, but plants do not.

Students of plant geography have long recognized the floristic affinity of a significant

portion of northwestern California and four adjacent counties (Curry, Douglas, Jackson, and Josephine) in southwestern Oregon. Together they constitute the Klamath-Siskiyou Region. The plants on the following list are endemic to northwestern California and to the Oregon component of the Klamath-Siskiyou Region. Again we have excluded single older historical collections and those from questionable locations.

CONIFERS

Cupressaceae

Chamaecyparis lawsoniana

Pinaceae

Picea breweriana

FLOWERING PLANTS

Berberidaceae

Vancouveria chrysantha

Caryophyllaceae

Minuartia howellii

Silene campanulata ssp. *campanulata*

Silene hookeri

Compositae (Asteraceae)

Antennaria suffrutescens

Arnica cernua

Arnica spathulata

Balsamorhiza sericea

Cirsium ciliolatum

Erigeron bloomeri var. *nudatus*

Erigeron cervinus

Erigeron klamathensis

Erigeron petrophilus var. *viscidulus*

Eriophyllum lanatum var. *lanceolatum*

Eucephalus glabratus

Eucephalus tomentellus

Microseris laciniata ssp. *detlingii*

Microseris laciniata ssp. *siskiyouensis*

Packera hesperia

Pyrrocoma racemosa ssp. *congesta*

Rudbeckia glauscescens

Symphyotrichum hendersonii

Crassulaceae

Sedum laxum ssp. *heckneri*

Sedum moranii

Sedum oblancheolatum

Sedum obtusatum ssp. *retusum*

Sedum radiatum var. *depauperatum*

Cruciferae (Brassicaceae)

Arabis aculeolata

Arabis koehleri

Arabis macdonaldiana

Draba howellii

Streptanthus howellii

Cyperaceae

Carex klamathensis

Carex serpenticola

Fagaceae

Quercus sadleriana

Gentianaceae

Gentiana plurisetosa

Gentiana setigera

Gramineae (Poaceae)

Poa piperi

Grossulariaceae

Ribes marshallii

Hydrophyllaceae

Phacelia leonis

Iridaceae

Iris bracteata

Iris innominata

Leguminosae (Fabaceae)

Lathyrus delnorticus

Lathyrus lanszwertii var. *tracyi*

Lupinus tracyi

Trifolium longipes ssp. *oreganum*

Trifolium siskiyouense

Liliaceae

Allium bolanderi var. *mirabile*

Allium siskiyouense

Calochortus persistens
Dichelostemma ida-maia
Dichelostemma x venustum
Erythronium citrinum var. *citrinum*
Erythronium hendersonii
Fritillaria gentneri
Fritillaria glauca
Lilium bolanderi
Lilium kelloggii
Lilium pardalinum ssp. *vollmeri*
Lilium pardalinum ssp. *wigginsii*
Prosartes parvifolia
Trillium kurabayashii
Trillium rivale
Triteleia crocea

Malvaceae

Sidalcea asprella ssp. *nana*
Sidalcea elegans

Onagraceae

Epilobium rigidum
Epilobium siskiyouense

Papaveraceae

Dicentra formosa ssp. *oregana*

Polygonaceae

Eriogonum diclinum
Eriogonum pendulum
Eriogonum umbellatum var. *goodmanii*

Portulacaceae

Claytonia saxosa
Claytonia serpenticola
Lewisia cotyledon ssp. *cotyledon*
Lewisia cotyledon var. *howellii*
Lewisia oppositifolia

Ranunculaceae

Delphinium decorum ssp. *tracyi*
Ranunculus occidentalis var. *howellii*

Rosaceae

Horkelia congesta var. *nemoralis*
Horkelia hendersonii
Horkelia sericata
Rosa gymnocarpa var. *serpentina*

Rubiaceae

Galium ambiguum var. *siskiyouense*

Salicaceae

Salix delnortensis
Salix tracyi

Saxifragaceae

Bensoniella oregana
Heuchera micrantha var. *erubescens*
Heuchera micrantha var. *macropetala*

Scrophulariaceae

Castilleja brevilobata
Castilleja miniata ssp. *elata*
Castilleja schizotricha
Pedicularis howellii

Umbelliferae (Apiaceae)

Lomatium engelmannii
Lomatium howellii
Lomatium tracyi
Sanicula peckiana
Tauschia glauca
Tauschia howellii

Violaceae

Viola primulifolia ssp. *occidentalis*

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SECTION 2.5 – RARE, ENDANGERED, AND THREATENED PLANTS

Rare, endangered, and threatened plants have been a subject of interest for various organizations, including the U. S. Fish and Wildlife Service, the U. S. Forest Service, the Bureau of Land Management, the California Department of Fish and Wildlife, The Nature Conservancy, and the California Native Plant Society. Only two of them are authorized by federal and state regulations to make legal declarations that afford these plants any protection.

FEDERALLY-LISTED PLANTS

Under the provisions of the Endangered Species Act, a plant is *endangered* (FE) if it is "in danger of extinction throughout all or a significant portion of its range." A species is *threatened* (FT) if it is "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." These plants from the region have been federally-listed by the U. S. Fish & Wildlife Service:

Arabis macdonaldiana • FE
Arenaria paludicola • FT
Chorizanthe howellii • FE
Eryngium constancei • FE
Erysimum menziesii • FE
Fritillaria gentneri • FE
Howellia aquatilis • FT
Lasthenia burkei • FE
Lasthenia conjugens • FE
Layia carnosa • FE
Lilium occidentale • FE
Navarretia leucocephala ssp. *pauciflora* • FE
Navarretia leucocephala ssp. *pleiantha* • FE
Noccaea fendleri ssp. *californica* • FE
Orcuttia tenuis • FT
Phlox hirsuta • FE
Sedella leiocarpa • FE
Trifolium trichocalyx • FE

FE = 15 • FT = 3

STATE-LISTED PLANTS

The California Department of Fish and Wildlife Code declares a plant *endangered* (SE) when "its prospects of survival and reproduction are in immediate jeopardy from one or more causes." A plant is *threatened* (ST) when "although not presently threatened with extinction, it is likely to become an endangered species in the foreseeable future in the absence of ... special protection and management efforts."

A plant is *rare* (SR) when "although not presently threatened with extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens." These plants from the region have been listed by the California Department of Fish & Wildlife.

Arabis macdonaldiana • SE
Arenaria paludicola • SE
Astragalus agnicidus • SE
Bensoniella oregana • SR
Blennospermum nanum var. *robustum* • SR
Brodiaea rosea • SE
Calamagrostis foliosa • SR
Calochortus persistens • SR
Chorizanthe howellii • ST
Cirsium ciliolatum • SE
Eriastrum tracyi • SR
Eriogonum alpinum • SE
Eriogonum kelloggii • SE
Eryngium constancei • SE
Erysimum menziesii • SE
Gratiola heterosepala • SE
Hesperolinon didymocarpum • SE
Lasthenia burkei • SE
Layia carnosa • SE
Lilium occidentale • SE
Limnanthes bakeri • SR
Lupinus constancei • Lassics lupine • SE
Lupinus milo-bakeri • ST
Navarretia leucocephala ssp. *pleiantha* • SE
Navarretia leucocephala ssp. *pauciflora* • ST
Orcuttia tenuis • SE
Phlox hirsuta • SE
Pleuropogon hooverianus • ST

Sedella leiocarpa • SE
Silene campanulata ssp. *campanulata* • SE
Trifolium trichocalyx • SE

SE = 21 • SR = 6 • ST = 4

**CALIFORNIA NATIVE PLANT SOCIETY &
CALIFORNIA NATURAL DIVERSITY DATABASE**

In the first edition of the *Inventory of Rare and Endangered Vascular Plants of California*, the California Native Plant Society presented its definitions and concepts, including a four element system (the REVD code) to categorize each plant in terms of its rarity, endangerment, vigor, and distribution. In later years, CNPS entered into a cooperative agreement with the California Natural Diversity Database in the California Department of Fish and Wildlife to manage rare plant data. In March 2010 the two organizations developed a scheme called the California Rare Plant Rank (CRPR). Each plant is given one of the following codes:

- 1A: plants presumed extirpated in California and either rare or extinct elsewhere (last collection dates are shown)
- 1B: plants rare, threatened, or endangered in California and elsewhere
- 2A: plants presumed extirpated in California, but more common elsewhere
- 2B: plants rare, threatened, or endangered in California, but more common elsewhere
- 3: plants about which we need more information
- 4: plants of limited distribution - a watch list

Degrees of threat are also indicated with an extension, as in 2B.2. Those with 1 are seriously threatened in California; with 2 are moderately threatened; and with 3 are not very threatened.

There are a few instances in which the scientific names we accept here differ from those used by CNPS and CNDDB, the former being shown in brackets. They are tracking 463 plants found in northwestern California.

LYCOPHYTES

Lycopodiaceae

Lycopodiella inundata • 2B.2
Lycopodium clavatum • 4.1

Selaginellaceae

Selaginella scopulorum • 3

FERNS

Aspleniaceae

Asplenium trichomanes ssp. *trichomanes*
• 2B.1

Dryopteridaceae

Polystichum x kruckebergii • 4.3
Polystichum lonchitis • 3

Equisetaceae

Equisetum palustre • 3

Ophioglossaceae

Botrychium crenulatum • 2B.2
Botrychium minganense • 2B.2
Botrychium pinnatum • 2B.3
Botrypus virginianus • 2B.2
Ophioglossum pusillum • 2B.2

Pteridaceae

Adiantum shastense • 4.3

Salviniaceae

Azolla microphylla • 4.2

GYMNOSPERMS

Cupressaceae

Callitropsis nootkatensis • 4.3
Hesperocyparis bakeri
• 4.2 [*Cupressus b.*]
Hesperocyparis pygmaea
• 1B.2 [*Cupressus p.*]

Pinaceae

Abies amabilis • 2B.3
Abies lasiocarpa var. *lasiocarpa* • 2B.3
Picea engelmannii var. *engelmannii* • 2B.2
Pinus contorta ssp. *bolanderi* • 1B.2

FLOWERING PLANTS

Alismataceae

- Alisma gramineum* • 2B.2
- Sagittaria sanfordii* • 1B.2

Apocynaceae

- Asclepias solanoana* • 4.2

Aristolochiaceae

- Asarum marmoratum* • 2B.3

Berberidaceae

- Vancouveria chrysantha* • 4.3

Boraginaceae

- Amsinckia lunaris* • 1B.2
- Cryptantha crinita* • 1B.2
- Cryptantha dissita* • 1B.2
- Cryptantha excavata* • 1B.1
- Hackelia amethystina* • 4.3
- Hackelia cusickii* • 4.3
- Mertensia bella* • 2B.2
- Plagiobothrys lithocaryus* • 1A (1899)

Cabombaceae

- Brasenia schreberi* • 2B.3

Campanulaceae

- Campanula californica* • 1B.2
- Campanula scabrella* • 4.3
- Campanula shetleri* • 1B.3
- Campanula wilkinsiana* • 1B.2
- Howellia aquatilis* • 2B.2
- Legenere limosa* • 1B.1

Caprifoliaceae

- Viburnum ellipticum* • 2B.3

Caryophyllaceae

- Arenaria paludicola* • 1B.1
- Minuartia decumbens* • 1B.2
- Minuartia rosei* • 4.2 [*Sabulina r.*]
- Paryonychia ahartii* • 1B.1
- Sabulina howellii* • 1B.3 [*Minuartia h.*]
- Sabulina stolonifera* • 1B.3 [*Minuartia s.*]
- Silene campanulata* ssp. *campanulata* • 4.2
- Silene marmorensis* • 1B.2
- Spergularia canadensis* var. *occidentalis* • 2B.1
- Stellaria littoralis* • 4.2
- Stellaria obtusa* • 4.3

Chenopodiaceae

- Extriplex joaquinana* • 1B.2 [as *Atriplex j.*]

Compositae

- Ageratina shastensis* • 1B.2
- Anisocarpus scabridus* • 1B.3
- Antennaria sawyeri* • 1B.2
- Antennaria suffrutescens* • 4.3
- Arnica cernua* • 4.3
- Arnica spathulata* • 4.3
- Arnica venosa* • 4.2
- Arnica viscosa* • 4.3
- Balsamorhiza lanata* • 1B.2
- Balsamorhiza macrolepis* • 1B.2
- Balsamorhiza sericea* • 1B.3
- Blennosperma nanum* var. *robustum* • 1B.2
- Calycadenia micrantha* • 1B.2
- Centromadia parryi* ssp. *parryi* • 1B.2
- Centromadia parryi* ssp. *rudis* • 4.2
- Chaenactis suffrutescens* • 1B.3
- Cirsium ciliolatum* • 2B.1
- Ericameria ophitidis* • 4.3
- Erigeron biolettii* • 3
- Erigeron bloomeri* var. *nudatus* • 2B.3
- Erigeron cervinus* • 4.3
- Erigeron elegantulus* • 4.3
- Erigeron greenei* • 1B.2
- Erigeron maniopotamicus* • 1B.2
- Erigeron petrophilus* var. *viscidulus* • 4.3
- Erigeron robustior* • 4.3
- Erigeron supplex* • 1B.2
- Eurybia merita* • 2B.3
- Harmonia doris-nilesiae* • 1B.1
- Harmonia guggolziorum* • 1B.1
- Harmonia hallii* • 1B.2
- Harmonia stebbinsii* • 1B.2
- Helianthus exilis* • 4.2
- Hemizonia congesta* ssp. *calyculata* • 4.3
- Hemizonia congesta* ssp. *congesta* • 1B.2
- Hemizonia congesta* ssp. *tracyi* • 4.3
- Hesperevax sparsiflora* var. *brevifolia* • 1B.2
- Hulsea nana* • 2B.3
- Hymenoxys lemmonii* • 2B.2
- Lasthenia burkei* • 1B.1
- Lasthenia californica* ssp. *bakeri* • 1B.2
- Lasthenia californica* ssp. *macrantha* • 1B.2
- Lasthenia conjugens* • 1B.1
- Layia carnosa* • 1B.1
- Layia septentrionalis* • 1B.2
- Micropus amphibolus* • 3.2
- Microseris borealis* • 2B.1
- Microseris paludosa* • 1B.2

Microseris sylvatica • 4.2
Packera bolanderi var. *bolanderi* • 2B.2
Packera clevelandii • 4.3
Packera hesperia • 2B.2
Packera macounii • 4.3
Pyrrocoma racemosa ssp. *congesta* • 2B.3
Pyrrocoma racemosa ssp. *pinetorum* • 4.2
Raillardella pringlei • 1B.2
Saussurea americana • 2B.2
Senecio hydrophiloides • 4.2
Tonestus lyallii • 2B.3
Tracyina rostrata • 1B.2
Wyethia longicaulis • 4.3

Convolvulaceae

Calystegia atriplicifolia ssp. *buttensis* • 4.2
Calystegia collina ssp. *oxyphylla* • 4.2
Calystegia collina ssp. *tridactylosa* • 1B.2
Calystegia purpurata ssp. *saxicola* • 1B.2
Cuscuta jepsonii • 1B.2
Cuscuta papillata var. *papillata* • 1B.2

Crassulaceae

Sedella leiocarpa • 1B.1
Sedum citrinum • 1B.2
Sedum divergens • 2B.3
Sedum laxum ssp. *eastwoodiae* • 1B.2
Sedum laxum ssp. *flavidum* • 4.3
Sedum laxum ssp. *heckneri* • 4.3
Sedum oblancheolatum • 1B.1
Sedum obtusatum ssp. *paradisum* • 1B.3

Cruciferae

Arabis aculeolata • 2B.2
Arabis koehleri • 1B.3 [as *Boechera k.*]
Arabis macdonaldiana • 1B.1
Arabis modesta • 4.3
Arabis oregana • 4.3
Arabis rigidissima var. *rigidissima* • 4.3
Arabis rollei • 1B.1 [*Boechera r.*]
Boechera serpenticola • 1B.2
Boechera shevockii • 1B.1
Boechera ultraalsa • 1B.1
Cardamine nuttallii var. *gemmata* • 1B.3
Cardamine pachystigma var. *dissectifolia*
• 1B.2 [*C. p.*]
Cochlearia groenlandica • 2B.3
Draba aureola • 1B.3
Draba carnulosa • 1B.3
Draba howellii • 4.3
Draba pterosperma • 4.3
Erysimum concinnum • 1B.1
Erysimum menziesii • 1B.1
Noccaea fendleri var. *californica* • 1B.1

Rorippa columbiae • 1B.2
Streptanthus barbiger • 4.2
Streptanthus batrachopus • 1B.3
Streptanthus drepanoides • 4.3
Streptanthus glandulosus ssp. *hoffmanii*
• 1B.3
Streptanthus hesperidis • 1B.2
Streptanthus howellii • 1B.2
Streptanthus longisiliquus • 4.3
Streptanthus morrisonii ssp. *elatus* • 1B.2
Streptanthus morrisonii ssp. *kruckebergii*
• 1B.2
Streptanthus oblancheolatus • 1B.2
Streptanthus vernalis • 1B.3
Thelypodium brachycarpum • 4.2

Cyperaceae

Carex arcta • 2B.2
Carex buxbaumii • 4.2
Carex californica • 2B.3
Carex comosa • 2B.1
Carex geyeri • 4.2
Carex halliana • 2B.3
Carex hystericina • 2B.1
Carex inops ssp. *inops* • 3.3
Carex klamathensis • 1B.2
Carex lenticularis var. *limnophila* • 2B.2
Carex leptalea • 2B.2
Carex limosa • 2B.2
Carex livida • 2A
Carex lyngbyei • 2B.2
Carex nardina • 2B.2
Carex petasata • 2B.3
Carex praticola • 2B.2
Carex saliniformis • 1B.2
Carex sabriuscula • 4.3
Carex serpenticola • 2B.3
Carex viridula var. *viridula* • 2B.3
Carex vulpinoidea • 2B.2
Eleocharis parvula • 4.3
Rhynchospora alba • 2B.2
Rhynchospora capitellata • 2B.2
Schoenoplectus subterminalis • 2B.3

Droseraceae

Drosera anglica • 2B.3

Elaeagnaceae

Shepherdia canadensis • 2B.1

Ericaceae

Arctostaphylos canescens var. *sonomensis*
• 1B.2
Arctostaphylos hispidula • 4.2

Arctostaphylos klamathensis • 1B.2
Arctostaphylos malloryi • 4.3
Arctostaphylos manzanita ssp. *elegans*
 • 1B.3
Arctostaphylos nortensis • 4.3
Arctostaphylos nummularia ssp.
mendocinoensis • 1B.2
Arctostaphylos stanfordiana ssp. *raichei*
 • 1B.1
Empetrum nigrum • 2B.2
Moneses uniflora • 2B.2
Monotropa uniflora • 2B.2
Pityopus californicus • 4.2
Vaccinium scoparium • 2B.2
Vaccinium shastense ssp. *shastense* • 1B.3

Euphorbiaceae

Euphorbia ocellata ssp. *rattanii* • 1B.2

Gentianaceae

Frasera umpquaensis • 2B.2
Gentiana plurisetosa • 1B.3
Gentiana setigera • 1B.2

Gramineae

Agrostis blasdalei • 1B.2
Agrostis hendersonii • 3.2
Anthoxanthum nitens • 2B.3
Calamagrostis bolanderi • 4.2
Calamagrostis crassiglumis • 2B.1
 [C. *inexpansa* var. *stricta*]
Calamagrostis foliosa • 4.2
Calamagrostis ophitidis • 4.3
Deschampsia atropurpurea • 4.3
Glyceria grandis • 2B.3
Imperata brevifolia • 1B.1
Melica spectabilis • 4.3
Muhlenbergia jonesii • 4.3
Orcuttia tenuis • 1B.1
Pleuropogon californica var. *davyi* • 4.3
Pleuropogon hooverianus • 1B.1
Pleuropogon refractus • 4.2
Poa piperi • 4.2
Poa rhizomata • 4.3
Puccinellia howellii • 1B.1
Puccinellia pumila • 2B.2
Puccinellia simplex • 1B.2
Stipa lemmonii var. *pubescens* • 3.2

Grossulariaceae

Ribes laxiflorum • 4.3
Ribes marshallii • 4.3
Ribes roezlii var. *amictum* • 4.3
Ribes victoris • 4.3

Hydrophyllaceae

Howellanthus dalesianus • 4.3
Phacelia argentea • 1B.1
Phacelia greenei • 1B.2
Phacelia insularis var. *continentis* • 1B.2
Phacelia leonis • 1B.3
Phacelia sericea var. *cilosa* • 2B.3
Romanzoffia tracyi • 2B.3

Iridaceae

Iris bracteata • 3.3
Iris innominata • 4.3
Iris longipetala • 4.2
Iris tenax ssp. *klamathensis* • 4.3
Sisyrinchium hitchcockii • 1B.1

Juglandaceae

Jugans hindsii • 1B.1

Juncaceae

Juncus dudleyi • 2B.3
Juncus interior • 2B.2
Juncus leiospermus var. *leiospermus* • 1B.1
Juncus nevadensis var. *inventus* • 2B.2
Juncus regelii • 2B.3
Juncus supiniformis • 2B.2

Labiatae

Lycopus uniflorus • 4.3
Monardella villosa ssp. *globosa* • 1B.2
Monardella viridis ssp. *viridis* • 4.3
Salvia dorrii var. *incana* • 3
Scutellaria galericulata • 2B.2
Stachys pilosa • 2B.3

Leguminosae

Astragalus agnicidus • 1B.1
Astragalus breweri • 4.2
Astragalus clevelandii • 4.3
Astragalus inversus • 4.3
Astragalus pauperculus • 4.3
Astragalus pycnostachyus var. *p.* • 1B.2
Astragalus rattanii var. *jepsonianus* • 1B.2
Astragalus rattanii var. *rattanii* • 4.3
Astragalus tener var. *ferrisiae* • 1B.1
Astragalus umbraticus • 2B.3
Hosackia gracilis • 4.2 [*Lotus formosissimus*]
Lathyrus biflorus • 1B.1
Lathyrus delnorticus • 4.3
Lathyrus glandulosus • 4.3
Lathyrus japonicus • 2B.1
Lathyrus palustris • 2B.2
Lathyrus sulphureus • 3
Lotus rubriflorus • 1B.1

Lotus yollabolliensis • 1B.2
Lupinus antoninus • 1B.2
Lupinus constancei • 1B.1
Lupinus croceus var. *pilosellus* • 4.3
Lupinus elmeri • 1B.2
Lupinus lapidicola • 4.3
Lupinus milobakeri • 1B.1
Lupinus sericatus • 1B.2
Lupinus tracyi • 4.3
Thermopsis gracilis • 4.3
Thermopsis californica var. *argentata* • 4.3
Thermopsis robusta • 1B.2
Trifolium buckwestiorum • 1B.1
Trifolium howellii • 4.3
Trifolium hydrophilum • 1B.2
Trifolium siskiyouense • 1B.1
Trifolium trichocalyx • 1B.1

Lentibulariaceae

Pinguicula macroceras • 2B.2
Utricularia minor • 4.2

Liliaceae

Allium fimbriatum var. *purdyi* • 4.3
Allium hoffmanii • 4.3
Allium peninsulare var. *franciscanum* • 1B.2
Allium siskiyouense • 4.3
Brodiaea leptandra • 1B.2
Brodiaea matsonii • 1B.1
Brodiaea rosea • 1B.1 • COL
Calochortus greenei • 1B.2
Calochortus monanthus • 1A (1876)
Calochortus persistens • 1B.2
Calochortus syntrophus • 1B.1
Calochortus umbellatus • 4.2
Calochortus uniflorus • 4.2
Chlorogalum pomeridianum var. *minus*
 • 1B.2
Erythronium citrinum var. *citrinum* • 4.3
Erythronium citrinum var. *roderickii*
 • 1B.3
Erythronium helenae • 4.2
Erythronium hendersonii • 2B.3
Erythronium klamathense • 2B.2
Erythronium oregonum • 2B.2
Erythronium revolutum • 2B.2
Erythronium shastense • 1B.2
Fritillaria agrestis • 4.2
Fritillaria eastwoodiae • 3.2
Fritillaria gentneri = 1B.1
Fritillaria glauca • 4.2
Fritillaria pluriflora • 1B.2
Fritillaria purdyi • 4.3
Lilium bolanderi • 4.2

Lilium humboldtii ssp. *humboldtii* • 4.2
Lilium kelloggii ssp. *kelloggii* • 4.3
Lilium maritimum • 1B.1
Lilium occidentale • 1B.1
Lilium pardalinum ssp. *vollmeri* • 4.3
Lilium pardalinum ssp. *wigginsii* • 4.3
Lilium rubescens • 4.2
Lilium washingtonianum ssp.
 purpurascens • 4.3
Prosartes parvifolia • 1B.2
Trillium ovatum ssp. *oettingeri* • 4.2
Triteleia crocea var. *crocea* • 4.3 [T. c.]
Triteleia crocea var. *modesta* = 4.3 [T. c.]
Triteleia grandiflora • 2B.1
Triteleia hendersonii • 2B.2
Triteleia lugens • 4.3
Veratrum fimbriatum • 4.3
Veratrum insolitum • 4.3
Zigadenus fontanus • 4.2

Limnanthaceae

Limnanthes bakeri • 1B.1
Limnanthes floccosa var. *belliingeriana*
 • 1B.2
Limnanthes floccosa var. *floccosa* • 4.2

Linaceae

Hesperolinon adenophyllum • 1B.2
Hesperolinon bicarpellatum • 1B.2
Hesperolinon didymocarpum • 1B.2
Hesperolinon drymarioides • 1B.2
Hesperolinon tehamense • 1B.3

Malvaceae

Iliamna bakeri • 4.2
Iliamna latibracteata • 1B.2
Malacothamnus helleri • 3.3
 [included in *M. fremontii*]
Malacothamnus mendocinensis
 • 1A (1939)
Sidalcea calycosa ssp. *rhizomata* • 1B.2
Sidalcea celata • 3
Sidalcea elegans • 3.3
Sidalcea hickmanii ssp. *pillusburiensis*
 • 1B.2
Sidalcea keckii • 1B.1
Sidalcea malachroides • 4.2
Sidalcea malviflora ssp. *patula* • 1B.2
Sidalcea malviflora ssp. *purpurea* • 1B.2
Sidalcea oregana ssp. *eximia* • 1B.2
Sidalcea oregana ssp. *hydrophila* • 1B.2

Nyctaginaceae

Abronia umbellata ssp. *breviflora* • 1B.1
Mirabilis greenii • 4.2

Onagraceae

Clarkia amoena ssp. *whitneyi* • 1B.1
Clarkia borealis var. *arida* • 1B.1
Clarkia borealis ssp. *borealis* • 1B.3
Clarkia gracilis ssp. *albicaulis* • 1B.2
Clarkia gracilis ssp. *tracyi* • 4.2
Epilobium luteum • 2B.3
Epilobium nivium • 1B.2
Epilobium oregonum • 1B.2
Epilobium rigidum • 4.3
Epilobium septentrionale • 4.3
Epilobium siskiyouense • 1B.3
Oenothera wolfii • 1B.1

Orchidaceae

Cypripedium californicum • 4.2
Cypripedium fasciculatum • 4.2
Cypripedium montanum • 4.2
Listera cordata • 4.2
Piperia candida • 1B.2
Piperia colemanii • 4.3
Piperia leptopetala • 4.3
Piperia michaelii • 4.2
Platanthera stricta • 4.2

Oxalidaceae

Oxalis suksdorfii • 4.3

Papaveraceae

Dicentra formosa ssp. *oregana* • 4.2
Eschscholzia hypocoides • 4.3

Parnassiaceae

Parnassia cirrata var. *cirrata* • 1B.3
Parnassia cirrata var. *intermedia* • 2B.2

Polemoniaceae

Collomia diversifolia • 4.3
Collomia tracyi • 4.3
Eriastrum brandegeae • 1B.2
Eriastrum tracyi • 3.2
Gilia capitata ssp. *pacifica* • 1B.2
Gilia millefoliata • 1B.2
Leptosiphon acicularis • 4.2
Leptosiphon jepsonii • 1B.2
Leptosiphon latisectus • 4.3
Leptosiphon nuttallii ssp. *howellii* • 1B.3
Leptosiphon rattanii • 4.3
Navarretia cotulifolia • 4.2
Navarretia heterandra • 4.3

Navarretia jepsonii • 4.3

Navarretia leucocephala ssp. *bakeri* • 1B.1

Navarretia leucocephala ssp. *pauciflora*
• 1B.1

Navarretia leucocephala ssp. *pleiantha*
• 1B.2

Navarretia linearifolia ssp. *pinnatisecta* • 4.3

Navarretia myersii var. *deminuta* • 1B.1

Navarretia nigelliformis ssp. *nigelliformis*
• 4.2

Navarretia nigelliformis ssp. *radians* • 4.2

Navarretia paradoxinota • 1B.3

Navarretia subuligera • 4.3

Phlox hirsuta • 1B.2

Polemonium carneum • 2B.2

Polemonium eddyense • 1B.2

Polygonaceae

Chorizanthe howellii • 1B.2

Eriogonum alpinum • 1B.2

Eriogonum congdonii • 4.3

Eriogonum diclinum • 4.3

Eriogonum hirtellum • 1B.3

Eriogonum kelloggii • 1B.2

Eriogonum libertini • 4.2

Eriogonum luteolum var. *caninum* • 3.2

Eriogonum nervulosum • 1B.2

Eriogonum nudum var. *paralinum* • 2B.2

Eriogonum pendulum • 2B.2

Eriogonum siskiyouense • 4.3

Eriogonum strictum var. *greenii* • 4.3

Eriogonum ternatum • 4.3

Eriogonum tripodum • 4.2

Eriogonum umbellatum var. *bahiiiforme*
• 4.2

Eriogonum umbellatum var. *humistratum*
• 4.3

Eriogonum umbellatum var. *lautum* • 1B.1

Eriogonum ursinum var. *erubescens* • 1B.3

Portulacaceae

Calandrinia breweri • 4.2

Calyptridium quadripetalum • 4.3

Claytonia palustris • 4.3

Claytonia umbellata • 2B.3

Lewisia cantelowii • 1B.2

Lewisia cotyledon var. *heckneri* • 1B.2

Lewisia cotyledon var. *howellii* • 3.2

Lewisia kelloggii ssp. *hutchisonii* • 3.2

Lewisia oppositifolia • 2B.2

Lewisia stebbinsii • 1B.2

Montia howellii • 2B.2

Potamogetonaceae

- Potamogeton epihydrus* • 2B.2
- Potamogeton foliosus* var. *fibrillosus* • 2B.3
- Potamogeton robbinsii* • 2B.3
- Potamogeton zosteriformis* • 2B.2
- Stuckenia filiformis* ssp. *alpina* • 2B.2

