

The Weekly Plant

18 August 2013

Scientific/Common names:

*Ferocactus wislizeni*¹/Arizona barrel cactus, fishhook barrel, compass barrel

*Echinocactus grusonii*¹/golden barrel cactus, golden ball, mother-in-law's cushion

TAV location:

Arizona barrel - several plants are in the quadrangle between the gym/swimming pool and the Community Center.

Golden barrel - small specimens in landscapes around the Village. Large, flowering specimens can be seen at B&B Cactus on Speedway.

Discussion:

I've been hesitant to write about both barrels and saguaros.

After all, what can I say that you haven't read already? But, maybe you haven't heard the botanical and taxonomic details. So, this week I'll discuss two common barrel cactus.

If you look at the scientific name of different cactus², you will see that some include the word "cactus" (like this week's plants) or the word "cereus" (like the hedgehog cactus, *Echinocereus fasciculatus*, Weekly Plant 8 Apr 2012). This is a clue about the plant's flowering habit (if those words aren't in the name, you have no clues about flowering). The "cactus" flower on the newer growth, near the tip of the plant (see photos above). The "cereus" flower on older growth - the flowers appear on the sides of the plant. Saguaro and hedgehog cactus are in this group.

What more can we learn about this week's plants - *Ferocactus* and *Echinocactus*? "Fero" is from the Latin *ferus*, meaning fierce or wild, for those wicked spines. "Echino" is from the Greek word for the spiny hedgehog, *Echinocactus* so named because of those wicked spines (that didn't help much). "Echino" is an exceptionally common prefix in scientific names (I stopped counting at 30 genera). And, while all of that may be interesting, it doesn't really explain the difference between *Ferocactus* and *Echinocactus*.

To tell these plants apart, you need to look at the flowers and fruit. We've plenty of flowering Arizona barrels in the Village but only small, too-young-to-flower golden barrels. B&B Cactus has a number of old specimens and they are flowering now. The difference: *Ferocactus* may have wicked spines, but the outer portion of the flower and the fruit is soft to the touch (you can safely "pet" the petals³).

Echinocactus petals are sharp and stiff (like a hedgehog). Additionally, a woolly covering hides the fruit.

Let's close with some details about each plant:

Arizona barrel is native to AZ, NM, TX and northern Mexico.

It tends to lean to the south. As it ages, it becomes tall and slender and seldom branches. If the growing tip is damaged by physical injury or mites, multiple growing points may form at the top of the plant⁴. Flowers range in color from yellow through orange to red, usually with a stripe on each tepal. Fruit ages to yellow.

Golden barrel is native to the Chihuahuan Desert of Mexico and is critically endangered in the wild. It stays globose even as it ages and is somewhat flattened on top. Older specimens branch, creating many small barrels at the base of the original plant. Flowers are yellow.

¹ Tropicos is the source of the currently accepted scientific name: <http://www.tropicos.org/>. ² Merriam-Webster Online Dictionary states cacti, cactuses, and cactus are all accepted plural forms of cactus. ³ Technically these are tepals - sepals and petals that are so similar it is difficult to tell them apart. ⁴ Personal communication, staff at B&B Cactus.



Ferocactus wislizeni, left, *Echinocactus grusonii*, right.



Ferocactus wislizeni, left. Tepals and scales on fruit are not spine tipped. *Echinocactus grusonii*, right. Tepals are spine tipped and fruit is covered in wool.



Left: distortion resulting from injury to growing point. Right: AZ barrel flower with pollinator, note striped tepals.