

ERICALES

(Ericalids)

Heath



Fouquieria



Phlox



Camellia



(not native to the Mojave)

(22 Families Worldwide)

Family **ERICACEAE** (Heaths)

Pointleaf Manzanita (*Arctostaphylos pungens*)



dense shrub

RRCNCA; Southern NV



April

Red Rock Canyon National Conservation Area; NV



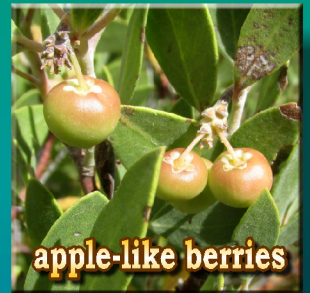
elliptical leaves

RRCNCA; Southern NV



smooth red stems

RRCNCA; Southern NV



apple-like berries

RRCNCA; Southern NV

- Flowers:** urceolate (urn shaped); spherical, terminal, raceme inflorescence; pink to white; .25"
Stems: erect; numerous, shrubby; highly branched; new: hairy, mature: glabrous; red; to 10'
Leaves: elliptical; entire; pointed tips; opposite; young leaves slightly woolly; lime green; 1.5
Blooms: February to June
Range: southwestern US (CA, NV, UT, AZ, NM, TX) south to central Mexico
Habitat: dry, sandy to gravelly soils; chaparral to woodland habitats; Upper Sonoran Life Zone

Notes:

common; evergreen/perennial; grows to 10' in the southwestern US to central MEX at elevations of 6,500-8,000' (or lower); .3" apple-like drupe (berry) fruit; seeds require scarification (chemical, thermal, or mechanical alteration of seed coat) to germinate; aka Mexican Manzanite; important food source for wildlife; native peoples processed fruit into jam, used berries to make beverages, and made infusions from leaves to apply for various medical remedies

Mojave presence: native

Comments:

This manzanite can be very difficult to distinguish from the Pringle Manzanita (*Arctostaphylos pringlei*). The latter is generally much hairier, blooms earlier, and is usually found at lower elevations. Nonetheless, such features are almost indistinguishable at a casual glance in the field! The specimens shown here at the Red Rock Canyon NCA in 2016 are identified as *A. pungens* in the Red Rock Canyon Visitor Guide 2013 edition by Tom Moulin.

Family FOUQUIERIACEAE (Fouquieria)

Ocotillo (Fouquieria splendens)

typical habitat



Quartzsite, AZ



Dolan Springs, Arizona



Dolan Springs, Arizona

small, ovate leaves



Boulder City, Nevada



Dolan Springs, Arizona

- Flowers:** tubular; terminal panicle inflorescence; 5-lobed, red stamens, yellow anthers; **red**; 1.25"
- Stems:** erect; numerous; branched at base, less above; woody, long sharp spines; gray; to 30'
- Leaves:** ovate to obovate; entire; alternate whorls; succulent, sparse, deciduous, glabrous; **green**; 1-2
- Blooms:** March to June
- Range:** southwestern US, south into Mexico
- Habitat:** gravelly to rocky soils; desert slopes, flats, etc.; Lower Sonoran Life Zone

Notes:

uncommon; perennial; grows to 30' in deserts of sw US from w TX west to CA, south into n MEX at elevations up to 5,000'; aka **Coach Whip**, **Vine Cactus**, **Desert Coral**, and more; 3 subspecies; pollinated by hummingbirds and carpenter bees; used for numerous traditional medical treatments, and the stems make effective walking sticks

Mojave presence: native

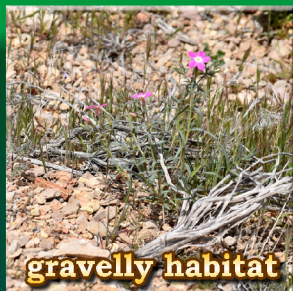
Comments:

While these distinctive plants are not common in the Mojave outside of **Joshua Tree NP** (left), they are more so in the Sonoran Desert and south of the **Grand Canyon** in Arizona (right). They are often utilized elsewhere as ornamental landscaping plants.