Primulaceae

- Androsace elongata* ssp. *acuta* • 4.2
- Lysimachia thrysiiflora* • 2B.3
- Trientalis europaea* • 2B.2

Ranunculaceae

- Anemone multifida* var. *multifida* • 2B.2
- Delphinium uliginosum* • 4.2
- Myosurus minimus* • 3.1
- Ranunculus lobbii* • 4.2

Rhamnaceae

- Ceanothus confusus* • 1B.1
- Ceanothus divergens* • 1B.2
- Ceanothus foliosus* var. *vineatus* • 1B.1
- Ceanothus gloriosus* var. *exaltatus* • 4.3
- Ceanothus gloriosus* var. *gloriosus* • 4.3
- Ceanothus purpureus* • 1B.2

Rosaceae

- Geum aleppicum* • 2B.2
- Horkelia bolanderi* • 1B.2
- Horkelia congesta* ssp. *nemorosa* • 2B.1
- Horkelia daucifolia* var. *indicta* • 1B.1
- Horkelia hendersonii* • 1B.1
- Horkelia marinensis* • 1B.2
- Horkelia sericata* • 4.3
- Horkelia tenuiloba* • 1B.2
- Ivesia longibracteata* • 1B.3
- Ivesia pickeringii* • 1B.2
- Neviusia cliftonii* • 1B.2
- Potentilla cristae* • 1B.3
- Rosa gymnocarpa* var. *serpentina* • 1B.3
- Rubus nivalis* • 2B.3
- Sanguisorba officinalis* • 2B.2

Rubiaceae

- Galium oreganum* • 3
- Galium serpenticum* ssp. *scotticum* • 1B.2

Salicaceae

- Salix delnortensis* • 4.3

Sarraceniaceae

- Darlingtonia californica* • 4.2

Saxifragaceae

- Bensoniella oregona* • 1B.1
- Cascadia nuttallii* • 2B.1 [*Saxifraga* n.]
- Chrysosplenium glechomifolium* • 4.3
- Micranthes howellii* • 4.3 [*Saxifraga* h.]
- Micranthes marshallii* • 4.3 [*Saxifraga* m.]
- Mitellastra caulescens* • 4.2 [*Mitella* c.]
- Saxifraga caespitosa* • 2B.3
- Suksdorfia ranunculifolia* • 2B.2
- Tiarella trifoliata* var. *trifoliata* • 3.2

Scrophulariaceae

- Antirrhinum virga* • 4.3
- Boschniakia hookeri*
 - 2B.3 [as *Kopsiopsis* h.]
- Castilleja affinis* ssp. *litoralis* • 2B.2
- Castilleja ambigua* ssp. *ambigua* • 4.2
- Castilleja ambigua* ssp. *humboldtiensis*
 - 1B.2
- Castilleja brevilobata* • 4.2
- Castilleja elata* • 2B.2
- Castilleja hispida* ssp. *brevilobata* • 4.2
- Castilleja mendocinensis* • 1B.2
- Castilleja miniata* ssp. *elata* • 2B.2
- Castilleja rubicundula* var. *rubicundula*
 - 1B.2
- Castilleja schizotricha* • 4.3
- Collinsia corymbosa* • 1B.2
- Cordylanthus maritimus* ssp. *palustris*
 - 1B.2
- Cordylanthus tenuis* ssp. *pallescens* • 1B.2
- Erythranthe taylorii* • 1B.1
- Erythranthe trinitiensis* • 1B.3
- Gratiola heterosepala* • 1B.2
- Mimulus nudatus* • 4.3
- Orobanche valida* ssp. *howellii* • 4.3
- Orthocarpus cuspidatus* ssp. *cuspidatus*
 - 4.3
- Orthocarpus pachystachyus* • 1B.1
- Pedicularis bracteosa* var. *flavida* • 4.3
- Pedicularis contorta* • 4.3
- Pedicularis howellii* • 4.3
- Penstemon cinereus* • 4.3
- Penstemon cinicola* • 4.3
- Penstemon filiformis* • 1B.3
- Penstemon heterodoxus* var. *shastensis*
 - 4.3
- Penstemon newberryi* ssp. *sonomensis*
 - 1B.3
- Penstemon tracyi* • 1B.3
- Sairocarpus subcordatus* • 4.3
 - [*Antirrhinum* s.]
- Veronica copelandii* • 4.3

Smilacaceae

Smilax jamesii • 4.2

Umbelliferae

Angelica lucida • 4.2

Eryngium constancei • 1B.1

Glehnia littoralis ssp. *leiocarpa* • 4.2

Lomatium engelmannii • 4.3

Lomatium hooveri • 4.3

Lomatium howellii • 4.3

Lomatium martindalei • 2B.3

Lomatium peckianum • 2B.2

Lomatium repostum • 4.3

Lomatium tracyi • 4.3

Perideridia gairdneri ssp. *gairdneri* • 4.2

Perideridia leptocarpa • 4.3

Sanicula peckiana • 4.3

Sanicula tracyi • 4.2

Tauschia glauca • 4.3

Tauschia howellii • 1B.3

Violaceae

Viola howellii • 2B.2

Viola langsdorffii • 2B.1

Viola palustris • 2B.2

Viola primulifolia ssp. *occidentalis* • 1B.2

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SECTION 2.6 — PLANTS OF SERPENTINE SUBSTRATE

This list is not an attempt to show all of the vascular plants of northwestern California that may be found on serpentine. That would be a very long list, indeed. The intent is to identify those plants that are endemic, along with those that are more or less restricted to serpentine, and those that are found there much more commonly than they are on other substrates.

Northwestern California has long been known for its high degree of endemic serpentine plants. Safford (2010-2011) reported that the Klamath Mountains and North Coast Ranges were the highest in both restricted and total endemics in the California flora.

I should note that several of the references cited below contain minor and major differences in whether a particular species is found on serpentine. I have relied heavily on Baldwin et al. (2012) when there are these discrepancies, especially when the treatments indicate that a plant is (1) on serpentine, (2) generally on serpentine, or (3) often on serpentine.

FERNS

Aspidotis densa
Polystichum lemmonii ☼

CONIFERS

Cupressaceae
Calocedrus decurrens
Chamaecyparis lawsoniana
Cupressus macnabiana
Cupressus sargentii

Pinaceae

Pinus attenuata
Pinus balfouriana ssp. *balfouriana*
Pinus jeffreyi

FLOWERING PLANTS

Apocynaceae

Asclepias solanoana ☼

Berberidaceae

Vancouveria chrysantha

Boraginaceae

Cryptantha dissita
Cryptantha hispidula ☼

Campanulaceae

Nemacladus montanus

Caryophyllaceae

Minuartia decumbens ☼
Minuartia douglasii
Minuartia howellii ☼
Minuartia rosei ☼
Minuartia stolonifera ☼
Silene campanulata ssp. *campanulata*
Silene hookeri
Silene serpentinicola

Compositae

Ancistrocarphus filagineus
Antennaria suffrutescens ☼
Arnica cernua ☼
Arnica spathulata ☼
Balsamorhiza macrolepis
Balsamorhiza sericea ☼
Ericameria ophitidis ☼
Erigeron angustatus ☼
Erigeron bloomeri var. *nudatus* ☼
Harmonia doris-nilesiae
Harmonia hallii ☼
Harmonia stebbinsii ☼
Helianthus bolanderi ssp. *exilis* ☼
Lagophylla minor
Lessingia ramulosa var. *ramulosa*
Packera clevelandii
Packera greenei
Pyrrocoma racemosa ssp. *congesta*
Raillardella pringlei ☼
Rudbeckia glaucescens
Rudbeckia klamathensis

Convolvulaceae

Calystegia collina ssp. *collina*
Calystegia collina ssp. *tridactylosa*
Calystegia collina ssp. *venusta*

Crassulaceae

Sedum eastwoodiae
Sedum laxum ssp. *flavidum*
Sedum laxum ssp. *heckneri*
Sedum laxum ssp. *laxum*
Sedum rubiginosum

Cruciferae

Arabis aculeolata ☼
Arabis koehleri var. *stipitata* ☼
Arabis macdonaldiana ☼
Arabis serpentinicola ☼
Cardamine nuttallii var. *gemmata*
Cardamine pachystigma var. *dissectifolia*
Draba carnosula ☼

Noccaea fendleri ssp. *californica* ☀
Streptanthus barbatus ☀
Streptanthus barbiger
Streptanthus batrachopus
Streptanthus brachiatus
Streptanthus breweri ☀
Streptanthus drepanoides ☀
Streptanthus howellii ☀
Streptanthus morrisonii

Cyperaceae

Carex mendocinensis
Carex scabriuscula
Carex serpenticola ☀

Ericaceae

Arctostaphylos canescens ssp. *sonomensis*
Arctostaphylos hispidula
Arctostaphylos klamathensis
Arctostaphylos stanfordiana ssp. *raichei*
Arctostaphylos viscida ssp. *pulchella*

Fagaceae

Quercus durata ssp. *durata* ☀

Garryaceae

Garrya buxifolia ☀

Gramineae

Calamagrostis ophitidis
Poa piperi
Stipa lemmonii var. *pubescens*

Hydrophyllaceae

Howellanthus dalesianus
Phacelia corymbosa
Phacelia greenei ☀
Phacelia leonis

Labiatae

Monardella purpurea
Monardella sheltonii
Monardella viridis ssp. *viridis*
Trichostema laxum

Leguminosae

Astragalus clevelandii
Astragalus rattanii var. *jepsonianus*
Astragalus whitneyi var. *siskiyouensis*
Lathyrus biflorus ☀
Lathyrus delnorticus
Lupinus constancei ☀
Lupinus onustus
Trifolium longipes var. *oreganum*

Lentibulariaceae

Pinguicula vulgaris ssp. *macroceras*

Liliaceae

Allium fimbriatum var. *purdyi*

Allium hoffmanii ☀
Brodiaea stellaris
Chlorogalum pomeridianum var. *minus*
Erythronium citrinum ssp. *citrinum*
Erythronium citrinum ssp. *rothrockii*
Fritillaria glauca
Fritillaria purdyi
Hastingsia serpentinicola ☀
Lilium bolanderi ☀
Odontostomum hartwegii
Trillium rivale
Triteleia bridgesii
Triteleia peduncularis
Zigadenus micranthus var. *fontanus*

Linaceae

Hesperolinon adenophyllum
Hesperolinon bicarpellatum
Hesperolinon didymocarpum
Hesperolinon disjunctum
Hesperolinon drymarioides
Hesperolinon tehamense

Malvaceae

Sidalcea diploscypha

Onagraceae

Epilobium siskiyouense ☀

Orchidaceae

Cypripedium californicum

Polemoniaceae

Collomia diversifolia
Linanthus dichotomus ssp. *meridianus*
Navarettia jepsonii
Phlox hirsuta ☀

Polygonaceae

Eriogonum alpinum ☀
Eriogonum compositum var. *compositum* ☀
Eriogonum congdonii
Eriogonum diclinum ☀
Eriogonum hirtellum ☀
Eriogonum kelloggii ☀
Eriogonum libertini ☀
Eriogonum luteolum var. *caninum*
Eriogonum luteolum var. *luteolum*
Eriogonum nervulosum
Eriogonum pendulum ☀
Eriogonum siskiyouense ☀
Eriogonum strictum var. *greenei* ☀
Eriogonum ternatum ☀
Eriogonum tripodum ☀
Eriogonum umbellatum var. *argus* ☀
Eriogonum umbellatum var. *goodmanii* ☀
Eriogonum umbellatum var. *humistratum* ☀
Eriogonum umbellatum var. *nelsoniorum* ☀
Eriogonum umbellatum var. *speciosum* ☀
Polygonum spergulariaeforme

Portulacaceae

Calyptidium quadripetalum
Claytonia exigua ssp. *exigua*
Claytonia exigua ssp. *glauca*
Claytonia saxosa
Claytonia serpenticola
Claytonia gypsophiloides

Ranunculaceae

Delphinium uliginosum

Rhamnaceae

Ceanothus jepsonii ☼
Ceanothus pumilus
Frangula californica ssp. *crassifolia*
Frangula californica ssp. *occidentalis* ☼

Rosaceae

Horkelia congesta var. *nemorosa*
Horkelia daucifolia ssp. *daucifolia*
Horkelia sericata
Horkelia tridentata ssp. *flavescens*
Ivesia pickeringii
Potentilla cristae
Sanguisorba officinalis

Rubiaceae

Galium ambiguum var. *siskiyouense*
Galium serpenticum ssp. *scotticum*

Salicaceae

Salix breweri
Salix delnortensis ☼

Sarraceniaceae

Darlingtonia californica

Scrophulariaceae

Castilleja brevilobata ☼
Castilleja miniata ssp. *elata*
Castilleja pruinosa
Collinsia greenei
Cordylanthus pringlei
Cordylanthus tenuis ssp. *brunneus* ☼
Cordylanthus tenuis ssp. *capillaris* ☼
Cordylanthus tenuis ssp. *viscidus* ☼
Erythranthe trinitiensis
Mimulus nudatus ☼
Penstemon filiformis
Synthyris cordata
Veronica copelandii

Umbelliferae

Lomatium ciliolatum ☼
Lomatium dasycarpum ssp. *dasycarpum*
Lomatium englemannii ☼
Lomatium hooveri ☼
Lomatium howellii ☼
Lomatium macrocarpum

Lomatium marginatum var. *marginatum* ☼
Lomatium marginatum var. *purpureum* ☼
Lomatium tracyi ☼
Lomatium triternatum var. *triternatum*
Perideridia leptocarpa ☼
Sanicula peckiana
Tauschia glauca

Violaceae

Viola cuneata
Viola douglasii
Viola ocellata
Viola primulifolia ssp. *occidentalis*

☼ = endemic to serpentine

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SECTION 2.7 — ARE SOME OF THEM STILL OUT THERE?

Extant is a useful, if less well known, word. It means still in existence, surviving, not destroyed or lost. This checklist is an attempt to identify the vascular plants that have been documented as having been present in northwestern California, but that are probably no longer considered to be a component of our flora. By documentation, we mean herbarium specimens, citations in scientific literature, or field reports made by seasoned observers. In other words, we have a reasonably high standard for claiming that a plant was once part of the California flora. Plants that have not been collected or observed in many years may well be extinct or extirpated. How many years? Fifty seems reasonable.

As historians often caution, the absence of evidence is not evidence of absence. The declaration that a plant no longer persists assumes a level of knowledge and certainty that may not be justified. This conclusion is more subjective and it is typically arrived at because visits to known historic sites or to similar habitats where the plant in question might be found have not been fruitful.

The most recent collection dates are based on specimens shown at the Consortium of California Herbaria (CCH) website. A few are of more recent vintage, particularly when the plant was known from one or a very few sites that seem particularly vulnerable.

Most of these entries are based on searching the CCH to confirm that the plant actually occurs in northwestern California. There are other plants, well established in the literature, that might also qualify for this list, but which need to be checked.

PLANTARUM MORTUUS

FLOWERING PLANTS

Aceraceae

Acer glabrum var. *douglasii* • 1935

Araceae

Acorus calamus • 1949

Amaranthaceae

Amaranthus retroflexus • 1907

Berberidaceae

Berberis vulgaris • 1952

Boraginaceae

Amsinckia tessellata var. *gloriosa* • 1902

Myosotis verna • 1927

Plagiobothrys arizonicus • 1960

Plagiobothrys lithocaryus • 1899

Plagiobothrys tener var. *subglaber* • 1943

Symphytum asperum • 1968

Symphytum x *uplandicum* • 1961

Callitrichaceae

Callitriche peploides • 1943

Caprifoliaceae

Lonicera etrusca • 1948

Symphoricarpos rotundifolius var. *parishii*
• 1897

Caryophyllaceae

Agrostemma githago • 1925

Silene noctiflora • 1963

Chenopodiaceae

Chenopodium murale • 1948

Suaeda calceoliformis • 1910

Compositae

Achillea filipendulina • 1975

Blennosperma nanum var. *robustum* • 1928

Cirsium andrewsii • 1950

Cota tinctoria • 1970

Deinandra kelloggii • 1910

Erigeron pumilus ssp. *intermedius* • 1949

Eurybia integrifolia • 1943

Filago pyramidata var. *pyramidata* • 1957

Helianthus cusickii • 1909
Hieracium parryi • 1950
Lasthenia conjugens • 1937
Leucanthemum lacustre • 1936
Scorzonera hispanica • 1983
Symphyotrichum cusickii • 1939
Symphyotrichum novae-angliae • 1966
Tanacetum balsamita • 1939
Tanacetum vulgare • 1966
Xanthisma texanum var. *drummondii*
• pre-1964

Convolvulaceae

Cuscuta approximata var. *approximata*
• 1959
Cuscuta brachycalyx ssp. *brachycalyx* • 1959
Cuscuta californica var. *papillosa* • 1983
Cuscuta cephalanthi • 1967
Cuscuta pacifica var. *papillata* • 1912
Cuscuta suaveolens • 1918

Crassulaceae

Sedella leiocarpa • 1943

Cruciferae

Aubrieta deltoidea • 1977
Boechera ultraalsa • 1981
Brassica oleracea • 1970
Descurainia incisa ssp. *filipes* • 1950
Descurainia pinnata ssp. *brachycarpa* • 1942
Descurainia pinnata ssp. *glabra* • 1913
Draba nemorosa • 1910
Eruca vesicaria ssp. *sativa* • 1911
Ionopsidium acaule • 1933
Lepidium appelianum • 1960
Rorippa columbiae • 1956

Cyperaceae

Bulbostylis capillaris • 1958
Carex livida • 1866
Eleocharis acicularis var. *occidentalis* • 1956
Eleocharis ovata • 1963

Dipsacaceae

Dipsacus sativus • 1937
Scabiosa atropurpurea • 1970

Ebenaceae

Diospyros virginiana var. *virginiana* • 1959

Elatinaceae

Elatine brachysperma • 1957
Elatine triandra • 1957

Ericaceae

Arctostaphylos crustacea ssp. *crustacea*
• 1957
Phyllodoce breweri • 1961

Gentianaceae

Zeltnera davayi • 1952

Geraniaceae

Geranium solanderi • 1931

Gramineae

Chloris virgata • 1966
Elymus arizonicus • 1949
Elymus condensatus • 1932
Elymus elymoides ssp. *hordeoides* • 1910
Elymus smithii • 1936
Festuca altaica • 1913
Hainardia cylindrica • 1938
Imperata brevifolia • 1928
Panicum miliaceum • 1931
Poa nemoralis • 1926
Puccinellia distans ssp. *distans* • 1935
Spartina alterniflora • 1989
Sporobolus indicus • 1969
Trisetum flavescens • 1917

Hydrophyllaceae

Phacelia rattanii • 1927

Hypericaceae

Hypericum calycinum • 1965

Iridaceae

Sisyrinchium hitchcockii • 1938
Watsonia meriana • 1953

Juglandaceae

Juglans nigra • 1975

Juncaceae

Juncus nevadensis var. *inventus* • 1965
Juncus triformis • 1866
Juncus uncialis • 1957
Luzula campestris • 1959
Luzula glabrata • 1966
Luzula piperi • 1966

Labiatae

Mentha aquatica • 1947
Mentha arvensis • 1937
Mentha x gracilis • 1964
Mentha suaveolens • 1943

Monardella odoratissima ssp. *pinetorum*
• 1948

Monardella viridis • 1897

Scutellaria angustifolia • 1948

Scutellaria galericulata • 1894

Leguminosae

Astragalus inversus • 1935

Astragalus whitneyi var. *lenophyllus* • 1934

Cytisus multiflorus • 1964

Hoita orbicularis • 1931

Lathyrus bijugatus • literature

Lathyrus lanszwertii var. *brownii* • 1918

Lotus tenuis • 1964

Lupinus grayi • 1950

Lupinus lepidus var. *confertus* • 1955

Lupinus subvexus var. *transmontana* • 1903

Pisum sativum • 1899

Trifolium hydrophilum • 1955

Trifolium siskiyouense • 1892

Trigonella corniculata • 1938

Vicia faba • 1940

Liliaceae

Allium bisceptrum var. *bisceptrum* • 1939

Calochortus monanthus • 1876

Camassia quamash ssp. *walpolei* • 1941

Erythronium multiscapideum • 1917

Linaceae

Sclerolinon digynum • 1936

Lythraceae

Rotala ramosior • 1949

Malvaceae

Hibiscus trionum • 1936

Malacothamnus mendocinensis • 1939

Malvella leprosa • 1842

Nyctaginaceae

Abronia maritima • 1939

Onagraceae

Epilobium pallidum • 1936

Plantaginaceae

Plantago patagonica • 1945

Polemoniaceae

Gilia tricolor ssp. *diffusa* • 1948

Gymnosteris parvula • 1969

Leptosiphon ambiguus • 1934

Leptosiphon croceus • 1954

Navarretia leucocephala var. *minima* • 1928

Phlox longifolia • 1949

Polemonium pulcherrimum var. *pilosum*
• 1955

Polygonaceae

Eriogonum inerme var. *inerme* • 1963

Eriogonum marifolium var. *cupulatum* • 1914

Eriogonum niveum • 1935

Polygonum aviculare ssp. *buxiforme* • 1908

Polygonum x *bohemicum* • 1958

Portulacaceae

Claytonia serpenticola • 1909

Primulaceae

Lysimachia nummularia • 1967

Ranunculaceae

Ranunculus acris • 1971

Ranunculus bulbosus • 1938

Resedaceae

Reseda lutea • 1957

Rhamnaceae

Ceanothus prostratus var. *occidentalis* • 1951

Frangula rubra ssp. *modocensis* • 1942

Rosaceae

Aphanes arvensis • 1935

Aphanes macrosepala • 1952

Geum triflorum var. *ciliatum* • 1939

Horkelia congesta var. *nemorosa* • 1935

Horkelia howellii • 1937

Malus sylvestris • 1950

Potentilla anglica • 1936

Rubus praecox • 1935

Sanguisorba annua • 1910

Rubiaceae

Galium mollugo • 1963

Salicaceae

Salix bebbiana • undated Applegate collection

Salix ligulifolia • 1936

Salix prolixa • 1914

Salix purpurea • 1920

Scrophulariaceae

Collinsia sparsiflora var. *bruceae* • 1962

Orobanche vallicola • 1896

Penstemon centranthifolius • 1950

Scrophularia oregana • 1940

Solanaceae

Hyoscyamus niger • 1931
Physalis pubescens var. *integrifolia* • 1945
Solanum lycopersicum • Tomato • 1948

Typhaceae

Sparganium eurycarpum ssp. *greenii* • 1949

Umbelliferae

Anethum graveolens • 1955
Bowlesia incana • 1869
Oenanthe pimpinelloides • 1950

Urticaceae

Parietaria pensylvanica • 1926

Valerianaceae

Plectritis ciliosa spp. *ciliosa* • 1949
Plectritis congesta ssp. *nitida* • 1949

Verbenaceae

Phyla lanceolata • 1945
Verbena bracteata • 1940
Verbena officinalis var. *officinalis* • 1980

Violaceae

Viola arvensis • 1948
Viola purpurea ssp. *venosa* • 1951

Viscaceae

Arceuthobium americanum • 1908

Vitaceae

Vitis vinifera • 1945

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SECTION 2.8 – WEEDS

"What is a weed?

A plant whose virtues have not yet been discovered."

(Ralph Waldo Emerson)

"A weed is more than a flower in disguise."

(James Russell Lowell)

"Whatever countries beyond the seas we may visit, in the temperate regions of the globe, we find that their vegetation has been invaded, and in many cases profoundly modified by immigrant plants from other countries...."

(Sir Joseph Dalton Hooker)

INTRODUCTION

The word itself comes from *woēd*, Old English for an herb or grass. It is also applied to articles of clothing, as a common name for marijuana, and as an act of removing unwanted plants, etc.

A plant is typically considered a weed if it: (1) thrives outside its natural range; (2) appears without being planted or cultivated; (3) grows where we don't want it to grow; (4) is not easily controlled or eradicated; (5) interferes with agriculture, horticulture, and other human activity; (6) out competes for light, nutrients, etc. and replaces the native flora; (7) appears to be useless or undesirable; and (8) it is ugly.

Weeds also tend to exhibit a syndrome of biological traits, including the ability to: (1) reproduce sexually and/or asexually; (2) germinate early in the season; (3) produce a large number of seeds; (4) germinate, thrive, and set seed in diverse, and especially disturbed habitats; (5) be unpalatable or even toxic to herbivores; and (6) persist from year to year, sometimes via seed banks in the soil.

Many of the plants that we encounter in our daily lives are often weeds or ornamentals. Think of the fields of bright yellow weedy mustards in our early spring flora. We also plant them to prevent or retard erosion.

Who decides whether a particular plant is a weed? As is so often the case, it depends on who you ask. Everyone from a homeowner tending a garden or lawn to the federal government has an opinion. Of course, we rely on the expert opinion of botanists, agronomists, and horticulturists. There are also professional organizations, such as the California Weed Science Society and the Weed Science Society of America. The WSSA has identified 2847 weedy species.

It is worth noting that not all of our weeds are alien to California. Of the 693 species listed in Robbins et al. (1970), 256 (37%) are indigenous. Although this list deals only with vascular plants (lycophytes, ferns, conifers, and flowering plants), a few algal species have also been recognized as weeds.

SOURCES

The United States Department of Agriculture. Under the provisions of the 1974 Federal Noxious Weed Act of 1974, the Secretary of Agriculture is authorized to declare that a plant is, to use its legal title, a noxious weed, which is defined as "... *any plant or plant product that can directly or indirectly injure or cause damage to crops (including nursery stock or plant products), livestock, poultry, or other interests of agriculture, irrigation, navigation, the natural resources of the United States, the public health, or the environment.*" [Coded as 1]

There can be economic impact on property owners where these noxious weeds occur. They may be required to eradicate the plants and can be fined if they fail to do so. If you move a federal noxious weed from one location to another, you can be fined up to \$1000, imprisoned for up to one year, or both.

The California Department of Food and Agriculture. Under California law, the director may designate "... *any species of plant that is, or is liable to be, troublesome, aggressive, intrusive, detrimental, or destructive to agriculture, silviculture, or important native species, and difficult to control or eradicate, which the director, by regulation ... to be a noxious weed. In determining whether or not*

a species shall be designated a noxious weed for the purposes of protecting silviculture or important native plant species, the director shall not make that designation if the designation will be detrimental to agriculture." [Coded as 2]

The California Invasive Plant Council. The Cal-IPC was formed in 1992. Its mission "... is to protect California's lands and waters from ecologically-damaging invasive plants through science, education and policy." It inventory includes not only plants that currently cause damage in California, but those that are likely to become invasive. [Coded as 3]

The Invasive Species Council of California. The ISCC was established in 2009 as an inter-agency state council. It defines an invasive species as "non-native organisms which cause economic or environmental harm." Humans, domestic livestock and non-harmful exotic organisms are excluded. [Coded as 4]

Weeds of California and Other Western States. This two volume comprehensive treatment by Joseph M. DiTomaso and Evelyn A. Healy contains detailed descriptions and outstanding photographs, many of them very useful close-ups. [Coded as 5]

Most of the plants derived from these sources are common. A few are known from only one or a few sites, and others have not been collected in recent years. I have included plants placed on "watch lists," but have excluded those not known to be currently present in California.

The criteria used by the U. S. D. A. and the C. D. F. A. clearly emphasize a plants negative economic impact on agriculture. Other entities used harm to the environment, especially to natural areas.

I have taken the liberty of adding some plants based on my own botanical peregrinations. My view of weediness is conceptually similar to the authors from non-governmental agencies. I have retained the nomenclature of the various agencies.

