Common Name: PURPLE PITCHERPLANT

Scientific Name: *Sarracenia purpurea* Linnaeus

Other Commonly Used Names: none

Other Scientific Names: Atlantic coastal plain plants: *Sarracenia purpurea* var. *venosa* Rafinesque, *S. purpurea* ssp. *venosa* (Rafinesque) Fernald var. *venosa*.
Mountain plants: *Sarracenia purpurea* var. *montana* Schnell & Determann, *S. purpurea* ssp. *venosa* var. *montana* Schnell & Determann.

Family: Sarraceniaceae (pitcherplant)

Rarity Ranks: G5/S1

State Legal Status: Endangered

Federal Legal Status: none

Federal Wetland Status: OBL

Description: Perennial **herb** with leaves modified into inflated pitchers. **Pitchers** 2 - 18 inches (5 - 45 cm) long, often resting on the ground, green with purple veins; widest at the middle, with a wing on the upper side and an erect, wavy-edged hood; pitchers persist through the winter.

Flower stalk 6 - 28 inches (15 - 70 cm) tall, leafless. **Flower** solitary with 5 drooping, maroon **petals**, 1 - 2⅜ inches (3 - 6 cm) long; 5 **sepals** that are maroon on the outside, greenish on the inside; and a yellow-green, umbrella-shaped **style disk** in the center of the flower. Sepals and style disk persist on the plant long after petals fall. **Fruit** a round, warty capsule, ⅜ - ⅞ inch (1 - 2 cm) in diameter.

Similar and Related Rare Species: Purple pitcherplants with pale pink flowers occurring in southwestern Georgia (Tift and Randolph Counties) are considered by some botanists to be a new species – Gulf Coast purple pitcherplant (*Sarracenia rosea*). Others consider these plants to be a variety of purple pitcherplant (*S. purpurea* ssp. *venosa* [Rafinesque] Fernald var. *burkii* Schnell). Regardless of name, these plants are very rare. They differ from other purple pitcherplants by having pale pink petals and a white style disk (see photo) and shorter flowering stalks (less than 14 inches - 35 cm).

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: Mountain variety: seepy bogs with sphagnum moss, mountain laurel, and rhododendron. Coastal plain variety: wet meadows, hillside seeps, bogs, and rights-of-way through these habitats; usually with other, more common pitcherplants such as hooded pitcherplant and yellow flytrap.
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 the animals to slide in and impeding their escape. 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). The unusual shape of the flowers, with their 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 nectar 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, many pitcherplants produce flowers before their pitchers are well developed. Others, like the purple pitcherplant, hold their flowers well above the pitchers on long stalks. Pitcherplants are usually 4 - 5 years old before they flower and may live to be 20 - 30 years old.

Survey Recommendations: Purple pitcherplant blooms April–May; its pitchers are distinctive throughout the growing season.

Range: Mountain variety: Georgia, North Carolina, and South Carolina. Atlantic coastal plain variety: Georgia, North Carolina, South Carolina, and Virginia.

Threats: Conversion of habitat to pine plantations, pastures, and development. Fire suppression and closure of canopy. Use of herbicides in powerline rights-of-way. Poaching. Off-road vehicle use. Digging by feral hogs.

Georgia Conservation Status: Mountain variety: only one site, on national forest land, has survived. Coastal plain variety: four sites are protected by a management agreement with Georgia Power Company.

Conservation and Management Recommendations: Avoid draining and conversion of wetlands. Apply prescribed fire every 2 - 3 years. Avoid herbicide use in rights-of-way. Limit access to prevent poaching and off-road vehicle access. Eradicate feral hogs.

