# Toxicodendron radicans

From Wikipedia, the free encyclopedia

**Toxicodendron radicans**, commonly known as **eastern poison ivy**<sup>[1]</sup> or **poison ivy**, is a poisonous Asian and North American flowering plant that is well-known for causing Urushiol-induced contact dermatitis, an itchy, irritating, and sometimes painful rash in most people who touch it. It is caused by urushiol, a clear liquid compound in the plant's sap.<sup>[2]</sup> The species is variable in its appearance and habit, and despite its common name it is not a true ivy (*Hedera*), but rather a member of the cashew and pistachio family (Anacardiaceae). *Toxicodendron radicans* is commonly eaten by many animals, and the seeds are consumed by birds,<sup>[3]</sup> but poison ivy is most often thought of as an unwelcome weed.

## **Contents**

- 1 Description
- 2 Distribution and habitat
- 3 Aids to identification
- 4 Effects on the body
- 5 Treatment of poison ivy rash
- 6 Similar-looking plants
- 7 Similar allergenic plants
- 8 References
- 9 External links

# **Description**

There are numerous subspecies and/or varieties of *T. radicans*,<sup>[4]</sup> which can be found growing in any of the following forms; all of which have woody stems:

- as a climbing vine that grows on trees or some other support
- as a shrub up to 1.2 metres (3 ft 11 in) tall
- as a trailing vine that is 10–25 centimetres (3.9–9.8 in) tall

## Subspecies and varieties<sup>[5]</sup>

- *Toxicodendron radicans* subsp. *eximum* (Greene) Gillis
- *Toxicodendron radicans* subsp. *hispidum* (Engl.) Gillis
- *Toxicodendron radicans* subsp. *negundo* (Greene) Gillis<sup>[6]</sup>
- Toxicodendron radicans var. negundo (Greene) Reveal
- *Toxicodendron radicans* var. *pubens* (Engelm. ex S. Watson) Reveal
- *Toxicodendron radicans* subsp. *radicans*
- Toxicodendron radicans var. radicans
- Toxicodendron radicans subsp. rydbergii (Small ex Rydb.) Á. Löve & D.
  Löve
- *Toxicodendron radicans* var. *rydbergii* (Small ex Rydb.) Erskine<sup>[7]</sup>

#### Poison ivy



Poison ivy during autumn



Poison ivy in spring, Ottawa, Ontario

## Scientific classification

Kingdom: Plantae (unranked): Angiosperms **Eudicots** (unranked): (unranked): Rosids Order: Sapindales Family: Anacardiaceae Genus: **Toxicodendron** T. radicans Species: Binomial name

Toxicodendron radicans

(L.) Kuntze

■ Toxicodendron radicans subsp. verrucosum (Scheele) Gillis

The deciduous leaves of *T. radicans* are trifoliate with three almond-shaped leaflets.<sup>[8]</sup> Leaf color ranges from light green (usually the younger leaves) to dark green (mature leaves), turning bright red in fall; though other sources say leaves are reddish when expanding, turn green through maturity, then back to red, orange, or yellow in the fall. The leaflets of mature leaves are somewhat shiny. The leaflets are 3–12 cm (1.2–4.7 in)

#### **Synonyms**

- Rhus radicans L.
- Rhus verrucosa Scheele, syn of subsp. verrucosum

long, rarely up to 30 cm (12 in). Each leaflet has a few or no teeth along its edge, and the leaf surface is smooth. Leaflet clusters are alternate on the vine, and the plant has no thorns. Vines growing on the trunk of a tree become firmly attached through numerous aerial rootlets. [9] The vines develop adventitious roots, or the plant can spread from rhizomes or root crowns. The milky sap of poison ivy darkens after exposure to the air.

The urushiol compound in poison ivy is not a defensive measure; rather, it helps the plant to retain water. It is frequently eaten by animals such as deer and bears.<sup>[10]</sup>

Toxicodendron radicans spreads either vegetatively or sexually. It is dioecious; flowering occurs from May to July. The yellowish- or greenish-white flowers are typically inconspicuous and are located in clusters up to 8 cm (3.1 in) above the leaves. The berry-like fruit, a drupe, mature by August to November with a grayish-white colour. Fruits are a favorite winter food of some birds and other animals. Seeds are spread mainly by animals and remain viable after passing through the digestive tract.









Toxicodendron radicans vine with typical reddish "hairs." Like the leaves, the vines are poisonous to humans.

Toxicodendron radica in Perrot State Park, Trempealeau County, Wisconsin

Toxicodendron radicans Flower detail, with bee

Poison ivy on a roadside

## Distribution and habitat

Toxicodendron radicans grows throughout much of North America, including the Canadian Maritime provinces, Quebec, Ontario, Manitoba, and all U.S. states east of the Rocky Mountains, [11] as well as in the mountainous areas of Mexico up to around 1,500 m (4,900 ft). *Caquistle* or *caxuistle* is the Nahuatl term for the species. It is normally found in wooded areas, especially along edge areas where the tree line breaks and allows sunshine to filter through. It also grows in exposed rocky areas, open fields and disturbed areas.

It may grow as a forest understory plant, although it is only somewhat shade-tolerant.<sup>[8]</sup> The plant is extremely common in suburban and exurban areas of New England, the Mid-Atlantic, and the Southeastern United States. The similar species *T. diversilobum* (western poison oak) and *T. rydbergii* (western poison ivy) are found in western North America.