

The Weekly Plant

8 April 2012

Common names: pinkflower, strawberry, or robust hedgehog cactus
Scientific name: *Echinocereus fasciculatus*¹ (formerly one of the subspecies/varieties of *Echinocereus fendleri* or *Echinocereus engelmannii*.)

TAV location:

Along the road: under large creosote on rise just south of lot 152. Also scattered along south portion of blue trail (between Galileo and Langtry).

Discussion:

I'm just starting my quest to understand cactus anatomy and, believe me, it's a sticky situation! Hedgehog cactus² are one of the first to bloom in spring so I'll start with them. *Echinocereus* are ground-hugging, ribbed cactus. *Echinocereus fasciculatus* is multi-stemmed. Each areole (the pad on the stem that has the spines) has several radial spines and one central spine, a characteristic used to distinguish it from other species.

Plants in the Cactaceae (cactus family) are exclusively New World plants.³ They are stem succulents. Leaves, if present, are small and quickly lost. The stems are swollen and capable of photosynthesis. They hold a reserve of water for the plant during times of drought. These adaptations are not unique to cactus. Some Old World Euphorbia can appear very similar to cactus.

Cactus flowers are usually large and showy. One important characteristic is their location. Some species, such as this hedgehog, form flowers on the side of the stem. This type of cactus may have "cereus" in its common or botanical name. Other species form flowers at the top of the stem. They may have "cactus" in their common or botanical names.

All cactus flowers have the same basic structure:

- An elongated flower tube that grows from or near the areoles. The ovary (part of the female pistil that contains the eggs and will become the fruit) is within the flower tube.
- Many sepals and petals that are similar in appearance. These are called tepals to indicate we can't really tell them apart.⁴
- Many stamens.
- A single pistil. The top of the pistil (made of a branched stigma, where the pollen lands, and a single style, a tube that connects the stigma to the ovary) can be seen among the stamens.



Left: typical cactus flower. Center: flower tube with areoles to left of tepals, emerging from side of stem. Right: a succulent Euphorbia.

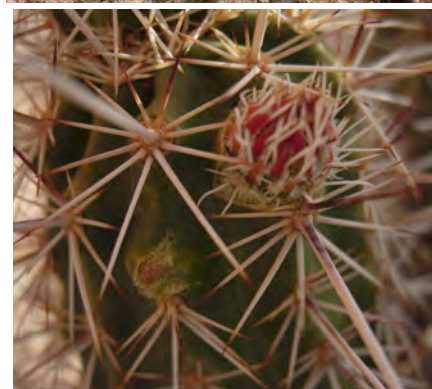
Contrast this to the flowers of the succulent Euphorbias (see photo). Though these plants are stem succulents, the flowers are small, without many tepals and without a flower tube.

¹ GRIN Online Database is the source of the currently accepted scientific name.

² Merriam-Webster Online Dictionary states cacti, cactuses, and cactus are all accepted plural forms of cactus.

³ There is one species of cactus in Africa. It is thought to be of New World origin, its seeds carried to Africa by birds.

⁴ Other plants with tepals are lilies and tulips.



Note areole with single central spine, upper left. Below it is a flower just starting to break through the skin of the cactus, just above the spines. To right, a more mature flower bud.