

BWSR Featured Plant

Name: Cup plant (*Silphium perfoliatum*)

Plant family: Aster (*Asteraceae*)

Right: Cup plant's composite flower heads have yellow ray and disk flowers.
Below: Water that collects where leaves meet the stem is available to birds and insects.
Photo Credits: Dan Shaw



Cupped leaves, a square stem and abundant yellow flowers make cup plant a unique species in the aster family. This native perennial of mesic to moist soils grows more than 7 feet tall, flowering from late summer through early fall. Cup plant is abundant in the southern half of the state. It is an important pollen and nectar source for several species of bees, flies and butterflies. Birds commonly perch on the plant and eat its seeds. Wildlife uses the water that collects in its cupped leaves. Common in native gardens, it often spreads by seed.

Plant Stats

STATEWIDE WETLAND INDICATOR STATUS: FACW

PRIMARY USES: Pollinator nutrition, biofuel, ethnobotanical.

Identification

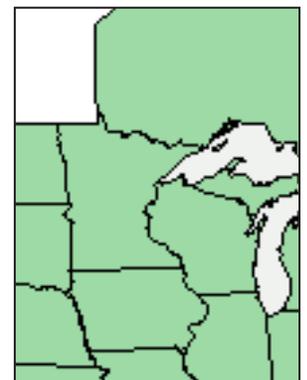
Opposite lance-shaped leaves measure about 8 inches long and 5 inches wide. Leaves have pointed tips, coarse teeth and a rough texture. Opposite leaves merge at the base of each leaf, forming a cup that holds rainwater. Stems are square, smooth and often reddish. Branching only occurs in the flowers, which grow on stalks in groups of 10 to 30. The composite flower heads measure about 3 inches in diameter. Flowers are yellow with dark brown stamens.



Each has 17 to 35 yellow petals measuring 2.5 to 3.5 inches long. Each plant has a central tap root and many shallow, fibrous rhizomes that allow it to spread.

Range

Cup plant is fairly common throughout the Midwest, the East (aside from Florida and South Carolina), and in the eastern half of Canada. In Minnesota, it grows in a range of habitats including low-lying woodland edges, lake borders, black-soil prairies, meadows near rivers and ditches. It is listed as threatened in Michigan, and invasive in Connecticut. Its



Range map source: USDA Plants database

weedy nature makes it a nuisance in places on the East Coast.

Planting Recommendations

Opposite leaves wrap around the stem, forming the “cup” that gives the plant its common name.

Photo Credit:
Laura Lukens



Cup plant grows best in full sun. It prefers moist, loamy soil, although it is somewhat drought-tolerant. It can be planted by seed, but growth can be slow. Fall-sown seeds can break dormancy naturally during the winter. Spring-planted seeds must be stratified for 60 days in a cool, moist environment first. They should be planted in a sunny area with a light leaf cover to retain moisture. Young offshoots from the parent plant can be divided and planted. Plants grown in pots also are available from native plant nurseries.

Uses

A potential biomass crop, cup plant with its large taproot can help sequester carbon. It's being researched as a food source for cattle. The species generates a nutrient-rich layer of humus, reduces erosion and helps remove excess rainwater through evapotranspiration. The plant is a food source to many species of bees, flies, butterflies and songbirds. Historically, cup plant was boiled and eaten as a green. The leaves were chewed to prevent vomiting, morning sickness and liver disorders.

Similar Species

The flowers of compass plant (*Silphium laciniatum*) and cup plant are similar. Compass plants' leaves are hairy with deep clefts, growing mostly at the base of the plant.



Photo Credits: Laura Lukens



References

Minnesota Wildflowers (*Silphium perfoliatum*): <https://www.minnesotawildflowers.info/flower/cup-plant>
Illinois Wildflowers (*Silphium perfoliatum*): <http://www.illinoiswildflowers.info/prairie/plantx/cupplantx.htm>
USDA Plants Database <https://plants.usda.gov/core/profile?symbol=sipe2>

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