



Common name: Palmer's penstemon

Scientific name: *Penstemon palmeri*

Family: Scrophulariaceae

Notes:

Palmer's penstemon is a perennial herb to a slightly woody subshrub 5 to 14 dm tall with a thick crown. The plant is glabrous and glaucous with fleshy leaves. The leaves are dentate with the upper ones sometimes triangular. The flowers range from white to lavender-pink.

They have several stalked flowers or flower clusters that are borne in the axils of the upper leaves or leaf-like bracts. The tubular corolla is strongly to distinctly two-lipped at the mouth with a two-lobed upper lip and a three-lobed lower lip. There are 4 anther-bearing (fertile) stamens and a single sterile stamen or staminodia that is often hairy at the tip. The fruit is a many-seeded capsule.



Common name: Lewis flax

Scientific name: *Linum lewisii*

Family: Linaceae

Notes: Flax plants have many narrow, small, alternate (rarely opposite), simple and entire leaves that are sessile (lacking stalks) on the stems. The perfect and regular, generally showy flowers are borne in racemes or cymes. The sepals, petals, and stamens are five, the fruit a capsule, and the seeds in most species are mucilaginous when wet.

In general, flax is an annual or short-lived, semi-evergreen perennial forb, sometimes semi-woody at base with attractive flowers ranging from white to blue to yellow to red in color.



Common name: Rocky Mountain penstemon

Scientific name: *Penstemon strictus*

Family: Scrophulariaceae

Notes: *Penstemon strictus* is a perennial herb growing 12 to 36 in tall. It has one to few stems arising from a thick crown. The leaves are entire and narrowly oblanceolate. The flowers are deep blue with parts of the corolla violet and whitish. The staminode is sparsely bearded to glabrous. This species likes full sun to partial shade, well drained soils, and blooms in the summer.

Penstemon or beardtongue species are perennial forbs or subshrubs to shrubs with attractive flowers. Penstemons have opposite, entire, or toothed leaves. They have several stalked flowers or flower clusters that are borne in the axils of the upper leaves or leaflike bracts.



Common name: Sticky geranium

Scientific name: *Geranium viscosissimum*

Family: Geraniaceae

Notes: Sticky purple geranium is a native perennial forb that grows to 40 to 90 cm tall. It has sticky glandular hairs that densely cover the stems and leaves. Leaves are basal, on long stalks and have blades 5 to 12 cm wide. The leaves are deeply palmately lobed into 5 to 7 sharply toothed divisions. Flowers are 2.5 cm wide, occur in open clusters near the top, and have 5 petals. Petals are pinkish-lavender to deep purple-magenta with purple veins and soft hairs on the lower half. Seed capsules are elongated, glandular and hairy, with a long beak shaped like a stork's or crane's bill.



Common name: Mountain lupine

Scientific name: *Lupinus argenteus*

Family: Fabaceae

Notes: The perennial silver-stem lupine bears from one to several, occasionally branched stems, each 1-2 ft. tall and covered with hairs. Stalked, palmately-compound, silvery-green leaves line the stems. Violet, pea-like flowers are arranged in a showy spike, up to 8 in. long, atop the stems. The flowers of silver-stem lupine are sometimes pink and rarely white. This species spreads quickly to form colonies.

Silvery Lupine is a member of the pea family (Fabaceae), which includes trees, shrubs, herbs, and vines with compound or occasionally simple leaves and flowers usually in clusters.



Common name: Fleabane Daisy

Scientific name: *Erigeron speciosus*

Family: Asteraceae

Notes: Clusters of leafy stems, 1/2-2 1/2 ft. tall, rise from the woody rootstock of this perennial. Each stem bears several showy, nearly 2 in. wide flower heads with from 70-150 blue, or rarely white, narrow rays. A leafy stem branches near the top into leafless stalks, each with one flower head at the end, with many narrow pink, lavender or white rays surrounding a yellow disk. The disk flowers are yellow-orange. The lower leaves of this plant tend to fall off as the season advances.

This *Erigeron* has one of the showiest heads, reflected in the species name, *speciosus*, which means pretty. The similar Hairy Showy Daisy (*E. subtrinervis*) has spreading hairs over most of the stem and leaves.



Common name: Arrowleaf balsamroot

Scientific name: *Balsamorhiza sagittata*

Family: Asteraceae

Notes: Arrowleaf balsamroot is a long-lived perennial forb native to western North America. The arrowhead shaped leaves are mostly all basal and petiolate, 2 to 18 in long and 0.6 to 6 in wide. Upper stem leaves are smaller and linear to elliptic. The leaves are silvery white to green. Several flower stems arise from the root crown to a height of 6 to 31 in. The stems bear a solitary floral head with yellow ray and disk flowers. Eight to twenty-five ray flowers with 0.8 to 2.4 in long petals surround a disk that is 12 to 25 mm in diameter. The fruit is a glabrous achene with no pappus. The taproots can be quite large reaching 8.8 ft long and 4 in in diameter. Deep lateral roots can run horizontally for 2 to 3 ft.