CONIFERS

Cupressaceae

Cupressus macrocarpa • Cal-IPC (limited)

Pinaceae

Pinus radiata (cultivars) • Cal-IPC (limited)

FLOWERING PLANTS

Aizoaceae

Carpobrotus chilensis • Cal-IPC

Carpobrotus edulis • Cal-IPC

Mesembryanthemum crystallinum • Cal-IPC

Anacardiaceae

Toxicodendron diversilobum

Apocynaceae

Vinca major • Cal-IPC

Aquifoliaceae

Ilex aquifolium • Cal-IPC

Araceae

Zantedeschia aethiopica • Cal-IPC

Araliaceae

Hedera helix • Cal-IPC

Boraginaceae

Cynoglossum officinale • Cal-IPC

Myosotis latifolia • Cal-IPC

Symphytum asperum • Cal-IPC

Buddlejaceae

Buddleja davidii

Caryophyllaceae

Gypsophila paniculata • SL

Petrorhagia dubia

Saponaria officinalis • Cal-IPC

Scleranthus annuus

Spergula arvensis

Spergularia rubra

Stellaria media

Chenopodiaceae

Salsola tragus • SL, Cal-IPC

Compositae

Achillea millefolium

Arctotheca calendula • SL, Cal-IPC

Bellis perennis

Carduus tenuiflorus • SL, Cal-IPC

Carthamus lanatus • SL, Cal-IPC

Centaurea diffusa • SL, Cal-IPC

Centaurea melitensis • SL, Cal-IPC

Centaurea solstitialis • SL, Cal-IPC

Cirsium arvense • SL, Cal-IPC

Cirsium vulgare • SL, Cal-IPC

Cotula coronopifolia • Cal-IPC

Delairea odorata • SL
Glebionis coronaria • Cal-IPC
Helminthotheca echioides • Cal-IPC
Hypochaeris glabra • Cal-IPC
Hypochaeris radicata • Cal-IPC
Lactuca serriola • Cal-IPC
Lapsana communis
Leucanthemum vulgare • Cal-IPC
Matricaria discoidea
Senecio jacobaea • SL, Cal-IPC
Senecio minimus • Cal-IPC
Silybum marianum • Cal-IPC
Sonchus arvensis • SL
Sonchus asper
Tanacetum vulgare • Cal-IPC

Convolvulaceae

Convolvulus arvensis • SL
Cuscuta spp. • FL, SL

Cruciferae

Brassica nigra • Cal-IPC
Brassica rapa • Cal-IPC
Cakile maritima • Cal-IPC
Coincya monensis • SL (limited)
Descurainia sophia • Cal-IPC
Hirschfeldia incana • Cal-IPC (limited)
Isatis tinctoria • SL, Cal-IPC
Lepidium didymum
Lobularia maritima • Cal-IPC
Raphanus raphanistrum
Raphanus sativus • Cal-IPC
Sinapis arvensis • Cal-IPC

Dipsacaceae

Dipsacus fullonum • Cal-IPC
Dipsacus sativus • Cal-IPC

Ericaceae

Erica lusitanica

Euphorbiaceae

Croton setigerus
Euphorbia virgata • SL, Cal-IPC

Geraniaceae

Erodium cicutarium • Cal-IPC
Geranium dissectum • Cal-IPC
Geranium molle

Gramineae

Aegilops cylindrica • SL
Aegilops geniculata • SL

Aegilops neglecta
Aegilops ovata • SL
Aegilops triuncialis • SL, Cal-IPC
Agrostis stolonifera • Cal-IPC
Aira caryophylla
Ammophila arenaria • Cal-IPC
Anthoxanthum odoratum • Cal-IPC
Arrhenatherum elatius
Arundo donax • SL, Cal-IPC
Avena barbata • Cal-IPC
Avena fatua • Cal-IPC
Brachypodium distachyon • Cal-IPC (limited)
Briza maxima • Cal-IPC
Briza minor
Bromus diandrus • Cal-IPC
Bromus hordeaceus • Cal-IPC
Bromus japonicus • Cal-IPC
Bromus madritensis ssp. *rubens* • Cal-IPC
Bromus tectorum • Cal-IPC
Cortaderia jubata • SL, Cal-IPC
Cortaderia selloana • Cal-IPC
Cynodon dactylon • Cal-IPC
Cynosurus cristatus
Cynosurus echinatus • Cal-IPC
Dactylis glomerata • Cal-IPC
Digitaria sanguinalis
Echinochloa crus-galli
Ehrharta erecta • Cal-IPC (limited)
Elymus caput-medusae • SL, Cal-IPC
Elymus repens • SL
Eragrostis cilianensis
Festuca arundinacea • Cal-IPC
Festuca myuros • Cal-IPC
Festuca perennis • Cal-IPC
Glyceria declinata • Cal-IPC
Holcus lanatus • Cal-IPC
Hordeum marinum ssp. *gussoneanum*
Hordeum murinum • Cal-IPC
Phalaris aquatica • Cal-IPC
Phragmites australis • Cal-IPC
Phleum pratense
Poa annua
Poa bulbosa
Poa pratensis • Cal-IPC
Polypogon monspeliensis • Cal-IPC
Secale cereale
Sorghum halepense • SL
Spartina densiflora • Cal-IPC
Triticum aestivum
Ventenata dubia

Haloragaceae

Myriophyllum aquaticum • Cal-IPC
Myriophyllum spicatum • SL, Cal-IPC

Hydrocharitaceae

Egeria densa • SL, Cal-IPC
Limnobium laevigatum • SL (limited)

Hypericaceae

Hypericum perforatum • SL, Cal-IPC

Iridaceae

Crocoshia x crocosmiiflora • Cal-IPC (limited)

Juncaceae

Juncus bufonius

Labiatae

Marrubium vulgare • Cal-IPC
Mentha pulegium • Cal-IPC
Prunella vulgaris
Salvia virgata • SL

Leguminosae

Acacia dealbata • Cal-IPC
Acacia melanoxylon • Cal-IPC (limited)
Cytisus scoparius • SL, Cal-IPC
Genista monspessulana • SL, Cal-IPC
Lathyrus latifolius
Lupinus arboreus • Cal-IPC
Medicago polymorpha • Cal-IPC
Melilotus officinalis
Robinia pseudoacacia • Cal-IPC
Sesbania punicea • SL, Cal-IPC (limited)
Spartium junceum • SL, Cal-IPC
Trifolium hirtum • Cal-IPC
Trifolium hybridum
Trifolium incarnatum
Trifolium pratense
Trifolium repens
Ulex europaeus • SL, Cal-IPC
Vicia hirsuta
Vicia sativa

Liliaceae

Allium paniculatum • SL
Allium triquetrum
Allium vineale • SL
Cordyline australis • Cal-IPC (limited)

Lythraceae

Lythrum hyssopifolium • Cal-IPC

Malvaceae

Malva neglecta

Molluginaceae

Mollugo verticillata

Moraceae

Ficus carica • Cal-IPC

Myoporaceae

Myoporum laetum • Cal-IPC (limited)

Myrtaceae

Eucalyptus globosus • Cal-IPC

Onagraceae

Clarkia concinna • SL
Fuchsia magellanica
Ludwigia hexapetala • Cal-IPC (limited)

Oxalidaceae

Oxalis pes-caprae • Cal-IPC

Phytolaccaceae

Phytolacca americana • Cal-IPC (limited)

Plantaginaceae

Plantago lanceolata • Cal-IPC
Plantago major

Polygonaceae

Polygonum convolvulus
Polygonum cuspidatum • SL, Cal-IPC
Polygonum persicaria
Polygonum polystachyum • SL
Polygonum sachalinense • SL, Cal-IPC
Rumex acetosella • Cal-IPC
Rumex crispus • Cal-IPC

Ranunculaceae

Ranunculus repens • Cal-IPC

Rosaceae

Cotoneaster franchetii • Cal-IPC
Cotoneaster lacteus • Cal-IPC
Cotoneaster pannosus • Cal-IPC
Crataegus monogyna • Cal-IPC
Rosa canina
Rubus armeniacus
Rubus laciniatus
Rubus leucodermis
Rubus parviflorus

Scrophulariaceae

Bellardia trixago • Cal-IPC (limited)
Digitalis purpurea • Cal-IPC
Linaria dalmatica

Linaria vulgaris • Cal-IPC
Parentucellia viscosa • Cal-IPC
Verbascum blattaria
Verbascum thapsus • Cal-IPC

Simaroubaceae

Ailanthus altissima • SL, Cal-IPC

Umbelliferae

Conium maculatum • Cal-IPC
Daucus carota
Daucus pusilla
Foeniculum vulgare • Cal-IPC
Torilis arvensis • Cal-IPC

Valerianaceae

Centranthus ruber (limited)

Zygophyllaceae

Tribulus terrestris • SL

ABBREVIATIONS

Cal-IPC • plants listed by the California Invasive Plant Council

FL • federally-listed plants by the U. S. Department of Agriculture

SL • state-listed plants by the California Department of Food and Agriculture

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SECTION 2.9

ESCAPED ORNAMENTALS, FOOD PLANTS, AND CROPS

The flora of northwestern California consists of plants that are either native or naturalized. One of several definitions of native is that populations of that species were present in North America before the arrival of Europeans and had evolved and persisted here for thousands or millions of years. Most of the plants that we refer to as naturalized were accidental or purposeful introductions related to human activity. By accidental, I mean plants that arrived here via ballast, contaminants in desirable seeds, straw in railroad cattle cars, the hide or hair of domesticated animals, etc.

The list that follows shows the plants that we purposely introduced into the region because they were useful to us or we found them attractive enough to grow in our homes and gardens. These plants escaped from our homes and cultivated fields and were able to persist in a compatible habitat. I have also included forage crops. Some have been aggressive weeds.

CONIFERS

Cupressaceae

Cupressus macrocarpa = Monterey cypress

FLOWERING PLANTS

Apocynaceae

Nerium oleander • Oleander
Vinca major • Periwinkle

Aquifoliaceae

Ilex aquifolium • English holly

Araceae

Arum italicum • Italian arum
Arum palaestinum • Solomon's-lily
Zantedeschia aethiopica • Calla-lily

Araliaceae

Hedera helix • English ivy

Balsaminaceae

Impatiens balfourii • Balfour's snapweed

Impatiens glandulifera • Glandular snapweed
Impatiens nolitangere • Western jewel weed

Berberidaceae

Berberis darwinii • Darwin's barberry

Bignoniaceae

Catalpa bignonioides • Catalpa, Indian bean

Boraginaceae

Echium lusitanicum • Violet-veined viper's-bugloss
Echium vulgare • Blue weed, common viper's-bugloss

Buddlejaceae

Buddleja davidii • butterfly bush, summer-lilac

Cannabaceae

Cannabis sativa • Marijuana
Humulus lupulus var. *lupulus* • Hops

Caprifoliaceae

Viburnum opulus • European cranberry bush

Cistaceae

Cistus monspeliensis • Rock-rose

Commelinaceae

Tradescantia ohiensis • Bluejacket

Compositae

Glebionis coronaria • Crown daisy
Glebionis segetum • Corn chrysanthemum
Leucanthemum maximum • Shasta daisy
Leucanthemum vulgare • Ox-eye daisy

Ericaceae

Erica lusitanica • Spanish heath

Escalloniaceae

Escallonia rubra • red claws

Euphorbiaceae

Euphorbia marginata • Snow-on-the-mountain

Fagaceae

Castanea dentata • Chestnut, American chestnut

Gramineae

Avena sativa • Cultivated oat
Cortaderia jubata • Purple pampas grass

Cortaderia selloana • Uruguayan pampas grass
Cynodon dactylon • Bermuda grass
Hordeum vulgare • Barley
Phleum pratense = Timothy
Poa pratensis = Kentucky blue grass
Secale cereale • Rye
Sorghum bicolor = Sorghum
Triticum aestivum • Wheat

Hypericaceae

Hypericum calycinum • Aaron's beard

Iridaceae

Crocasmia x crocosmiiflora • Montbretia
Ixia campanulata • White-flowered corn-lily
Ixia maculata • African corn-lily
Sparaxis tricolor • Harlequin flower,
Watsonia meriana • Watsonia, bugle-lily

Juglandaceae

Juglans hindsii • Northern California or Hinds' walnut
Juglans hindsii x *J. nigra* • Hybrid walnutya
Juglans nigra • Black walnut

Labiatae

Mentha x piperita • Peppermint
Mentha x smithiana • Red-stemmed mint
Teucrium fruticans • Shrubby germander

Lauraceae

Laurus nobilis • Sweet bay, Grecian laurel

Leguminosae

Acacia dealbata • Silver green wattle
Acacia melanoxylon • Black acacia
Medicago sativa • Alfalfa, lucerne
Pisum sativum • Garden or English pea
Robinia pseudoacacia • Black locust
Trifolium incarnatum = Crimson clover
Trifolium pratense = Red clover
Trifolium repens = White clover

Liliaceae

Asparagus officinalis ssp. *officinalis*
• Asparagus
Cordyline australis • Cabbage-palm
Kniphofia uvaria • Redhot-poker, torch lily
Leucojum aestivum ssp. *aestivum* • Summer snowflake
Muscari botryoides • Common grape-hyacinth
Narcissus pseudonarcissus • Daffodil
Narcissus tazetta • Bunch-flowered narcissus
Ornithogalum umbellatum • Star-of-Bethlehem

Melanthaceae

Melianthus major • Honey bush

Myrtaceae

Eucalyptus globulus • Blue gum
Eucalyptus tereticornis • Forest red or slaty gum

Nymphaeaceae

Nymphaea alba • European white water-lily
Nymphaea odorata ssp. *o.* • White water-lily

Oleaceae

Ligustrum ovalifolium • California privet

Onagraceae

Fuchsia magellanica • Hardy fuchsia

Oxalidaceae

Oxalis articulata ssp. *rubra* • Window box wood sorrel
Oxalis pes-caprae • Bermuda-buttercup

Papaveraceae

Papaver rhoeas • Corn poppy
Papaver somniferum • Opium poppy

Pittosporaceae

Pittosporum tenuifolium • Pittosporum, tawhiwhi

Polygonaceae

Muehlenbeckia complexa • Maidenhair vine
Polygonum capitatum • Pink-headed smart weed
Polygonum polystachyum • Himalayan knotweed

Rosaceae

Cotoneaster franchetii • Orange cotoneaster
Cotoneaster horizontalis • Rock spray
Cotoneaster lactaeus • Milk-flowered cotoneaster
Malus pumila • Cultivated apple, sweet apple
Prunus avium • Sweet cherry
Prunus dulcis • Almond
Prunus avium • Sweet cherry
Prunus dulcis • Almond
Prunus laurocerasus • English-laurel
Pseudocyonia sinensis • False quince
Pyracantha angustifolia • Slender or woolly firethorn
Pyracantha fortuneana • Chinese fire thorn
Pyracantha koidzumii • Taiwan firethorn
Pyrus communis • Pear
Rosa multiflora • multiflora rose
Rubus laciniatus = Cut-leaved blackberry

Salicaceae

Populus alba = White poplar

Scrophulariaceae

Cymbalaria muralis • Kenilworth-ivy
Digitalis purpurea • Foxglove, purple foxglove

Linaria dalmatica = Dalmatian toadflax
Veronica speciosa = New Zealand hebe

Solanaceae

Cestrum fasciculatum = Red cestrum
Solanum lycopersicum • Tomato

Tamaricaceae

Tamarix parviflora = Salt-cedar

Tropaeolaceae

Tropaeolum majus • Nasturtium

Umbelliferae

Foeniculum vulgare = Fennel
Pastinaca sativa = Parsnip

Valerianaceae

Centranthus ruber = Red-valerian

Violaceae

Viola odorata = Sweet blue biolet

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SECTION 2.10 — WILD EDIBLE PLANTS

We begin with a simple question. What is an edible plant? The answer is not as easy as you might think. Consider our personal preferences in cultivated edible plants. Are we all in agreement that okra, eggplant, and hominy grits are edible? To many of us they are comparable to slime, cardboard, and wallpaper paste. About all we can do is talk about plants that most of us consider edible, realizing there are many others that we might add to the list.

SOME PRECAUTIONS

Be sure of the identification of any plant that you eat. It is not only important to avoid poisonous plants, but to know the identity of the plant that you are about to consume. The emergency room may be curious.

Make certain that you know the toxic plants of your area. Excellent technical and popular references are available to assist you in telling the edible from the poisonous. It can be difficult. The edible plants of the carrot family are amazingly similar to ones that are lethal. The toxic plants of the lily family closely resemble some of the popular wild edible ones. People make these mistakes all the time. Some only once!

Avoid plants growing in stagnant waters, those growing in the immediate vicinity of agricultural areas that might have been

sprayed, or those growing in soils high in nitrates or selenium.

In some plants, only certain parts are edible, while in others the entire plant body may be eaten.

Some may be eaten without any preparation, while others require cooking, sometimes involving a change of waters. Consult the recipes for details.

Never eat large quantities of any wild plant that you have not tried before. Place a small portion in your mouth, chew it up, and then spit it out. Wait for a few minutes to see if any unpleasant taste or stinging sensation occurs. If not, chew and swallow a small piece of the plant. This time, wait for an hour or so. If the plant passes your personal test, then proceed with some of the fancy recipes.

You should also ignore much of the folklore associated with wild edible plants. One of the most dangerous myths is to observe the food habits of wild animals as a guide. After all, if a bird can eat that plant or if you see Bambi browsing on some herb, then it must be safe to eat. The digestive system of birds, other mammals, and insects are sufficiently different from ours that they should not be viewed as reliable guides. The notion that plants come color-coded (certain colors indicate edibility; others toxicity) is also without foundation.

A final precaution. When dealing with native species, make sure that an adequate population remains before harvesting plants.

UNDERGROUND PLANT PARTS

amole	<i>Chlorogalum pomeridianum</i>	Bulbs, slightly acid unless cooked
arrowhead	<i>Sagittaria latifolia</i>	Tuberous roots; boiled or roasted
balsam root	<i>Balsamorhiza</i> spp.	Roots cooked over hot stones
bear grass	<i>Xerophyllum tenax</i>	Roots; roasted or boiled
biscuit roots	<i>Lomatium</i> spp.	Roots; raw or ground into flour
bistort	<i>Polygonum bistortoides</i>	Roots; saute with butter and onions
bitter root	<i>Lewisia rediviva</i>	Roots; remove bark and cook well; bitter
broomrape	<i>Orobancha</i> spp.	Underground parts tender and edible
burdock	<i>Arctium minus</i>	Peel off outer layer of root, then boil
bur reed	<i>Sparganium eurycarpum</i>	Tubers; cooked
camas	<i>Camassia</i> spp.	Bulbs; raw, but better cooked

cattail	<i>Typha</i> spp.	Roots; boiled or roasted; starchy
chickweeds	<i>Stellaria</i> spp.	Tubers; raw or cooked
chicory	<i>Cichorium intybus</i>	Roots; better cooked; bitter taste
cow-lily	<i>Nuphar luteum</i>	Rootstocks; raw or baked
cow-parsnip	<i>Heracleum maximum</i>	Roots cooked; ashes for salt substitute
dandelion	<i>Taraxacum officinale</i>	Roots
eel-grass	<i>Zostera marina</i>	Rootstocks chewed, but do not swallow
evening-primrose	<i>Oenothera</i> spp.	Roots; boil in early spring
false dandelion	<i>Tragopogon</i> spp.	Roots; raw or cooked; parsnip-like
false Solomon's seal	<i>Maianthemum racemosum</i>	Aromatic rootstocks; soak in lye
fawn lilies	<i>Erythronium</i> spp.	Bulbs; boiled or dried
fritillaries	<i>Fritillaria</i> spp.	Bulbs; raw, boiled or dried
green brier	<i>Smilax californica</i>	Roots in soups; also ground into flour
green-gentians	<i>Frasera</i> spp.	Roots; raw, boiled or roasted
hedge nettle	<i>Stachys palustris</i>	Tubers; raw or cooked
Indian-potato	<i>Orogenia</i> spp.	Roots; raw, roasted or baked
lilies	<i>Lilium</i> spp.	Bulbs; raw or cooked
mariposa lilies	<i>Calochortus</i> spp.	Bulbs; raw or cooked
nodding scrozonella	<i>Microseris nutans</i>	Roots; raw
nut-grass	<i>Cyperus esculentus</i>	Tubers; raw
pondweed	<i>Potamogeton</i> spp.	Rootstocks underwater; boil
rattlesnake weed	<i>Daucus pusillus</i>	Roots; raw or cooked
reed grass	<i>Phragmites australis</i>	Roots; raw, roasted or boiled
rein orchid	<i>Platanthera dilatata</i>	Roots; raw or cooked
sand-verbena	<i>Abronia latifolia</i>	Large roots are eaten
sea rocket	<i>Cakile edentula</i>	Roots ground into flour
skunk-cabbage	<i>Lysichiton americanum</i>	Roots; roasted, gives starchy flavor
shooting stars	<i>Dodecatheon</i> spp.	Roots; raw or boiled
spring beauty	<i>Claytonia</i> spp.	Bulbs; raw or cooked
sunflower	<i>Helianthus</i> spp.	Tubers; raw, boiled or roasted
sweet cicely	<i>Osmorhiza</i> spp.	Roots; anise-flavored
thistle	<i>Cirsium</i> spp.	Roots; raw or cooked; rather flat taste
toothwort	<i>Cardamine</i> spp.	Bulbs; raw, or cooked in salads
tule (bulrush)	<i>Schoenoplectus</i> spp.	Roots; raw or soaked; starchy
waterleaf	<i>Hydrophyllum occidentale</i>	Roots; boiled
water shield	<i>Brasenia schreberi</i>	Tuberous roots are boiled
wild carrot	<i>Daucus carota</i>	Roots; much as in the cultivated carrot
wild-ginger	<i>Asarum</i> spp.	Rootstock is used
wild-hyacinth, brodiaea	<i>Brodiaea</i> spp.	Bulbs; less mucilaginous after boiling
wild licorice	<i>Glycyrrhiza lepidota</i>	Sweet succulent roots used as flavoring
wild onion	<i>Allium</i> spp.	Bulbs; either raw or cooked
yampa, squawroot	<i>Perideridia gairdneri</i>	Roots; raw or cooked

STEMS, LEAVES, AND FLOWERS (SALADS AND POTHERBS)

asparagus	<i>Asparagus officinalis</i>	Young shoots; same as cultivated plants
balsamroot	<i>Balsamorhiza</i> spp.	Leaves and stems boiled
bitter cress	<i>Cardamine</i> spp.	Young plant as salad or potherb
black mustard	<i>Brassica nigra</i>	Leaves as a salad
bladder campion	<i>Silene</i> spp.	Young shoots as potherbs
broomrape	<i>Orobanche fasciculata</i>	Raw; better roasted
bulrushes	<i>Scirpus</i> and <i>Schoenoplectus</i> spp.	Stem bases, rhizomes eaten raw, cooked
burdock	<i>Arctium minus</i>	Leaf stalks peeled; raw or cooked
burnet	<i>Sanguisorba occidentalis</i>	Leaves used as a salad
burning bush	<i>Kochia scoparia</i>	Tips of young shoots as potherbs
carpetweed	<i>Mollugo verticillata</i>	Plant as a potherb
cattail	<i>Typha latifolia</i>	Young shoots; raw or cooked
cheeseweed	<i>Malva</i> spp.	Shoots and leaves as salad or potherb
chicory	<i>Cichorium intybus</i>	Leaves; raw or boiled; spinach-like
chickweed	<i>Stellaria media</i>	Young plants used as a potherb
cow parsnip	<i>Heracleum maximum</i>	Inner stem tissue; raw or cooked
curly dock	<i>Rumex crispus</i>	Leaves as potherb; boil in two waters
dandelion	<i>Taraxacum officinale</i>	Tender young leaves as a potherb
dead nettle, henbit	<i>Lamium amplexicaule</i>	Leaves and stems boiled as potherb
evening-primrose	<i>Oenothera</i> spp.	Leaves and stems as salad; better blanched
false mermaid	<i>Floerkea proserpinacoides</i>	Plants make for a spicy salad
field pennycress	<i>Thlaspi arvense</i>	Leaves and stems; raw or boiled
filaree	<i>Erodium cicutarium</i>	Young plants as a potherb
fireweed	<i>Chamerion angustifolium</i>	Stems and leaves as potherb
glasswort	<i>Salicornia</i> spp.	Succulent stems used; salty taste
goldenrod	<i>Solidago</i> spp.	Leaves used as a potherb
goosefoot	<i>Chenopodium</i> spp.	Leaves cooked as salad greens
hedge mustard	<i>Sisymbrium officinale</i>	Young plant used as a potherb
hops	<i>Humulus lupulus</i>	Young stems as potherb
Hottentot-fig, ice plant	<i>Carpobrotus edulis</i>	Leaves and stems as salad
Indian pipe	<i>Monotropa</i> spp.	Succulent stems; raw or cooked
Indian-rhubarb	<i>Darmera peltata</i>	Leafstalk peeled; eaten raw or cooked
lady's thumb	<i>Polygonum persicaria</i>	Leaves in salads
lamb's quarters	<i>Chenopodium album</i>	Young plants as potherbs
live forever	<i>Dudleya</i> spp.	Fleshy leaves and stems eaten raw
mignonette	<i>Reseda lutea</i>	Young plants as salad
milk thistle	<i>Silybum marianum</i>	Prepare as you would the artichoke
miner's-lettuce	<i>Montia perfoliata</i>	Young plants as salad or potherb
monkey flower	<i>Mimulus guttatus</i>	Young plants as salad; somewhat bitter
mountain-sorrel	<i>Oxyria digyna</i>	Leaves and stems raw or boiled
nettle	<i>Urtica</i> spp.	Young stems and leaves as a potherb
nipplewort	<i>Lapsana communis</i>	Young plants boiled as potherb

pigweed	<i>Amaranthus</i> spp.	Young leaves; boil immediately
pipissisewa	<i>Chimaphila umbellata</i>	Leaves as a salad
plantain	<i>Plantago</i> spp.	Leaves boiled as potherb
prickly lettuce	<i>Lactuca serriola</i>	Young leaves for salads or potherbs
purslane	<i>Portulaca oleracea</i>	Young stems and leaves as potherb
redbud	<i>Cercis californica</i>	Fresh flowers good in salads
red maids	<i>Calandrinia ciliata</i>	Plants as salad or potherb
reed grass	<i>Phragmites australis</i>	Stems and leaves as potherb
Russian thistle	<i>Salsola tragus</i>	Leaves and stems; boil for 12-15 minutes
saltbush	<i>Atriplex</i> spp.	Stems and leaves boiled
scorpion weed	<i>Phacelia ramosissima</i>	Leaves cooked as greens
sea rocket	<i>Cakile edentula</i>	Leaves and stems as salad or potherb
shepherd's purse	<i>Capsella bursa-pastoris</i>	Tender leaves and stems as salad
sorrel, sour-grass	<i>Oxalis oregana</i>	Leaves and stems eaten raw
sow thistle	<i>Sonchus oleraceus</i>	Stems and leaves used as a potherb
speedwell	<i>Veronica</i> spp.	Leaves as a salad
stonecrops	<i>Sedum</i> spp.	Leaves and stems; raw or boiled
vetch	<i>Vicia</i> spp.	Young stems and leaves boiled
violet	<i>Viola</i> spp.	Leaves and stems eaten raw or cooked
water cress	<i>Nasturtium officinale</i>	Plants as salad or potherb
winter cress	<i>Barbarea vulgaris</i>	Leaves; boil in two waters
wintergreen	<i>Gaultheria humifusa</i>	Young leaves as greens

EDIBLE FRUITS (SEE ALSO EDIBLE SEEDS)

bastard toadflax	<i>Comandra umbellata</i>	Raw; best when fruits are green
blackberry	<i>Rubus</i> spp.	Berries; raw or cooked
bunchberry (dogwood)	<i>Cornus unalashkensis</i>	Raw or cooked
California-laurel	<i>Umbellularia californica</i>	Parched; ground into flour
cheeseweed	<i>Malva</i> spp.	Young fruits edible
chinquapin	<i>Chrysolepis chrysophylla</i>	Acorns edible
chinquapin, bush	<i>Chrysolepis sempervirens</i>	Acorns edible
chokecherry	<i>Prunus</i> spp.	Cook! Raw fruits high in cyanide
crabapple	<i>Malus fusca</i>	Good for jellies
crab grass	<i>Digitaria sanguinalis</i>	Grains may be ground into flour
dill	<i>Anethum graveolens</i>	Seed-like fruits used in flavorings
dropseed	<i>Sporobolus</i> spp.	Ground into meal or flour
elderberry	<i>Sambucus</i> spp.	Blue or black berries only; pies & jellies
flax	<i>Linum lewisii</i>	Eat only after roasting fruits
foxtail	<i>Setaria</i> spp.	Fruits ground into meal
gooseberry	<i>Ribes</i> spp.	Raw or cooked
ground cherry	<i>Physalis</i> spp.	Purple berries; raw or cooked
hawthorn	<i>Crataegus douglasii</i>	Fruits edible; used in pies and preserves
hazelnut, beaked	<i>Corylus cornuta</i>	Fruits ground into meal

Hottentot-fig	<i>Carpobrotus edulis</i>	Fruits edible
huckleberry	<i>Vaccinium</i> spp.	Raw or cooked; taste varies with species
Johnson grass	<i>Sorghum halepense</i>	Grains ground into meal or flour
June berry (serviceberry)	<i>Amelanchier</i> spp.	Fruits highly prized by Native Americans
juniper	<i>Juniperus</i> spp.	Raw or cooked; best in late summer
madrone	<i>Arbutus menziesii</i>	Berries; raw, boiled, or steamed
manna grass	<i>Glyceria</i> spp.	Fruits parched; ground into flour
manzanita	<i>Arctostaphylos</i> spp.	Makes excellent jellies; somewhat acid
mountain-ash	<i>Sorbus</i> spp.	Ripe berries; raw or cooked
Nuttall's dogwood	<i>Cornus nuttallii</i>	Raw or cooked
oak	<i>Quercus</i> spp.	Acorns edible, varies with species
ocean spray	<i>Holodiscus discolor</i>	Raw or cooked
Oregon-grape	<i>Mahonia aquifolium</i>	Eaten raw or made into jelly
oso berry	<i>Oemleria cerasiformis</i>	Raw or cooked
panic grass	<i>Panicum</i> spp.	Grains eaten raw or ground into meal
raspberry	<i>Rubus leucodermis</i>	Berries; raw or cooked
redberry	<i>Rhamnus crocea</i>	Berries edible
redbud	<i>Cercis occidentalis</i>	Fruits may be fried
rose	<i>Rosa</i> spp.	Hips edible; varies with the species
sagebrush	<i>Artemisia tridentata</i>	Raw or dried; ground into meal
salal	<i>Gaultheria shallon</i>	Raw or cooked
salmonberry	<i>Rubus spectabilis</i>	Berries; raw or cooked
squawbush	<i>Rhus trilobata</i>	Berries best when fully ripe
sunflower	<i>Helianthus annuus</i>	Seed-like fruits roasted; ground into meal
tansy mustard	<i>Descurainia</i> spp.	Fruits and seeds ground into meal
tarweed	<i>Madia glomerata</i>	Raw or roasted; also ground into meal
thimbleberry	<i>Rubus parviflorus</i>	Berries; raw or cooked
toyon	<i>Heteromeles arbutifolia</i>	Raw or roasted
twinberry	<i>Lonicera involucrata</i>	Edible raw
twisted stalk	<i>Streptopus amplexifolius</i>	Raw or cooked
unicorn plant	<i>Proboscidea</i> spp.	Fruits boiled or pickled when young
walnut, northern California	<i>Juglans hindsii</i>	Nuts edible
walnut, California	<i>Juglans californica</i>	Nuts edible
wild grape	<i>Vitis californica</i>	Fruits edible
wild oat	<i>Avena</i> spp.	Grains ground into flour
wild strawberry	<i>Fragaria</i> spp.	Fruits edible; quality varies with species
wintergreen	<i>Gaultheria humifusa</i>	Raw or cooked

