

Plant Diversity Website

Campsis radicans (L.) Bureau

Common Names: Trumpet vine (4), Trumpet-creeper(1), Cow-itch vine (4), Trumpet-flower (1)

Etymology: *Campsis* comes from the Greek kampsis, or “curve”, referring to the curved stamens of the genus (5). *Radicans* is latin for “rooting”, a reference to the species’ aerial roots (9).

Botanical synonyms: *Bignonia radicans* L. (4), *Tecoma radicans* Juss (5).

FAMILY: Bignoniaceae (the Bignonia or Trumpet-creeper family)

Quick Notable Features:

- Tube-shaped orange and red flowers
- Large, opposite, pinnately compound leaves
- 7-15 coarsely serrate leaflets per leaf



Plant Height: Has been found growing 20 meters into tree crowns (9) and to the tops of telephone poles (7).

Subspecies/varieties recognized: *Campsis radicans* var. *speciosa*, as well as various horticultural cultivars.

Most Likely Confused with: *Bignonia capreolata*, *Campsis grandifolia*, *Tribulus terrestris*, *Lonicera sempervirens*, *Wisteria frutescens*, *Wisteria sinensis*

Habitat Preference: Along the edges of woods, on fences and hedges, railways and roads, growing up utility poles and trees (7).

Geographic Distribution in Michigan: Although not native to Michigan, *C. radicans* can be found across the southern half of the state as an escapee from gardens, largely along developed routes (1).

Known Elevational Distribution: Found in the Smoky Mountains at altitudes of 2000 feet but may have been introduced there (6).

Complete Geographic Distribution: Native to the eastern United States from Iowa and New Jersey south to Texas and Florida (7), and west through Kansas (9). Naturalized northward through Ohio (8), into New England (7), Michigan (1), and North Dakota, as well as California, Washington, Utah, and Colorado (16).

Vegetative Plant Description: This climbing, sprawling, or trailing woody vine is perennial. The stems have pale bark and yellowish wood with long internodes. The older stems may be stiff

with peeling bark, while the younger stems are smooth and flexible. The opposite leaves are pinnately compound with 5-13 leaflets borne on short petiolules (7). The leaflet blades are rounded to oblique at the base, lanceolate to ovate, and paler below than above, usually with pubescence along the midrib (7). *Campsis* has five sets of nectaries; one large floral set and four smaller sets on the calyx, corolla, fruit, and extraflorally on the petioles (13).

Climbing Mechanism: Adventitious aerial roots are borne along older portions of the stem (9). These lodge in cracks in bark or on trellises, aiding in support while the main stem generally grows straight upward (pers. obs. R. J. Burnham).

Flower Description: The inflorescence is a terminal, compound cyme, often with 10-20 bisexual flowers, which may not bloom all at once (7,12). The calyx is campanulate to cylindrical, orange and leathery with five lobes (12). The corolla is cylindrical and flaring, red-orange, with a yellow



and red striped interior that is a quarter the length of the calyx (7,12). Two pairs of didynamous stamens (two lengths) with pollen sacs and one staminode (without pollen sacs) are located at the top of tube, but do not extend beyond the calyx (11). The single, two-carpellate pistil has a slim, superior ovary with one two-lobed stigma and is surrounded by a large nectar disc (11,12).

Flowering Time: June to September across its native range (12); while the flowering season in Michigan may be shorter.

Pollinator: The red, tube-shaped flowers are known to attract hummingbirds (1).

Fruit Type and Description: The fruit is a two-part dehiscent capsule, 10-20cm long, with two locules and a slight groove along its suture. It is elongated and irregularly cylindrical, as well as tapered at either end (7, 12).

Seed Description: The seeds are flattened and brown with translucent wings on either side, 1.5-2cm (12).

Dispersal Syndrome: Seeds of *Campsis* are winged, so they are most likely dispersed via wind.



Distinguished by: *Bignonia capreolata* is commonly known as cross-vine or trumpet-flower and in some areas it may be considered to be the same species as *Campsis radicans*. However, the corollas of *Bignonia capreolata* have yellow linings, and the leaves have only one or two leaflets with generally entire margins and a terminal tendril (8). *Campsis grandiflora* does not grow as high, has few adventitious roots, and has larger, showier flowers (10). In addition, *Campsis grandiflora* has glabrous leaves and rounded capsule tips (14). *Tribulus terrestris* is

far more hairy than *Campsis radicans*, has entire leaflet margins, and is more a creeper than a climber. While *Lonicera sempervirens* has similarly colored and shaped flowers, its simple leaves should immediately distinguish it from *Campsis*. *Wisteria frutescens* and *Wisteria sinensis* have alternate leaf arrangement and entire leaf margins, although the leaflets of *Wisteria sinensis* may seem undulate.

Other members of the family in Michigan: There are two species of *Catalpa* in Michigan (5).

Ethnobotanical Uses: The roots of *Campsis* are known to induce sweating and may help heal wounds; NOTE: the leaves may cause a skin rash (15).

Phylogenetic Information: The Bignoniaceae are derived within the order Lamiales which is a part of the euasterids I, of the eudicots (17). Some sources list Bignoniaceae within the Scrophulariales, while others have merged the Scrophulariales with the Lamiales (11, 17). Either way, Bignoniaceae is closely related to Oleaceae (11) and *Campsis* is a member of the Bignoniaceae tribe Tecomeae (L. Lohmann pers. comm. 11/07).

Interesting Quotation or Other Interesting Factoid not inserted above:

- There are accounts in the southern United States of *Campsis* becoming highly invasive and sending up shoots several meters away from the main trunk (10).
- Campsis* is attractive to several ant species due to its complex, extrafloral nectarines. The ants protect *Campsis* from herbivory (13).
- Bignoniaceae is largely a tropical family, although several members may be found as cultivars across the southern U.S. There are only two species in the genus *Campsis*; the other is native to China (8).

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