

Common Name: RADFORD'S MINT

Scientific Name: Dicerandra radfordiana R.B. Huck

Other Commonly Used Names: Radford's balm, Radford's dicerandra

Previously Used Scientific Names: none

Family: Lamiaceae/Labiatae (mint)

Rarity Ranks: G1Q/S1

State Legal Status: Endangered

Federal Legal Status: none

Federal Wetland Status: none

Description: Annual **herb** up to 26 inches (65 cm) tall, with erect, hairy stems; base of the stem often swollen by an insect gall. **Leaves** $\frac{3}{4}$ - 2 inches (1.9 - 55 cm) long and $\frac{1}{4}$ inch (4 - 6 mm) wide, opposite, oblong, lacking leaf stalks, with a cluster of small leaves at the base of each leaf; leaf margins smooth or with small teeth; leaf surfaces with tiny, rough hairs and pitted glands that give off a cinnamon-like odor. **Flower** up to $1\frac{3}{4}$ inch (4.4 cm) long with a narrow, straight tube that opens out into 2 lips; the upper lip hood-like, the lower lip divided into 3 blunt lobes; bright pink with dark dots. Four **stamens** extend only slightly beyond the lips, each stamen with 2 small, curved "horns" on the **anthers**.

Similar Species: Rose balm (*Dicerandra odoratissima*) also smells like cinnamon but is smaller than Radford's mint; its leaves are narrower and more needle-like; the pale pink flower tube is always less than $\frac{7}{8}$ inch long. Coastal Plain balm (*D. linearifolia*) leaves smell like mint; its flowers have a funnel-shaped tube less than $\frac{5}{8}$ inch long with widely spreading lips; its stamens are showy and extend well beyond the tube and lips.

Related Rare Species: None in Georgia. Several species of *Dicerandra* are rare and endemic to the central peninsula of Florida.

Habitat: Altamaha River bluffs with deep, well drained sands.

Life History: Radford's mint is an annual herb that reproduces by seed. Its flowers are probably pollinated by hawkmoths or, possibly, butterflies such as cloudless sulphur and Gulf fritillary. Flowers appear to successfully produce fruit, which are dispersed short distances when the plant is jostled by strong winds or other movement. Long-distance seed dispersal may occur following rainstorms that move the buoyant, mucilage-coated fruits into streams, such as the nearby Altamaha River. The strong odor given off by the glands that cover the leaf surfaces deters insects and other animals from eating the leaves.

Survey Recommendations: Surveys are best conducted during flowering (late September–late October).

Range: Found only in McIntosh County, Georgia.

Threats: Conversion of habitat to development, pasture, or pine plantations; sand mining.

Georgia Conservation Status: Only 2 populations are known; one occurs on a state wildlife management area; another, on private land, is protected by a conservation easement. Size of populations varies widely from year to year, depending on summer rainfall.

Conservation and Management Recommendations: Although plants are adapted to occasional disturbance, avoid clearcutting (unless part of an ecological restoration plan), sand mining, and other severe disturbances. Use prescribed fire to create sunny openings and control woody species.

Selected References:

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Date Compiled or Updated:

L. Chafin, Feb. 2007: original account

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

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