

The Weekly Plant

28 July 2013

Common names: desert senna, Coues' senna, rattlebox, rattleweed, dais, Ko'owī Ta:tam (Tohono O'odham)

Scientific name: *Senna covesii*¹ (formerly *Cassia covesii*)

TAV location:

Along the driveway that borders lot 9, about half way down. Along OST near the Rainwater/OST intersection (view carefully). The flowers close by midday.

Discussion:

When you go to the grocery, you easily recognize vegetables in the pea family, even though you've never seen them before. Snow peas, fava beans, Chinese yard-long beans, Romano beans - you can recognize them all even if you can't put name to them. That distinctive "pea pod" fruit, called a legume, is the unique characteristic that ties all the members of the Fabaceae, or pea family, together. Legumes open along two seams when they are mature.

There are other characteristics shared by plants in the Fabaceae. Many have compound leaves (leaves that are made of several small leaflets). Most have roots with nitrogen-fixing bacteria. Legume seeds become very hard when they have matured and dried fully. Cooks deal with this when they cook dry beans. Plant propagators deal with this when they try to grow Fabaceae from seed. The hard coat keeps the seed from absorbing water, the obligatory first step in the seed germination process. To break open the seed coat, propagators might use a file to nick the seed coat (photo right), rub the seeds between layers of sand paper, soak the seeds in sulfuric acid, or simply plant and let Mother Nature's soil and insects make holes in the seeds.

You'll notice I haven't mentioned the flowers yet. The classic "pea" flower is seen on edible peas as well as dalea, lupine, clover, wisteria and many others. Here in the desert you also need to learn the "puff ball" cluster of pea flowers seen on the acacias (and former acacias), mesquite, and fairy duster.

Today's plant has the third type of pea flower, found also on palo verde (see Weekly Plant 6May2012) and bird of paradise. The flowers of desert senna have 5 petals, almost symmetrically arranged. The pistil is curved and you easily see how it can become a "pea pod". The leaves are indeed compound; they are even pinnate (an even number of leaflets on a central stalk) with 4, 6 or 8 leaflets.

Desert senna is a perennial that becomes a subshrub, growing to about 2' x 2', though it may act more like an annual in dry years. I notice it when it begins to bloom with the monsoon rains but it is also listed as blooming in spring. The leaves are shed with the dry season, perhaps reducing its ornamental value. Desert senna is native to Arizona and spills over the border into surrounding states.

Our native sennas are a food source for sulphur butterfly caterpillars. Desert senna has an unusual pollination mechanism - you can learn more about it here: <http://tinyurl.com/lg4bfgl> (and I did get buzzed by the bees!).

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



Desert senna flowers are about an inch wide; the leaves are grayish and up to 4" long, each leaflet about an inch long.

