



**Common Name:** GREEN-FLY ORCHID

**Scientific Name:** *Epidendrum magnoliae* Muhlenberg

**Other Commonly Used Names:** none

**Previously Used Scientific Names:** *Epidendrum conopseum* R. Brown, *Amphiglottis conopsea* (R. Brown) Small, *Lamandra conopsea* (R. Brown) Rafinesque, *Lamandra magnoliae* (Muhlenberg) Rafinesque

**Family:** Orchidaceae (orchid)

**Rarity Ranks:** G4/S3

**State Legal Status:** Unusual

**Federal Legal Status:** none

**Federal Wetland Status:** none

**Description:** Perennial **herb** with an erect, unbranched stem  $1\frac{3}{4}$  - 15 inches (4.5 - 38 cm) tall, with several bracts sheathing the stem. **Roots** embedded in the bark of tree limbs or in rocks. **Leaves**  $\frac{3}{8}$  -  $2\frac{3}{4}$  inches (1 - 9.5 cm) long and up to  $\frac{1}{2}$  inch (1.3 cm) wide, 2 - 3 in number, in a rosette at the base of the stem, oval, yellowish-green, overwintering and present during

flowering. **Flower spike** with a single row of 6 - 14, yellowish flowers spiraling around the stem, all blooming at the same time; flower stalk covered with gland-tipped hairs. **Flowers** about 1 inch (2 - 3 cm) wide; 2 petals and 3 sepals are similar in size and shape, and curve forward; the lip petal curves slightly downward, with a yellow center and a wavy or fringed edge. **Fruit** an oval capsule, about  $\frac{3}{8}$  inch (7 - 11 mm) long, with many tiny seeds.

**Similar Species:** Green-fly orchid is one of only a few epiphytic (tree-dwelling) and epipetric (rock-dwelling) species that occur in south Georgia; other such species include ferns and bromeliads, none of which could be confused with this orchid.

**Related Rare Species:** More than 30 species of orchids are rare in Georgia. See on this web site: many-flowered grass-pink (*Calopogon multiflorus*), pink lady's-slipper (*Cypripedium acaule*), Kentucky lady's-slipper (*Cypripedium kentuckiense*), yellow lady's-slipper (*Cypripedium parviflorum*), green-fly orchid (*Epidendrum magnoliae*), Michaux's spider orchid (*Habenaria quinqueseta*), small whorled pogonia (*Isotria medeoloides*), Appalachian twayblade (*Listera smallii*), Florida adder's-mouth orchid (*Malaxis spicata*), southern white fringed-orchid (*Platanthera blephariglottis*), Chapman's fringed-orchid (*Platanthera chapmanii*), large purple fringed-orchid (*Platanthera grandiflora*), monkeyface orchid (*Platanthera integrilabia*), purple fringeless orchid (*Platanthera peramoena*), crestless plume orchid (*Pteroglossaspis ecristata*), downy slender ladies-tresses (*Spiranthes brevilabris*), Florida ladies-tresses (*Spiranthes floridana*), Great Plains ladies-tresses (*Spiranthes magnicamporum*), and three birds orchid (*Triphora trianthophora*).

**Habitat:** Limbs of southern magnolia (*Magnolia grandiflora*) and live oak (*Quercus virginiana*) trees in moist forests, usually along streams; sandstone-like walls of crevices in Altamaha Grit outcrops, where the porous rock provides a constant moisture source.

**Life History:** Green-fly orchid is a perennial orchid usually found on the limbs of trees and, less frequently, on sandstone outcrops, with its roots embedded in fissures in the tree bark or sandstone. It reproduces sexually; its flowers are especially fragrant at night and are pollinated by moths. Each fruit contains thousands of minute seeds that are dispersed by the wind. The dust-like seeds contain no stored food reserves, and must land on a patch of bark or soil containing a specific mycorrhizal fungus (*Epulorhiza* sp.) that provides nutrients for germination and subsequent plant growth.

**Survey Recommendations:** Surveys may be conducted year-round since plants are evergreen; plants are somewhat more conspicuous during flowering (June–July, sporadically until October) and fruiting (September–January).

**Range:** Georgia, Alabama, Florida, Louisiana, Mississippi, South Carolina, North Carolina, and eastern Mexico. Green-fly orchid is the only epiphytic orchid to occur outside of Florida.

**Threats:** Removal by orchid collectors, logging, and other clearing in lowland forests.

**Georgia Conservation Status:** At least 70 populations occur in about 15 conservation areas in 26 counties in south Georgia; in some areas, it is locally abundant.

**Conservation and Management Recommendations:** Protect plants from poaching; avoid clearcutting bottomland and floodplain forests.

**Selected References:**

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Zettler, L.W., S.B. Poulter, K.I. McDonald, and S.L. Stewart. 2007. Conservation-driven propagation of an epiphytic orchid (*Epidendrum nocturnum*) with a mycorrhizal fungus. HortScience 42(1): 135-139.

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L. Chafin, Mar. 2007: original account

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