

# FLORA NEOMEXICAIMA



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Updated by: 2019 Leads, January 2020

# Guide Template

PHOTOS

**Latin Name**

USDA Code

Habitat  
Description

Tips for lookalikes (When  
appropriate)

Native/non-native/invasive  
status

# Annuals v/s Perennials

- 1 year = 1 life cycle
- Grow and die within the same year
- Often smaller
- Shallow roots
- ^easier to pull out of ground
- Never woody

**BOBAB3 is annual:** notice how close to the ground the photo is taken



- Many years = 1 life cycle
- Grow for multiple years
- Often larger
- Deeper roots
- ^harder to pull out of ground
- Can be suffrutescent or woody

**BOGR2 is perennial:** notice how much farther from the ground the inflorescences reach

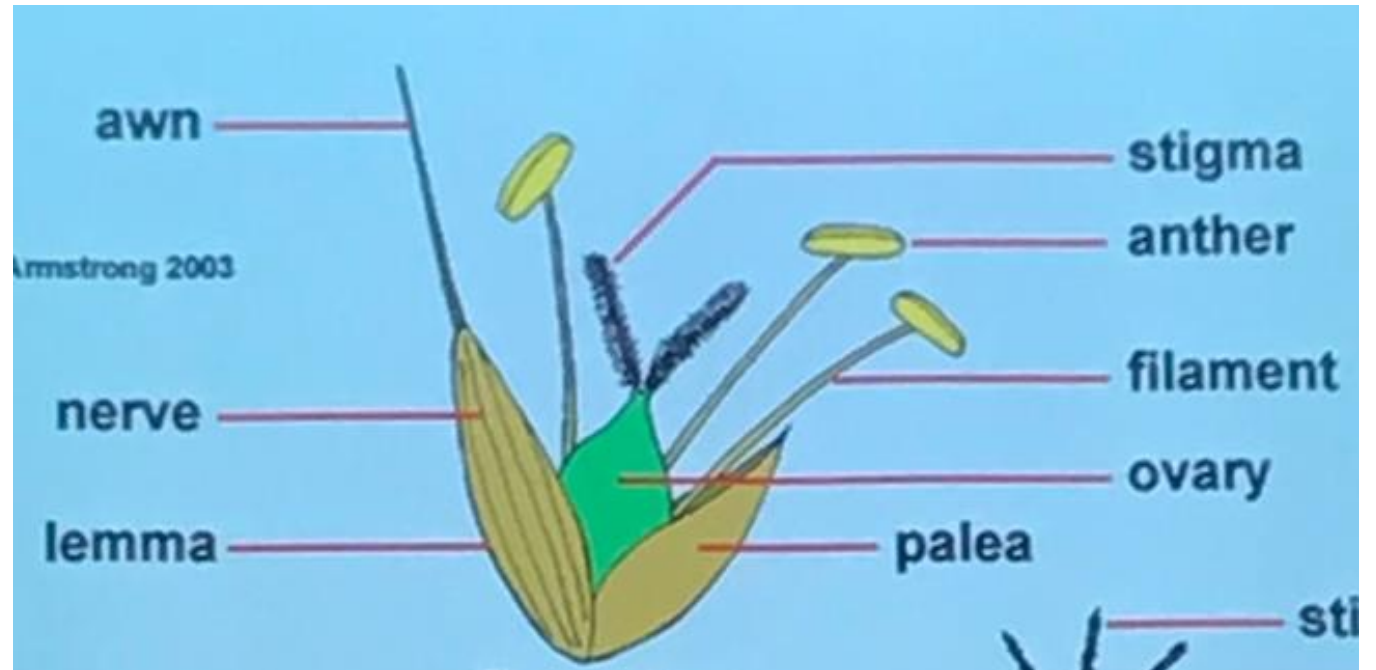


**NOTE: SIZE IS NOT A PERFECT INDICATOR!** Some annuals can be large (*Helianthus annuus*) and some perennials can be small (*Chamaesyce albomarginata*). Think of the size difference in reference to other plants of the same genus

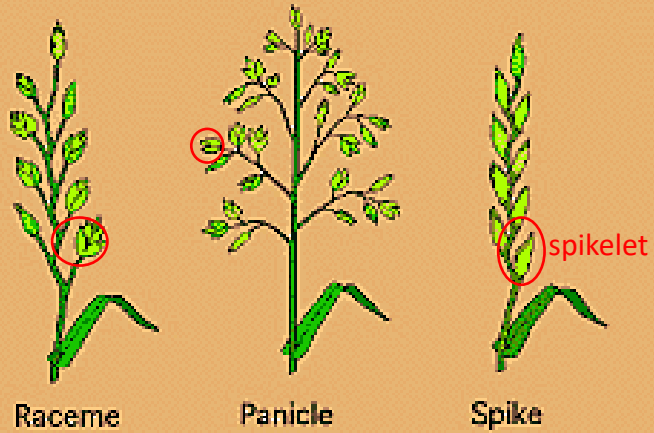
Grasses (Poaceae)  
Annual and Perennial

# Poaceae - Grasses

- Herbs with hollow, round stems
- Leaves alternate with an encircling sheath, ligule, and blade
- Flowers arranged in spikelets
- Each floret has two bracts: lemma (outer, often with a long awn) and palea (inner)

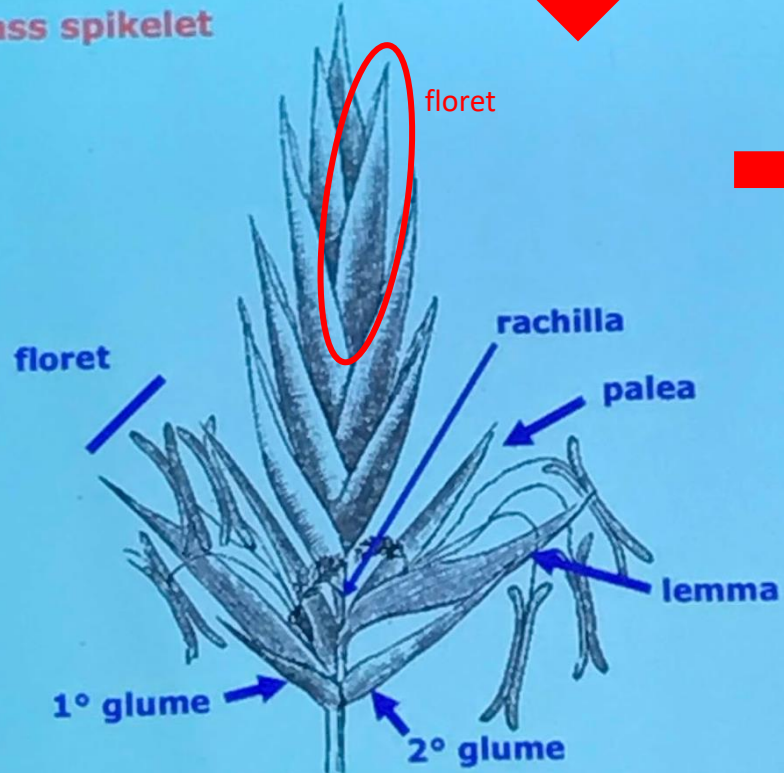


# Grass Inflorescences

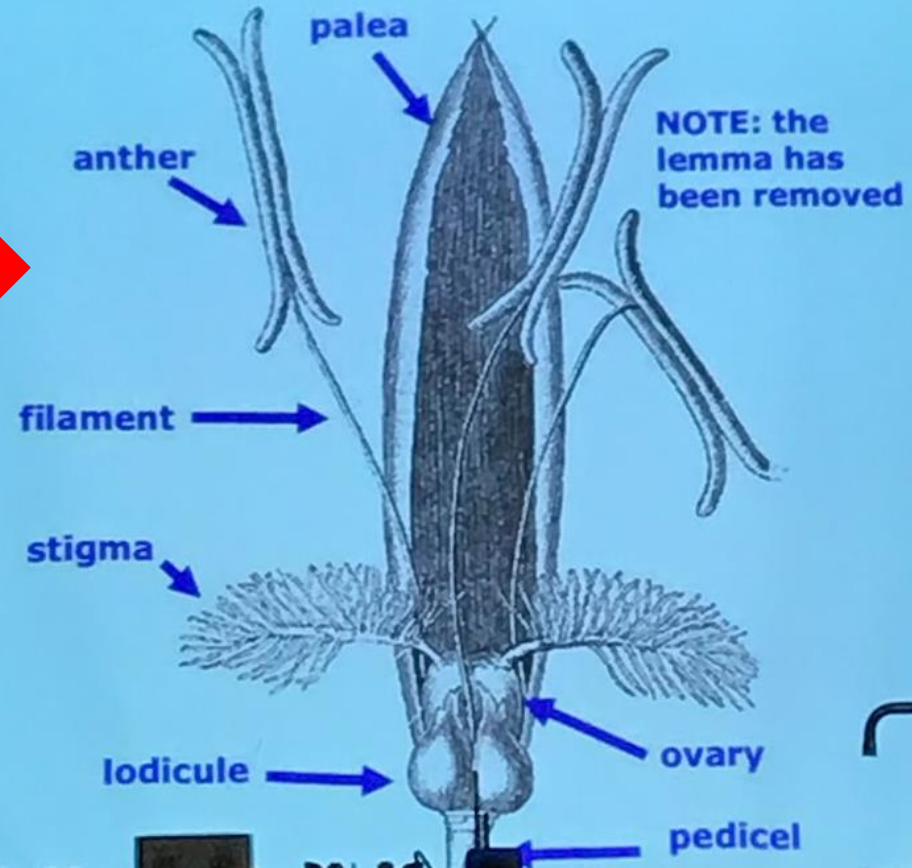


- Each inflorescence is made of many spikelets
- Each spikelet is made of many florets
- Each individual floret is a singular grass flower

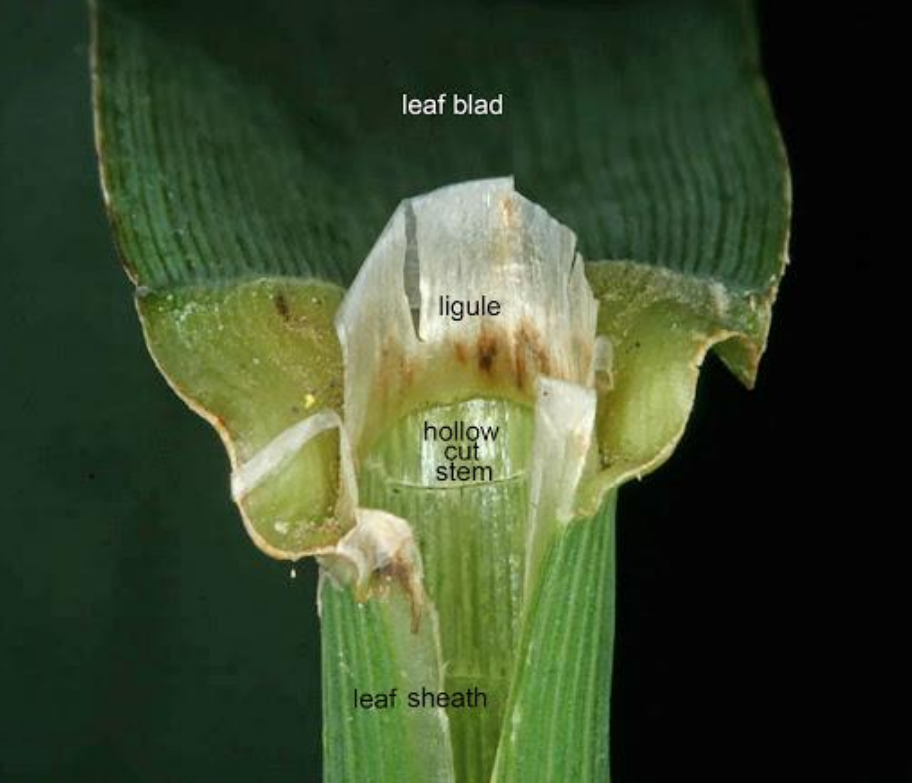
## Grass spikelet



## Grass floret

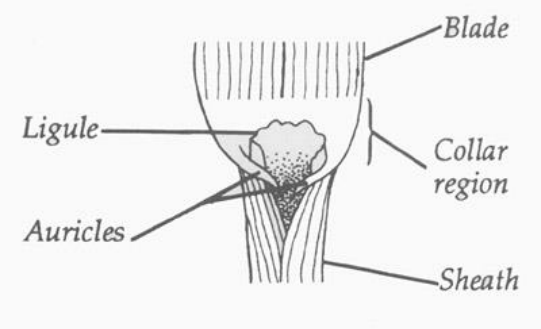


# Look for...

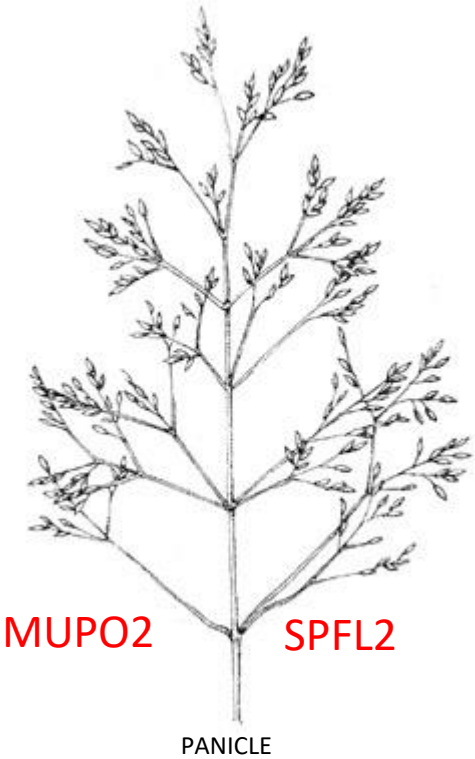


This leaf structure, especially the ligule (hairy or membranous)!

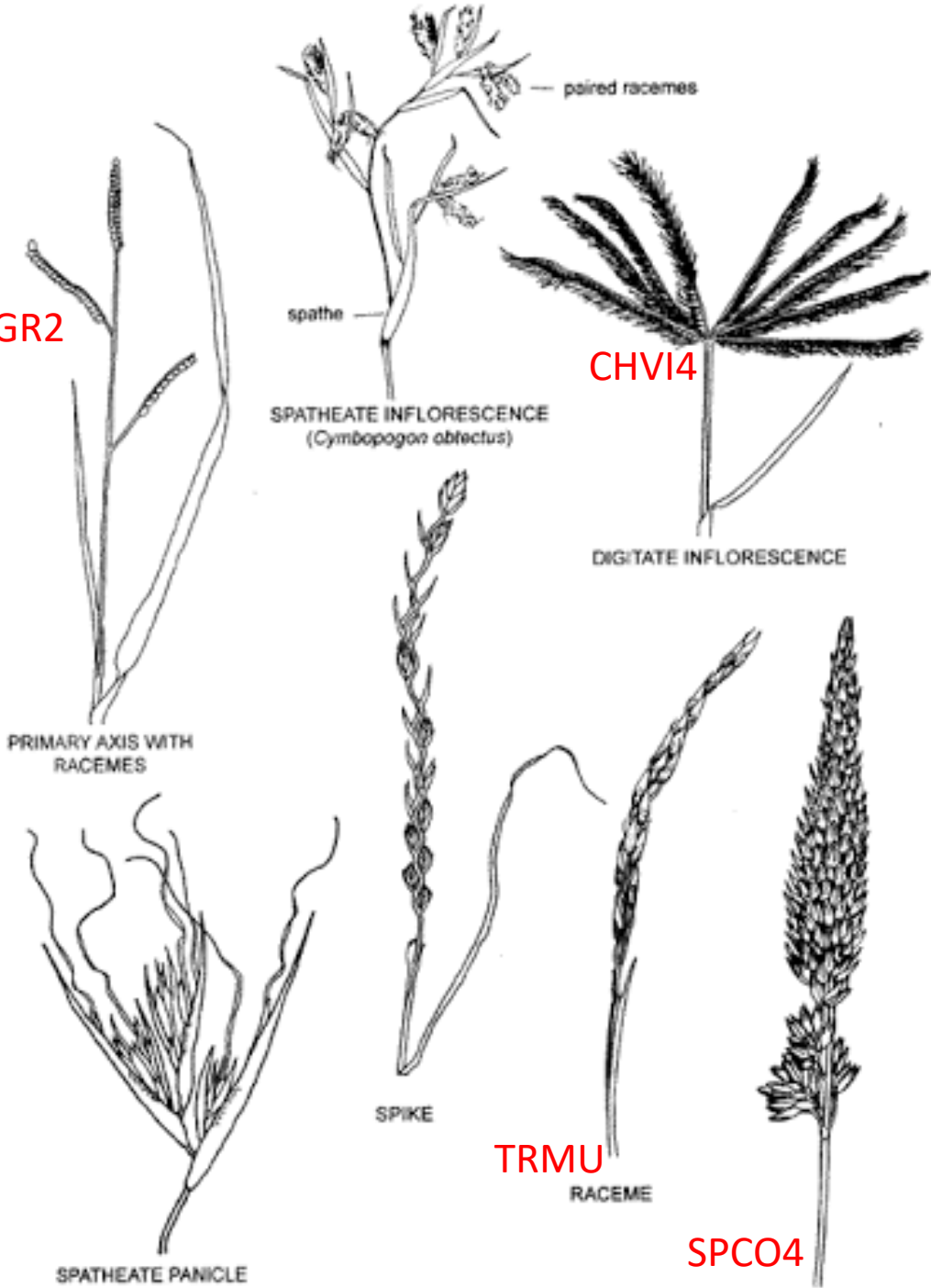
Hairy collars in the Sporobolus genus



A variety of sized and shaped inflorescences like these. They often look fluffy due to depending on wind for seed dispersal



BOGR2



*Aristida*



# *Aristida adscensionis*

USDA code: ARAD

Common name: Sixweeks threeawn

Family: Poaceae

Habitat: waste ground, along roadsides, and on degraded rangelands and dry hillsides, often in sandy soils. It is associated with woodland, prairie, and desert shrub communities.

Description: Annual grass 10-30 cm; inflorescence narrow and spikelike, often with a purplish color; spikelets with one floret, unequal glumes; lemma elongated into a twisted awn column, apex bearing three awns 5-15 mm long.

Smaller than *A. purpurea* and *A. ternipes*

Native

Looks like an annual ARPU9!



# *Aristida purpurea*

USDA code: ARPU9

Common name: Purple threeawn

Family: Poaceae

Habitat: sandy

Description: Perennial grass 10-60 cm; inflorescence narrow and spikelike; spikelets with one floret, unequal glumes; lemma elongated into a twisted awn column, apex bearing three awns 7-10 cm long

Different from other *Aristida* in being perennial and having very unequal Glumes

Native



# *Aristida ternipes*

USDA Code: ARTE3

Common name: Spidergrass

Family: Poaceae

Habitat: Sandy and Rocky soils??

Description: **Culms** 25-120 cm, wiry, erect to sprawling, unbranched, **ligules** less than 0.5 mm; **blades** 5-40 cm long, 1-2.5 mm wide, flat to folded, straight to lax at maturity, **primary branches** 5-25 cm, remote, stiffly ascending to divaricate, with axillary pulvini, usually naked near the base; **secondary branches** and **pedicels** usually appressed. **Spikelets** usually congested. keeled, usually not twisted, 0.1-0.2 mm wide apices, junction with the awns not evident; **awns** unequal or almost equal, not disarticulating at maturity; **central awns** 8-25(30) mm, straight to arcuate at the base; **lateral awns** absent or to 0-23 mm.

