

Radiate Flowers



While appearing to be singular flowers, these composites are actually composed of many smaller, individual flowers grouped in the head (**disk florets**; staminate to bisexual) and surrounding the margin of the head (**ray florets**; pistillate to neutral; 3-lobed) to form a complete flower-like structure. The advantage of this arrangement is that the plant can pack more into the same amount of space as a typical "perfect" flower, allowing pollinators to fertilize more flowers in a single visit, assuring a greater abundance of seed production.

Family ASTERACEAE (Sunflowers)

Common Sunflower (*Helianthus annuus*)



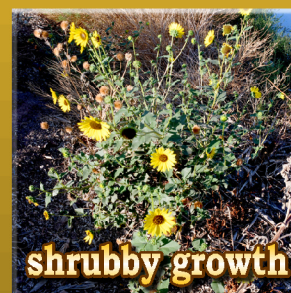
prime real estate

HBVP; Henderson, NV



June

Bird Viewing Preserve; Henderson, NV



shrubby growth

HBVP; Henderson, NV



bristly stems

HBVP; Henderson, NV



broad leaves

HBVP; Henderson, NV

- Flowers:** radiate; solitary; to 20/plant; 6" ray florets: yellow; 10-30
 disc florets: golden yellow to maroon; 100+
- Stems:** erect; singular to numerous; heavily branched above; hispid (bristly); reddish to olive; 120"
- Leaves:** proximal: heart shaped, distal: elliptical; entire to dentate; alternate; hispid; green; 3-12"
- Blooms:** March to October
- Range:** North America; Mexico; introduced world-wide
- Habitat:** riparian; various soils; roadsides, disturbed areas, fields, etc.; Lower Sonoran to Transition LZs

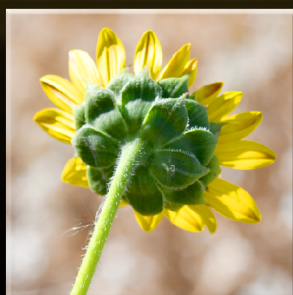
Notes:

common; annual; grows to 10' throughout most of NA and MEX (introduced world-wide) at an elevation of 100-7,000'; ovate, pointed, hairy phyllaries; .5" cypsela fruit with .14" scaly pappus; 6 subspecies; aka Wild Sunflower, Hopi Sunflower; etc.; food source and host for various wildlife; traditionally used by native peoples for food (seeds eaten raw, bread making, etc.) and various medicinal purposes

Mojave presence: native

Comments:

These sunflowers were blooming majestically in June, 2022, at the Henderson Bird Viewing Preserve. Note the distinct phyllaries (left); a bloom at right plays host to a Painted Lady.



As R2

Family ASTERACEAE (Sunflowers)

Nuttall's Sunflower (*Helianthus nuttallii*)



dense growth

Ash Meadows NWR; NV



September

Ash Meadows NWR; Amargosa Valley, NV



wetland habitat

Ash Meadows NWR; NV



hispid stems

Ash Meadows NWR; NV



lanceolate leaves

Ash Meadows NWR; NV

- Flowers:** radiate; solitary to few per stem; 3.5" ray florets: **yellow**; 10-20
 disc florets: **yellow-orange to red-brown**; 60+
- Stems:** erect; few to many; branched above; glabrous, hispid, to hairy; **glaucous** to yellow-brown; 72+"
- Leaves:** lanceolate to linear*; entire/toothed; opposite (lower) to alternate (upper); rough; **green**; 2-8"
- Blooms:** August to November
- Range:** Pacific Coast of NA (BC south to CA), east to the midwest US (except TX), Newfoundland, CAN
- Habitat:** moist; fields, meadows, streambanks, wetlands, etc; Lower Sonoran to Canadian Life Zones

Notes:

common; herbaceous perennial; widespread, growing to 13' tall at elevations up to 9,000'; 30-38 spreading, lanceolate to ovate **phyllaries**; brown, .2", compressed, usually glabrous **achenes**; **pappus** with thin, papery base; 7 subspecies

(*distinguished from broad, ovate to heart-shaped leaves of **Common Sunflower Helianthus annuus**)

Mojave presence: native; rare

Comments:

At a glance, this sunflower variety reminds me of the **Black-Eyed Susan (Rudbeckia hirta)** when I was growing up in my home state of Maryland. They both share the trait of having composite flowers with bright-yellow ray florets surrounding a head of dark disk florets. Susans have slightly larger "flowers" with ray florets that are somewhat smoother in texture--not obvious field distinctions! The Nuttall's presence in the desert environment (though slight) is a better distinction. The photos above were taken at the

As R4

Ash Meadows NWR in September, 2018.

