



**Common Name:** YELLOW LADY'S-SLIPPER

**Scientific Name:** *Cypripedium parviflorum* Salisbury

**Other Commonly Used Names:** golden slipper

**Previously Used Scientific Names:** *Cypripedium calceolus* Linnaeus

**Family:** Orchidaceae (orchid)

**Rarity Ranks:** G5/S3

**State Legal Status:** Rare

**Federal Legal Status:** none

**Federal Wetland Status:** FAC-

**Description:** Perennial **herb**, 3 - 28 inches (7 - 70 cm) tall, with 3 - 5 leaves evenly spaced along an erect, hairy stem. **Leaves** up to 8 inches (20 cm) long and 4 inches wide, broadly oval with pointed tips and clasping leaf bases, hairy, strongly ribbed, alternate. **Flowers** 1 - 2 per plant, at the top of the stem, fragrant, with an erect, green **bract** behind each flower; a yellow, pouch-like lip petal ("**slipper**") up to 2 inches (5.4 cm) long and 1 $\frac{3}{8}$  inch wide (3.5 cm); 2 spirally twisted, drooping **petals**, 1 - 4 inches (2.4 - 9.7 cm) long; and 2 **sepals**, one curved over the top of the flower and another curved behind the slipper; sepals and petals are green with maroon spots or solid maroon. **Fruit** an oval capsule, up to 2 inches (5 cm) long.

**Similar Species:** Some botanists recognize 2 varieties of yellow lady's-slipper; both are state-listed as Rare in Georgia. They are difficult to tell apart and occur in the same habitat. Small-flowered yellow lady's-slipper (*Cypripedium parviflorum* var. *parviflorum*) lip is  $\frac{7}{8}$  - 1 $\frac{3}{8}$  inches (2.2 - 3.4 cm) long, and its petals and sepals appear uniformly maroon; flowers smell of vanilla. Large-flowered yellow lady's-slipper (*C. parviflorum* var. *pubescens*) lip is up to 2 $\frac{1}{4}$  inches (5.4 cm) long, and the petals and sepals are green with maroon spots and streaks; flowers smell lemony.

**Related Rare Species:** Pink lady's-slipper (*Cypripedium acaule*) is state-listed as Unusual; Kentucky lady's-slipper (*Cypripedium kentuckiense*) is state-listed as Endangered. Both are included on this website.

**Habitat:** Both varieties of yellow lady's-slipper occur in rich, cove hardwood forests.

**Life History:** Yellow lady's-slippers are perennial herbs that reproduce sexually. Its flowers are pollinated by bees that are attracted by their color and fragrance. When a bee enters the colorful, inflated lip through a one-way opening, it quickly discovers that neither pollen nor nectar are available, and that it cannot readily escape. The bee can exit the flower only through two openings at the back of the lip; as it leaves the flower through one of these openings, its back brushes against the female part of the flower, leaving a packet of pollen that it picked up from the last flower that it visited. It also picks up a new packet of pollen from the male part of the flower to take to the next flower it visits. The pollen is held in small packets that stick to the bee's back where it cannot be removed by the bee. Bees soon learn to avoid these flowers that fail to provide nectar and pollen; although flowers remain on the plants for several weeks to increase the chances of pollination, few plants in a population will produce fruit in a given year. Fortunately, each fruit contains thousands of seeds, but the seeds are tiny, containing no stored food reserves. The seeds must land on a patch of soil containing a specific fungus that provides nutrients for germination and subsequent plant growth. Yellow lady's-slipper plants dug from the wild and transplanted into gardens rarely survive for very long due to the lack of this fungus.

**Survey Recommendations:** Surveys are best conducted during flowering (April–June).

**Range:** Yellow lady's-slipper occurs nearly throughout North America and is rare or unusual throughout its range.

**Threats:** Logging, competition from exotic pest plants, digging by feral hogs, overbrowsing by deer, poaching.

**Georgia Conservation Status:** Yellow lady's-slipper once occurred in nearly all Piedmont and mountain counties. Habitat destruction and poaching have greatly reduced the number of populations, perhaps to fewer than 100. Most remaining sites are in the Chattahoochee National Forest.

