# **OLEACEAE** -- Olive Family

# 

# Scientific Name:

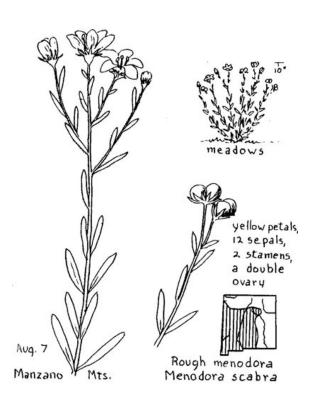
Menodora scabra

### Size:

10 - 30 cm

### **Description:**

Erect perennial herb, somewhat woody at the base, stems few to many, branched above. Herbage slightly rough to the touch. Leaves opposite near the base, alternate above, mostly sessile, oblong to oblanceolate, 1 - 3 cm long, 2 - 5 mm wide. Flowers perfect, in small groups near branch ends. Calyx 6 - 7 mm long, bell-shaped, with 8 - 11 linear lobes. Corolla tubular, with 5 to 6 lobes 5 - 9 mm long. Stamens 2, protruding. Fruit a membranous 2-lobed capsule 5 - 7 mm high, 10 - 14 mm long, with 4 seeds in each cell. Each cell splits into 2 hemispheres at maturity.



### Common Name:

Rough menodora, frog's eyes

### Color:

Yellow

### **Notes:**

The Olive Family is composed almost exclusively of trees, shrubs or woody vines. *Menodora* is the only genus which is herbaceous. *Menodora* occurs only in western North America, southern South America and Southern Africa. This peculiar distribution was part of botanical information which helped give rise to the theory of continental drift. The round shiny fruit gives rise to the common name, frog's eyes. Rough menodora blooms from May into September between 4000 and 7500 ft.





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### Scientific Name:

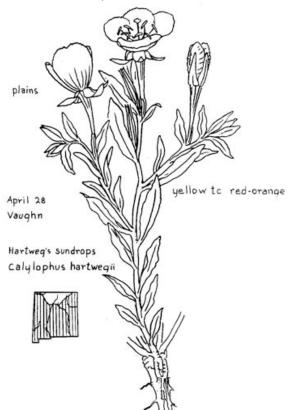
Calylophus hartwegii ssp. fendleri

### Size:

10 - 40 cm

### **Description:**

Perennial herb. Stems spreading. Upper stems and ovary with gland-tipped hairs. Leaves alternate, ascending, linear-oblong, 3 - 6 mm wide, with smooth edges, without stipules. Flowers in upper leaf axils. Hypanthium extends 20 - 50 mm beyond ovary, funnel form, 4-angled, dilating upward, 10 - 18 mm wide at the apex. Sepals 4, 10 - 15 mm long, with a crest along the midrib near the tip. Petals 4, 20 - 30 mm long, rhomboidal, turning red on drying. Stamens 8, unequal, the longer attached to the sepals. Stigma disk-like. Capsule cylindrical, narrowed at base, often curved.



### Common Name:

Hartweg's sundrops

### Color:

Yellow (red in age)

### Notes:

There are several species of sundrops in New Mexico. The Hartweg species has the longest floral tube at 2 - 5 cm. Their bright yellow 4-petaled flowers turn reddish after a day of blooming. The genus name *Calylophus* from Greek means "crested calyx". This is in reference to the modified leaves (sepals) right below the petals, which have a "keel" near the tip. Hartweg's sundrops bloom from June through August between 5000 and 7500 ft.



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# Scientific Name:

Chamerion angustifolium

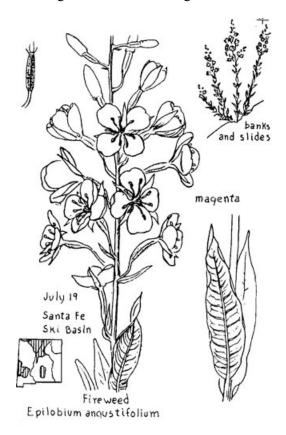
### Size:

50 - 200 cm

### Description:

Synonym: Epilobium angustifolium

Stout, erect, perennial herb. Stems simple or branched, glabrous or with short hairs above. Leaves alternate, lanceolate, 5-20 cm long, 5-35 mm wide, more or less sessile, glabrous or with hairs on bottom of mid-vein, smoothedged, often with whitish side veins below. Flowers perfect, in loose clusters at stem ends. Sepals 4, lanceolate, 7-16 mm long, spreading. Petals 4, obovate, 8-18 mm long, tapering to a narrow base, spreading. Stamens 8, 4-12 mm long, anthers purplish. Style 10-20 mm long, with a ring of hairs at base. Stigma 4-lobed.



### Common Name:

Fireweed

### Color:

Magenta

### **Notes:**

The genus name *Chamerion* comes from the Greek *chamae*, "lowly", and *Nerium*, the genus name of oleander. The leaves of fireweed distinctly resemble those of oleander, and before blooming, young fireweed looks like a miniature oleander. The common name fireweed comes from the fact that this plant is one of the first to repopulate burned areas. It blooms from late July into September between 7000 and 12000 ft



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# Scientific Name:

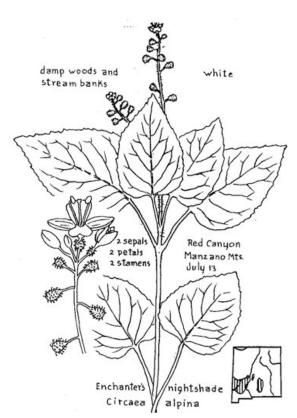
Circaea alpina ssp. pacifica

### Size:

30 - 60 cm

### **Description:**

Erect perennial herb from rhizomes, stems slender, simple or branched, glabrous, or with soft, short hairs above, these often glandular. Leaves opposite, 2 - 5 cm long, ovate, rounded at the base, pointed at the tip, edges wavy with small teeth, petioles 2 - 4 cm long. Flowers in loose clusters at stem or branch ends, each flower on a pedicel 3 - 4 mm long, subtended by tiny bracts. Sepals 2, about 1 mm long, bent backwards. Petals 2, about 1 mm long, notched at the tip. Stamens 2, alternate with petals. Capsule obovoid, about 2 mm long, with soft hooked hairs.



### Common Name:

Enchanter's nightshade

### Color:

White

### Notes:

The genus name *Circaea* comes from the Greek enchantress Circe, who when not changing men into pigs, also dabbled in magical herbs, one of which was Enchanter's nightshade. The tiny flowers are quite remarkable with 2 sepals, and at right angles, 2 notched petals, and two stamens. The club-shaped fruit with hooked hairs is also quite unusual. This plant is unusual in the Manzanos. It blooms from July into September between 6000 and 9000 ft.





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# Scientific Name:

Epilobium brachycarpum

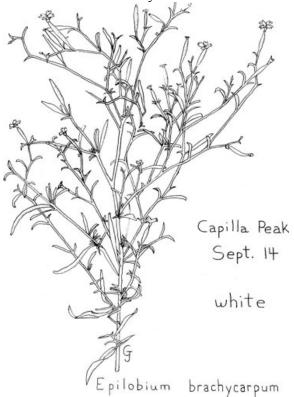
### Size:

50 - 100 cm

### **Description:**

Synonym: Epilobium paniculatum.

Erect annual herb from taproot, stems much branched, mostly glabrous to slightly glandular, with outer layers often peeling off near base. Leaves mostly alternate, linear to linear-lanceolate or elliptical, 1 - 5 cm long, 1 - 8 mm wide, edges smooth, remotely toothed, or with tiny points, often with bundles of small secondary leaves in the axils. Flowers scattered on thin stalks 5 - 15 mm long, floral tube 1 - 8 mm long, sepals 4, 1 - 4 mm long. Petals 4, deeply notched, 3 - 8 mm long. Stamens 8. Stigma with 4 short lobes. Fruit a capsule 1 - 3 cm long, 1 - 2 mm in diameter, tapered at both ends. Seeds with an early deciduous tuft of hair.



# Common Name:

Autumn willowherb

### Color:

White to pink

### Notes:

Seeds of plants in the genus *Epilobium* are tipped with a tuft of cottony hairs which help the wind carry them. *Epilobium* is sometimes called cottonweed. The outer layers of the lower stems often peel off in this species. It also commonly displays small bundles of secondary leaves in the leaf axils. It blooms from July into September between 6000 and 9000 ft.



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# Scientific Name:

Epilobium ciliatum

### Size:

30 - 100 cm

### **Description:**

Erect annual or perennial herb, stems glabrous or with short, soft hairs. Leaves alternate or opposite, ovate to lanceolate or elliptic-lanceolate, 3 - 7 cm long, with small pointed teeth. Petioles short. Flowers in leaf axils or in clusters at end of stems, perfect, mostly regular. Sepals 4, 2 mm long, deciduous. Petals 4, obovate to obcordate, notched at the tip, 2 - 6 mm long. Stamens 8, usually alternating in length. Hypanthium extending beyond ovary. Ovary 4-celled, stigma 4- lobed. Capsule linear or broadest in the middle narrowing at both ends, 4 - 6 cm long, sometimes tinged with red.



### Common Name:

Willowweed, willow herb

### Color:

White to pink

### Notes:

The genus name *Epilobium* from Greek means "on a capsule". The flowers of willowweed are very small and sit on the end of a very long floral tube which becomes the seed pod. willowweed is found in moist ground and along streams. It blooms from June through August between 5000 and 10000 ft.





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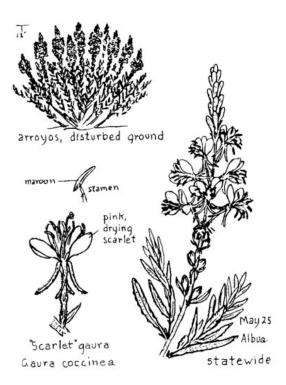
# Scientific Name: Gaura coccinea

# Size:

20 - 40 cm

### **Description:**

Ascending perennial herb, stems glabrous or with hairs lying flat or with erect hairs. Leaves alternate, mostly sessile, smooth-edged to lobed, glabrous or with hairs lying flat. Lower leaves lanceolate to oblong, 1 - 6 cm long, edges smooth to somewhat wavy. Upper leaves oblong-lanceolate to linear. Flower stalk with older flowers below. Flowers highly irregular. Floral bracts linear to lanceolate, 3 - 6 mm long, persistent. Hypanthium 5 - 8 mm long, the outside with short hairs lying flat, the inside with short, erect hairs. Sepals 4, linear-oblong, bent backwards after flower opens. Petals 4, 3 -6 mm long, broadly elliptic, tapering to a narrow neck. Stamens 8. Stigma 4 - lobed. Fruit 5 - 10 mm long, sessile, 4-angled.