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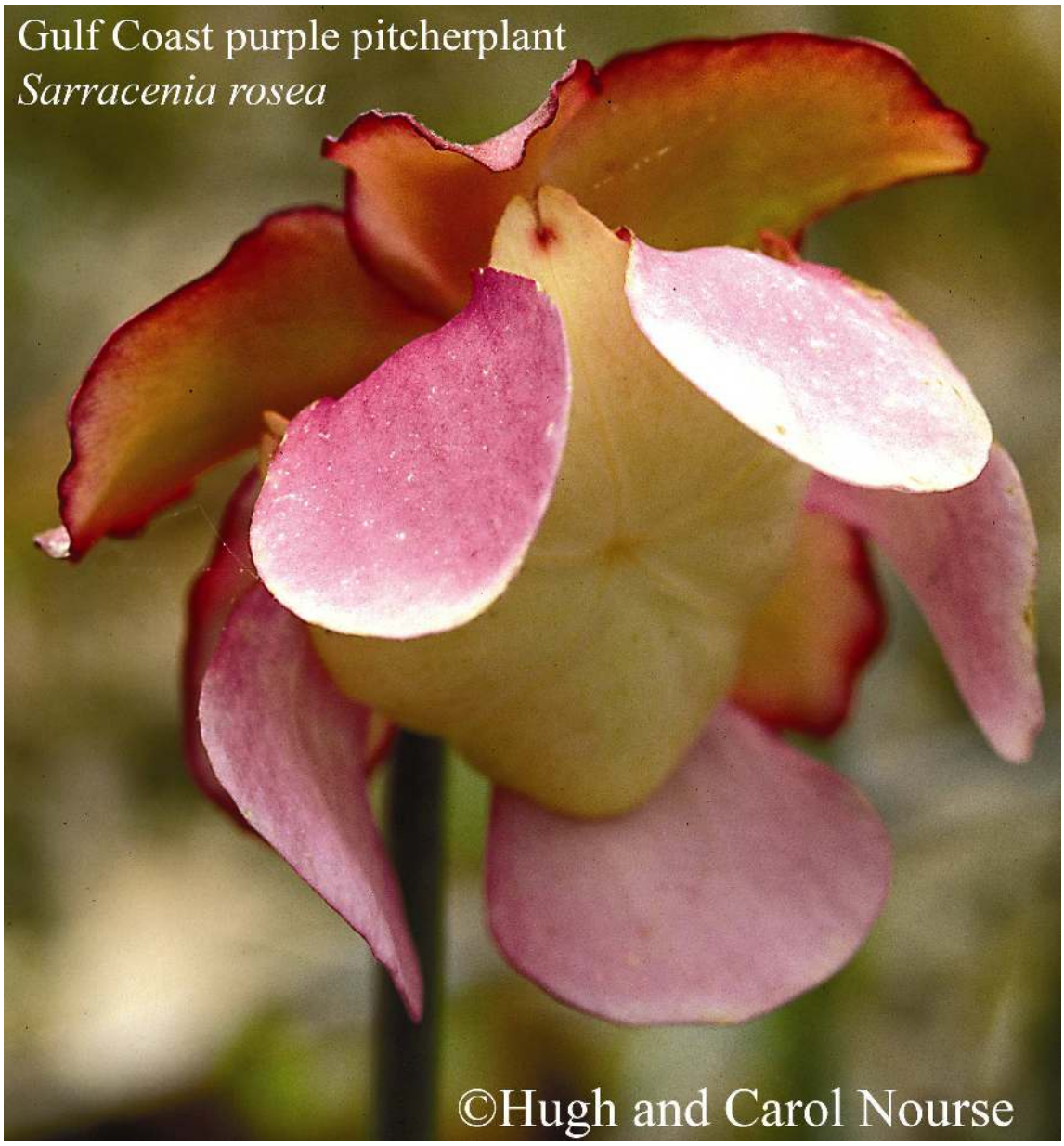
Gulf Coast purple pitcherplant
Sarracenia rosea