Family ASTERACEAE (Asters)

Hoary Tansyaster (*Dieteria canescens*)



small, tangled shrub

Willow Springs; RRCNCA



July

Willow Springs; Red Rock Canyon NCA; NV



clasping leaves

Hualapai Plateau; CG West Rim



July

small puffball of pappi

Hualapai Plateau; CG West Rim



woolly stems

Hualapai Plateau; CG West Rim

Flowers: radiate; terminal panicle; .75" ray florets: blue to purple with white base; 10-25; .5"

disc florets: yellow; many; .75" head

Stems: erect; many; tangled, open branching; glandular with short hairs; dark green; to ~40"

Leaves: linear to obovate; entire to dentate; clasping; green; 1-4"

Blooms: April to June; October if adequate summer rainfall

Range: western North America

Habitat: gravelly to rocky; desert scrub to pinyon-juniper woodlands; Lower Sonoran to Transition LZs

Notes:

common; woolly annual/perennial herb; grows to 4' in w NA from CAN south to n MEX at elevations up to 8,000'; one or more flower heads per inflorescence (terminal panicle) with several layers of glandular, sticky, curled

phyllaries; glabrous to appressed-hairy achene fruit tipped with bristly pappus; 10 subspecies; aka Hoary Aster, Purple Aster, Hoary Goldenweed, etc.; 10 subspecies; formerly in Genus *Machaeranthera*; hosts a variety of insects; used by indigenous people as an emetic (causes vomiting)

Mojave presence: native



basal stems, leaves



host to many creatures

As R7

Family ASTERACEAE (Daisies)

Wallace's Woolly Daisy (*Eriophyllum wallacei*)



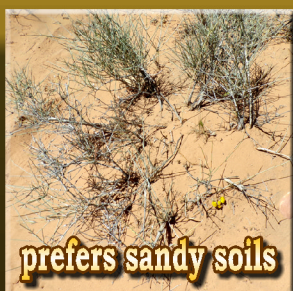
US 95, Calnevari, NV



Red Rock Canyon NCA; Las Vegas, NV



Red Rock Cyn NCA; NV



Red Rock Cyn NCA; NV



Red Rock Cyn NCA; NV

- Flowers:** radiate; solitary; .7" ray florets: yellow to cream; 5-10; .25"
disc florets: yellow to brownish yellow; 20-30; .2" head
- Stems:** short erect; clumpy to spreading; singular to branched at base; woolly; glaucose to green; to 6"
- Leaves:** spatulate to oval; entire to 3-lobed; basal; green; .25-.75"
- Blooms:** December to July
- Range:** southwestern US; northwestern Mexico
- Habitat:** sandy to rocky; desert scrub to ponderosa woodlands; Lower Sonoran to Transition LZs

Notes:

common; herbaceous annual; grows to only 6" tall in the Mojave Desert (CA, NV, AZ, UT) and Baja, MEX, at elevations of 100-7,800'; pointed, overlapping phyllaries; tiny, mostly hairless, club-shaped cypselas; .06" pappus; 4 subspecies; aka **Woolly Daisy**, **Woolly Easterbonnet**; provides food for various small wildlife (rodents, insects, etc.)

Mojave presence: native

Comments:

When I became interested in Mojave Desert vegetation sometime around 2016, I first recognized this rather adorable little plant at **Red Rock Canyon NCA** in 2018, although I since discovered I had taken a pic of a specimen near CalNevAri, NV, in 2017 without knowing then what the plant was. Over time I came to realize that its range was much more extensive than I originally thought. I now find it almost everywhere I go in the desert during bloom season.