Perennial

Much taller than *A. adensionis*, and perennial

Native



*Bouteloua*

# *Bouteloua aristidoides*

USDA code: BOAR

Common name: Needle-grama

Family: Poaceae

Habitat: loamy sand

Description: **Plant:** Annual grass to 50 cm; blades 2-5 cm long, <2mm wide, flat or folded; panicles 3-10 cm with 4-15 branches; branches one-sided, 10-45 mm, delicate, deciduous, densely pubescent with 2-10 spikelets/branch. **Ligules** 0.2-0.5 mm

Similar to, but much smaller than

*B. curtipendula*

Native



Looks like an annual version of a cross between BOCU (spikelets hanging to one side) and BOER4 (needle like spikelets)

“BOAR looks like BOER4”

# *Bouteloua barbata*

USDA code: BOBA2

Common name: Sixweeks grama

Family: Poaceae

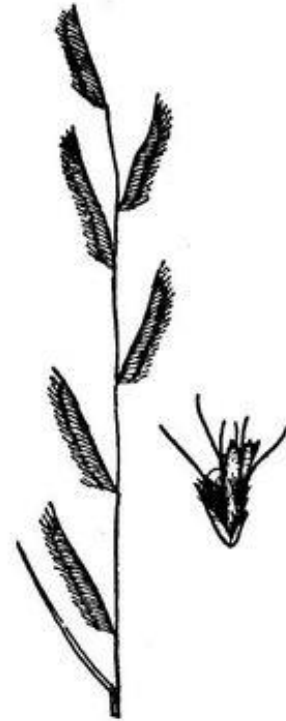
Habitat: loose sands, rocky slopes, and washes, often on disturbed soils, usually at elevations below 2000 m

Description: annual; tufted

Much smaller than *B. eriopoda*, glabrous stem, annual.

Native

\*\*We usually see BOBAB3, *B. barbata* var *barbata*



Looks like an annual BOGR2

# *Bouteloua curtipendula*

USDA code: BOCU

Common name: Sideoats grama

Family: Poaceae

Habitat:.. grasslands and wetlands of the drier portions of the central grasslands of North America

Description: Perennial grass often rhizomatous, culms to 80 cm; blades to 30 cm long, 3-7 mm wide, scabrous on underside; panicles one-sided, with 13-30 reflexed branches; branches 10-30 mm, deciduous with 2-7 spikelets

Native



Courtesy of The Morton Arboretum



Pendulous side oats!

# *Bouteloua eriopoda*

USDA code: BOER4

Common name: Black grama

Family: Poaceae

Habitat: grows on dry plains, foothills, and open forested slopes, often in shrubby habitats, and also in waste ground. It is usually found between 1000-1800 m, but extends to 2500 m.

Description: Stoloniferous perennial grass to 60 cm, stolons woolly-pubescent, culms wiry, decumbent, often rooting at nodes, lower internodes woolly; blades 3-6 cm long, <2mm wide; panicles 2-15 cm with 2-8 branches; branches persistent, with 8-18 spikelets

Native

Look for the wooly stem in segments!





# *Bouteloua gracilis*

USDA code: BOGR2

Common name: Blue grama

Family: Poaceae

**Habitat:** *Bouteloua gracilis* grows in pure stands in mixed prairie associations and disturbed habitats, usually on rocky or clay soils and mainly at elevations of 300-3000 m. Its native range extends from Canada to central Mexico; records from the eastern portion of the Flora represent introductions.

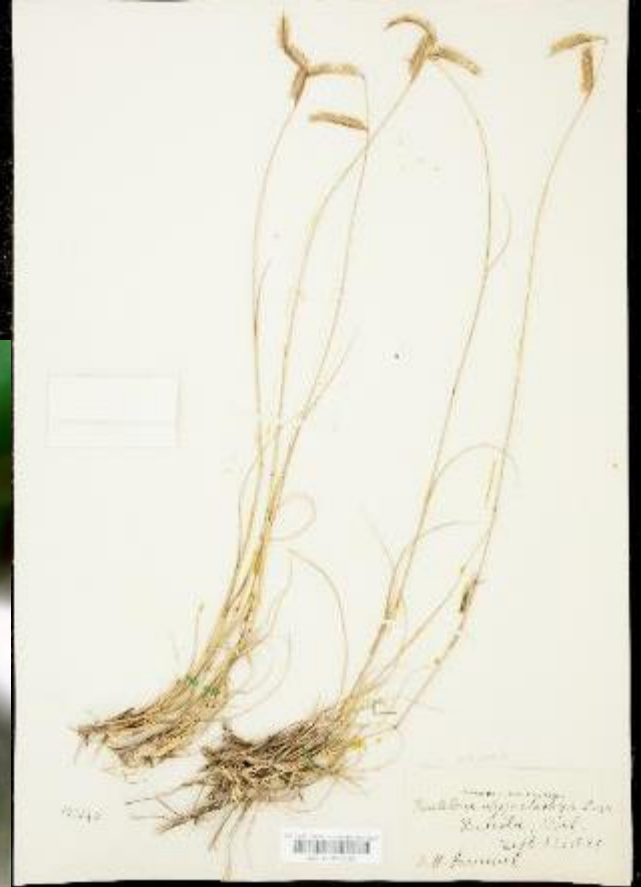
**Description:** **Culms** 24-70 cm, not woody basally, erect, geniculate, or decumbent and rooting at the lower nodes, not branched from the aerial nodes; **nodes** usually 2-3, glabrous or puberulent; **lower internodes** glabrous. **Leaves** mainly basal; **sheaths** glabrous or sparsely hirsute; **ligules** 0.1-0.4 mm, of hairs, often with marginal tufts of long hairs; Perennial

Different from *B. hirsuta* in that it does not have extended primary branch past terminal spikelet.

Native



BOGR2 – the spikelets often curve (like the letter G) when dead and crispy



# *Bouteloua hirsuta*

USDA Code: BOH12

Common name: Hairy grama

Family: Poaceae

Habitat:

Description: perennial; densely or loosely cespitose, occasionally stoloniferous. **Culms** 15-75 cm, erect or decumbent, sometimes branched basally, sometimes branched aerially; **nodes** 3-6; **internodes** glabrous or sparsely to densely pubescent with papillose-based hairs. **Leaves** basal or mainly cauline; **sheaths** mostly glabrous, finely scabrous, or pubescent, pilose near the ligules; **ligules** 0.2-0.5 mm, of hairs; **blades** 1-30 cm long, 1-2.5 mm wide, flat to involute, papillose-based hairs often present on the bases of the margins. **branches** 10-40 mm, persistent, straight, with 20-50 spikelets, axes extending 5-10 mm beyond base of the terminal spikelets; **disarticulation** above the glumes

Primary branches extend past spikelets, differentiating it from *B. gracilis*

Native



Looks like BOGR2, but with an extended branch at the end of spikelet

# *Bouteloua warnockii*

USDA Code: BOWA

Common name: Warnock's grama

Family: Poaceae

Habitat: grows on limestone ledges and dry slopes below limestone outcrops.

Description: Perennial. **Culms** 20-35(50) cm, stiffly erect. **Leaves** bluish-green, more or less glaucous; **sheaths** mostly glabrous, hairs present distally; **ligules** 1-1.5 mm, of hairs; **blades** 5-15(25) cm long, 1-1.5(2.5) mm wide, stiffly erect or curving, involute when dry; mostly glabrous, ligular area with long and short hairs, bases usually with papillose-based hairs on the margins. **Panicles** 5-13(20) cm, with 9-15(30) branches; **branches** 4-5.5 mm, deciduous, scabrous, with 2-6 spikelets, axes terminating well beyond the terminal spikelets, apices entire; **disarticulation** at the base of the branches. **Spikelets** 5-6.5 mm

Compared to *B. curtipendula*, has narrower leaves, and is found **almost exclusively on the open grasslands and rocky hills of Otero Mesa**

Native



*Bothriochloa*

# *Bothriochloa barbinodis*

USDA Code: BOBA3

Common name: Cane bluestem

Family: Poaceae

Habitat: along roadsides, drainage ways, and gravelly slopes in desert grasslands,

Description: Smells like blueberries. Fuzzy. **Culms** 60-120 cm tall, rarely more than 2 mm thick, erect, geniculate at the base, often branched at maturity, not glaucous below the nodes; **nodes** hirsute, hairs 3-4 mm, mostly erect to ascending, tan or off-white. **Leaves** cauline; **ligules** 1-2 mm, often erose; **blades** 20-30 cm long, 2-7 mm wide, not glaucous, glabrous or sparingly pilose near the throat. **Panicles** 5-14(20) cm on the larger shoots, oblong to somewhat fan-shaped, silvery-white; **Sessile spikelets** 4.5-7.3 mm; **lower glumes** short pilose, with or without a dorsal pit; **awns** 20-35 mm;

Perennial

Native

Crush the inflorescence to smell blueberries!



*Bromus*

# *Bromus rubens*

USDA Code: BRRU2

Common Name: Red brome

Family: Poaceae

Habitat: It now grows in North America in disturbed ground, waste places, fields, and rocky slopes, from southern Washington to southern California, eastward to Idaho, New Mexico, and western Texas.

Description: Annual. with fine retrorse pubescence; blades narrow, 1.5-4(-5) mm wide, sometimes involute; ligule 1-2.5(-3) mm; infl contracted, ovoid, short, to 10 cm, often purplish, the short branches and pedicels stout, ascending; spikelets 18-25(-30) mm, 3-8(-10)-fld, scaberulous to finely hirsute; glumes subulate, the first (5-)6.5-10 mm, 1-veined, the second 9-13 mm, 3-veined; lemmas subulate, 12-17 mm, 0.5-1.2 mm wide in side-view, 3- or 5-veined, the slender apical teeth 4-5 mm; awns 12-20(-24) mm, straight or slightly arcuate-spreading

**Invasive**



# *Bromus tectorum*

USDA Code: BRTE

Common Name: Cheatgrass

Family: Poaceae

Habitat: disturbed sites, such as overgrazed rangelands, fields, sand dunes, road verges, and waste places. It is highly competitive and dominates rapidly after fire, especially in sagebrush areas.

Description: Annual. **Culms** 5-90 cm, erect, slender, puberulent below the panicle. **Sheaths** usually densely and softly retrorsely pubescent to pilose, upper sheaths sometimes glabrous; **auricles** absent; **ligules** 2-3 mm, glabrous, obtuse, lacerate; **blades** to 16 cm long, 1-6 mm wide, both surfaces softly hairy. **Panicles** 5-20 cm long, 3-8 cm wide, open, lax, drooping distally, usually 1-sided; **branches** 1-4 cm, drooping, usually 1-sided and longer than the spikelets, usually at least 1 branch with 4-8 spikelets. **Spikelets** 10-20 mm, usually shorter than the panicle branches, sides parallel or diverging distally, moderately laterally compressed, often purplish-tinged, not densely crowded, with 4-8 florets. **Glumes** villous, pubescent, or glabrous, margins hyaline; **lower glumes** 4-9 mm, 1-veined; **upper glumes** 7-13 mm, 3-5-veined; **lemmas** 9-12 mm, lanceolate, glabrous or pubescent to pilose, 5-7-veined, rounded over the midvein, margins hyaline, often with some hairs longer than those on the back, apices acuminate, hyaline, bifid, teeth 0.8-2(3) mm; **awns** 10-18 mm, straight,

**Invasive**





*Chloris*

# *Chloris virgata*

USDA Code: CHVI4

Common name: Showy  
windmillgrass

Family: Poaceae

Habitat: tropical to temperate  
areas with hot summers

Description: Annual grass to 60  
cm; blades weak, flat or folded, 2-  
8 mm broad; inflorescence  
branches usually numerous, 2-6  
cm long, densely aggregated at the  
culm apex (finger-like); spikelets  
small, numerous along spike  
branches.

Native



*Dasyochloa*

# *Dasyochloa pulchella*

USDA code: DAPU7

Common name: Fluffgrass

Family: Poaceae

Previous names: *Erioneuron pulchellum*, *Tridens pulchellus*

Habitat: rocky, sandy arid soils

Description: Low perennial grass, appearing annual, < 15 cm; culms numerous, wiry, consisting mainly of a single elongated internode bearing at its apex a fascicle of leaves and spikelets, the fascicles eventually bending over to the ground and rooting; blades 1-5 cm long; inflorescence of capitate clusters of sessile or short-pedicelled spikelets most 7-13 mm long, 6 to 12-flowered.

Native

Looks like SCBR2 but feels  
less soft (contrary to name)

Young plants can be covered in fluff



E

# *Enneapogon desvauxii*

USDA code: ENDE

Common name: Spike pappusgrass

Family: Poaceae

Habitat: open areas of the southwestern United States

Description: Perennial or annual grass to 45 cm, culm nodes hairy; blades 2-12 cm long, 1-2 mm wide; slightly hairy, involute; Panicles spike-like 2-10 cm, grayish-green; spikelets with 3-6 florets, lemmas strongly 9-veined, these extending into barbed awns.

Native

**ENDE** inflorescence is in a spike,  
grows **in** not out





Annual version of ERLE

# *Eragrostis pectinacea*

USDA Code: ERPE

Common name: Desert lovegrass

Family: Poaceae

Habitat: cultivated and waste areas, parkways and parking lots, and cindery or sandy waste ground like railroad ballast.

Description: Annual grass to 60 cm; blades 2-15 cm, 2-4 mm wide, flat; panicles 10-25 cm, open; spikelet stalks (pedicels) widely spreading; spikelets 5-8 mm long, <2 mm wide with 5-15 florets.

Much smaller than *E. lehmanii* and annual

Native





L

# *Leptochloa dubia*

USDA Code: LEDU

Common Name: Green Sprangletop

Family: Poaceae

Habitat: often in well-drained, sandy or rocky soils

Description: Perennial. **Culms** (10)30-110 cm, round or basally compressed, tillering from the basal nodes, not branching from the aerial nodes, mostly glabrous, sometimes pilose basally; **internodes** solid. **Sheaths** sometimes with a pilose collar; **ligules** 1-2 mm, truncate, erose; **blades** (2)8-35 cm long, 2-8 mm wide, glabrous, strigose, or pilose. **Panicles** 8-20 cm, with 2-15 subdigitate or racemose branches; **secondary panicles** often hidden in the lowest leaf sheaths; **branches** 2-19 cm, ascending to spreading at maturity.

Native



# *Lycurus sp.*

USDA Code: LYCUR

Common name: Wolftail

Family: Poaceae



## Habitat:

Description: Plants perennial; cespitose. Culms 10-60 cm, erect to somewhat decumbent, usually branched. Sheaths open, compressed-keeled, glabrous, smooth or scabridulous, mostly shorter than the internodes, a 2-veined prophyllum often present; ligules hyaline, strongly decurrent, truncate or rounded to elongate and acuminate, sometimes with narrow triangular lobes extending from the edges of the sheath on either side; **branches** short, fused to the rachis, terminating in a pair of unequally pedicellate spikelets or a pedicellate spikelet and a short secondary branch with two spikelets. **disarticulation** at the fused base of the pedicels or pedicel and branch, paired spikelets falling as a unit, leaving a cuplike tip. **Spikelets** with 1 floret

Native



*Muhlenbergia*

# *Muhlenbergia arenacea*

USDA Code: MUAR

Common name: Ear muhly

Family: Poaceae

Habitat: grows in sandy flats, plains, alluvial fans, washes, depressions, and alkaline mesas in open grasslands

Description: perennial; rhizomatous, not cespitose. **Culms** 10-30(40) cm, decumbent, terete to somewhat compressed-keeled near the base; **internodes** scabridulous below the nodes. **Sheaths** about 1/2 as long as the internodes, margins hyaline; **ligules** 0.5-2 mm, hyaline, with lateral, 1-2 mm lobes; **blades** 0.7-4(6) cm long, 0.5-1.7 mm wide, flat, occasionally folded, tapering, scabrous abaxially, strigulose adaxially, margins and midveins thickened, whitish, apices narrow, often sharp.

Native



# Muhlenbergia arenicola

USDA code: MUAR2

Common name: Sand muhly

Family: Poaceae

Habitat: *Muhlenbergia arenicola* grows on sandy mesas, limestone benches, and in valleys and open desert grasslands, at elevations of 600-2135 m.

Description: Culms (15)20-60(70) cm, somewhat decumbent, 1 or more nodes exposed; internodes hispidulous below the nodes. Leaves somewhat basally concentrated, most blades not reaching more than  $(1/4)1/2$  of the plant height; sheaths usually a little shorter than the internodes, not keeled, scabridulous, margins hyaline, basal sheaths rounded, not becoming spirally coiled when old; ligules 2-9 mm, hyaline, acute, lacerate, often with lateral lobes; blades 4-10(16) cm long, 1-2.2 mm wide, not arcuate, flat, folded, or involute, scabrous, often glaucous. Perennial

Native



# *Muhlenbergia porteri*

Common name: Bush muhly

USDA code: MUPO2

Family: Poaceae

Habitat: grows among boulders on rocky slopes and on cliffs, and in dry arroyos, desert flats, and grasslands, frequently in the protection of shrubs, at elevations of 600-1700 m.

Description: perennial; loosely cespitose from a knotty base, not rhizomatous, distinctly bushy in appearance. Purple to yellow stems, anthers, and leaves.

Native

Most common *Muhlenbergia*!  
Stems grow zig-zag and tangly,  
inflorescence often purple  
**Bush muhly** hides in **bushes**!



*Panicum*



# *Panicum hallii*

USDA code: PAHA

Common name: Hall's panicgrass

Family: Poaceae

Habitat:

Hall's panicum grows on sandy to clayey calcareous soils. It will tolerate soils that are weakly saline.

Description: Perennial

Hall's Panicum curls at the edges of its hairless leaves when it matures or dries. It can be anywhere from six to twenty inches in height. It flowers from April to November and forage value is fair for livestock and wildlife.

Native



Perennial, likes hills

Old dead leaves look like woodshavings/ribbons



# *Panicum hirticaule*

USDA Code: PAHI5

Common name: Mexican witch

Family: Poaceae

Habitat: gravel, loamy sites

Description: Annual grass 20-40 cm; sheaths and leaf blades pappilose-hispid 4-8 cm long, 3-7 mm wide; panicle open 1/3 to 1/4 the length of the culm; spikelets 3-4 mm long; first glume about 1/2 length of second glume; fruit smooth and shiny; fertile lemma not "winged" at base

Native



Annual, likes low elevation sandy/loamy/gravelly, won't have dead ribbony leaves

# *Pleuraphis mutica*

USDA code: PLMU3

Common name: Tobosa

Family: Poaceae

Previous names: *Hilaria mutica*

Habitat: **Plant:** Rhizomatous perennial grass 30-60 cm, culms bending at middle nodes; leaf blades 2-15 cm, mostly scabrous on both sides; Inflorescence a terminal spikelike panicle 4-8 cm long, of reduced, disarticulating branches; each branch with three spikelets.

Description: level upland areas and desert valleys subject to occasional flooding but lacking permanent streams

Native

**PLMU3 grows in tufts/plumes**

**Old dead leaves get gray and scraggly**



S

# *Scleropogon brevifolius*

USDA code: SCBR2

Common name: Burrograss

Family: Poaceae

Description: **Stolons** to 50 cm, wiry, internodes 5-15 cm. **Culms** (5)10-20 cm, erect. **Ligules** about 1 mm; **blades** 2-8(12) cm long, 1-2 mm wide. **Bisexual spikelets** 2-4 cm, staminate florets below the pistillate florets. **Staminate spikelets** 2-3 cm. **Pistillate spikelets** subtended by a glumelike bract; **lemma bodies** 2.5-3 cm.  $2n = 40$ .