EDIBLE SEEDS (AND SEED-LIKE FRUITS)

balsam root	<i>Balsamorhiza</i> spp.	Roasted
beach pea	<i>Lathyrus japonicus</i>	Raw when immature; best in soups later
bedstraw	<i>Galium aparine</i>	Roasted; coffee substitute
black medick	<i>Medicago lupulina</i>	Ground into meal
blazing star	<i>Mentzelia</i> spp.	Red seeds used to make gravy
buttercups	<i>Ranunculus</i> spp.	Parched; ground into meal
chia	<i>Salvia columbariae</i>	Parched; ground into meal
cow-lily	<i>Nuphar luteum</i>	Roasted; also ground into meal
ghost pine or gray pine	<i>Pinus sabiniana</i>	Seeds edible
giant hyssop	<i>Agastache urticifolia</i>	Raw or roasted
goosefoot	<i>Chenopodium</i> spp.	Ground into meal for gruel or soup
hedge mustard	<i>Sisymbrium officinale</i>	Parched; ground into flour
juniper	<i>Juniperus</i> spp.	Raw or dried and ground into meal
lacepod	<i>Thysanocarpus curvipes</i>	Parched and eaten or ground into flour
pepper-grass	<i>Lepidium</i> spp.	Mix with vinegar and salt for dressing
purslane	<i>Portulaca oleracea</i>	Seeds may be ground into mush
red maids	<i>Calandrinia ciliata</i>	Raw or cooked and ground into meal
sagebrush	<i>Artemisia</i> spp.	Raw or cooked and ground into meal
saltbush	<i>Atriplex</i> spp.	Ground into meal
Scotch broom	<i>Cytisus scoparius</i>	Roasted; coffee substitute
shepherd's purse	<i>Capsella bursa-pastoris</i>	Parched; ground into flour
tansy mustard	<i>Descurainia</i> spp.	Ground into meal
tarweed	<i>Madia glomerata</i>	Raw, boiled or roasted
vervain	<i>Verbena</i> spp.	Roasted; ground into flour
vetch	<i>Vicia</i> spp.	Seeds boiled, eaten by Native Americans
wild flax	<i>Linum perenne</i>	Roasted, dried and ground; high in oils

BEVERAGE PLANTS

bird's foot fern	<i>Pellaea mucronata</i>	Stems and leaves make an aromatic tea
California-lilac	<i>Ceanothus</i> spp.	Leaves and flowers; boil 5-10 minutes
Douglas-fir	<i>Pseudotsuga menziesii</i>	Needles as a tea
elderberry	<i>Sambucus</i> spp.	Blue and black berries made into wine
false buckwheat	<i>Eriogonum umbellatum</i>	Leaves as a tea
goldenrod	<i>Solidago</i> spp.	Leaves and mature flowers steeped for tea
ground ivy	<i>Glechoma hederacea</i>	Leaves dried; prepared as a tea
horehound	<i>Marrubium vulgare</i>	Tea/broth from leaves; also a laxative
sugar bush	<i>Rhus ovata</i>	Berries soaked in water
manzanitas	<i>Arctostaphylos</i> spp.	Fruits scalded, crushed, added to water
mountain hemlock	<i>Tsuga mertensiana</i>	Steep needles in hot water
mountain mahogany	<i>Cercocarpus ledifolius</i>	Bark as a tea
Oregon grape	<i>Mahonia aquifolium</i>	Fruits in water
pennyroyal	<i>Monardella odoratissima</i>	Makes a refreshing tea

pineapple weed	<i>Matricaria discoidea</i>	Flower heads used as a tea
pipsissewa	<i>Chimaphila umbellata</i>	Boil roots and leaves
prairie smoke	<i>Geum triflorum</i>	Roots boiled for a tea
saltbushes	<i>Atriplex</i> spp.	Seeds in water
selfheal	<i>Prunella vulgaris</i>	Fresh or dried leaves in cold water
spearmint; peppermint	<i>Mentha</i> spp.	Fresh or dried leaves in boiling water
squawbush	<i>Rhus trilobata</i>	Berries soaked in water
tarweed	<i>Grindelia</i> spp.	Leaves as a tea; broth for skin rashes
western hemlock	<i>Tsuga heterophylla</i>	Steep needles in hot water
wild strawberry	<i>Fragaria</i> spp.	Leaves as a tea
yerba buena	<i>Clinopodium douglasii</i>	Steep leaves 15-20 minutes in hot water
yerba santa	<i>Eriodictyon californicum</i>	Leaves as a tea

MISCELLANEOUS USES

California bay	<i>Umbellularia californica</i>	Leaves used as a condiment
chicory	<i>Cichorium intybus</i>	Roots provide coffee flavoring
cow parsnip	<i>Heracleum maximum</i>	Leaves dried, burned; salt substitute
Douglas-fir	<i>Pseudotsuga menziesii</i>	Cones used to clean pots
false dandelion	<i>Tragopogon</i> spp.	Sap chewed as a gum
hawkweed	<i>Hieracium</i> spp.	Sap may be chewed as gum
horsetails	<i>Equisetum</i> spp.	Peel away tough outer stem; pulp sweet
pussy's toes	<i>Antennaria</i> spp.	Stalks may be chewed as gum
red osier	<i>Cornus stolonifera</i>	Inner bark-leaves as tobacco substitute
reed grass	<i>Phragmites australis</i>	Stems may be ground into flour
sugar bush	<i>Rhus ovata</i>	Sugary covering on berries eaten
sugar pine	<i>Pinus lambertiana</i>	Sap sugary; also resinous
willows	<i>Salix</i> spp.	Inner bark edible when times are rough

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SECTION 2.11 — PLANTS OF ETHNOBOTANICAL SIGNIFICANCE

The title "Useful Plants" would have been more succinct. Of course, we use some plants to meet our basic needs. We eat all or parts of them, we clothe ourselves with their fibers, and we build shelters from their leaves, stems, and wood. We use them to treat our illnesses and to alter our perception of the

world around us. A more comprehensive list appears below. Anthropologists have studied the interaction of people and plants for many years, especially those of remote cultures often viewed as primitive at the time. Their work evolved into the more multi-disciplinary science of ethnobotany.

A MORE DETAILED LIST OF PLANT USES

- Food
 - Spices and flavorings
 - Beverages
- Cooking, serving, and eating utensils
- Clothing (everyday and ceremonial)
- Dwellings
- Personal hygiene
- Beautification (including dyes)
- Bedding
- Baskets
- Strings, cords, ropes, and lashings
- Brooms and brushes
- Stuffing material
- Fishing nets and traps
- Building materials (houses, boats, paddles)
- Glue and other adhesives
- Digging sticks
- Canes
- Clubs and spears
- Medicines (including charms and cures)
 - Insecticides
 - Rodenticides
 - Fish poisons
 - Fumigants
- Warfare (darts, arrows, poisons)
- Rituals and ceremonies
 - Aphrodisiacs
 - Psychoactives
- Toys and games
- Art work
- Ornamentations
- Aesthetics (beauty and fragrance)

In his 1981 thesis at Humboldt State University, Marc Baker noted that little ethnobotanical research had been done in northwestern California. His important and widely cited work on the pre-1850 cultures of the Karok, Tolowa, and Yurok and that of V. K. Chestnut (1902) on more recent uses by the Pomo and Yuki people in Mendocino County were the primary sources for the plants listed below.

F E R N S

Athyriaceae

Athyrium filix-femina • leaves to clean butchered eels

Blechnaceae

Struthiopteris spicant • leaves for bedding

Woodwardia fimbriata • fibers dyed with alder bark for use in basketry

Dennstaedtiaceae

Pteridium aquilinum • leaves as serving plates for fish and to clean them; pulverized leaves to treat poison-oak

Dryopteridaceae

Dryopteris arguta • leaves to clean meats and to lay over meat to keep flies away

Polystichum munitum • leaves for bedding

Equisetaceae

Equisetum laevigatum • stems as sandpaper on madrone spoons

Equisetum telmateia • small, fresh sprouts eaten; also rubbed on children's teeth to keep them from gritting

Polypodiaceae

Polypodium californicum • rhizomes to treat infections; juice from roots as medicine

Pteridaceae

Adiantum pedatum • rachis to decorate basketry; infusion as medicine

Pentagramma triangularis • spores used by children to make art work

C O N I F E R S

Cupressaceae

Calocedrus decurrens • leaflets to leach of acorns

Juniperus communis var. *saxitilis* • dried berries to decorate dresses

Sequoia sempervirens • wood as building materials, dugout canoes, paddles, storage boxes, platters, finger bowls, head rests; roots used in basketry

Pinaceae

Picea sitchensis • roots for horizontal weave in basketry

Pinus contorta • hunters rubbed branches on their bodies to hide their scent

Pinus jeffreyi • roots used in basketry

Pinus lambertiana • seeds eaten after cones roasted and as ornaments; wood for planks in houses and sweathouses; sweet sap for food and an adhesive

Pinus ponderosa • larger roots used in basketry

Pinus sabiniana • seeds eaten; pitch to protect cuts and burns and to cure rheumatism

Pseudotsuga menziesii • shoots eaten and to make a tea used at leisure or to treat colds

Taxaceae

Taxus brevifolia • wood to make bows; decoction made from bark to purify the blood; berries as food

Torreya californica • roasted nuts edible

FLOWERING PLANTS

Aceraceae

Acer circinatum • wood for paddles for stirring food; rattles

Acer macrophyllum • bark fibers for skirts

Alismataceae

Sagittaria latifolia • fleshy tubers edible

Amaranthaceae

Amaranthus retroflexus • seeds edible

Anacardiaceae

Rhus trilobata • fruits to treat smallpox

Toxicodendron diversilobum • young buds eaten to impart immunity; branches for basketry and to prop open salmon fillets; sap used for tattoos

Apocynaceae

Apocynum cannabinum • fibers of inner bark to make ropes, thread, nets, and garments

Asclepias cordifolia • dried latex chewed by elders

Asclepias eriocarpa • latex as a healing lotion for cuts and warts and for tattooing

Asclepias fascicularis • young flowers edible

Araceae

Lysichiton americanum • sturgeon eggs baked in leaves in ashes; leaves as a drinking vessel; steamed roots to treat arthritis, lumago, and stroke

Araliaceae

Aralia californica • boiled roots to treat arthritis, lung and stomach disease, and tuberculosis

Aristolochiaceae

Asarum caudatum • leaves to prevent infection of newborn's navel and other infections; roots as sachet powders

Berberidaceae

Mahonia aquifolium • roots used to dye porcupine quills yellow

Mahonia pumila • roots to treat coughs, to purify blood, and as a tonic

Vancouveria hexandra • fresh leaves eaten to treat coughs

Betulaceae

Alnus rhombifolia • roots used in basketry

Alnus rubra • bark used to dye *Woodwardia* stems used in basketry; stems for lashing in sweat houses

Corylus cornuta var. *californica* • nuts eaten fresh or ground into a flour; stems for basketry, fish nets, and frames for snowshoes

Boraginaceae

Amsinckia lycopsoides • fresh shoots edible

Cynoglossum grande • cooked roots used as food and to treat venereal disease

Plagiobothrys fulvus var. *campestris* • tender shoots and seeds edible

Caprifoliaceae

Lonicera interrupta • stems used in basketry; leaves to make a concentrated tea and wash for sore eyes

Sambucus nigra ssp. *caerulea* • flowers used externally to treat sprains, bruises, and to make an antiseptic wash; internally to stop bleeding from tuberculosis and for stomach pain; inner bark an emetic

Sambucus racemosa • fresh fruits edible

Symphoricarpos albus var. *laevigatus* • twigs as brushes; larger stems to make arrows and pipe stems

Celastraceae

Paxistima myrsinites • fruits edible

Compositae

Achillea millefolium • decoction or steamed to treat sore eyes; leaves as a tea to treat tuberculosis, stomach aches and headaches; alcoholic extract for sprains and bruises

Achyrachaena mollis • roasted seeds often mixed with buttercup seeds, ground into a fine meal

Anthemis cotula • fresh plants put in bath water to treat severe colds and rheumatism

Artemisia douglasiana • fresh leaves to make a poultice for arthritis and as a linament; steamed herbs for fractures; tea for "pin worms;" shoots to keep away salmon beetles

Baccharis pilularis var. *consanguinea* • stems to make arrows

Balsamorhiza deltoidea • peduncles edible

Brickellia californica • leaves to make a tea

Grindelia spp. • fresh leaves chewed for tea; decoction of whole plant to treat colds, colic, constipation and as a blood purifier

Helenium puberulum • flowers and leaves edible when raw or as a decoction to treat venereal disease

Hemizonia congesta ssp. *luzulaefolia* • roasted seeds edible

Layia platyglossa • seeds ground in a fine flour

Madia gracilis • seeds yield an oil used in cooking

Matricaria discoidea • decoction of leaves and flowers to treat diarrhea

Microseris laciniata • milky juice after exposure to sun to make a chewing gum

Petasites frigidus var. *palmatum* • heated leaves placed on arthritic joints; ashes a salt source; stems and leaves edible; roots to treat early stages of tuberculosis and in dried form to treat boils and running sores

Wyethia longicaulis • decoction of root an emetic; poultice to treat rheumatism, headaches and inflamed eyes

Cruciferae

Brassica rapa • young leaves edible

Nasturtium officinale • fresh leaves eaten as relish; boiled young plants edible

Thysanocarpus curvipes • seeds edible; plants to treat stomach aches

Cucurbitaceae

Marah oregana • shoots combined with *Polypodium* rhizomes to make a tea; fruits used in children's games; roots for a poultice to draw boils and treat bruises

Cyperaceae

Carex barbarae • rootstocks • basketry

Schoenoplectus spp. • stems used in basketry, mats, clothing, etc.; ashes to treat poison-oak; roots edible

Datisceae

Datisca glomerata • leaves and roots as a dye and fish poison

Ericaceae

Arbutus menziesii • roasted berries as food and fish bait and for ornamentation; bark to make children's sleds; inner bark for dresses; wood for carving; leaves to separate food and in puberty ceremonies

Arctostaphylos cinerea • berries mixed with salmon and sugar to form patties that were baked

Arctostaphylos manzanita • fruits edible and to make cider

Arctostaphylos nevadensis • berries as food and made into a drink; leaves to treat diarrhea and poison-oak

Arctostaphylos uva-ursi • berries edible

Chimaphila menziesii • decoction of leaves to treat kidney, bladder, and female "troubles"

Chimaphila umbellata • leaves mixed with *Artemisia douglasiana* to treat various aches and pains; mixed with *Mahonia* to treat kidney ailments

Gaultheria shallon • fruits edible

Rhododendron columbianum • leaves simmered to make a much-prized tea

Vaccinium ovatum • fresh berries edible

Vaccinium parvifolium • fresh berries edible

Vaccinium scoparium • fresh berries edible

Euphorbiaceae

Croton setigerus • bruised leaves to stupefy fish

Fagaceae

Chrysolepsis chrysophila • nuts edible after being rolled over hot coals

Notholithocarpus densiflorus • nuts ground into flour after leaching or ground into soup and gruel, paste made into patties; bark used to dye fishing nets

Quercus chrysolepis • acorns edible, after being buried for up to four years

Quercus douglasii • acorns edible

Quercus garryana • acorns edible

Quercus kelloggii • acorns edible

Quercus lobata • acorns edible

Gramineae

Avena fatua • grains edible

Bromus carinatus • grains edible

Elymus triticooides • grains edible; leaves used as forage

Hordeum vulgare • grains edible and ground to make a coffee substitute

Phragmites australis • grains edible

Grossulariaceae

Ribes cereum • fresh fruits edible, after removing spines

Ribes divaricatum • fresh fruits edible

Ribes lobbianum • fresh fruits edible

Ribes nevadense • leaves used in cooking seaweed to separate them and impart a slight flavor

Ribes roezlii var. *cereum* • fresh fruits edible

Hippocastanaceae

Aesculus californica • seeds edible after being cooked; leaves and young shoots a fish poison

Hydrangeaceae

Philadelphus lewisii • older wood to make bows, younger wood for arrows; stems in basketry

Hydrophyllaceae

Eriodictyon californicum • leaves boiled to make a tea to treat colds and coughs; fresh leaves chewed as a relaxant; highly regarded

Iridaceae

Iris innominata • roots and leaves for cordage

Iris tenax ssp. *klamathensis* • roots and leaves for cordage

Juncaceae

Juncus effusus • stems in basketry and to construct fish traps

Juncus ensifolius • stems in basketry

Labiatae

Monardella sheltonii • leaves make refreshing tea; also valued as blood purifier and for colic

Pogogyne douglasii var. *parviflora* • leaves as a tea; also used to treat pain in stomach and bowels; seeds edible, highly prized

Salvia columbariae • mucilaginous seeds used to make soup

Satureja douglasii • leaves as a medicinal tea, an aphrodisiac, and refreshing drink

Trichostema lanceolatum • smashed fresh plants a fish poison; infusion of leaves to treat headaches; decoction of leaves mixed with those of turkey mullein as a wash in typhoid fever

Lauraceae

Umbellularia californica • roasted fruits edible or added to a soup or gruel; burning foliage to drive away evil spirits and to fumigate a house after an illness

Leguminosae

Cercis occidentalis • young shoots • basketry; bark • thread and as a substitute for quinine

Lathyrus jepsonii ssp. *californicus* • leaves edible; boiled plants applied to swollen joints

Trifolium spp. • leaves edible

Vicia americana • leaves edible

Liliaceae

Allium unifolium • fried bulbs and leaf bases edible

Brodiaea elegans • bulbs baked in sand edible

Camassia leichtlinii • bulbs edible

Camassia quamash • bulbs edible; baked or between layers of grape leaves in a pit

Chlorogalum pomeridianum • outer covering of bulbs for small brushes; juice from bulb as a glue; young shoots edible; bulbs for various medicinal uses, as a substitute for soap; smashed bulbs used to stupify fish

Dichelostemma congestum • bulbs edible

Dichelostemma multiflorum • raw bulbs edible

Erythronium oregonum • corms edible and used as a poultice to treat boils

Lilium rubescens • flowers for bouquets

Trillium chloropetalum • bulbs cut and scrapped to make a poultice to treat burns

Triteleia laxa • bulbs edible

Xerophyllum tenax • new sprouts for basketry

Zygadenus venenosus • fresh and cooked bulbs to treat bruises, as a painkiller, and to treat rheumatism

Loasaceae

Mentzelia laevicaulis • decoction of leaves to treat stomach aches and to wash skin diseases

Nymphaeaceae

Nuphar polysepala • seeds edible

Oleaceae

Fraxinus latifolia • wood used to make canes, handles, small tools, tobacco pipes; mashed roots used to treat wounds

Onagraceae

Clarkia purpurea ssp. *quadrivulnera* • seeds edible; decoction of leaves to wash sore eyes

Oxalidaceae

Oxalis oregana • plants edible, with dried fish; poultice to treat sores or skin infections

Papaveraceae

Eschscholzia californica • fresh roots put in tooth cavities and to treat headaches

Plantaginaceae

Plantago major • steamed leaves used to treat boils

Polemoniaceae

Leptosiphon ciliatus • flowers as a coffee substitute; infusion to treat coughs and colds

Polygonaceae

Eriogonum latifolium • plants to treat stomach pain, headaches, and female complaints

Eriogonum nudum var. *oblongifolium* • young shoots edible; roots for abdominal pains

Polygonum aviculare • decoction of whole plants and oak bark to make an astringent

Rumex crispus • leaves edible; seeds ground to make a mush

Portulacaceae

Claytonia parviflora • shoots used in a game

Claytonia perfoliata • shoots used by children in a similar game

Claytonia sibirica • tips of shoots edible

Primulaceae

Dodecatheon hendersonii • roasted roots and leaves edible; flowers as ornamentation

Ranunculaceae

Aquilegia formosa • sweet nectaries in sepal spurs edible, mostly by younger people

Clematis ligusticifolia • stems and leaves chewed to cure colds and sore throats

Delphinium nudicaule • plants with a narcotic property used to stupefy victims

Ranunculus occidentalis • seeds edible

Rhamnaceae

Ceanothus integerrimus • young shoots for basketry

Frangula purshiana • bark used as a very bitter laxative

Rosaceae

Amelanchier utahensis • fruits edible

Cercocarpus betuloides • wood used to make arrow tips, digging sticks, spears, and clubs

Fragaria spp. • fresh fruits edible
Heteromeles arbutifolia • fruits edible, after roasting over an open fire
Oemleria cerasiformis • fruits edible, but only a few at a time
Prunus virginiana var. *demissa* • fruits edible
Rosa pisocarpa • fruits used to make a medicinal tea
Rubus armeniacus • fresh fruits edible
Rubus leucodermis • fresh fruits edible
Rubus parviflorus • fresh fruits edible
Rubus spectabilis • fresh fruits edible; young shoots with seaweed and dried eels edible
Rubus ursinus • fresh fruits edible; young shoots to make a tea

Salicaceae

Populus trichocarpa • shoots boiled to make a medicinal decoction; pitch for tattooing; roots for basketry
Salix exigua var. *hindsiana* • bark for basketry; stems as main ribs in baskets
Salix scouleriana • roots for basketry
Salix sitchensis • roots for basketry

Scrophulariaceae

Boschniakia strobilacea • young plants edible
Mimulus guttatus • leaves edible
Pedicularis densiflora • children suck nectar from flowers
Verbascum thapsus • leaves a tobacco adulterant

Smilacaceae

Smilax californica • stems for basketry

Solanaceae

Nicotiana quadrivalvis var. *bigelovii* • leaves smoked
Solanum nigrum • fully ripe berries edible

Typhaceae

Typha latifolia • leaves woven together to make mats and raincoats

Umbelliferae

Angelica spp. • chewed root and rubbed on legs to prevent rattlesnake bites; roots eaten for colds, colic, and fever; young sprouts edible
Heracleum maximum • inner layers of stem near shoot apex edible
Ligusticum californicum • roots edible
Lomatium californicum • roots smoked and a decoction as herbal remedy
Lomatium utriculatum • young, crisp leaves edible
Osmorhiza berteroi • leaves edible in the spring; dried roots eaten for headaches; used to fumigate houses after an illness
Sanicula crassicaulis • seeds edible; chewed roots bring good luck in gambling

Urticaceae

Urtica dioica ssp. *gracilis* • fresh leaves pounded into a poultice to treat skin inflammations

Violaceae

Viola adunca • chewed leaves applied to sore eyes

Viscaceae

Phoradendron leucarpum • leaves used to treat toothaches; tea to induce abortions

Vitaceae

Vitis californica • fresh berries edible; roots for basketry; stems for ropes and lashings

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SECTION 2.12 — POISONOUS PLANTS

A poisonous plant is one that typically disrupts the normal state of health of the victim, when ingested or otherwise encountered in small quantities. Symptoms range from relatively mild allergic reactions and rashes through various forms of gastrointestinal distress and effects on other major systems, to death. In other words, we are not just talking about plants that will kill you. We do have some notorious plants in northwestern California that will do exactly that, including the water hemlock (*Cicuta maculata*), which has been called the most violently poisonous plant in North America. It produces the three stages

of poisoning. First, you begin to present symptoms that get worse. Second, you are afraid you might die. Third, you are fearful that you won't. See the discussion at the end of the list for more details. Humans are not the only victims of plant poisoning. So are wild and domesticated animals, including household pets. You may be surprised to learn that some plants have evolved mechanisms for poisoning other plants. We have included several popular ornamental plants that are technically not part of our flora because they have yet to escape and become naturalized.

Scientific Name • Common Name

Toxic Part • Toxin • Symptoms

F E R N S

Equisetum spp. • horsetails, scouring-rush
Dryopteris filix-mas • male fern
Pteridium aquilinum • bracken fern

Stems • thiaminase • circulatory failure
 Foliage • thiaminase • GI
 All, esp. rhizomes • thiaminase • circulatory, tremors, carcinogenic

G Y M N O S P E R M S

Cedrus deodara • deodar cedar [O]
Cupressus macrocarpa • Monterey cypress [O]
Juniperus spp. • junipers
Pinus ponderosa • ponderosa pine
Taxus spp. • English and Japanese yew [O]

Cones, sap • unknown • dermatitis
 Foliage • diterpene acids • abortions in cattle
 Cones, shoots, foliage • isocupressic acid + others • abortions in cattle
 Leaves, twigs • terpene (?) • abortions in cattle, teratogenic
 All parts • taxine (alkaloids) • GI, circulatory, respiratory, CV

F L O W E R I N G P L A N T S

Amaranthaceae (Pigweed Family)

Amaranthus spp. • pigweeds

All parts • nitrates, oxalates (?) • GI

Anacardiaceae (Cashew Family)

Toxicodendron diversilobum • western poison-oak

All parts • urushiol (catechols) • dermatitis

Apocynaceae (Dogbane Family)

Apocynum spp. • dogbane, Indian-hemp
Asclepias spp. • milkweeds
Catharanthus roseus • periwinkle [O]
Nerium oleander • oleander [O]
Vinca spp. • periwinkle [O]

All parts • apocynamarin + glycosides • CV failure, GI
 All parts • resinoids • CNS + GI
 All parts • glycosides • CV failure, GI
 All parts • oleandrin + glycosides • CV failure, GI
 All parts • glycosides • CV failure, GI

Aquifoliaceae (Holly Family)

Ilex aquifolium • English holly [O]

Fruits • ilicin + uncharacterized saponin (?) • GI

Araceae (Aroid or Philodendron Family)

Dieffenbachia spp. • dumbcane [O]

Philodendron spp. • philodendron [O]

Zantedeschia aethiopica • calla-lily

Stem • calcium oxalate + proteolytic enzyme • M & T

Leaves • calcium oxalate + proteolytic enzyme • M & T

All parts • calcium oxalate + proteolytic enzyme • M & T

Araliaceae (Spikenard Family)

Aralia californica • spikenard, elk-clover

Hedera helix • English ivy

All parts • saponins + mechanical • GI

All parts • hederin (saponin) • GI + dermatitis

Berberidaceae (Barberry Family)

Berberis spp. • barberry [O]

Mahonia spp. • Oregon grape

All parts • isoquinoline alkaloids • GI, muscular + uterine contractions

All parts • alkaloids • GI, muscular + uterine contractions

Boraginaceae (Borage Family)

Amsinckia intermedia • fiddleneck

Cynoglossum officinale • hound's tongue

Echium spp. • viper's bugloss [O]

Heliotropium spp. • heliotrope

Symphytum spp. • comfrey

Seeds • pyrrolizidine alkaloids • CNS, GI, liver failure

All parts • cynoglossine, etc. (alkaloids) • GI, respiratory

All parts • pyrrolizidine alkaloids • liver failure, GI

All parts • pyrrolizidine alkaloids • liver failure, GI

All parts • pyrrolizidine alkaloids • Liver failure, GI

Calycanthaceae (Spice Bush Family)

Calycanthus occidentalis • spice bush

Seeds • calycanthin (alkaloid) • convulsions, CV

Cannabaceae (Hemp Family)

Cannabis sativa • marijuana, pot, hemp

Leaves, bracts • tetrahydrocannabinols (resins) • CNS, respiratory

Caprifoliaceae (Honeysuckle Family)

Lonicera spp. • honeysuckle

Symphoricarpos spp. • snowberry

Sambucus spp. • elderberry

Fruits • unknown • GI, CV+respiratory

Fruits • unknown • GI

All parts, esp. root + rhizome • HCN glycosides+alkaloids • GI

Caryophyllaceae (Pink Family)

Agrostemma githago • corn cockle

Saponaria officinalis • bouncing bet

Vaccaria hispanica • cow cockle

Seeds • saponins • GI

All parts • saponins • GI

All parts, esp. seeds • saponins • GI

Celastraceae (Bittersweet Family)

Euonymus occidentalis • western burning bush, wahoo

Fruit, bark • evomonoside (glycoside) • GI, CNS, CV

Chenopodiaceae (Goosefoot Family)

Bassia spp. • bassia, smotherweed

Chenopodium spp. • goosefoot

Kochia scoparia • summer cypress

Salsola tragus • Russian thistle

All parts • unknown • weakness, incoordination, GI

All parts • nitrates + oxalates • GI

All parts • nitrates, oxalates, saponins, thiaminase (?) = Prostration, photosensitization, liver + kidney, weight loss

All parts • oxalates • GI+circulatory

Compositae (Sunflower Family)

Acroptilon repens • Russian knapweed

Artemisia spp. • sage, sagebrush, wormwood

Centaurea solstitialis • yellow star thistle

Grindelia spp. • gumweed

All parts • lactones • "Chewing sickness," mechanical injury

All parts • volatile oils, thujone • CNS, "sage sickness"

All parts • lactones • "Chewing sickness," mechanical injury

All parts • selenium • respiratory+cardiac

Hymenoxys hoopesii • sneezeweed All parts • hymenovin (lactone) • CNS, "spewing sickness"
Hypochaeris radicata • hairy cat's-ear All parts • unknown • "Stringhalt," peripheral nerve degeneration
Lactuca serriola • wild lettuce All parts • unknown • GI, lung, kidney, +liver damage
Senecio jacobaea • tansy ragwort, stinking Willy All parts • pyrrolizidine alkaloids • liver damage
Senecio spp. (*Erechtites*) • fireweeds All part • diester retronecines • liver damage
Silybum marianum • milk thistle All parts • nitrate • GI, vitamin deficiency
Tanacetum vulgare • tansy All parts • thujone, etc. (oils) • CNS, abortions
Tetradymia spp. • horse brush All parts • tetradymol • CNS, photosensitization ("Big Head"), liver
Xanthium spp. • cocklebur All parts • glycosides • GI, mechanical, dermatitis

Convolvulaceae (Morning Glory Family)

Convolvulus arvensis • field bind weed Seeds, foliage • resinoid, tropane alkaloids • GI, CNS (?)

