



Common Name: CHATTAHOOCHEE TRILLIUM

Scientific Name: *Trillium decipiens* J.D. Freeman

Other Commonly Used Names: Chattahoochee toadshade, mimic trillium, deceptive trillium

Previously Used Scientific Names: none

Family: Trilliaceae (Trillium) or Melanthiaceae (bunchflower)

Rarity Ranks: G3/S3?

State Legal Status: Special Concern

Federal Legal Status: none

Federal Wetland Status: none

Description: Perennial **herb** with hairless, erect **stems** 7 - 17 inches (17 - 44 cm) tall, about the same length as the leaves before flowering, later lengthening to 2 - 3 times longer than the leaves. **Leaves** 3 per plant, in a whorl at the top of the stem, 3 - 6¾ inches (8 - 17 cm) long and 1½ - 3¾ inches (4.0 - 8.5 cm) wide; leaves mottled with 3 - 5 shades of green and a silvery streak along the midvein; leaves of mature plants are less mottled. **Flower** at the center of the whorl of leaves with no flower stalk, smelling of over-ripe bananas or old sneakers. **Sepals** 3, erect, green to maroon. **Petals** 2 - 3½ inches (5 - 9 cm) long, 3 - 5 times longer than broad, erect;

maroon, green, or yellow, overlapping at the base, hiding the stamens and ovary. **Stamens** 6, yellow, with vertical pollen sacs (**anthers**) opening along both sides to release pollen. **Ovary** dark green to brown, sharply 6-angled.

Similar Species: Underwood's trillium (*Trillium underwoodii*) flowers smell yeasty, and its stamens are maroon. Its stem is about the same length as the leaves during flowering; later, stems may elongate to 2 - 3 times the length of the leaves. Mottled trillium (*T. maculatum*) stamens are maroon and the anthers open inward, rather than along the sides.

Related Rare Species: There are at least 22 species of trillium in Georgia, nine of which are of Special Concern. Five of these are included on this website: Chattahoochee trillium (*Trillium decipiens*), pale yellow trillium (*T. discolor*), Edna's trillium (*T. persistens*), least trillium (*T. pusillum*), and relict trillium (*T. reliquum*).

Habitat: Mature hardwood forests in rich ravines along the Chattahoochee River and its tributaries, with beech, southern magnolia, and spruce pine.

Life History: Trilliums are perennial herbs that send up stems, leaves, and flowers in early spring, after temperatures have risen but before the forest canopy has leafed out. Chattahoochee trillium flowers, with their rotting fruit odor, are probably pollinated by flies and beetles. After flowering and fruiting, the aboveground plant disappears, persisting through the late summer, fall, and winter as an underground rhizome. Seeds shed in the summer germinate the following spring and, within a year or two, send up a single, spatula-shaped seed leaf (cotyledon) for one year's growing season. The next year, a true leaf is produced and, in subsequent years, three-leaved plants appear. After 5 - 7 years (possibly fewer in the Coastal Plain), the plant produces a flowering stalk. Trillium seeds have small, fat-rich appendages called elaiosomes that are appealing to ants, yellow jackets, and other wasps, which carry the seed back to their nests, inadvertently dispersing the trillium seeds. Seeds are dispersed longer distances when the fruits are eaten by other animals such as deer and woodchucks. Mature trillium plants are very long-lived, perhaps living hundreds of years, since the rhizome continues to lengthen and produce shoots on one end, while the other end decays.

Survey Recommendations: Surveys are best conducted during flowering (late January–early April).

Range: Georgia, Alabama, and Florida.

Threats: Logging of hardwood slopes, conversion of habitat to pine plantations, competition from invasive pest plants, overbrowsing by deer.

Georgia Conservation Status: Easily confused with robust plants of Underwood's trillium, Chattahoochee trillium was thought to be abundant but is actually infrequently found and only within 20 miles of the lower Chattahoochee River.

Conservation and Management Recommendations: Protect hardwood slope forests from logging and conversion to pine plantations. Eradicate exotic pest plants, especially Japanese honeysuckle and kudzu. Reduce the size of Georgia's deer herd.

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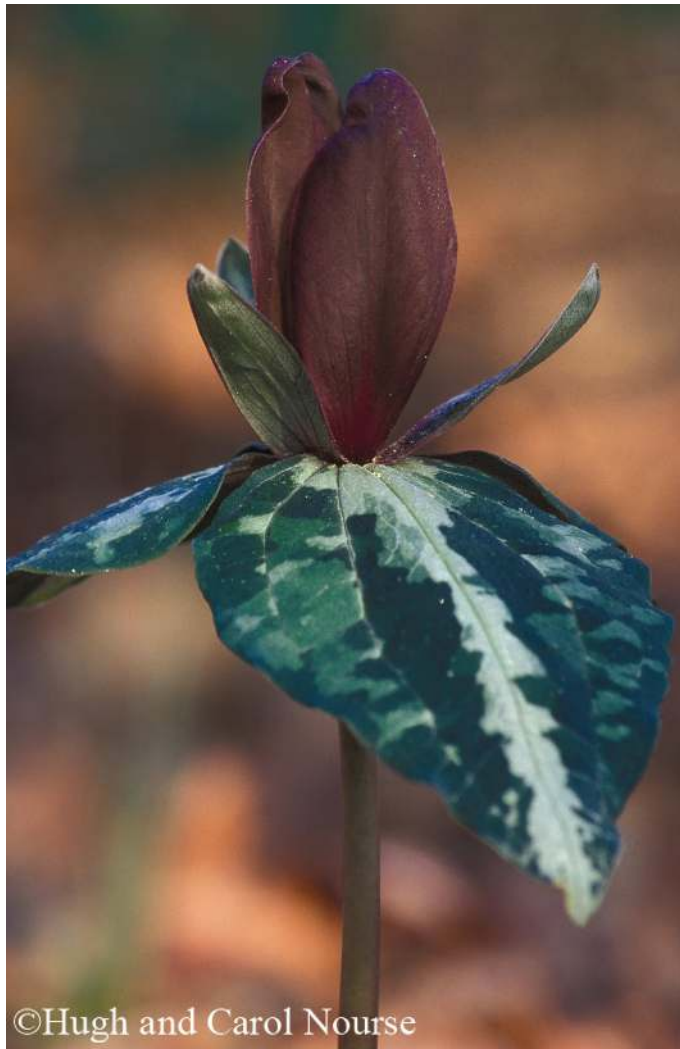
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