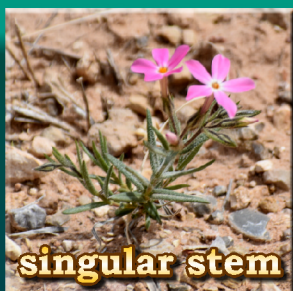


Family **POLEMONIACEAE** (Phloxes)

Long-Leaf Phlox (*Phlox longifolia*)



Goodsprings District; NV



Goodsprings District; NV



Boss Mine; Goodsprings District; Clark County; NV



Goodsprings District; NV



Goodsprings District; NV

- Flowers:** tubular; cymose (2-3 ea); 5 revolute lobes, white bases, 5 yellow anthers; pink, white, purple; 1.2"
Stems: erect; singular to few (3-8); branched; suffrutescent (woody at base), hairy; olive green; 1.5'
Leaves: linear; entire; opposite; hairy; green; 3"
Blooms: April to July
Range: interior western NA
Habitat: dry, sandy to rocky; flats, slopes, canyons, etc.; Lower to Upper Sonoran Life Zones

Notes:

common; taprooted perennial; grows in compact to diffuse forms to about 1.5' in western NA east of the coastal ranges from BC, CAN, south to s CA/AZ, east to the western flanks of the Rockies at elevations from 3,200- 6,800'; 5 long, hairy, glandular calyces; flowers aromatic with obovate lobes; up to 14 subspecies

Mojave presence: native

Comments:

These attractive flowers are found widespread throughout their range in western North America, but common just locally in the Mojave, and only when conditions are perfect. I photographed the ones shown here in Goodsprings Valley near Goodsprings, Nevada, in April of 2019. However, I haven't seen them since. As with many desert annuals, their seeds can lay dormant for many years before conditions are just right for germination. Get pics when you can!

Family **POLEMONIACEAE** (Phloxes)

Stansbury's Phlox (*Phlox stansburyi*)



gravelly habitat

Goodsprings, NV



hairy stems

Goodsprings, NV



Goodsprings; Goodsprings Valley; Clark Co.; NV



white base, yellow anthers

Goodsprings, NV



furry, linear leaves

Goodsprings, NV

- Flowers:** tubular; cymose inflor.; 5 revolute lobes, white bases, 5 yellow anthers; pink to white; 1.25"
Stems: erect; numerous; branched from base; dense, short hairs; olive green; to 1.5'
Leaves: linear to lanceolate; entire; opposite; hairy; blue green; 1.3"
Blooms: April to June
Range: southwestern US
Habitat: dry, sandy to gravelly; desert scrub to pin.-jun. woodlands; Lower Sonoran to Transition LZs

Notes:

common; herbaceous perennial; grows as a low subshrub to 1' in sw US from CA east to TX at elevations from 3,500-10,000'; aka **Cold desert Phlox**, **Pink Phlox**; at least 5 subspecies (formerly considered a subspecies of *P. longifolia*); glandular, hairy **calyx** formed of keeled, ribbed sepals separated by light green membranes; flowers aromatic with slightly fringed, obovate lobes

Mojave presence: native

Comments:

The flowers of this phlox look very similar to those of the **Long Leaf Phlox** (page 4), making the plants at first glance easily confused, especially considering they occur in the same habitat and range. The main distinction is their growth forms. The long-leaf is generally diffuse with few stems and flowers, and the stems are woody at the base; the Stansbury is rather shrubby with many flowers, and the stems are completely herbaceous. The ones shown here were blooming in the Goodsprings, NV, area in April, 2020.

Family POLEMONIACEAE (Phloxes)

Desert Woollystar (*Eriastrum eremicum*)



typical habitat

Red Rock Cyn NCA; NV



singular, branched stem

Dolan Springs, AZ



June

Bill Williams NWR; Lake Havasu City, AZ



cobwebby bracts

Dolan Springs, AZ



linear leaves

Dolan Springs, AZ

- Flowers:** funnelform; 5-lobed corolla, purple streaks, yellow throat, 5 stamens; blue, pink; .75"
- Stems:** erect, spindly; usually singular; branched; green to maroon; 12"
- Leaves:** linear to lanceolate; entire to pinnately lobed; alternate; green; to 2"
- Blooms:** March to June
- Range:** southwestern US, nw Mexico
- Habitat:** dry gravelly soils; desert scrub, flats, washes, etc.; Lower to Upper Sonoran Life Zones

Notes:

common locally; herbaceous annual/perennial; grows to about 1' tall and wide in the sw US (AZ, UT, NV, CA), south into Baja and nw MEX at elevations of up to 5,000'; characterized by open flower arrangement, flowers with **bilateral symmetry**, and a 5-lobed **calyx** of **leafy, cobwebby bracts with maroon tips**; used by Paiute Native Americans for various medical treatments, such as stomach ailments and diarrhea

Mojave presence: native

Comments:

Though generally common and widespread throughout its range, this woollystar is usually only encountered in localized areas, especially in Mohave County, AZ, near Dolan Springs, and **Red Rock Canyon NCA** in Nevada. While it **can** be misidentified for any number of plants with similar flowers, its fleshy, leafy bracts covered in cobwebby hairs makes this plant unmistakable.

