

Echinocerids



Hedgehog cactuses and their relatives are members of the tribe **Echinocereae** in the subfamily **Cactoideae**. Such cacti are recognized by several distinctive characteristics similar to their cousins in the tribe the **cactae**: **spherical** to **short columnar** growth, **ribbed** unsegmented stems, and **areoles** that produce various numbers and shapes of **unsheathed** spines, but no **glochids** (bristles). However, the tribe differs in having some members that are **arborescent** (tree-like), bear flowers that are usually **nocturnal**, and are found mainly in the deserts of Mexico and the southwestern US. Echinocerids are common in the Mojave Desert, though represented by only a half dozen or so species.

Subfamily **ECHINOCEAREAE** (Hedgehogs)

Strawberry Hedgehog (*Echinocereus engelmannii*)



typical habitat
Christmas Tree Pass; NV



April
Red Spring; Red Rock Canyon NCA; NV



large flowers
Red Rock Cyn NCA; NV



light and dark spines
Cerbat Mtns; Mohave Co.; AZ



fleshy fruit
Boss Mine; Goodsprings; NV

- Flowers:** areolic; tubular; solitary, diurnal; green stigmas, yellow anthers; **magenta**; 3.5"
- Stems:** cylindrical barrel; solitary to many; branched at base; stout, erect, fluted (ribbed); **green**; 24"
- Leaves:** spines; smooth; stellate clusters; interlaced, straight to curved; white, **straw yellow**, **red brown**; 3"
- Blooms:** February to June
- Range:** southwestern US; Baja California and Sonora, Mexico
- Habitat:** dry; gravelly to rocky; desert scrub to montane woodlands; Lower Sonoran to Transition LZs

Notes:

common; perennial; grows to 2' (usually less)) throughout the Mojave Desert south through Baja and n MEX at elevations up to about 7,000'; fleshy, spiny, pink, 2" fruit that produce black .1" seeds; 6-14 radial spines, 2-7 central (longest central spine flat, bladed) per **areole**; no **glochids**; aka **Engelmann's Hedgehog**, **Calico Cactus**, etc.; 8 subspecies; often used in landscaping; pollinated by bees (mainly leafcutter); fruit and buds edible raw or roasted

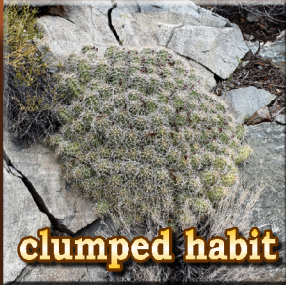
Mojave presence: native

Comments:

This cactus is one of the most commonly encountered in the Mojave. When in bloom, its showy flowers are among the largest of any cactus species. Outside of bloom, its clumps of many barrel-like stems covered with mixed white to red-brown spines is distinctive and characteristic. Once you learn to recognize this species, you'll never mistake it for any other similar cacti, though identifying the many

Subfamily **ECHINOCEAREAE** (Hedgehogs)

Mojave Mound Cactus (*Echinocereus mojavensis*)



clumped habit

Clark Mtn; Mountain Pass; CA



curved spines

Potosi Mtn; Goodsprings, NV



Potosi Mountain; Goodsprings District; NV



showy flowers

Potosi Mtn; Goodsprings, NV



buds; ribbed stems

Clark Mtn; Mountain Pass; CA

- Flowers:** perianthic; funnellform; apical; round petal tips, green stigmas, pink anthers; **scarlet red**; 2"
- Stems:** spherical to cylindrical; up to 300; branched from the base; undulately fluted; **green**; 12"
- Leaves:** spines; smooth; densely interlaced; **curved/twisted**; white, tan, **pinkish**; 2.5"
- Blooms:** April to June
- Range:** southwestern US; northern Mexico
- Habitat:** gravelly to rocky; desert scrub to montane woodlands; Lower Sonoran to Canadian Life Zones

Notes:

uncommon; perennial; **highly variable** in spination, depth of flower color, etc.; grows in compactly rounded mounds to 3' tall, 5' wide, from se CA east through the Mojave Desert to w CO/NM, south into MEX at elevations of 3,000 to 10,000'; flowers mainly nocturnal; juicy, cylindrical, green-yellow (young) to red (mature), spineless, 1" fruit; 5-13 spines (5-9 radial; 1-4 central) per woolly **areole**; no **glochids**; aka **Claret-Cup Cactus**, **Mojave Kingcup Cactus**; formerly known as **E. triglochidiatus**; host to hummingbirds, bees, etc.; fruit edible raw or cooked

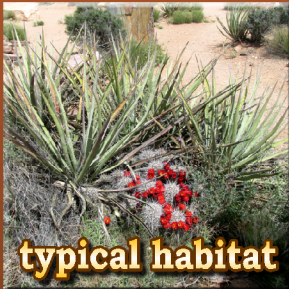
Mojave presence: native

Comments:

Though generally uncommon, this cactus can be locally abundant. When in full bloom--which is quite impressive--it can easily be confused with the closely related **Scarlet Hedgehog** **E. coccineus** (next page). The most conspicuous difference in the field is the spines: straight on the scarlet; curved on the Mojave mound.