### Common Name:

Scarlet gaura

### Color:

White to pink (scarlet in age)

### Notes:

The flowers of scarlet gaura are white when they open in the evening, but turn pink by midmorning the next day, then drying and turning scarlet. The species name *coccinea* is Latin for deep red. The white flowers at night attract the chief pollinators, moths. Scarlet gaura blooms from late May through August between 3500 and 7500 ft.





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# Scientific Name:

Gaura mollis

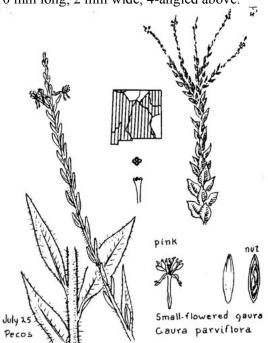
### Size:

100 - 200 cm

### **Description:**

Synonym: Gaura parviflora.

Erect annual or biennial herb, stems with long, soft hairs and glandular hairs. Leaves alternate, 3 - 15 cm long, with long, soft hairs. Basal leaves oblanceolate, with somewhat wavy edges, narrowing into a petiole with short, flat edges. Upper leaves lanceolate, growing smaller above, sessile, with smooth edges or a few small teeth. Flowers highly irregular. Floral bracts linear-lanceolate, 2 - 5 mm long, falling early. Flower clusters often bent down at the tip. Hypanthium glabrous to lightly hairy on the outside, lightly hairy within. Sepals 4, 2 - 3 mm long, bent backwards after the flower opens, glabrous to lightly hairy. Petals 4, 2 mm long, spatulate with a strongly narrowed base. Stamens 8. Stigma 4-lobed. Fruit sessile, 6 -10 mm long, 2 mm wide, 4-angled above.



### Common Name:

Small-flowered gaura

### Color:

Pink

### Notes:

The flowers of this gaura are quite small, but the plant is fairly large. The usually simple stalk splits into several wavy flowering stalks that resemble willow branches, giving rise to another common name, willow gaura. It is also called lizard tail gaura, and, because of its hairiness, velvety gaura. It blooms from May through July between 4000 and 7500 ft.





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### Scientific Name:

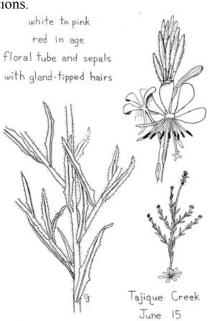
Gaura suffulta ssp. nealleyi

### Size:

20 - 60 cm

### Description:

Erect annual herb from a stout taproot, stems branched from the base, with scattered long, soft hairs particularly below. Leaves with some long hairs along veins and margins. leaves lyrate, 4 - 9 cm long, 5 - 15 mm wide. Stem leaves narrowly lanceolate to linear 2-7cm long, 1 - 6 mm wide with mildly wavytoothed margins. Flowers highly irregular. Floral bracts lanceolate to ovate 2.5 - 3.5 mm long, 1 – 2.5 mm wide. Sepals 11 – 21 mm long, 2-3 mm wide. Floral tube 10-20 mmlong. Petals 4, 10 - 15 mm long, 5 - 8 mm wide, tapering to a narrow base. Stamens 8, filaments 8 - 13 mm long. Style 1, 22 - 36 mm long. Stigma 4-lobed. Fruit 4 – 8 mm long, on a short, slender stalk, 4-angled, angles with thin projections.



Nealley's Gaura Gaura suffulta subsp. nealleyi

### Common Name:

Nealley's Gaura

### Color:

White to pink, red in age

### Notes:

The genus name *Gaura* comes from the Greek *gauros* meaning "superb". The flowers of Nealley's gaura are ephemeral, opening in the evening and withering in the morning of the next day, but they are certainly "superb" during their brief time open. This is the largest flowered gaura in the Manzanos and is definitely uncommon. Other common names applied to gaura are butterfly weed, beeblossom, and kisses. Nealley's gaura blooms from May into July between 4000 and 7000 ft.





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# Scientific Name:

Oenothera albicaulis

### Size:

30 - 45 cm

### **Description:**

Annual herb, stems simple or branched, grayish with short, fine hairs, also with scattered longer, stiff hairs. Basal leaves spatulate to oblanceolate or obovate, up to 6 cm long, with smooth edges or lobed. Upper leaves alternate, lanceolate to narrowly oblanceolate, pinnately divided into narrow evenly spaced segments. Flowers occur singly in leaf axils. Hypanthium 15 - 35 mm long, extending beyond the ovary. Sepals 4, 15 - 25 mm long, bent backwards after the flower opens, often with the tips sticking together. Petals 4, 15 - 25 mm long and wide. Stamens 8, stigma with 4 linear lobes. Capsule 20 - 40 mm long, cylindrical, sessile.



### Common Name:

Prairie evening primrose

### Color:

White (pink with age)

### Notes:

The species name *albicaulis* translates from Latin to "white stem". This primrose is also called palestem evening primrose. The hairiness of the stem gives it a pale cast. Its leaves are divided into very narrow, parallel segments somewhat like widely separated teeth in a comb. It blooms from May through June between 4000 and 7500 ft.

**New Mexico Native** 



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# Scientific Name:

Oenothera caespitosa

### Size:

5 - 10 cm

### Description:

Perennial herb, growing in tufts, without stems. Herbage grayish-white with fine, short hairs. Leaves oblanceolate, with blades 3 - 10 cm long, edges smooth to wavy-toothed, petioles with short, flattened margins. Flowers fragrant, opening in the evening. Hypanthium 5 - 8 cm long, extending beyond the ovary. Sepals 4, 25 - 35 mm long, bent backwards after the flower opens, tips sticking together. Petals 4, obcordate, 25 - 40 mm long. Stamens 8. Stigma with 4 linear lobes. Capsule ovoid, sessile 20 - 30 mm long.

### Common Name:

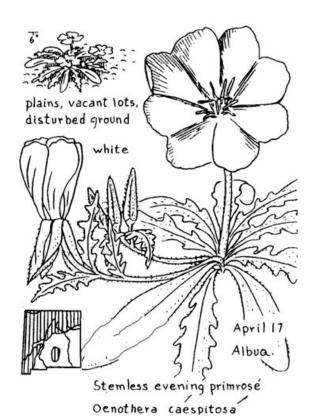
Stemless evening primrose

### Color:

White (pink with age)

### Notes:

The flower of the stemless evening primrose opens in the evening, stays open all night and then, during the warmth of the day, turns pinkish and closes. The blossoms are quite fragrant. This combination of night blooming and fragrance attracts moths. The flowers also have a very long floral tube so that only large moths can reach the nectar, producing an interdependence between the moth and the plant. They bloom from mid-May into July between 4000 and 7000 ft.





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# Scientific Name:

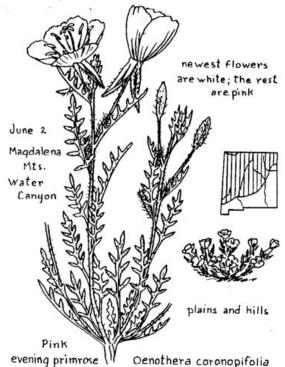
Oenothera coronopifolia

### Size:

5 - 25 cm

### **Description:**

Erect perennial herb, stems sometimes branched, with short, fine hairs lying flat and a few stiff hairs. Leaves alternate. Lower leaves oblong-lanceolate to oblanceolate, 15 - 25 mm long, wavy-toothed, falling early. Upper leaves oblong-lanceolate, with a deep and regular wavy-toothed margin, the lobes narrow. Flowers in upper leaf axils. Hypanthium 10 -30 mm long, extending beyond the ovary, with fine, short hair on the exterior and long hairs in the throat. Sepals 4, 8 - 15 mm long, bent backwards after the flower opens. Petals 4, 7 -15 mm long. Stamens 8. Stigma with 4 linear lobes. Capsule 10 - 20 mm long, widest near the middle, with both ends narrower.



### Common Name:

Pink evening primrose

### Color:

White (pink with age)

### Notes:

The pink evening primrose is a very common part of the summer flora of the Manzanos. It is also called cutleaf evening primrose. As with other primroses, the flowers open in the evening. The genus *Oenothera* has been a great contributor to the theory of evolution. In 1900, the Dutch botanist Hugo DeVries used species of *Oenothera* to establish mutation as a force in evolution. Pink evening primrose blooms from mid-June into August between 5000 and 8000 ft.





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# Scientific Name:

*Oenothera elata* ssp. hookeri

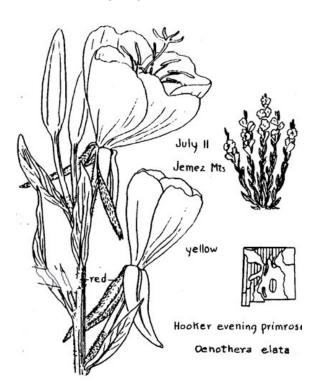
### Size:

50 - 100 cm

### **Description:**

Synonym: Oenothera hookeri.

Erect biennial herb, stems reddish, rough with small bumps, with stiff hairs lying flat and coarse, erect hairs. Leaves alternate. Lower leaves oblanceolate to spatulate, blades 5 - 20 cm long, twice as long as the petioles. Upper leaves with petioles, lanceolate, with wavy edges and small teeth. Flowers grouped near top of stem. Hypanthium 3.5 - 4 cm long with short hairs on the inside. Sepals 4, bent backwards after flower opens, 20 - 25 mm long, reddish, with long, erect hairs and short gland-tipped hairs. Petals 4, broadly obovate. Stamens 8. Stigma with 4 linear lobes. Capsule 20 - 50 mm long, angled, with coarse hairs.