Cruciferae (Mustard Family)

Armoracia lapathifolia • horseradish [F] Root • glucosinolates • severe GI disturbance
Barbarea vulgaris • yellow rocket, winter cress All parts • glucosinolates • GI
Brassica napus • rape [F] Various • Unknown (bacterial ?) • Pulmonary emphysema
 Various • Glucosinolates • GI, liver/kidney damage
 Various • Glucosinolates • CNS ("rape blindness") • Urinary ("redwater disease")
Descurainia pinnata • tansy mustard All parts • unknown • Blindness, "paralyzed tongue"
Sinapis spp. • white mustard All parts, esp. seeds • glucosinolates • GI
Thlaspi arvense • fanweed Seeds • glucosinolates • GI

Cucurbitaceae (Gourd Family)

Cucurbita spp. • gourds, squashes [F] Fruits • cucurbitacins • GI, prostration
Marah oreganus • coastal manroot All parts, esp. seeds • cucurbitacins • CV, internal bleeding

Datisceae (Datisca Family)

Datisca glomerata • Durango root All parts • unknown • CNS, GI

Ericaceae (Heath Family)

Kalmia spp. • mountain laurel, lambkill All parts, honey • grayanotoxins • GI, CNS, CV
Ledum spp. • Labrador tea All parts • grayanotoxins • GI, CNS, CV
Leucothoë spp. • Sierra laurel All parts • grayanotoxins • GI, CNS, CV
Menziesia ferruginea • rusty leaf Leaves • grayanotoxins • GI, CNS, CV
Pieris spp. • pieris, andromeda [O] All parts • grayanotoxins • GI, CNS, CV
Rhododendron spp. • azalea, rhododendron All parts, honey • grayanotoxins • GI, CNS, CV

Euphorbiaceae (Spurge Family)

Croton setigerus • turkey mullein All parts • none • mechanically injurious (obstruction)
Euphorbia lathyris • gopher spurge All parts • diterpene esters • dermatitis, GI
Euphorbia maculata • spotted spurge All parts • diterpene esters • dermatitis, GI
Euphorbia marginata • snow-on-the-mountain All parts • diterpene esters • dermatitis, GI

Fagaceae (Oak Family)

Quercus spp. • oaks Acorns • tannins+gallotannins • M & T, GI

Geraniaceae (Geranium Family)

Erodium spp. • filaree All parts • HCN glycosides • cellular asphyxiation

Gramineae (Grass Family)

Anthoxanthum spp. • vernal grass All parts • coumarin • hemorrhaging

<i>Avena sativa</i> • oats	All parts • nitrites • "Grass tetany"
<i>Bromus</i> spp. • ripgut grass	Awns • none • mechanically injurious (penetration)
<i>Cynodon dactylon</i> • Bermuda grass	All parts • HCN, nitrates • CNS, photosensitization, dermatitis
<i>Festuca arundinacea</i> • alta fescue	All parts (fungal endophytes) = alkaloids, nitrates • "Fescue foot"
<i>Festuca temulenta</i> • darnel	All parts, fungal endophyte • temuline • CNS, GI
<i>Glyceria</i> spp. • manna grass	All parts • HCN glycosides • cellular asphyxiation
<i>Holcus lanatus</i> • velvet grass	All parts • HCN • cellular asphyxiation
<i>Hordeum jubatum</i> • foxtail barley	Awns • none • mechanically injurious (penetration)
<i>Panicum</i> spp. • panic grasses	All parts • saponins (?) • photosensitization, mild liver damage
<i>Phalaris</i> spp. • canary grass	All parts • ergot alkaloids = "Staggers"
<i>Setaria</i> spp. • foxtail	Awns • none • mechanically injurious (penetration)
<i>Sorghum</i> spp. • Johnson grass, sorghum	All parts • HCN • cellular asphyxiation
	All parts • unknown • spinal cord damage, ataxia, limb paralysis, bladder
<i>Stipa</i> spp. • needle grass	Awns • none • mechanically injurious (penetration)
<i>Triticum aestivum</i> • wheat	All parts • HCN, nitrates • grass tetany, photosensitization
<i>Zea mays</i> • corn, maize [F]	Stem, leaves • nitrates • Circulatory

Hippocastanaceae (Buckeye Family)

<i>Aesculus californica</i> • horse chestnut, buckeye	All parts • aesculin (saponin) • CNS, GI, blindness
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Hydrangeaceae (Hydrangea Family)

<i>Hydrangea</i> spp. • hydrangea [O]	All, esp. buds, leaves • hydrangin (HCN glycosides) • GI, cellular poison
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Hydrophyllaceae (Waterleaf Family)

<i>Phacelia</i> spp. • phacelia	Leaves, stems • none • mechanically injurious; dermatitis
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Hypericaceae (St. John's Wort Family)

<i>Hypericum perforatum</i> • Klamath weed	All, esp. leaves, flowers • hypericin (pigment) • photosensitization
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Iridaceae (Iris Family)

<i>Gladiolus</i> spp. • gladiola [O]	All parts • unknown • GI, depression
<i>Iris</i> spp. • iris	All parts • irisin (resin) • GI
<i>Moraea polystachya</i> • Cape blue-tulip [O]	All parts • alkaloid • GI, prostration

Juglandaceae (Walnut Family)

<i>Juglans</i> spp. • walnuts [F]	Wood shavings • juglone (?) • inflammation of limbs and hooves
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Juncaginaceae (Arrowgrass Family)

<i>Triglochin</i> spp. • arrowgrass	All parts • HCN glycoside • cellular asphyxiation
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Labiatae (Mint Family)

<i>Glechoma hederacea</i> • creeping charlie	All parts • volatile oils (?) • CNS
<i>Mentha pulegium</i> • pennyroyal	All parts • pulegone (oil) • respiratory, liver damage

Lauraceae (Laurel Family)

<i>Persea americana</i> • avocado [F]	Leaves, seeds • persin • necrosis of mammary glands and myocardium
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Leguminosae (Pea or Bean Family)

Astragalus spp. • locoweeds

Cytisus spp. • brooms

Glycine max • soy bean [F]

Laburnum anagyroides • golden chain tree [O]

Lathyrus spp. • sweet peas

Lupinus spp. • lupines

Medicago spp. • alfalfa

Melilotus spp. • sweet clovers

Phaseolus lunatus • lima bean [F]

Phaseolus vulgaris • kidney bean [F]

Pisum sativum • garden pea [F]

Robinia pseudoacacia • black locust [O]

Sesbania punicea • coffee weed, sesbane

Spartium junceum • Spanish broom

Trifolium spp. • clovers

Vicia faba • fava bean [F]

Vicia spp. • vetch

Wisteria spp. • wisteria [O]

All parts • alkaloids • CNS, respiratory failure

All parts • selenium accumulation • dermatitis, GI, anemia

Leaves • miserotoxin • Emphysema, ataxia, "Cracker Heel"

All part • miserotoxins • circulatory, CNS, paralysis

All parts • cytisine+sparteine • CNS, respiratory failure

Seeds • lectins • circulatory (agglutination), goitrogenic

Flowers, seeds • cytisine • CNS and respiratory failure

Seeds • nitriles, etc • CNS, "lathyrism", teratogenic

Seeds, etc. • alkaloids • CNS, "crooked calf disease"

All parts • saponins + estrogen • photosensitization, infertility

All parts • dicoumarin • severe hemorrhaging ("The bleeds")

Seeds • HCN glycosides • cellular asphyxiation

Seeds • lectins + enzyme inhibitors • GI, blocks starch digestion

All parts, esp. fruits • lectin • CNS (ensilage only), mitogenic

Leaves, seeds • phytotoxin +glycoside • GI, agglutination

Seeds • sesbanine (alkaloid) + saponins • GI, respiratory

Leaves, seeds • sparteine • GI+circulatory

All parts • isoflavones, coumarins • respiratory, photosensitivity,

Seeds • lectins • anemia ("favism") in the genetically sensitive

All parts • HCN + lectins • "Favism" (hemolytic anemia)

Seeds • lycorine+wistarine (glycosides) + lectins • GI

Liliaceae (Lily Family)

Allium spp. • onion, garlic, etc.

Amaryllis belladonna • naked ladies [O]

Asparagus officinalis • asparagus [F]

Colchicum autumnale • autumn crocus [O]

Hippeastrum spp • amaryllis [O]

Hyacinthus orientalis • hyacinth [O]

Narcissus spp. • narcissus, daffodil [O]

Veratrum spp. • corn lily, false hellebore

Zigadenus spp. • death camas

All parts • sulfides/disulfides • hemolytic anemia

Bulbs • lycorine (alkaloid) • GI

Stems, fruits • glycosides+saponin • dermatitis, GI, CV

All parts • colchicine • GI, mitotic poison

Bulbs • lycorine (alkaloid) • GI

All parts • lycorine (alkaloid) • GI

All parts • phenanthridine alkaloids • GI, CNS

All parts • veratrum alkaloids • CNS, teratogenic effects, GI, CV

All parts • zygadenine, etc. • GI, vasomotor collapse, M & T

Linaceae (Flax Family)

Linum usitatissimum • flax

All parts • HCN glycosides • cellular asphyxiation

Malvaceae (Mallow Family)

Malva parviflora • cheeseweed

All parts • fatty acids • CNS disturbances, "shivers"

Moraceae (Mulberry Family)

Ficus carica • fig

Sap • ficin (enzyme)+ methoxyypsoralein • dermatitis, photodermatitis

Myrtaceae (Myrtle Family)

Eucalyptus spp. • eucalyptus [O]

Leaves • HCN + monoterpenes • GI, CNS, respiratory

Oleaceae (Olive Family)

Ligustrum spp. • privet [O]

Leaves, berries • syringin (glycoside) • GI, kidney damage

Orchidaceae (Orchid Family)

Cypripedium spp. • lady slipper orchid

Stems, leaves • none • dermatitis from irritating hairs

Oxalidaceae (Oxalis Family)

Oxalis pes-caprae • Bermuda buttercup [O]

All parts • oxalates • GI, circulatory

Papaveraceae (Poppy Family)

Argemone spp. • prickly poppy

Seeds • berberine, protopine • CNS, GI

Corydalis spp. • fumitory, fitweed

All parts • chelidonine (alkaloid) • GI, trembling and convulsions

Dicentra spp. • bleeding hearts

All parts • chelidonine (alkaloid) • GI, trembling and convulsions

Papaver spp. • ornamental poppies, opium poppy

All parts • isoquinoline alkaloids • CNS, GI

Phytolaccaceae (Pokeweed Family)

Phytolacca americana • pokeweed, pokeberry

All parts • resin, saponin, alkaloid • GI, mitogenic effects

Pittosporaceae (Pittosporum Family)

Pittosporum spp. • pittosporum [O]

All parts • saponins • GI

Polygonaceae (Smartweed Family)

Rumex spp. • docks

All parts • oxalates • GI, circulatory

Primulaceae (Primrose Family)

Anagallis arvensis • scarlet pimpernel

All parts • saponin, glycoside, volatile oil • dermatitis, GI

Ranunculaceae (Buttercup Family)

Aconitum spp. • monkshood, wolfsbane

All parts • aconitine (alkaloid) • cardiac, circulatory

Actaea spp. • baneberry

Roots, fruits • protoanemonin • CNS, GI, circulatory

Anemone spp. • windflower, pasque flower

All parts • ranunculin • GI irritation

Caltha spp. • marsh marigold

All parts • diterpene alkaloids • M & T, GI

Clematis spp. • virgin's bower

All parts • protoanemonin • M & T, GI, CNS

Delphinium spp. • larkspur, staggerweed

All parts • delphinine, ajacine, etc. • GI, respiratory

Ranunculus spp. • buttercups

All parts • protoanemonin • GI

Rhamnaceae (Buckthorn Family)

Frangula purshiana • cascara

Bark • anthraquinones • purgative, medicinal uses

Rhamnus spp. • buckthorn

Fruit • anthraquinones • GI

Rosaceae (Rose Family)

Amelanchier spp. • serviceberry

All parts, esp. fruits • HCN glycosides • GI, cellular asphyxiation

Cercocarpus spp. • mountain mahogany

Leaves • HCN glycosides • GI, cellular asphyxiation

Heteromeles arbutifolia • toyon

All parts, esp. young leaves • HCN glycosides • GI, cellular asphyxiation

Malus sylvestris • crab apple [F]

Seeds • HCN glycosides • GI, cellular asphyxiation

Prunus laurocerasus • cherry laurel [O]

All parts • HCN glycosides • GI, cellular asphyxiation

Pyracantha spp. • firethorn

Fruits, leaves • HCN glycosides • GI, cellular asphyxiation

Rubiaceae (Madder Family)

Cephalanthus occidentalis • buttonbush

All, esp. leaves • glycosides • spasms, paralysis

Rutaceae (Citrus Family)

Ptelea crenulata • hop tree, wafer ash

All parts • furocoumarins • photodermatitis

Scrophulariaceae (Scroph Family)

Digitalis purpurea • foxglove

All parts • digitalis glycosides, saponin • GI, CV

Simaroubaceae (Simarouba Family)*Ailanthus altissimus* • tree-of-heaven

Leaves, bark, flowers • ailanthin, etc. • dermatitis, GI

Solanaceae (Nightshade Family)*Cestrum* spp. • jessamine

All parts • tropane alkaloids + saponins • CNS

Datura spp. • datura, thornapple, jimson weed

All parts • tropane alkaloids • CNS

Lycium barbarum • box thorn

Leaves • tropane alkaloids (?) • severe GI

Nicotiana spp. • tobacco

All parts • nicotine • CNS, respiratory, teratogenic

Physalis spp. • ground cherry [F, O]

All parts • solanine (glycoalkaloid) • CNS, GI

Solanum spp. • nightshades, potato, tomato

All parts • solanine (glycoalkaloid) • CNS, GI

Umbelliferae (Parsley Family)*Ammi majus* • bishop's weed

All parts • furocoumarins • photodermatitis

Apium graveolens • celery

Sap • furocoumarins • photodermatitis

Cicuta spp. • water hemlock

Rootstocks • cicutoxin (alcohol) • CNS, GI, tetanic seizures

Conium maculatum • poison hemlock

All parts • coniine • cardiac and respiratory failure, teratogenic

Daucus carota • carrot, wild carrot

All parts • furocoumarins • photodermatitis

Heracleum maximum • cow parsnip

All parts • furocoumarins • dermatitis

Pastinaca sativa • wild parsnip

All parts • furocoumarins • photodermatitis, dermatitis

Sphenosciadium capitellatum • ranger's buttons

All parts • unknown • respiratory, GI, photodermatitis

Urticaceae (Nettle Family)*Urtica* spp. • nettles

All parts • histamines • dermatitis

Verbenaceae (Vervain Family)*Lantana camara* • lantana [O]

Fruits, leaves • lantadene A & B (triterpene) • GI and liver damage

Viscaceae (Mistletoe Family)*Phoradendron* spp. • mistletoes

All parts • phoratoxin (lectin) • GI, CV, abortions

Zygophyllaceae (Caltrop Family)*Tribulus terrestris* • puncture vine, goat head

All parts • saponins • photosensitization, ataxia

Fruits • none • mechanically injurious

[F] = food [O] = ornamental

SYMPTOMS, SYNDROMES, & ABBREVIATIONS

Cellular: inhibition of mitosis, stimulation of mitosis, neoplastic growths (tumors), lymphocyte transformation, mutagenic activity (induce mutations)

CNS (central nervous system): headache, dizziness, faintness, weakness, impaired coordination, paralysis, contraction or dilation of pupils, difficulty in breathing, speaking, or seeing, heightened reactions to external stimuli, nervousness, giddiness, trembling, convulsions, depression, seizures, hallucinations, coma

CV (cardiovascular system): changes in pulse rate and blood pressure, changes in frequency and effectiveness of contractions, anemia, agglutination of red blood cells, bluish discoloration of mouth and skin, changes in oxygen-carrying capacity of blood

Dermatitis: itching, redness, stinging, burning, formation of vesicles (blisters)

GI (gastrointestinal tract): nausea, retching, vomiting, stomach-abdominal pain, bloating, diarrhea, and constipation

HCN (hydrogen cyanide): weakness, giddiness, headache, blue discoloration of skin, nausea, vomiting, instantaneous collapse, convulsions, coma, changes in the oxygen-carrying capacity of the blood, death, bitter almond odor on breath (not actually caused by HCN itself)

M & T (mouth and throat): tingling, numbness, burning, swelling of lips-tongue-throat, loss of speech or ability to swallow or eat

Mechanical: penetration by spines, thorns, etc. of softer tissues, leading to infection or obstruction

Photodermatitis: same as dermatitis, but with serum leakage into tissues

Reproductive system: changes in estrus cycles and spermatogenesis, sterility, abortions, stillbirths, teratogens (embryological malformations)

Respiratory: wheezing, coughing, emphysema, bronchitis

Skeletal system: curvature of spine, reduced flexibility, permanent contraction of joints, fusion of bones, malformation of bones

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SECTION 3.1

DISTINCTIVE PLANTS YOU SHOULDN'T HAVE TO KEY

The premise of this section is that some of the commonly encountered plants in northwestern California are so distinctive that you should not have to resort to a long, tortuous dichotomous key to identify them. In other words, the purpose of this section is not having to use the next one.

If your unknown plant is or has this feature — then it might very well be:

has an unusual color and is or has:

- tangled mass of yellow and/or orange leafless vines — dodder (*Cuscuta*)
- shrubby parasite on tree branches — mistletoe (*Arceuthobium* or *Phoradendron*)
- pinkish herb; leaves with sticky hairs and trapped insects — sundew (*Drosera*)
- white fleshy stems — Indian pipe (*Monotropa uniflora*), phantom orchid (*Cephalanthera austiniiae*), or California pinefoot (*Pityopus californicus*)
- yellow-brown, red-brown, red or purple stems with bract-like sheathing leaves — coral root (*Corallorhiza*)
- bright red or scarlet, fleshy, cone-like herb — snow plant (*Sarcodes sanguinea*)
- mature plants brown, yellowish, or purple cone-like herbs — ground cone (*Boschniakia*)
- fleshy herb with red and white stripes — sugar stick (*Allotropa virgata*)

is a shrub that is or has:

- scale-like leaves 1.5–3.5 mm long — salt cedar (*Tamarix*)
- three leaflets — poison-oak (*Toxicodendron diversilobum*), sumac (*Rhus trilobata*), or box-elder (*Acer negundo*)
- flattened spine-tipped needles and olive-shaped “fruits” — California nutmeg (*Torreya californica*)
- or small tree with spiny fruits — chinquapin (*Chrysolepis*) or chestnut (*Castanea dentata*)
- or small tree with an inflated capsule, horned, and open at the top (*Staphylea bolanderi*)
- with yellow flowers and intertwined thorns — gorse (*Ulex europaea*)
- spiny-leaved with bright yellow flowers — barberry (*Mahonia*)
- palmately compound leaves and a large, leathery, pear-shaped fruit — buckeye or horse chestnut (*Aesculus californicus*)
- elongate, drooping tassels in early spring — silk-tassel (*Garrya*)
- dark pink flowers appearing before its leaves come out — red bud (*Cercis californica*)

is a tree that is or has:

- spiny fruits — chestnut (*Castanea dentata*) or chinquapin (*Chrysolepis*)
- pine with forked branches and large cones — ghost pine (*Pinus sabiniana*)
- opposite, pinnately-compound leaves and a winged fruit — ash (*Fraxinus*)
- opposite, simple, palmately lobed leaves and paired winged fruits — maple (*Acer*)
- compound leaves, paired spines, and white flowers — black locust (*Robinia pseudoacacia*)
- broad-leaved tree with small woody cones — alder (*Alnus*)

is a vine that has:

- leaves divided into three leaflets — poison-oak (*Toxicodendron diversilobum*) or skunk bush (*Rhus aromatica*)
- simple, shiny leaves and umbels of flowers or fruits — English or Algerian ivy (*Hedera*)
- tendrils attached opposite the leaves — wild grape (*Vitis*)

- tendrils and white flowers — man-root, wild-cucumber (*Marah*)
- prickly stems — green briar (*Smilax*), briars (*Rubus*), roses (*Rosa*)

is a grass that is or has:

- underground bulbs — onion grass (*Melica*) or tall oat grass (*Arrhenatherum elatius*)
- purple-tailed bulblets among the spikelets — bulbous blue grass (*Poa bulbosa*)
- tall with a large clump of basal leaves and a terminal plume — pampas grass (*Cortaderia*)
- bamboo-like with woody stems and a conspicuous terminal plume — giant reed (*Arundo donax*)

is a fern:

- with two very different looking fronds — deer fern (*Struthiopteris spicant*)
- that is really large — chain fern (*Woodwardia fimbriata*)

is a terrestrial herb that is or has:

- ridged stems, whorls of scale leaves, terminal cones — horse tails (*Equisetum*)
- small bulbs that smell and taste like small onions — wild onion (*Allium*)
- tall, aromatic, with purple-blotched stems and finely-divided leaves — poison hemlock (*Conium maculatum*)
- tall, aromatic, very finely divided, thread-like leaves — fennel (*Foeniculum vulgare*)
- a basal clump of large, spiny leaves with white markings — milk thistle (*Silybum marianum*)
- tall, cone-like head of blue flowers sitting above a set of up-curved spines — teasel (*Dipsacus*)
- malodorous, glandular hairy, and has fruits with long, curved claws (*Proboscidea louisianica*)
- white-flowered with three leaves from one node — wake robin (*Trillium*)
- square-stemmed plant with stinging hairs — stinging nettle (*Urtica*)
- pink or purple flowers with swept-back petals — shooting stars (*Dodecatheon*)
- milky sap — dogbane family (*Apocynaceae*), fig family (*Moraceae*), sunflower family (*Compositae*)
- brightly-colored sap — poppy family (*Papaveraceae*)
- beach plant forming mats of fleshy leaves triangular in cross-section — ice plant (*Carpobrotus*)

is a free-floating herb on the surface of the water and is:

- very small, green, without obvious stems and leaves — duckweeds (*Lemnaceae*)
- very small, typically red, with overlapping leaves — mosquito fern (*Azolla*)
- quite conspicuous with very attractive blue or white flowers — water-hyacinth (*Eichhornia*)

is a completely submerged aquatic herb in:

- marine waters — surf-grass (*Phyllospadix*) or eel-grass (*Zostera*)
- freshwater habitats and has grass-like leaves — quillwort (*Isoetes*) or ditch-grass (*Ruppia*)
- freshwater habitats and has broad leaf blades — bur reed (*Sparganium*)

is an aquatic or semi-aquatic herb (or found in a particularly wet site) and is or has:

- large floating leaves and cup-shaped yellow flowers — yellow pond-lily (*Nuphar polysepalum*)
- vase-like leaves expanded to an inflated hood — California pitcher plant (*Darlingtonia californica*)
- aromatic plant with cluster of swollen, chambered roots at base — water hemlock (*Cicuta*)
- sticky leaf surfaces with dead insects attached — sundew (*Drosera*) or butterwort (*Pinguicula macroceras*)
- tall, linear leaves, with compact, brown, cylindrical inflorescences — cat-tails (*Typha*)
- emergent that looks like a horsetail or scouring-rush — mare's-tail (*Hippuris vulgaris*)
- large, thick, yellow-green leaves and an unpleasant odor — skunk-cabbage (*Lysichiton americanus*)

SECTION 3.2 — KEYS TO VASCULAR PLANT FAMILIES

"Keys are written by people who don't need them, for people who can't use them."

(Anonymous crank or frustrated user)

A key is a series of paired statements describing one or more features of the unknown plant or animal that you are attempting to identify. Each statement is called a **lead** and the pair is a **couplet**. Because the statements are paired, the structure is more technically called a **dichotomous key**, taken from a Greek word that means to divide in two parts. In a properly written key, the elements in a lead are parallel, contrasting, and mutually exclusive; parallel because they address the same features in the same order, contrasting and exclusive in that the unknown plant, in our case, should fit comfortably under only one of the choices.

Each lead will end in the name of a group, family, genus, etc. or in a number that takes you to a new couplet in the key. You will see in these keys that a family name is often accompanied by a generic name in parentheses. We do this to indicate that the family is represented by a single genus in our region, or that this lead takes you to just that genus in the family.

You will begin the keying process by placing your unknown plant in one of the artificial groups. We thought this was preferable to one very long key. The groups are not meant to show taxonomic relationships, but rather more easily observed features.

A word of caution. Do not assume, for instance, that Group P contains all of the families with sepals, petals, and many stamens. It doesn't. The groups are not independent. You got to Group P by going through the preliminary key where some families with those features were already taken out.

Here are some hints in using a dichotomous key that you may find helpful.

- Read both leads in the couplet. The first statement may sort of – kind of – match what you are seeing, but the second one turns out to be much better.
- Authors of keys use qualifiers, such as often, usually, seldom, and typically. This is our way of dealing with the fact that plants demonstrate more diversity than we can capture in our shorter technical descriptions.
- We have attempted to indicate more unusual character states by putting the alternative feature or measurement in brackets, as in "Stamens 3 or 6 [9 or 12]" or "Erect herbs with whorled [opposite] leaves."
- The common English words "and" and "or" do not mean the same thing.
- In the following couplet, we have not said that the plants under the second lead are annuals.
 1. Stamens 8 or 10; plant perennial
 1. Stamens 2, 4, or 5
- If you come to a couplet where neither lead fits, one of us has made a mistake. Retrace your steps through the key. Please let me know if it is an error on my part so that it can be repaired.
- There is another obstacle. Your unknown plant specimen may be incomplete. You should assume that if you "top-snatch" a plant, the key will ask you to determine whether the plant is an annual or perennial, or if it bears rhizomes or bulbs. Of course, you won't get far with strictly vegetative specimens. We have at least one introduced plant in our flora that typically remains in a vegetative state for years. The golden bamboo (*Phyllostachys aurea*) is a popular ornamental and it escapes from cultivation. We have been monitoring a large population south of Redding for several years, hoping to find that the plants had produced spikelets. They have not.
- Several families come out in more than one group because of variation in the features used in the key.

KEY TO GROUPS

1. Plants free-floating on or just below the water's surface or completely submerged → **Group A**
 - Plants terrestrial, amphibious, or epiphytic; if aquatic, rooted in the soil with emergent or floating vegetative or reproductive structures → **2**
2. Plants herbaceous, reproducing by means of spore-producing structures (sporangia) on the underside of fertile leaves or in hardened cases at the base of the plants or in terminal cylindrical or soft, cone-like structures; seeds, flowers, and fruits not formed → **Group B**
 - Plants herbaceous to woody, reproducing by seeds borne between the scales of a woody cone or one that is fleshy at maturity (gymnosperms) or seeds borne within an ovary that matures into a dry or fleshy fruit (flowering Plants) → **3**
3. Seeds borne exposed on woody or papery cone bracts, or in 1-seeded fleshy fruit-like cones; leaves needle- or scale-like; flowers and fruits absent → **Group C**
 - Seeds borne within the ovary of a flower that will mature into dry or fleshy fruits → **4**
4. Plants modified for trapping insects as seen by their presence on conspicuous sticky, glandular hairs, in small submerged bladders, or hooded, tubular, vase-like leaves → **Group D**
 - Plants without such modifications; glandular hairs sometimes present → **5**
5. Leaf blades gland-dotted (best seen when held up to the sun or other light source) → **Group E**
 - Leaf blades not gland-dotted → **6**
6. Plants lacking chlorophyll (typically brown, orange, yellow, yellow-green, red, white, or striped) and parasitic on the aerial stems and branches of woody plants or by means of underground connections to nearby hosts → **Group F**
 - Plants chlorophyll-bearing and non-parasitic → **7**
7. Plants with a milky or colored sap → **Group G**
 - Plants with a clear, watery sap → **8**
8. Plants of more or less permanent freshwater habitats → **Group H**
 - Plants of terrestrial, moist, or ephemeral wet sites, including roadside ditches → **9**
9. Herbaceous or woody vines that climb on and over other plants → **Group I**
 - Erect herbaceous or woody plants, including those that are spreading or prostrate over the ground, but not climbing over other plants → **10**
10. Plants bearing conspicuous thorns (sharp-pointed modified stems), or spines (sharp-pointed leaf parts occurring singly, in pairs or clusters at nodes) or prickles (irregular epidermal outgrowths on stems or petioles) → **Group J**
 - Plants not armed with thorns, spines, or prickles, but including those with spiny leaf or bract margins, and those with less substantial irritating hairs or bristles → **11**
11. Trees and shrubs with unisexual flowers, some or all of them borne in catkin or catkin-like inflorescences → **Group K**
 - Trees, shrubs, or herbs; flowers typically bisexual, but if unisexual not borne in catkin or catkin-like inflorescences → **12**
12. Perianth reduced (often only about 1 mm long) or replaced by hairs, bristles, or minute flaps or absent; none of the segments petal-like → **Group L**
 - Perianth well-developed, at least the inner series white or brightly-colored → **13**
13. Sepals or petals modified to form a sac, spur, or keel → **Group M**
 - Sepals or petals not so modified → **14**
14. Flower parts (especially petals and stamens) in 3's or multiples thereof → **Group N**
 - Flower parts (especially petals and stamens) in 2's, 4's, 5's, or 7's or multiples thereof → **15**
15. Perianth parts similar, in 1 series → **Group O**
 - Perianth parts in 2 or more series, distinguished by shape, color, or points of attachment → **16**
16. Stamen number at least 3 times that of petals → **Group P**
 - Stamen number no larger than twice that of petals; often 1–10 → **17**

17. Lower portion of the sepals, petals, and stamens united to form a cup- or bowl-shaped or tubular structure (hypanthium), their free portions arising from its rim; the ovary may be free from the hypanthium or partially to completely enclosed by it → **Group Q**
- Sepals, petals, and stamens not united as above; petals separate or united → **18**
18. Petals separate (sometimes united only at the very base) → **19**
- Petals (2 or more of them) united for at least 1/4 their length → **20**
19. Plants woody → **20**
- Plants herbaceous → **21**
20. Petals separate → **Group R**
- Petals (at least 2 of them) united → **Group S**
21. Petals separate → **Group T**
- Petals united → **22**
22. Flowers radially symmetrical → **Group U**
- Flowers bilaterally symmetrical → **Group V**

QUICK GUIDE TO THE GROUPS

GROUP	PLANTS	DEFINING FEATURES
A	Ferns & Flowering Plants	Free-floating or completely submerged aquatics
B	Lycophytes & Ferns	Reproducing by spores; no flowers, fruits, or seeds
C	Gymnosperms	Reproducing by seeds; no flowers or fruits
D	Flowering Plants	Insectivorous plants
E	Flowering Plants	Leaf blades gland-dotted
F	Flowering Plants	Plants without chlorophyll
G	Flowering Plants	Sap milky or brightly-colored
H	Flowering Plants	Plants of freshwater habitats
I	Flowering Plants	Herbaceous or woody vines
J	Flowering Plants	Herbaceous or woody plants • armed with thorns or spines
K	Flowering Plants	Woody plants • catkin-bearing
L	Flowering Plants	Herbaceous or woody plants • perianth rudimentary or 0
M	Flowering Plants	Sepals or petals forming a spur, pouch, or keel
N	Flowering Plants	Floral parts in 3's or multiples thereof
	Flowering Plants	Floral parts in 2's, 4's, 5's, or 7's [Groups 0 → V]
O	Flowering Plants	Only one perianth series present
P	Flowering Plants	Calyx and corolla present • stamens many
Q	Flowering Plants	Hypanthium present
R	Flowering Plants	Woody plants • petals separate
S	Flowering Plants	Woody plants • 2 or more petals united
T	Flowering Plants	Herbaceous plants • petals separate
U	Flowering Plants	Herbaceous plants • petals united • flowers radial
V	Flowering Plants	Herbaceous plants • petals united • flowers bilateral

Group A • Free-floating or submerged aquatics.