Habitat: grows on grassy plains and flats, generally being most abundant on disturbed or overgrazed land. Its North American range extends from the southwestern United States. Perennial

Native



Looks similar to DAPU7, but feels softer to the touch. When flowering, look for two different types of inflorescences:

- 1) With long wispy awns
- 2) With thick glumes

Also look for many individuals connected by stolons (3)



# *Setaria leucopilula*

USDA code: SELE6

Common name: Plains bristlegrass

Family: Poaceae

Alternate names: *Setaria macrostachya*, *Setaria vulpiseta*

Habitat: Dry plains and washes, rocky slopes, often in partial shade

Description: Perennial bunchgrass to 1m; blades flat or folded 8-25 cm long, 2-5 mm wide, usually scabrous on both surfaces; panicle densely flowered and spike-like; spikelets 2-2.5 mm long; 1st glume about 1/2 as long as the spikelet, three nerved; bristles usually solitary below each spikelet.

Native



# *Sporobolus*

HAIRY COLLARS!



# *Sporobolus airoides*

USDA Code: SPAI

Common name: Alkali Sacaton

Family: Poaceae

Habitat: *Sporobolus airoides* grows on dry, sandy to gravelly flats or slopes, at elevations from 50-2350 m. It is usually associated with alkaline soils.

Description: **Culms** 35-120(150) cm, stout. **Sheaths** rounded below, shiny, apices glabrous or sparsely hairy, hairs to 6 mm; **ligules** 0.1-0.3 mm; **blades** (3)10-45(60) cm long, (1)2-5(6) mm wide, flat to involute, glabrous abaxially, scabridulous adaxially, margins smooth or scabridulous; **flag blades** ascending. **Panicles** (10)15-45 cm long, 15-25 cm wide, diffuse, subpyramidal, often included in the uppermost sheath; **primary branches** 1.5-13 cm, spreading 30-90° from the rachis; **secondary branches** spreading, without spikelets on the lower 1/4-1/3. Perennial.

Taller than *S. cryptandrus* and *S. flexuosus*.

Native



Looks like a tall version of SPFL2 and SPCR  
“SPAI grows high”



# *Sporobolus contractus*

USDA Code: SPCO4

Common name: Spike dropseed

Family: Poaceae

Habitat: grows in dry to moist, sandy soils, salt-desert scrub, desert grasslands.

Description: Plants perennial; cespitose, not rhizomatous. Culms 40-100(120) cm tall, 2-4(5) mm thick near the base. Sheaths rounded below, margins hairy, particularly distally, hairs to 3 mm, apices with conspicuous tufts of hair; ligules 0.4-1 mm; primary branches 0.3-1.5 cm, appressed, spikelet-bearing to the base.

Native **The only  
Sporobolus with  
the inflorescence  
contracted**



# *Sporobolus cryptandrus*

USDA code: SPCR

Common name: Sand dropseed

Family: Poaceae

**Habitat:** It grows in sandy soils and washes, on rocky slopes and calcareous ridges, and along roadsides in salt-desert scrub, pinyon-juniper woodlands, yellow pine forests, and desert grasslands.

**Description:** **Plants** perennial; cespitose, not rhizomatous, bases not hard and knotty. **Culms** 30-100(120) cm tall, 1-3.5 mm thick, erect to decumbent. **Sheaths** rounded below, glabrous or scabridulous, margins sometimes ciliate distally, apices with conspicuous tufts of hairs, hairs to 4 mm; **ligules** 0.5-1 mm; **blades** (2)5-26 cm long, 2-6 mm wide, flat to involute, glabrous abaxially, scabridulous to scabrous adaxially, margins scabridulous.

Does not have the extremely appressed branches of *S. contractus* or the extremely reflexed branches of *S. flexuosus*.

Native

Secondary branching is more  
oppressed compared to SPFL2



# *Sporobolus flexuosus*

USDA code: SPFL2

Common name: Mesa dropseed

Family: Poaceae

Habitat: grows on sandy to gravelly slopes, flats, and roadsides

Description: **Plants** perennial (rarely appearing annual); cespitose, not rhizomatous, bases not hard and knotty. **blades** (2)5-24 cm long, 2-4(6) mm wide, ascending or strongly divergent, flat to involute, glabrous abaxially, scabridulous adaxially, margins scabridulous.

Primary branches usually reflexed and tangled, unlike *S. cryptandrus* and *airoides*

Native



Compared to SPCR, the secondary branching is open and often looks wiggly (**flexible**)



# Other *Sporobolus* spp.



*Sporobolus nealleyi* SPNE  
Looks like annual SPFL2



*Sporobolus wrightii* SPWR  
Looks like (w)really big SPCR



*Sporobolus giganteus* SPGI  
Looks like gigantic SPCO4



*Tridens*

# *Tridens muticus*

USDA Code: TRMU

Common name: Slim tridens

Family: Poaceae

Habitat:

Description: Perennial grass to 50 cm; blades narrow; inflorescence 6-20 cm long, paniculate or racemose, narrow and spikelike, the spikelets not crowded; spikelets 9-13 mm long, 5 to 8-flowered; lemmas tinged with purple.

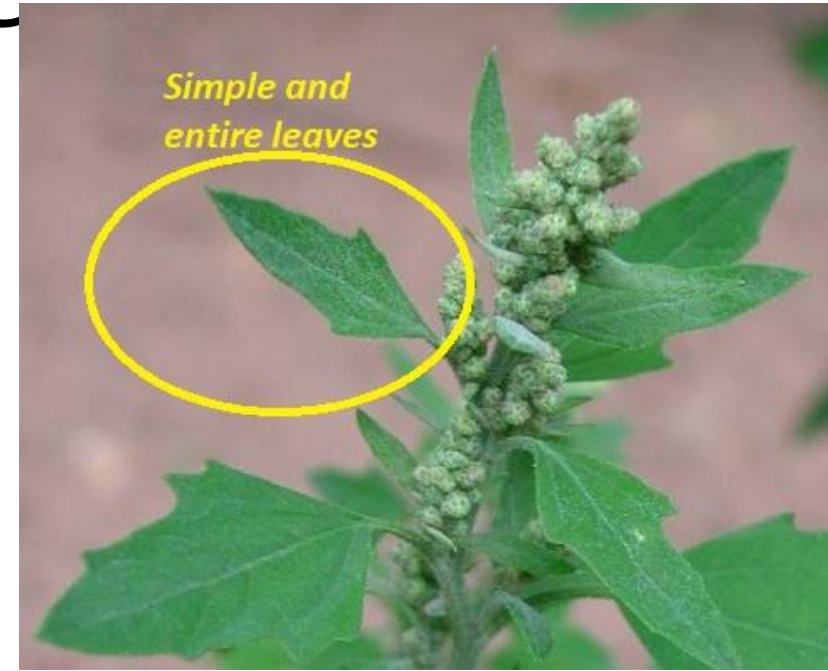
Native



Has pretty purple striped spikelets

# Annual Forbs

# Amaranthaceae





# *Amaranthus acanthochiton*

USDA Code: AMAC

Common Name: Greenstripe

Family: Amaranthaceae

Habitat: Flowering summer-fall. Sandy areas, sand dunes, riverbanks, disturbed habitats

Description: **Plants** glabrous or glabrescent. **Stems** eproximal bract, much-branched, 0.1-0.8 m; ranches ascending. **Leaves:** petiole shorter than blade; blade narrowly linear-lanceolate to linear, 2-8 × 0.2-1.2(-1.7) cm, base narrowly cuneate to narrowly decurrent, margins erose, crispate, or irregularly undulate, apex acute to subobtus. **Inflorescences** terminal spikes, erect, usually stiff. **Bracts** completely enfolding flower; of pistillate flowers with prominent excurrent midrib, venation distinct,

**Compared with AMPA:** has more lanceolate leaves, prickly fruits, and usually found on loose sand.

Native



# *Amaranthus palmeri*

USDA Code: AMPA

Common Name: Palmer's pigweed

Famiy: Amaranthaceae

Habitat: Roadsides ditches, fields, arroyos, swales, microplayettes

Description: **Plants** glabrous or nearly so. **Stems** erect, branched, usually (0.3-)0.5-1.5(-3) m; proximal branches often ascending. **Leaves:** long-petiolate; blade obovate or rhombic-obovate to elliptic proximally

AMAC has narrower leaves, spiny fruits, and is usually on loose sand.

Native



# *Chenopodium sp.*

USDA Code: CHENO

Common Name: Goosefoot

Family: Amaranthaceae

Habitat:

Description: **Herbs**, annual or perennial [rarely suffruticose, or small trees], farinaceously pubescent with small white inflated hairs or glabrous. **Stems** erect to prostrate, branched (rarely simple), not jointed, not armed, not fleshy. **Leaves** alternate

Only native species in the district; non-native species further north or at higher elevations.



# *Amaranthus blitoides*

- Prostrate and typically small
- Relatively weedy species
- Sometimes white splotches on leaves



# *Salsola tragus*

USDA Code: SATR12

Common Name: Russian thistle.

Family: Amaranthaceae

Description: Annual forb usually much-branched **Leaves:** leaves reduced, 8-52 mm, thread-like, becoming rigid; base becoming wide, leathery, becoming thick and spine-tipped; margin at base translucent  
**INFLORESCENCE:** inflorescence axillary  
**Flowers:** flowers generally 1 per axil, sepals becoming thickened and winged in fruit

Invasive

Tumbleweed, invasive, pokey



# *Tidestromia lanuginosa*

USDA Code: TILA2

Common Name: Woolly tidestromia

Family: Amaranthaceae

Habitat: Primary and disturbed vegetation, riparian forests, pinyon-juniper woodlands, desert scrub, creosote bush scrub, mesquite-yucca communities, grasslands, coastal dunes, beaches, roadsides, fields, in basalt deposits, limestone, gypseous, calcareous, alluvial, rocky, volcanic, gravelly, sandy, silty, muddy, and clayey soils

Description: Annual forb; stems procumbent to prostrate, radiating from the root; stems reddish, herbage with branched hairs making leaves appear whitish **Leaves:** leaves (opposite) broadly ovate to spatulate; young terminal leaves white-gray, tomentose-canescenscent, hairs short, much-branched, wearing off, older leaves green above, more whitish below **INFLORESCENCE:** cymes, clusters of 1-5 flowers, axillary, sessile, subtended and  $\pm$  enclosed by involucre of 2-3 bract-like leaves that become hardened; bracts scarious **Flowers:** flowers yellow, in small axillary clusters, bisexual;

Native



# Asteraceae



*Distinct flowers with **Disk** and **Ray**  
Petals. Fruits are Achenes*



# *Aphanostephus ramosissimus*

USDA Code: APRA

Common Name: Low faintcrown

Family: Asteraceae

Habitat:

Description: **Annuals**, 10-45 cm; vestiture hispidulo-puberulent, stem hairs spreading to deflexed, 0.2-0.6 mm. **Phyllary apices** acute. **Ray florets** 20-41. **Disc florets:** corolla bases not conspicuously swollen and indurate. **Cypselae:** hairs apically straight; **pappi** minutely ciliate crowns 0.1-0.2 mm or absent or nearly so

Native





# *Bahia pedata*

USDA Code: BAPE

Common Name: Blunt-scale bahia

Family: Asteraceae

Habitat: Sandy soils, limestone, openings in grasslands and pinyon-juniper woodlands

Description: **Annuals or biennials**, 15-70(-120+) cm. **Stems** mostly erect. **Leaves** all or mostly alternate (proximalmost sometimes opposite); blades simple or 1-2-ternately lobed, lobes ovate or obovate to lanceolate or oblanceolate, 2-25 × 1-6(-8) mm, faces sparsely scabrellous, usually gland-dotted as well.

Native



# *Gutierrezia sphaerocephala*

USDA Code: GUSP

Common Name: Round-head snakeweed

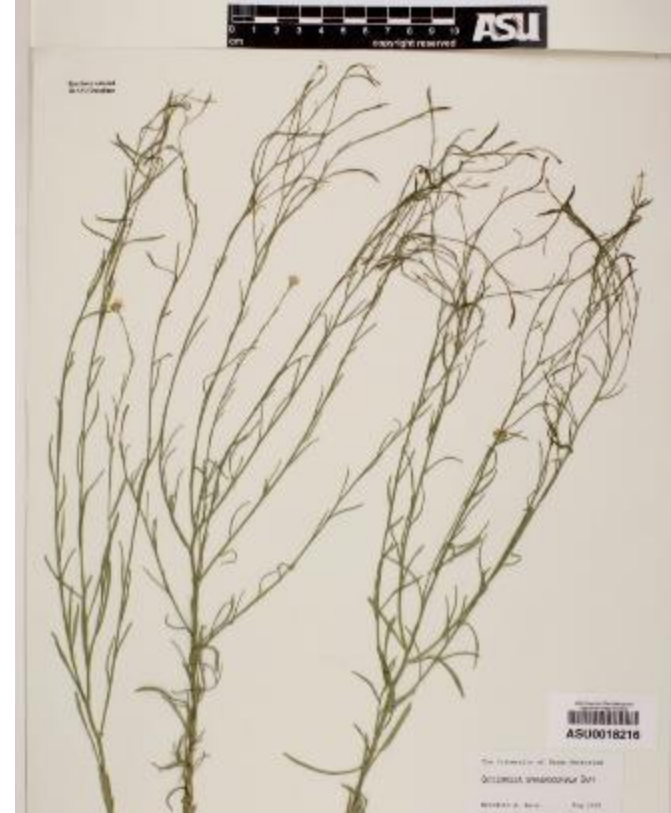
Family: Asteraceae

Habitat: Grasslands, roadsides, lake edges, alkaline flats with *Atriplex*, oak-pine-juniper woodlands, often over gypsum or limestone;

Description: **Annuals**, 20-50 cm. **Stems** minutely, prominently, often sparsely, papillate-scabrous (hairs triangular or deltate to lanceolate, less than 0.1 mm). **Leaves:** proximal usually absent at flowering; cauline blades 1-nerved, linear, 0.5-1.2 mm wide, little reduced distally. **Heads** in loose arrays.

More diffuse than GUMI & GUSA2; annual.

Native



Spindley version of GUMI/GUSA2, with the most ray flowers

# *Hedosyne ambrosiifolia*

USDA Code: HEAM11

Common Name: Ragged marsh-elder

Family: Asteraceae

Habitat: in sandy, gypseous, or calcareous soils; 1000-2000 m

Description: Leaves: petioles 5-12(-45) mm; blades 3-5(-9) × 4-5(-8) cm overall, lobes 1-3 mm wide. Peduncles 3-12+ mm. Involucres 2-3+ mm. Phyllaries: outer 5 sparsely strigose or glabrous. Paleae 1-1.5 mm. Functionally staminate florets: corollas 1.5-2 mm.

Native



# *Heliomeris longifolia*

USDA Code: HELOA2

Common Name: Annual Goldeneye

Family: Asteraceae

Previous names: *Viguiera longifolia*

Habitat: Rocky slopes.

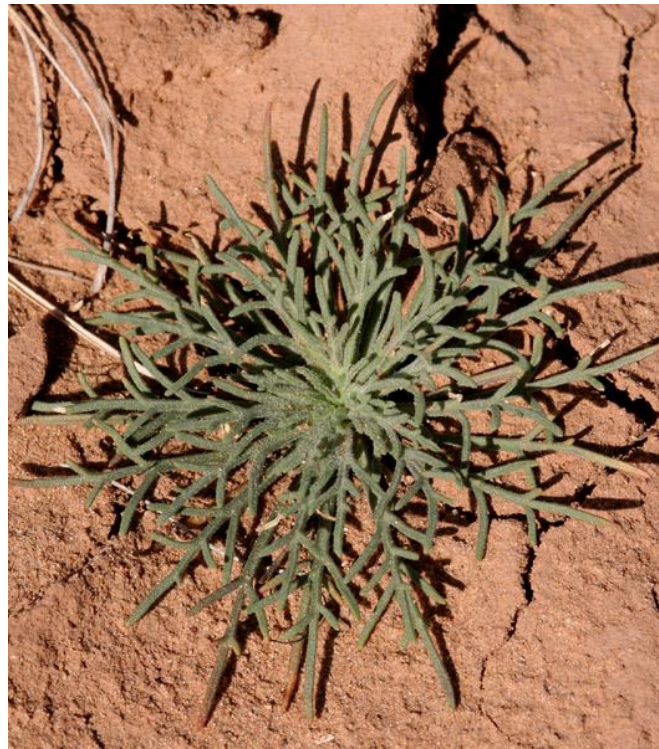
Description: **Annuals**, 7-15 cm (taprooted). **Stems** strigose. **Leaves** usually opposite proximally, sometimes alternate (distal); blades lance-linear to linear, 10-160 × 1.5-8(-12) mm, margins ciliate to  $\frac{1}{4}$  their lengths, hairs mostly less than 0.5 mm, faces strigose to strigillose (hair bases narrowly tuberculate), abaxial often gland-dotted. **Heads** 6-25+. **Peduncles** 0.2-0.5(-2) cm, lengths  $\frac{1}{20}$ - $\frac{1}{2}$  times leafy portions of stems. Involucres 6-14 mm diam. Phyllaries 3-6 mm. Paleae oblong, 4-4.5 mm, acute to cuspidate. Ray florets 12-14; laminae  $\pm$  elliptic, 5-17 mm (glabrous or puberulent). Disc florets 50+; corollas 2.5-4 mm.

Native



## *Hymenoxys odorata*

- USDA Code: HYOD
- Common Name: Poison rubberweed
- Family: Asteraceae
- Habitat: Roadsides, open flats, mesquite and creosote-bush flats, ditches and drainage areas, stream banks and bottoms
- Description: Annual 15-60 cm, soft-hairy, ± glabrous in age; stems erect, branched above  
**Leaves:** basal generally 0 at time of flower; cauline 1-5 cm, simple, alternate, divided into linear lobes 1 mm or less wide, dotted with sunken resin glands
- Native



# *Laënnecia coulteri*

USDA Code: LACO13

Common Name: Coulter's woolwort

Family: Asteraceae

Habitat: Stream banks, roadsides, other disturbed sites, clays or sands, often alkaline soils

Description: Taprooted annual forb to 1 m; herbage sticky glandular **Leaves:** Taprooted annual forb to 1 m; herbage sticky glandular; leaves mostly alternate, clasping, oblong-lanceolate, 2-15 mm wide, regularly toothed or shallowly lobed

Native



# *Machaeranthera tanacetifolia*

USDA Code: MATA2

Family: Asteraceae

Habitat: Desert scrub, pinyon/juniper  
woodland

Description: **Plant:** Taprooted annual or  
biennial forb to 1m **Leaves:** leaves alternate,  
simple, deeply lobed to bipinnatifid,  
generally 3-12 cm **INFLORESCENCE:** primary  
inflorescence a head, each resembling a  
flower; heads radiate, solitary or cymosely  
clustered; phyllaries generally in 3-5 series,  
tips elongate, acuminate, spreading to bent  
backward

Native



# *Malacothrix fendleri*

USDA Code: MAFE

Common Name: Fendler's desert-dandelion

Family: Asteraceae

Habitat: Grasslands, pinyon-juniper woodlands, creosote bush associations

Description: **Annuals**, 3-15(-25+) cm. **Stems** (1-)3-8, ± decumbent or spreading-ascending, branched proximally and distally, glaucous or glabrous. **Cauline leaves:** proximal elliptic to oblong-ob lanceolate, sometimes pinnately lobed (lobes 2-4+ pairs, oblong to triangular, unequal, apices acute), not fleshy, ultimate margins usually dentate, faces glabrous; distal reduced (narrowly triangular to linear or filiform, margins dentate or entire).