### Common Name:

Hooker evening primrose

### Color:

Yellow (reddish with age)

### Notes:

As other evening primroses, flowers of the Hooker open late in the day and fade by the middle of the next day. Their bright yellow petals and reddish sepals are quite striking. They are common in canyon bottoms and along streams. The species name *Hookeri* honors the English botanist Joseph Dalton Hooker (1817 - 1911). Hooker primroses bloom from mid-June into September between 6000 and 9000 ft.





# 

# Scientific Name: Calypso bulbosa

# Size:

5 - 15 cm

### **Description:**

Erect perennial herb with a single leaf from the root crown, blade elliptic to ovate, 3 - 6 cm long, about as long as petiole. Flowering stalk single, leafless. Flower usually solitary. Sepals 3, petals 3. Sepals and 2 petals are similar, narrowly lanceolate, erect, 12 - 23 mm long. Third petal long, hollow, slipper-shaped, with an orifice near the sepals. Upper surface of third petal with yellow hairs. Fertile stamen 1, fused with the 3 stigmas forming a structure called the column which is an inverted round flap partially closing the orifice of the third petal.

### Common Name:

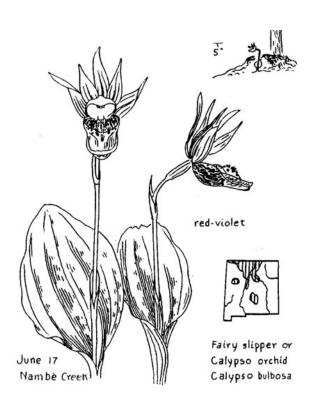
Fairy slipper

### Color:

Rose-pink and white

### **Notes:**

The fairy slipper orchid is certainly one of the most beautiful and remarkable flowers in the Manzanos. Orchids have an extremely unusual reproductive process in which typical floral parts are modified, reduced, or fused into bizarre structures, all for the exploitation of their relationship with insects. The result is the intricate, colorful, and fascinating flower typified by the fairy slipper. It blooms from late April into June between 7000 and 10000 ft.





# 

### Scientific Name:

Corallorhiza maculata

### Size:

20 - 55 cm

### **Description:**

Erect perennial saprophytic herb without chlorophyll, stems yellowish to reddish-brown, wrapped by several papery bracts. Leaves absent. Flowers 10 - 30, perfect, on slender stalks 1 - 2 mm long, loosely clustered on upper half of stem. Sepals 3, linear to oblanceolate, 6 - 8 mm long, 3 - 5 mm wide. Two petals erect, alternating with, but slightly shorter than the sepals, with a few dark spots. Third petal with wrinkly edges, bent down, obovate to almost round, 5 - 8 mm long, with 2 lateral lobes about 1 mm long. Fertile stamen 1, fused with the 3 stigmas forming a structure called the column, 4 - 5 mm long, thick, stout, curved above third petal.

# maroon and white Spotted coralvoot Orchid Corallorrhiza maculata Sandia Mts

### Common Name:

Spotted coralroot orchid

### Color:

White with dark spots

### Notes:

The genus name *Corallorhiza* means coral root. The rootstock of the coralroot orchid is warty, lumpy, noduled, resembling ocean coral. They have no fibrous roots of the kind traditionally associated with plant root systems. Coral root orchids are fairly common in the Manzanos. Spotted coralroot orchids bloom from late May into August between 7000 and 10000 ft.





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### Scientific Name:

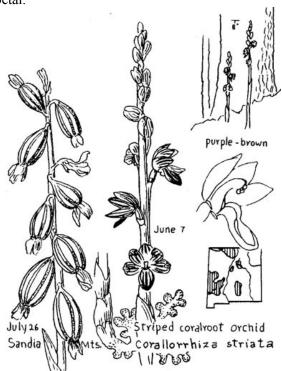
Corallorhiza striata var. vreelandii

### Size:

15 - 40 cm

### **Description:**

Erect perennial saprophytic herb without chlorophyll, stems yellowish to reddish-brown, wrapped by several papery bracts. Leaves absent. Flowers 7 - 25, perfect, on stalks 1 - 3 mm long, clustered near stem end. Sepals 3, oblong-lanceolate, 10 - 15 mm long, 1 - 4 mm wide, with 3 - 5 ruddy stripes. Two petals, similar to but shorter and wider than the sepals, alternate with the sepals. Third petal 8 - 12 mm long, elliptical, concave, with thick upturned margins, strongly ruddy striped. Fertile stamen 1, fused with the 3 stigmas forming a structure called the column, 4 - 7 mm long curving upward and outward from the base of the third petal.



### Common Name:

Striped coralroot orchid

### Color:

Pinkish-yellow to whitish

### Notes:

Coral root orchids do not contain chlorophyll, and cannot produce their own food. Their roots are buried in rotting forest litter, from which, in combination with a specific fungus associated with them they obtain necessary nutrients. The genus *Corallorhiza* is native to North and Central America. New Mexico has 4 species. Striped coralroots bloom from late May into August between 6500 and 9500 ft.





# Scientific Name:

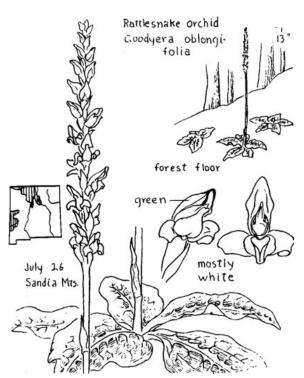
Goodyera oblongifolia

### Size:

20 - 35 cm

### **Description:**

Erect perennial herb, stems leafless, densely glandular-hairy, intermittently wrapped with papery bracts. Leaves in a basal rosette, ovate-to elliptic-lanceolate, 3 - 8 cm long, 2 - 3 cm wide, with broad flat-edged petioles. Leaf midrib white. Leaf surface usually with a white, net-like pattern. Flowers small, perfect, sessile, with a single subtending bract, clustered at stem end. Sepals 3, 2 laterals curled backwards, the third overlying 2 fused petals forming a hood. Third petal sack-shaped, swollen at base, under the hood, surrounded by lateral sepals. Fertile stamen 1, fused with the 3 stigmas forming a structure called the column, protruding above the third petal.



### Common Name:

Rattlesnake orchid

### Color:

White

### Notes:

Members of the Orchid family have some of the most beautiful and unusual flowers in the plant world. The family is also one of the largest families containing an estimated 15,000 species. New Mexico has 13 genera and 28 species. The upper leaf surface has a mottled appearance resembling snakeskin, giving rise to the name rattlesnake orchid. They bloom from July through August between 8000 and 9500 ft.





# **OROBANCHACEAE** -- Broomrape Family

# 

### Scientific Name:

Conopholis alpina var. mexicana

### Size:

15 - 20 cm

### **Description:**

Synonym: Conopholis mexicana.

Erect, stout, parasitic herb without chlorophyll, stems several, thick, glabrous, mostly underground. Leaves alternate, rigid, scalelike, sessile, triangular, 5 - 15 mm long, 3 - 10 mm wide, pressed against stem, overlapping. Flowers perfect, on short, stout stalks, each subtended by a leaf-like lanceolate bract, becoming reduced and sessile above, in a dense many-flowered cluster at stem end. Calyx urnshaped, 2 - 7 mm long, asymmetrical, with irregular brownish papery lobes, split on lower side. Corolla curved, tubular, 10 - 18 mm long, 2-lipped, the upper with 2 lobes curled inward, the lower with 3 lobes curled inward.

### Common Name:

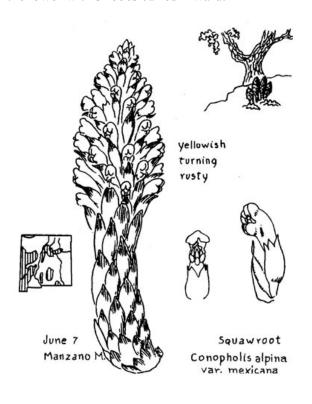
Squawroot

### Color:

Pale yellow

### **Notes:**

The genus name *Conopholis* comes from the Greek *conos*, "cone" and *pholis*, "scale", in reference to the triangular, scalelike leaves of the plant. Squawroot is parasitic on oaks and possibly pines. It is often seen pushing up dense mats of leaves or pine needles on the forest floor or under trees. The pale yellow plants turn rusty and eventually black late in the season. They bloom from early May through June between 5000 and 8000 ft.





# **OROBANCHACEAE** -- Broomrape Family

# 

# Scientific Name:

Orobanche fasciculata

### Size:

5 - 15 cm

### **Description:**

Parasitic, erect, fleshy perennial without chlorophyll, stems mostly underground, with little but flowers and stalks showing, with gland-tipped hairs. Leaves alternate, scalelike. Flowers perfect, on stalks 3 - 10 cm long, clustered at stem ends. Calyx bell-shaped, 7 - 10 mm long, with 4 or 5 triangular lobes 3 - 5 mm long. Corolla tubular, 15 - 30 mm long, 2-lipped, the upper with 2 rounded lobes, the lower with 3 rounded lobes. Stamens 4 in 2 unequal pairs, not protruding, anthers 1.5 - 2 mm long. Pistil 1, style 1, stigma a flat disk. Fruit a many-seeded capsule.

### Common Name:

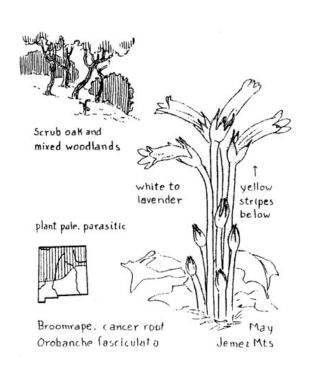
Clustered cancer-root, broomrape

### Color:

Pinkish purple

### Notes:

Clustered cancer-root commonly parasitizes sagebrushes, plants of the genus *Artemisia*, particularly the species *frigida* (see *Artemisia frigida*). The species name *fasciculata* is Latin for "clustered" or "bundled", in reference to the bundles of flower stalks originating at the stem end. This plant is an example of a parasite which has a delicate and very attractive blossom. It is unusual in the Manzanos. It blooms from mid-May to August between 4000 and 8500 ft.