- Group A includes flowering plants so small that it is difficult to determine their affinities, plants with obvious flowers, and three families of ferns that don't look very fern-like. Plants of the monocot family *Zosteraceae* are the only members of our flora that have invaded the marine habitat.
- Plants range from 0.5 mm wide to plants with well-developed roots, stems, and leaves, often forming dense, floating colonies several cm long or wide, to much larger individual plants with conspicuous flowers.
- Free-floating plants may also become stranded in mud on the margins of ponds, etc., especially when water levels drop.
- Caution! Plants with floating leaves or dense mats of plants are not automatically members of Group A, because they may be rooted in the soil. You are going to get wet and muddy when collecting aquatics.

1. Plants free-floating (not rooted in the soil) → **2**
 - Plants completely submerged → **5**
2. Plant body not differentiated into stems and leaves → **Lemnaceae**
 - Plant body differentiated into stems and leaves → **3**
3. Plants several cm tall, with inflated leaf bases and attractive blue flowers clearly elevated above the water → **Pontederiaceae (Eichhornia)**
 - Plants 0.5 mm to several cm in diameter, their leaves prostrate on the water's surface → **4**
4. Leaf blades 1–2 mm long by 1 mm wide; plants reproducing by means of spores → **Salviniaceae (Azolla)**
 - Leaf blades 1–10 cm long by 1–8 cm wide; plants with green-white to yellow flowers → **Hydrocharitaceae (Limnobium)**
5. Plants of marine waters → **Zosteraceae**
 - Plants of freshwater [brackish, saline or alkaline] water habitats → **6**
6. Plants reproducing by means of flowers, fruits, and seeds → **Ruppiaceae (Ruppia)**
 - Plants reproducing by means of sporangia; flowers, fruits, and seeds absent → **7**
7. Sporangia embedded in leaf bases → **Isoëtaceae (Isoëtes)**
 - Sporangia enclosed in hairy, spherical structures at the base of the plant → **Marsileaceae (Pilularia)**

Group B • Herbaceous plants. Flowers, fruits, and seeds lacking.

- Group B consists of the families of plants that do not reproduce by forming seeds, as do the gymnosperms and flowering plants, but by spores produced in specialized structures (sporangia).
- Most of us have a concept of what a fern looks like and it works well for the majority of our California ferns. Their sporangia are found on the underside of leaves (fronds). Here are some exceptions. (1) Horsetails (*Equisetum* spp.) have whorls of scaly leaves fused around segmented, grooved stems. Their reproductive structures resemble small cones at the ends of erect stems. They have been considered so different that they were once placed in their own division. The majority of our ferns are terrestrial or epiphytic. (2) There are aquatic ferns that are very unfern-like. Their leaves are grass-like or resemble a four-leaf clover. The plants float on the water's surface or are completely submerged. They were taken out in Group A.
- Lycophytes, commonly known as fern allies in the older literature, are not as well known to most of us. Some of them might be mistaken for mosses. Most are creeping perennial plants with small scale- or needle-like leaves and with their sporangia at the base of fertile leaves that are aggregated into cone-like structures or in swollen structures at the base of the plants. The quillwort family (*Isoëtaceae*) has a very different look. Some of them are submerged aquatics and were also taken out in Group A.
- In the true ferns, leaves are often called fronds and petioles are called stipes in the traditional literature.

1. Leaves with a single vein; sporangia solitary in leaf axils (lycophytes) → **2**
 - Leaves with complex vein systems; sporangia numerous on the underside of leaves, in terminal cones, or in hardened spherical or flattened cases at the base of the plant (ferns) → **4**
2. Leaves grass-like, to 30 cm long → **Isoëtaceae (Isoëtes)**
 - Leaves small, scale- or needle-like, only a few mm long → **3**
3. Leaves with small flap (ligule) at their base → **Selaginellaceae (Selaginella)**
 - Leaves without ligule at base → **Lycopodiaceae**
4. Plants aquatic, leaves floating or emergent → **Marsileaceae**
 - Plants terrestrial → **5**
5. Stems conspicuously segmented; leaves scaly, pointed, their bases united into a collar at each node → **Equisetaceae (Equisetum)**
 - Stems not segmented; leaves small to large, but not united into a collar at each node → **6**
6. Sporangia enclosed in hairy, spherical structures at the base of the plant → **Marsileaceae (Pilularia)**
 - Sporangia produced on the underside of leaves → **7**
7. Sporangia produced only on fertile leaves very different in appearance from the sterile leaves or on individual leaves with very different fertile and sterile segments → **8**
 - Sporangia produced on leaves similar in appearance to those that are sterile → **10**
8. Leaves differentiated into sterile blade and spike-like or branched fertile segment → **Ophioglossaceae**
 - Leaves entirely fertile or sterile → **9**
9. Sterile leaves deeply-lobed to 1-pinnate → **Blechnaceae (Struthiopteris)**
 - Sterile leaves 2 or 3 times pinnate → **Pteridaceae (Cryptogramma)**
10. Plants forming dense stands; leaf stalks 10–100 cm long; blades leathery, 15-150 cm long, widely triangular; dead leaves persistent → **Dennstaedtiaceae (Pteridium)**
 - Plants not in all respects as above → **11**
11. Sporangia protected by a scale- or flap-like outgrowth of the epidermis (indusium) or by a folded or rolled-over leaf margin (false indusium) → **12**
 - Sporangia not so protected → **19**
12. False indusium present → **Pteridaceae**
 - True indusium present → **13**

13. Indusium cup-like, forming ring of hair-like or scale-like filaments beneath the sporangia →
→ **Woodsiaceae (Woodsia)**
— Indusium not as above → **14**
14. Robust ferns with leaves up to 1 m long; sori attached end-to-end, forming 2 lines →
→ **Blechnaceae (Woodwardia)**
— Plants not in all respects as above → **15**
15. Leaflet midribs with stiff, needle-like hairs → **Thelypteridaceae (Thelypteris)**
— Leaflet midribs without stiff, needle-like hairs → **16**
16. Leaves 1-pinnately compound → **Aspleniaceae (Asplenium)**
— Leaves 2-pinnately compound → **17**
17. Leaves widest toward the base; indusium peltate or kidney-shaped → **Dryopteridaceae**
— Leaves widest toward the mid-section; indusium hood-like, elongate, or j-shape → **18**
18. Leaf blades generally 25–130 cm long and 10–60 cm wide; indusium elongate to j-shaped →
→ **Athyriaceae (Athrium)**
— Leaf blades generally 10–25 cm long and 1–10 cm wide; indusium hood-like →
→ **Cystopteridaceae (Cystopteris)**
19. Leaves pinnately divided, but without discrete leaflets → **Polypodiaceae (Polypodium)**
— Leaves 2-pinnately compound → **Athyriaceae (Athrium)**

Group C • Gymnosperms

Trees or shrubs. Seeds produced in woody, papery, or fleshy cones.

- Most of us have a reasonable good working concept of a gymnosperm or conifer. They are resinous, often pleasantly aromatic, trees and shrubs with needle-like or flattened leaves. They produce their seeds typically in woody cones. The term “conifer” literally means cone-bearing. They don’t have any structures that look like flowers, but as you will see in the key, they sometimes form fleshy, fruit-like reproductive structures. Fruits are the exclusive property of the flowering plants.
- The pistillate flowers of *Alnus*, a flowering plant of *Betulaceae*, are borne in a woody, cone-like structure. Its broad leaf blades make it unlikely that you would think of this tree as a conifer.
- There is a fourth family of gymnosperms in California. Plants of *Ephedraceae* are found mostly in the southern half of the state.

1. Needles tapering gradually or abruptly to a narrow base, but not flattened or sheathing → **Pinaceae**
— Needles scale-like, wedge-shaped; base broader than apex or base flattened, sheathing stem → **2**
2. Leaves opposite; ovules 2-many, borne in a woody or fleshy cone → **Cupressaceae**
— Leaves alternate; ovule 1, partially or completely enclosed within a fleshy aril → **Taxaceae**

Group D • Insectivorous Plants.

- Group D rests on the assumption that you will react to these plants the same way I did when first encountering them in the field. They have living or dead insects stuck on their leaves, or when you pull that plant out of the water there are small transparent bladders attached with dead bugs inside, or this plant has leaves that are hollow with a flap covering the top, and if you cut the leaves open there are dead insects inside. Yes, these plants are insectivorous.
- Not all plants with dead insects on their sticky leaves have evolved mechanisms for digesting trapped creatures.
- These plants are not that common. They grow on moist ground, in bogs or fens, stream banks, and in shallow to deep water. They are more frequent in the northern half of the state.
- *Darlingtonia californica* (California cobra-lily or pitcher plant) is our only native member of *Sarraceniaceae*. A few other species of *Sarracenia* (pitcher plants) and the Venus fly-trap (*Dionaea muscipula*) have been collected in California, either as discarded ornamentals or perhaps purposely planted. Are they persisting?

1. Leaves 10–60 cm tall, in a basal rosette, their bases dilated and the upper section modified into a hollow tube ("pitcher") with a thickened rim → **Sarraceniaceae**
— Leaves not in all respects as above → **2**
2. Plants aquatic; submerged leaves (or what appears to be leaves) dissected, some of them modified into small transparent bladders with insects trapped inside → **Lentibulariaceae (Utricularia)**
— Plants terrestrial; leaves not dissected, none of which form small bladders → **3**
3. Leaf blades red or brown; flowers radial → **Droseraceae**
— Leaf blades generally green; flowers bilateral, with a basal spur → **Lentibulariaceae (Pinguicula)**

Group E • Leaf blades gland-dotted. Plants often aromatic.

- This feature is best seen by holding leaves against a light source, including the sun.
- The glands may be raised above the surface or embedded in the blade. They may be clear or colored.

1. Inflorescence catkin-like; perianth 0; flowers unisexual → **Myricaceae (Morella)**
— Inflorescence not at all catkin-like; calyx and corolla well-developed; flowers bisexual → **2**
2. Stamens many → **3**
— Stamens 4–12 → **4**
3. Trees and shrubs; hypanthium present; ovary inferior → **Myrtaceae (Eucalyptus)**
— Herbs [shrubs]; hypanthium 0; ovary superior → **Hypericaceae (Hypericum)**
4. Calyx and corolla 3-parted → **Lauraceae**
— Calyx and corolla 4- or 5-parted → **5**
5. Sepals and petals 5 or 6, united; stamens in 1 set → **Primulaceae (Lysimachia)**
— Sepals and petals 3–5, separate; stamens 4, 8 or 10, in 2 sets → **6**
6. Leaves simple → **Myoporaceae (Myoporum)**
— Leaves compound → **Rutaceae (Ptelea)**

Group F • Chlorophyll lacking. Plants white, brown, red, orange, or off-green.

- The vast majority of our California vascular plants produce chlorophyll, manufacture their own nutrients, and are free-living – not dependent on other plants in their vicinity for sustenance.
- The plants of Group F have a different lifestyle. Most lack chlorophyll; they are achlorophyllous. They function as saprophytes or root-parasites. In place of the familiar green foliage and stems, these parasites are typically red, pink, orange, brown, white, or even striped. This is your clue that these plants are probably parasitic.
- This group does not include trees and shrubs that turn an attractive red, yellow or orange in the fall, or herbs that are in a distressed condition because of environmental factors.
- We do have plants in northwest California that are not green, but they are not parasites. The sundew in Group D fits that bill. If you do a careful job of digging up these herbs, you will discover that they do not have any underground connection to a host plant.
- The best known are the shrubby aerial parasites that attach themselves to the branches of trees and shrubs. You have probably seen mistletoes or perhaps witch's-brooms up in tree branches. They look like what they are – one plant living on another. But, don't overgeneralize. Some plants, such as the huckleberry sitting atop a redwood stump in my front yard, are merely epiphytes that do not penetrate their host and tap into its nutrients.
- Less obvious perhaps are the non-green plants, mostly herbs, that attach themselves to their hosts by underground structures. Again, their color gives them away.
- In the older literature, many of these parasites were segregated into their own families and considered to be reduced, derived, or degenerate relatives of closely related free-living plants. The dodders of *Cuscutaceae* were obviously derived from the bind weeds (*Convolvulaceae*), the ground cones and broom rapes (*Orobanchaceae*) from the scrophs or snapdragons (*Scrophulariaceae*), and the Indian pipes and sugar sticks (*Monotropaceae*) from the heath family (*Ericaceae*).

1. Plants forming conspicuously tangled masses of yellow-green to bright-orange thread-like vines; leaves vestigial → **Convolvulaceae (Cuscuta)**
 - Shrubs growing on other shrubs or trees, or herbs functioning as root-parasites; leaves well-developed or scale-like → **2**
2. Shrubs parasitic on the aerial portion of other trees and shrubs; flowers unisexual → **Viscaceae**
 - Herbs parasitic by means of underground attachments to the roots of the host; flowers bisexual → **3**
3. Flowers 3-parted, one of the petals forming a lip → **Orchidaceae**
 - Flowers 4-, 5- or 8-parted; lip not present → **4**
4. Stamens 8 -- 10; corolla various, but not 2-lipped → **Ericaceae (Monotropeidae)**
 - Stamens 2 + 2; corolla 2-lipped → **Scrophulariaceae (Orobanchoidae)**

Group G • Sap milky or colored.

- This feature is best seen in fresh material. You probably noticed it when you collected the plant.
- A good rule of thumb is that plants with milky or colored latex are often toxic. They can cause irritation to the skin and can cause severe problems if they are consumed. Don't rub your eyes after handling these plants or get the sap into cuts or scrapes.

1. Plants aquatic → **2**
 - Plants terrestrial → **4**
2. Perianth segments 1, bract-like → **Aponogetonaceae (Aponogeton)**
 - Perianth segments 3, 5 to many → **3**
3. Flowers solitary, several cm wide → **Nymphaeaceae**
 - Flowers in umbels, racemes, or panicles; perianth parts only a few mm long → **Alismataceae**
4. Vines → **Convolvulaceae**
 - Erect herbs, shrubs, or trees → **5**
5. Trees → **Moraceae**
 - Herbs or shrubs → **6**
6. Flowers unisexual; species monoecious or dioecious → **7**
 - Flowers bisexual → **8**
7. Flowers attached to the inner wall of a spherical or oblong hollow receptacle (fig) → **Moraceae (Ficus)**
 - Flowers easily visible → **Euphorbiaceae**
8. Flowers in heads → **Compositae**
 - Flowers solitary or variously branched inflorescences → **9**
9. Sepals 2 [3 or 4]; stamens mostly numerous → **Papaveraceae**
 - Sepals 5; stamens 5 → **10**
10. Leaves opposite or whorled; ovary superior; fruit a follicle → **Apocynaceae**
 - Leaves alternate; ovary inferior; fruit a capsule → **Campanulaceae**

Group H • Plants restricted to freshwater habitats.

- Determining the membership of this group has been difficult because both specialists in aquatic plants and the rest of us attach different meanings to the term "aquatic." In the broadest sense, an aquatic plant is one that grows in wet places of any sort – from lakes to seasonally wet depressions in fields and even roadside ditches. There is a story, perhaps apocryphal, that one of the great experts on aquatic plants said of another expert that if he saw a cow standing in a shallow pool of water he would declare it to be an aquatic cow.
- I take a more conservative approach. Group H is restricted to those plants that spend their lives in permanent bodies of water, such as lakes, ponds, marshes, and slow-moving rivers and streams. You will look out into the water to observe these plants. If it is a true aquatic, you may need waders, hip boots, or even a boat to collect them. If the bottom of your shoes should get a little wet because you collected a specimen from the edge of a roadside ditch, from the margin of a lake or stream, from a ephemeral depression, standing water in an agricultural field, or similar sites, look elsewhere in the keys. These are not aquatics; they are terrestrial or amphibious plants.
- I am using "freshwater" in the broad sense to include brackish, saline, and alkaline situations; in other words, non-marine.
- Not all aquatic plants are accounted for here, only those that are rooted in the soil and have vegetative and reproductive parts that are emergent. See Group A for those that are free-floating or completely submerged.
- We have two cereal crops that are grown in flooded fields in the region – rice (*Oryza sativa*) and wild-rice (*Zizania palustris*). They are not included because I have been unable to confirm that they have escaped from cultivation and become naturalized.

1. Robust perennials to 4 m tall; inflorescence dense, spike-like to 12 cm long → **Typhaceae (Typha)**
 - Plants much shorter; inflorescence various, but not as above → **2**
2. Stems or leaves bearing small, urn-shaped bladders → **Lentibulariaceae (Utricularia)**
 - Small, urn-shaped bladders absent → **3**
3. Leaves compound, leaflets 3 → **Menyanthaceae (Menyanthes)**
 - Leaves simple to divided into thread-like segments → **4**
4. Leaves (at least the upper ones) in whorls of 3–12 → **5**
 - Leaves alternate or opposite → **6**
5. Upper leaves in whorls of 6–12; flowers bisexual → **Hippuridaceae (Hippuris)**
 - Upper leaves in whorls of 3; flowers unisexual → **Hydrocharitaceae**
6. Perianth rudimentary or absent → **7**
 - Perianth well-developed, although not always conspicuous → **12**
7. Leaves, at least submersed ones, divided into thread-like segments → **8**
 - Leaves entire to toothed → **9**
8. Leaf segments entire; flowers bisexual → **Haloragaceae (Myriophyllum)**
 - Leaf segments sparsely toothed on one side; flowers unisexual → **Ceratophyllaceae (Ceratophyllum)**
9. Stem leaves opposite → **Callitrichaceae (Callitriche)**
 - Stem leaves alternate → **10**
10. Leaves submerged or floating → **Potamogetonaceae**
 - Leaves well-elevated above the surface of the water → **11**
11. Flowers unisexual in terminal and axillary heads → **Typhaceae (Sparganium)**
 - Flowers bisexual [unisexual] borne in 1- to several-flowered spikelets → **Gramineae**
12. Flowers solitary, 5–19 cm in diameter → **Nymphaeaceae**
 - Flowers much smaller, not solitary (axillary in *Elatine*) → **13**
13. Leaves opposite → **Elatinaceae (Elatine)**
 - Leaves basal or alternate → **14**

14. Leaves basal, palmately-veined; flowers unisexual → **Alismataceae**
 - Leaves alternate, pinnately- or parallel-veined; flowers bisexual [unisexual] → **15**
15. Leaves parallel-veined; flowers inconspicuous, enclosed by bracts → **Cyperaceae**
 - Leaves pinnately-veined; flowers conspicuous → **16**
16. Perianth in 1 series, typically petaloid and brightly-colored; carpels 3 → **Polygonaceae (Polygonum)**
 - Perianth in 2 [1] series, typically differentiated; carpels many → **Ranunculaceae (Ranunculus)**

Group I • Herbaceous or woody vines.

- As we use the term, vines climb on or over other plants. Some are tendril-bearing. Plants that merely spread horizontally along the ground are better described as spreading, prostrate, or decumbent.
- A woody vine, especially one that hangs from tree branches is often called a liana. Our grape vines (*Vitis*) would qualify. The term is more commonly applied to woody tropical vines.
- Caution! One of the growth forms of poison-oak comes out in this group. You might want to look up *Toxicodendron* in the cashew family (*Anacardiaceae*) before proceeding further. Even pressed and dried specimens many years old can cause dermatitis in sensitive individuals.
- Prickles are irregularly-spaced, sharp-pointed epidermal outgrowths, as opposed to thorns and spines that are modified stems and leaf parts, respectively.

1. Stems prickly → **2**
 - Stems without prickles → **3**
2. Leaves simple → **Smilacaceae (Smilax)**
 - Leaves compound → **Rosaceae (Rubus)**
3. Leaves simple → **4**
 - Leaves compound [*Caution: You may be keying poison-oak.*] → **14**
4. Tendrils present → **5**
 - Tendrils absent → **7**
5. Leaves pinnately compound → **Leguminosae**
 - Leaves simple → **6**
6. Flowers bisexual; ovary superior → **Vitaceae (Vitis)**
 - Flowers unisexual; ovary inferior → **Cucurbitaceae**
7. Leaves (at least the upper ones) alternate → **8**
 - Leaves opposite or whorled (or appearing so) → **13**
8. Flowers bilateral → **Aristolochiaceae (Aristolochia)**
 - Flowers radial → **9**
9. Perianth parts united → **Convolvulaceae (Convolvulus)**
 - Perianth parts separate → **10**
10. Perianth parts in 3's → **Smilacaceae (Smilax)**
 - Perianth parts in 5's → **11**
11. Leaves evergreen; flowering stems not climbing → **Araliaceae (Hedera)**
 - Leaves deciduous; flowering stems climbing → **12**
12. Flowers unisexual → **Cannabaceae (Humulus)**
 - Flowers bisexual → **Polygonaceae**
13. Leaves opposite; flowers blue, solitary in leaf axils → **Apocynaceae (Vinca)**
 - Leaves whorled; flowers yellow to white, in panicles or clusters → **Rubiaceae (Galium)**
14. Leaves 1- or 2-pinnately compound with several leaflets → **Ranunculaceae (Clematis)**
 - Leaflets 3 → **Anacardiaceae (Toxicodendron)**

If you find yourself at the last line in this key, you have been handling poison-oak.

Wash your hands thoroughly as soon as possible.

Group J • Erect or spreading herbaceous or woody plants with thorns, spines, or prickles.

- In everyday parlance, spines, thorns, and prickles are more or less interchangeable terms for unpleasant sharp-pointed structures found on plants. In botany, they are not synonymous. Thorns are modified stems, often described as spine-tipped. Spines are modified leaves or leaf parts, commonly modified stipules and therefore often paired at a node. Prickles are sharp-pointed outgrowths of the epidermis or bark.
- The sharp-pointed structures on plants in this group are substantial enough to cause some discomfort, even capable of penetrating the skin and eliciting colorful expletives. Plants with less threatening bristles, irritating hairs or smaller spiny teeth on leaf, bract or petiole margins will be found elsewhere in the key.
- There are a few families in the California flora whose plants are equipped with stinging hairs. Our best known examples are members of the nettle family (*Urticaceae*).
- Plants with spiny fruits are not included in this group.

1. Stems fleshy, segmented bearing clusters of spines → **Cactaceae (Opuntia)**
— Plants not in all respects as above → **2**
2. Plant a much-branched, heavily armed shrub with twigs modified into thorns; mature leaves awl-shaped; plants appearing leafless → **Leguminosae (Ulex)**
— Plants not as above; leaves well-developed, persistent (sometimes small) → **3**
3. Plants herbaceous → **4**
— Plants woody → **10**
4. Stamens many; sap yellow or red; leaf margins prickly → **Papaveraceae (Argemone)**
— Stamens 5; sap watery; leaves or floral bracts spine-tipped → **5**
5. Leaves compound; leaves and floral bracts spine-tipped → **Umbelliferae (Eryngium)**
— Leaves simple; leaves or bracts subtending individual flowers or inflorescences spine-tipped → **6**
6. Leaves spine-tipped; inflorescence axillary, branched → **Chenopodiaceae (Salsola)**
— Floral or involucral bracts spine-tipped; inflorescence a head → **7**
7. Floral bracts and calyx teeth spine-tipped → **8**
— Involucral bracts subtending dense heads spine-tipped → **9**
8. Perianth 6-parted; stamens 3, 6, or 9 → **Polygonaceae (Chorizanthe)**
— Perianth 5-parted; stamens 5 → **Polemoniaceae (Navarretia)**
9. Bracts spreading or up-turned, subtending the entire inflorescence and as long as or longer than the inflorescence → **Dipsacaceae (Dipsacus)**
— Bracts much shorter and surrounding the inflorescence itself → **Compositae**
10. Plants bearing irregularly-spaced prickles arising from the stem epidermis → **Rosaceae**
— Plants bearing thorns or spines → **11**
11. Plants bearing paired nodal spines at the base of leaves; leaves compound → **12**
— Plants bearing thorns → **13**
12. Evergreen shrub; leaflets typically with spiny margins → **Berberidaceae**
— Deciduous tree; leaflet margins entire → **Leguminosae (Robinia)**
13. Flowers bilateral; fruit a legume → **Leguminosae (Pickeringia)**
— Flowers radial; fruit a drupe-like pome, follicle, capsule or berry → **14**
14. Ovary inferior; fruit a drupe-like pome → **Rosaceae (Crataegus)**
— Ovary superior; fruit a follicle, capsule, or berry → **15**
15. Leaves ± sessile; stipules 2 minute bristles; fruit a follicle → **Crossosomataceae**

(Glossopetalon)

- Leaves petiolate; stipules scale-like or absent; fruit a capsule or berry → **Rhamnaceae**

Group K • Trees and shrubs. Flowers unisexual.

At least some of them in catkin or catkin-like inflorescences.

- The distinction between a catkin and a spike is a little murky. If an inflorescence is a spike of unisexual flowers and pendent from the branches of a tree or shrub, call it a catkin. We do have a few exceptions in the oak family (*Fagaceae*), where the catkins are spreading to erect.
- In some of our species, there are both male and female catkins; in others one sex is in catkins, but the other is not. Male and female catkins may occur on the same plant or on separate plants.
- Many catkin-bearing plants flower early in the spring.
- In early 20th century texts, the various families of catkin-bearing trees and shrubs were considered primitive, closely related, and constituted a group called Amentiferae. This concept has been abandoned.
- Inflorescences in *Aceraceae*, *Garryaceae*, and *Myricaceae* are not true catkins.

1. Leaves pinnately compound → **Juglandaceae**

- Leaves simple → **2**

2. Leaves opposite → **3**

- Leaves alternate → **4**

3. Plants dioecious; leaves evergreen; fruit a berry → **Garryaceae (Garrya)**

- Plants bisexual [monoecious]; leaves deciduous; fruit a winged achene (samara) → **Aceraceae (Acer)**

4. Milky latex present; fruit an achene inside a fleshy calyx, thus appearing berry-like → **Moraceae (Morus)**

- Milky latex absent; fruit various, but not at all berry-like → **5**

5. Plants aromatic; leaf blades gland-dotted → **Myricaceae (Myrica)**

- Plants not aromatic; leaf blades not gland-dotted → **6**

6. Ovary superior; fruit a capsule → **Salicaceae**

- Ovary inferior; fruit an achene or nut → **7**

7. Female flowers and fruits ± enclosed within a scaly cup or a spiny shell → **Fagaceae**

- Female flowers and fruits enclosed in a papery involucre or subtended by papery bracts or woody ones forming a cone-like structure → **Betulaceae**

Group L • Perianth rudimentary or absent.

- By absent, I mean that you see nothing surrounding the stamens or carpels. With experience you will begin to suspect that a bump, rim, or crest might be vestigial perianth parts, but let's not worry about that now.
- By greatly modified, I mean that you see bristles, awns or almost microscopic flaps or scales that occupy the space where you would ordinarily expect to find a more typical perianth of some sort.
- There are several other families of aquatic and woody plants without a perianth and they were accounted for earlier in the keys, particularly in the group of catkin-bearing woody plants.

