

The Weekly Plant

25 Nov 2012

Common names: desert milkweed, leafless milkweed, rush or bedstraw milkweed
Scientific name: *Asclepias subulata*¹

TAV location:

I have not seen it growing wild at TAV. You can see it used as a landscape plant at the very front of lot 176 near the driveway. Listed as native to Pima County.

Discussion:

Milkweeds - plants in the genus *Asclepias*, named for Asklepios, the Greek god of medicine and healing - are common throughout the lower 48 states. Using the BONAP maps², I counted about 60 native species.

Like any group of related plants, all milkweeds have common characteristics:

- They are a larval food source for monarch and queen butterflies. However, milkweeds are extremely popular with a number of other insects as well (see photos below).
- They have a white, milky sap (hence the common name). This sap contains cardiac glycosides and is at least mildly toxic to many animals. The native peoples carefully used it medicinally.
- The fruit is a pod that contains many seeds attached to light-weight, fluffy "silk". This silk was used to stuff life vests and flight suits during the Second World War.

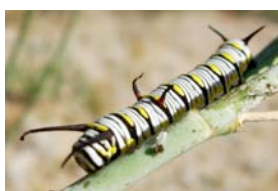
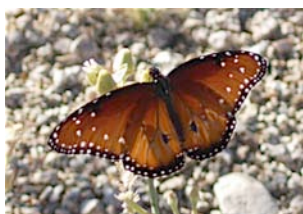


Desert milkweed is unusual because it often has no leaves. Though leaves will appear on young plants or with ample moisture, the stems are most frequently leafless. A mature plant is usually just a clump of green twigs with clusters of white to yellow flowers on top. Reaching to 4 ft, it can be a dramatic statement in the landscape, surviving on rainwater but growing and flowering more vigorously with a little irrigation. The seedlings that have appeared in my yard are growing at the base of the downspouts.

Milkweed flowers vary greatly from the basic flower structure you learned in botany class. There are sepals and petals, true. The sepals are hidden beneath the petals which are reflexed (they bend backward). The showy white/yellow parts of the flower are not petals, but outgrowths of the filaments of the stamens, the male sexual organ. (The filament is usually long and slender, with anthers at the tip.) The rest of the stamen is fused to the pistil. Two pollen sacs are connected by a wishbone structure. For pollination to occur, the leg of an insect must snag the wishbone, pull the pollen sacs free, and deposit them on another flower. It's an inefficient system. Only a few milkweed flowers are successfully pollinated. Numerous small insects spend their life with their legs stuck in the flower, unable to pull free.

¹ The USDA, ARS, National Genetic Resources Program *Genoplasm Resources Information Network - (GRIN)* Online Database is the source of the currently accepted scientific name.

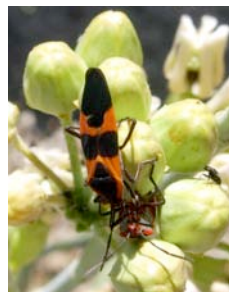
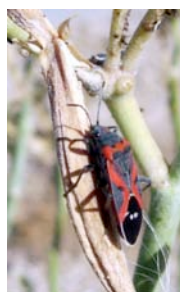
² Biota of North America Project (<http://www.bonap.org/>).



Photos and text by Mary Welch-Keeseey



Left: pistil and fused stamen. Arrow indicates wishbone. Right: wishbone with two pollen sacs + my fingerprint.



Many insects love milkweeds. Clockwise from upper left: male queen butterfly; queen butterfly larva; large milkweed bug; small milkweed bug (milkweed bugs feed on the seeds); tarantula hawk wasp (sting packs a real wallop, so admire at a distance. A large wasp, NOT aggressive. They won't sting unless you try to handle them.)