

The Weekly Plant 9 November 2014

Common names: desert broom, greasewood, rosin-bush or -brush

Scientific name: *Baccharis sarothroides*¹

TAV location: The largest plants are on the east side of southern Galileo, near the drainage area in front of lots 49-60.

Discussion

I've had a hard time writing this Weekly Plant. Academy Village is one of many communities in both Tucson and Phoenix that does not allow desert broom in its landscapes (see our "Prohibited Plant List"²). Almost every article on this plant by cities or HOAs included the word "invasive".

Yet, the more I read about desert broom, the more I felt it wasn't getting a fair shake. Yes, there are some bad things about it. It burns fiercely and can be a threat to nearby buildings. Its pollen is allergenic for some people. It produces lots of white fluffy seeds (think cottonwood) and those seeds germinate easily in disturbed soil, especially near irrigated plants.

There are positives, however. Desert broom is native to Arizona and to southern New Mexico and California. It is a pioneer plant that helps revegetate disturbed areas - roadsides, cleared lots, washes. Its roots help hold the soil on easily eroded areas. It is a good wildlife plant, not for mammals but for insects. One scientific paper reported that it supports 26 species of insect - when it isn't in flower. When in flower desert broom is covered with butterflies and bees, beetles and bees, wasps and bees.

Exactly how invasive is desert broom? Buffelgrass, Sahara mustard, and other non-native invasive species can completely take over an area, out-competing native plants. Does desert broom act this way? To answer this question I walked around the Village and talked to staff at Saguaro National Park.

In the Village: I walked both the orange and blue trails looking for desert broom (orange trail parallels Old Spanish Trail; blue follows the wash between Langtry and Galileo). I didn't find any. The area along the trails has not been disturbed recently so I found what you would expect: no desert broom. What about areas that were disturbed more recently, in the last 15 years? I walked around several of the lots on southern Galileo (lots 50-60 and lots 160-168). Yes, there is desert broom on these lots, especially in the low, moister areas. Is it taking over the lots? Not at all. I saw a number of medium sized plants, but no new, small plants at all. The only clusters of plants were around the drainage basins on southern Galileo, not on the lots.

At Saguaro National Park: I asked if the invasiveness of desert broom was a concern. Answer: No. They don't have a problem with it, don't have very much desert broom in the park at all, aren't making any effort to eliminate it.

Don't get me wrong. I do think we should remove desert broom from our landscape.³ Near houses it is a fire hazard⁴. But is it a nasty, evil, invasive species that must be completely eliminated from Arizona? I say no. Desert broom is a good wildlife plant. It plays an important role in revegetating areas disturbed by fire or flood or even by human activities. It even has the potential to remediate soil over mine tailings.⁵

If you'd like to repeat my experiments, here's the plant you are looking for:

Desert broom is a shrub that can grow to as large as 10' x 10'. The newest stems and the leaves are a dark green, just stiff enough to be used as a broom. On large plants the lower stems are bare and the upper growth gives the plant a tufted appearance. The leaves are narrow and less than an inch long. They are sparse and will drop off under drought stress.

Desert broom is in the aster family. The small flowers are held together in small clusters, male flowers on some plants, female on others. Most plants were flowering the last week of October. The male plants were showier then, with their yellow flowers. Now, flowering has finished. The male flower clusters are dropping off the plants. The female plants are setting fruit. Each fruit is attached to white fluff that helps with seed dispersal. A few plants are already releasing the fruit to blow in the wind. Expect to see much more white fluff blowing around in the next week.

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

<http://www.tropicos.org/>

² See Resident Handbook (the red book), page 32 in 8th edition.

³ So, how do you eliminate desert broom? Look at your landscape plants frequently, especially those under irrigation, so you can pull desert broom while it is still small. For larger plants: cut off low to the ground and immediately paint the cut stump with concentrated RoundUp. Monitor the stump. If new growth appears, spray it with RoundUp diluted as directed on the product label.

⁴ There is so much desert broom along Old Spanish Trail and other roads that I'm not sure eliminating it from the Village is going to help the allergy sufferers.

⁵ See <http://www.ncbi.nlm.nih.gov/pubmed/17964035>.

Photos and text by Mary Welch-Keesey



Left, top: cluster of male flowers
Left bottom: cluster of female flowers.
Note difference in shape of male and female flower clusters. Right, top: male flowers have finished and are falling off.
Right bottom: Fruit of desert broom