The Weekly Plant Extra 26 August 2014

Common names: Graham's pincushion cactus, Graham's nipple cactus, Arizona fishhook cactus

Scientific name: Mammillaria grahamii¹

TAV location: along orange trail (parallels Old Spanish Trail). Look closely, especially under trees and bushes. Some of the plants may be labeled (as Mammillaria or nipple cactus or pincushion cactus).

Discussion:

I missed the opportunity to feature this plant several weeks ago when it first bloomed. Fortunately, the recent rains have sparked another round of flowering.

This plant is an EXTRA since it's going to be hard to observe. There are none of these small plants along the streets and along the trails they are hard to spot as they blend into the shade under trees and shrubs. Also, the flowers are closed first thing in the morning. You will need to go out after 10AM or so to see open flowers. There are two options:

1) walk along the orange trail. It is probably most efficient to start at the connector to the orange trail across from lots 133-136. Look for the red

gravel and the Pake bench. Once on the orange trail, go left (toward Vail) first. The Open Space and Trails Committee has labeled several of the plants. Look for the labels but also keep looking under trees and shrubs. Trail is easy to walk but there are a few ups and downs.

2) my yard. Please make an appointment since I will have to show you where they are. (Thanks to the Cactus Rescue Crew of the Tucson Cactus and Succulent Society. My plants came via Bill McCourt.)

Graham's pincushion cactus is found mainly in Arizona, New Mexico and adjoining Mexico (one reference listed it as "rare" in AZ and NM). You will usually see plants with just a single stem but sometimes clusters of several stems form. Each stem is no more than 6" tall and no more than 2.5" wide. Most of the spines are whitish, radiating out flat from the areoles (the place where the spines are connected to the stem). The areole also has a long central spine, dark brown and hooked. The flowers are large in comparison to the plant, and large for *Mammillaria*, about an inch wide. They are usually pink or pink with white edging, appearing 2-3 times during monsoon.

Just like saguaro, this species uses nurse trees to help protect it from frost, sun, and trampling. Even when I'm looking for these plants, they are hard to find when not in flower.

The larger cacti of our desert - saguaros, barrels, and hedgehogs - are "ribbed" cactus. The areoles form vertical rows, the ribs of the cactus. *Mammillaria* are not ribbed cactus. None of the areoles is directly above its nearest neighbor (see photos below). Because of this zig-zag pattern, no ribs are formed.

The greatest diversity of *Mammillaria* is found in Mexico. Even there, most species are less than a foot tall. *Mammillaria* are attractive to cactus enthusiasts because of their small size, attractive flowers and great diversity in shape (cylindrical to spherical) and spines.

1 Tropicos is the source of the currently accepted scientific name.





Top of page: Note multi-stem form of this plant. Far left: Flower closeup. Note also the many white spines radiating outward and the dark, hooked central spine. Left: Looking straight down on the plant, you can see that flowers form on the side of the stem. This is the older part of the stem. Like hedgehogs and saguaros, Mammillaria are in the "cereus" group of cacti. Barrels (also blooming now) form flowers on the newer part (top) of the stem and are in the "cactus" group of cacti.

Photos and text by Mary Welch-Keesey

