

Cup Plant *Silphium perfoliatum* L.

The Cup Plant is an imposing 4-8 feet tall native perennial that is easy to distinguish by its yellow sunflower-like flowers; thick, hairless, four-sided square stems; and opposite pairs of cup-forming leaves. The plant remains unbranched, except for the panicle of flowering stems near its apex. The flowers, about 3-4" across, bloom in mid-summer for about 1-1½ months. The leaves, which grow to 14" long, are coarsely toothed, and have a rough, sandpapery texture. The root system consists of a central taproot, and abundant shallow rhizomes that help to spread the plant vegetatively. When cut, the stem of the Cup Plant exudes a gummy sap which was used by Native Americans as chewing gum.

While the lower leaves of the Cup Plant are attached at the stem by petioles, the middle and upper leaves lack petioles and join together, encircling the central stem to form a cup, hence the name of the plant. These cups collect rainwater and dew and become drinking fountains for birds, insects and even frogs.

Overall, the Cup Plant is an exceptional wildlife plant. Along with the "cups" that hold water, the showy flowers provide pollen and nectar to long-tongued bees, butterflies, and hummingbirds. Many birds, especially Goldfinches, love the seeds; and because of the tendency of the Cup Plant to form dense colonies, this plant provides good cover. Birds can lurk among the leaves during the heat of the day, searching for insects or pausing to rest.

In Michigan, Cup Plant is found in river floodplains, forest openings and edges. According to the "Michigan Natural Feature Inventory," the Cup Plant is "Threatened" and legally protected. However, the plant is fairly common in other parts of the country and is even considered a weed and potentially invasive in some places.

Nevertheless, researchers at South Dakota State University are exploring Cup Plant as a potential new biomass crop that could also store carbon in its extensive root system. Perennial grasses will always be the base for biomass production; but Cup Plant could be an excellent complementary species since it will grow in low, moist prairies generally unfit for cropland. In addition, Cup Plant supports biodiversity because its water "cups" attract a variety of insects and birds, and its stems provide perches for grassland birds.

The Cup Plant can be a very dependable and striking addition to your garden if you have room. It has a commanding presence in perennial borders and can be used in rain gardens, prairie gardens, or at the edge of woodland gardens. It thrives in full or partial sun and moist loamy soil. The plant does spread vegetatively and can look weedy if not kept in check. It has also been known to topple over during a rainstorm with strong winds, particularly while in bloom or situated on a slope.

More photos and information on the Cup Plant are available at:

<http://www.illinoiswildflowers.info/prairie/plantx/cupplantx.htm>

<http://plants.usda.gov/java/profile?symbol=SIPE2>

<http://www.hort.net/profile/ast/silpe/>