Native





# *Pectis* spp.

Common Name: Limoncillo

Family: Asteraceae

## ***Pectis angustifolia*: PEAN**

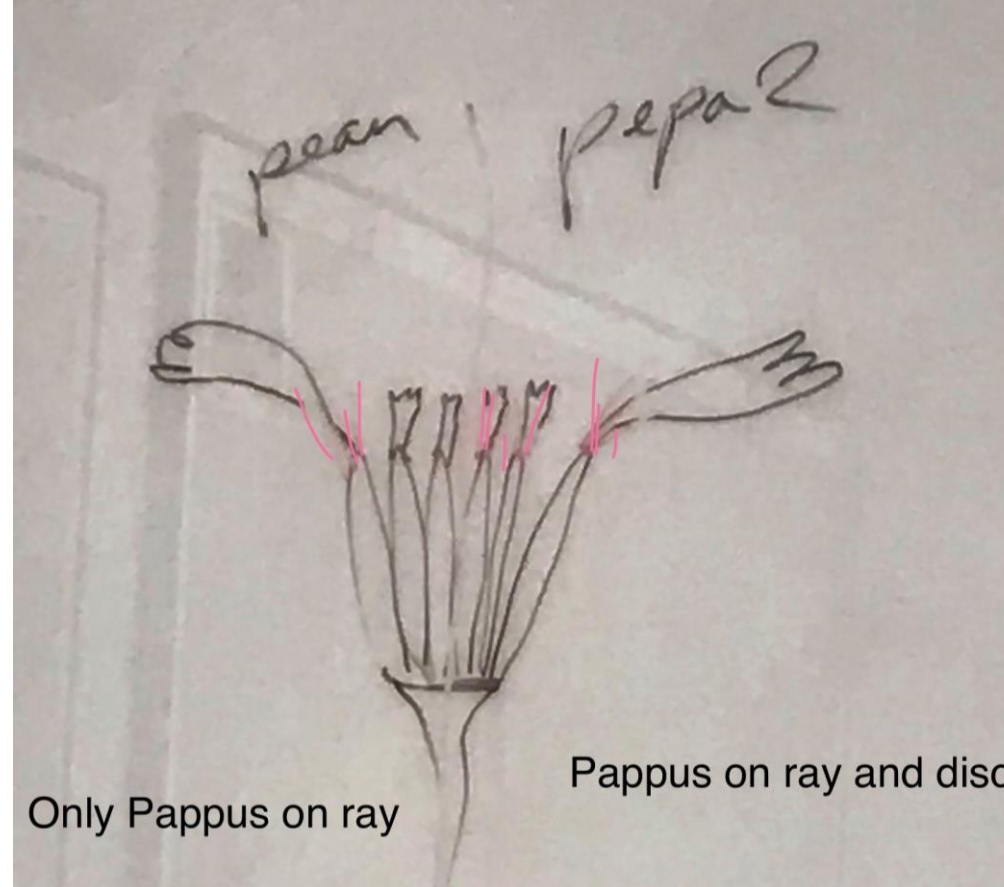
Description: Annuals or perennials, 1-20 cm (caudices slender, woody); herbage lemon-scented or spicy-scented. Stems erect or ascending, glabrous or puberulent. Leaves linear, 10-45 × 1-3 mm, margins with 2-5 pairs of bristles 1-2 mm, faces glabrous (dotted with oil-glands 0.2-0.7 mm). Heads in congested, cymiform arrays

Has no pappus on disc flowers, unlike *P. papposa*

## ***Pectis papposa*: PEPA2**

Description: herbage spicy-scented. Stems ascending, glabrous or puberulent. Leaves linear, 10-60 × 1-2 mm, margins with 1-3 pairs of setae, faces glabrous (dotted on margins with round to oval oil-glands 0.3-0.5 mm). Heads in congested or open, cymiform arrays. Peduncles 3-40 mm. Involucres campanulate to cylindrical

Has pappus on both ray and disc flowers, unlike *P. angustifolia*



Have to look really close!  
May need microscope

*Pectis* spp. have a distinct  
lemony, VERY sweet smell

# *Rafinesquia neomexicana*

USDA Code: RANE

Common Name: Desert chicory

Family: Asteraceae

Habitat: Gravelly and sandy desert soils, often partially supported in branches of shrubs

Description: Annual, glabrous; sap milky; stems erect, 1-several from base, 1-4 dm, in larger plants generally < 5 mm diam near base **Leaves:** basal and cauline, alternate, 3-15 cm, dentate or  $\pm$  narrowly lobed **INFLORESCENCE:** primary inflorescence a head, each resembling a flower; heads generally 1-5 per stem, ligulate; peduncles 2-8(15) cm; involucre generally 17-30 mm; phyllaries in 3-4 series.

Native



# *Sanvitalia abertii*

USDA Code: SAAB

Common Name: Abert's dome

Family: Asteraceae

Habitat: dry slopes

Description: Slender annual forb <20 cm; stems spreading or erect, simple to much-branched, strigose **Leaves:** simple, opposite, lanceolate or lance-linear, sessile or short-petioled, 2-5 cm, acute, scabrous **INFLORESCENCE:** primary inflorescence a head, each resembling a flower; heads radiate, generally in cymes

Native



# *Xanthisma gracile*

Code: XANGRA

Common Name: Slender sleep-daisy

Family: Asteraceae

Previous names: *Machaeranthera gracilis*

Habitat: Rocky to sandy washes, plains, slopes, roadsides

Description: **Annuals**, 5-45 cm; taproots 2-5+ cm. **Stems** 1-15+, often branched at base or throughout, moderately stout to stout, not wiry, moderately hairy (hairs antrorsely appressed). **Leaves**: basal often withering by flowering, blades 20-60 × 10-25 mm, pinnatifid to 2-pinnatifid; cauline evenly spaced, blades obovate to oblanceolate (proximal), oblong to linear (distal <sup>2</sup> / 3 +), 4-10(-20) × 1-3 mm, markedly reduced distally, margins evenly serrate to serrulate, teeth 3-6 per side, each tipped with prominent white bristle 1.5-2.5 mm, faces moderately hairy (hairs antrorsely appressed)

Native



# Boraginaceae

Five sepals and five petals that are often fused into either a cone or saucer shape.



# *Cryptantha crassisepala*

USDA Code: CRCR3

Common Name: Thick-sepal cat's-eye

Family: Boraginaceae

Habitat:

Description: Annual forb 10-30 cm; herbage bristly; flowers white, in loose cymes; nutlets 4, with pale tuberculations, one axial odd nutlet. **Flowers:** flowers white, in loose cymes; nutlets 4, with pale tuberculations, one axial odd nutlet.

Native



# *Eriastrum diffusum*

USDA Code: ERDI2

Common Name: Miniature woolly-star

Family: Boraginaceae

Habitat: Open sites, desert shrublands, sagebrush, pinyon-juniper woodland

Description: **PLANT:** Annual 3-35 cm tall, erect and simple to diffusely branching. **LEAVES:** subglabrous to sparsely woolly, entire or with 1-2 pairs of lobes near the base of the rachis, 1-3 cm long.

Native



# *Lappula occidentalis*

USDA Code: LAOCO

Common Name: Spiny sheepbur

Family: Boraginaceae

Habitat:

Description: Plant: Annual forb 10-40 cm;  
Leaves: herbage dark green, bristly Flowers:  
flowers pale blue or white in racemes Fruit: a  
spiny bur.

Native





*Lappula occidentalis*  
*var. cupulata*

USDA Code: LAOCC

Common Name: Spiny sheepbur

Family: Boraginaceae

Habitat:

Description: Annual forb 10-40 cm; **Leaves:** herbage dark green, bristly **Flowers:** flowers pale blue or white in racemes **Fruit:** a spiny bur.

Native



# *Nama hispidum*

USDA Code: NAHI

Common Name: Sandbells

Family: Boraginaceae

Habitat:

Description: **Plant:** Annual 5-15 cm; herbage pubescent **Leaves:** leaves alternate, narrowly spatulate, gradually narrowing to a winged petiole, upper leaves smaller, sessile **Flowers:** flowers lavender, 13-15 mm long **Fruit:** a capsule.

Native



# *Phacelia arizonica*

USDA Code: PHAR13

Common Name: Arizona Scorpionweed

Family: Boraginaceae

Habitat: Low, clayey sites, usually in tobosa grassland.

Description: Annual forb to 40 cm; herbage glandular, with stiff hairs **Leaves:** leaves alternate, entire to bipinnate, larger leaves basal **Flowers:** inflorescences helicoid (curled at the tip like a scorpion's tail); corolla tubular, light blue, stamens and styles exerted 3-4 mm **Fruit:** a capsule; central ridge of seeds lacking corrugations.

Native



Brassicaceae

# *Descurainia pinnata* subsp. *ochroleuca*

USDA Code: DEPIO2

Common Name: Western tansy-mustard

Family: Brassicaceae

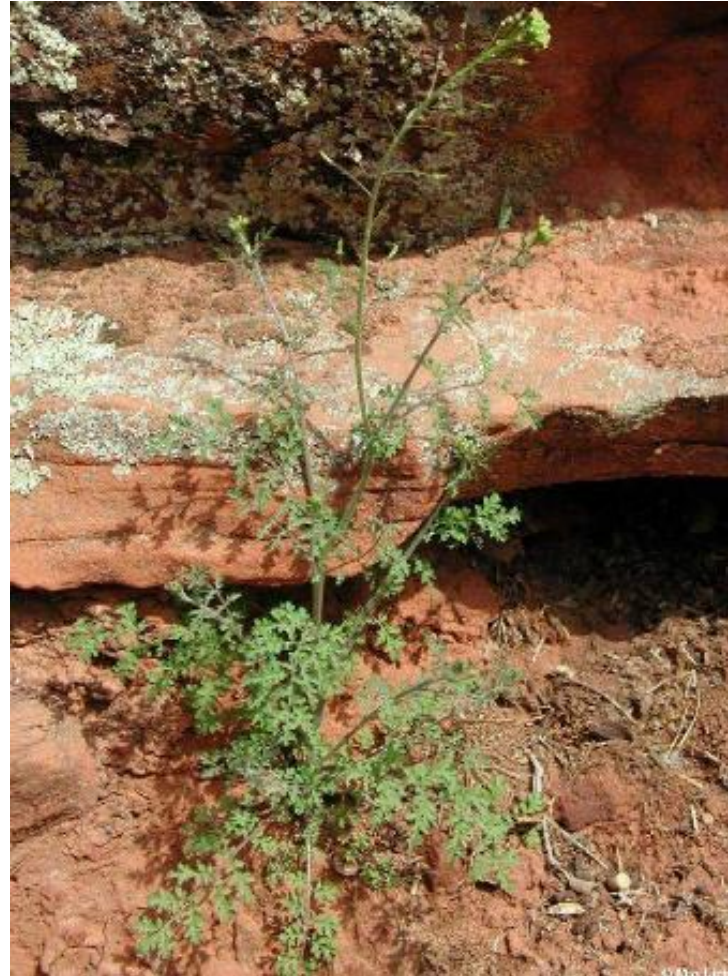
Habitat: Washes, slopes, often saline soils;  
disturbed areas.

Description: leaves alternate, pinnate,  
bipinnate, or pinnatisect, 3-7 cm long  
Flowers: flowers minute, cream, in  
elongate racemes  
Fruit: a 2-celled clavate  
capsule, 5-10 mm long; Seeds 5-20 per  
chamber, 2 rows per chamber, 0.5-1 mm

Native



A winter annual. You will see it like this 



# *Dimorphocarpa wislizeni*

USDA Code: DIWI2

Common Name: Spectaclepod

Family: Brassicaceae

Habitat: Sandy roadsides, sandstone knolls, sand hills and dunes, sandy streambeds and dry washes, desert flats.

Description: **Annuals. Stems** unbranched or branched basally, branched distally, (1-)2-6(-8) dm. **Basal leaves:** petiole 1-4(-5) cm; blade lanceolate to linear-lanceolate, (2-)3-7(-10) cm × 4-15(-20) mm, base cuneate to attenuate, margins pinnately lobed to coarsely dentate. **Cauline leaves:** (proximalmost) petiole 1-4(-5) cm, (distalmost) shortly petiolate or sessile; blade linear to narrowly lanceolate, base cuneate, margins usually entire, rarely dentate, or repand. **Fruiting pedicels** divaricate to slightly reflexed, (6-)8-14 (-22) mm. **Flowers:** sepals (2.5-)3-4 × 1-1.5 mm, pubescent

Tastes like horseradish.

Native



Fruits look like little aviator sunglasses

Thick leaves smell and taste like horseradish!



# *Lepidium lasiocarpum*

USDA Code: LELA

Common Name: Wright's  
pepperweed

Family: Brassicaceae

Habitat: Beaches, tidal shores, saline  
soils, roadsides

Description: Annual forb usually less  
than 20 cm, ± glabrous, grayish,  
rhizomed; stems much-branched

**Leaves:** leaves alternate, pinnatifid  
to entire; basal < 3 dm, 6-8 cm wide,  
toothed, long-petioled; cauline  
reduced but many 1-4 cm wide,  
lower petioled, upper sessile

**INFLORESCENCE:** dense racemes

**Flowers:** small, cream, bisexual;  
sepals 4, free, < 1 mm, margins  
wide, white; petals white; stamens  
6; ovary 1, superior, chambers  
generally 2, septum membranous,  
connecting 2 parietal placentas,  
style 1, stigma simple or 2-lobed

Native



# *Physaria gordonii*

Code: PHYGOR

Common Name: Gordon's bladderpod

Family: Brassicaceae

Habitat: Sandy or light soils, rocky plains, caprock ledges, gravelly brushland, sandy desert washes, stream bottoms, pastures, roadsides, abandoned fields;

Description: Annual; stems several from base, erect to decumbent or prostrate, (unbranched or branched, sometimes densely leaved), 1-3.5(-4.5) dm. Basal leaves: blade obovate to broadly oblong, 1.5-5(-8) cm, margins lyrate-pinnatifid, dentate, or entire.

LEFE (*Physaria fendleri*) is a perennial, usually on rockier soils.

Native





# *Sisymbrium irio*

USDA Code: SIIR

Common Name: London Rocket

Family: Brassicaceae

Habitat: Disturbed areas, orchards, roadsides

Description: Annual forb to 90 cm, branched from near base; hairs 0 or above, few,  $\pm$  short, thin **Leaves:** leaves alternate, variable in length; basal not clustered, petioled, pinnately lobed, terminal lobe  $>$  lateral, often hastate; upper cauline pinnately lobed to  $\pm$  entire **INFLORESCENCE:** racemes, many-flowered; bracts 0 **Flowers:** bisexual; sepals 4, free, erect to  $\pm$  spreading; petals (0)4, free, 2.5-4 mm, barely  $>$  sepals, narrowly oblong, pale yellow, claws long; stamens generally (2,4)6, generally 4 long, 2 short; ovary 1, superior, chambers generally 2, septum membranous, connecting 2 parietal placentas, style 1, stigma simple or 2-lobed

**Invasive**



Euphorbiaceae

# *Chamaesyce micromera*

USDA Code: CHMI7

Common Name: Desert spurge

Family: Euphorbiaceae

Habitat: Sandy places; < 1000 m.; Sep-Dec, also Apr-Jun

Description: Prostrate annual forb; herbage with milky sap **Leaves:** leaves opposite, cauline, short-petioled, inequilateral at base, <5 mm long, margins entire **INFLORESCENCE:** flower-like, generally 1 per node; involucre < 1 mm, bell-shaped, glabrous to hairy; gland << 0.5 mm, round, red or pink; appendage 0 **Flowers:** flowers monoecious borne in cyathia, petaloid appendages absent or minute; ovary and capsule glabrous; Staminate flowers 2-5, generally in 5 clusters around pistillate flower.

Unlike *C. albicaulis*, no petals and annual—thus it will never appear partially buried in sands

Native



CHIMI7: not hairy and not dentate, Looks like CHAL11 but with two unfused stipules



# *Chamaesyce serpyllifolia*

USDA Code: CHSE6

Common Name: Thyme-leaf spurge

Family: Euphorbiaceae

Habitat:

Description: Prostrate annual forb branching from central point; herbage with milky sap; stems reddish **Leaves:** leaves opposite, inequilateral at base, serrate margins on upper half, often red along midvein

Native

Unlike *C. serrulata*, is glabrous.

CHSE6 and CHSE7 have serrated leaves

CHSE6 is **NOT** hairy



# Chamaesyce serrula

USDA Code: CHSE7

Common Name: Sawtooth spurge

Family: Euphorbiaceae

Habitat:?

Description: Plant: Prostrate to ascending annual forb; herbage pilose, with milky sap  
Leaves: leaves opposite, inequilateral at base, with serrulate margins, sometimes with red along midvein  
Flowers: flowers monoecious borne in cyathia; petaloid appendages white; ovary and capsule glabrous, ~2mm long; seeds smooth.

Has hairs unlike *C. serpyllifolia*

Native



CHSE6 and CHSE7  
have serrated  
leaves

CHSE7 IS hairy



CHSE7 (serrated leaves and hairy)  
(CHSE6 is serrated but not hairy)

CHAL11 (not hairy, not serrated leaves, connected part)  
(CHIMI IS LIKE CHAL BUT TWO LEAF PARTS)

Fabaceae

# *Astragalus nuttallianus*

USDA Code: ASNU4

Common Name: Nuttall's locoweed

Family: Fabaceae

Habitat: Gravelly

Description: **Plant:** Annual, slender, minutely strigose; stem prostrate or weakly ascending, 4-45 cm **Leaves:** generally compound, alternate, stipuled, 1.5-6.5 cm, odd-1-pinnate;; leaflets 5-13, 2-10 mm, at least upper elliptic, acute at tips, lower sometimes blunt, notched at tip **INFLORESCENCE:** raceme, axillary; flowers 1-4, 4-7 mm **Flowers:** bilateral; calyx 5-lobed; corolla whitish, faintly lilac-tinged (rarely purplish); banner outside wings in bud, keel blades with small protrusion at base locking into pit on adjacent wing

Native

Unlike *A. allochrous*, has less "inflated" fruits, and is pubescent



# *Senna bauhinioides*

USDA Code: SEBA3

Common Name: Twinleaf senna

Family; Fabaceae

Habitat: dry sandy areas at lower elevation

Description: spreading low plant with gray-green foliage. The yellow flowers frequently only partly open. The fruit is a plump pod. The leaves are paired

Native



**1 plant with 2 leaves is SEBA3**





Geraniaceae

# *Erodium cicutarium*

USDA Code: ERCI6

Common Name: Filaree

Family: Geraniaceae

Habitat: Open, disturbed sites, grassland, scrub

Description: Winter-annual or biennial herb up to 40 cm tall **Stem**: very short at first, then becoming much-branched with branches loosely ascending or spreading, and hairy throughout.

