

The Weekly Plant

27 May 2012

Common names: creosote, creosote bush, greasewood, chaparral

Scientific name: *Larrea tridentata*¹

TAV location:

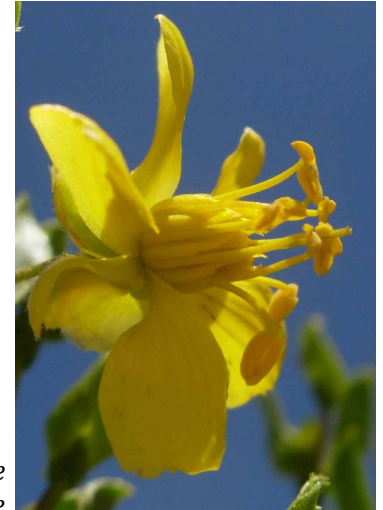
Along the road: east side of Vivaldi, SW corner of O’Keeffe and Galileo.

Discussion:

Creosote is everywhere around our Village. This shrub is one tough plant². It is found in three of our four deserts (Sonoran, Chihuahuan, Mojave), tolerating annual rainfall of 3 up to 20 inches a year and able to survive two years without rainfall. However, it won’t tolerate poor drainage, salty soils, or extended cold weather. It can spread horizontally by producing new stems at the edge of the plant. One plant has grown this way for almost 12,000 years, creating a ring of separate but identical shrubs 45 feet across.³

Creosote can grow to a height of 10 feet with ample moisture. It is evergreen, though the leaves often fall from the inner branches, creating an open plant that casts little shade. The leaves of creosote are opposite and each leaf is made of two small leaflets joined at the base. Stipules are small and reddish. The leaves are resinous, waxy, and strong-scented. The native peoples used the leaves medicinally for GI complaints, colds, arthritis, and aching bones. Unfortunately, modern preparations, such as chaparral tea, have been linked to both liver and kidney damage (even death) and are not recommended.

Creosote flowers most abundantly in spring. The flowers have five yellow petals that, according to one reference⁴, twist 90° when the flowers are pollinated. The stamens are held against the ovary. A single style extends past the anthers. The fruit is covered with hairs and tipped with the remains of the style. They are eaten by small rodents, birds, and reptiles.



Left: creosote flower. Center: leaves and fruit. Note that each leaf has two leaflets (almost look like wings). The stipules (small outgrowths of the leaves, found on each side of the base of the leaf stalk) are red and triangular. Lower fruit is tipped with the remains of the style. Right: Note the stamens are held almost in a column. A sharp eye will see the single style extending just past the anthers to the right.

In a dense stand of creosote, the plants are so evenly spaced one can imagine the hand of a compulsive gardener. Though chemicals in the roots do seem to inhibit the growth of some plants, the current explanation for the regular spacing is much simpler. The roots of each creosote bush spread 10-12’ from the center of the bush, quickly absorbing any rain that falls. Any seedling that falls too close to existing plants cannot compete for water and soon dies. Only those that germinate in between, regularly spacing themselves with the other plants, survive.

¹ GRIN Online Database is the source of the currently accepted scientific name.

² I have read that 20 of 21 creosote bushes at the center of a thermonuclear explosion resprouted within 10 years.

³ See newspaper article here: <http://www.lucernevalley.net/creosote/index.htm>

⁴ *A Field Guide to the Plants of Arizona*, Anne Orth Epple, 1995.