As R8

Family ASTERACEAE (Daisies)

Hairy Daisy (*Erigeron concinnus*)



short plant

Grand Wash Cliffs; AZ



thick mat of stems

Grand Wash Cliffs; AZ



April

Grand Wash Cliffs; Mohave Co., AZ



a welcomed visitor

Kaibab Lake; Williams, AZ



hairy, linear leaves

Kaibab Lake; Williams, AZ

- Flowers:** radiate; panicle (1-6): 1.5" ray florets: white to bluish; narrow; 75-120; .6"
disc florets: yellow; 100+; .2" head
- Stems:** erect; numerous; densely branched, hairy; glaucous to green; 3-12"
- Leaves:** lanceolate, spatulate, linear; entire; alternate/basal; hairy; green; .75-2.5"
- Blooms:** March to July
- Range:** inland western US
- Habitat:** dry, gravelly to rocky; desert scrub, mountain slopes, etc.; Lower Sonoran to Transition Life

Zones

Notes:

common; low-growing, woody perennial; grows to 1' in creosote bush scrub to Joshua, pinyon-juniper, and ponderosa habitats in eastern Mojave Desert (CA, NV, UT) east to AZ, NM, and north to ID, MT, CO at elevations of 3,000-8,000'; hairy, equal-length phyllaries, often orange to reddish at tips; bristly inner pappus, scaly outer pappus; 5 subspecies; aka **Tidy Fleabane**, **Navajo Fleabane**; 3 subspecies; food source for birds and insects

Mojave presence: native (eastern region)

Comments:

With its numerous and slender ray florets, this daisy could easily be confused with the **Spreading Fleabane** (next page) if not for its relatively smaller growth. Its shorter, denser, mound-like habit is distinctly different than the more upright and open habit of its close cousin.

As R10

Family **ASTERACEAE** (Daisies)

Spreading Fleabane (*Erigeron divergens*)



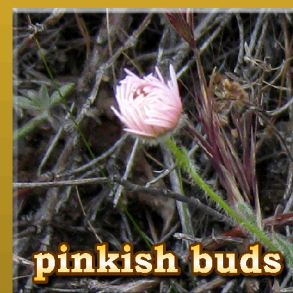
rocky habitat

Rocky Gap; RRCNCA; NV



May

Red Rock Canyon NCA; Las Vegas, NV



pinkish buds

Rocky Gap; RRCNCA; NV



hairy stems, leaves

Rocky Gap; RRCNCA; NV



linear to spatulate leaves

Rocky Gap; RRCNCA; NV

- Flowers:** radiate; solitary; 1.5" ray florets: white, pink, lavender; 75-150
disc florets: yellow; 100+; dense
- Stems:** erect; singular to multiple; branched; hairy; green; 3-28"
- Leaves:** basal: obovate/spatulate, cauline: sessile, linear; entire/dentate/lobed; grayish green; .4-2.8"
- Blooms:** February to October
- Range:** western North America
- Habitat:** rocky slopes, desert scrub, grasslands, washes, etc.; Lower Sonoran to Transition Life Zones

Notes:

common, but easily misidentified due to its highly variable appearance; herbaceous annual/perennial; grows to ~2.5' tall and 2' wide in w NA from BC and Alberta, CAN, south to n MEX at elevations of ~500 to 8,500'; hairy **phyllaries**; small **cypsela** with fluffy **pappus**; one of the earliest plants to bloom in the desert; 3 subspecies; aka **Branching Fleabane**, **Desert Fleabane**, **Spreading Daisy**; important wildlife food source (birds, bees, butterflies, etc.); traditionally used for medicinal treatments (headaches, eyewash, snakebites, etc.), ceremonies, good luck charm, etc.

Mojave presence: native

Comments:

This daisy is among the most commonly encountered and earliest blooming in the Mojave region. Due its larger range and growth habit than many other daisies, it

As R11

is usually easy to identify.