# **OROBANCHACEAE** -- Broomrape Family

# 

### Scientific Name:

Orobanche ludoviciana ssp. multiflora

### Size:

10 - 30 cm

### Description:

Parasitic, erect, stout perennial, stem thick, solitary, with sticky hairs above ground, glabrous below. Leaves alternate, sessile, scalelike, lanceolate, 5 - 12 mm long, pressed against stem. Flowers perfect in a dense cluster 2 - 4.5 cm in diameter on upper third to half of stem. Upper flowers sessile, lower on short stalks. Calyx subtended by 2 narrow bracts, bell-shaped 8 - 17 mm long, sticky-hairy with 4 or 5 nearly equal erect lobes. Corolla tubular, 15 - 30 mm long, 2-lipped, the upper erect, with 2 rounded lobes, the lower with 3 spreading lobes. Stamens 4, in 2 unequal pairs, anther glabrous to woolly. Pistil 1, style 1, stigma a flat disk. Fruit a many-seeded capsule.

### Common Name:

Desert cancer-root

### Color:

Brownish purple

### Notes:

The genus name Orobanche comes from the Greek orobos, "vetch" and anchein, "to strangle", in reference to the parasitic nature of Desert cancer-root parasitizes the plants. members of the composite family (Asteraceae). particularly Artemisia, Heterotheca, Hymenopappus. Like other members of the genus, this plant is uncommon. The dull brownish coloration of the plants makes them appear dead at first glance, but their flowers have a surprising beauty on close examination. They bloom from May into September between 3500 and 7500 ft



### **New Mexico Native**



# **OXALIDACEAE -- Woodsorrel Family**

# 

### Scientific Name:

Oxalis corniculata var. wrightii

### Size:

5 - 15 cm

### **Description:**

Perennial herb, stems trailing, often rooting, with stiff, straight hairs, spreading or lying flat. Leaves alternate, on long petioles, with 3 obcordate leaflets 5 - 20 mm wide all originating at the same point at end of petiole, often folded along midrib. Flowers 1 - 5, perfect, on short stalks all originating at the tip of a long stalk from a leaf axil. Sepals 5, distinct, elliptic, less than 4 mm long. Petals 5, 4 - 8 mm long. Stamens 10, united at base. Pistil 1, styles 5. Fruit an erect, oblong pointed capsule 1 - 2 cm long, somewhat hairy. Seeds brown

### Common Name:

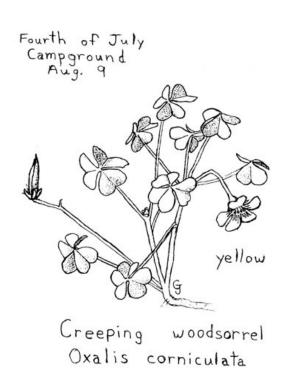
Creeping woodsorrel

### Color:

Yellow

### Notes:

The species name *corniculata* is Latin, meaning "horned". The fruiting capsules are oblong, pointed and directed upward resembling small horns. The leaves fold along the midrib under heat stress and at night. The flowers also close at night. New Mexico has 6 species of the genus *Oxalis*. *O. corniculata* is the only yellow-flowered species. It blooms from May into August between 4000 and 8000 ft.





# **OXALIDACEAE** -- Woodsorrel Family

# 

# Scientific Name:

Oxalis violacea

### Size:

10 - 25 cm

### **Description:**

Stemless perennial herb from a bulb. Herbage glabrous. Leaves basal, on petioles 6 - 12 cm long with 3 obcordate leaflets 10 - 25 mm wide, lobes rounded, the leaflets originating at the same point at the end of the petiole, often folded along midrib. Flowers 2 - 10, perfect, on short stalks originating at the tip of a leafless stalk 10 - 25 cm long from the bulb. Sepals 5, 4 - 6 mm long, each tipped with 2 confluent swellings. Petals 5, united at base. Pistil 1, styles 5. Fruit an ovoid capsule 4 - 6 mm long.

### Common Name:

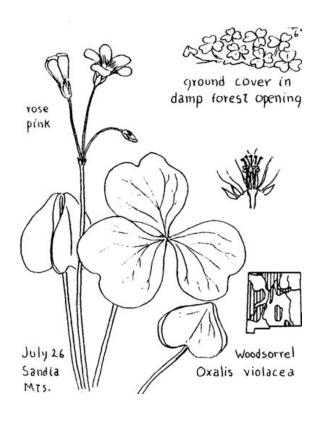
Violet woodsorrel

### Color:

Rose pink

### **Notes:**

The genus name *Oxalis* comes from the Greek *oxys*, "sour". Without flowers, the plants distinctly resemble 3-leaved clover. One quick taste of the leaves quickly differentiates them. Woodsorrel contains oxalic acid, which makes it quite bitter. The common name sorrel has a similar genesis, coming from Middle English and Old French words for sour. Violet woodsorrel blooms from June into August (occasionally again in September) between 7000 and 9000 ft.





# **PLANTAGINACEAE -- Plantain Family**

# 

# Scientific Name:

Plantago lanceolata

### Size:

10 - 40 cm

### **Description:**

Stemless perennial herb. Leaves basal from a tan, woolly root crown, parallel veined, narrow elliptic or lanceolate, 5 - 30 cm long, 1 - 4 cm wide, tapering to a point, with shaggy hairs or glabrous. Flowers minute, sessile, in dense ovoid, becoming cylindrical, clusters 1 - 8 cm long, 1 cm wide, on hairy stalks 10 - 40 cm long. Sepals 4, the 2 next to the bract fused into one with a double mid-vein. Petals 4, fused, with 4 spreading lobes about 2 mm long. Stamens 4, much protruding, with white, showy anthers.

### Common Name:

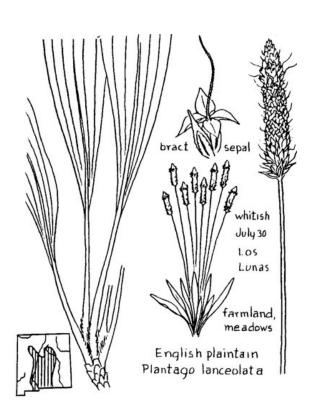
English plantain

### Color:

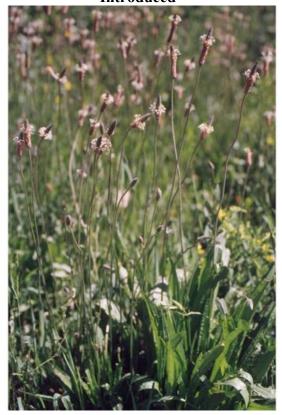
Pinkish

### **Notes:**

The tiny flowers of English plantain form a very dense, narrow, cylindrical cluster. They bloom in a narrow ring starting at the bottom of the cylinder and gradually moving upward. The only real sign of the blooming flowers is the delicate ring of white stamens. English plantain blooms from late May through September between 4000 and 6500 ft.







# **PLANTAGINACEAE** -- Plantain Family

# 

# Scientific Name:

Plantago major

### Size:

5 - 25 cm

### **Description:**

Stemless perennial herb. Leaves with petioles, basal from root crown, parallel-veined, ovate to lanceolate or broadly elliptic, 4 - 18 cm long, 3 - 10 cm wide, edges finely toothed to smooth. Flowers minute, sessile, subtended by an ovate bract, in variously dense clusters 5 - 25 cm long, 1 cm wide, stalked below from the root crown. Sepals 4, distinct, glabrous. Petals 4, fused, with 4 lobes about 1 mm long, bent backwards. Stamens 4 protruding. Fruit a capsule 2 - 4 mm long. Seeds black, wrinkled.

### Common Name:

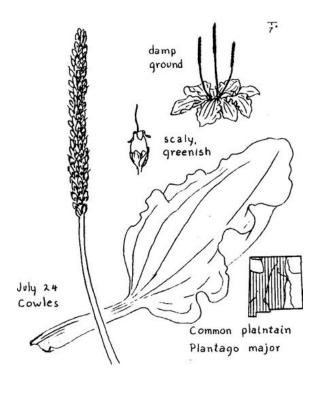
Common plantain

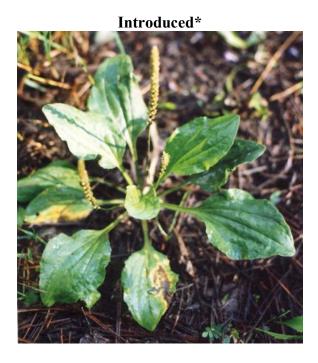
### Color:

Greenish

### Notes:

The genus name *Plantago* comes from the Latin *planta*, "sole of the foot", in reference to the fact that many species are stemless with only basal leaves which often grow close to the ground. Introduced from Europe, common plantain is part of the flora in most of the United States. The leaves are edible when young. Three ounces provide as much vitamin A as a large carrot. Common plantain is popular with herbalists for several purposes. It blooms from May through August from 4000 to 8000 ft.





# **PLANTAGINACEAE -- Plantain Family**

# 

# Scientific Name: Plantago patagonica

*Size:* 5 - 20 cm

### **Description:**

Synonym: Plantago purshii.

Stemless perennial herb. Herbage with long, woolly hairs. Leaves linear to narrowly oblanceolate, 2 - 15 cm long, 1 - 8 mm wide, pointed, usually with a hardened tip. Flowers small, sessile, each subtended by a hairy, lanceolate bract, in dense, cylindrical clusters 1 - 10 cm long, 5 - 8 mm wide on hairy stalks 5 - 15 cm long. Sepals 4, narrowly obovate, 2 - 3 mm long, hairy. Petals 4, fused, with 4 spreading ovate-lanceolate lobes about 2 mm long. Stamens 4. Fruit a capsule 3 - 3.5 mm long with 2 seeds.

# plains white Woolly plaintain Plantago patagonica syn. P. purshii

# Common Name:

Woolly plantain

### Color:

Greenish white

### **Notes:**

This woolly and graceful plantain grows in dry areas all over western North America from southern Canada to the Mexican border. It is also common in the table land of Argentina and Chile (Patagonia), hence the species name *patagonica*. It blooms from late April into August between 3500 and 7000 ft.





