

Common Name: ROYAL CATCHFLY

Scientific Name: Silene regia Sims

Other Commonly Used Names: none

Previously Used Scientific Names: Melandrium regium (Sims) A. Braun

Family: Caryophyllaceae (pink)

Rarity Ranks: G3/S1

State Legal Status: Endangered

Federal Legal Status: none

Federal Wetland Status: none

Description: Perennial **herb** with erect, unbranched, sticky-hairy **stems**, $1\frac{1}{2}$ - $5\frac{1}{4}$ feet (50 - 160 cm) tall. **Leaves** $1\frac{1}{2}$ - $4\frac{3}{4}$ inches (4 - 12 cm) long and $3\frac{4}{4}$ - 2 inches (2 - 5 cm) wide, opposite, lance-shaped, without leaf stalks, nearly clasping the stem, in 10 - 20 pairs; lower leaves are withered by time of flowering. **Flowers** in a branched, open cluster at the top of the stem. **Petals** 5, bright red, pointed or slightly toothed (not deeply notched), with a low, 10-pointed "crown" at the base of the petals. **Sepals** fused into a sticky-hairy tube (**calyx**) up to 1 inch (2.5 cm) long with 10 conspicuous veins. **Fruit** a cylindrical capsule, $3\frac{4}{8}$ - $3\frac{4}{8}$ inch (1 - 2 cm) long.

Similar Species: Fire-pink (*Silene virginica*) has red petals with several deep notches at the tips and fewer than 10 pairs of leaves. Its stems are shorter, less than 32 inches long (20 - 80 cm), leaning or sprawling, and are not sticky-hairy.

Related Rare Species: Round-leaved fire-pink (*Silene rotundifolia*, Special Concern) occurs in Dade and Walker Counties on sandstone cliffs and ledges. It has branched, sprawling stems up to 28 inches (20 - 70 cm) long; up to 8 pairs of oval or round stem leaves; and red petals with deep notches, similar to fire-pink. The entire plant is covered with sticky hairs. Also see fringed campion (*S. polypetala*) and ovate catchfly (*S. ovata*) on this website.

Habitat: Limestone cedar glades, rocky openings in woodlands over basic soils, Coosa Valley prairies, and rights-of-way through these habitats.

Life History: Royal catchfly plants are tap-rooted and long-lived; they are adapted to frequent fire and sprout back readily after a burn. The flowers are capable of both self- and cross-pollination, but successful fruit set typically follows hummingbird pollination. Its seeds are dispersed by gravity, do not have a dormant period, and do not create a seed bank. Seedlings are stimulated to emerge by soil disturbance and fire. Fire benefits royal catchfly at every life stage, promoting growth, survival of individual plants, and reproduction.

Survey Recommendations: Surveys are best conducted during flowering (late May–early July).

Range: Georgia, Florida, Alabama, Tennessee, Arkansas, Oklahoma, Kentucky, Illinois, Indiana, Kansas, Missouri, and Ohio. It is rare throughout its range.

Threats: Clearing and conversion of habitat to pine plantations, pasture, and developments. Use of herbicides in rights-of-way. Fire suppression and encroachment by woody species. Invasion by exotic pest plants.

Georgia Conservation Status: Four populations have been observed but only one site in Dade County has survived; it is on private land.

Conservation and Management Recommendations: Burn prairies every 2 - 3 years. Mow only after plants have released seed. Avoid use of herbicides. Protect woodlands from clearing and logging. Eradicate exotic pest plants.

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