**Invasive**



Martyniaceae

# *Proboscidea parviflora*

USDA Code: PRPA2

Common Name: Wooton's devil's claw

Family: Martyniaceae

Habitat:

Description: Erect or spreading annual to 2.5 m across and 1 m high. **LEAVES:** simple; petioles to 25 cm long or more; blades broadly triangular-ovate to subobicular-ovate, cordate or inequilateral, rounded to obtuse at apex, to 25 cm long and nearly as broad, the margins entire to shallowly 3- to 7-lobed, the sinuses obtuse, denticulate. **INFLORESCENCE:** slender racemes to 2.5 dm long at maturity.

Annual

Native



*Proboscidea  
althaeifolia*

PRAL4

PERENNIAL VERSION



Molluginaceae

# *Mollugo cerviana*

USDA Code: MOCE

Common name: threadstem carpet weed

Family: Molluginaceae

Habitat: weed of sandy places in tropical and subtropical regions around the world

Description: erect, 3-20 cm. **Leaves** glaucous, in whorls of 4-12, basal rosette present; petiole 0.8-1.1 mm; blade linear to spatulate, 3-15 × 1-5 mm, base cuneate, apex acute to obtuse. **Inflorescences:** flowers in groups of 3-4 in stalked, axillary and terminal umbellate cymes. **Flowers:** sepals pale green, glaucous abaxially, white adaxially, elliptic to obovate, 1-1.5 × 1-1.6 mm, margins white, membranous; stamens 5, alternate with sepals; pedicel erect to spreading,

Non-Native/Introduced



Nyctaginaceae



# *Boerhavia torreyana*

USDA Code: BOTO2

Common Name: Torrey's spiderling

Famliy: Nyctaginaceae

Habitat: Usually on sandy soils in deserts or arid grasslands, especially among mesquite coppice dunes.

Description: **Herbs**, annual; taproot tapered, soft or  $\pm$  woody. **Stems** prostrate or decumbent-ascending, usually profusely branched throughout, 10-80 dm, minutely puberulent with flat hairs, usually also with spreading hairs, sometimes also glandular basally, glabrous distally.

Unlike *B. triquetra*, does not have flowers in umbellate groups.

Native



# *Boerhavia triquetra*

USDA Code: BOIN

Common Name: Slender spider-wing

Family: Nyctaginaceae

Habitat: Sandy or gravelly areas in deserts

Description: **Herbs**, annual; taproot tapered, soft or  $\pm$  woody. **Stems** erect or ascending, occasionally decumbent, moderately or profusely branched, **Leaves** mostly in basal  $\frac{1}{2}$  of plant; larger leaves with petiole 4-8[-15] mm, blade broadly ovate or oval to lanceolate, 10-21[-35]  $\times$  6-8[-13] mm (distal leaves smaller, proportionately narrower), adaxial surface usually glabrous, rarely minutely puberulent, abaxial surface paler than adaxial, glabrous, **Flowers**: pedicel 0.3-4.5 mm; bracts at base of perianth quickly deciduous, 2, linear-lanceolate to lanceolate [ovate], 0.5-0.6 mm; perianth whitish to pale pink or purplish, campanulate beyond constriction, 1 mm; stamens 2-3, included or barely exerted.

Native

Has umbellate flowers, unlike *B. torreyana*



Onagraceae

# *Oenothera primiveris*

USDA Code: OEPR

Common Name: Early evening-primrose

Family: Onagraceae

Habitat: Sandy flats, low hills, dune margins, arroyos

Description: Annual acaulescent forb; herbage often pubescent **Leaves:** leaves 3-30 cm long, deeply toothed or lobed; ovary inferior **Flowers:** flowers 4-merous, showy, petals yellow, turning pinkish, 2-3 cm long; capsule at base a plant, sharply 4-angled, thick and hard.

Native



Plantaganaceae

# *Plantago patagonica*

USDA Code: PLPA2

Common Name: Woolly plantain

Family; Plantaganaceae

Habitat: Introduced from farther west. Locally frequent in sandy soils. It also occurs in newly disturbed sand and along roads.

Description: Annual herb with a taproot flowering stem to 20 cm tall **Leaves:** basal, semi-clasping, to 18 cm long and 1 cm wide, linear to thread-like with a tapering base and pointed tip, more or less parallel-veined, white woolly

Native



Polemoniaceae

# *Ipomopsis longiflora*

USDA Code: IPLO2

Common Name: Blue trumpets

Family: Polemoniaceae

Habitat:

Description: **PLANT:** Annual in AZ or biennial, 25-100 cm tall, simple to branched; stems glabrous to sparsely short pubescent.

**LEAVES:** glabrous to sparsely short pilose, deeply lobed. **INFLORESCENCE:** diffuse, with 1-3, subsessile to long pedicelled flowers at tips of branches.

Native

“Ipomopsis” means “looks like morning glory”, flowers look like classic morning glory trumpets





Polygonaceae

# *Eriogonum abertianum*

USDA Code: ERAB

Common Name: Abert's wild-buckwheat

Family: Polygonaceae



Classic Eriogonum flowers: can be very red/pink or not at all

Habitat: Sandy, gravelly, or clayey flats, washes, and slopes, mixed grassland, saltbush, greasewood, creosote bush, blackbrush, and manzanita communities, oak and conifer woodlands

Description: Annual forb to 50 cm; herbage velvety Leaves: leaves oblong to ovate, in whorls along stem Flowers: flowers cream in head-like clusters at branch tips. Branching inflorescence.

More diffuse than *E. wrightii*.

Native

TWO VARIETIES: ERABN & ERABC

If not in bloom just call it ERAB

ERABC: flowers grow within leaves



V/S ERABN: flowers grow up out of leaves



Both vary in color of flowers

# *Eriogonum trichopes*

USDA Code: ERTR8

Common Name: Little desert-trumpet

Family: Polygonaceae

Habitat: Clayey, sandy to gravelly flats, washes, and slopes, mixed grassland, saltbush, creosote bush, blackbrush, and mesquite communities, pinyon and/or juniper woodlands

Description: Delicate, much-branched annual forb, usually less than 25 cm **Leaves:** leaves ovate, in basal rosette **Flowers:** flowers minute, yellow

Native

Very cute little flowers

“ER.....TR...” don’t know what to say bc its so cute!!



Portulacaceae

# *Portulaca pilosa*

USDA Code: POPI3

Common Name: Kiss me quick

Family: Portulacaceae

Habitat: occur in shallow, sandy soils, often on rocky outcrops, and are often highly branched, compact, short, and not very pilose. in warm, moist environments tend to branch quickly into a spreading habit, with erect growth following secondarily. Plants in cool, dry habitats grow erect first, then branch more slowly

Description: roots fibrous to slightly fleshy. **Stems** prostrate, suberect to erect, succulent; trichomes conspicuous at nodes and in inflorescence; branches 3-25 cm. **Leaf blades** linear to oblong-lanceolate, terete to hemispheric, 5-20 × 1-3 mm, apex acute; involucrelike leaves 6-9.

Native



Solanaceae

# *Solanum elaeagnifolium*

USDA Code: SOEL

Common Name: Silverleaf nightshade.

Famliy: Solanaceae

Habitat: Disturbed areas

Description: **LEAVES:** alternate, simple, linear to oblonglanceolate, to 10 cm long and 2.5 cm wide, the margin entire, sinuate-repand or 6 CANOTIA Vol. 5 (1) 2009 shallowly lobed; blade coriaceous, the lower surface densely covered with stellate hairs; petiole to 5 cm long; base attenuate, oblique, or rounded; apex acute.  
**INFLORESCENCE:** panicles, 5-8-flowered; peduncles to 15 mm long. **FLOWERS:** zygomorphic (Fig. 3C); pedicels to 2 cm long; calyx to 1 cm long, the lobes 1/2 as long to as long as the tube, unequal, linear; corolla rotate, purple or sometimes white, to 3.5 cm in diameter

Native

Little tomato-y looking fruits, silvery, long leaves. Stem has little fragile prickles



Zygophyllaceae



# *Kalistroemia parviflora*

USDA Code: KAPA

Common Name: Warty caltrop

Family: Zygophyllaceae

Habitat:

Description: **Stem:** prostrate, diffusely branched, grayish-hairy. **Leaves:** opposite, pinnately compound, short-stalked, 3 - 6 cm long. Leaflets usually in pairs of four, about 1 cm long, oblong or elliptic, and hairy. **Flowers:** on 1 - 3 cm long stalks, yellow, to 1 cm wide. Sepals awl-shaped. Ovary ten-chambered. **Fruit:** dry, indehiscent, splitting into ten one-seeded sections, to 4 mm wide, egg-shaped, long-beaked, wrinkled, with tuber-like projections.

Native



# *Tribulus terrestris*

USDA Code: TRTE

Common Name: Goatheads

Family: Zygophyllaceae

Habitat: Local along unpaved roads and streets, and in the parking lots of towns with sandy soil. It has also been found along railroads and in sandy cultivated fields.

Description: Prostrate annual forb, diffusely branched **Leaves:** leaves compound **Flowers:** flowers yellow, 5 mm across **Fruit:** a spiny bur.

**Invasive**



# Perennial Forbs

Asteraceae

Nice crunch when you step on them like this →

## *Acourtia nana*

USDA Code: ACNA2

Common Name: Desert-holly

Family: Asteraceae

Previous names: *Perezia nana*

Habitat: Gravel, sandstone, silty, or caliche soils in desert scrub

Description: Perennial forb 5-15 cm; stems woolly at base **Leaves:** leaves alternate, spine-toothed, holly-shaped **Flowers:** flowers all bilabiate with scabrous, bristly pappus.

Native



# *Bahia absinthifolia*

USDA Code: BAAB

Common Name: Hairyseed bahia

Family: Asteraceae

Habitat: Sandy soils with mesquite or desert scrubs, calcareous places

Description: Perennial forb to 50 cm; herbage white woolly **Leaves:** leaves opposite below, alternate above, dissected

Native

Leaves super varied in shape:  
multi-lobed to not at all

Compared to BAMU:  
BAAB has more typical  
looking aster flowers, leaves  
are not as hairy



# Baileya multiradiata

USDA Code: BAMU

Common Name: Desert marigold

Family: Asteraceae

Habitat: Stony slopes, mesas, and sandy plains

Description: Perennial forb 30-50 cm with well-developed taproot; herbage densely white woolly  
**Leaves:** leaves in basal rosettes and alternate on stems, pinnatifid below, reduced and entire on stems

Compared with *B. absinthifolia* has multiple layers of ray florets and more tomentose leaves.

Native

BAMU compared to BAAB  
BAMU has a thicker receptacle- BAM!  
Leaves are usually very fuzzy

Slichter 2011



# *Chaetopappa ericoides*

USDA Code: CHER2

Common Name: Heath-aster

Family: Asteraceae

Habitat:

Description: Perennial forb to subshrub, to 15 cm; caudex ± woody; stems ascending to erect, generally branched, strigose, ± glandular

**Leaves:** basal and cauline (basal 0 at flower), 4-12 mm, alternate, entire, linear to scale-like, pointing up along stem, obtuse to abruptly pointed, ± glandular, bristly-hairy below

Native





# *Melampodium leucanthum*

USDA Code: MELE2

Common Name: Plains blackfoot daisy

Family: Asteraceae

Habitat: Open sites, grasslands, roadcuts, arid or desert scrublands; (200-)1000-2000(-2500) m

Description: Perennials or subshrubs, 12-40(-60) cm. Leaf blades lanceolate, linear-oblong, or linear, 20-35(-45) × 1-10(-12) mm, lengths 3-8+ times widths, pinnately lobed, lobes 1-6, ultimate margins entire. Peduncles 3-7 cm. Outer phyllaries 5, connate 1/2-3/5 their lengths, ovate, 5-7 mm. Ray florets 8-13; corollas cream-white (sometimes purplish abaxially), laminae oblong-elliptic, 7-13 × 2.5-8 mm. Disc florets 25-50.

Native



# *Thymophylla acerosa*

USDA Code: THAC

Common Name: Prickle-leaf  
dogweed

Family: Asteraceae

Habitat: Calcareous outcrops,  
gypseous soils;

Description: Subshrubs or shrubs,  
green, to 25 cm, usually puberulent,  
sometimes glabrescent, rarely  
glabrous. Stems erect (branched  
from bases). Leaves mostly  
opposite; blades not lobed, linear to  
acerosa, 10-18 mm. Peduncles 0-10  
mm, puberulent or glabrous. Ray  
florets 7-8; corollas lemon-yellow,  
laminae 5-6 × 2-3 mm.

THPE4 has deeply lobed leaves and  
flower heads elevated well above  
the leaves.

Native



“THAC.” Short sound, stout flowers

Smells like a Pectis, looks like THPE4

# *Thymophylla pentachaeta*

USDA Code: THPE4

Common Name: Parralena. Five Needeled  
prickly leaf

Family: Asteraceae

Habitat:

Description: **Plant:** Perennial forb to 30 cm  
**Leaves:** leaves with translucent oil glands,  
filiform and clustered at nodes

Has an elevated flower head, unlike *T. acerosa*

Native



THPE4 is jumping up, like its  
saying “yippie!”

Smells like a pectis, looks  
like THAC



# *Verbesina encelioides*

USDA Code: VEEN

Common Name: Cowpen daisy

Family: Asteraceae

Habitat: Fine sandy soil, low elevations.

Description: **Leaves** all or mostly alternate (proximal usually opposite); blades deltate-ovate or rhombic to lanceolate, 3-8(-12+) × 2-4(-6+) cm, bases broadly cuneate to ± truncate, margins coarsely toothed to subentire, apices acute to attenuate, faces strigoso-scabrellous to sericeous. **Involucres** ± hemispheric to saucerlike, 10-20+ mm diam **Ray florets** (8-)12-15+; laminae 8-10(-20+) mm. Heart-shaped seeds.

The winged fruits differentiate this from most of our other asters. Smells acid.

Native

Smells like VEEN!



# *Xanthisma spinulosum*

Code: XASP

Common Name: Lacy sleep-daisy

Family: Asteraceae

Previous names: *Machaeranthera pinnatifida*

Habitat:

Description: Perennial forb to 50 cm **Leaves:** leaves entire, spinulose-toothed or lobed, the lobes bristle-tipped

Native



Boraginaceae

# *Tiquilia canescens*

USDA Code: TICA3

Common Name: Woolly crinklemat

Family: Boraginaceae

Habitat: Slopes, ridges of broken granite, limestone, gneiss; 500-1500 m.

Description: **Leaves:** leaves irregularly alternate and clustered, ovate-elliptic <1 cm long, soft-canescent, grayish; veins obscure, margin entire, spiny-ciliate **INFLORESCENCE:**  $\pm$  axillary; flowers  $\pm$  solitary; bracts 0 **Flowers:** calyx 3-5 mm, free 2/3-3/4 length; corolla 5-lobed, generally  $\pm$  funnel-shaped, tube yellow when young, appendages 0; style branched < 1/3 from tip, shortly exserted from calyx

Native



Brassicaceae



# *Lepidium montanum*

USDA Code: LEMO2

Common Name: Mountain  
pepperweed

Family: Brassicaceae

Habitat: Sandy, gravelly, often saline  
soils; 800-2100 m.

Description: **Plant:** Biennial to shrub-like, rounded; root crown simple or branched; stems generally  $\pm$  erect, 1-several, (1)2-4 dm; branches 0 or many  
**Leaves:** alternate; basal 3-15 cm, pinnately lobed, lobes generally dentate or dissected; cauline reduced, upper generally entire, petioled to not  
**INFLORESCENCE:** racemes, 2-4 cm, many-flowered  
**Flowers:** small, bisexual; sepals 4, free, 1.2 mm, hairs 0 to sparse; petals  $\pm$  2 mm, white to pale cream; stamens (2)6; ovary 1, superior, chambers generally 2, septum membranous, connecting 2 parietal placentas, style 1, stigma simple or 2-lobed  
**Fruit:** capsule with 2 deciduous valves, 2.5-4 mm,  $\pm$  ovate, glabrous, dehiscent; pedicel  $\pm$  cylindrical, slender

Native



# *Lepidium sp.*

USDA Code: LEPID

Common Name: Pepperweed

Family: Brassicaceae

Habitat:

Description: **Plants** not scapose; glabrous, pubescent, hirsute, or pilose. **Stems** usually erect or ascending, sometimes procumbent, decumbent, or prostrate, unbranched or branched. **Leaves** usually basal and cauline (basal absent in *L. fremontii*); petiolate or sessile; basal rosulate or not, petiolate (or petiole undifferentiated from blade), blade margins entire, dentate, denticulate, serrate, crenate, or lobed; cauline petiolate or sessile, blade (base auriculate or not), margins entire, dentate, or pinnately divided. **Racemes** (usually corymbose), elongated or not in fruit. **Fruiting pedicels** erect to divaricate, slender or stout.

Native and Non-Native species



# *Physaria fendleri*

Code: PHFE

Common Name: Fendler's bladderpod

Family: Brassicaceae

Previous names: *Lequerella fendleri*

Habitat: hills, gravels, sandy washes, rocky slopes, bluffs, shallow drainage areas, plains and desert shrub areas

Description: caudex branched, (sometimes woody at base); densely (silvery) pubescent, trichomes (sessile or short-stalked), several-rayed, rays not furcate, fused (webbed) ca. 1/2 their length, (tuberculate throughout or tubercles scarce or absent over center). **Stems** several from base, erect or laterally decumbent

Native



Euphorbiaceae

# *Chamaesyce albomarginata*

USDA Code: CHAL11

Common Name: Rattleweed spurge

Family: Euphorbiaceae

Habitat: Dry slopes

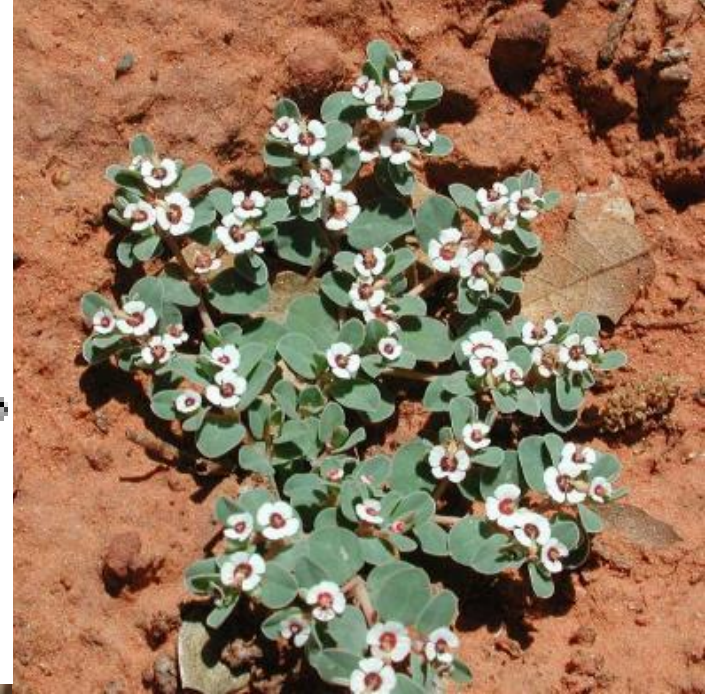
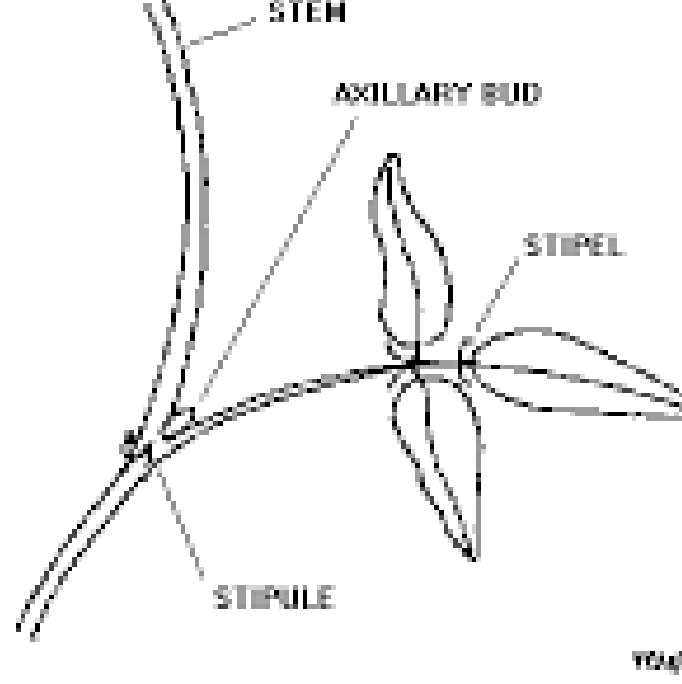
Description: Prostrate perennial forb branching from central point **Leaves:** herbage glabrous with milky sap, stipules united into a glabrous, membranous scale

Native

Perennial, and may appear buried unlike other annual *Chamaesyce sp.*

CHAL11: leaves entire, not hairy, singular fused stipule

CHMI: look-alike with two stipules



USDA Code: CRPO2

Common Name: Leatherweed

Family: Euphorbiaceae

# *Croton pottsii*

Habitat: Disturbed, rocky/gravelly

Description: Plant: Monoecious perennial forb usually < 30 cm; herbage with watery latex, stellate to lepidote pubescence Leaves: leaves alternate, mostly lanceolate, < 2.5 cm wide Flowers: inflorescences terminal and axillary; pistillate flowers proximal and numerous, staminate flowers distal with well-developed corollas Fruit: a 3-seeded capsule.



