

Common Name: YELLOW TRUMPETS PITCHERPLANT

Scientific Name: Sarracenia flava Linnaeus

Other Commonly Used Names: yellow flytrap, golden trumpets, fly-catcher

Previously Used Scientific Names: none

Family: Sarraceniaceae

Rarity Ranks: G5?/S3S4

State Legal Status: Unusual

Federal Legal Status: none

Federal Wetland Status: OBL

**Description:** Perennial **herb** with leaves modified into erect, tubular pitchers. **Pitchers** 10 - 37 inches (25 - 95 cm) tall, bright yellow, narrow at the base and widening to an opening partially covered by a hood; the narrow "neck" at the base of the hood is usually dark red; pitchers do not overwinter. Flat, curved, non-pitcher leaves (**phyllodes**), 5 - 12 inches (12 - 30 cm) tall develop after flowering and persist through the winter. **Flower stalk** up to 24 inches (60 cm) tall, leafless.

**Flower** solitary with 5 drooping, bright yellow **petals**, 2 - 3% inches (5 - 8.5 cm) long; 5 yellow-green **sepals**; and a yellow-green, umbrella-shaped **style disk** in the center of the flower. Sepals and style disk persist long after the petals fall, and the **fruit** – a round, warty capsule about % inch (1.5 - 2 cm) wide – develops.

**Similar and Related Rare Species:** All seven of Georgia's pitcherplants are state-protected and included on this web site: yellow trumpets (*Sarracenia flava*), white-top pitcherplant (*S. leucophylla*), hooded pitcherplant (*S. minor*), green pitcherplant (*S. oreophila*), parrot pitcherplant (*S. psittacina*), purple pitcherplant (*Sarracenia purpurea*), and sweet pitcherplant (*S. rubra*).

**Habitat:** Wet savannas and pine flatwoods, seepage slopes, and bogs.

**Life History:** Pitcherplants capture and digest insects and other small animals in their pitchers. Nectar is produced by glands around the top of the pitcher, luring animals to the opening with its sweet smell. Stiff, down-pointing hairs line the pitcher, encouraging animals to slide in and then impeding their escape. The red veins and "neck" on the pitchers of yellow pitcherplants attract insects and direct them into the pitcher. Enzymes dissolved in water in the base of the pitcher digest the animals, making nutrients, particularly nitrogen, available for absorption by the plant. (Soils of bogs and other permanently saturated wetlands are typically low in nitrogen.)

Pitcherplants reproduce sexually and also vegetatively by spread of underground stems (rhizomes). They usually reach 4 - 5 years old before they flower and may live to be 20 - 30 years old. The unusual shape of their flowers, with drooping petals and umbrella-like style disk, promotes cross-pollination by insects. When an insect, usually a bee, pushes its way past the petals to reach the nectar and pollen on the interior of the flower, it brushes against one of the stigmas, which are at the pointed tips of the "umbrella," and deposits pollen gathered from a previously visited flower. Once inside the petals, it picks up pollen from the anthers and from the inner surface of the umbrella and then carries it to the next visited flower, usually avoiding the stigmas as it leaves the flower. Since it would be a disadvantage to the plant to "eat" its pollinators, most pitcherplants produce flowers before their pitchers are well developed or hold them on tall stalks well above the pitchers. As the fruit matures, its stalk turns almost upright and the fruit splits apart, exposing the seeds to wind currents.

**Survey Recommendations:** Yellow trumpets bloom March–April, before the leaves mature; the pitchers are easily recognizable throughout the summer and fall.

Range: Georgia, west to Mississippi and north to southeastern Virginia, in the Coastal Plain.

**Threats:** Conversion of habitat to pine plantations, pastures, and developments. Ditching and draining of wetlands. Fire suppression, canopy closure, and encroachment by woody plants. Poaching. Digging by feral hogs. Off-road vehicle use.

**Georgia Conservation Status:** Yellow trumpet pitcherplant is probably the most common of Georgia's pitcherplants, historically occurring in at least 42 counties. It was originally added to

the state protection list because of the threat of poaching and commercial exploitation. However, its habitat has since been widely destroyed and many of the older populations are now gone.

**Conservation and Management Recommendations:** Avoid ditching, draining, and mechanical clearing. Apply prescribed fire every 2 - 3 years. Limit access to sites to prevent poaching and off-road vehicle traffic. Eradicate feral hogs.

## **Selected References:**

Botanical Society of America. 2008. Carnivorous plants online. http://www.botany.org/carnivorous\_plants/Sarracenia\_flava.php

Godfrey, R.K. and J.W. Wooten. 1981. Aquatic and wetland plants of southeastern United States, Vol. 2, dicotyledons. University of Georgia Press, Athens.

Honda, M. 2008. Insectivorous plants in the wilderness. http://www.honda-e.com/IPW\_3\_Description/TX-1PitcherPlants.htm

International Carnivorous Plant Society. 2008. Carnivorous plant FAQ. http://www.sarracenia.com/faq/faq5525.html

McDaniel, S. 1971. The genus *Sarracenia*. Bulletin 9, Tall Timbers Research Station, Tallahassee, Florida.

NatureServe. 2008. NatureServe Explorer. Arlington, Virginia. http://www.natureserve.org/explorer

Patrick, T.S., J.R. Allison, and G.A. Krakow. 1995. Protected plants of Georgia. Georgia Department of Natural Resources, Natural Heritage Program, Social Circle.

Schnell, D.E. 2002. Carnivorous plants of the United States and Canada, 2nd edition. Timber Press, Inc. Portland, Oregon.

Weakley, A.S. 2008. Flora of the Carolinas, Virginia, Georgia, northern Florida, and surrounding areas. University of North Carolina Herbarium, Chapel Hill. http://www.herbarium.unc.edu/flora.htm

**Author of Species Account:** Linda G. Chafin

## **Date Compiled or Updated:**

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