

Monecious Plants



Monoecious plants bear unisexual flowers -- male (**staminate**) and female (**pistillate**) -- on each individual plant. Thus they are **self pollinating**, in that pollen from the male flower dusts the female flowers usually situated below on the same stem. Self fertilization provides the advantage of ensuring survival and spread in the absence of multiple representatives of the plant in the area, but the risk is a genetic weakening of the species. To avoid such a consequence, many monoecious plants can also **cross pollinate**, increasing genetic robustness.

Family ASTERACEAE (Ragweeds)

Cheesebush (*Ambrosia salsola*)



dense shrub

Pierce Ferry Rd; Mohave Co., AZ



narrow linear leaves



April

Pierce Ferry Rd; Mohave Co., AZ



Pierce Ferry Rd; Mohave Co., AZ



male

female

Flowers: .75 - 2"

Male (staminate) Flowers: (cuplike) cream to white; 5 - 15

Female (pistillate) Heads: cream to **yellow**; single flower

Stems: thin, upright, from single base; branched

Leaves: thin linear; entire, except pinnate lobes on some lowest ones; alternate; dark **green**; .75 - 2"

Blooms: March to June

Range: native to deserts of sw US and n MEX

Habitat: gravelly, sandy soils; creosote scrub to pinyon-juniper woodlands; Lower to Upper Sonoran life

Notes:

very common; perennial; thrives in alkaline environments (washes, bajadas, disturbed sites, etc.), growing 2 - 3' tall in sw US (CA, NV, AZ, UT) and n MEX (Baja, Sonora) at elevations of ~600 to 6,000'; male flowers in clusters above female heads growing on leaf axils; winged fruit, pearly white, yellow, or pink to .25" long; short lifespan, but a high rate of seed production; pungent, "cheesy" odor exudes from crushed leaves and stem tips; aka **Cheeseweed**, **White Burrobush**, **Winged Ragweed**, **Desert Pearl**

Mojave presence: native; year-round

Family ASTERACEAE (Ragweeds)

White Bursage (*Ambrosia dumosa*)



dense shrub

Calico Basin; RR NCA



April

Calico Basin; RR NCA



April

Red Spring; Red Rock NCA; Nevada



May

spikey, bur-like fruit

Red Rock NCA; LV, NV



hairy, lobed leaves

Frenchman Mtn; LV, NV

| | | | |
|-----------------|--|----------------------------|-------------------------|
| Flowers: | .25 - .5" | Male (staminate) Flowers: | pale yellow; many |
| | | Female (pistillate) Heads: | pale yellow; 2-flowered |
| Stems: | rigid, hairy, highly branched; longitudinal stripes on the smaller stems | | |
| Leaves: | obovate; lobed, pinnately compound; gray, woolly hairs; .25 - 1.5" | | |
| Blooms: | March to June; September to November depending on summer rains | | |
| Range: | Mojave Desert into Sonoran Desert of nw MEX | | |
| Habitat: | creosote bush scrub; Lower Sonoran Life Zone | | |



January

drought deciduous

Valley of Fire SP; Nevada

Notes:

common; annual/perennial; grows to 8 - 36" in Mojave Desert creosote bush scrub in CA, NV, UT, south into Sonoran Desert from AZ to n Mex (Baja, Sonora, Chihuahua) at elevations up to 3,000'; 5 to 8-lobed **bract**; spherical, bur-like, lt. brown to purple **fruit** covered with 30-40 spines; male flowers oriented downward to dust female heads below; long lived (to 75 years); aka **Burrobush**, **Burroweed**; like the **Creosote Bush**, the roots produce chemicals that act to inhibit crowding by neighboring plants (reduces competition for limited water);

Mojave presence: native; year-round

Family ASTERACEAE (Sagebrushes)

Basin Big Sagebrush (*Artemisia tridentata tridentata*)



I-15 rest stop; Blackfoot, ID



I-15 rest stop; Blackfoot, ID



Interstate-15 rest stop; Blackfoot, Idaho



I-15 rest stop; Blackfoot, ID



I-15 rest stop; Blackfoot, ID

- Flowers:** discoid; narrow bell shape, 3 - 9/head, greenish yellow, .16"; triangular, 2.5 - 6" inflorescence
- Stems:** upright, woody, brown; tree-like with short trunk, often branched at base; 2 - 6"
- Leaves:** oblanceolate*; shallow 3-lobed tips/entire*; alternate; fuzzy, gray green; aromatic*; 1.5 - 2"
- Blooms:** July to October
- Range:** w NA from e CA east to w NE/SD/ND; s BC, CAN, south to n AZ/NM and Baja, MEX
- Habitat:** well-drained soils; arid flats, hills, slopes, etc.; Lower to Upper Sonoran to Life Zones

Notes:

very common; annual; large, evergreen shrub to sub-tree that grows to 9'* (tallest of the four sagebrush subspecies) in intermountain valleys throughout the Great Basin region and into the Great Plains; most abundant of the sagebrushes; hairy **bracts**; aka **Big Sagebrush**; crushed leaves produce a distinctive aromatic fragrance*; extremely drought tolerant; important forage plant for wildlife (bighorn sheep, deer, elk, sage grouse, etc.), and nesting site for numerous birds; used as a spice; traditionally valued by native populations for firewood (due to the highly flammable oils in its wood), and as a deodorant; state flower of Nevada

(*rounded, gnarled appearance *rounded to slightly pointed {mostly entire on vegetative stems}; *pungent)

(*distinguished from **Mountain Big Sagebrush**)

Mojave presence: native; uncommon; far ne region

Family ASTERACEAE (Sagebrushes)

Mountain Big Sagebrush (*Artemisia tridentata vaseyana*)



Willow Spring; RRCNCA



First Creek; RRCNCA



Willow Spring; Red Rock Canyon NCA; Nevada



RRCNCA; LV, NV



Red Spring; RRCNCA

- Flowers:** discoid; bell shape, 4 - 8/head, pale yellow to cream; .16"; narrow, 4 - 6" inflorescence
- Stems:** upright, woody, brown; flowering stalks characteristically rise above crown; 2 - 4'
- Leaves:** wide wedge*; shallow tri-lobed tips*; curled edges; alternate, fuzzy, grayish green; aromatic*; .6"
- Blooms:** July to October
- Range:** w NA from e CA east to w NE/SD/ND; WA/MT south to NV/AZ/NM
- Habitat:** loamy/gravelly soils; high elevations with plentiful snow; Upper Sonoran to Canadian Life Zones

Notes:

relatively common at higher elevations; annual; medium-sized evergreen shrub that grows to ~5'* throughout the Great Basin region at elevations of ~3,000 - 10,000'; hairy bracts; aka **Big Sagebrush**; crushed leaves produce a distinctive aromatic fragrance*; extremely drought resistant, and can tolerate greater moisture than *A. t. tridentata*; important forage plant for wildlife (bighorn sheep, deer, elk, etc.), and nesting site for numerous songbirds; used as a spice; traditionally valued by native populations for firewood (due to the highly flammable oils in its wood), and as a deodorant

(distinguished from **Basin Big Sagebrush** by *smaller size; flat-topped crown, *flared outer lobes and rarely entire}

(*sweet-pungent aroma, and *smaller, wedge-shaped leaves)

Mojave presence: native

As M5