Native



Leaves usually folded up and kind of wrinkly. Look for silver hue



Fabaceae

# *Astragalus allochrous*

USDA Code: ASAL6

Common Name: Halfmoon locoweed

Family: Fabaceae

Habitat:

Description: Short-lived perennial acaulescent forb to 30 cm **Leaves:** leaves compound, leaflets linear-lanceolate about 1 cm long, strigose on both sides **Flowers:** flowers purple in many-flowered racemes; pods inflated 15-25 mm long

Native

Unlike *A. nuttallianus*, has inflated fruits and is glabrous





# *Hoffmannseggia glauca*

USDA Code: HOGL2

Common Name: Waxy rush-pea

Family: Fabaceae

Habitat: Dry, alkaline flats in deserts, disturbed areas; up to 5,000 ft

Description: **Plant:** Rhizomatous perennial forb 10-20 cm; roots often tuberous **Leaves:** leaves bipinnately compound, leaflets small

**INFLORESCENCE:** raceme, terminal, scapose, 5-15 cm, often glandular **Flowers:** yellow, gland-dotted red; slightly bilateral; sepals  $\pm$  free, equal; petals  $\pm$  equal, spreading; stamens 10, exserted, free, filaments often glandular

Native

Kind of looks like an itty bitty PRGL2,  
with cooler toned leaves and no thorns



Loasaceae

# *Mentzelia multiflora*

USDA Code: MEMU3

Common Name: Adonis blazingstar

Family: Loasaceae

Habitat: sand and gravel bars, roadcuts and banks

Description: Perennial herb; stems to 80 cm tall, usually producing branches along their entire length **Leaves:** to 15 cm long, to 3 cm wide, sessile, narrowly elliptic to lanceolate, occasionally oblanceolate; margins toothed to lobed, sometimes pinnatifid, sometimes approaching entire in very narrow leaves; upper leaves commonly with broad, clasping bases and sometimes with clasping basal lobe

Native



Malvaceae

# *Sida abutifolia*

USDA Code: SIAB

Common Name: Spreading fan-petal

Family: Malvaceae

Habitat: Arid, sandy plains and on roadsides

Description: perennial herb;  
Procumbent perennial herbs,  
stellate-pubescent and usually with  
simple hairs 1-2 mm long **Leaves:**  
ovate to oblong, crenate, up to 1.5  
cm long (occasionally larger)

**Flowers:** solitary in the leaf axils on  
slender pedicels; calyx 4-5(-7) mm  
long; petals white, 5-6 mm long;  
styles 5 **Fruit:** FRUITS oblate-conical  
schizocarp, pubescent, 5 mm  
diameter; mericarps 5, with apical  
spines 0-0.5 mm long; **SEEDS**  
solitary, glabrous

Non-Native



# *Sphaeralcea emoryi*

USDA Code: SPEM

Common Name: Emory's globemallow

Family: Malvaceae

Habitat:

Description: Perennial forb or subshrub to > 1 m; herbage stellate pubescent **Leaves:** leaves alternate, ovate-triangular, 3-lobed, 3-5 cm long **Flowers:** inflorescence racemose-paniculate, many-flowered; corolla reddish, petals 10-12 mm long

Native



# *Sphaeralcea hastulata*

USDA Code: SPHA

Common Name: Wrinkled globemallow

Family: Malvaceae

Habitat: ?

Description: Landeolate, trilobed leaves come to a pointed tip occasionally. Green/ grayish due to hairs on leaf. Lightly serrated. Rather pubescent, tomentose and hirsute. 5 orange petals, fuzzy stem.

Lower-growing than most other *Sphaeralcea*. Compared with SPSUP2, has less lobed leaves.

Native



# *Sphaeralcea pumila*

USDA Code:

Common Name: Globemallow

Family: Malvaceae

More lobed leaf than *S. Hastulata*

Native





# *Sphaeralcea* sp.

USDA Code: SPHAE

Common Name: Globemallow

Family: Malvaceae

SPIN2: perennial, leaves not as lobed, light anthers

SPHPUM: perennial, dark anthers

SPHA: perennial, deeply lobed, light anthers

Native

SPHPUM



SPIN2



SPHA



Nitrariaceae

# *Peganum harmala*

USDA Codes: PEHA

Common Name: African rue

Family: Nitrariaceae

Habitat: Dry waste areas

Description: smells foul when crushed. It is a much branched suffrutescent perennial. The leaves are pinnatifid with linear, glabrous segments. There are four or five white petals that have greenish veins visible and 8-10 stamens with filaments that are dilated at the base. The fruit is a nearly globose capsule that contains many seeds

**Invasive & noxious weed**



Nyctaginaceae

# *Acleisanthes chenopodioides*

USDA Code: AMCH3

Common Name: Goosefood moonpod

Family: Nyctaginaceae

Previous names: *Ammocodon chenopodioides*

Habitat: Dry, sandy, and gravelly areas, rock, gypseous clay

Description: herbaceous, overall lightly pubescent with white, T-shaped minute hairs. **Stems** erect or ascending, sparsely to moderately leafy, 15-40 cm. **Leaves** dull green when fresh or dry, petiolate, those of a pair very unequal (the smaller often less than  $\frac{1}{2}$  the size of the larger), gradually reduced toward inflorescence, fleshy; petiole 5-45 mm; blade ovate to ovate-oblong or deltate, 15-50 × 6-40 mm, base rounded to subcordate, margins entire or undulate, apex acute, obtuse, or rounded. **Flowers** 3-25 in umbellate clusters, in forks of branches and distal axils, and terminal on branches; pedicel 1-4 mm; perianth 4-6 mm, tube greenish pink, limbs pink to lavender, 4-6 mm diam.; stamens 2(-3), widely spreading.

Native



# *Allionia incarnata*

USDA Code: ALIN

Common Name: Trailing windmills

Family: Nyctaginaceae

Habitat: Widespread on open dry, silty to rocky soils in desert scrub and grasslands

Description: Prostrate perennial forb herbage glandular pubescent **Leaves:** leaves opposite, unequal in pair, oblong to ovate, 1-2 cm **Flowers:** flowers, grouped in threes in axils, subtended by rose-purple bracts.

Native



**ALIN is a-lying down!** Growth form similar to *Boerhavia* spp. But stays low to the ground

Each “flower” is actually an inflorescence of 3 flowers



## *Boerhavia* sp.

USDA Code: BOERH2

Common Name: Spiderling

Family: Nyctaginaceae

Habitat:

Description: **Herbs**, annual or perennial, sometimes suffrutescent at base, slender, often glandular, glabrous, or pubescent, from slender and soft or stout,  $\pm$  woody, and ropelike or fusiform taproot. **Stems** procumbent, decumbent, ascending, or erect, unarmed, with or without glutinous bands on internodes. **Leaves** petiolate, pairs unequal in size in each pair; blade thin or thick and slightly fleshy, base symmetric to asymmetric.

Native

Looks similar to ALIN, but grows up more. Stems and leaves are often slightly sticky, sand will stick to it



Polygonaceae



# *Rumex hymenosepalus*

USDA Code: RUHY

Common Name: Cainagre

Family: Polygonaceae

Habitat: Flowering spring. Sandy and rocky places: plains, slopes, stream beds, alkaline soils;

Description: Plants perennial, glabrous or indistinctly papillose-pubescent, with distinctly tuberous roots and short rhizomes. Stems usually erect, rarely ascending, branched above middle, 25-90(-100) cm. Leaves: ocrea prominent and persistent at maturity, whitish or silvery white, membranous; blade oblong, oblong-elliptic, or obovate-lanceolate, (5-)8-30 × 2-8(-12) cm, base cuneate or narrowly cuneate, margins entire, flat or indistinctly crisped, apex acute or acuminate, rarely obtuse. Inflorescences terminal, occupying distal 1/2 of stem, narrowly paniculate, rarely simple. Pedicels articulated near middle or in proximal 1/3, filiform, 5-15(-20) mm, articulation indistinct.

Native, and sometimes noxious



Portulaceae

# *Talinum aurantiacum*

USDA Code: TAAU

Common Name: Orange flameflower

Family: Portulacaceae

Previous names: *Phemeranthus aurantiacus*

Habitat: Usually on rocky slopes, sometimes in gravelly flats.

Description: **Plants** to 5 dm; roots woody-tuberous. **Stems** erect, simple or branching, slender to stout, sometimes suffrutescent. **Leaves** subsessile; blade narrowly planate, narrowly lanceolate or rarely oblanceolate, to 6 cm, base attenuate. **Inflorescences:** flowers usually solitary, sometimes in 2-3-flowered cymules. **Flowers:** sepals deciduous, ovate, sometimes cuspidate, 5-10 mm; petals orange, sometimes reddish, rarely pinkish, obovate, 9-15(-25) mm; stamens usually 20-30; stigmas 3, linear; pedicel often recurving in fruit.

TAPO5 has narrower leaves and yellow flowers.

Native



TAAU has broader leaves that don't form a seam, orange flower

# *Talinum polygaloides*

USDA Code: TAPO5

Common Name: Orange Flameflower

Family: Portulacaceae

Habitat: Usually in low-lying, clayey areas, especially in tobosa or burrograss grassland.

Description: Herbs to 5 dm tall. **ROOTS** woody tuberous. **STEMS** simple or branching, erect, sometimes suffrutescent. **LEAVES**: subsessile; blades linear, basally attenuate, to 6 cm long. **INFLORESCENCE**: lateral with flowers inserted singly or occasionally in cymules; pedicels often recurving in fruit. **FLOWERS**: sepals ovate, sometimes cuspidate, 5-10 mm long, deciduous; petals obovate, 9-15(-25) mm long, yellow; stamens usually 20-30; stigmas 3, linear.

TAAU has wider leaves and orange flowers.

Native

Thin leaves with a “seam” on the underside, yellow flowers

TAPO5 is yellow



Solanaceae

# *Chamaesaracha sordida*

USDA Code: CHSO

Common Name: Hairy five-eyes

Family: Solanaceae

Habitat: Found in disturbed areas and deserts

Description: Perennial forb, usually low and spreading, from deep roots; herbage glandular with stellate hairs **Leaves:** leaves alternate, 3-10 cm long, narrowly elliptic, the margins pinnately lobed or wavy **Flowers:** flowers in axils on slender pedicels, corolla rotate, 2-4 cm, cream-yellow with a dark center **Fruit:** globose berry.

Native



# Shrubs and Subshrubs

Amaranthaceae



# *Atriplex canescens*

USDA Code: ATCA2

Common name: Four-wing saltbrush

Family: Amaranthaceae

Habitat: Clay to gravelly flats, slopes, scrub;

Description: Leaves persistent, alternate, sessile or nearly so, blade linear to oblanceolate, oblong, or obovate, mainly 10-40 × 3-8 mm, margin entire, apex retuse to obtuse. Staminate flowers yellow (rarely brown), in clusters 2-3 mm wide, borne in panicles 3-15 cm. Pistillate flowers borne in panicles 5-40 cm. Fruiting bracteoles 8-25 mm, as wide, on stipes 1-8 mm, with 4 prominent wings extending the bract length

Native



Fruits have four "wings"



# *Krascheninnikovia lanata*

Winterfat gets woolly for the winter

USDA Code: KRLA2

Common name: Winterfat

Family: Amaranthaceae

Previous names: *Eurotia lanata*, *Ceratoides lanata*

Habitat: Rocky to clay soils, flats, gentle slopes

Description: Shrub generally 5-10 dm, generally monoecious; hairs white, becoming  $\pm$  rust-colored **Leaves:** 6-30 mm, 1.5-5 mm wide, linear to lanceolate, flat, entire; margins inrolled **INFLORESCENCE:** 3-19 cm; staminate flowers many; pistillate flowers 1-4 in lower axils; bractlets densely hairy, 4-6 mm in fruit **Flowers:** Staminate flower: calyx lobes 4, 1-2 mm, densely hairy; stamens 4, exserted; Pistillate flower: calyx lobes 0; stigmas 2, exserted

Native



Anacardiaceae

# *Rhus microphylla*

USDA Code: RHMI3

Common name: Littleleaf sumac, lemonade berry

Family: Anacardiaceae

Habitat: Gravelly mesas and rocky hillsides, often on limestone, in Chihuahuan Desert, semi-desert grassland, and oak (encinal) woodland, occasionally along dry washes and in mesquite bosques and riparian woodlands

Description: Densely branched shrub, to 2 m tall; old bark dark gray, lenticular; branches gray, stiff and spinescent, puberulent to glabrate. **LEAVES:** 12-20 mm long, deciduous, odd-pinnately compound, 5-9 foliolate, with a winged rachis; leaflets sessile, elliptic, 6-9 mm long, 2-5 mm wide, entire, hirsute.

Native

Look for little leaves  
(micro phylla)  
Red fruits in clusters,  
taste like lemon



Agavaceae

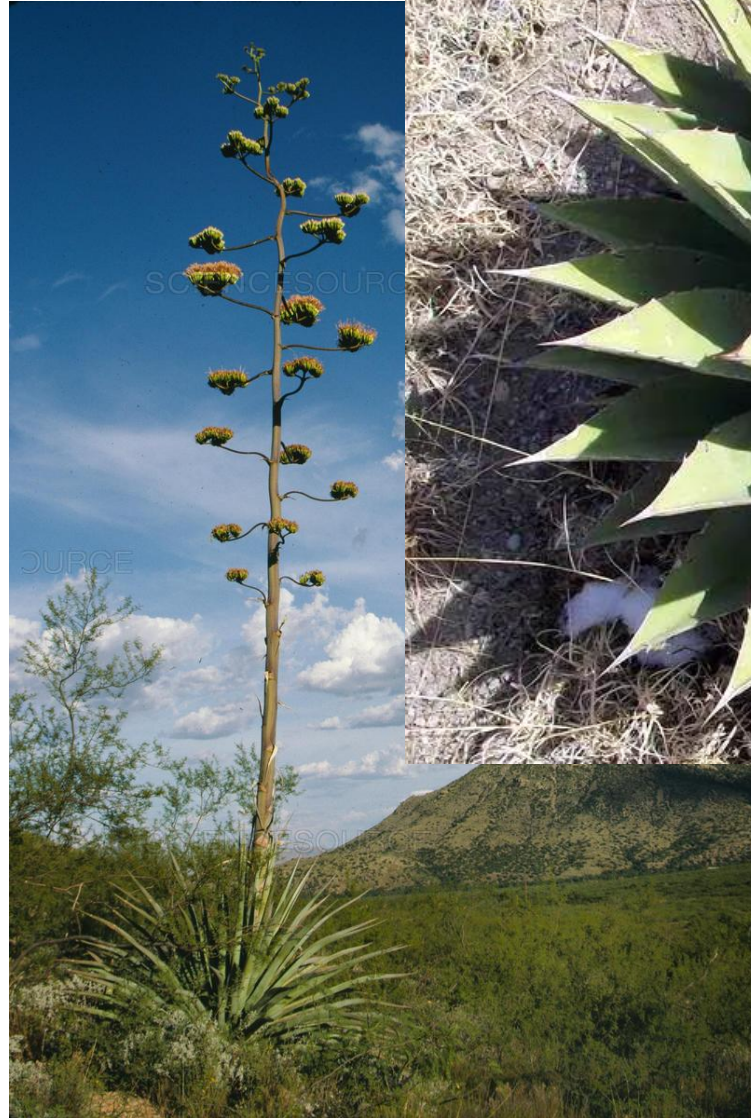
# *Agave palmeri*

AGPA4

Longer leaves than AGPAN6

More green and darker than AGPAN6

Palmerii – longer sound for longer leaves



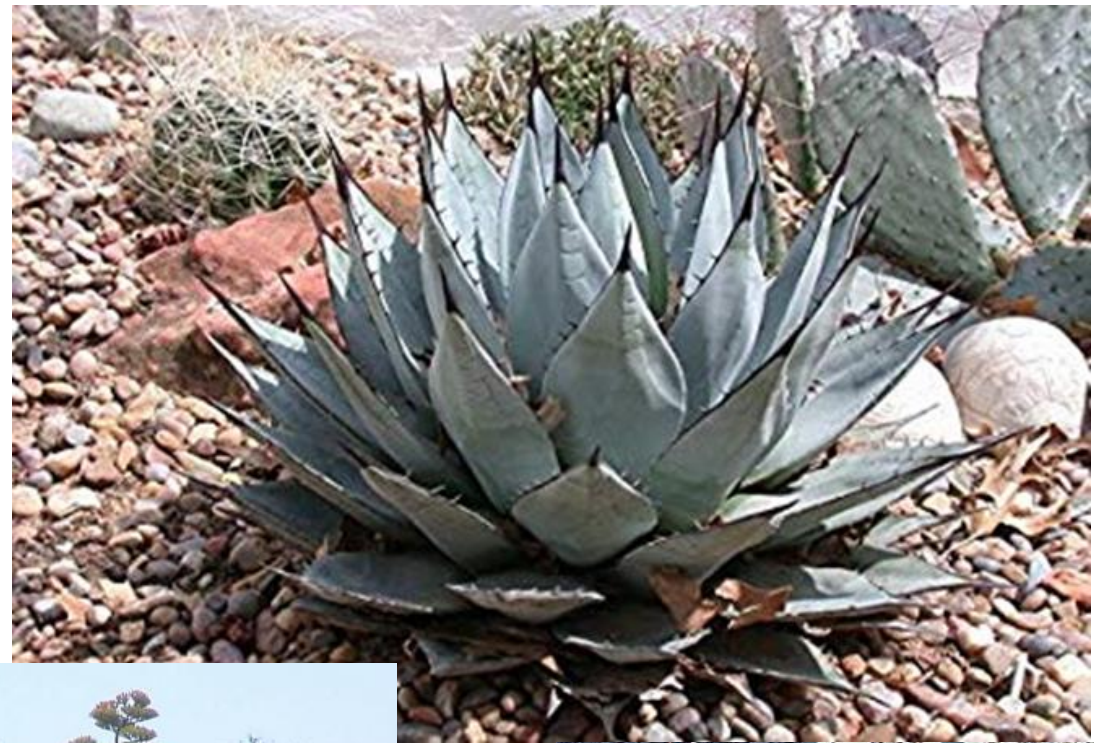
*Agave parryi* ssp.  
*neomexicana*

AGPAN6

Stouter leaves than palmerii

Paler green than palmerii

AGPAN. Shorter sound for shorter leaves



Asparagaceae



# *Dasyilirion wheeleri*

USDA Code: DAWH2

Common name: Common sotol

Family: Asparagaceae

Habitat: open, rocky slopes

Description: Rosette herb 40-100 cm tall, flowering scape 3-6 m tall **Leaves:** leaves 40-70 cm long, 1 cm wide, spines on margins numerous **Flowers:** male and female flowers on separate plants, in large terminal spike-like panicles **Fruit:** a three-winged capsule.