Family ASTERACEAE (Daisies)

Blackfoot Daisy (*Melampodium leucanthum*)



shrubby habit

Peach Springs, AZ



May

Diamond Creek Road; Peach Springs, AZ



notched ray florets

Peach Springs, AZ



erect stems

Peach Springs, AZ



linear leaves

Peach Springs, AZ

- Flowers:** radiate; on branched stem tips; 2" ray florets: white; back-curved, notched; 8-13; .75"
disc florets: golden yellow; 25-50; .5" head
- Stems:** erect; multiple; branched; suffrutescent (woody at base), upper stems strigose; gray green; 12"
- Leaves:** linear to lanceolate; entire, notched basal; opposite; adpressed hairy; gray green to green; 2"
- Blooms:** March to November
- Range:** central to southwestern US; northern Mexico (isolated populations elsewhere)
- Habitat:** limey, gravelly to rocky; grasslands, desert scrub, slopes, etc.; Lower to Upper Sonoran LZs

Notes:

common locally; herbaceous perennial; grows as a rounded sub-shrub 1' tall, 2' wide, in the sc US from c TX/sw KS west through most of AZ, south into n MEX (disjunct populations in e TX, c MEX), at elevations of 2,000-6,500'; hairy, connate, inner and outer **phyllaries** form a cup-shaped **involucre**; .2" **cypsela** fruit with ridged **achenes**, lacking **pappus**; aka **Plains Blackfoot Daisy**, **Rock Daisy**; 2 subspecies; often used in desert landscaping; important food source for birds, small mammals, insects (butterflies, moths, etc.)

Mojave presence: native; nw AZ

Comments:

This daisy is easily mistaken for many other similar species at first glance. Range and close inspection of various specific traits, such as the number of ray florets, will help in identifying this attractive plant.

Family ASTERACEAE (Blanketflowers)

Slender Blanketflower (*Gaillardia pinnatifida*)



St. George, UT



St. George, UT



St. George, UT

- Flowers:** radiate; solitary; to 2" ray florets: yellow with red base; deeply 3-lobed; 7-12
disc florets: deep red with yellow interior florets; 40-100
- Stems:** erect; singular; unbranched; strigose to villous; green; to 22"
- Leaves:** spatulate to oblanceolate; proximal: pinnately lobed, distal: entire; strigose/canescent green; 6"
- Blooms:** April to October
- Range:** southwestern US; northern Mexico
- Habitat:** clay to sandy; washes, roadsides, desert scrub to p-j woods; Lower Sonoran to Transition LZs

Notes:

common locally; perennial; grows to 2' (usually shorter) in sw US from TX west to s NV, south into n MEX at elevations of 3,000-7,000'; 2 subspecies; Red-Dome Blanketflower, Cut-Leaf Blanketflower, Slender Gaillardia, etc.; pappus of bristle-tipped scales; displays numerous variations throughout range; provides food, nectar, cover for hummingbirds, small rodents (mice, ground squirrels, etc.), and insects (bees, butterflies, etc.)

Mojave presence: rare; restricted to far ne region (s NV, sw UT)

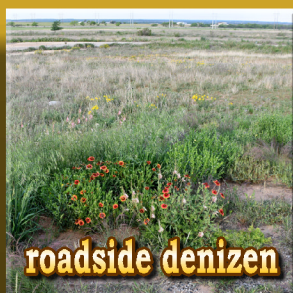
Comments:

The ray florets of this species can be quite variable, even to the point of having no red at all, which can make identification quite a challenge. These St. George, UT, residents made for some splendid scenery in July of 2011.

As R15

Family **ASTERACEAE** (Blanketflowers)

Firewheel Blanketflower (*Gaillardia pulchella*)



roadside denizen

I-20; Big Springs, TX



May

I-20; Big Springs to Colorado City, TX



showy flowers

I-20; Big Springs, TX



hairy stems

I-20; Big Springs, TX



narrow leaves

I-20; Big Springs, TX

- Flowers:** radiate; solitary to 2.5" ray florets: red with yellow tips; 10-20
disc florets: dark red with yellow interior florets; 40-100
- Stems:** erect; singular; unbranched; hairy; green; to 24"
- Leaves:** linear to oblong; entire to toothed/lobed; clasping basal and alternate; hairy; green; to 4"
- Blooms:** April to September; year-round in some areas
- Range:** US (coastal east and south, central), northern Mexico; naturalized in other areas
- Habitat:** arid, sandy to gravelly; slopes, roadsides, urban lots etc.; Lower Sonoran Life Zone

