



**Common Name:** HUMMINGBIRD FLOWER

**Scientific Name:** *Macranthera flammea* (W. Bartram) Pennell

**Other Commonly Used Names:** flameflower, Spanish princess

**Previously Used Scientific Names:** *Gerardia flammea* W. Bartram

**Family:** Scrophulariaceae (snapdragon) or Orobanchaceae (broomrape)

**Rarity Ranks:** G3/S1

**State Legal Status:** Threatened

**Federal Legal Status:** none

**Federal Wetland Status:** OBL

**Description:** Large, biennial **herb** with erect, 4-angled stems, 5 - 10 feet (150 - 300 cm) tall. Lower stem **leaves**  $3\frac{3}{8}$  -  $6\frac{3}{8}$  inches (8.5 - 16 cm) long, becoming smaller up the stem, opposite, deeply lobed and toothed, hairless except for tiny hairs on the leaf margin. **Flower clusters** up to 2 feet (60 cm) long, held erect at the tips of stems. **Flowers** up to 1 inch (2.5 cm) long, orange, on long, curving flower stalks, with a tube and 5 short lobes; **style** up to  $1\frac{3}{4}$  inches (4.6 cm) long; 4 **stamens** extend well beyond the flower tube. **Fruit** a capsule, about  $\frac{3}{8}$  inch (1 cm) long plus the long, persistent style; capsule 2-parted, each half deeply grooved. Plants are semi-parasitic and turn black when dried.

**Similar Species:** With its large size, deeply cut leaves, and bright orange, tubular flowers, hummingbird flower resembles no other plants in Georgia; it is the only species in this genus.

**Related Rare Species:** Hummingbird flower is the only species in its genus.

**Habitat:** Seepage slopes, wet streamside thickets, pitcherplant bogs, edges of cypress-gum ponds, and utility rights-of-way through these habitats. Semi-parasitic on the roots of swamp black gum, bayberry, blackberry, tulip poplar, and other wetland shrubs and trees.

**Life History:** Hummingbird flower is a biennial herb – its first year is devoted to vegetative growth; the second year, it flowers and sets seed then dies. As its name indicates, hummingbird flower is pollinated by hummingbirds; butterflies are also a major pollinator. Hummingbird flower is a hemiparasite; although it is green and photosynthesizes, it connects to the roots of other plants through haustoria, small root-like organs that penetrate the roots of other plants and extract water, minerals, hormones, and sugars. It has been found to form haustorial connections with as many as 18 different tree species and several herbs, shrubs, and grasses.

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

**Range:** Coastal Plain of Georgia, Florida, Alabama, Mississippi, and Louisiana.

**Threats:** Fire suppression, construction of firebreaks in wetland ecotones, conversion of habitat to pine plantations, alteration of stream hydrology, herbicide application in utility rights-of-way, rooting by feral hogs.

**Georgia Conservation Status:** Four populations are known; one occurs on a private conservation preserve; 2 are protected by conservation easement.

**Conservation and Management Recommendations:** Apply prescribed fire every 2 - 3 years. Avoid altering hydrology of streams and wetlands. Protect wetlands from conversion to pine plantations. Eradicate feral hogs. Limit off-road-vehicle access to wetlands and rare plant sites.

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

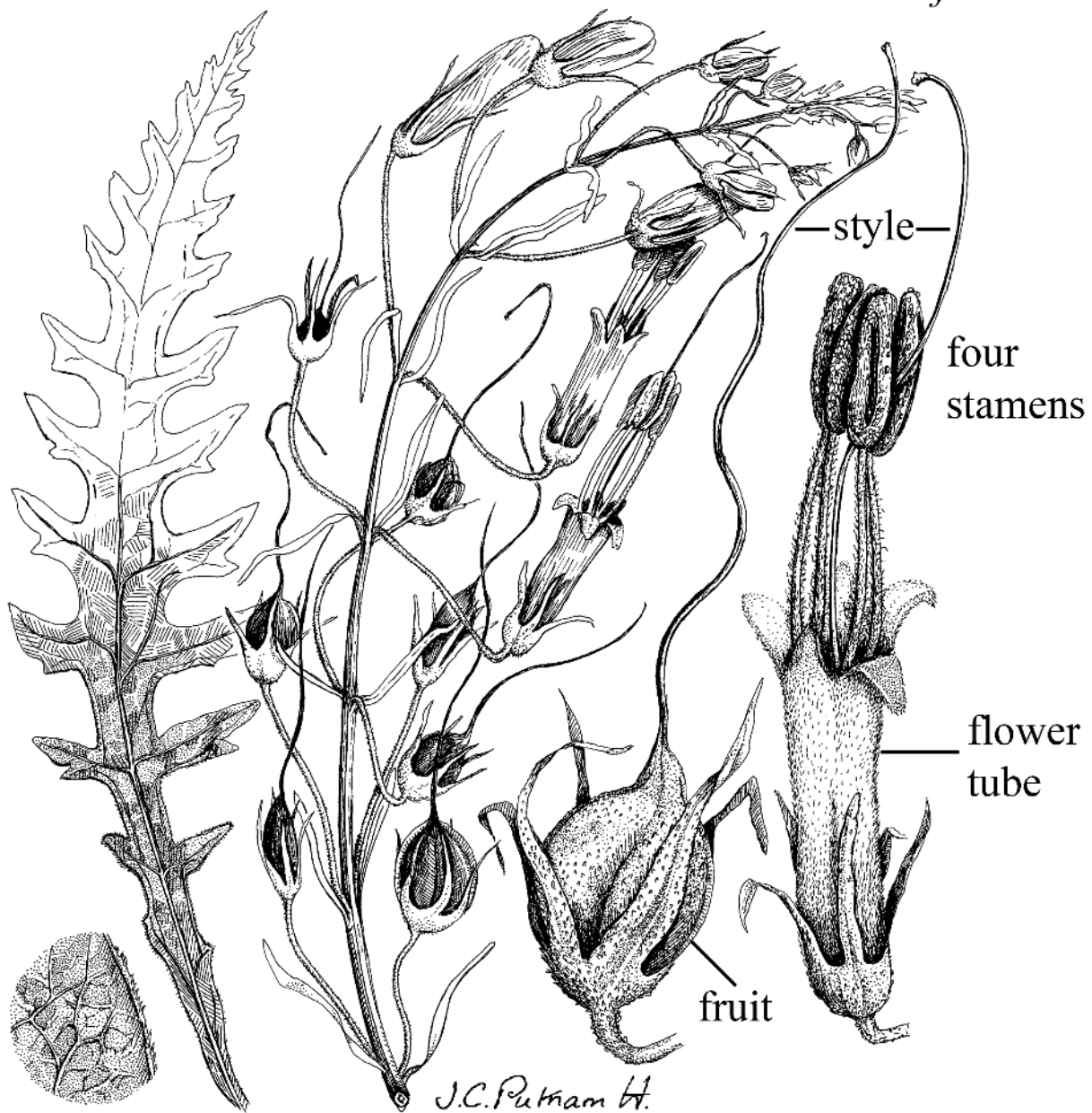
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L. Chafin, June 2008: original account

K. Owers, Feb. 2010: added pictures

# HUMMINGBIRD FLOWER

*Macranthera flammea*





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Inflorescence