Native

Saw toothed leaves,  
inflorescence dense  
spike, can grow a little  
tall bot not as much as  
YUELE



# *Yucca baccata*

USDA Code: YUBA

Common name: Bannana yucca

Family: Asparagaceae

Habitat:

Description: Plants often forming open colonies of rosettes, acaulescent or short-caulescent, shorter than 2.5 m. Stems, if present, decumbent, 1-24, aerial or subterranean, simple or sometimes branched, to 2 m. Leaf blade erect, bluish green, concavo-convex, 30-100 × 2-6 cm, rigid, scabrous or glaucous, margins brown.

Thicker, tougher and pointier leaves than *Y. Elata*

Native



Thick leaves, big  
tendrily things,  
does **not** grow tall,  
often in colonies

# *Yucca elata var elata*

USDA Code: YUELE

Famiy: Asparagaceae

Habitat: Sandy soils

Description: Different from *Yucca baccata* in that it is solitary and taller. *Yucca Baccatta* only gets ~3-4' tall. Rosette herb, mature specimens tree-like up to 8 m, with one to several stems **Leaves:** leaves linear, 35-45 cm long, .5 cm wide, numerous in rosette **Flowers:** flowers cream **Fruit:** a dry capsule

Native

Thin leaves, grows tall  
and tree like



# *Yucca treculeana*

YUTR

Less common than the other yuccas, looks like a combination of the two:

Thick leaves, grows tall



Asteraceae

# *Artemisia filifolia*

USDA Code: ARFI2

Common name: Sand sage

Family: Asteraceae

Habitat: *A. filifolia* occurs in sandy soils and cohabits with species of *Yucca*, Cactaceae, and

Description: Shrubs, 60-180 cm (rounded), faintly aromatic. Stems green or gray-green, wandlike (usually slender, curved, sometimes stout and stunted in harsh habitats), glabrous or sparsely hairy. Leaves gray-green; blades linear if entire, obovate if lobed, (1.5-)2-5(-6) × 0.1-2.5 cm, entire to 3-lobed, lobes filiform (less than 1 mm wide), apices acute, glabrous or sparsely hairy. Heads (mostly sessile) in paniculiform arrays 8-15(-17) × 2-4(-5) cm (branches erect to somewhat recurved). Involucres globose, 1.5-2 × 1.5-2 mm.

Native



# *Artemisia ludoviciana*

USDA Code: ARLUA

Common name: Silver sage

Family: Asteraceae

Habitat: Rocky areas/gravel

Description:

**Perennials**, 20-80 (rarely to 120 in desert washes) cm, aromatic (rhizomatous). **Stems** relatively few to relatively numerous, erect, gray-green, simple or widely branched, hairy. **Leaves** cauline, uniformly gray-green, green, or white, or bicolor (white and green); blades linear to broadly elliptic, 1.5-11 × 0.5-4 cm, entire or lobed to relatively deeply pinnatifid, faces hairy.

Native



# *Flourensia cernua*

USDA Code: FLCE

Common name: Tarbush

Family: Asteraceae

Habitat: Limestone or alkaline or clay soils, gravelly sites, desert scrub;

Description: Plant: Shrub to 1.5 m; stems much-branched; herbage resinous Leaves: leaves alternate, small, ovate to oval, entire Flowers: flowers yellow; achene cuneate, laterally compressed but somewhat thickened, villous; pappus of two unequal awns.

Native

“smells like tar”, a more mid toned green (yellowish than mariola, cooler toned than LATR2)





# *Gutierrezia microcephala*

USDA Code: GUMI

Common name: Threadleaf snakeweed.

Family: Asteraceae

Habitat: Grasslands, chaparral, oak or oak-pine woodlands, usually over gravelly or rocky limestone or gypsum substrates.

Description: Leaves: leaves alternate, linear-filiform 15-40 mm long, gland-dotted, sometimes gummy, glabrous or minutely scabrous, dark gray-green  
INFLORESCENCE: primary inflorescence a head, each resembling a flower; heads 1-3-flowered, in groups of 5-6, sessile; involucre generally < 3.2 mm, < 1.2 mm diam, cylindric; phyllaries 4-6 in 2 series  
Flowers: Ray flowers 1-2; corollas 2.1-3.5 mm, yellow;

Native

Smells pine-ish. 1-2 ray flowers. Likes gravelly/rocky areas





Smells pine-ish. 2-8 ray flowers



# *Gutierrezia sarothrae*

USDA Code: GUSA2

Common name: Broom snakeweed

Family: Asteraceae

Habitat: Grasslands, deserts, montane areas

Description: Subshrub 1-6 dm; stems sprawling or upright, brown below, green or tan above  
**Leaves:** alternate, sometimes in axillary clusters, entire, gland-dotted, sometimes gummy, glabrous or minutely scabrous, dark gray-green, lance-linear if single, thread-like if clustered. Ray flowers 2-8

Native

# *Isocoma tenuisecta*

USDA Code: ISTE2

Common name: Burroweed

Family: Asteraceae

Habitat: Flowering Sep-Nov. Sandy or gravelly flats and hills, grasslands, usually matorral or *Larrea* stands; 700-1600 m;

Description: **Herbage** minutely hispidulous to hirtellous or sparsely puberulous (at least distal stems), not resinous. **Leaf blades** oblong-ob lanceolate, 20-35 mm, margins pinnatifid (lobes spreading at right angles, linear to filiform). **Involucres** 4-6.5 × 2-2.8 mm. **Phyllary apices** with small, sharply delimited, green resinous area, not aristate, often distinctly thickened and approaching resin pockets, usually gland-dotted. **Florets** 8-12(-15); corollas 4.5-6 mm.

Native



Looks like a beefy  
GUSA2, with pinnately  
lobed leaves

Mostly in the bootheel



# *Parthenium incanum*

USDA Code: PAIN2

Common name: Mariola

Family: Asteraceae

Habitat: Openings in desert scrub,  
often on limestone soils

Description: Shrub to 70 cm; herbage  
grey-tomentose **Leaves:** leaves  
alternate, pinnatifid, with blunt  
roundish lobes

Native

Smells good,  
pale green,  
lobed leaves,  
true shrub

PAIN2 is one of  
the shrubs that  
DOESN'T cause  
pain!



# *Viguiera stenoloba*

USDA Code: VIST

Common Name: Resinbush

Family: Asteraceae

Habitat: Chihuahuan Desert scrub, usually on rocky limestone.

Description: **Shrubs**, 50-150 cm. **Leaves** opposite or alternate; sessile or subsessile; blades ovate (and shallowly to deeply lobed, lobes 3-9,  $\pm$  linear) or linear, 1.5-10.8  $\times$  1-9 cm, ultimate margins entire (revolute), faces: abaxial loosely to densely strigillose (canescent) and gland-dotted, adaxial densely strigose to glabrate. **Heads** usually borne singly

Native



# *Zinnia acerosa*

USDA Code: ZIAC

Common Name: Desert Zinnia

Family: Asteraceae

Habitat: Rocky open slopes, flats, calcareous soils

Description: Subshrub usually <30 cm **Leaves:** leaves opposite, entire, 3-ribbed

Compared to *Z. Grandiflora* has white flowers and shorter leaves.

Native

Petals somewhat reflexed



# *Zinnia grandiflora*

USDA Code: ZIGR

Common name: Plains zinnia

Family: Asteraceae

Habitat: Dry, often slopes, mesas, shortgrass prairies, calcareous soils

Description: **Plant:** Subshrub usually <30 cm  
**Leaves:** leaves opposite, entire, 1-ribbed

Compared to *Z. acerosa*, has longer  
Leaves and yellow flowers.

Native



Brassicaceae



# *Lepidium alyssoides*

USDA Code: LEAL

Common Name: Mesa pepperweed

Family: Brassicaceae

Habitat: Pinyon-juniper or sagebrush communities, prairies, grasslands, sandstone outcrops, gypsum flats, sand dunes, dry flats and river bottoms, gravelly roadsides

Description: . Stems few to several from base, erect to ascending, branched throughout, (0.7-)1-4.8(-6.1) dm. Basal leaves often not rosulate; petiole 1-6 cm; blade pinnately lobed, (1-)1.5-8(-11) cm × (5-)10-35 mm, margins (of lobes) entire or denticulate. Cauline leaves sessile; blade linear, (0.8-)1.3-7(-9.5) cm × (0.7-)1-2(-3) mm, base attenuate, not auriculate, margins entire. Flowers: sepals ovate to oblong, 1-2 × 0.8-1 mm; petals white, suborbicular, 2-3 × 1-2 mm, claw 0.5-1.5 mm; stamens 6; filaments 1.5-2 mm, (glabrous); anthers 0.2-0.4 mm.

Native



Subshrubby, smells like horseradish  
variable leaf shape especially when  
young (very lobed to not)

Cactaceae

# *Cylindropuntia leptocaulis*

USDA Code: CYLE8

Common name: Tasajillo, Christmas cactus

Family: Cactaceae

Habitat: deserts (commonly with nurse plant), sandy, loamy to gravelly substrates, flats, bajadas and slopes to desert and plains grasslands to chaparrals and oak-juniper woodlands

Description: Shrubs or small trees, sparingly to densely branched, usually bearing many short, commonly spineless branchlets arranged along major axes, 0.5-1.8 m tall; STEM segments gray-green to purplish, very narrow, 20-80 mm long, 3-5 mm in diam; tubercles not prominent, linear, drying as elongate, rib-like wrinkles, 11-20(-30) mm long.

Native

Looks christmasy in fruit b/c red and green

Spines have sheaths you can pull off



# *Ferocactus wislizeni*

USDA Code: FEWI

Common Name: Fish-hook barrel cactus

Family: Cactaceae

Habitat: Desert scrub, grasslands, south-facing slopes in lower edges of oak woodlands, flats, bajadas, mountainsides, usually relatively deep soils of limestone and igneous origin

Description: **Stems** usually leaning southward in adulthood, depressed-spheric to ovoid-cylindric, 19-100(-300) × (20-)36-65(-100) cm. **Ribs** 20-30(-40), shallowly notched immediately above each areole. .

**Flowers** similar in color inside and out, 4-8.5 × 4-6.5 cm; inner tepals orange, red, or yellow with orange to red midstripes, or wholly yellow; stigma lobes yellow, orange, or red.

**Fruits** ± readily dehiscent through basal pore, bright yellow, 35-60 × 18-40 mm, thick walled, leathery or fleshy, locule dry, hollow except for seeds.

Native



This cactus is FEWI cool looking!! 😊

# *Opuntia engelmannii*

USDA Code: OPEN3

Common name: Engelmann's prickly-pear

Family: Cactaceae

Habitat:

Description: **Shrubs or trees**, with short trunk, spreading to sometimes de-cumbent. **Spines** (0-)1-6(-12) per areole, white to yellow, usually red to dark brown at extreme bases, aging gray to ± black, subulate, straight to curved, flattened to angular at least near base, the longest spreading to strongly reflexed, 10-30(-50) mm. **Glochids** widely spaced, sparse in crescent at adaxial edge, encircling areole or nearly so, and scattered in subapical tuft, yellow to red-brown, aging gray to blackish, of irregular lengths, to 10 mm.

Upright plants, with larger pads than other common *Opuntia*, stays green or turns grayish when stressed; several tan or whitish spines per areole.

Native



Cactus pads grow circular and OPEN

# *Opuntia macrocentra*

USDA Code: OPMA8

Common name: Purple prickly-pear

Family: Cactaceae

Habitat: Sandy desert flats to rocky hills and valleys, desert uplands, grasslands or oak woodlands

Description: **Shrubs**, erect to decumbent. PADS all purple to green with purple near areoles and pad margins, glabrous, broadly obovate to subcircular, thickish

Upright plants, turn purple when drought-stressed; relatively few spines, usually 0 or 1 per areole.

Native

Turns purple when unhappy,  
one to two spines per areole



# *Opuntia phaeacantha*

USDA Code: OPPH

Common name: New Mexico prickly-pear

Family: Cactaceae

Habitat: Sandy to rocky soils, deserts, surrounding mountains, plains;

Description: Not usually more than 2 pads high. Spines smaller than macrocentrum.

Low-growing, sprawling across the ground; turns orange, reddish, or brownish when stressed; several brownish spines per areole.

Native

**Dense small spines on edges**



# *Opuntia tortispina*

USDA Code: OPTO3

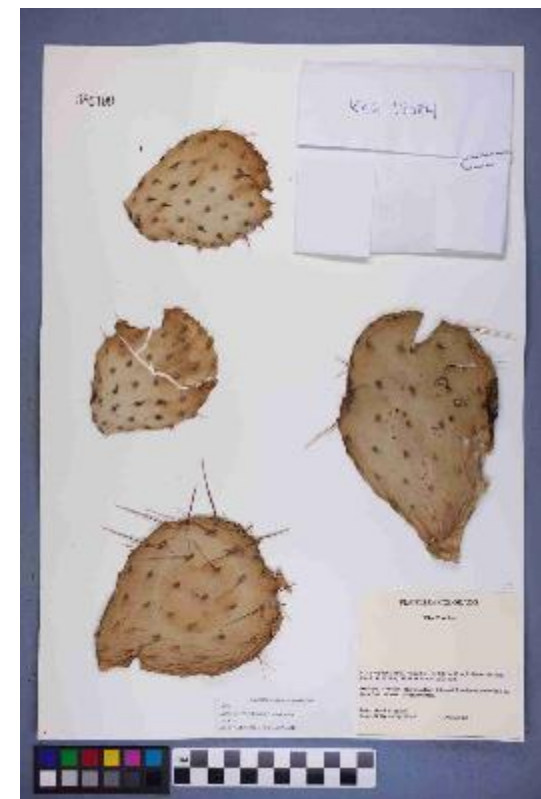
Family: Cactaceae

Common name: Twistspine prickly pear

Habitat: Grass-lands, pinyon-juniper-oak woodlands, sandy or shaley flats, rocky hills

Description: **Shrubs**, low, to 0.4 m, creeping from clumps, sometimes from thickened rootstocks. **Stem segments** not easily detached, pale green to deep green, graying with age, wrinkled when stressed, flattened, broadly obovate to ovate, 6.5-15 × 4-10 cm, tuberculate, glossy, glabrous; areoles 6-9 per diagonal row across midstem segment, oval, obovate, or subcircular, 2.5-5 × 1.5-4 mm; wool tan, aging brown. **Spines** 1-9 on most areoles to only on distal 1/2 of stem segment, white to gray with pale brown tips and bases, sometimes brown throughout; central spines 1-3, all deflexed or 1-2 porrect or ascending, terete or flattened, occasionally spirally twisted, 25-70 mm; small spines (2-)-3-6(-8) strongly deflexed, usually slender, even bristlelike, 5-15 mm

Native





# *Peniocereus greggii* subsp. *greggii*

USDA Code: PEGRG

Common Name: Spiny sheepbur

Family: Cactaceae

Habitat:

Description: Shrubs erect to sprawling, sparingly branched, inconspicuous, 0.4-1.2(-3) m tall; root solitary, large, light-brown, napiform, usually 15-30 cm long, 5--12 cm wide, but much larger ones are known. STEM gray-green to gray to purple, the distal parts 8-25 mm in diameter, bearing 4-6 prominent, angular, papillose-canescenscent ribs, the basal parts usually narrowed, brown and cylindric. AREOLES white-woolly, aging gray to blackish, (3.5-)4.5-12(-15) mm apart on each rib **Leaves:** SPINES black to yellowish-white, (9-)11-15(-17) per areole, usually in 3 vertical rows; apical ones black, subulate to 1 mm long; basal 3-5 spines yellowish white throughout to only at tips, thinner, to 3 mm long, appressed, puberulent when young

Native



Ephedraceae

# *Ephedra torreyana*

USDA Code: EPTO

Common name: Torrey's mormon-tea

Family: Ephedraceae

Habitat: Dry rocky to sandy areas

Description: Bark gray, cracked and irregularly fissured. Branches alternate or whorled, rigid, angle of divergence about 45°. Twigs blue-green, becoming gray with age, glaucous, with numerous very fine longitudinal grooves; internodes 2--5 cm. Terminal buds conic, less than 4 mm. Leaves in whorls of 3, 2--5 mm, connate to 2/3 their length; bases becoming gray and shredded with age; apex acute.

More flexible and less pointy leaves than than EPTR; somewhat grayish-blue stems; usually in low-lying areas on clayey soils.

Native



# *Ephedra trifurca*

USDA Code: EPTR

Common name: Longleaf Mormon-tea

Family: Ephedraceae

Habitat: Dry rocky slopes to flat sandy areas

Description: Dioecious shrub with slender, jointed branches. Leaves: leaves reduced to three scales at nodes.

Compared to *E. Torreyana*, has longer leaves and sharper tipped stems.

Native



This is the one we see more



Fouquieriaceae

# *Fouquieria splendens*

USDA Code: FOSP2

Common name: Ocotillo

Family: Fouquieriaceae

Habitat: Chihuahuan and Sonoran deserts and mesquite grasslands

Descriptions: Shrub to small tree; short trunk 10-20 cm tall bearing numerous usually simple, erect, spiny branches 2-6 m high

**Leaves:** 1-2 cm long, 2-8 mm wide, obovate, on terminal long growth or axillary short shoots, the tips rounded or notched

Native



Big seaweed!

Fabaceae

# *Dalea formosa*

USDA Code: DAFO

Common name: Feather-plume

Family: Fabaceae

Habitat: Dry, scrubby areas

Description: Shrub usually <1 m **Leaves:** leaves alternate, compound, odd pinnate, gland-dotted, leaflets < 3 mm long **Flowers:** flowers in terminal few-flowered spikes; corolla purple, bracts, setaceous

Native

Small, subshrubby

Similar to KRER but  
brown-er stems and  
compound leaves, legume  
flower





# *Mimosa aculeaticarpa* var. *biuncifera*

Code: MIACB

Common name: Catclaw

Family: Fabaceae

Habitat:

Description: The flowers are in globose white clusters, and the leaves are small and pinnately compound. The branches frequently look reddish. The fruits are flattened and curved. The seeds are reddish brown, 3-4mm and ovoid.

In most of the district, this is the only shrub with hooked spines. In Hidalgo County, SEGR3 is similar.

