

# Half-shrub Sundrop

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Spring in Texas, the time of year all who enjoy venturing outside look forward to. Yes, hunters might rightfully argue for a crisp fall morning but spring brings life again to all landscapes. In the plant calendar, the New Year begins about the first of April, but even that depends upon where you are in Texas; a few weeks earlier southward and later in the panhandle. It is the time of year when grass arises green again, and if April showers are favorable, it is the time for wildflowers to begin showing off. Many of our most beautiful wildflowers, specifically those that attracts people to roadsides for viewing and photo ops, are annuals and are profoundly tied to rainfall received over the winter. If there is a scarcity of fall to winter rains we will have few patches of Texas bluebonnets the following spring. However, our perennial forbs will store enough root reserves to enable the plant to shoot up new growth in the spring whereas the annuals may be no-shows. The dates of many of my photos of this plant show it in full bloom one week either side of May 1<sup>st</sup>.

One of these strong, native, perennial sub-shrubs is called Half-shrub sundrop, *Calylophus berlandieri*. Other names include square-bud primrose, Berlandier's sundrop and Drummond's sundrop. There are two sub-species within this genus, *berlandieri* and *pinifolius*, differing in plant height, leaf blade length and whether the stigma and cup-shaped leaf base is yellow or black. Though in the Onagraceae or evening primrose family, the genus *Calylophus* is not a true primrose. These differ from the true evening primroses (Onagraceae family, *Oenothera*) in that the un-opened flower buds of *Calylophus* have a raised or keeled midnerve of the sepals while those of *Oenothera* has a flat midnerve showing a smooth rounded flower bud. The sepals appear immediately below the petals. At least one species of half-shrub sundrops can be found growing in all ten vegetational areas of Texas. So from the Piney Woods to the Trans-Pecos, from the Coastal Prairies to the High Plains – this sundrop can be found providing color and food for many species.

A sub-shrub can be described as having a woody-like base and herbaceous stems. Though the woody base is a bit unusual on this plant, it is just one of many perennial forbs we are fortunate to have in Texas. This sundrop grows from a bushy base often with multiple stems and can reach a height of 15 to 24 inches. The leaves alternate up the stems, appear long and thin and usually attach directly to the stems. The leaf margins may appear entire or more commonly seen wide-spaced and sharply toothed upon the margins. Leaves are linear in shape, commonly less than 5/8 inches in width and from 1 to 3 inches in length. Flowers are bright yellow ranging up to two inches in width with four petals, each petal broad and wrinkled. The fruit is a cylindrical capsule which holds onto the seeds so the availability for bird use is low.

The foliage of half-shrub sundrop is readily eaten by all classes of livestock, white-tailed deer, mule deer and antelope. Exotic deer will readily consume it as well. Since the large flowers remain open throughout the day, this plant is visited by many pollinator species.

Half-shrub sundrop can grow in most soil types as long as well-drained, in full sun or light shade, but seems most commonly observed in full sun growing in association with large surface rocks or within clumps of prickly pear cactus which offers some protection from overgrazing by livestock and wildlife. Due to its fair to good palatability, it will be uncommon to see this forb on ranchlands that

have had long-term heavy grazing. Hand collecting the freshly ripened seed capsules and immediately planting will help to restore or enhance this desirable forb across its native Texas.

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Captions:

1 Half-shrub sundrop, *Calylophus berlandieri* ssp. *pinnifolius*, differs in having a black stigma and normally shows black at the base of each petal.



2 *Calylophus berlandieri* ssp. *berlandieri* differs in having a yellow stigma and base; both species differ from regular primroses by the raised or keeled midnerve of the sepals of unopened flowers, seen right of these open flower.



3 Cylindrical seed capsules form up the stem as flowers mature and wither.



4 A healthy clump of half-shrub sundrop as it appears when grazing pressure is light.



5 Forward raking teeth on the leaf margins can vary from few to many but usually always occur.



6 In many locations half-shrub sundrop thrives when growing within and adjacent to protection such as large rocks, cactus or other plants.

