



SPREADING YELLOW FOXGLOVE

Scientific Name: *Aureolaria patula* (Chapman) Pennell

Other Commonly Used Names: spreading false foxglove, spreading yellow false foxglove

Previously Used Scientific Names: *Dasystema patula* Chapman, *Gerardia patula* (Chapman) A. Gray

Family: Scrophulariaceae (snapdragon) or Orobanchaceae (broomrape)

Rarity Ranks: G3/S1

State Legal Status: Threatened

Federal Legal Status: none

Federal Wetland Status: none

Description: Perennial **herb** 3 - 4 feet (1 - 1.2 meters) tall, parasitic on the roots of oaks. **Stems** leaning on other plants, sprawling on the ground, or erect; green tinged with reddish-purple. **Leaves** opposite, mostly hairless except on veins; mid- and lower stem leaves up to 5 - 8 inches (13 - 20 cm) long, deeply lobed and toothed, forming a narrow wing on the leaf stalk; upper leaves smaller, lance-shaped, and toothed. **Flowers** up to 1 $\frac{3}{8}$ inches (3 - 3.5 cm) long, yellow, with a funnel-shaped tube and 5 spreading petals; flower stalk $\frac{1}{2}$ - 1 inch (1.2 - 2.5 cm) long and less than $\frac{1}{32}$ inch (0.5 mm) thick; flower, sepals, and stalk covered with tiny, soft hairs. **Fruit** oval, hairless, less than $\frac{1}{4}$ inch (5 - 6 mm) long, on a stalk $\frac{1}{2}$ - 1 inch long.

Similar Species: False-foxglove (*Aureolaria laevigata*) leaves have only a few teeth and are not deeply lobed. Downy false-foxglove (*A. virginica*) has hairy fruit; it flowers May–July. Smooth false-foxglove (*A. flava*) is mostly hairless; its flower stalks curve strongly upward. All of these species have shorter (less than $\frac{3}{8}$ inch or 8 mm long) and thicker (about $\frac{1}{16}$ inch or 1.5 mm) flower stalks.

Related Rare Species: None in Georgia.

Habitat: Coosa Valley flatwoods with moist, calcium-rich soil.

Life History: Spreading yellow foxglove is a hemiparasite – it has chlorophyll and photosynthesizes, but it also connects to other plants by means of haustoria (tiny, root-like organs that embed into the roots of host plants) in order to withdraw water and nutrients. Known host plants include sweet gum (*Liquidambar styraciflua*), red bud (*Cercis canadensis*), ironwood (*Carpinus caroliniana*), and flowering dogwood (*Cornus florida*). Spreading yellow foxglove is self-incompatible and relies on bumblebees and other insects to effect cross-pollination.

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

Range: Georgia, Alabama, Tennessee, and Kentucky.

Threats: Clearcutting in lowland forests, stream impoundment, cattle grazing, invasion by exotic pest plants.

Georgia Conservation Status: Three populations, with a total of about 1000 plants, are known; 2 of these populations are on conservation land.

Conservation and Management Recommendations: Protect streamside forests from clearcutting, impoundment, development, cattle grazing, and trampling. Eradicate exotic pest plants, especially Chinese privet and Japanese honeysuckle.

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Date Compiled or Updated:

L. Chafin, Aug. 2007: original account

K. Owers, Jan. 2010: updated status and ranks, added pictures

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Aureolaria patula

lobed
lower leaf

toothed
upper leaf

fruit