1. Plants woody → **2**
 - Plants herbaceous → **8**
2. Leaves compound → **3**
 - Leaves simple → **6**
3. Leaves alternate → **4**
 - Leaves opposite → **5**
4. Leaves 1-pinnately compound → **Juglandaceae (Juglans)**
 - Leaves 2-pinnately compound → **Leguminosae**
5. Leaflets 3; fruits hairy → **Aceraceae (Acer)**
 - Leaflets 5-7; fruits glabrous → **Oleaceae (Fraxinus)**
6. Leaves entire to pinnately toothed, pinnately veined; aromatic when crushed → **Myrtaceae (Eucalyptus)**
 - Leaves palmately lobed and palmately veined → **7**
7. Leaves alternate → **Platanaceae (Platanus)**
 - Leaves opposite → **Aceraceae (Acer)**
8. Leaf blades reduced, scale-like → **Chenopodiaceae (Salicornia)**
 - Leaf blades well-developed → **9**
9. Leaves compound or deeply divided → **10**
 - Leaves simple, entire to lobed or incised → **12**
10. Leaves basal; flowers bisexual → **Berberidaceae**
 - Cauline leaves present; flowers unisexual → **11**
11. Leaves palmately lobed or divided → **Cannabaceae (Cannabis)**
 - Leaves compound → **Ranunculaceae (Thalictrum)**
12. Leaf venation parallel → **13**
 - Leaf venation netted or reticulate → **19**
13. Flowers inconspicuous, borne in spikelets → **14**
 - Flowers not concealed by bracts → **15**
14. Stems round [flattened] in cross-section; internodes hollow [solid]; edges of sheathing leaf bases generally not united; individual flowers enclosed by two bracts → **Gramineae**
 - Stems triangular [round] in cross-section; internodes solid; edges of sheathing leaf bases united; individual flowers subtended by a single bract → **Cyperaceae**
15. Flowers in open clusters or subglobose heads → **Juncaceae**
 - Flowers in dense, cylindrical spikes or racemes → **16**
16. Inflorescence a thickened spike subtended by one or more conspicuous white or yellow bracts → **17**
 - Flowers in narrow racemes, spikes, heads, etc., but not as above → **18**
17. Inflorescence subtended by a single white or yellow bract → **Araceae**
 - Inflorescence subtended by 4-9 white, petaloid bracts → **Saururaceae (Anemopsis)**
18. Flowers unisexual; fruit a follicle or drupe-like → **Typhaceae**
 - Flowers bisexual; fruit of 3 or 6 achene-like mericarps → **Juncaginaceae (Triglochin)**

19. Ovary 3-lobed, 3-chambered, each with 1 seed; sap often milky → **Euphorbiaceae**
 — Ovary 1-chambered, 1-seeded; sap watery → **20**
20. Style 1 → **21**
 — Styles 2 or 3 → **22**
21. Plants low, rounded gray with stellate hairs → **Euphorbiaceae (Croton)**
 — Plants erect to trailing plants, some with non-stellate, painful stinging hairs → **Urticaceae**
22. Ovary inferior; stamens 8-many → **Datisceae (Datisca)**
 — Ovary superior; stamens 5 or fewer [8 or 9] → **23**
23. Stipules united into a membranous or papery collar around stem → **Polygonaceae**
 — Stipules not united into a collar → **24**
24. Carpels many, separate; receptacle cylindrical → **Ranunculaceae (Myosurus)**
 — Carpels 2 or 3, united; receptacle flat or rounded → **Amaranthaceae**

Group M • Sepals or petals modified to form a sac, spur or keel.

- This structure may be formed by one or more sepals or petals.
- This group does not include flowers that are merely two-lipped (bilabiate).
- The keel, sac, pouch, or spur is typically, but not always, conspicuous.

1. Leaves orbicular, peltate → **Tropaeolaceae (Tropaeolum)**
 — Leaves rounded to lanceolate, but not peltate → **2**
2. Petals 2+2; stamens many → **Ranunculaceae (Delphinium)**
 — Petals 3 or 5; stamens 2, 4, 5, or 8 → **3**
3. Lateral sepals enlarged; petals 3, the lower forming a beaked or fringed keel → **Polygalaceae**
 — Sepals and petals not in all aspects as above → **4**
4. Ovary inferior → **5**
 — Ovary superior → **6**
5. Sepals absent; petals 5; fruit an achene → **Valerianaceae (Plectritis)**
 — Sepals 3; petals 3; fruit a capsule → **Orchidaceae**
6. Sepals 2, petals 4, stamens 6; leaves variously dissected → **Papaveraceae**
 — Flowers and leaves not in all respects as above → **7**
7. Stamens 10; carpel 1; fruit a legume → **Leguminosae**
 — Stamens 2, 2+2, or 5; carpels 2, 3, or 5; fruit a capsule → **8**
8. Stamens 2 or 2 + 2 [5]; carpels 2 → **9**
 — Stamens 5; carpels 3 or 5 → **10**
9. Flowers solitary; stamens 2; ovary 1-chambered → **Lentibulariaceae (Pinguicula)**
 — Flowers not solitary; stamens 2 + 2 or 4; ovary 2-chambered → **Scrophulariaceae**
10. Spur a modified sepal; carpels 5; fruit explosively dehiscent → **Balsaminaceae (Impatiens)**
 — Spur a modified petal; carpels 3; fruit not explosively dehiscent → **Violaceae (Viola)**

Group N • Herbs, shrubs, or trees.

Plants with floral parts in 3's or multiples thereof.

- The two sets or series of the perianth may be differentiated by color, texture, or by points of insertion on the receptacle.
- The classical distinction between monocot and dicot plant families is that the former have flowers built on a pattern of 3's (3 sepals, etc.) and that the latter are built on 4's, 5's or more. While 3-parted flowers are typical of most of our monocot families, this pattern is also found in a few dicot families, including *Aristolochiaceae*, *Berberidaceae*, *Limnanthaceae*, *Papaveraceae*, and *Polygonaceae*, as you will see below.

1. Plants woody → **2**
 - Plants herbaceous → **6**
2. Trees → **3**
 - Shrubs → **4**
3. Leaves numerous, clustered, blades to 1 m long; not aromatic → **Liliaceae (Cordyline)**
 - Leaves not clustered, blades a few cm long; aromatic → **Lauraceae (Umbellularia)**
4. Leaves compound → **Berberidaceae**
 - Leaves simple → **5**
5. Plants low, heath-like; leaves revolute; fruit a berry → **Ericaceae (Monotropeoideae)**
 - Plants taller, not at all heath-like; leaves not revolute; fruit an achene → **Polygonaceae (Eriogonum)**
6. Stamens numerous → **Papaveraceae (Platystemon)**
 - Stamens 3 or 6 [9 or 12] → **7**
7. Perianth parts in 1 set or series → **8**
 - Perianth series 2 → **9**
8. Leaves cordate or hastate; flowers several cm wide; ovary inferior → **Aristolochiaceae (Asarum)**
 - Leaves various, but not cordate or hastate; flowers less than 1 cm wide; ovary superior → **Polygonaceae**
9. Sepals green; petals brightly-colored → **10**
 - Sepals and petals similarly colored → **13**
10. Stamen filaments hairy → **Commelinaceae**
 - Stamen filaments glabrous → **11**
11. Leaves simple → **Liliaceae (Trillium)**
 - Leaves compound → **12**
12. Leaves 1-pinnately compound → **Limnanthaceae (Floerkea)**
 - Leaves with 3 leaflets, each further divided into 3 leaflets → **Berberidaceae (Vancouveria)**
13. Stamens 6 or 9 → **14**
 - Stamens 3 → **16**
14. Flowers small and drab; fruit an achene → **Polygonaceae**
 - Flowers conspicuous and usually white, yellow, or brightly-colored; fruit a capsule or berry → **15**
15. Perianth parts separate → **Liliaceae**
 - Perianth parts fused in 2 petal-like series → **Liliaceae (Odontostomum)**
16. Ovary inferior → **Iridaceae**
 - Ovary superior → **17**
17. Sepals spreading; petals erect → **Liliaceae (Scoliopus)**
 - Sepals and petals similarly positioned → **18**
18. Flowers in umbels → **Liliaceae**
 - Flowers in spikes, racemes, or axillary clusters → **Polygonaceae**

Group O • Herbs, shrubs, and trees.

Floral parts in 2's, 4's, 5's, or 7's. Only one perianth series present.

- This group contains plants with flowers that have perianth parts that are of the same color and appear to be attached to the receptacle in a single series. Are they sepals or petals? The convention is that, with a few exceptions, we call these perianth parts sepals, regardless of their color. Some authors call them tepals.
- Not all plants with a single perianth series will be found in this group. Several other families were taken out earlier in the key based on more easily observable features, such as habitat, growth form, or inflorescence type.

1. Plants woody → **2**
 - Plants herbaceous → **9**
2. Leaves compound → **3**
 - Leaves simple → **4**
3. Leaflets 3, coarsely toothed → **Aceraceae (Acer)**
 - Leaflets 3–7 [9], entire to serrate → **Oleaceae**
4. Stamens united by filaments for about half their length → **5**
 - Stamens separate → **6**
5. Flowers 3.5–6 cm in diameter; calyx of 5 yellow sepals; petals 0 → **Sterculiaceae (Fremontodendron)**
 - Flowers much smaller, generally less than 2.5 cm wide; petals 5 → **Malvaceae**
6. Perianth parts 2-6 cm long; carpels many, separate → **Calycanthaceae (Calycanthus)**
 - Perianth parts less than 1 cm long; carpels 1 or 3 → **7**
7. Carpels 3, united; fruit a drupe or capsule → **Rhamnaceae**
 - Carpel 1; fruit an achene → **8**
8. Flowers bisexual; stamens 10 to many → **Rosaceae (Cercocarpus)**
 - Flowers unisexual; stamens 8 → **Elaeagnaceae (Shepherdia)**
9. Stamens 20 or more → **10**
 - Stamens equal to or twice number of perianth parts (in all cases fewer than 20) → **12**
10. Leaves conspicuously thickened, fleshy → **Aizoaceae**
 - Leaves not conspicuously thickened, fleshy → **11**
11. Carpels 3-many, separate → **Ranunculaceae**
 - Carpels 2-several, united (in *Platystemon* the carpels tend to separate at maturity) → **Papaveraceae**
12. Ovary superior → **13**
 - Ovary inferior → **23**
13. Plants fleshy, non-green; leaves small, scaly → **Ericaceae**
 - Plants not fleshy, chlorophyll present, leaves typically well-developed → **14**
14. Perianth parts united, bell-shaped to salver-shaped → **Nyctaginaceae**
 - Perianth parts separate or separately inserted on edge of involucre cup → **15**
15. Ovary conspicuously lobed; styles forked; sap often milky → **Euphorbiaceae**
 - Ovary not 3-lobed; styles not forked; sap watery → **16**
16. Carpels 5-12, united into a ring; fruit a berry → **Phytolaccaceae (Phytolacca)**
 - Carpels 2-5, united (often appearing unilocular because of the 1-chambered ovary); fruit an achene or capsule → **17**
17. Perianth 2- or 4-parted → **18**
 - Perianth 5- or 6-parted → **20**
18. Flowers white; stamens 4 → **Liliaceae (Maianthemum)**
 - Flowers greenish or reddish; stamens 6 or 8 → **19**

19. Flowers in terminal panicles → **Polygonaceae (Oxyria)**
 - Flower solitary in leaf axils → **Saxifragaceae (Chrysosplenium)**
20. Leaves alternate (opposite in *Pterostegia*); fruit a flattened or triangular achene → **Polygonaceae**
 - Leaves (at least lower ones) opposite or whorled; fruit a many-seeded capsule → **21**
21. Style 1 → **Primulaceae**
 - Style 2–5 → **22**
22. Ovary 2- to 5-chambered; placentation axile → **Molluginaceae**
 - Ovary 1-chambered; placentation free-central or basal → **Caryophyllaceae**
23. Plants spreading, succulent annuals of coastal dunes, bluffs, and salt marshes; leaves triangular-ovate → **Aizoaceae (Tetragonia)**
 - Plants not combining all of the above features → **24**
24. Stamens united by anthers → **Compositae**
 - Stamens separate → **25**
25. Hypanthium present, typically fused to ovary and extending beyond it → **Onagraceae**
 - Hypanthium absent → **26**
26. Leaves opposite or whorled → **Rubiaceae**
 - Leaves alternate or basal → **27**
27. Semiparasitic perennial herbs or shrubs attached to branches of host trees → **Viscaceae**
 - Terrestrial herbs → **28**
28. Flowers in small terminal or axillary clusters → **Santalaceae (Comandra)**
 - Flowers in simple or compound umbels → **29**
29. Plants aromatic; leaves generally compound with sheathing bases → **Umbelliferae**
 - Plants not aromatic; leaves simple, bases not sheathing → **Hydrocotylaceae (Hydrocotyle)**

**Group P • Herbs, shrubs, and trees. Calyx and corolla present.
Stamen number at least three times the number of petals.**

1. Plants woody → **2**
 - Plants herbaceous → **6**
2. Petal 1 → **Leguminosae (Amorpha)**
 - Petals 2 or more → **3**
3. Leaves 2-pinnately compound → **Leguminosae (Acacia)**
 - Leaves simple, palmately compound or 1-pinnately compound → **4**
4. Leaves opposite → **Hydrangeaceae**
 - Leaves alternate → **5**
5. Flowers bisexual; stamens united by filaments into a tube → **Malvaceae**
 - Flowers unisexual; stamens separate → **Ebenaceae (Diospyros)**
6. Leaves modified into tubular “pitchers” terminating in rounded hoods → **Sarraceniaceae**
 - Leaves not modified into pitchers, nor terminating in rounded hoods → **7**
7. Sepals and petals of a different number → **8**
 - Sepals and petals of same number → **13**
8. Flowers bilaterally symmetrical → **Ranunculaceae**
 - Flowers radial → **9**
9. Carpels numerous, separate → **Ranunculaceae (Ranunculus)**
 - Carpels 2-several, united → **10**
10. Leaves fleshy; styles 2-many → **11**
 - Leaves not fleshy; style 1 → **12**

11. Leaves flattened → **Portulacaceae**
 - Leaves distinctly 3-sided; mostly sandy coastal areas → **Aizoaceae (Carpobrotus)**
12. Sepals 3; petals 5; leaves narrowly linear → **Cistaceae**
 - Sepals 2 [3]; petals 4, 6, or more; leaves various, but not narrowly linear → **Papaveraceae**
13. Ovary inferior → **Loasaceae**
 - Ovary superior → **14**
14. Stamens united by filaments into single tube or 3-5 bundles → **15**
 - Stamens separate → **16**
15. Leaf blades minutely gland-dotted → **Hypericaceae**
 - Leaf blades not gland-dotted → **Malvaceae**
16. Sepals, petals, and stamens inserted on rim of an open cup → **Rosaceae**
 - Sepals, petals, and stamens inserted on receptacle, not on cup-like structure → **17**
17. Carpels united; fruit a capsule → **18**
 - Carpels separate; fruit a series of follicles, achenes, or berries → **19**
18. Leaves narrowly linear → **Cistaceae**
 - Leaves oblong, partly clasping → **Hypericaceae**
19. Carpels several to many, forming achenes, berries, or follicles less than 1 cm long → **Ranunculaceae**
 - Carpels 2-5; fruit a series of follicles over 1.5 cm long at maturity → **Paeoniaceae**

Group Q • Plants woody or herbaceous. Hypanthium present.

- In this group, the lower portions of sepals, petals, and stamens are united to form a cup- or bowl-shaped, or tubular structure called an hypanthium. The free portions of these floral parts appear to arise from its rim.
- The ovary wall may be fused to the hypanthium, partially fused, or be entirely separate. In these situations, we say that the ovary is inferior, half-inferior, or superior, respectively.

1. Herbs (except for *Fuchsia*); flowers 4- [5-] parted → **2**
 - Trees or shrubs; flowers 5-parted → **4**
2. Sepals 5 and petals 5 [4, 0]; stamens [0, 1] 5-many; fruit various, but not a capsule → **Rosaceae**
 - Sepals and petals 4 [0, 2, 6]; fruit a capsule → **3**
3. Stamens 4 or 6; ovary superior → **Lythraceae**
 - Stamens 8 [4]; ovary inferior → **Onagraceae**
4. Ovary inferior → **5**
 - Ovary superior → **7**
5. Aromatic trees, often with shredding bark; fruit a capsule → **Myrtaceae**
 - Shrubs and trees, not noticeably aromatic; fruit various, but not a capsule → **6**
6. Carpels 2 → **Grossulariaceae (Ribes)**
 - Carpels 5 → **Rosaceae**
7. Plants aromatic; perianth 3 + 3; stamens 9; carpels 3 → **Lauraceae**
 - Plants not aromatic, except in some Rosaceae; sepals and petals differentiated; stamens and carpels not as above → **8**
8. Flowers unisexual, the species dioecious; carpel 1 → **Elaeagnaceae**
 - Flowers bisexual; carpels [1] 2 to many → **9**
9. Leaves alternate or basal → **10**
 - Leaves opposite [alternate] or clustered on short side branches → **11**
10. Carpels 2, united below; stipules usually absent → **Saxifragaceae**
 - Carpels 1, 5, or many, free to united; stipules present → **Rosaceae**

11. Stamens opposite the petals → **Rhamnaceae**
- Stamens alternating with the petals → **Celastraceae**

Group R • Trees, shrubs, or vines. Petals separate.
Stamens no more than twice number of sepals or petals (often 1-10 [12]).
Caution! Poison-oak belongs to this group.

1. Leaves 1.5–3.5 mm long, scale-like; plants appearing leafless at a distance → **Tamaricaceae (Tamarix)**
 - Leaves to several cm long, their blades well-developed → **2**
2. Leaves simple → **3**
 - Leaves compound (*Caution! You may be keying poison-oak!*) → **13**
3. Ovary inferior → **4**
 - Ovary superior → **6**
4. Leaves opposite; sepals, petals, and stamens 4 → **Cornaceae (Cornus)**
 - Leaves alternate or clustered; sepals, petals, and stamens 5 or 10 → **5**
5. Flowers fragrant; stamens 10; fruit a drupe → **Styracaceae (Styrax)**
 - Flowers not fragrant; stamens 5; fruit a capsule → **Escalloniaceae (Escallonia)**
6. Leaves opposite → **7**
 - Leaves alternate → **9**
7. Leaves palmately lobed and veined → **Aceraceae (Acer)**
 - Leaves entire or pinnately lobed or toothed, venation pinnate → **8**
8. Stamens attached at base of (in front of) each petal → **Rhamnaceae (Ceanothus)**
 - Stamens alternating with points of insertion of petals → **Celastraceae**
9. Stamens united by filaments for about half their length → **Sterculiaceae (Fremontodendron)**
 - Stamens separate or fused only at their base → **10**
10. Ovary 1-chambered → **Anacardiaceae (Rhus)**
 - Ovary 2- to 8-chambered → **11**
11. Flowers 4-parted → **Aquifoliaceae (Ilex)**
 - Flowers 5-parted → **12**
12. Stamens 5; fruit a capsule → **Rhamnaceae (Ceanothus)**
 - Stamens 10; fruit a red or yellow pome → **Rosaceae (Heteromeles)**
13. Leaves opposite → **14**
 - Leaves alternate → **16**
14. Leaflets 3 [5] → → **Staphyleaceae (Staphylea)**
 - Leaflets 4 or more → **15**
15. Leaves palmately compound → **Hippocastanaceae (Aesculus)**
 - Leaves pinnately compound → **Oleaceae**
16. Flowers bilaterally symmetrical → **Leguminosae**
 - Flowers radially symmetrical → **17**
17. Leaflets numerous → **Simaroubaceae (Ailanthus)**
 - Leaflets 3 (*Caution ! You may be keying poison-oak.*) → **18**
18. Plants strongly aromatic; leaflets gland-dotted; fruit a samara, 1–2 cm in diameter → **Rutaceae (Ptelea)**
 - Plants not aromatic; leaflets not gland-dotted; fruit a drupe → **Anacardiaceae***

**If your unknown has an axillary inflorescence, well-developed pedicels, and creamy white fruits, you have been examining poison-oak. Wash your hands and exposed skin as soon as possible.*

Group S • Trees, shrubs, and subshrubs.
Petals (2 or more of them) united for at least 1/4 of their length.

1. Leaves opposite or whorled → **2**
 - Leaves alternate → **10**
2. Ovary superior → **3**
 - Ovary inferior → **7**
3. Flowers radially symmetrical → **4**
 - Flowers bilaterally symmetrical → **5**
4. Stamens 6–10; carpels 4 or 5 → **Ericaceae**
 - Stamens 4; carpels 2 → **Buddlejaceae (Buddleja)**
5. Trees to 15 m tall → **Bignoniaceae (Catalpa)**
 - Low shrubs → **6**
6. Fruit of 4 nutlets → **Labiatae**
 - Fruit a capsule or berry → **Scrophulariaceae**
7. Flowers in dense heads; fruits 2–4 nutlets → **Rubiaceae (Cephalanthus)**
 - Flowers in cymes, panicles, or racemes; fruit drupe- or berry-like → **8**
8. Leaves compound → **Caprifoliaceae (Sambucus)**
 - Leaves simple → **9**
9. Flowers subtended by 2 fused bractlets; ovary 4-chambered → **Caprifoliaceae (Symphoricarpos)**
 - Flowers not subtended by 2 fused bractlets; ovary 1-chambered → **Caprifoliaceae (Viburnum)**
10. Flowers bilaterally symmetrical → **11**
 - Flowers radially symmetrical → **12**
11. Stamens 4; ovary 4-lobed; fruit a capsule → **Melanthaceae (Melianthus)**
 - Stamens 10; ovary not 4-lobed; fruit a legume → **Leguminosae**
12. Leaves glabrous and sticky above; conspicuously veined and minutely hairy beneath → **Hydrophyllaceae (Eriodictyon)**
 - Leaves not as above → **13**
13. Stamens [6] 8–10 → **Ericaceae**
 - Stamens 5 → **14**
14. Leaves 2–8 cm long; flowers solitary in the leaf axils → **Pittosporaceae (Pittosporum)**
 - Leaves 20–30 cm long; flowers in cyme- or raceme-like clusters → **Solanaceae (Solanum)**

Group T • Herbs. Petals separate.
Stamen number no more than twice the number of petals (often 1-10 [12]).

1. Carpel 1; fruit a legume → **Leguminosae**
 - Carpels 2–5; fruits various → **2**
2. Carpels more or less separate, sometimes joined at their base → **3**
 - Carpels united for at least half their length → **4**
3. Leaves fleshy; carpels 3–5 → **Crassulaceae**
 - Leaves not fleshy; carpels 2 → **Saxifragaceae**
4. Leaves reddish, in basal rosette less than 10 cm in diameter, with numerous gland-tipped hairs → **Droseraceae (Drosera)**
 - Leaves not as above → **5**

5. Plants less than 10 cm tall, of mud flats; leaves opposite, entire; plants rooting at nodes → **Elatinaceae (Elatine)**
 - Plants typically much larger and not restricted to mud flats; leaves alternate (opposite or alternate in Caryophyllaceae) → **6**
6. Ovary inferior (half-inferior in Portulacaceae) → **7**
 - Ovary superior → **10**
7. Flowers in compound umbels, racemes of umbels, or heads; leaves typically compound (except in certain genera of Umbelliferae) → **8**
 - Flowers in axillary or terminal racemes or sessile; leaves simple → **9**
8. Inflorescence a compound umbel or head; fruit a schizocarp → **Umbelliferae**
 - Inflorescence a raceme of umbels; fruit a berry → **Araliaceae (Aralia)**
9. Sepals 2; petals 5 [4 or 6] → **Portulacaceae (Portulaca)**
 - Sepals and petals 4 [2 or 5] → **Onagraceae**
10. Flowers bilaterally symmetrical → **11**
 - Flowers radially symmetrical → **12**
11. Petals 4, forming an inner and outer pair → **Papaveraceae**
 - Petals 5 or 6, not paired → **Resedaceae (Reseda)**
12. Sepals 2 or 3 → **13**
 - Sepals 4 or more → **16**
13. Sepals 2 → **14**
 - Sepals 3 → **15**
14. Leaves ± fleshy; petals 5 or more → **Portulacaceae**
 - Leaves not fleshy; petals 2 → **Liliaceae (Maianthemum)**
15. Leaves pinnately dissected; stigmas 5 → **Limnanthaceae (Floerkea)**
 - Leaves entire to somewhat lobed; stigmas 3 → **Polygonaceae**
16. Fruit of 4 nutlets → **Boraginaceae (Borago)**
 - Fruit a silique, silicle, capsule, or achene → **17**
17. Placentation free-central → **Caryophyllaceae**
 - Placentation axillary, parietal, or basal → **18**
18. Leaves compound → **19**
 - Leaves simple, entire to deeply cleft → **23**
19. Leaves palmately compound → **Oxalidaceae (Oxalis)**
 - Leaves pinnately or ternately compound → **20**
20. Leaves 2- or 3-foliolate → **Berberidaceae (Vancouveria)**
 - Leaves pinnately compound → **21**
21. Stems prostrate; fruit spiny → **Zygophyllaceae (Tribulus)**
 - Erect or sprawling herbs; fruits without spines → **22**
22. Flowers 4-parted → **Cruciferae**
 - Flowers 5-parted → **Geraniaceae (Erodium)**
23. Petals with scale-like flap on inner surface → **Frankeniaceae (Frankenia)**
 - Petals without a scale-like flap on the inner surface → **24**
24. Flowers 4-parted → **25**
 - Flowers 5-, 6-, or 7-parted → **29**
25. Stipules fused into cylindrical sheath; fruit an achene → **Polygonaceae (Oxyria)**
 - Stipules not fused into cylindrical sheath; fruit a silique, silicle, or capsule → **26**
26. Leaves alternate → **27**
 - Leaves opposite or whorled = **28**

- 27. Stamens 4 → **Gentianaceae (Gentiana)**
 - Stamens 5 → **Linaceae**
- 28. Leaves generally simple; stamens 6, 4 long and 2 short [3 + 3 or 2] → **Cruciferae**
 - Leaves generally palmately compound with 3 - 5 leaflets; stamens 6 or 8-32 → **Cleomaceae**
- 29. Stamens alternating with 5 gland-tipped, thread-like sterile stamens → **Parnassiaceae (Parnassia)**
 - Thread-like sterile stamens absent → **30**
- 30. Ovary deeply lobed; styles elongate, inserted around a central column, coiling from base upward at maturity → **Geraniaceae**
 - Ovary not noticeably lobed; styles not coiling away from central column → **31**
- 31. Styles 2-5, separate to near bases → **32**
 - Style 1, sometimes lobed at apex → **34**
- 32. Stigmas and styles 2 or 3 → **33**
 - Stigmas and styles 5 → **35**
- 33. Leaves palmately lobed to divided, mostly basal; carpels separate at tips → **Saxifragaceae**
 - Leaves linear to lanceolate [ovate], stem leaves well-developed; carpels united at tips → **Linaceae**
- 34. Plants maritime; leaves basal → **Plumbaginaceae**
 - Plants widespread; stem leaves well-developed → **Linaceae**
- 35. Leaves palmately or pinnately lobed or divided; mature carpels separating as 1-seeded segments → **Limnanthaceae (Limnanthes)**
 - Leaves entire; fruit a few- to many-seeded capsule → **36**
- 36. Leaves in 1 whorl at stem apex → **Primulaceae**
 - Leaves alternate [opposite] → **Linaceae**

Group U. Herbs. Petals united. Flowers radial.

- 1. Stamens 8 or 10 → **Ericaceae**
 - Stamens 1-5 → **2**
- 2. Ovary inferior → **3**
 - Ovary superior → **7**
- 3. Flowers in heads → **Compositae**
 - Flowers not in heads → **4**
- 4. Stamens 1 or 3 → **Valerianaceae**
 - Stamens 4 or 5 → **5**
- 5. Stamens 2 + 2; flowers paired, nodding → **Caprifoliaceae (Linnaea)**
 - Stamens 5; flowers not paired, nor nodding → **6**
- 6. Leaves alternate → **Campanulaceae**
 - Leaves opposite or whorled → **Rubiaceae**
- 7. Stamens attached at base of (in front of) each corolla lobe → **Primulaceae**
 - Stamens attached at points alternating with corolla lobes → **8**
- 8. Style 3-parted; ovary and fruit 3-chambered → **Polemoniaceae**
 - Style undivided or forked; ovary and fruit 1-, 2- or 4-chambered → **9**
- 9. Leaves alternate → **10**
 - Leaves opposite, whorled, or basal → **13**
- 10. Ovary conspicuously 4-lobed → **Boraginaceae**
 - Ovary 2-lobed or unlobed → **11**
- 11. Calyx shallowly 5-toothed → **Solanaceae**
 - Calyx deeply lobed to divided → **12**

12. Flowers in coiled cymes or solitary → **Boraginaceae**
 - Flowers in spiny, densely bracted heads → **Polemoniaceae (Navarretia)**
13. Plants aquatic or semiaquatic; leaves compound (leaflets 3) → **Menyanthaceae (Menyanthes)**
 - Plants terrestrial; leaves simple, entire to deeply lobed → **14**
14. Stamens 2 or 4 → **15**
 - Stamens 5 → **17**
15. Leaves strictly basal; corolla thin, dry and veinless → **Plantaginaceae**
 - Leaves distributed along stems; corolla greenish to brightly-colored, veined → **16**
16. Fruit a capsule → **Gentianaceae**
 - Fruit of 4 nutlets → **Verbenaceae (Verbena)**
17. Sap milky; stamens forming ring around style; fruit a follicle → **Apocynaceae**
 - Sap watery; stamens not forming ring around style; fruit a capsule → **17**
18. Sepals separate, fused at base only; stamens attached at base of corolla → **Hydrophyllaceae**
 - Sepals fused; stamens attached in corolla tube or throat → **Gentianaceae**

Group V • Herbs. Petals united. Flowers bilateral.