# 

# Scientific Name: Collomia linearis

### Size:

10 - 50 cm

### **Description:**

Erect annual herb, stems simple or branched above from leaf axils. Herbage with fine, short hairs, becoming longer and glandular above. Leaves alternate, sessile, lanceolate, 1 - 6 cm long, 3 - 15 mm wide. Flowers perfect, sessile, numerous in dense heads at ends of stems and branches, subtended by lanceolate bracts. Calyx tubular, papery, 4 - 7 mm long, with 5 nearly equal narrowly triangular teeth. Corolla narrowly funnel-shaped, 8 - 15 mm long, 5-lobed. Stamens 5, unequally attached to corolla. Pistil 1, style 1, stigma 3-lobed. Fruit an ellipsoidal capsule. Seeds mucilaginous when wet.

### Common Name:

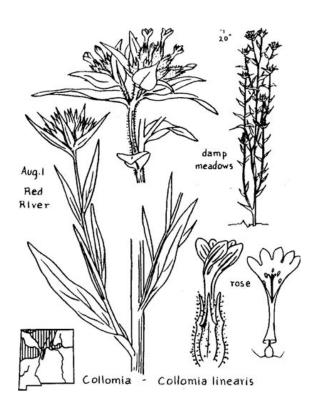
Collomia, tiny trumpets

### Color:

Pink to purplish or white

### Notes:

The genus name *Collomia* comes from the Greek *kolla*, "glue". This is in reference to the seeds of the plant, which become gooey and slimy when wet. There are about 13 species in the genus, all from North and South America, predominately from the Western United States. *C. linearis* is the only New Mexico representative. It blooms from June through August between 7000 and 9500 ft.





**New Mexico Native** 

# 

### Scientific Name:

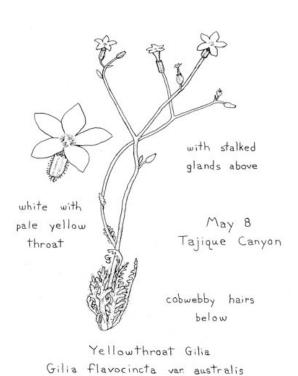
Gilia flavocincta var. australis

### Size:

10 - 30 cm

### **Description:**

Erect to ascending annual herb, stems sparingly branched, cobwebby-hairy at the base, becoming glandular above. Basal leaves 1 - 6 cm long, pinnatifid or twice-pinnatifid with linear lobes, sparsely cobwebby-hairy. Stem leaves alternate, much reduced. Flowers in loose clusters near stem ends. Calyx tubular, 5-lobed, 3 - 5 mm long, with 5 green ribs and papery areas between. Calyx lobes long, pointed. Corolla funnel-shaped, 5-lobed, about as long as wide, with a yellowish throat. Stamens 5, about equal. Pistil 1, style 1, stigma 3-lobed



### Common Name:

Yellowthroat gilia

### Color:

White, pink or bluish

### **Notes:**

The species name *flavocincta* comes from the Latin *flavus*, "yellow" and *cinctus*, "enclosed", in reference to the yellowish throat in the flowers. Plants of the genus *Gilia* with dissected leaves and cobwebby hairs at the base are extremely difficult to differentiate. Yellowthroat gilia blooms in late April and May between 4000 and 7000 ft.





# 

# **Scientific Name:** Gilia rigidula

### Size:

8 - 25 cm

### **Description:**

Perennial herb, stems much branched from the woody base. Herbage with short glandular hairs. Leaves alternate, 6 - 20 mm long, unequally pinnatifid into 2 - 7 needle-like to linear oblong segments. Flowers solitary or loosely clustered. Calyx tubular, 5 - 7 mm long, with 5 lobes shorter than the tube, the tube with 5 green, glandular ribs, with papery areas between. Corolla broadly funnel-shaped, blue with a yellow center, with 5 rounded lobes 3 - 5 mm long, equal to or longer than the tube. Stamens 5, protruding. Pistil 1, style 1, stigma 3-lobed. Fruit a capsule 3 - 5 mm long.

### Common Name:

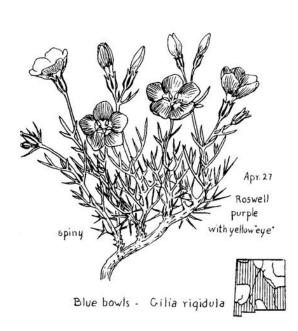
Blue bowls

### Color:

Blue and yellow

### **Notes:**

The species name *rigidula* means somewhat rigid. The leaves are narrow and stout. The plants are tough and drought resistant. The genus *Gilia* is named for a Spanish botanist, Felipe Luis Gil (1756-1821). Blue bowls bloom from late April to July mostly in the foothills of the Manzanos between 4500 and 6500 ft.





# 

### Scientific Name:

Ipomopsis aggregata ssp. formosissima

### Size:

20 - 100 cm

### **Description:**

Erect biennial herb with an unpleasant smell, stems 1 to several, with crinkly white hairs or stalked glands. Basal leaves in a rosette. Leaves alternate, 2 - 8 cm long, pinnatifid with narrow segments 1 - 12 mm long. Flowers perfect, on short stalks, in loose clusters with reduced leaves along upper stem. tubular, hairy, with 5 long narrow lobes. Corolla trumpet-shaped, with a narrow tube 15 -40 mm long, with 5 spreading lobes 5 - 12 mm Stamens 5, about equal, sometimes long. protruding. Pistil 1, style 1, long and slender, stigma 3-lobed. Fruit a capsule 4 - 8 mm long. Seeds mucilaginous when wet.

# forest openings red Skyrocket. Scarlet gilia Ipomopsis aggregata Skyrocket. Scarlet gilia

### Common Name:

Skyrocket, scarlet gilia

### Color:

Red

### Notes:

Skyrocket is quite common, not just in the Manzanos, but in the mountains in most of New Mexico. As is common with plants having red, narrowly tubular flowers, skyrocket is pollinated by hummingbirds. *I. aggregata* is a complicated cluster of subspecies with at least 10 types. New Mexico has 3. Skyrocket blooms from June through September between 5000 and 9000 ft.





# 

# Scientific Name:

Ipomopsis laxiflora

### Size:

10 - 40 cm

### **Description:**

Erect annual herb, stems simple to much branched, with glandular hairs or glabrous. Leaves alternate, 1 - 4 cm long, pinnatifid, the 3 - 5 lobes threadlike or linear 5 - 15 mm long. Flowers on stalks 1 - 2 cm long, solitary or in small groups. Calyx 5 - 7 mm long, tubular, with 5 narrow, pointed teeth. Calyx with 5 green ribs, membranous between. Corolla trumpet-shaped 10 - 20 mm long, with 5 spreading lobes 4 - 6 mm long. Stamens 5, unequal, sometimes protruding. Pistil 1, style 1, stigma 3-lobed. Fruit a capsule 7 - 10 mm long.

### Common Name:

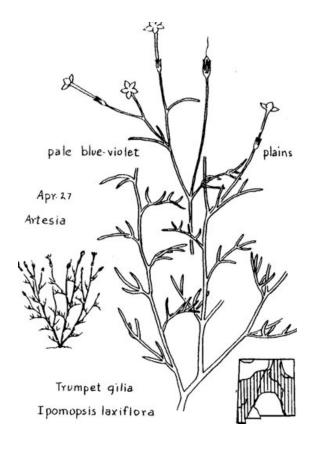
Trumpet gilia, iron skyrocket

### Color:

Pale blue-violet

### Notes:

The species name *laxiflora* translates from Latin as "loose flowered" in reference to the fact that the flowers are often solitary and widely scattered over the branches. *I. laxiflora* is predominantly a plains species, but appears in the foothills approaching the Manzanos. It blooms from May into August between 5500 and 7000 ft.







# 

### Scientific Name:

Ipomopsis longiflora ssp. neomexicana

### Size:

10 - 60 cm

### **Description:**

Erect annual or biennial herb, stems much Herbage glabrous or with a few branched. cobwebby hairs. Leaves alternate, 2 - 5 cm long, pinnatifid with 1 - 3 pairs of widely separated threadlike or linear segments 5 - 20 mm long. Flowers on stalks of different lengths, 1 - 4 cm, in loose clusters near branch Calyx 5 - 8 mm long, the 5 sharp lanceolate lobes equal to or shorter than the tube, glandular to glabrous. Corolla trumpetshaped 25 - 40 mm long, with a narrow tube and 5 spreading lobes 6 - 12 mm long. Stamens 5, unequal, sometimes protruding. Pistil 1, style 1, stigma 3-lobed. Fruit a capsule 7 - 14 mm long.

# pale blue roadsides, dry meadows Trumpet gilia Canjilon Aug. 16 I pomopsis longiflora

### Common Name:

Trumpet gilia, flax-flowered ipomopsis

### Color:

Lavender to pale blue

### Notes:

With one sighting of the flowers of trumpet gilia, anyone would agree that the species name *longiflora* is extremely appropriate. The pale and extremely long floral tube is a sign that the plants are pollinated by night flying moths. Despite the wispy and delicate appearance of the plants, they are hardy and drought resistant. Occurring in the more arid plains and foothills, trumpet gilia blooms from June into September between 3500 and 6500 ft.





# 

# Scientific Name: Ipomopsis multiflora

ipomopsis muitijioi

### Size:

15 - 40 cm

### **Description:**

Erect to spreading perennial herb, stems somewhat woody at base, with short gland-tipped hairs and longer whitish hairs. Leaves alternate, divided into narrow pinnate segments or some leaves linear, undivided. Flowers in a dense head-like cluster carried on a short branch. Calyx tubular, 4 - 5 mm long, glandular, with 5 tapered teeth tipped with a small spine. Corolla trumpet-shaped, the tube narrow, pale, 5 - 10 mm long, with 5 darker lobes, 3 - 5 mm long, marked with purple. Stamens 5, blue, noticeably protruding, bent downward. Pistil 1, style 1, stigma 3-lobed.