Notes:

common locally; short-lived perennial/annual; growing to 2' (usually shorter) from the Atlantic and Gulf coasts, north through the Great Plains and west to s NV (isolated populations in CA), south into n MEX at elevations of 3,000-6,000'; 4 subspecies; aka **Indian Blanket**; **Rosering Gaillardia**, **Sundance**, etc.; presents some color variations; hairy, .12" **cypsela** fruit with **pappus** of 7-8 aristate (bristly tipped) scales; OK state flower

Mojave presence: native; rare

Comments:

Firewheels are rare in the Mojave, germinating infrequently in such areas as Southern Nevada and the southwestern portion of Utah. The ones shown here along Interstate 20 near Big Springs, TX, were photographed in May of 2021.

As R16

Family ASTERACEAE (Brittlebushes)

Goldenhills Brittlebush (*Encelia farinosa farinosa*)



US 93; Lake Mead NRA



Valley of Fire State Park; Clark Co., NV



Davis Dam; Laughlin, NV



Bear's Best GC; Las Vegas, NV



Hoover Dam; Lake Mead NRA

- Flowers:** radiate; panicle inflorescence; to 3" ray florets: long, tri-lobed (shallow); **yellow**; 11-21
disc florets: numerous; **golden yellow***; to 1.4"
- Stems:** erect, leafless; many; flower peduncles (stalks) distally branched; tomentose; whitish green; 60"
- Leaves:** ovate; entire, curled; alternate; dense, tomentose (finely hairy), fragrant; gray green; 1-4"
- Blooms:** November to May
- Range:** southwestern US, northwestern MEX
- Habitat:** dry, rocky to gravelly; slopes, sandy washes; Lower to Upper Sonoran Life Zone

Notes:

very common; perennial; grows 1-5' tall, many feet wide in creosote bush scrub of the Mojave Desert south into Baja and nw MEX at elevations up to 3,000'; characterised by tall, leafless flower stalks that rise well above the mass of leaves that define the main body of the bush; lanceolate **phyllaries**; silky hairs in margins of .25" **cypsela**; no **pappus**; aka **Incienso**; 1 of 3 subspecies; used by natives and pioneers for glue, sealer and waterproofing, varnish, incense, gum, and medicinally for treatment of toothache and as a topical application for relief of chest pain

(* characteristic of the subspecies)

Mojave presence: native

Comments:

This subspecies seems to be the most common of

As R17

the brittlebushes I encounter in the Mojave.

Family ASTERACEAE (Brittlebushes)

Goldenhills Brittlebush (*Encelia farinosa phenicodonta*)



US 93; Lake Mead NRA



Bear's Best GC; Las Vegas,



Bear's Best Golf Course; Las Vegas, NV



Bear's Best GC; Las Vegas, NV



US 93; Lake Mead NRA

- Flowers:** radiate; paniculiform; to 3" ray florets: long, tri-lobed; yellow; 11-21
disc florets: numerous; red-brown*; to 1.4"
- Stems:** erect, leafless; many; flower stalks distally branched; tomentose; whitish green; 60"
- Leaves:** ovate; entire, curled; alternate; densely packed, tomentose (hairy), fragrant; gray green; 1-4"
- Blooms:** November to May
- Range:** southwestern US; northern Mexico
- Habitat:** dry, rocky to gravelly; slopes, sandy washes, etc.; Lower to Upper Sonoran Life Zone

Notes:

very common; perennial; grows 1-5' tall, many feet wide in creosote bush scrubland in the the sw US (CA, AZ, UT, NV) south to MEX (Baja, Sonora, Sinaloa, Hidalgo) at elevations up to 3,000"; characterised by tall, leafless flower stalks that rise well above the mass of leaves that define the main body of the bush; lanceolate **phyllaries**; silky hairs on margins of .25" flattened **cypselas**; no **pappus**; aka **Incienso**; used by natives and pioneers for glue, sealer and waterproofing, varnish, incense, gum, and medicinally for treatment of toothache and as a topical application for relief of chest pain

