Palo Brea
Sonoran Palo verde

Parkinsonia praecox
Cercidium praecox, caesalpinia praecox

Family: Fabaceae

Basic Description: A semi-evergreen, it drops leaves as a reaction to water and temperature. It has a large spreading canopy. The leaves are small and compound. It can have some thorns and grows 20 – 30 ft high x 20 – 40 ft wide.

Bloom & Fruit Description: Earliest bloomer of the trees, in spring through summer. It has bright yellow flowers and green pods, which will turn to brown. Flowers grow close to the branch creating yellow, wand or shaft-like appearance.

Cultural information/Uses/Human Interaction: Parkinsonia was named for the author John Parkinson (1597-1650) an English herbalist/botanist. Palo means stick; it's green like the palo verde and related. Brea means "early" referring to its early spring bloom.

This genus is one of 16,000 members of the Fabaceae (legume) family. In order to grow, plants require specific nutrients including phosphorus, potassium and nitrogen. Plants can draw potassium and phosphorus as minerals directly from the soil. Nitrogen, which is an air-born gas, cannot be directly used by plants. Specialized bacteria have to convert nitrogen into nitrate, within the soil, in order for plants to be able to access it. Legumes harbor nitrogen-fixing bacteria in their roots. The bacteria convert nitrogen into nitrate, causing legumes to have higher levels of nitrogen compounds than other arid plants. When they decompose, they release the nitrates into the soil. They actually improve the soil in which they live. All plants have some level of nitrogen, but in arid regions where decomposition is slow, plants with high levels of nitrogen compounds, like legumes, significantly increase the soil's nutrient level.

Other members of the legume family in the Gardens include: Palo brea, mesquite, Texas ebony and acacia.

Distribution/Range/Habitat*:* Southern Sonoran Desert south of Hermosillo, Sonora and Southern Baja California; Michoacan, Mexico; Peru and Ecuador.

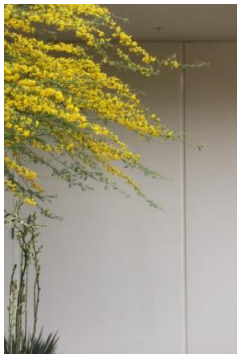
Cultural Requirements: It's cold tolerant to 20°F. Prefers full sun and little irrigation needed. No supplemental water once established is necessary. Overwatering causes vigorous growth that creates a very weak plant and can cause complete failure. Pruning is required to control the canopy growth.

Propagation: Can be cultivated by seeds, and readily hybridizes with other parkinsonia species; cloning is another method.

Wildlife/Plant relationships: birds, insects, especially native bees, and mammals.

Disease/Pathology/toxins: palo verde beetle larvae at the root.

Status: X
Resources:
Arizona Sonora Desert Museum
Arizona State University
Arid Zone Trees




Palo Brea	Palo Verde	

Palo brea blooms grow close together. The branches look like shafts of yellow. Palo verde look more lacey.