**Conservation and Management Recommendations:** Avoid logging on slopes and in rich forests. Eradicate exotic pest plants and feral hogs. Limit the size of Georgia's deer population. Prosecute plant poachers. All lady's-slippers are rare or unusual and should never be dug from the woods. They depend on a local soil fungus for nutrients and rarely survive transplanting. Most lady's-slipper species are now available from nurseries.

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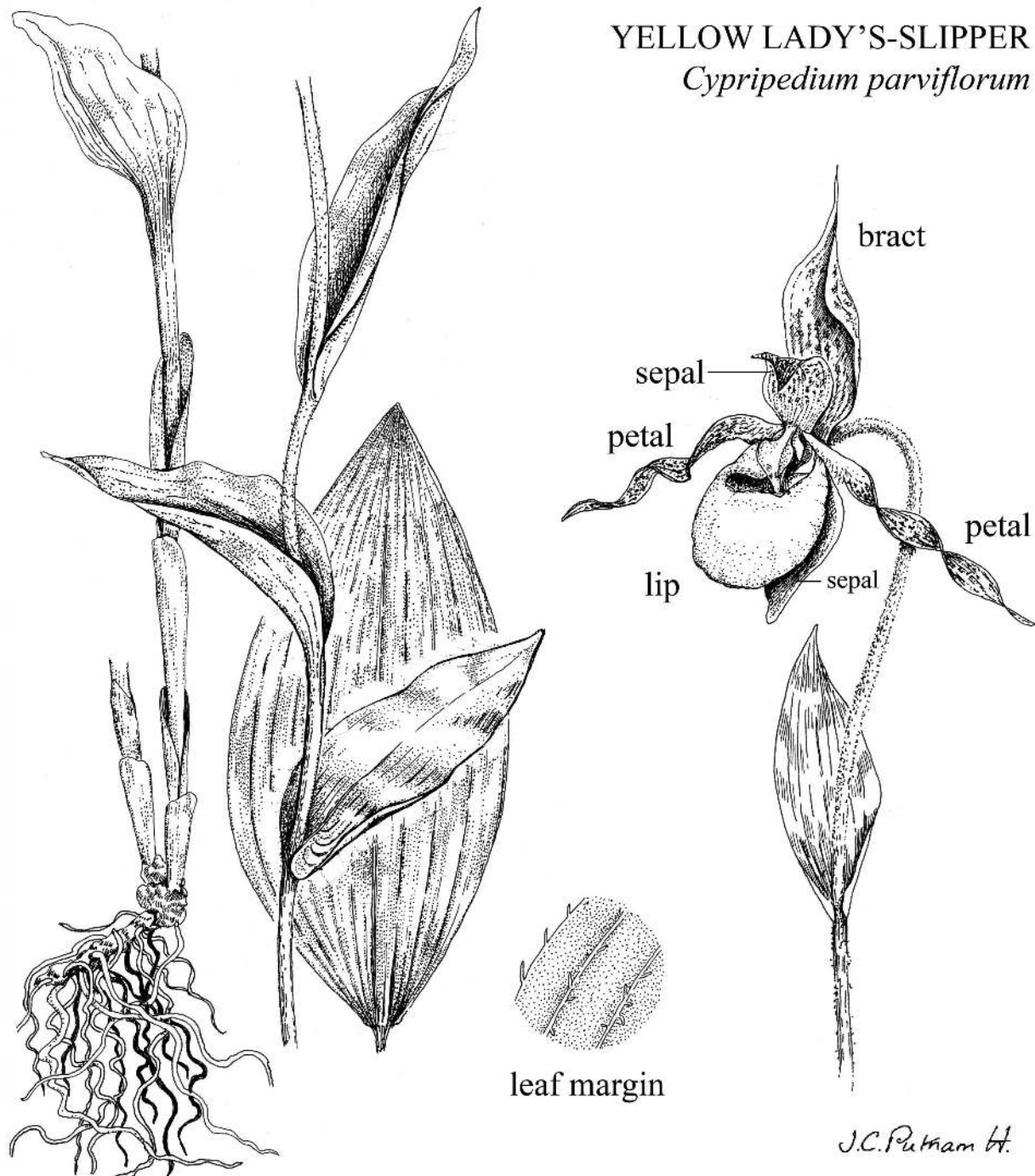
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