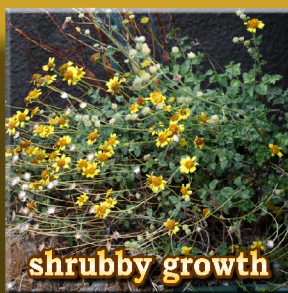
(* characteristic of the subspecies)

Mojave presence: native; mainly eastern region

As R18

Family ASTERACEAE (Brittlebushes)

Virgin River Brittlebush (*Encelia virginensis*)



shrubby growth

RRCNCA; LV, NV



golden
disc florets

short
tri-lobed
ray florets

May

Red Rock Canyon NCA; Las Vegas, NV



solitary blooms

RRCNCA; LV, NV



hairy stems

RRCNCA; LV, NV



deltate leaves

RRCNCA; LV, NV

- Flowers:** radiate; solitary*; to 2" ray florets: short*, tri-lobed; yellow; 11-21
disc florets: numerous; golden yellow; to .6"
- Stems:** erect; many; unbranched peduncles*; woody base; hairy (young), glabrous (old); whitish green; 12"
- Leaves:** ovate to deltate; mostly entire, uncurled*; cauline, alternate; strigose (sparsely hairy); green; 1"*
- Blooms:** March to June; later in some areas depending on rainfall
- Range:** southwestern US; northern Baja California, MEX
- Habitat:** sandy, gravelly soils; desert flats, washes, slopes, etc.; Lower to Upper Sonoran Life Zone

Notes:

common; perennial shrub; grows to ~4' tall in creosote bush scrub to pinyon-juniper woodlands mainly in the Mojave Desert (CA, NV, UT, AZ) south into the Sonoran Desert in AZ, extreme sw NM, and an isolated area in Baja, MEX, near the US border at elevations of 1,000-5,000'; characterised by tall, mostly leafless flower stalks (peduncles) that rise about a foot above the leafy dome of the plant; narrowly ovate **phyllaries**; silky hairs on margins of .32" **cypsela** fruit, usually no **pappus**; 2 subspecies; important food source and cover for desert tortoise, birds rodents, and insects

(* distinguished from branched flower stems, paniculiform flowers, longer ray florets and curled leaves of *E. farinosa*)

Mojave presence: native

As R19

Family ASTERACEAE (Marigolds)

Woolly Marigold (*Baileya pleniradiata*)



clumpy appearance

Grand Wash Cliffs; Meadview, AZ



April

Valley of Fire State Park; Clark Co., NV



Grand Wash Cliffs; Meadview, AZ



woolly basal leaves

Eldorado Canyon; Nelson, NV



leafcutter bee

gracious host

Dolan Springs, AZ

- Flowers:** radiate; solitary; 2" ray florets: yellow; 20-40; .4" disc florets: orangish yellow; 40-50; .5" head
- Stems:** erect, clumpy; many; branched at base; tomentose (woolly); silvery green; 16" peduncles
- Leaves:** oblanceolate; pinnately lobed; basal: rosette, cauline: alternate; canescent; silvery green; 3"
- Blooms:** February to June and October to November (double blooming season)
- Range:** southwestern US; northwestern Mexico
- Habitat:** sandy to gravelly; open sunny areas, hillsides, washes; Lower and Upper Sonoran Life Zones

Notes:

common; annual; grows to 1.5' at elevations from ~300-6,000' throughout the Mojave Desert, east to NM, south to Baja and Sonora, MEX; woolly phyllaries; cypsela with no pappus; 2 subspecies; aka Woolly Desert Marigold; host to numerous butterflies and other insects; seeds eaten by birds and small mammals

Mojave presence: native

Comments:

Like their Desert Marigold cousin (previous page), these marigolds are also favorite stops for visiting pollinators, such as the leafcutter bee (above, lower right) in Dolan Springs, AZ, in May of 2023. They are distinguished by shorter and more oval ray florets, fewer disk florets, shorter peduncle (flower stalk) with small leaves (bracts), clumpier appearance, and are more prominent in the fall than the desert marigold.

