



**Common Name:** MICHAUX'S ORCHID

**Scientific Name:** *Habenaria quinqueseta* (Michaux) A. Eaton

**Other Commonly Used Names:** Michaux's orchis, long-horned habenaria, long-horned false rein-orchid

**Previously Used Scientific Names:** *Habenaria quinqueseta* var. *quinqueseta*, *Orchis habenaria* Linnaeus, *O. quinqueseta* Michaux

**Family:** Orchidaceae (orchid)

**Rarity Ranks:** G4G5/S1

**State Legal Status:** Threatened

**Federal Legal Status:** none

**Federal Wetland Status:** FACW

**Description:** Perennial **herb** 8 - 35 inches (20 - 90 cm) tall. **Stem leaves** 2 - 10 inches (5 - 25 cm) long, decreasing in size near the top of the stem, alternate. **Flowers** 3 - 25 in number, in a leafy spike at the top of the stem. **Petals**  $\frac{1}{4}$  -  $\frac{5}{8}$  inch (0.6 - 1.5 cm) long, white, each divided into 2 narrow, up-curved segments. **Lip petal**  $\frac{3}{8}$  -  $\frac{3}{4}$  inch (0.8 - 2 cm) long, white, divided into 3 narrow, down-curved segments. **Spur**  $1\frac{1}{2}$  - 7 inches (4 - 18 cm) long, curving down and behind the flower. **Sepals** up to  $\frac{5}{8}$  inch long, 1 erect, 2 spreading, oval to oblong, light green with dark green stripes. **Fruit** a capsule  $\frac{1}{2}$  -  $1\frac{3}{16}$  inch (1.5 - 3 cm) long, held erect on a short stalk.

**Similar Species:** Water-spider orchid (*Habenaria repens*) has 10 - 50 green flowers in a dense spike; its flowers are smaller with sepals and petals usually less than  $\frac{1}{4}$  inch (3 - 7 mm) long and spur about  $\frac{1}{2}$  inch (1.4 cm) long. It occurs in swamps and roadside ditches and along stream edges in the Coastal Plain.

**Related Rare Species:** More than 30 species of orchids are rare in Georgia. On this web site, see: 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 conopseum*), 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*), three birds orchid (*Triphora trianthophora*).

**Habitat:** Rich, moist hardwood hammocks; mixed oak - pine flatwoods; Altamaha Grit outcrops.

**Life History:** Michaux's orchid emerges from an underground tuber to form a rosette of small, glossy leaves in early summer; the flowering stem arises from the rosette and produces flowers in late summer. Although the pollination mechanism of Michaux's orchid flowers has not been studied, it is likely to be similar to other white-flowered species in this genus which are pollinated primarily by moths. Michaux's orchid is probably pollinated by hawkmoths whose long tongues are capable of extracting nectar from the spur. While the moth probes the interior of the flower, packets of pollen (pollinia) stick to the insect's head or proboscis, to be carried to the flowers that the moth visits next. Michaux's orchid's minute, dust-like seeds are dispersed by

gravity and wind. The seeds are too small to provide nutrients for a developing embryo and form a symbiotic relationship with a fungus which supplies sugars and other growth factors.

**Survey Recommendations:** Surveys are best conducted during flowering (August–September).

**Range:** Georgia, Florida, Alabama, Mississippi, Louisiana; extirpated from South Carolina and Texas; also occurs in Mexico, West Indies, and Central America.

**Threats:** Conversion of habitat to agriculture, pastures, and pine plantations; fire suppression; invasion by exotic pest plants, especially cogon grass (*Imperata cylindrica*).

**Georgia Conservation Status:** Six populations have been observed, 3 are known to have survived. One site is protected on a private nature preserve.

**Conservation and Management Recommendations:** Avoid mechanical disturbances to soil and ground layer. Burn pine flatwoods every 2 - 3 years during growing season. Eradicate exotic pest plants such as cogon grass.

**Selected References:**

Brown, P.M. 2000. Recent taxonomic and distributional notes from Florida 7: the genus *Habenaria*. North American Native Orchid Journal 6(2): 142-153. [wiki.terrorchid.org/\\_media/media:journals-pdf:nanoj:nanoj\\_6-2\\_2000.pdf?id=tow%3Ajournals&cache=cache](http://wiki.terrorchid.org/_media/media:journals-pdf:nanoj:nanoj_6-2_2000.pdf?id=tow%3Ajournals&cache=cache)

Brown, P.M. and S.N. Folsom. 2002. Wild orchids of Florida. University Press of Florida, Gainesville.

Brown, P.M. and S.N. Folsom. 2004. Wild orchids of the southeastern United States, north of peninsular Florida. University Press of Florida, Gainesville.

Chafin, L.G. 2007. Field guide to the rare plants of Georgia. State Botanical Garden of Georgia and University of Georgia Press, Athens.

Fowler, J.A. 2005. Wild orchids of South Carolina: a popular natural history. University of South Carolina Press, Columbia. <http://books.google.com>

FNA. 2003. Flora of North America. Vol. 26, Magnoliophyta: Liliidae: Liliales and Orchidales. Oxford University Press, New York.

Luer, C.A. 1972. The native orchids of Florida. New York Botanical Garden, New York

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

Pijl, L. van der, L. and C.H. Dodson. 1966. Orchid flowers: their pollination and evolution. Fairchild Tropical Garden and the University of Miami Press, Miami, Florida.

Weakley, A.S. 2007. Flora of the Carolinas, Virginia, Georgia, and surrounding areas. University of North Carolina Herbarium, Chapel Hill. <http://www.herbarium.unc.edu/flora.htm>

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