



Common Name: PALE YELLOW TRILLIUM

Scientific Name: *Trillium discolor* Wray ex Hooker

Other Commonly Used Names: small yellow toadshade, pale trillium, faded trillium

Previously Used Scientific Names: none

Family: Trilliaceae (Trillium) or Melanthiaceae (bunchflower)

Rarity Ranks: G2/S1S2

State Legal Status: Special Concern

Federal Legal Status: none

Federal Wetland Status: none

Description: Perennial **herb** with hairless, erect **stems** 4 - 9 inches (10 - 22 cm) tall. **Leaves** 3 per plant, in a whorl at the top of the stem, $2\frac{3}{8}$ - 5 inches long and $1\frac{1}{2}$ - $2\frac{3}{4}$ inches wide (6 - 13 cm long and 4 - 7 cm wide), oval to nearly circular, pale green with scattered dark mottles, fading to an even, dull green with age. **Flower** at the center of the whorl of leaves with no flower stalk, faintly sweet- or clove-smelling. **Sepals** 3, green, spreading, shorter than petals. **Petals** $\frac{7}{8}$ - 2 inches long and $\frac{3}{8}$ - $\frac{5}{8}$ inch wide (2.2 - 5 cm long and 0.9 - 1.5 cm wide), pale yellow or cream-colored, sometimes maroon or green at the base; erect and overlapping or spreading; widest above the middle and abruptly narrowed (“clawed”) near the base; one petal with a distinctly pointed tip. **Stamens** 6, maroon, with vertical pollen sacs (**anthers**) opening along both sides to release pollen. **Ovary** purplish, with 6 slightly winged angles.

Similar Species: Yellow trillium (*Trillium luteum*) petals are rich yellow in color and not abruptly narrowed at the base; its flowers smell of lemon, and the stems may be up to 15 inches (38 cm) tall; it occurs in the mountains. Toadshade (*T. cuneatum*) petals may be bronze or greenish yellow but they are lance-shaped and not abruptly narrowed at the base; its leaves are heavily mottled with dark green and have a silvery streak along the midvein.

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*).

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. Pale yellow trillium flowers have a spicy or sweet, clove-like smell, suggesting that they are pollinated by insects that are attracted to sweet fragrances (bees) and spicy smells (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 March–early May).

Range: Georgia, South Carolina, and North Carolina, only in the Savannah River basin.

Threats: Logging and clearing of hardwood slopes, damming streams and flooding ravines, overbrowsing by deer, and invasion by exotic pest plants, especially Japanese honeysuckle and kudzu.

Georgia Conservation Status: About 10 populations are known, most on the Chattahoochee National Forest and U.S. Army Corps of Engineers land.

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

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