Subfamily **ECHINOCEAREAE** (Hedgehogs)

Scarlet Hedgehog (*Echinocereus triglochidiatus*)



typical habitat

West Rim; Grand Cyn; AZ



straight spines

West Rim; Grand Cyn; AZ



April

West Rim; Hualapai Plateau; Grand Canyon; AZ



female flower

West Rim; Grand Cyn; AZ



male flower

- Flowers:** perianthic; funnellform; round petal tips, green stigmas; **pink** to **scarlet red** (yellow throat) 3.5"
- Stems:** spherical to cylindrical; few to many; branched from base; fluted; **green**; to 16"
- Leaves:** spines; smooth; **straight**, densely interlaced; yellowish (new) to gray (old); 3"
- Blooms:** March to June
- Range:** southwestern US; northern Mexico
- Habitat:** rocky; desert slopes to montane woodlands; Upper Sonoran to Canadian Life Zones

Notes:

uncommon; perennial; grows as mounded clumps of up to 100 stems to 1.5' tall, 3' wide, in the sw US from TX west to s CA, CO/UT south to n MEX at elevations of 4,000 to 9,000'; flowers **perfect** (bisexual) or **dioecious** (male and female on separate plants) depending on subspecies; fleshy, juicy, spiny, green to red-brown fruit with white pulp; 5-24 undifferentiated spines (5-20 radial, 0-4 central) per **areole**; no **glochids**; aka **Kingcup Cactus**, **Mexican Claret Cup**, etc.; 3 subspecies; pollinated by bees and hummingbirds attracted to the flower's central nectar chamber

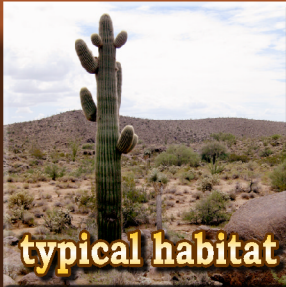
Mojave presence: native

Comments:

While widespread throughout its narrow range, scarlets are rather uncommon and difficult to recognize when not in bloom. The specimen shown here (with pistillate flowers) from the West Rim of the Grand Canyon is the only one I have photographed presenting its beautiful flowers!

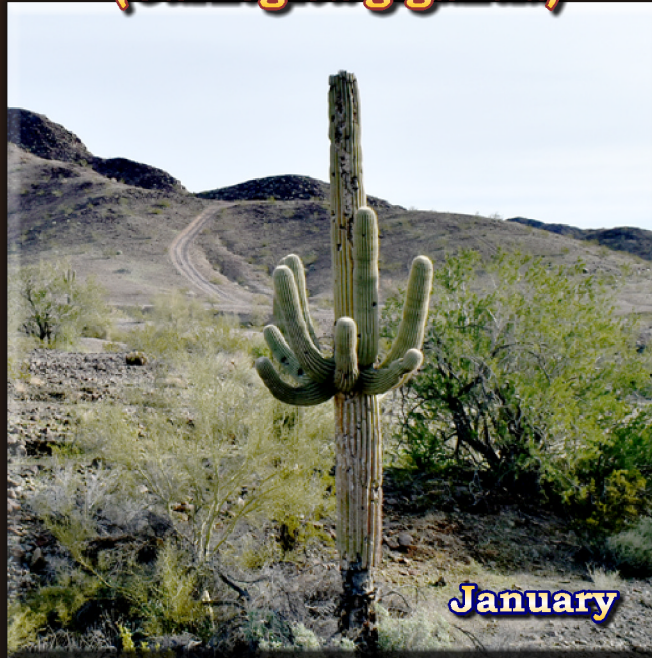
Subfamily **ECHINOCEAE** (Saguaros)

Giant Saguaro (*Carnegiea gigantea*)



typical habitat

Hualapai Mtns; AZ



January

Quartzsite; La Paz County; Arizona



showy flowers



ribbed stems

Quartzsite; AZ



radiating spines

Hualapai Mtns; AZ

- Flowers:** perianthic; funnelform; apical; reflexed tepals, yellow stigmas, pink anthers; white; 3"
- Stems:** columnar, arborescent; one to many; branching from trunk; fluted; **green**; ~48"
- Leaves:** spines; smooth; radial; rigid, straight; white to gray; 2"
- Blooms:** May to June
- Range:** Sonora, Mexico; southwestern US
- Habitat:** arid well-drained; gravelly to rocky; desert flats, slopes; Lower Sonoran Life Zone

Notes:

common; perennial; grows to 50' (usually less) in the Sonoran Desert and transition zones from n MEX north to Kingman, AZ, west to just across the Colorado River in CA at elevations below 4,500'; scaly, pear-shaped, 4" fruit with dark red pulp and black seeds; 16-30 spines per woolly **areole**; no **glochids**; flowers open in evening (for only 1 day); aka **Giant Cactus**; provides food and shelter for wildlife; fruit (rich in sugar, protein, vitamin C) and seeds eaten raw by native peoples, and used to make beverages, jams, cakes, etc., while stem ribs used for thatching, fencing, etc.

Mojave presence: transition zone

Comments:

Being a Sonoran cactus, the saguaro's only appearance in the Mojave is in the transition zone between the two deserts, such as by the Antler Mine in the Hualapai Mountains near Kingman, AZ (upper left). Flowers are seldom seen since they bloom

in the evening for only one day!



young fruit



mature fruit

Ca5