

Plant Diversity Website

Ipomoea coccinea L.

Common Names: Red Morning Glory, Scarlet Starglory, Scarlet Morning Glory, Starglory, Redstar, Mexican Morning Glory, Woolly Tidestromia (4,8).

Etymology: The name *Ipomoea* comes from the Greek roots “*ips*,” which means “worm,” and “*homoios*,” which means “resembling” (2). The name refers to the worm-like twining of plants in the genus. “Coccinea” or “coccineus” means scarlet, referring to the color of the flowers (9).

Botanical synonyms (3, 10):

Ipomoea coccinea v. *hederifolia* (L.) A. Gray

Quamoclit coccinea (L.) Moench

Quamoclit coccinea v. *hederifolia* (L.)

House

Quamoclit hederifolia (L.) Choisy

FAMILY: Convolvulaceae – Morning Glory or Bindweed Family (5,6).



Quick Notable Features:

- Climbing and twining annual plant, herbaceous
- Stems tangled and often running along the ground
- Bright reddish orange trumpet-shaped flowers
- Small, brownish-black seed capsules with 1-4 small seeds inside

Plant Height: Stems reach 3 m in length (13).

Subspecies/varieties recognized: *Ipomoea coccinea* var. *hederifolia* (L.) A. Gray. (10)

Most Likely Confused with: *I. coccinea* is often confused with *Ipomoea quamoclit* and *Ipomoea hederifolia* (3).

Habitat Preference: Roadsides, fencerows, fields, thickets, disturbed and/or waste sites. *Ipomoea coccinea* is generally considered a weed (1, 3, 4).

Geographic Distribution in Michigan: The distribution of *Ipomoea coccinea* in Michigan is not known, however a hybrid of *I. coccinea* and *I. quamoclit*, *I. x multifida*, has been reported from Jackson county, suggesting its parent species can be found nearby. *I. coccinea* is also known to inhabit Erie County, Ohio, on the Michigan/Ohio border (4,6).

Known Elevational Distribution: In Arizona it is found to range from 2500 to 6000 feet (15).

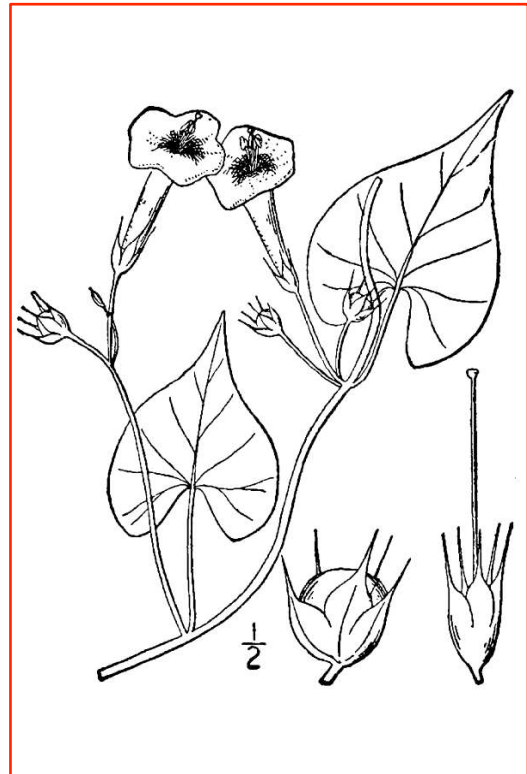
Complete Geographic Distribution: Native to tropical America, *I. coccinea* is introduced throughout the United States. There, the species occupies an area from Massachusetts to Iowa, Florida to Arizona, and all the states in between (3, 4, 6, 8).

Vegetative Plant Description: *I. coccinea* is an annual herb. It has fibrous roots that emerge from a main taproot. Stems are twining or prostrate, ranging from glabrous to finely pubescent. Leaves are alternate, either entire or lobed (often dentate with a few teeth), and ovate, with a cordate base. The shape of the leaves varies from specimen to specimen, and if leaves are lobed, they have 3-5 lobes. Leaves are from 2-14 cm in length and 1-12 cm in width, with petioles ranging from 0.6-14 cm long. It has no stipules (1, 3, 12).

Climbing Mechanism: The stems twine dextrally and are sometimes, but rarely, decumbent (1, 3).

Flower Description: This plant bears scarlet (orange-red) flowers in cymes of 2-8 that may be solitary, on occasion. The sepals are subequal, 3-3.5 mm long, ranging from elliptic to oblong. Petals are fused at the base to form a narrow tube that is sometimes referred to as “trumpet-shaped.” Bracts are 1-3 cm in length and range from lanceolate to ovate, aristate to mucronate. Pedicels are 5-15 mm in length and erect. The style of the pistil is exerted beyond the stamens, and the ovary is ovoid (1, 3, 12).

Flowering Time: Summer, July to October. Flowers are open for only one day (5,7).



Pollinator: Nectar produced by the flowers of *Ipomoea coccinea* attracts various insects and sometimes birds. Because of the tube-like flowers, any insect or bird that enters the flower for nectar becomes dusted with pollen. *Ipomoea coccinea* is also capable of self-pollinating (7, 14).

Fruit Type and Description: *Ipomoea coccinea* bears capsular fruits, with pedicels that are reflexed below the fruit, but erect in the flower. The fruits are 6-7 mm across. Mature fruits are spherical in shape, light brown, glabrous, and contain up to 4 seeds (1, 3).

Seed Description: Seeds are wedge shaped, 3-4 mm long, black to dark brown, and finely tomentose (1, 3).

Dispersal Syndrome: 1-4 seeds per fruit, most likely gravity dispersed. The capsule appears to become brittle, indicating that it would shatter upon impact with the ground, releasing the seeds (pers. obs., K LW).



Distinguished by: *Ipomoea coccinea* is often confused with *Ipomoea quamoclit* because the flowers are similar. However, the leaves of the two species are very different. *Ipomoea quamoclit* has leaves that are finely divided, resembling a pine bough, hence its common name: cypress vine. *I. coccinea* is also sometimes confused with *Ipomoea hederifolia*. Where *I. coccinea* has a more scarlet-orange flower, *I. hederifolia* has a flower that is a dark, solid red. In addition, the seeds of *I. hederifolia* are more “pinched” than the seeds of *I. coccinea*. *I. coccinea* is the only species of the three that is currently identified as inhabiting Michigan (4, U. of M. Herbarium, K LW).

Other members of the family in Michigan (number species): *Calystegia* (10 species), *Convolvulus* (2 species), *Cuscuta* (10 species), and *Ipomoea* (4 species) (4,6).

Ethnobotanical Uses: The seeds of *Ipomoea coccinea* (and other species in *Ipomoea*) have hallucinatory properties that may cause, among other things, distortion of sight and hearing (1).

Phylogenetic Information: The Convolvulaceae belong to the order Solanales. Solanales forms a monophyletic group with Lamiales and belongs to the Asterid 1 clade. Within Convolvulaceae there are 3 - 4 distinct subfamilies. *Ipomoea* belongs to the Convolvuloideae, and the species here belongs to the Quamoclit Section of the genus (7,11).

Interesting Quotation or Other Interesting Factoid not inserted above: *Ipomoea coccinea* is considered a “noxious weed,” but yet, attracts hummingbirds (4,14).

Literature and websites used:

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