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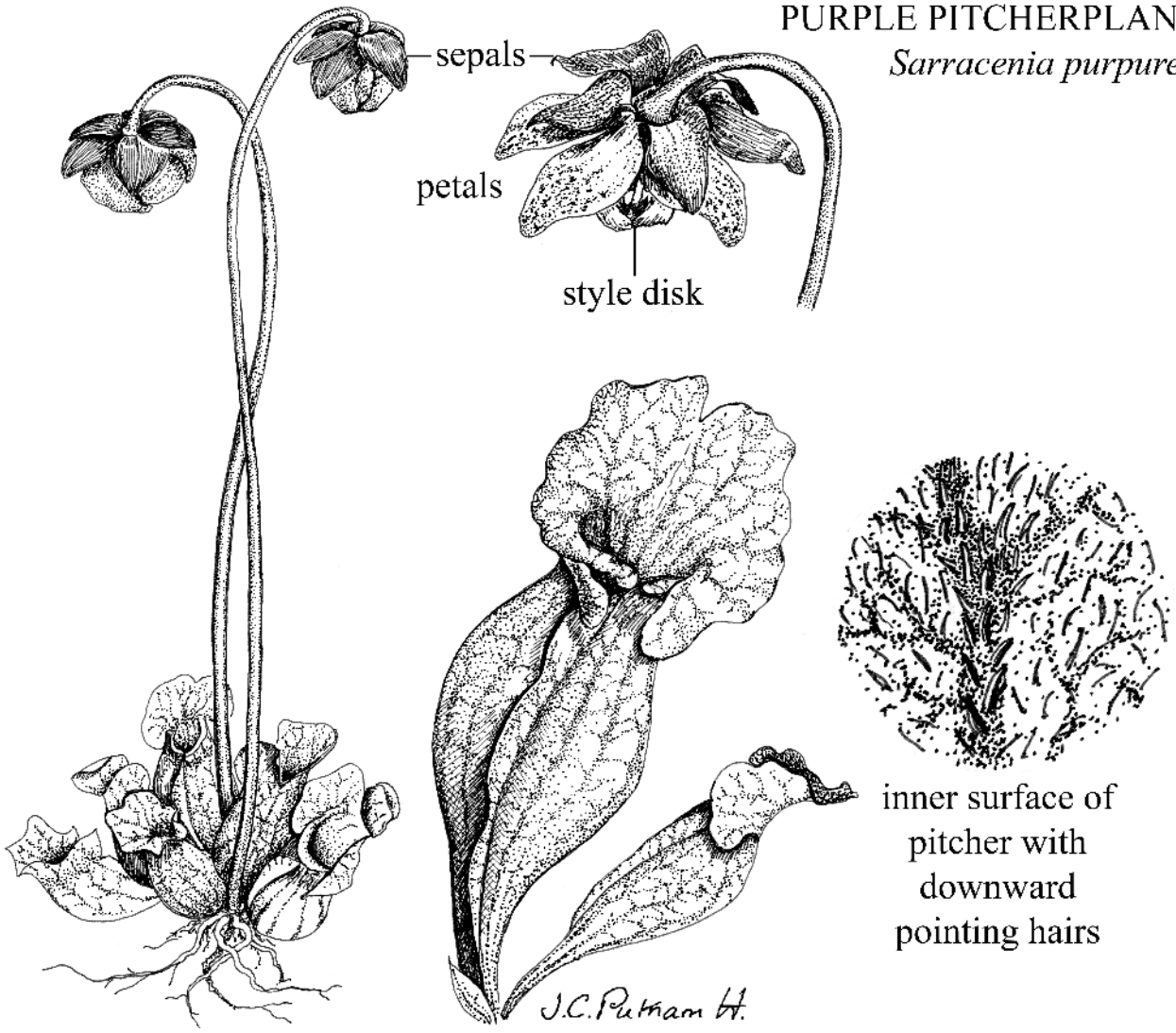
PURPLE PITCHERPLANT

Sarracenia purpurea



inner surface of pitcher with downward pointing hairs