The Weekly Plant
6 May 2013

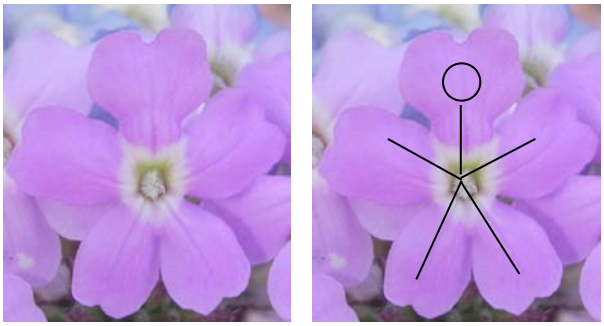
Common names: Goodding verbena; southwestern mock vervain; pink, Mojave, or desert verbena; southwestern vervain
Scientific name: *Glandularia gooddingii*[1]

TAV location:
There are several plants scattered along the south side of Rainwater (incoming side), behind the wood fence. They are not really visible from the road, so you'll need to take a short walk.

Discussion:
This week's plant is a short-lived perennial landscape plant, providing lovely purple springtime color. You may still find it under the older name, V*erbena gooddingii*. It will survive on rainfall, but is better with some irrigation. Give it a bit of shade in the afternoons if possible. In very mild winters it may remain evergreen. Even if it dies to the ground, the roots survive and will send up new shoots in the spring. The plant sometimes reseeds, but you may simply have to replace it after several years. It is native to the Rincons, and the flowers attract butterflies and other insects.

It's easy to mistake this plant for purple lantana (*Lantana montevidensis*[2]), which is also a common landscape plant. They are both in the Verbenaceae (verbena or vervain family), so they have similarities. Three things help identify this family: 1) opposite leaves, usually on square stems 2) in some species, a long flower stalk that has only a few flowers open at one time (see photo below), and 3) gingerbread-man shaped flowers.

The petals of many flowers are arranged with radial symmetry - they look the same no matter how you turn them (see Weekly Plant, 18Mar2013, desert anemone). Other flowers exhibit bilateral symmetry - there is only one way to divide the flower and have both halves be the same (for an example, see Weekly Plant 24Mar2013, penstemon). Flowers in the verbena family are almost radially symmetrical, but not quite. Instead they look like a gingerbread man - the arms are a bit close to the head and the legs are a bit too close to each other. It's a bit subtle, but once you see it, you'll be able to recognize the shape in other flowers. I've drawn the gingerbread man on a flower, so you'll see what I mean.



Glandularia *flower with gingerbread man superimposed. These flowers are not quite radially symmetrical.*

Once we place the plant in the verbena family, how do we tell a *Glandularia* from a *Lantana*? Before flowering, look at the leaf shape. Both plants have toothed leaves, but the leaves of the *Glandularia* are lobed as well. *Lantana* leaves have more of an overall egg shape. During and after flowering, look at the shape of the flower cluster. The flower cluster of *Glandularia* continues to elongate. This is one of the reasons the plant can look a little ratty after flowering (just cut off the flower stalks to keep it neat, but remember you'll remove any chance of reseeding). The flower cluster of *Lantana* does not elongate but stays more rounded.

Top: Glandularia *leaf*
Bottom: Lantana *leaf*

L: Only a few flowers on this flower stalk are open. Plants with this structure often have the common name "vervain". R: Glandularia *flower cluster.*

Both of these plants work in the landscape. One caution with *Lantana*, however. The berries of all species are poisonous and the leaves can cause skin irritation in some people.

[1] Tropicos (http://www.tropicos.org/) is the source of the currently accepted scientific name.
2 *Lantana camara*, with yellow and multicolored flowers, is also grown at TAV. Not AZ natives.

Photos and text by Mary Welch-Keesey