Family **POLEMONIACEAE** (Phloxes)

Giant Woollystar (*Eriastrum densifolium*)



funnel shape

Red Rock Cyn NCA; NV



March

Willow Spring; Red Rock Canyon NCA; NV



distinctive stripes

Red Rock Cyn NCA; NV



rocky substrate

Red Rock Cyn NCA; NV



cobwebby bracts

Red Rock Cyn NCA; NV

- Flowers:** funnellform; terminal inflorescence; 5 petals, purple stripes; woolly bracts; blue to purple; 1"
Stems: erect; single to few; highly branched; woody base, glabrous to woolly; gray green; 20"
Leaves: pinnate; linear lobed; alternate; hairy; brownish to gray green; 2"
Blooms: April to October
Range: southwestern US (southern CA into southern NV)
Habitat: dry, sandy to gravelly soils; canyons, slopes, juniper woodlands, etc.; Lower Sonoran Life Zones

Notes:

uncommon; annual/perennial; grows mainly in southern CA at elevations up to 8,000'; distinguished from *E. eremicum* by its **densely clustered inflorescence**; aka **Dense Woolly Star**; 5 subspecies

Mojave presence: native

Comments:

While this variety of woollystar is known primarily from the mountain regions of southern and central California, I encountered the specimen shown here at the Willow Spring area of the **Red Rock Canyon National Conservation Area** in southern Nevada in March of 2019 at an elevation above 4,000 feet. This could represent an eastward expansion of the species, and possibly a new subspecies, warranting more in-depth research.

Family POLEMONIACEAE (Phloxes)

Humble Gilia (*Linanthus demissus*)



Meadview, AZ



Meadview, AZ



Pierce Ferry Road; Dolan Springs, Arizona



Dolan Springs, AZ



Dolan Springs, AZ

- Flowers:** campanulate; term. inflor.; 5 recurved petals, purple spots at base, yellow stamens; white; .25"
Stems: erect, decumbent; usually singular; highly branched; pubescent; **reddish**; 4"
Leaves: oblong; entire to lobed; opposite; usually pubescent; **green**; .5"
Blooms: March to May
Range: southwestern US (CA, NV, UT, AZ)
Habitat: sandy to gravelly soils; desert washes, flats, etc.; Lower Sonoran Life Zone

Notes:

uncommon; annual herb; found in the Mojave Desert of sw US where it appears in small clusters to about 4" tall at elevations up to about 2,000'; aka **Desertsnow**; due to small size and limited range, of little importance to wildlife

Mojave presence: native; endemic

Comments:

This very uncommon, diminutive plant is easily overlooked while exploring spring blooms in the desert region. I first encountered this plant in a Joshua forest on Grapevine Mesa near Meadview, AZ, in May of 2020. However, I was only packing a cheap, low-resolution, point-and-shoot cammera, and took only a couple pics of the plant that I did not recognize. Turns out, as I began working on this gallery in May, 2023, it was only then that **A)** I discovered that the plant was called Humble Gilia, and **B)** my photos were mostly of too poor in quality to crop effectively. Ironically, the **very next day** I was exploring around Dolan Springs, AZ, and came across three more representatives that I was able to get great shots of with a much better camera.

Er8

Presto! Problem solved.

Family POLEMONIACEAE (Phloxes)

Star Gilia (*Gilia stellata*)



rocky substrate

Goodsprings, NV



young basal leaves

Goodsprings, NV



May

Bare Mountain; Beatty, Nevada



blue anthers

Goodsprings, NV



tack-like glands

Goodsprings, NV

- Flowers:** funnelform; singular; 5 lobed, yellow throat, purple spots, blue anthers; white, blue, pink; .5"
Stems: erect; singular; simple to branched; hairy below, stalked glands above; green to reddish; 28"
Leaves: linear; lobed/toothed; basal rosette, pinnately compound; green; 2"
Blooms: March to May
Range: southwestern US; Baja California and northern Mexico
Habitat: dry; sandy to rocky; desert scrub, slopes, woodlands, etc.; Lower to Upper Sonoran Life Zones