### Common Name:

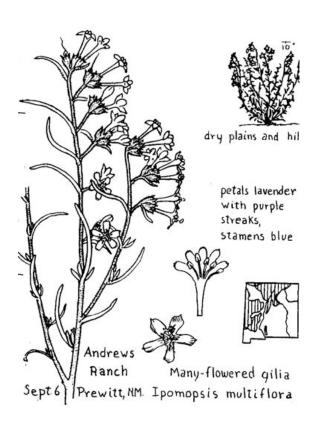
Many-flowered gilia

### Color:

Purplish to blue

### **Notes:**

The species name *multiflora*, not surprisingly, means many-flowered. The flowers of this plant are in closely packed clusters unlike the loose arrangement of some of the other members of *Ipomopsis* (see *I. laxiflora*, *I. longiflora*). The lobes of the flower are lavender with darker purple streaks or spots. Its blue stamens and white style extend well out of the floral tube. Many-flowered gilia blooms in August and September between 5000 and 6500 ft.





# 

# Scientific Name:

Ipomopsis pumila

### Size:

5 - 20 cm

### **Description:**

Short annual herb, stems much branched, the branches often exceeding main stem, with white woolly hairs. Leaves alternate, 1 - 3 cm long with a narrow central axis, with 3 - 7 narrow pinnate lobes up to 10 mm long, lightly hairy to glabrous. Flowers clustered in heads at branch ends, with leaf-like bracts. Calyx tubular, 3 - 5 mm long, with 5 bristle-tipped teeth. Corolla trumpet-shaped, the tube 7 - 9 mm long with 5 spreading lobes 2 - 3.5 mm long. Stamens 5, blue, 1 - 2 mm long, between corolla lobes, somewhat protruding. Pistil 1, style 1, protruding, stigma 3-lobed.

### Common Name:

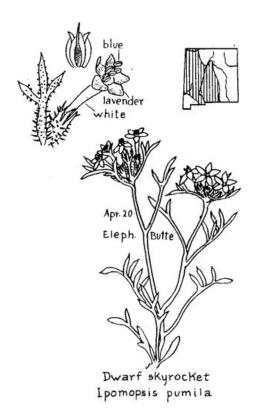
Dwarf skyrocket, dwarf gilia

### Color:

Pale blue to lavender

### Notes:

The species name *pumila* means "dwarf". The plants certainly fit that description, rarely exceeding 10 cm in height. With their narrowly segmented leaves and low growth habit, they are well suited for the arid life in the dry plains and foothills approaching the Manzanos. Dwarf skyrocket blooms from early May into July between 4000 and 6500 ft.





# 

# Scientific Name:

Phlox gracilis var. humilior

### Size:

1 - 5 cm

### Description:

Synonym: Microsteris gracilis var. humilior. Low growing annual herb, stems much branched. Plants broader than tall. Herbage lightly hairy, generally glandular above. Bottom leaves opposite, upper alternate, lanceolate to linear, 5 - 25 mm long, 2 - 7 mm wide, with smooth edges. Flowers at branch ends, in pairs (sometimes solitary) with one stalked and one almost sessile. Calyx 4 - 8 mm long, tubular with membranous areas between the 5 green ribs, 5-toothed. Corolla 5 - 15 mm long, the tube yellow or white, the 5 spreading lobes pink. Stamens 5, unequal. Pistil 1, style 1, stigma 3-lobed. Fruiting capsule generally rupturing the calyx.



### Common Name:

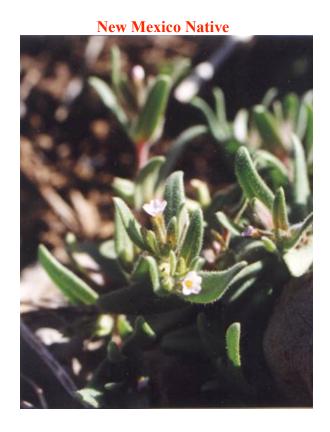
Dwarf phlox

### Color:

Pink to white

### Notes:

Although not uncommon, this tiny phlox goes generally unnoticed. One of the first plants to sprout in the spring, dwarf phlox sometimes appears before the end of February. The herbaceous cup (calyx) holding the floral tube grows with the developing seed after the flower drops and the stalk lengthens forming a bristly club-like fruiting body which breaks open releasing the seeds. Dwarf phlox blooms from mid-March into June between 5000 and 8500 ft.



# 

# Scientific Name:

Polemonium flavum

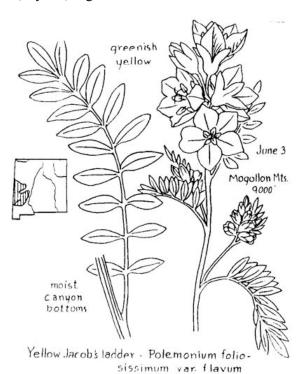
### Size:

40 - 120 cm

### **Description:**

**Synonym:** Polemonium foliosissimum var. flavum

Erect foul-smelling perennial herb, stems 1 to several, sometimes branched above, leafy throughout. Herbage thinly to densely hairy with short, straight or matted hairs, glandular above. Leaves alternate, pinnate (pinnatifid at the tip) with 11 - 25 lanceolate to elliptic or oblong leaflets 10 - 35 mm long, 3 - 10 mm wide. Flowers in round-topped clusters at branch ends. Calyx bell-shaped, 5 - 8 mm long, herbaceous, 5-lobed. Corolla tubular, bell-shaped, 10 - 16 mm long, as wide or wider than long, with 5 broad obovate lobes longer than the tube. Stamens 5, attached to corolla tube. Pistil 1, style 1, stigma 3-lobed.



### Common Name:

Leafy Jacob's ladder, skunkleaf

### Color:

White to cream

### Notes:

The opposite leaflets of the compound leaves resemble a ladder, giving rise to the common name Jacob's ladder. The plants are extremely leafy from top to bottom. The blue Jacob's ladder, *Polemonium foliosissimum* var. *foliosissimum*, common in the Sandia Mountains, is occasional in the Manzanos. Jacob's ladder blooms from late June into September between 7000 and 10000 ft.





# **POLYGALACEAE -- Milkwort Family**

# Scientific Name:

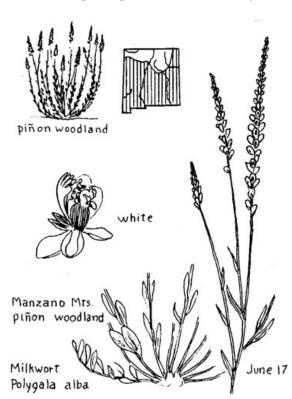
Polygala alba

### Size:

10 - 30 cm

### **Description:**

Erect perennial herb, stems clustered, sometimes branched, glabrous. Leaves alternate whorled, smooth-edged, narrowly oblanceolate below, linear above, 1 - 2 mm wide. Flowers perfect, irregular, in a dense cone-shaped cluster 3 - 8 cm tall and 4 - 8 mm in diameter at the base, on a slender stalk at the stem end. Sepals 5, the outer 3 small, the inner two (lateral) larger, petal-like. Petals 3 united at the base, the upper 2 similar, the lower one longitudinally ridged, often with a fringed or lobed crest. Stamens 8, filaments united into a tube often surrounded by the lower petal. Fruit a 2-celled elliptic capsule about 3 mm long.



### Common Name:

White milkwort

### Color:

White

### Notes:

The dense cone-shaped cluster of small flowers borne on a delicate stalk could easily seem to be some type of clover. An individual flower is quite tiny, but has an intricate and unusual architecture under a lens. It has only 3 petals, one boat-shaped and fringed. Two of the bracts which normally hold the flower have become petal-like, making it seem as if there are 5 petals. White milkwort blooms from late May through August between 5000 and 7500 ft.

**New Mexico Native** 



# **POLYGALACEAE -- Milkwort Family**

# 

# Scientific Name:

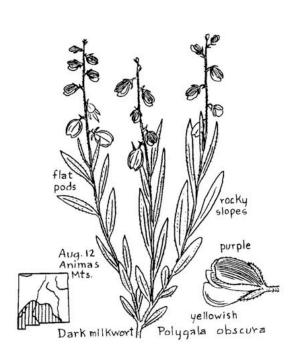
Polygala obscura

# Size:

10 - 25 cm

# **Description:**

Erect perennial herb, stems with hairs curving towards surface. Leaves alternate, without teeth or lobes, 6 - 10 mm wide, lower leaves oval to ovate, broader and shorter than the upper ones. Flowers perfect, scattered along upper stem. Sepals 5, the outer 3 small, the inner 2 (lateral) larger, petal-like. Petals 3, the upper 2 similar, the lower one with a longitudinal ridge. Stamens 8, filaments united into a tube, this enclosed in lower petal. Fruit a flattened 2-celled capsule notched at the apex, with hairs along the margins, with short hairs on the sides at maturity.



#### Common Name:

Dark milkwort

# Color:

Purple with green

#### Notes:

This milkwort is generally found in the drier and warmer southwestern part of the state, but is found occasionally in the dry plains approaching the southern end of the Manzanos. Its purple clam-like flowers and greenish heartshaped pods are distinctive. Dark milkwort blooms from July into September between 4000 and 6500 ft.





# 

# Scientific Name:

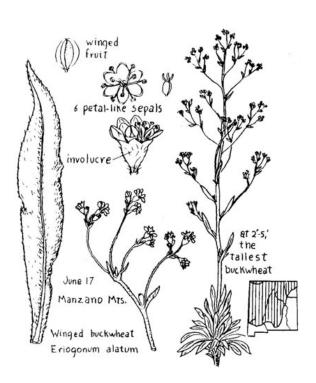
Eriogonum alatum

# Size:

50 - 150 cm

# **Description:**

Erect perennial herb, stems usually solitary, alternately branched above with long hairs lying flat. Basal leaves narrowly oblanceolate to lanceolate, 3 - 12 cm long, 3 - 15 mm wide with long hairs lying flat on upper surface, at least mid-vein hairy below, margins smooth but hairy. Stem leaves alternate, few, similar, reduced above. Flowers borne in branched clusters of several-flowered, bell-shaped to obconic, hairy, 5-lobed involucres 2 - 4.5 mm long on stalks 3 - 20 mm long subtended by bracts. Petaloid parts 6, lanceolate, united to near middle. Stamens 9. Pistil 1, styles 3. Seeds 4 - 6 mm long, glabrous, 3-angled, each angle with a long thin papery margin.