Common name: Gaillardia

Scientific name: *Gaillardia aristata*

Family: Asteraceae

Notes: The pubescent plant grows to a height of 26 inches with rough-hairy, lanceshaped, alternate leaves, 6 inches long, 1 inch wide, entire to coarsely-toothed, or rarely pinnately divided. The flower heads are radiate, showy, solitary to few, with an outer series of ray flowers and an inner group of disk flowers. A normal flower head has a large number of ligulate and tubular-shaped rays, with the latter shape being four-lobed.



Common name: Northern sweetvetch

Scientific name: *Hedysarum boreale*

Family: Fabaceae

Notes: Sweetvetch is a native perennial, cool season, herbaceous legume with deep taproots and several lateral roots, sometimes rhizomatous. Its deep taproots allow the plant to extract deep soil moisture and nutrients resulting in significant drought resistance and winter hardiness. The main stems arise from a woody crown and may grow 1 to 2 feet tall. The leaves are compound (two or more leaflets) and hairless. Flowers can be pink, purple, or white arranged in a loose raceme. Seeds develop in a long constricted pod, with several sections. Each section contains one brown kidney-shaped seed.



Common name: Gooseberryleaf globemallow

Scientific name: *Sphaeralcea grossulariifolia*

Family: Malvaceae

Notes: Gooseberryleaf globemallow is a native perennial forb to subshrub with few to many stems arising from a deep, branched woody caudex. Mature plants range from 35 to 75 cm (14 to 30 in) in height. This species is morphologically diverse. Stems and leaves can be white to gray with dense stellate hairs, or green and sparsely hairy. The leaves are typically 3 to 5 lobed with the lobes distinct to the base, the blades 1.2 to 5 cm (0.5 to 2.0 in) long. Flowers are orange or rarely rose pink with 5 petals ranging from 8 to 18 mm (0.3 to 0.7 in) in length. The fruit is a schizocarp with 8 to 20 carpels.



Common name: Prairie clover

Scientific name: *Dalea ornata*

Family: Fabaceae

Notes: Prairie clover is a perennial, herbaceous legume that grows to 12-24 in. in height. It has a cluster of stems that arise from a taproot. Dried stems are usually present from previous years. Lvs are 1.6 to 2 in long, alternate and odd-pinnate, comprised of 5-7 oval shaped leaflets, each 0.4-0.8 in long. Lvs and stems are dotted with tiny glands. The plant is hairless except for long silky hairs on the calyces. Flws occur in dense, cylinder-shaped spikes which are 0.8-2.4 in long. Flws are light pink to purple in color/have 5 petals. One petal is broad-clawed and attached to the calyx. The other 4 petals are narrow-clawed, attached to the staminal tube and alternate with the 5 stamens. The flowers bloom upward along the spike. Seedpods are enclosed by the calyces and contain 1 or 2 seeds.



Common name: Prairie coneflower

Scientific name: *Ratibida columnifera*

Family: Asteraceae

Notes: Prairie coneflower is a native perennial about a foot and a half tall. The rays are generally three to five centimeters long, much longer than the disk (solid part between the rays). The floral disk is somewhat globe-shaped, ovoid, or shortly ellipsoid, twelve to twenty millimeters high. Prairie coneflower has well-developed leaves up to fifteen centimeters long and six centimeters wide, pinnatifid to partly bipinnatifid, with ultimate segments linear to oblong, often very unequal. This species has one to several stems twelve to forty-seven inches tall. The fruit is a small achene.



Common name: Showy goldeneye

Scientific name: *Heliomeris multiflora*

Family: Asteraceae

Notes: Showy goldeneye is a perennial forb arising from a woody taproot. The much branching stems reach approximately 1 m (39 in) in height. Leaves are lanceolate to linear, opposite, entire or serrate, 1 to 8 cm (0.4 to 3.2 in) long and 2 to 20 mm (0.08 to 0.8 in) wide. There are commonly 2 to several flower heads per stem. The disk is 6 to 14 mm (0.25 to 0.6 in) across with dark yellow flowers. The disk is surrounded by 10 to 14 yellow ray flowers, 7 to 18 mm (0.3 to 0.7 in) long. The fruit is a brown achene 1.2 to 1.8 mm (0.05 to 0.07 in) long lacking a pappus (Welsh et al 2003). There are approximately 1,000,000 seeds per pound in pure seed.



Common name: False goldenaster

Scientific name: *Heterotheca villosa*

Family: Asteraceae

Notes: A round plant with erect or spreading leafy stems, with yellow flower heads in branched clusters. Stem covered with rough, grayish hairs.

This species and its close relatives, distinguished by their hairiness, are so common in the West that they are difficult to overlook. They are everywhere in dry places, often in very showy displays.



