

Botanical Briefs: Trumpet Vine (*Campsis radicans*)

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A member of the Bignoniaceae family, *Campsis radicans* is nicknamed “trumpet creeper” or “trumpet vine” because of its characteristic trumpetlike flowers. While the trumpet vine has been considered to be nothing more than an invasive weed that may cause dermatitis, its showy flowers have been displayed in landscapes as a cover for trellises, fences, and pillars (Figure 1).

The flowers typically are yellow-orange to red, growing up to 8×4 cm at the mouth. They grow in groups of 4 to 12 and bloom from July to August. The actual fruit is a flat tapered capsule that is 8- to 13-cm long with flat winged seeds. The entire plant may grow to be more than 30-ft high. Other distinguishing physical features include *u*-shaped bundle scars on the stem, coarsely toothed opposite compound leaves (Figure 2), and tan flakey bark.^{1,2} The trumpet vine is native to north central, eastern, and south central portions of the United States. It is abundant from New Jersey to Iowa and south to Florida and Texas.³

Campsis radicans also has been referred to as hummingbird vine because hummingbirds often are enticed by the vine’s tubular flowers and large quantities of nectar. The flowers also attract butterflies, bees, and ants.⁴ *Radicans* is defined as stem-rooting, referring to the abundant and vigorous rootlike aerial stems. This trait also has given rise to the nicknames “hellvine” and “devil’s shoestrings.” It clearly is a “love it or hate it” plant. The stems often stretch for many feet and are known for tripping hikers in areas



Figure 1. The showy flowers of the trumpet vine (*Campsis radicans*) often are used as a cover in landscapes (A and B).

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Figure 2. The sturdy vines of the trumpet vine (*Campsis radicans*) display coarsely toothed opposite compound leaves.

where the plant grows wild. Its aggressive growth pattern sometimes may be destructive. The aerial roots can creep under and lift shingles and boards while grabbing a hold of every available surface. It has been known to crack building foundations, grow out of asphalt, invade sewer lines, and smother nearby trees and flower beds. It can grow more than 30 ft in one season. This plant is so hearty that it has been stated that “if you cannot grow a trumpet vine, give up gardening.”⁴ Because it may be impervious to common weed killers, assertive pruning often is recommended,^{4,5} which may result in trumpet vine dermatitis.

Campsis radicans also has been designated the cow-itch vine because of its ability to cause skin irritation. Contact with leaves or flowers may cause inflammation and blisters persisting for several days. The eruption is similar to poison ivy, but the sensitizing potential of the trumpet vine appears to be much lower. The frequency of trumpet vine dermatitis is more a measure of exposure than an indication of high sensitizing potential.^{6,7}

Although there are many anecdotal reports of dermatitis from *C radicans*, there has not been a systematic study of the mechanisms involved or allergens implicated, nor is it known if all varieties are capable of causing dermatitis. Major chemicals extracted from the plant include alkane, salicylic

acid, squalene, stansioside, verbascoside, ferulic acid, trimethoxycinnamic acid, and cyanidin-3-rutinoside.⁵ *Campsis radicans* is thought to be poisonous if ingested. Reported symptoms include gastric irritation, dilated pupils, and numbness in hands.^{1,8,9} Treatment is symptomatic.

While the trumpet vine may be pleasing to the eye, it should be treated with the same cautious respect that one might give to poison ivy and other environmental dermatologic threats. Individuals who do not heed this warning may find themselves “trumpeting” a tune of woe when developing a “creepy” and preventable dermatitis.

REFERENCES

1. Foster S, Caras RA. *Peterson Field Guide to Venomous Animals and Poisonous Plants*. Boston, MA: Houghton Mifflin Harcourt Publishing Company; 1994.
2. Hunter CG. *Trees, Shrubs, and Vines of Arkansas*. Little Rock, AR: The Ozark Society Foundation; 1989.
3. Wennerberg S. Plant guide: trumpet creeper. United States Department of Agriculture Natural Resources Conservation Service. http://plants.usda.gov/plantguide/doc/pg_cara2.doc. Updated June 1, 2006. Accessed April 29, 2008.
4. Willis K. Trumpet vine: a hummingbird magnet. <http://www.gardenandhearth.com/Plant-Guides/Trumpet-Vine.htm>. Accessed May 2, 2008.
5. Binutu OA, Cordell GA. Bignoniaceae. In: Avalos J, Maibach H, eds. *Dermatologic Botany*. Danvers, MA: CRC Press; 2000:339-348.
6. Mitchell J, Rook A. *Botanical Dermatology: Plants and Plant Products Injurious to the Skin*. Vancouver, British Columbia, Canada: Greengrass; 1979.
7. Lawrence RA. Poisonous plants: when they are a threat to children. *Pediatr Rev*. 1997;18:162-168.
8. Westerfield RR, Wade GL. Poisonous plants in the landscape. Cooperative Extension Service/The University of Georgia College of Agricultural and Environmental Sciences. <http://pubs.caes.uga.edu/caespubs/horticulture/H-00-056.pdf>. Published October 2000. Accessed April 29, 2008.
9. Hardin JW, Arena JM. *Human Poisoning From Native and Cultivated Plants*. 2nd ed. Kingsport, TN: Kingsport Press; 1977.