Family **ASTERACEAE** (Yarrows)

Common Yarrow (*Achillea millefolium*)



erect habit

Yellowstone National Park



August

Island Park, Idaho



pinnate leaves

Island Park, Idaho



corymb inflorescence

Island Park, Idaho



paddle-shaped florets

Island Park, Idaho

- Flowers:** radiate; corymbose (10-100/cluster); .5" ray florets: white to pink; ovate/round; 3-8
disc florets: tan to pale yellow; 10-40
- Stems:** erect; 1-4 (usually single); branched near top; woolly; green to orangish; to 36"
- Leaves:** clasping; feathery; pinnately divided; alternate, cauline; hairy; green; 2-8"
- Blooms:** April to September
- Range:** throughout North America; Baja and central Mexico; temperate areas of Asia and Europe
- Habitat:** high desert chaparral, mtn slopes/meadows, forests, etc.; Upper Sonoran to Alpine Life Zones

Notes:

common; herbaceous perennial; very variable and aromatic; grows to ~3' tall throughout most of NA (US, CAN) south into Baja and central MEX at elevations of 5,000-11,000'; 4-9 **phyllaries**; achene-like **cypsela**; aka **Yarrow**, **Nosebleed**, **Devil's Nettle**, etc.; about a dozen subspecies; host to many types of insect pollinators, and grazed by bighorn sheep, pronghorn, deer, etc.; has many traditional medical applications: treatment for colds, headaches, nausea, pain, etc., and contains chemicals that act to stem bleeding from wounds

Mojave presence: native

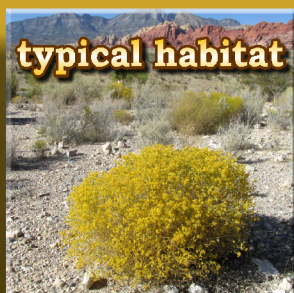
Comments:

This species is quite uncommon in the Mojave. I have yet to get conclusive photos of any in the region, though sightings have been recorded.

As R25

Family ASTERACEAE (Matchweeds)

Sticky Snakeweed (*Gutierrezia microcephala*)



typical habitat

Red Rock Cyn NRA; LV, NV



clustered inflorescence

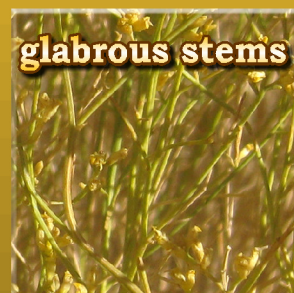
Hualupai Plateau; AZ



tiny, tubular flowers

October

Red Rock Canyon NRA; Las Vegas, NV



glabrous stems

Potosi Mtn; Clark Co., NV



linear leaves

Hualupai Plateau; AZ

- Flowers:** tubular; panicle of 3+ sessile heads; resinous/waxy; .25" ray florets: yellow; 1-5
disc florets: yellow; 1-3
- Stems:** erect; many; highly branched; glabrous; new: yellow to green, old: brown; to 24"
- Leaves:** linear to filiform; entire; alternate; resinous; green; to ~ 1.5"
- Blooms:** July to October; sometimes earlier or later depending on precipitation
- Range:** southwestern US; northern Mexico
- Habitat:** variable; desert scrub/chaparral to higher mtn woodlands; Lower to Upper Sonoran Life Zones

Notes:

common; perennial shrub; grows 8-24" tall in desert scrub communities to pinyon-juniper woodlands from TX west to CA/UT, CO south to n MEX at elevations of 1,000-7,000'; cypsela fruit with small pappus; aka Threadleaf Snakeweed, Broomweed, Small-Headed Matchweed, etc.; rounded appearance; minor food source for wildlife (birds, rodents, insects); used by indigenous peoples to treat toothaches, gastric issues, etc.

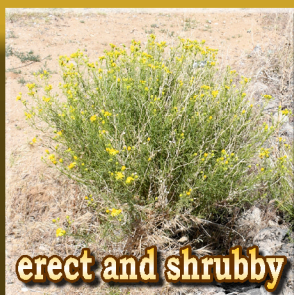
Mojave presence: native

Comments:

Many desert plants are virtually impossible to identify when they are dormant. Even dedicated botanists need to see the flowers and leaves to be certain of species! Matchweeds are certainly amongst this category. Even then they can be difficult to differentiate between members of the same genus. Note the characteristics of this and the Broom Matchweed (next page).