Common name: Maximilian sunflower

Scientific name: *Helianthus maximiliani*

Family: Asteraceae

Notes: This native perennial has a stout, rhizomatous root system. It grows from 0.9 m to 2.5 m tall with stems occurring singly or in clusters. The central stem is stout, light green to light red, and covered with short, dense white hairs. Leaves are alternate, up to 30 cm long and 5 cm wide, sessile, narrowly lance-shaped, and folded upward from the central vein. Leaf surfaces are covered with white hairs; margins are smooth or loosely toothed. Short inflorescence stalks emerge from the leaf axils, bearing one composite flower head and one to two leaves. The characteristic that distinguishes Maximilian sunflower is the grayish appearance given off by dense white hairs on the plant.



Common name: Mule's ear

Scientific name: *Wyethia amplexicaulis*

Family: Asteraceae

Notes: Large, round, shiny leaves subtend a stout but lax stem, 1-3 ft. tall. Stem leaves are more lance-shaped, resembling the ears of mule. A large, yellow, sunflower-like flower head is often surrounded by smaller yellow flowers. Plant seems varnished with resin, the stout leafy stems growing from clumps of lanceolate leaves, ending in several large deep yellow flower heads on long stalks, the central head largest.

All species have leaves on the stem, distinguishing them from *Balsamorhiza*, which has all leaves at the base.



Common name: Woolly sunflower

Scientific name: *Eriophyllum lanatum*

Family: Asteraceae

Notes: *Eriophyllum lanatum* is a native forb or subshrub, and may be an annual, biennial, or short- or longlived perennial depending on site conditions. It has a multi-branched, erect to spreading form and grows to 10 to 60 cm (4 to 24 in) tall. Stems and leaves are covered with white hairs. Leaves are 2.5 to 7.5 cm (1 to 3 in) long and irregularly divided into narrow lobes. Flowers are solitary, on long peduncles and bloom May through July. The flower head is 4 to 6.5 cm (1.5 to 2.5 in) wide with golden yellow disk flowers and 8 to 12 yellow ray flowers, each 1.5 to 2 cm (0.6 to 0.8 in) long. Flower bracts are broad, erect and keeled. Seed is narrow, smooth, has four angles and a crown of scales or short pappus.



Common name: Indian ricegrass

Scientific name: *Achnatherum hymenoides*

Family: Poaceae

Notes: Indian ricegrass is 8 to 30 inches tall. It has many tightly rolled, slender leaves, growing from the base of the bunch giving it a slightly wiry appearance. The ligule is about 6 mm long and acute. It has a wide spreading panicle inflorescence with a single flower at the end of each hair-like branch. Seeds are round to elongated, black or brown, and generally covered with a fringe of short, dense, white callus hairs. Indian ricegrass has fair to good seedling vigor. Seed of most accessions are very slow to germinate due a thick hull and embryo dormancy.



Common name: Prairie junegrass

Scientific name: *Koeleria macrantha*

Family: Poaceae

Notes: Prairie junegrass is a native, perennial, cool season tufted bunchgrass found on rangelands, plains and open forestlands. It is commonly 0.5- 2 feet tall. The narrow leaves form small basal clusters from which arise several seedheads. Leaves are basal, flat to in-rolled and sharply pointed. The seedheads are narrow contracted panicles and have the appearance of dense spikes, one per stem. The spikelets are normally pale green to purplish in color. Fine hairs are found on the reproductive stem just below the seedhead. The glumes are sharp and shiny. This is one of the first grasses to green-up in the early spring. Prairie junegrass is a perennial grass of medium longevity found in a wide variety of native plant communities.



Common name: Bluebunch wheatgrass
 Scientific name: *Pseudoroegneria spicata*
 Family: Poaceae

Notes: Bluebunch wheatgrass is a perennial native bunchgrass. Bluebunch wheatgrass is highly variable and grows to 1.5 to 4 feet (0.4 to 1.2 m) tall with seed spikes 3 to 8 inches (76 to 200 mm) long. The auricles are pointed and semi-clasping to nearly lacking. Leaves are lax, cauline, flat to inrolled, 0.6 to 0.25 inches (4 to 6 mm) wide, and green to blue in color. The sheath is generally glabrous. Reproductive stems are erect, slender, and sometimes wiry with a wavy rachis. The lemma awns range from being short to prominent and divergent except on the beardless type where the awn is lacking.



Common name: Slender wheatgrass
 Scientific name: *Elymus trachycaulus*
 Family: Poaceae

Notes: Slender wheatgrass is a relatively short-lived (3 to 5 years) perennial, cool-season C3 type, bunchgrass native to Western North America. Plants are perennial, occasionally producing short rhizomes. Culms are erect or decumbent at the base, reaching a height of 0.5 to 1.0 m (20 to 40 in) tall. Stems are noted as having a reddish to purplish tinge at the base. The leaves are flat, usually 2 to 8 mm (0.08 to 0.31 in) wide, stiffly ascending or somewhat lax. Sheaths are commonly glabrous or somewhat scabrous with auricles short or lacking. The inflorescence is a long, spicate raceme ranging from 5 to as much as 25 cm (2 to 10 in) long.