Native



Catclaw because the thorns are like cat claws



# *Prosopis glandulosa*

USDA Code: PRGL2

Common name: Honey mesquite

Family: Fabaceae

Habitat: anywhere there isn't a creosote shrubland.

Description: bush with thorns, opposite leaflets

Native

You will know this plant 😊



# *Vachellia constricta*

USDA Code: VACO9

Common name: Whitethorn acacia

Family: Fabaceae

Habitat:

Description: Shrub to 4 m, usually with paired spines at nodes aging white  
**Leaves:** leaves alternate, twice compound with 3-5 pinnae  
**Flowers:** flowers yellow, in dense globose heads  
**Fruit:** a linear straight or slightly curved pod, strongly constricted between seeds.

Native

MIAC3 has hooked spines; VAVE has fewer pairs of pinnae per leaf (see illustration under VAVE).



“VACO9” is a **longer** sound than “VAVE”;  
VACO9 has **more** pinnae than VAVE

# *Vachellia vernica*

USDA Code: VAVE

Common Name: Viscid acacia

Family: Fabaceae

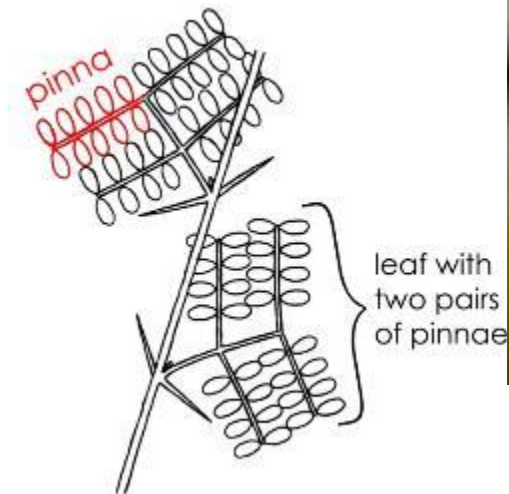
Habitat:

Description: Spiny shrubs; spines straight & white; leaves twice-pinnately compound; flowers yellow, in dense heads.

Native

Leaves have 1 to 3 pairs of pinnae (see illustration); MIAC3 and VAVE have 4 to 8 pairs of pinnae per leaf.

“VAVE” is a **shorter** sound than “VACO9”;  
VAVE has **less** pinnae than VACO9



K

# *Koeberlinia spinosa*

USDA Code: KOSP

Common name: Crucifixion-thorn

Family: Koeberliniaceae

Habitat:

Description: **Plant:** Shrub usually wider than tall, often forming thickets; stems leafless, twigs slender and thorn-tipped **Flowers:** inflorescence of small semipersistent racemes; flowers pale yellow, clustered, ~4mm **Fruit:** a globose berry ~3mm.

Native

**KOSP, Crucifixion thorn**



# *Krameria erecta*

USDA Code: KRER

Common Name: Range ratany

Family: Krameriaceae

Habitat: Deserts to oak savanna and chaparral

Description: **Plant:** shrub, Much branched shrub 1-2 m high; young stems strigose, occasionally bearing glandular capitate trichomes, these especially dense on the youngest branch tips and foliage; old stems gray, with striate bark  
**Leaves:** alternate, exstipulate, sessile, linear to linear-lanceolate, the margins entire; borne in long and short shoots, (0.5-)1.0-12(-27) mm long, 0.5-2 mm wide, variably strigose, sometimes bearing glandular, capitate trichomes  
**INFLORESCENCE:** uniflorous in leaf axils, terminal racemes or open panicles

Native

Low to the ground, subshrubby, look at those crazy fruits!!

Similar to DAFO but pale stems, leaves simple, not a legume (flower/fruits)



Liliaceae



# *Nolina texana*

USDA Code: NOTE

Common name: Texas beargrass

Family: Liliaceae

Habitat: Rocky hillsides, limestone, granite, grasslands, shrublands;

Description: Plants acaulescent, cespitose; rosettes from vertical, subterranean branched caudices. Leaf blades wiry, stiff, triangular, slightly concavo-convex toward base, 40-90 cm × 2-4(-7) mm, not glaucous; margins entire, rarely remotely serrate with widely separated, noncartilaginous teeth, tips dying; inflorescence leaf blades curling distally, 10-50 cm. Scape curling distally, 0.5-2 dm. Inflorescences paniculate, rarely purple, 2.5-7 dm × 5-17 cm, held completely or partially within rosettes; main rachis and divisions thick, rigid, lateral branches ascending; bracts persistent, to 10-40 cm;

Native



Inflorescences remains within leaves



# *Nolina microcarpa* - NOMI

Like NOTE but the  
inflorescence comes up  
out of the leaves



Oleaceae

# *Menodora scabra*

USDA Code: MESC

Common name: Bull's-balls

Family: Oleaceae

Habitat: Sandy, desert types.

Description: **Plant:** Subshrub to 60 cm **Leaves:** leaves alternate, linear-lanceolate 1-3 cm long **Flowers:** flowers yellow with 5 lobes 10-15 mm across, calyx 7 or more linear lobes, stamens 2 **Fruit:** paired globose capsule

Native

Fruits look like bulls balls  
Leaves tend to grow upwards, sometime have purple hue



Polygonaceae

# *Eriogonum wrightii*

USDA Code: ERWR

Common name: Bastard-sage

Family: Polygonaceae

Habitat:

Description: Subshrub 20-30 cm  
**Leaves:** Subshrub 20-30 cm; leaves alternate, <2cm long, oblanceolate, tomentose  
**Flowers:** inflorescence branches tomentose, 10-20 cm long; flowers 3 mm long, cream with pink stripe, in 4-5 flowered involucre

Compared with *E. abertianum*, has flowers in racemes, is taller and generally less diffuse.

Native

Look for distinct *Eriogonum* flowers, very small "shrub", usually pale stems



R

# *Ziziphus obtusifolia*

USDA Code: ZIOB

Common Name: Lotebush

Family: Rhamnaceae

Habitat:

Description: Shrubs to 4 m tall, armed. STEMS: green to gray, or brown, canescent to glaucous; branchlets thorn-tipped, occasionally with axillary recurved thorns, the thorn tips mostly glabrous and brown. LEAVES: thin or thick, deciduous; stipules triangular; petioles 0.5- 5 mm long; blades linear to narrowly elliptic to oblong or ovate, 5-20 (-27) mm long, 2-15 mm wide, green to pale green, glabrous to canescent; margins entire to serrate or crenate. FLOWERS: inconspicuous, (1-) 2-15 (sometimes more) per inflorescence; hypanthium 1.0-2 mm long, glabrous to canescent; sepals yellowish green, glabrous to canescent; petals ca. 1 mm, white to light green; stigma 2-lobed.

Native

Pale and pokey, usually sparsely leaved. Smooth bark.





# *Cercocarpus breviflorus*

USDA Code: CEBR6

Common Name: Desert mountain-mahogany

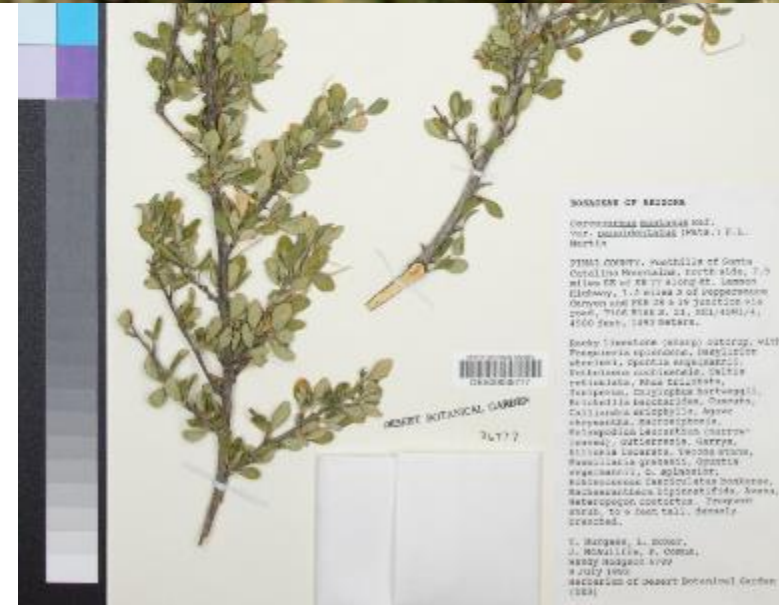
Family: Rosaceae

Alternate name: *Cercocarpus montanus* (true *Cercocarpus montanus* is mostly north of LCDO)

Habitat: mountainous parts of the southwestern United States (Texas, New Mexico, Arizona) and northern Mexico (from Sonora to Tamaulipas, south as far as Querétaro), on both limestone and igneous rock.

Description: evergreen tree or large shrub growing to about 5 metres (16 ft) tall, often with several branches springing from the base. The small leaves are oblong to oblanceolate, up to 2 cm (1 in) long, pubescent and entire apart from a few weak teeth near the apex. They are fasciculate, with groups of two to four leaves forming small tufts separated by lengths of bare twig. The yellowish-green tubed flowers are inconspicuous and grow from the axils of the leaves. The fruits are achenes with twisted, hairy, elongated and persistent styles, looking like long narrow feathers

Native



# *Fallugia paradoxa*

USDA Code: FAPA

Common Name: Apache-plume

Family: Rosaceae

Habitat: lower to middle elevation shrub of dry habitats

Description: The flowers bear five white petals and dozens of stamens. The achenes have a long twisted hairy red style or "plume." The plume presumably aids in wind dispersal of the seeds.

Native

Fruits in pinkish feathery plume  
Very lobed leaves



S

# *Lycium berlandieri*

USDA Code: LYBE

Common name: Silver wolfberry

Family: Solanaceae

Habitat: Gravelly, sandy soils

Description: Shrub 0.7-2.5 m tall, rather sparingly branched, with few thorns at the end of branches, or practically unarmed; branches somewhat crooked, decumbent or flexuous, tan to silvery-gray, the older stems often dark reddish brown

Native

Stem looks silvery and often kind of scraggly



Verbenaceae

# *Aloysia wrightii*

USDA Code: ALWR

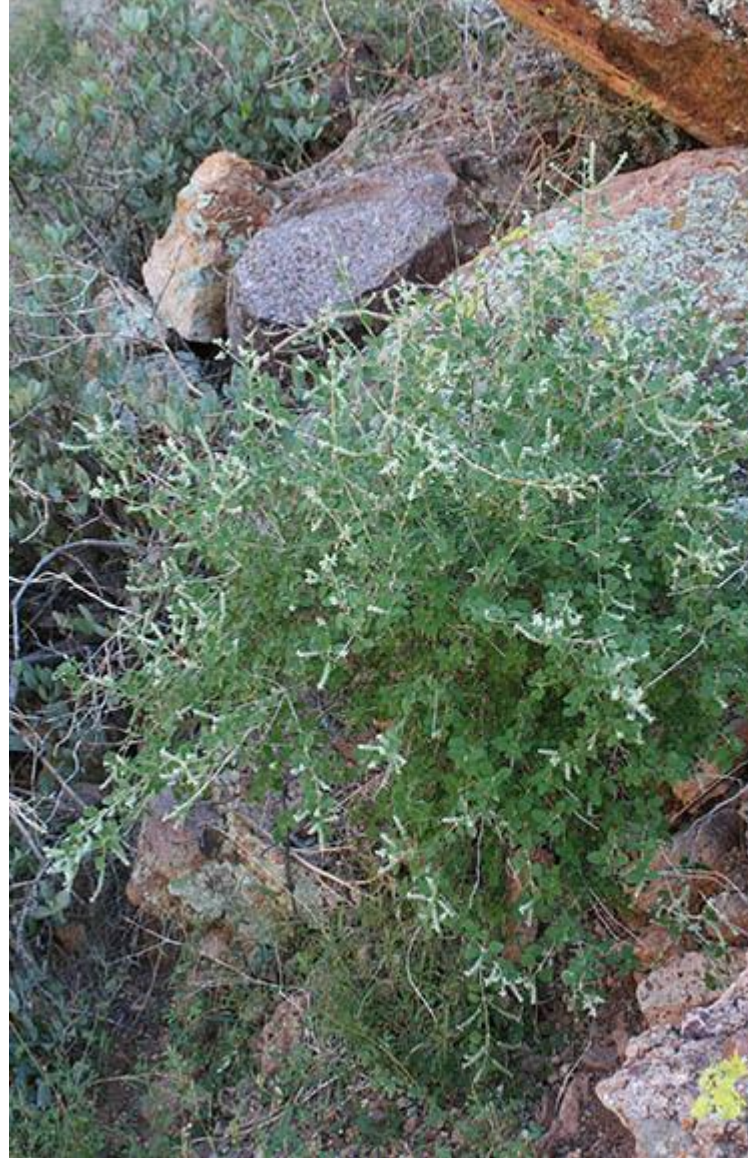
Common name: Wright's beebrush,  
oreganillo

Family: Verbenaceae

Habitat:

Description: Shrub 1-2 meters;  
herbage fragrant **Leaves:** Shrub 1-2  
meters; herbage fragrant (smells more  
or less like oregano); leaves opposite,  
1cm, crenate **Flowers:** inflorescence a  
terminal or lateral spike; flowers  
white.

Native



**Oreganillo** ALW(R)ays smells like  
**oregano** and has **little** leaves

Also, bees love it!

Zygophyllaceae

# *Larrea tridentata*

USDA Code: LATR2

Common name: Creosote bush

Family: Zygophyllaceae

Habitat: Sandy soils

Description: Shrub to 2 m

**Leaves:** leaves two-lobed

**Flowers:** flowers yellow, fruit a schizocarp covered in white hairs

**Notes:** leaflets fused with rachis protruding in gap between them, may appear as a single dissected leaf

Native



“Smells like rain”; very distinct  
smell when leaves crushed



Trees

# *Cylindropuntia imbricata*

USDA Code: CYIM2

Common name: Cane cholla

Family: Cactaceae

Habitat: sand, rocky, and grasslands

Previous names: *Opuntia imbricata*

Description: tubercles very prominent, widely spaced, (1.5-)2-5 cm; areoles elliptic, 5-8 × 3-4 mm. **Spines** (5-)8-15(-30) per areole or spineless to nearly spineless

Longer spines and tubercles than CYSP8. Found east and north of the West Potrillo Mountains.

*Native*



Longer and sparser  
spines compared  
to CYSP8

More than 2cm  
long tubercles

# *Cylindropuntia spinosior*

USDA Code: CYSP8

Common Name: Walking-stick cholla

Family: Cactaceae

Previous names: *Opuntia spinosior*

Habitat: Desert and plains grasslands on a variety of soils; rocky slopes.

Description: **Trees**, compact, widely branching, 0.4-2 m. **Stem segments** firmly attached, whorled or subwhorled, green to purple, 5-23 × 1.3-3.5 cm; tubercles crowded, pronounced, oval to narrowly oval, 0.5-1.2(-1.5) cm; areoles broadly obdeltate to elliptic, 4.5-7 × 2-4 mm; wool yellow to tan, aging gray to black. **Spines** (4-)6-18(-24) per areole, at most areoles, interlacing with spines of adjacent areoles, pale tan (rarely yellowish), pinkish to red-brown; abaxial spines erect to usually deflexed, terete, often flattened basally, 8-19 mm; adaxial spines erect or spreading, subterete;

Shorter spines and smaller tubercles than CYIM2; found in the West Potrillos and westward.

Native



Spinosior is spiny-er!  
More dense, shorter  
spines than CYIM2

Less than 1.2cm long  
tubercles



# *Juniperus deppeana*

USDA Code: JUDE2

Common Name: Alligator Juniper

Family: Cupressaceae

Habitat:

Description: shrub or tree; single-trunked, 7-15(-30) m tall; dioecious. **STEMS:** bark ashy gray outside, dark brown to black inside, 1-20 cm thick, deeply fissured into rectangular plates  
**Leaves:** usually decussate, closely appressed, scale-like, gland obvious  
**Cones:** POLLEN CONES terminal, 3-4 mm long, oblong. SEED CONES terminal, 8-20 mm long, sub-spheric to broad-ellipsoid, green, maturing bluish to usually red-tan to red-brown in second year, glaucous, dry, hard, fibrous to obscurely woody  
**Fruit:** SEEDS (1)4-5(-7) per cone, 6-9 mm long, ovoid or oblong or irregular, often angled, brown

Native

Bark looks like alligator skin



# *Juniperus monosperma*

USDA Code: JUMO

Common Name: One-seed juniper

Family: Cupressaceae

Habitat Dry, rocky soils and slopes

Description: shrub or small tree; 3-8(-18) m tall; dioecious; STEMS short shoots 6-12 mm long, 1-2 mm wide, branching apart at 50 degrees to 70 degrees angle; bark red-brown weathering brown to gray **Leaves:** decussate, closely appressed, scale-like, glaucous; glands on awl-like leaves rarely (less than 20 percent) covered with conspicuous white resin; margin denticulate or serrulate under magnification. Less resinous than *J. arizonica*

*Native*



Looks like JUAR, but **less** noticeable white resin, and more **blue** colored “berries”



# *Juniperus arizonica*

JUAR – Arizona Juniper, Redberry

Evergreen small tree or large shrub 1-4.5 m with spreading branches forming an irregular, open crown; bark is shreddy but formed close to trunk, ashy gray to brown; multi-trunked at base. Needles: Erect branchlets with tricussate, scalelike, appressed leaves green to light green, abaxial glands obvious and elliptic to ovate. Cones: Dioecious terminal pollen cones, 3-4 mm long, oblong; seed cones terminal, 10-12 mm long, spheric to ovoid, bluish but maturing blue-brown to reddish-brown the second year; dry, hard, and fibrous. Seeds: Ovulate cones contain 1-3 seeds per, ovate to pyriform, grooved, tip acuminate.

Ecology: Found on dry, well-drained soils in full sun, from 4,000-6,500 ft (1372-1981 m); flowers October-November. Distribution: AZ, sw NM; south to n MEX.

Notes: The complex of *Juniperus* can be confusing in the field, but with berries (cones) this species stands apart. Distinguished by the soft, fleshy, sweet cones <8mm long which are pink to yellow-orange to dark red (as opposed to red-blue and brown-blue in *J. monosperma*). Absent that, it can be difficult to distinguish it from *J. monosperma* in the field, except for the two is the glands on *J. arizonica* are covered (more than 25 percent) by conspicuous white resin.



Looks like JUMO, but **more noticeable white resin (especially off leading stems), and more warm colored “berries”**



# *Tamarix ramosissima*

USDA Code: TARA

Common Name: Saltcedar

Family: Tamaricaceae

Habitat: Riparian areas.

Description: Has 5-merous fls, with the filaments arising from (or just outside) the sinuses of the 5-lobed disk (the disk lobes often emarginate)

**Invasive**



# *Ulmus pumila*

USDA Code: ULPU

Common Name: Siberian elm

Family: Ulmaceae

Habitat: Widely cultivated, naturalized or weedy in riparian areas and developed land (including roadsides)

Description: frequently root-sprouting; buds spherical to subspherical; bark of mature trunk gray to brown, rough **Leaves:** blade ovate to lanceolate (occasionally obovate), 2-6.5(7.5) cm long, (1.5)2-3.5 cm wide, nearly symmetrical, the apex acute to acuminate, glabrous to scabrous above, glabrous below with tufts of hair and/or domatia in vein axils; margins once or twice serrate; 0-3(4) of the lateral veins forking per side

**Invasive**



the Forest Preserve District of DuPage County