The Weekly Plant 26 April 2013

Common names: spiny goldenweed, cut-leaf ironplant, lazy sleep(y)daisy **Scientific name**: *Xanthisma spinulosum*¹

TAV location:

There are many plants around the Village, with high concentrations right next to the curb. Look for them along Langtry (especially on vacant lot 136) and the north side of the Eliot-Carver curve. The flowers may be closed early in the morning. Perhaps this is why they are called sleepydaisies.

Discussion:

Why are there so many yellow daisies? These plants are clearly evolutionarily successful. Insects love them, even though they may not actually see them as yellow². The shape allows the insects to rest on the flower, rather than hovering around it, a clear energy saving advantage. The insects feed on nectar and pollen while spreading the pollen around and allowing the plant to reproduce efficiently.

How do non-insects tell the yellow daisies apart? Sometimes with great difficulty. The Weekly Plant has already covered several yellow daisies (aka DYCs). They are all in the aster family (Asteraceae). Some have long, showy petals, some do not. Some are yellow in the center, some are not.



Sometimes you have to look beyond the flower to the plant shape and leaves. It was the shape that struck me with this plant. It is nicely rounded, like an upside-down bowl, short but very attractive. It is covered with showy yellow flowers. I first thought it might be burroweed (*Isocoma tenuisecta* - Weekly Plant 23Sept 2012). The two plants are growing together in several places so comparison is easy. The goldenweed is flowering now; burroweed doesn't flower until fall. Goldenweed is short with greyish leaves; burroweed is tall with dark green leaves. Goldenweed flowers have showy petals; burroweed flowers don't have showy petals.

Spiny goldenweed on left, burroweed on right.

I've been able to find very little information on spiny goldenweed. Fortunately, one of my plant books has photos of a related species, so I was able to get a tentative ID. I then sent my photos to a contact at the UA Herbarium. I'd gotten the genus right, but not the species. On a visit to the Herbarium I was able to look at preserved specimens and verify the identity.

An herbarium is a giant library of pressed plant specimens. It's not exciting to visit (row after row of tall metal filing cabinets and plants referenced only by their scientific name), but it's a valuable resource for plant scientists, both amateur and professional (otherwise you'd be incorrectly calling this plant *Xanthisma gracile*).







L: flower head, ray flowers on outside, disc flowers in center.

C: leaf with small, white bristle tips on the end of each leaf lobe ("spiny"). R: seeds. A few plants in the Village are already producing seeds.

Photos and text by Mary Welch-Keesey

¹ Tropicos (http://www.tropicos.org/) is the source of the currently accepted scientific name.

² Some insects don't see the yellow as we do. Instead they see the flower pigments that reflect ultraviolet light. For a series of great photos see: http://www.naturfotograf.com/UV_flowers_list.html.