Notes:

uncommon; herbaceous annual; grows to about 2' in the sw US from NM west to CA, south to Baja and N MEX at elevations up to about 5,000'; aka *Gilia*, *Star Gily Flower*; round to oval, .25" capsular fruit bearing 5-10 seeds; attracts pollinators, but is otherwise of little value to wildlife

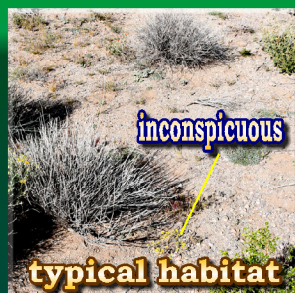
Mojave presence: native

Comments:

This small, uncommon, and inconspicuous plant is best identified by two distinct characteristics. The first, and most readily apparent, is the blue anthers exserted slightly above the white-lobed corolla (upper right). Secondly, note the stalked glands that cover the top portion of the stems (lower right); I find these glands to be very reminiscent of the "tacks" that are distinctive and definitive on such plants as the *Tackstems* in the sunflower family.

Family POLEMONIACEAE (Phloxes)

Golden Desert-Trumpets (*Leptosiphon aureus*)



Dolan Springs, AZ



Dolan Springs, AZ



US Highway 95; CalNevAri, Nevada



Dolan Springs, AZ



Dolan Springs, AZ

- Flowers:** campanulate; singular, terminal; 5 lobed, 5 yellow stamens and anthers, 3 styles; **yellow**; .5"
- Stems:** erect, ascending; singular to few; branched; spindly, glabrous to pilose; **reddish**; 6"
- Leaves:** linear to needle-like; entire; whorled (3-5 per group); pilose; **green**; maturing to **red**; 1.25"
- Blooms:** March to June
- Range:** southwestern US (CA, NV, UT, AZ, NM); Baja California and northwest Mexico
- Habitat:** dry; gravelly; desert scrub, washes, slopes, woodlands, etc.; Lower to Upper Sonoran Life Zones

Notes:

common; herbaceous annual; grows to about 6" in the sw US from NM west to CA, south into Baja and nw Mexico at elevations from 2,000 to 6,000'; flowers diurnal; aka **Desert Gold**, **Desert Trumpets**, **Golden Linanthus**, etc.; 2 subspecies; formerly in the genus **Linanthus**, though still under review

Mojave presence: native

Comments:

Due to its thread-like, spindly stems, this plant is inconspicuous and difficult to identify when not in bloom. Once flowers appear in the spring, however, they can emblazon an entire area! The subspecies shown here is **Leptosiphon aureus aureus**, distinguished from its close relative **L. a. decorus** by its bright yellow flowers (the latter bears white flowers). The specimens pictured above from Dolan Springs, AZ, were photographed in the nearby **Mt. Tipton Wilderness Area** in April and May of 2023.

Family POLEMONIACEAE (Phloxes)

Nuttall's Linanthus (*Leptosiphon nuttallii*)



mounded habit

SMNRA; Spring Mtns; NV



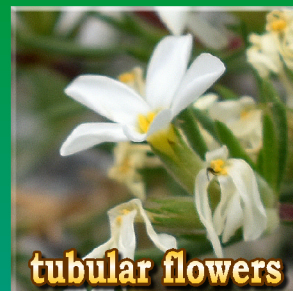
furry stems

SMNRA; Spring Mtns; NV



September

Upper Lee Meadows; Springs Mtns NRA; Nevada



tubular flowers

SMNRA; Spring Mtns; NV



tri-divided leaves

SMNRA; Spring Mtns; NV

- Flowers:** tubular; bracteate, 2-5 in terminal panicles; 5 lobed, yellow anthers; white (yellow throat); .6"
Stems: erect; numerous; branched from base; spindly, glabrous to pilose; green to reddish; 8"
Leaves: palmately lobed (3-5); needle-like leaflets; opposite; pilose; blue green maturing to red; 1"
Blooms: June to September
Range: western US; British Columbia, Canada; northwestern Mexico
Habitat: dry, gravelly to rocky; slopes, open forest habitats; Upper Sonoran to Transition Life Zones

Notes:

common locally; suffrutescent (woody at base) perennial; grows in a mounded habit to about 1' west of the Rocky Mtns from BC, CAN, south to nw MEX at elevations from 5,000-8,500'; all parts of plant sweet aromatic; .2" ovoid to oblong capsular fruit; formerly in genus *Linanthus*; 4 subspecies; host to various insects (flies, ants, butterflies, etc.)

