

## The Weekly Plant

### 6 May 2012

**Common names:** littleleaf paloverde, foothill paloverde, yellow paloverde (or palo verde, palo-verde)

**Scientific name:** *Parkinsonia microphylla* <sup>1, 2</sup>

#### TAV location:

Tree-form: center of Rainwater, around Community Center. Shrub-form: in open spaces including red and orange trails. Can be seen from TAV roads.

#### Discussion:

Paloverdes are beloved landscape trees throughout the desert southwest because their green bark makes them ornamental year-round. Both littleleaf paloverde and blue paloverde (*Parkinsonia florida*) are native to Arizona and both have green trunks and limbs. Mexican paloverde (*Parkinsonia aculeata*) is a short-lived, weedy tree. Though there is some dispute, most references stated that it is not native to Arizona. Its trunk is brown, with only the newest branches showing green. In all three plants, the green bark can perform photosynthesis, providing food for the plant even when the leaves fall due to drought or cold.

Littleleaf paloverde is the most common naturally occurring paloverde around TAV. It is a multistemmed large shrub or small tree. The leaves are about an inch long with 3-5 pairs of tiny leaflets, each leaflet no more than 1/8" long. Each branch ends in a sharp tip. The flowers are pale yellow, often appearing before the leaves. Each flower has 5 petals, one of them white. Right now, many plants without irrigation have flowers but no leaves.

In contrast, blue paloverde is usually a tree. It prefers washes, needing more water than littleleaf paloverde. Leaves are only 1/2" long, with each leaflet about 1/4" (usually 2-4 pairs). There is a spine at each node (where the leaves connect to the stem). Flowers are a bright yellow, often appearing with the leaves. The 5 petals are yellow, though one may have small red dots. Blue paloverde is the earliest blooming of the paloverdes. They are almost finished blooming here at TAV.<sup>3</sup>

Littleleaf paloverde seeds are thin-shelled and germinate readily when the summer rains come. They are eaten readily by rodents and other seedeaters. The O'odham eat the pods and seeds green, like peas. Mature seeds can be toasted, ground, and made into a gruel.<sup>4</sup>

The photo at the top of this page is of a naturally occurring littleleaf paloverde. Notice that the flowers are all at the top of the plant. Why doesn't the lower part of the plant have flowers?

The answer requires an understanding of one of the main ways plants differ from animals. Like animals, trees and shrubs are sexually immature (incapable of flowering) when young. Unlike animals, they do not go through a transition in which the whole plant becomes sexually mature. Instead, after the plant reaches a certain size (depending on the species), the newest growth becomes sexually mature. Thus, the top and outer edges of the plant will produce flowers while the inner, lower portion of the plant will not (and never will).

<sup>1</sup> GRIN Online Database is the source of the currently accepted scientific name.

<sup>2</sup> The genera *Parkinsonia* and *Cercidium* are very similar. Over the last 100 years they have been alternately grouped together and split apart. The current thinking is apparently to group them together under *Parkinsonia*. However, you will still frequently see littleleaf paloverde listed as *Cercidium microphyllum* and blue paloverde as *Cercidium floridum*.

<sup>3</sup> If you have a paloverde with bright yellow flowers still blooming profusely, you probably have a Mexican paloverde (leaves are long, up to a foot) or the 'Desert Museum' hybrid (leaves 3" or more, almost always with 6 or more pairs of leaflets, no thorns).

<sup>4</sup> *A Natural History of the Sonoran Desert*, Arizona-Sonora Desert Museum.