1. Fruit a capsule 5–10 cm long, tapering on both ends, its tip splitting into 2 curved claws at maturity → **Martyniaceae (Proboscidea)**
 - Fruits much smaller and lacking 2 curved appendages → **2**
2. Ovary inferior → **3**
 - Ovary superior → **4**
3. Flowers in heads; ovule solitary; fruit an achene → **Compositae**
 - Flowers in open, branched inflorescences; ovules many per ovary; fruit a capsule → **Campanulaceae**
4. Ovary 4-lobed, style arising from within the lobes → **Labiatae**
 - Ovary not 4-lobed; style apical → **5**
5. Stamens 10 (often 9 of them fused together by their filaments); carpel 1 → **Leguminosae**
 - Stamens 4–6; carpels 2 or more → **6**
6. Petals 4, in 2 pairs (outer spreading at tip, inner smaller and sometimes fused at tip); stamens 3 + 3 → **Papaveraceae**
 - Petals 5; stamens 4 or 5 → **7**
7. Stamens 2 + 2 [5]; fruit a capsule → **Scrophulariaceae**
 - Stamens 4; fruit of 2 nutlets → **Verbenaceae (Phyla)**

LOCATION OF FLOWERING PLANT FAMILIES IN GROUPS

Aceraceae • K	Celastraceae • Q	Gentianaceae • T
Aceraceae • L (2) *	Celastraceae • R	Gentianaceae • U (2)
Aceraceae • O	Ceratophyllaceae • H	Geraniaceae • T (2)
Aceraceae • R	Chenopodiaceae • J	Gramineae • H
Acoraceae • N	Chenopodiaceae • L	Gramineae • L
Aizoaceae • P	Cistaceae • P (2)	Grossulariaceae • Q
Aizoaceae • O (2)	Cleomaceae • T	Haloragaceae • H
Alismataceae • G	Commelinaceae • N	Hippocastanaceae • R
Alismataceae • H	Compositae • G	Hippuridaceae • H
Amaranthaceae • L	Compositae • J	Hydrangeaceae • P
Anacardiaceae • I	Compositae • O	Hydrocharitaceae • A
Anacardiaceae • R (2)	Compositae • U	Hydrocharitaceae • H
Apocynaceae • G	Compositae • V	Hydrocotylaceae • O
Apocynaceae • I	Convolvulaceae • F	Hydrophyllaceae • S
Apocynaceae = U	Convolvulaceae • G	Hydrophyllaceae • U
Apocynaceae • V (2)	Convolvulaceae • I	Hypericaceae • E
Aponogetonaceae • G	Cornaceae • R	Hypericaceae • P (2)
Aquifoliaceae • R	Crassulaceae • T	Iridaceae • N
Araceae • L	Crossosomataceae • J	Juglandaceae • K
Araliaceae • I	Cruciferae • T (2)	Juglandaceae • L
Araliaceae • T	Cucurbitaceae • I	Juncaceae • L
Aristolochiaceae • I	Cyperaceae • H	Juncaginaceae • L
Aristolochiaceae • N	Cyperaceae • L	Labiatae • S
Balsaminaceae • M	Datiscaceae • L	Labiatae • V
Berberidaceae • J	Dipsacaceae • J	Lauraceae • E
Berberidaceae • L	Dipsacaceae • V	Lauraceae • N
Berberidaceae • N (2)	Droseraceae • D	Lauraceae = Q
Berberidaceae • T	Droseraceae • T	Leguminosae • I
Betulaceae • K	Ebenaceae • P	Leguminosae • J (3)
Bignoniaceae • S	Elaeagnaceae • O	Leguminosae • L
Boraginaceae • T	Elaeagnaceae • Q	Leguminosae • P (2)
Boraginaceae • U (2)	Elatinaceae • H	Leguminosae • M
Buddlejaceae • S	Elatinaceae • T	Leguminosae • R
Cactaceae • J	Ericaceae • F	Leguminosae • S
Callitrichaceae • H	Ericaceae • N	Leguminosae • T
Calycanthaceae • O	Ericaceae • O	Leguminosae • V
Campanulaceae • G	Ericaceae • U	Lemnaceae • A
Campanulaceae • U	Ericaceae • S (2)	Lentibulariaceae • D (2)
Campanulaceae • V	Escalloniaceae • R	Lentibulariaceae • H
Cannabaceae • I	Euphorbiaceae • G	Lentibulariaceae • M
Cannabaceae • L	Euphorbiaceae • L (2)	Liliaceae • N (6)
Caprifoliaceae • S (3)	Euphorbiaceae • O	Liliaceae • O
Caprifoliaceae • U	Fagaceae • K	Liliaceae • T
Caryophyllaceae • O	Frankeniaceae • T	Limnanthaceae • N
Caryophyllaceae • T	Garryaceae • K	Limnanthaceae • T (2)

Linaceae • T (4)
 Loasaceae • P
 Lythraceae • Q
 Malvaceae • O
 Malvaceae • P (2)
 Martyniaceae • V
 Melianthaceae • S
 Menyanthaceae • H
 Menyanthaceae • U
 Molluginaceae • O
 Moraceae • G (2)
 Moraceae • K
 Myoporaceae • E
 Myricaceae • E
 Myricaceae • K
 Myrtaceae • E
 Myrtaceae • L
 Myrtaceae • Q
 Nyctaginaceae • O
 Nymphaeaceae • G
 Nymphaeaceae • H
 Oleaceae • L
 Oleaceae • O
 Oleaceae • R
 Onagraceae • O
 Onagraceae • Q
 Onagraceae • T
 Orchidaceae • F
 Orchidaceae • M
 Oxalidaceae • T
 Paeoniaceae • P
 Papaveraceae • G
 Papaveraceae • J
 Papaveraceae • M
 Papaveraceae • N
 Papaveraceae • O
 Papaveraceae • P
 Papaveraceae • T
 Papaveraceae • V
 Parnassiaceae • T
 Phytolaccaceae • O
 Pittosporaceae • S
 Plantaginaceae • U
 Platanaceae • L
 Plumbaginaceae • T
 Polemoniaceae • J
 Polemoniaceae • U (2)
 Polygalaceae • M

Polygonaceae • H
 Polygonaceae • I
 Polygonaceae • J
 Polygonaceae • L
 Polygonaceae • N (4)
 Polygonaceae • O (2)
 Polygonaceae • T (2)
 Pontederiaceae • A
 Portulacaceae • P
 Portulacaceae • T (2)
 Potamogetonaceae • H
 Primulaceae • E
 Primulaceae • O
 Primulaceae • S
 Primulaceae = T
 Primulaceae • U
 Ranunculaceae • H
 Ranunculaceae • I
 Ranunculaceae • L (2)
 Ranunculaceae • O
 Ranunculaceae • M
 Ranunculaceae • P (3)
 Resedaceae • T
 Rhamnaceae • J
 Rhamnaceae • O
 Rhamnaceae • Q
 Rhamnaceae • R (2)
 Rosaceae • I
 Rosaceae • J (2)
 Rosaceae • O
 Rosaceae • P
 Rosaceae • Q (3)
 Rosaceae • R
 Rubiaceae • I
 Rubiaceae • O
 Rubiaceae • S
 Rubiaceae • U
 Ruppiaceae • A
 Rutaceae • E
 Rutaceae • R
 Salicaceae • K
 Santalaceae • O
 Sarraceniaceae • D
 Sarraceniaceae • P
 Saururaceae • L
 Saxifragaceae • O
 Saxifragaceae • Q
 Saxifragaceae • T (2)

Scrophulariaceae • F
 Scrophulariaceae • M
 Scrophulariaceae • S
 Scrophulariaceae • V
 Simaroubaceae • R
 Smilacaceae • I (2)
 Solanaceae • S
 Solanaceae • U
 Staphyleaceae • R
 Sterculiaceae • O
 Sterculiaceae • R
 Styracaceae • R
 Tamaricaceae • R
 Tropaeolaceae • M
 Typhaceae • H (2)
 Typhaceae • L
 Umbelliferae • J
 Umbelliferae • O
 Umbelliferae • T
 Urticaceae • L
 Valerianaceae • M
 Valerianaceae • U
 Verbenaceae • U
 Verbenaceae • V
 Violaceae • M
 Viscaceae • F
 Viscaceae • O
 Vitaceae • I
 Zosteraceae • A
 Zygophyllaceae • T

* entries in group

SECTION 3.3 — A VEGETATIVE KEY TO THE GENERA OF SELECTED TREES, SHRUBS AND WOODY VINES

CONIFERS

1. Leaves linear, needle-like → **2**
 - Leaves awl-shaped or scale-like → **10**
2. Leaves attached in bundles of 2–5 → **Pinus**
 - Leaves attached singly to stems → **3**
3. Small branchlets (rather than leaves) deciduous; leaf bases sheathing, green → **Sequoia**
 - Individual leaves deciduous → **4**
4. Leaf scars smooth on branches → **5**
 - Leaf scars forming cushions or stalks on branches → **8**
5. Leaf tips blunt or notched → **6**
 - Leaf tips acute or sharp-pointed → **7**
6. Needles flexible, with white lines of stomata on one or both surfaces → **Abies**
 - Needles stiff, without white lines of stomata on one or both surfaces → **Taxus**
7. Needles glossy green with a stout, spiny apex; apical buds small → **Torreya**
 - Needles dull green, without sharp apical spines; apical buds large and sharp-pointed → **Pseudotsuga**
8. Needle length variable → **Tsuga**
 - Needle length uniform → **9**
9. Needles stiff, apex sharp-pointed → **Picea**
 - Needles flexible, apex acute → **Pseudotsuga**
10. Leaves (at least some of them) awl-shaped → **11**
 - Leaves scale-like and appressed against the branch → **14**
11. Leaves opposite or whorled → **12**
 - Leaves alternate → **13**
12. Mature scale-like leaves less than 2 mm long → **Cupressus**
 - Mature scale-like leaves 3 mm or longer → **Juniperus**
13. All leaves awl-shaped → **Sequoiadendron**
 - Some leaves awl-shaped, but others short lanceolate and linear → **Sequoia**
14. Scale-like leaves on branchlets forming flat sprays → **15**
 - Scale-like leaves on angled branchlets not forming flat sprays → **17**
15. Leaf tips strongly mucronate; leaves on young branchlets at least twice as long as wide → **Calocedrus**
 - Leaf tips not mucronate; leaves on young branchlets less than twice as long as wide → **16**
16. Lines of stomata on the underside of leaves forming white hour-glass or butterfly-like markings → **Thuja**
 - Lines of stomata (if present) not forming hour-glass or butterfly-like markings on the underside → **Chamaecyparis**
17. Mature scale-like leaves 2 mm or less long; immature awl-like leaves lacking lines of stomata → **Cupressus**
 - Mature scale-like leaves 3 mm or more long; immature and awl-like leaves with white lines of stomata → **Juniperus**

KEY TO BROAD-LEAVED WOODY PLANTS

1. Plants appearing leafless (leaves reduced to small scales) → **Tamarix**
 - Plants with well-developed leaves → **2**
2. Leaves opposite or whorled → **3**
 - Leaves alternate → **34**
3. Leaves compound → **4**
 - Leaves simple → **9**
4. Leaves pinnately compound; leaflets 3 or more → **5**
 - Leaves trifoliolate or palmately compound → **7**
5. Vine → **Clematis**
 - Shrub or tree → **6**
6. Branches stout and pithy, forming a shrub or rounded tree → **Sambucus**
 - Branches thin with flattened nodes, forming a shrub or vertical tree → **Fraxinus**
7. Leaves palmately compound → **Aesculus**
 - Leaves trifoliolate → **8**
8. Tree; terminal leaflet largest, coarsely serrate; two lateral leaves smaller, all densely pubescent → **Acer**
 - Shrub; leaves not densely pubescent → **Acer**
9. Leaves palmately lobed → **10**
 - Leaves not palmately lobed → **12**
10. Vine → **11**
 - Shrub or tree → **Acer**
11. One leaf of pair modified into a tendril → **Vitis**
 - Both leaves of pair unmodified → **Humulus**
12. Leaves evergreen → **13**
 - Leaves deciduous → **23**
13. Leaves with persistent, swollen, corky stipules → **Ceanothus**
 - Leaves not as above → **14**
14. Leaves sessile → **15**
 - Leaves petiolate → **18**
15. Leaves needle-like, on short side branches → **Erica**
 - Leaves lanceolate, oblong, or ovate → **16**
16. Smaller leaves clustered in axils of larger leaves; margins denticulate to coarsely toothed, revolute → **Mimulus**
 - Leaves of one size → **17**
17. Leaf bases connected by a line across the stem; margins strongly revolute → **Kalmia**
 - Leaf bases not connected by a line across the stem → **Keckiella**
18. Leaves whorled → **Nerium**
 - Leaves opposite → **19**
19. Petioles more than 6 mm long; large shrubs → **20**
 - Petioles less than 4 mm long; small shrubs or subshrubs → **22**
20. Leaf margins entire, may be undulate; bark smooth → **Garrya**
 - Leaf margins serrate to dentate → **21**
21. Lower leaf surface gray → **Buddleja**
 - Lower leaf surface green → **Fuchsia**
22. Twigs 4-angled; densely branched small shrubs → **Paxistima**
 - Twigs round; subshrubs → **Keckiella**

- 23. Leaves with 1 prominent midrib → **24**
 - Leaves with 3–5 prominent veins from the base → **32**
- 24. Leaves opposite and whorled → **Cephalanthus**
 - Leaves only opposite → **25**
- 25. Vine → **Lonicera**
 - Shrub or tree → **26**
- 26. Branches 4-angled → **27**
 - Branches round → **28**
- 27. Old and new season's branches angled; bark greenish-gray → **Euonymus**
 - Only new season's branches angled; bark brownish → **Lonicera**
- 28. Lateral veins strongly arcuate → **Cornus**
 - Lateral veins straight or only slightly curved → **29**
- 29. Leaves spicy aromatic when crushed; bark smooth → **Calycanthus**
 - Leaves may be slightly aromatic when crushed, but not spicy; bark exfoliating → **30**
- 30. Terminal buds naked, showing immature leaves → **Fuchsia**
 - Terminal buds covered by scales → **31**
- 31. Exposed bud scales 6–8; leaves of 2 kinds, entire and lobed → **Symphoricarpos**
 - Exposed bud scales 4; leaves of one kind → **Lonicera**
- 32. Leaves coarsely dentate → **Viburnum**
 - Leaves entire to denticulate → **33**
- 33. Twigs slender; flattened at the nodes and keeled below the leaf scar → **Philadelphus**
 - Twigs thick; not flattened at the nodes → **Ceanothus**
- 34. Vines → **35**
 - Trees or shrubs → **38**
- 35. Leaves compound → **36**
 - Leaves simple → **37**
- 36. Stems with prickles → **Rubus**
 - Stems without prickles → **Toxicodendron**
- 37. Leaves thick, evergreen → **Hedera**
 - Leaves thin, deciduous → **Aristolochia**
- 38. Tree → **39**
 - Shrub → **67**
- 39. Leaves evergreen → **40**
 - Leaves deciduous → **49**
- 40. Leaf margins entire or revolute → **41**
 - Leaf margins variously toothed, not revolute → **46**
- 41. Leaf margins glandular-denticulate → **Ceanothus**
 - Leaf margins not glandular-denticulate → **42**
- 42. Leaves oval or oblong → **43**
 - Leaves lanceolate → **44**
- 43. Leaves less than 25 mm long, margins revolute; bark gray → **Cercocarpus**
 - Leaves more than 50 mm long, margins entire; bark reddish-brown → **Arbutus**
- 44. Leaves dark green above with golden or whitish scales below → **Chrysolepis**
 - Leaves green and glabrous on lower surface → **45**
- 45. Leaves strongly aromatic; bark green and smooth → **Umbellularia**
 - Leaves not aromatic; bark gray and shredding → **Dendromecon**
- 46. Winter bud scales absent, showing immature leaves → **Frangula**
 - Winter bud scales present, covering immature leaves → **47**

47. Buds clustered at ends of branches; leaf shape and leaf margins variable on the same tree → **Quercus**
- Buds single at ends of branches; leaf shape and margins consistent on the same tree → **48**
48. Leaves oblong to oblanceolate, dark green, glossy, fragrant → **Myrica**
- Leaves oblong, acute, with prominent parallel lateral veins ending in sharp teeth; pale with whitish pubescence when young → **Notholithocarpus**
49. Leaves compound → **50**
- Leaves simple → **54**
50. Leaves typically trifoliolate, sometimes with 5 leaflets → **Ptelea**
- Leaves with 7 to many leaflets → **51**
51. Stipular spines present; leaflets oval-oblong → **Robinia**
- Stipular spines absent → **52**
52. Leaves twice-pinnately compound, gray-green → **Acacia**
- Leaves once-pinnately compound, green → **53**
53. Leaf margins finely serrate; twigs with chambered pith → **Juglans**
- Leaf margins entire, except for 1 or 2 glandular teeth at the base; twigs with continuous pith → **Ailanthus**
54. Leaves deeply lobed → **55**
- Leaves with various margins, but not deeply lobed → **57**
55. Leaves pinnately lobed → **Quercus**
- Leaves palmately lobed → **56**
56. Leaves rough to the touch on upper surface → **Ficus**
- Leaves pubescent, but not rough → **Platanus**
57. Terminal buds naked, showing immature leaves → **58**
- Terminal buds with scales, bud scale scars evident in the spring → **59**
58. Lateral buds large, sometimes stalked; leaves acute or narrowly obtuse at apex; lower surfaces pubescent → **Alnus**
- Lateral buds small and not stalked; leaves obtuse at apex; lower surfaces glabrous and shiny → **Rhamnus**
59. Petiole 10 mm or more long → **60**
- Petiole 10 mm or less long → **62**
60. Leaves coarsely and sharply serrate; petioles round → **Betula**
- Leaves finely serrate or crenate to entire; petiole sometimes flattened → **61**
61. Leaves lanceolate, elliptic or oblong, blades with 1 or 2 glands at attachment to petiole → **Prunus**
- Leaves round-ovate, ovate or deltoid; blades glandless → **Populus**
62. Leaves roundish with broad, rounded apices, typically serrate on upper margins, entire on the lower → **63**
- Leaves oblong, usually with point apices; if serrate, then along the margin to base → **65**
63. Leaf bases round or cordate → **Amelanchier**
- Leaf bases cuneate → **64**
64. Leaves more than 25 mm long, often lobed; branches armed with thorns → **Crataegus**
- Leaves less than 25 mm long, not lobed; branches thornless → **Cercocarpus**
65. Leaf blades with 1 or 2 glands at attachment of petiole → **Prunus**
- Leaf blades lacking glands → **66**
66. Branches with conspicuous clusters of bud scale scars; leaves on shortened, lateral spur-like branches; stipules, when present, small → **Malus**
- Branches without conspicuous clusters of bud scale scars or spur-like branches; winter buds with a single scale; stipules, when present, large → **Salix**
67. Leaves evergreen → **68**
- Leaves deciduous → **98**

- 68. Leaves compound → **69**
 - Leaves simple → **71**
- 69. Leaves pinnately compound → **Mahonia**
 - Leaves palmately compound or trifoliolate → **70**
- 70. Leaves trifoliolate → **Genista**
 - Leaves with more than 3 leaflets → **Lupinus**
- 71. Leaves linear, needle-like, or scale-like → **72**
 - Leaves not as above → **75**
- 72. Plants of subalpine meadows and lake margins → **73**
 - Plants of low elevation chaparral and coastal bluffs → **74**
- 73. Leaves linear and extending away from branches → **Phyllodoce**
 - Leaves scale-like and closely appressed to branches → **Cassiope**
- 74. Branches prostrate or spreading; leaves crowded; coastal bluffs → **Empetrum**
 - Branches 3–5 m tall; leaves along the stems; interior chaparral → **Adenostoma**
- 75. Twigs angled → **76**
 - Twigs rounded → **79**
- 76. Leaves reduced to small scales or spines → **77**
 - Leaves not so reduced → **78**
- 77. Leaves spiny → **Ulex**
 - Leaves strongly reduced or absent, but not spiny → **Cytisus**
- 78. Leaves with clearly differentiated blade and petiole → **Ceanothus**
 - Leaves with cuneate bases not clearly differentiated from petiole → **Baccharis**
- 79. Leaves with 3 (rarely 1) veins from the base, the side ones arched → **Ceanothus**
 - Leaves with straight veins from midrib → **80**
- 80. Leaf margins entire → **81**
 - Leaf margins variously toothed → **89**
- 81. Leaves strongly revolute → **Cercocarpus**
 - Leaves plane → **82**
- 82. Leaf surfaces identical; leaves typically vertical → **Arctostaphylos**
 - Leaf surfaces different; leaves typically horizontal or drooping → **83**
- 83. Lower leaf surfaces heavily covered with hairs or scales → **84**
 - Lower leaf surfaces glabrous → **85**
- 84. Lower leaf surfaces felt-like; leaves clustered at ends of branches → **Rhododendron**
 - Lower leaf surfaces with yellow to white scales; leaves along branches → **Chrysolepis**
- 85. Leaves more than 6 cm long; petioles about 25 mm long; terminal buds large → **Rhododendron**
 - Leaves less than 6 cm long; petioles about 5 mm long; terminal buds small → **86**
- 86. Shrubs prostrate with smooth, red bark on young branchlets → **Arctostaphylos**
 - Shrubs upright with smooth bark on young branchlets → **87**
- 87. Branches with grayish-brown bark → **Rhus**
 - Young branches with bright green bark → **88**
- 88. Leaves lanceolate, strongly aromatic → **Umbellularia**
 - Leaves oblong to oval, not strongly aromatic → **Leucothoë**
- 89. Leaves less than 25 mm long → **90**
 - Leaves more than 30 mm long → **94**
- 90. Buds naked, showing immature leaves → **Rhamnus**
 - Buds with scales enclosing immature leaves → **91**
- 91. Leaves clustered on short spur branches → **Cercocarpus**
 - Leaves placed individually along stem → **92**

92. Buds clustered at tips of stems; leaves and margins variable → **Quercus**
 — Buds not clustered; leaves and margins uniform → **93**
93. Leaves dark green and waxy → **Vaccinium**
 — Leaves gray-green and pubescent → **Notholithocarpus**
94. Leaves ovate to round, twigs zigzag → **Gaultheria**
 — Leaves oblong, elliptical or lanceolate; twigs straight → **95**
95. Leaves aromatic → **96**
 — Leaves not strongly aromatic → **97**
96. Leaves clustered at ends of branches, glutinous above, grayish beneath → **Eriodictyon**
 — Leaves along stems, glabrous and green → **Myrica**
97. Petioles more than 12 mm long; leaf margins strongly toothed → **Heteromeles**
 — Petioles less than 8 mm long; leaf margins merely serrulate → **Leucothoë**
98. Leaves compound → **99**
 — Leaves simple → **106**
99. Leaves trifoliolate → **100**
 — Leaves pinnately or palmately compound → **103**
100. Plants with spines, bristles, or prickles → **101**
 — Plants not as above → **102**
101. Prickles and/or bristles present along stems and on leaves → **Rubus**
 — Side branches spine-tipped → **Pickeringia**
102. Terminal leaflet much larger than laterals, typically lobed and without a distinct petiole → **Rhus**
 — Terminal leaflet similar to the laterals, typically with a distinct petiole → **Toxicodendron**
103. Leaves palmately compound → **Rubus**
 — Leaves pinnately compound → **104**
104. Leaves less than 25 mm long, with oblong leaflets; margins entire → **Dasiphora**
 — Leaves greater than 25 mm long, with toothed margins → **105**
105. Branches with prickles → **Rosa**
 — Branches without prickles → **Sorbus**
106. Leaves palmately lobed and veined → **107**
 — Leaves either not strongly lobed or pinnately lobed and veined → **108**
107. Leaf blades doubly serrate, glabrous above, hairy below; internodes not contracted on lateral branches; bark thin, shreddy → **Physocarpus**
 — Leaf blades various; internodes contracted on lateral branches, clustering leaves; bark smooth → **Ribes**
108. Leaves with 3 teeth at the tip of the blade → **109**
 — Leaf margins entire or otherwise variously toothed → **110**
109. Leaves gray with silky hairs, margins plane → **Artemisia**
 — Leaves green above, white tomentose beneath; margins revolute → **Purshia**
110. Leaves linear to narrowly oblanceolate → **111**
 — Leaves broader → **114**
111. Leaves petioled and fascicled on short side branches → **Prunus**
 — Leaves lacking a distinct petiole, not fascicled → **112**
112. Leaves gray-green or whitish → **Chrysothamnus**
 — Leaves greenish → **113**
113. Leaves resinous; branches brown and spineless → **Ericameria**
 — Leaves glabrous; branches greenish → **Spartium**
114. Leaves round with cordate bases → **115**
 — Leaves not round with cordate bases → **116**

115. Twigs grayish; leaves grayish beneath due to stellate hairs → **Styrax**
 — Twigs brownish; leaves green and glabrous; persistent legumes often seen → **Cercis**
116. Leaves glabrous or nearly so → **117**
 — Leaves variously pubescent, at least on one surface → **123**
117. Leaves with prominent raised veins on lower surfaces → **118**
 — Leaves with smooth lower surfaces → **122**
118. Leaves with 3 (rarely 1) veins from the base, the side ones arched → **Ceanothus**
 — Leaves with straight veins from midrib → **119**
119. Stipules present and large; buds with a single scale → **Salix**
 — Stipules absent; buds with several scales → **120**
120. Leaf margins doubly serrate → **Alnus**
 — Leaf margins entire to serrate → **121**
121. Stems strong, round, gray to brown → **Rhamnus**
 — Stems weak, angled, green → **Solanum**
122. Leaves oval to elliptic with serrate margins on upper half → **Spiraea**
 — Leaves ovate, sometimes with gland-tipped serrations along the margins → **Vaccinium**
123. Leaves with 3 (rarely 1) veins from the base, the side ones arched → **Ceanothus**
 — Leaves with straight veins from midrib → **124**
124. Leaves oblanceolate, slightly hairy beneath; buds large, reddish; pith chambered → **Oemleria**
 — Leaves obovate, lanceolate to elliptical; buds not red; pith not chambered → **125**
125. Leaves conspicuously pubescent on both surfaces → **126**
 — Leaves pubescent, mainly on lower surfaces → **127**
126. Leaves without stipules; branches with strong zigzag pattern → **Corylus**
 — Leaves with stipules; branches straight → **Salix**
127. Leaves white tomentose below → **Spiraea**
 — Leaves hairy, but not white tomentose below → **128**
128. Leaves with scattered brown hairs on upper surface → **Menziesia**
 — Leaves hairy, but without brown hairs on upper surface → **129**
129. Leaf pubescence sparse, mainly in axils of veins on lower surfaces → **130**
 — Leaf pubescence abundant on lower surface → **131**
130. Buds large and red in winter; leaf margins ciliate → **Rhododendron**
 — Buds small in winter; leaf margins entire to serrulate → **Vaccinium**
131. Leaves deeply lobed → **Quercus**
 — Leaves merely coarsely toothed, dentate or serrate, but not deeply lobed → **132**
132. Twigs hairy and ribbed below leaf scars → **Holodiscus**
 — Twigs not hairy or ribbed → **133**
133. Lateral buds stalked and without bud scales → **Alnus**
 — Lateral buds sessile and covered with one bud scale → **Salix**

Source: This is an updated version of the key written by John Sawyer that appeared in *Keys to the families and genera of vascular plants in northwest California*. Fourth edition. 1981. Mad River Press. Eureka, CA. Pp. 157-177.

About the Authors

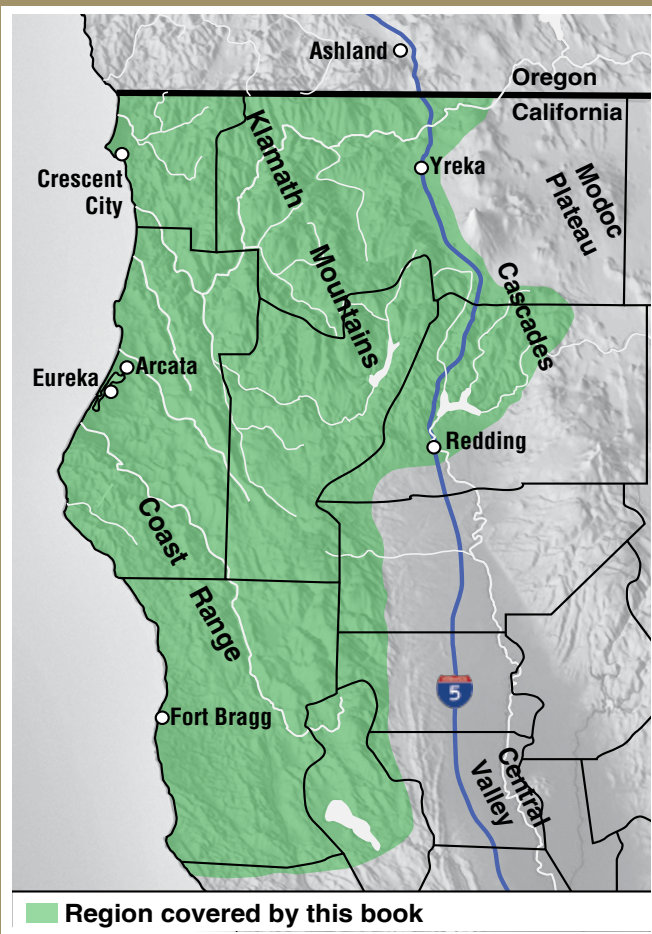
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This book provides a checklist of the native and naturalized vascular plants that occur in northwestern California. By vascular plants, we mean lycophytes (traditionally called fern allies), ferns, conifers, and flowering plants. Escaped ornamentals, plants growing at abandoned home sites, and crops are also included if they have become established and persist without our assistance. This is a more inclusive definition than the one used in the second edition of *The Jepson Manual*, which is the primary reason that we show many more plants as occurring in northwestern California.

This catalog documents the occurrence of 158 families, 901 genera, 3,376 species, and 3,811 taxa (subspecies and varieties) in the region. To provide some perspective, there are more vascular plant species in northwestern California than in 39 states!



Generous support for this book provided by CNPS North Coast Chapter.