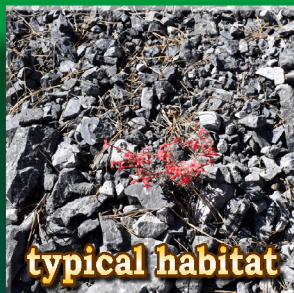
Mojave presence: native

Comments:

This is not a Mojave Desert plant, per se, as it is only found growing in the mid to high elevations among conifer/ponderosa woodland habitats of "sky island" mountain ranges within the region. The superficially daisy-like flowers (when present) can be misleading, otherwise, inspect the leaves closely; though appearing as a whorl around the stems, the "whorl" is actually two opposite leaves, each divided into (usually) three needle-like lobes--very distinctive and characteristic! The specimens shown here adorned the slopes of under-forest clearings in Lee Canyon in the Spring Mountains National Recreation Area

Family **POLEMONIACEAE** (Phloxes)

Arizona Skyrocket (*Ipomopsis arizonica*)



Lee Cyn; SMNRA; NV



Bristlecone Trail; Lee Canyon; Spring Mtns NRA; NV



Lee Cyn; SMNRA; NV



Lee Cyn; SMNRA; NV



Lee Cyn; SMNRA; NV

- Flowers:** tubular; spike inflorescence; 5-lobed, pointed at tips, included (not exserted) stamens; red; 1"
- Stems:** erect; usually singular; simple to lightly branched; glabrous to pubescent; reddish; 12"
- Leaves:** linear; entire to lobed; pinnate; pointed tips, fleshy, pubescent; gray green; 2"
- Blooms:** April to October
- Range:** Mojave Desert region and adjacent areas
- Habitat:** rocky; montane; canyons, slopes, cliffs, woodlands, etc.; Upper Sonoran to Canadian Life Zones

Notes:

rare; herbaceous perennial; grows to about 1' in the montane "sky islands" of the Mojave Desert from se CA east to n AZ at elevations of 4,500 to 9,000'; short lived, monocarpic (blooms once, then dies); .3" capsular fruit bearing 4-7 seeds per chamber; aka **Arizona Firecracker**; 2 subspecies; pollinated by long-tongued wildlife, such as hummingbirds

Mojave presence: native; endemic

Comments:

This species is very similar to the much more widespread **Scarlet Gilia** *Ipomopsis aggregata*, but possesses shorter stems, its flower corolla tubes are also shorter, and its stamens are included in--rather than exserted above--the corolla. Do not expect to find this plant growing in the desert itself; I've only encountered this small, but beautiful, species in the high elevations of the **Spring Mountains National Recreation Area** west of Las Vegas, NV, such as the one shown here in October of 2019.

Family POLEMONIACEAE (Phloxes)

Bristly Langloisia (*Langloisia setosissima*)



Shadow Valley; Cima, CA



Shadow Valley; Cima, CA



Shadow Valley; Kingston Wilderness; Cima, CA



Shadow Valley; Cima, CA



Shadow Valley; Cima, CA

- Flowers:** funnelform; 5-lobed corolla, purple to no spots, exerted stamen; white, blue, lavender; 1"
Stems: erect; numerous; unbranched; pubescent; green; 3-5"
Leaves: linear to oblanceolate; toothed; alternate to spiral; fleshy, bristly, 3-5 spiny tips; green; 1.25"
Blooms: March to June
Range: western US; northwestern Mexico
Habitat: dry, sandy to gravelly; desert scrub, washes, slopes, etc.; Lower Sonoran Life Zone

Notes:

uncommon; annual; grows to 5" in the western US from OR/ID south to nw MEX, UT/AZ west to CA at elevations up to 5,500'; triangular capsule fruit produces angular seeds; 2 subspecies (*L. s. punctata* known as Lilac Sunbonnet); lone member of the genus *Langloisia*; host to various insects, particularly bee flies

Mojave presence: native

Comments:

Though common as a species, the subspecies shown here, *L. s. setosissima*, in April of 2020 in the foothills of the Kingston Range in San Bernardino County, CA, is actually quite uncommon. It is the only specimen I know with certainty that I've encountered. Of course, its very small and inconspicuous size makes it easily overlooked. Note that this variety completely lacks spots, replaced instead with faint longitudinal lines down the corolla lobes.