# Common Name:

Winged buckwheat

# Color:

Yellowish

#### Notes:

The species name *alatum* comes from the Latin *alatus*, "winged". The seeds are 3-angled. At the margin of each angle there is a thin, papery extension called a wing. Winged buckwheat is a tall, spindly plant. It is the tallest buckwheat in the state. The plants turn brick red in the fall and are very persistent, often standing through the winter. They bloom from late June into September between 5000 and 9000 ft.

**New Mexico Native** 



# 

# Scientific Name:

Eriogonum annuum

# Size:

30 - 100 cm

# **Description:**

Erect annual herb, stems usually solitary, simple or few-branched. Herbage with a covering of soft, tangled, woolly hairs. Basal leaves few, early deciduous, oblanceolate, 2 - 5 cm long, with short petioles. Stem leaves alternate, similar, numerous on lower stem, few or none above. Flowers borne in clusters of involucres branched in inclined to ascending pairs or triples; involucres erect, stalked or sessile, obconic 2 - 3 mm long, on one side of branch. Petaloid parts 6, united to about the middle, inner surface densely hairy, outer glabrous. Seeds 3-angled, glabrous.

#### Common Name:

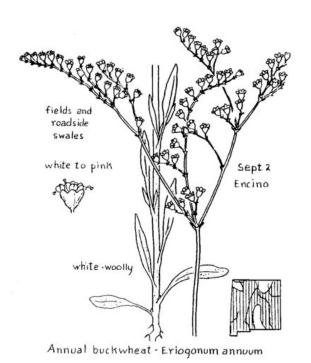
Annual buckwheat

# Color:

White to pink

#### Notes:

The genus name *Eriogonum* comes from the Greek *erion*, "wool" and *gony*, "knee". In this genus, the leaf and branch bases often have membranous appendages which wrap the stem forming a sheath, giving the impression of a joint in the stem. These "joints" are often hairy. Wild buckwheat is closely related to true buckwheat, *Fagopyrum esculentum*. The genus name *Fagopyrum* comes from the Latin *Fagus*, genus name of the beech tree, and the Greek *pyros*, "wheat". Fagopyrum seeds resemble the 3-angled beech nut. Annual buckwheat blooms from April to mid-September between 3500 and 7000 ft.





# 

# Scientific Name:

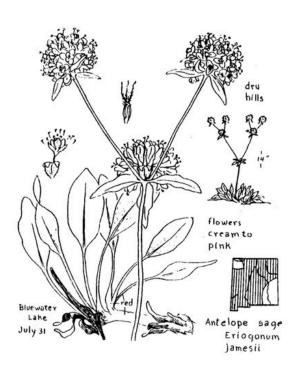
Eriogonum jamesii var. jamesii

# Size:

10 - 30 cm

# **Description:**

Perennial herbs forming mats, stems woody, branched, with tangled, woolly hairs. Flowering stems almost leafless, branching. Leaves elliptic, obovate or ovate, 1 - 9 cm long, 4 - 20 mm wide, with tangled woolly hairs, edges smooth to wavy, petioles 1 - 6 cm long. in small groups in an involucre, involucres grouped into a head-like cluster on a stalk subtended by leaf-like bracts. stalked clusters occur singly or in pairs from a single node subtended by leafy bracts. Involucres bell-shaped with tangled, woolly hairs, sessile, 3 - 14 mm high, with 5 - 8 teeth. Flowers 4 - 11 mm high, hairy, with a calyx of two series of petal-like sepals, the calyx narrowing into a stalk-like base. Petals absent. Achenes 4 - 5 mm long, 3 angled.



# Common Name:

Antelope sage

# Color:

Yellowish-white

#### Notes:

There are actually four varieties of *Eriogonum jamesii* in New Mexico. Two have creamy yellowish white flowers (var. *jamesii* and var. *undulatum*). Two have yellow flowers (var. *flavescens* and var. *wootonii*). *E. jamesii* blooms from July through September from 6000 to 9000 ft.



# 

# Scientific Name:

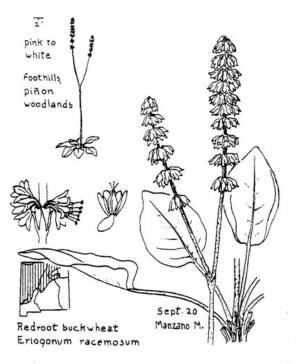
Eriogonum racemosum

# Size:

30 - 80 cm

# **Description:**

Erect, stemless, perennial herb. Leaves basal, with petioles 1 - 10 cm long, blades elliptic, oblong, oval or ovate, 1 - 10 cm long, 1 - 4 cm wide, with smooth edges, upper surface with tangled, white, woolly hairs, even more dense below. Flowers borne in sessile, woolly, several-flowered, bell-shaped or obconic, 5-toothed involucres 2 - 6 mm long scattered along the upper portions of long, leafless, woolly, typically 2 or 3 branched flowering stalks. Flowers 2 - 5 mm long, on short, curving stalks, petaloid parts 6, in 2 series, oblong or oblanceolate. Stamens 9. Pistil 1, styles 3, stigma headlike.



#### Common Name:

Redroot buckwheat

#### Color:

White to pink

#### Notes:

A typical flower has a whorl of petals supported by a whorl of usually herbaceous sepals. In the flowers of wild buckwheats, the petals and sepals are indistinguishable. It is not possible to tell if the 6 petal-like parts are all sepals, all petals or a mixture, so they are often called tepals. These, with the 9 stamens, form a very attractive blossom. The roots of this plant are quite massive and reddish in color, also containing some red pith. It blooms from July through September between 5500 and 7500 ft.



# 

# Scientific Name:

Eriogonum wrightii

# Size:

20 - 40 cm

# **Description:**

wrightii

Perennial, stems woody, leafy, with tangled woolly hairs, much branched. Leaves lanceolate to elliptic to oblanceolate, 3 - 25 mm long, 3 - 10 mm wide, with tangled woolly hairs above and below, petioles short, 1 - 6 mm long. Flowers clustered in small groups in a sessile involucre, involucres grouped into clusters along flowering stalks. Flowering stalks solitary, or with a few steep branches, with tangled, woolly hairs. Involucres cone-shaped, 2 - 4 mm long, with 5 teeth, with tangled, woolly hairs. Flowers 3 - 4 mm long, glabrous, with a calyx of 2 series of petal-like sepals. Petals absent. Achenes 2 - 3 mm long, 3 angled.

# Petals absent. Achenes 2 - 3 mm long, 3 angled. dry slopes white. turning orange leaves woolly, whitish on both sides Wright buckwheat Eriogorum

# Common Name:

Wright's buckwheat

#### Color:

White or pink (orange with age)

#### Notes:

The buckwheat family is large and diverse with 49 species in New Mexico. The flowers are generally quite small, and in rather dense clusters, making identification more difficult. The family is well suited for New Mexico's dry climate. Wright's buckwheat blooms from late July through September between 5000 and 8000 ft





# 

# Scientific Name: Polygonum aviculare

*Size:* 10 - 50 cm

# **Description:**

Reclining to ascending or erect annual herb, sometimes forming mats, stems with swollen leaf nodes. Leaves alternate, not crowded, with a hinge-like joint at the point of attachment with the stem-wrapping sheath formed by the stipules; lower leaves elliptic, 1 - 4 cm long, 2 - 10 mm wide, upper leaves linear or lanceolate, reduced. Flowers perfect, on short stalks, in groups of 1 - 5 in leaf axils. Flowers 2 - 3 mm long, with 5 petaloid segments all similar, green with white or pink margins, united at the base. Stamens 3 - 9, free. Pistil 1, styles 2 or 3, often short. Fruit a dull, brown, 3-angled seed 2 - 3 mm long.

#### Common Name:

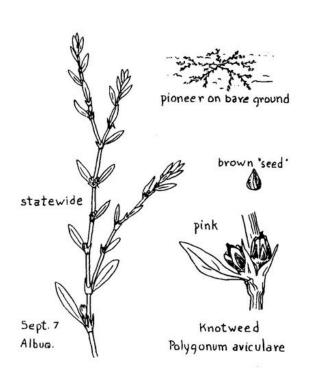
Knotweed

#### Color:

Greenish white

#### Notes:

The genus name *Polygonum* comes from the Greek *poly*-, "many" and *gony*, "knee". Appendages at the base of the leaves form sheaths around the stem which give the stem a many jointed appearance. Knotweed is a tough plant, able to endure foot, animal and even vehicle traffic. In the fall, the leaves fall and the stems dry and harden turning orangish, often forming tangled mats which can persist for years if undisturbed. Knotweed blooms from April through September between 4000 and 10000 ft.





# 

# Scientific Name:

Polygonum convolvulus

# Size:

vine to 150 cm

# **Description:**

Reclining to twining annual herb, stems often minutely roughened. Leaves alternate, lower leaves with long petioles, upper leaves reduced, with short petioles; blades arrowhead-shaped, 2 - 7 cm long, 1 - 5 cm wide. Stipules small, but sheathing the stem. Flowers perfect, on short, jointed stalks, in loose clusters from upper leaf axils or at stem end. Flowers 3 - 4.5 mm long, greenish, the 5 petaloid segments equal, united into a 5-lobed cup. Stamens 3 - 9. Pistil 1, styles 3, united. Seeds 3-angled, black.



#### Common Name:

Black bindweed

#### Color:

Greenish

#### Notes:

Black bindweed is a non-native species introduced from Europe. It has become naturalized in much of the United States. It is occasional in the Manzanos, often in disturbed ground. The heart-shaped leaves and vining habit are reminiscent of the morning glories and bindweed of the family Convolvulaceae, giving rise to the species name *convolvulus*. Black bindweed can be an invasive species and is considered a noxious weed in a number of states. It blooms from May into August between 5000 and 8000 ft.





# 

# Scientific Name:

Polygonum douglasii

# Size:

10 - 50 cm

# **Description:**

Erect annual herb, stems few branched, glabrous. Stems jointed and swollen where branches and leaves join. Leaves alternate, linear to oblong or lanceolate, 1 - 5 cm long, 1 - 8 mm wide, few and scattered, nearly sessile, with a hinge-like joint at the base. Leaf bases with stipules forming a rough-edged sheath around stem. Flowers in leaf axils, without an involucre, 1 - 3 per cluster, on stalks 1 - 4 mm long. Flowers 2 - 4 mm long, composed of 5 petal-like segments, green with white to pink edges. Achenes 2 - 4 mm long, 3 - angled, shiny, black.