Family ASTERACEAE (Ragworts)

Smooth Threadleaf Ragwort (*Senecio flaccidus monensis*)



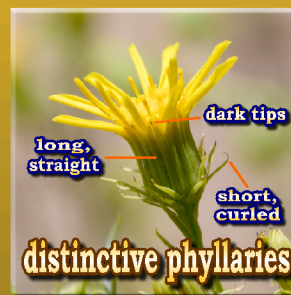
erect and shrubby

Red Rock Cyn NRA; NV



April

US Highway 93; Dolan Springs, Arizona



distinctive phyllaries

Red Rock Cyn NRA; NV



pinnate, filiform leaves

Dolan Springs, AZ



branched, ribbed stems

Dolan Springs, AZ

- Flowers:** radiate; corymb inflorescence of 3-5; to 4" ray florets: yellow; 8-21
disc florets: golden yellow; numerous
- Stems:** erect; many; grooved, branched; suffrutescent (woody at base); mostly glabrous; lime green; 36"
- Leaves:** linear to filiform; pinnate*; entire; alternate; fleshy, tomentose; green; to 4"
- Blooms:** March to November
- Range:** southwestern US, northern Mexico
- Habitat:** dry, sandy to rocky; roadsides, washes, desert scrub, slopes, etc.; Lower to Upper Sonoran LZs

Notes:

common locally; perennial; grows to 3' in dry, open or disturbed areas of the sw US from w TX to s CA, UT south into Baja and n MEX at elevations of 1,000-6,000'; 2 sets of phyllaries (main set: long, in single row, dark tips; outer set: short, curved outward); cypselia fruit; ribbed, pubescent achene with bristly pappus; aka **Shrubby Butterweed**, **Threadleaf Groundsel**, **Mono Ragwort**, **Senecio**, etc.; 1 of 3 subspecies; provides food (seeds, nectar, etc.) and shelter for small birds and mammals, insects (bees, butterflies, moths, etc.); toxic to livestock in large quantity

(*resembles goldenbush, but has pinnate vs alternate leaves)



bristly pappi



important host

Mojave presence: native

As R30

Family ASTERACEAE (Goldeneyes)

Parish Goldeneye (*Bahiopsis parishii*)



rocky habitat

Oatman, AZ



May

Memorial Point; Route 66; near Oatman, AZ



solitary flowers

Oatman, AZ



hairy gray stems

Oatman, AZ



deltoid leaves

Oatman, AZ

- Flowers:** radiate; solitary terminal to cymose (3-5); to 2" ray florets: yellow; 8-15, lobed
disc florets: golden yellow; 50+
- Stems:** erect; many; straggly branched; hispid (rough), canescent (fine hairs); silvery to gray; 36"
- Leaves:** deltate to ovate; wavy to toothed; proximate: opposite, distal: alternate; shiny; green; 1.5"
- Blooms:** January to October (two blooming seasons)
- Range:** coastal and southwestern US; Mexico
- Habitat:** gravelly to rocky; desert scrub, washes, slopes, roadsides, etc.; Lower to Upper Sonoran LZs

Notes:

common locally; sub-shrubby perennial; grows to 3' in the sw US from s TX west to Pacific coast, WA south throughout MEX at elevations up to 5,000'; linear to lanceolate **phyllaries** equal to unequal in length; oblong, ridged, .16" **cypsela** fruit with brownish, appressed hairy pappus; aka **Shrubby Goldeneye**, **Parish'e Scrub Aster**; used in some locations for erosion control and re-vegetation projects; seeds eaten by granivorous birds and small mammals; pollen and nectar collected by various insects (bees, butterflies, etc.)

Mojave presence: native

Comments:

I first noticed this species growing along Route 66 in the mountains west of Oatman, AZ, in May of 2024. Easily mistaken for many other asters, the deltate leaves are a distinguishing characteristic.

As R31

