Common Name: CURTISS' LOOSESTRIFE

Scientific Name: *Lythrum curtissii* Fernald

Other Commonly Used Names: none

Previously Used Scientific Names: none

Family: Lythraceae (loosestrife)

Rarity Ranks: G1/S1

State Legal Status: Threatened

Federal Legal Status: none

Federal Wetland Status: OBL

Description: Perennial **herb** rising from a woody, persistent base, with one to several erect, much-branched **stems**. **Upper branches** four-sided or slightly winged. **Leaves** widely spaced

with very short or no **leaf stalks**; leaves on lower stems up to 2 inches (5 cm) long, opposite, usually shed by flowering time; leaves on upper branches smaller and usually alternate. **Flowers** slightly asymmetrical, held in the angle between stem and upper leaves. **Flowers** consist of 6 pink-purple **petals** less than ⅛ inch long (3 mm) and a green and purple, ribbed tube about less than ⅛ inch long (3 mm) formed by 6 tiny, pointed **sepals**; sepals alternate with 6 appendages that are the same size as the sepals; petals fall soon after flowering. **Fruit** a tiny, cylindrical, reddish-brown capsule.

Similar Species: Winged loosestrife (*Lythrum alatum*) occurs in fresh-water wetlands, sometimes with Curtiss' loosestrife. Its leaves are smaller, crowded, and overlapping in the upper branches; the flowers are larger and the sepal appendages are twice as long as the adjacent sepals.

Related Rare Species: None in Georgia.

Habitat: Swamps over limestone, clearings in wet pine flatwoods, sunny patches in stream thickets and floodplain forests.

Life History: Curtiss' loosestrife is a perennial herb that reproduces sexually, primarily through outcrossing. Flowers of the loosestrife (*Lythrum*) genus are especially adapted to promote cross-pollination. The flowers on one plant will have long styles and short stamens ("thrum" flowers), while flowers of another plant in the same population will have short styles and long stamens ("pin" flowers). Insects that visit these flowers will pick up pollen on different areas of their bodies, depending on the length of the stamen; they will be able to contribute that pollen only to the other type of flower, thus preventing self-pollination.

Survey Recommendations: Surveys are best conducted during flowering (June–early September).

Range: Southwest Georgia and Florida Panhandle.

Threats: Draining, ditching, and conversion of wetland habitat, primarily for agriculture and pine plantations. Fire suppression, building firebreaks in wetland ecotones, use of herbicides on roadsides and in utility rights-of-way.

Georgia Conservation Status: Seven populations are known, most in disturbed habitats.

Conservation and Management Recommendations: Avoid drainage and mechanical disturbance in wetlands. Burn flatwoods every 2 - 3 years to maintain open canopy; allow fires to burn into streamside thickets and edges of floodplains. Avoid herbicide use on roadsides and in utility rights-of-way.

Selected References:

Allison, J.R. 1991. The status of *Cacalia diversifolia* and *Lythrum curtissii* in southwest Georgia. Georgia Natural Heritage Program, Social Circle.

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

Chafin, L.G. 2000. Field guide to the rare plants of Florida. Florida Natural Areas Inventory, Tallahassee.

Godfrey, R.K. and J.W. Wooten. 1981. Aquatic and wetland plants of southeastern United States, Vol. 2, dicotyledons. University of Georgia Press, Athens.

Graham, S.A. 1964. The genera of Lythraceae in the southeastern United States. Journal of the Arnold Arboretum 45: 235-250.

Graham, S.A. 1975. Taxonomy of the Lythraceae of the southeastern United States. Sida 6:80-103.

Kral, R. 1983. A report on some rare, threatened, or endangered forest-related vascular plants of the South. Technical Publication R8-TP2. United States Forest Service, Atlanta.

NatureServe. 2007. NatureServe Explorer. Arlington, Virginia.
http://www.natureserve.org/explorer

Patrick, T.S., J.R. Allison, and G.A. Krakow. 1995. Protected plants of Georgia. Georgia Department of Natural Resources, Natural Heritage Program, Social Circle.