# Common Name:

Douglas' knotweed

# Color:

Greenish-white

#### Notes:

Plants of the genus *Polygonum* are called knotweed because the nodes where branches or leaves begin are swollen and jointed, looking like someone tied a knot in the stem. The species name *douglasii* honors the Scottish explorer and botanist David Douglas (1799-1834) for whom the Douglas fir is named. Douglas knotweed blooms from July into September between 7000 and 8500 ft.



# Scientific Name:

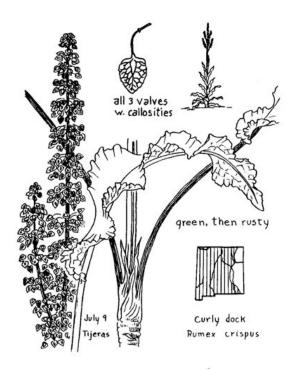
Rumex crispus

# Size:

70 - 100 cm

# **Description:**

Erect perennial herb, mostly glabrous, stems unbranched below flowers. Leaves alternate, surfaces wavy or crinkly; basal leaves on long petioles, oblong-lanceolate to elliptic, 8 - 25 cm long, 1 - 5 cm wide, pointed; stem leaves similar, smaller, on shorter petioles. Flowers perfect, on slender, flexuous stalks, in long, dense, branched clusters at stem end, the branches ascending. Flowers composed of 6 sepaloid segments in 2 whorls of 3, the outer 3 remaining small and erect in fruit, the inner 3 similar, but greatly elongating and pressing together to form a 3-sided fruit with very thin papery margins and a hardened lump in the valley of each side.



# Common Name:

Curly dock

#### Color:

Green to yellowish

#### Notes:

Curly dock is common in moister areas of the Manzanos. In the fall the seed heads form a long reddish-brown cluster used in dried flower arrangements. The seeds are contained in a 3 angled husk with papery wings. A single plant can have as many as 40,000 seeds. The leaves and stems of curly dock are edible and in fact, more nutritious than spinach, although the very earliest spring leaves contain chrysophanic acid, which is an irritant to the mouth. It blooms from April to September from 3500 to 8000 ft.





# 

# Scientific Name:

Rumex hymenosepalus

# Size:

25 - 50 cm

# **Description:**

Erect perennial herb from tuberous roots, stems stout, glabrous. Leaves alternate, elliptic to oblong, 6 - 30 cm long, fleshy, with wavy edges. Stipules 1 - 3 cm long, forming a cylindrical sheath around the stem. Petioles shorter than the leaf blade, blending into the stipular sheath. Flowers small, in dense clusters along the stem, on pedicels 8 - 10 mm long and jointed at the middle. Flowers have no real petals, rather six sepals, 3 outer, green, herbaceous, about 2 mm long, and 3 inner sepals called valves, 10 -15 mm long when mature, smooth and without a hardened lump.



# Common Name:

Cañaigre

#### Color:

Reddish to yellowish

#### Notes:

Cañaigre contains tannin in sufficient quantity for use in leather tanning. *Rumex* species are generically referred to as docks, hence *R. hymenosepalus* is called Tanner's-dock. The stalks resemble and function as an effective substitute for rhubarb, thus this plant is also called wild rhubarb. Cañaigre is found on the plains approaching the east side of the Manzanos. It blooms from April to June between 4000 and 6500 ft.

**New Mexico Native** 



# **PORTULACACEAE -- Purslane Family**

# 

# Scientific Name:

Phemeranthus brevicaulis

# Size:

3 - 7 cm

# **Description:**

Synonym: Talinum pulchellum.

Low, glabrous, succulent perennial herb. Stems short, leafy. Leaves alternate, sessile, crowded, linear, succulent, 12 - 20 mm long. Flowers in a loose cluster of 3 - 5 from upper leaf axils, on stalks with a pair of bracts below the middle. Sepals 2, pointed, persistent in fruit. Petals 5, obovate, 12 - 15 mm long, short-lived. Stamens numerous. Style slender, 3-cleft. Fruit a capsule with 3 valves.

# Common Name:

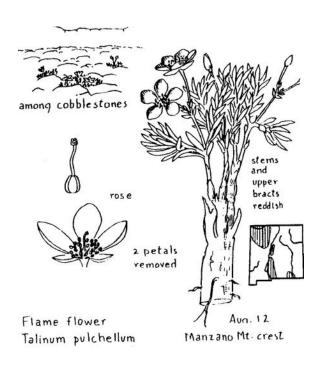
Showy flameflower

# Color:

Magenta

#### **Notes:**

This is a plant of remarkable beauty when flowering, but hard to spot when closed, especially in dry conditions. Most hikers never see the flowers. An individual flower opens for only 1 - 2 hours and only on a single day, generally in the late afternoon. When not flowering, the low, tiny plants, often with their leaves folded together, are scarcely noticeable. Despite their small stature, the plants have large taproots and are quite drought resistant. Showy flame flowers bloom from June into August between 5000 and 10000 ft.





# **PORTULACACEAE** -- Purslane Family

# 

# Scientific Name:

Portulaca oleracea

# Size:

5 - 50 cm

# **Description:**

Fleshy, glabrous, low growing annual herb, stems much branched, trailing on the ground. Leaves alternate, juicy but flat, obovate to spatulate, 6 - 30 mm long, 2 - 12 mm wide, rounded at the tip. Flowers perfect, solitary or clustered, sessile, 5 - 10 mm wide. Sepals 2, ovate to round, 3 - 4.5 mm long, united at the base, longitudinally ridged on the back. Petals mostly 5, 3 - 4.5 mm long, 2 - 3 mm wide, notched at the apex. Stamens 6 - 10. Style lobes 4 - 6. Fruit a capsule 5 - 9 mm long.

#### Common Name:

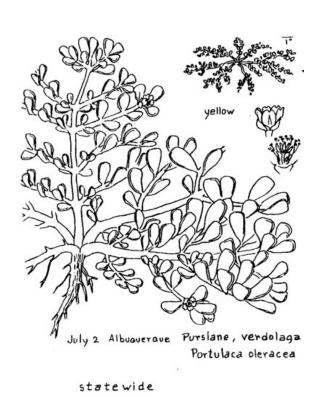
Purslane, verdolaga

# Color:

Yellow

#### Notes:

The species name *oleracea* means "of the vegetable garden". Purslane certainly fits into that category. Indigenous to the Middle East, it has been used as food for thousands of years. It has been encouraged and cultivated and has spread worldwide. Now it is generally considered an ugly weed. The succulent plants, even uprooted and turned upside down, retain enough moisture and nutrients to assure seed maturation. A single plant can produce as many as 50,000 seeds. Purslane bloom from July into September between 4000 and 8000 ft.





# **PRIMULACEAE -- Primrose Family**

# 

# Scientific Name:

Androsace septentrionalis

# Size:

5 - 25 cm

# **Description:**

Stemless annual herb. Leaves in a basal rosette, linear-lanceolate to oblanceolate, somewhat toothed on the upper half of the margin, sparsely to densely hairy. Flowers in loose clusters of 6-20 on individual stalks 5 - 40 mm long originating from a common point subtended by several linear to lanceolate bracts at the top of a leafless secondary stalk, this sometimes hairy or glandular. Calyx bell-shaped, 2.5 - 4 mm long, 5-lobed, with ridges below the lobes. Corolla funnel-shaped, about as long as calyx, with 5 lobes less than 1 mm long. Stamens 5, enclosed. Style 1. Fruit a round capsule.

#### Common Name:

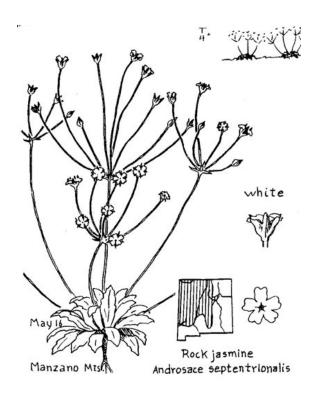
Northern rock jasmine

# Color:

White

#### Notes:

Northern rock jasmine has no real stems. What appear to be stems are leafless compound flower stalks. The plants appear quite delicate with their tiny flowers on long slender stalks, but they are very successful and common all over the Manzanos. True jasmine is a genus in the Olive family. The species name *septentrionalis* is a very long Latin word meaning "northern". Rock jasmine blooms from April through August between 7000 and 10000 ft.





# **PRIMULACEAE** -- Primrose Family

# 

# Scientific Name:

Dodecatheon dentatum ssp. ellisiae

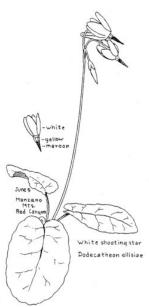
# Size:

15 - 40 cm

# Description:

Synonym: Dodecatheon ellisiae.

Stemless perennial herb. Leaves basal, with petioles, ovate to elliptic, 2 - 15 cm long, 1 - 5 cm wide, glabrous, edges wavy-toothed. Flowers upside down in loose clusters of 1 to several, on slender stalks, 1 - 7 cm long, originating from a common point at the tip of leafless secondary stalk 10 - 35 cm long, glabrous or slightly glandular-hairy. Calyx cupshaped, tube 1.5 - 2.5 mm long with 4 or 5 triangular lobes 2 - 3 mm long. Corolla with a short tube, and 4 - 5 oblong lobes 12 - 20 mm long, bent strongly backwards. Stamens 4 or 5, filaments less than 1 mm long, anthers red to purple, 6 - 7 mm long, closely surrounding the style. Fruit a cylindrical to ovoid capsule 6 - 10 mm long.



# Common Name:

Shooting star

# Color:

White

#### Notes:

With their white petals strongly bent backwards and their red stamens stuck together into a cone, these flowers are very unusual. They almost always hang upside down. They are rare in the Manzanos, found only in Red Canyon and uncommon in the state. The genus name *Dodecatheon* comes from the Greek *dodeca*, "twelve", and *theos*, "god". The Greeks believed plants in the Primrose family were specially protected by their 12 major gods. Shooting star blooms in June and early July between 8000 and 9500 ft.