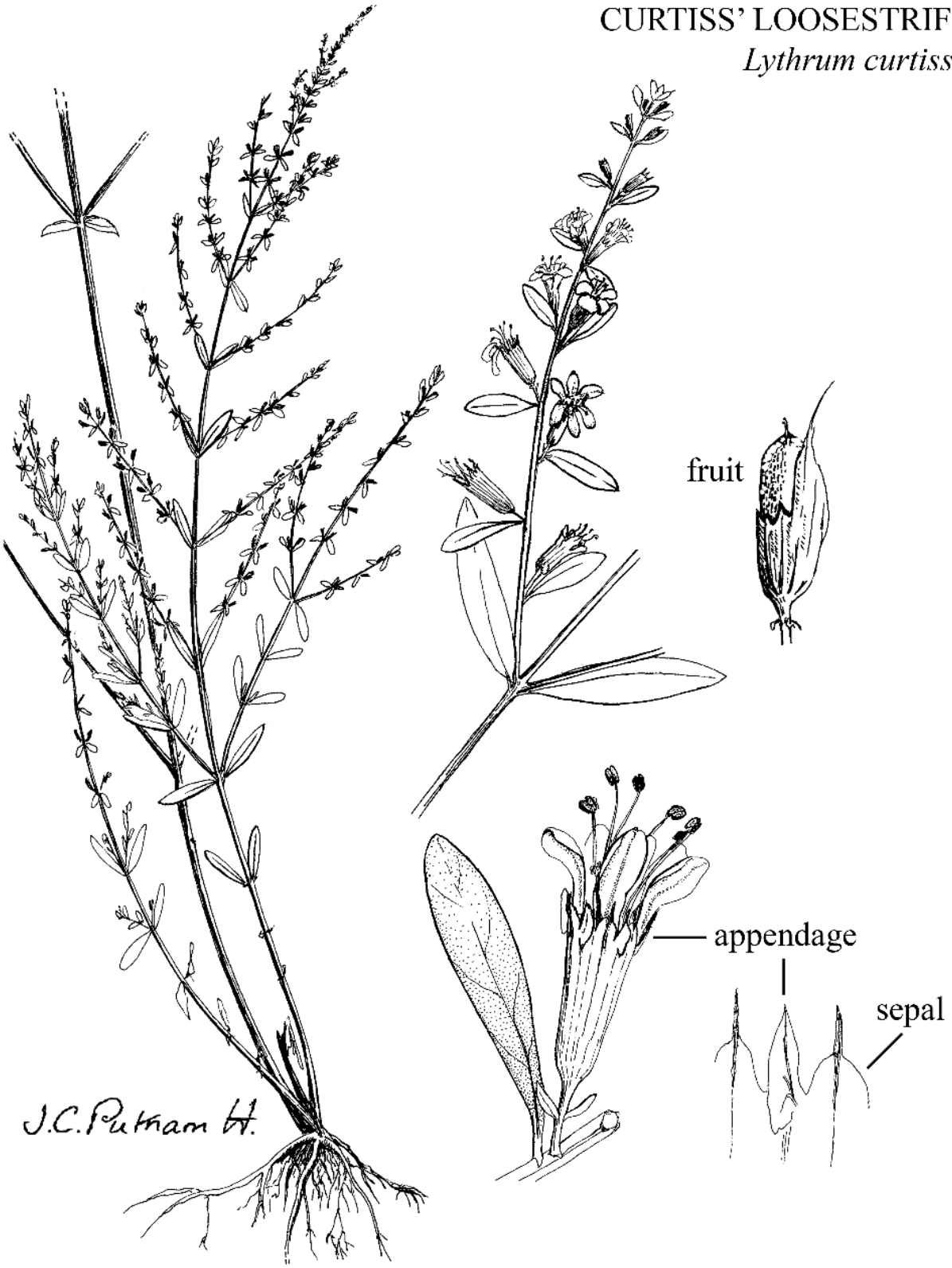
Weakley, A.S. 2008. Flora of the Carolinas, Virginia, Georgia, northern Florida, and surrounding areas. University of North Carolina Herbarium, Chapel Hill.
http://www.herbarium.unc.edu/flora.htm

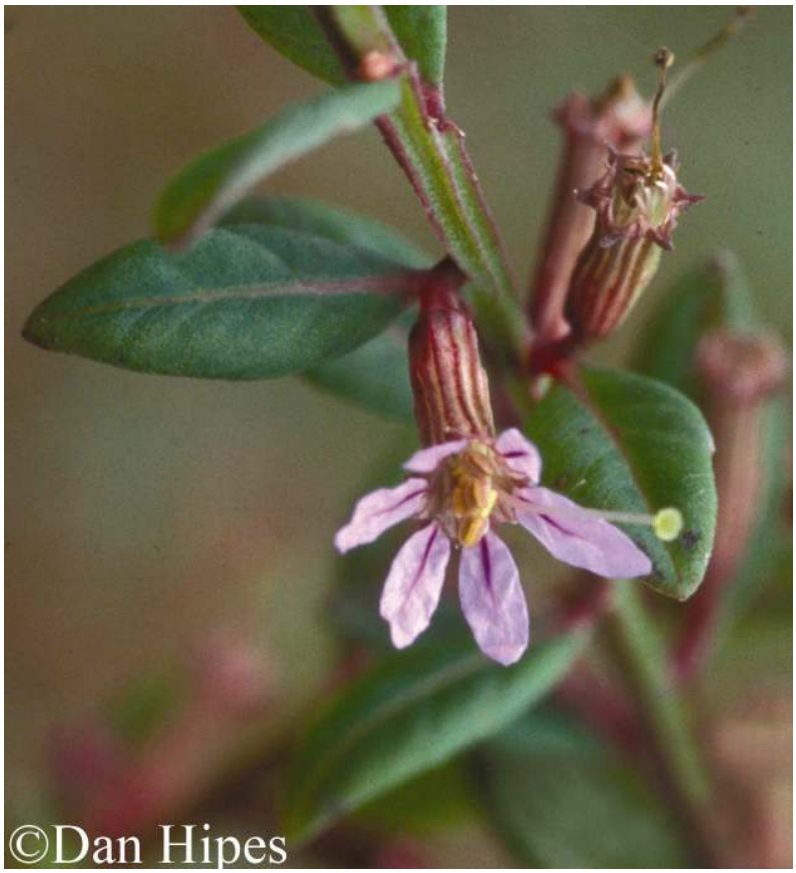
Author of species account: Linda G. Chafin

Date Compiled or Updated:
L. Chafin, June 2008: original account
K. Owers, Feb. 2010: added pictures

CURTISS' LOOSESTRIFE

Lythrum curtissii




©Dan Hipes