

## **Department of Horticulture**

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# **Poison Ivy**

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## **Identification and Symptoms**

Although poison ivy (*Rhus radicans or Toxicodendron radicans*) is easily identified and should be avoided, countless people experience a painful introduction to the species. A mere touch of the foliage can result in a blotching of the skin and burning water blisters, which cause the flesh beneath to swell and throb with intense pain. Symptoms may become evident within a short time after exposure, or they may take a few days to appear. Fortunately, such an attack leaves no scars, and general health is not impaired.

All parts of the plant, including stem and roots, contain and secrete a nonvolatile oil (oleo resin), which affects the skin. Because the oil is insoluble in water, washing with water alone merely spreads the oil to other areas and increases the discomfort. However, washing with a strong alkali soap such as yellow laundry or naptha will relieve the discomfort. Alcohol will dissolve and remove the oily substance from the skin and if applied soon enough will prevent irritation.

Burning poison ivy after it has been cut or grubbed out and dried can be hazardous because smoke can cause the same symptoms. Inhaling the smoke can result in serious consequences.

The names "poison ivy" and "poison oak" are often incorrectly used interchangeably. Poison ivy is the only species found throughout Indiana. Poison oak (Rhus toxicodendron), is a low-growing, non-climbing shrub, that is not known to occur in Indiana.

### Appearance

Poison ivy can be a low-growing shrub or a vine that climbs to the top of the tallest tree. See Figure 1.



Figure 1. Poison ivy plant characteristics. Courtesy of Thornton, Harrington and Zimdahl, Colorado Experiment Station.

Aerial rootlets enable the vine to attach itself to whatever it may be growing on. Leaves are compound, with three leaflets that may have smooth, scalloped, or irregularly toothed margins. See Figure 2.



Figure 2. Poison ivy leaf characteristics.

The leaf surface may or may not have an oily appearance. The fruit is greenish-white and smooth, with a waxy appearance. It grows in clusters the size of small currents. Each fruit (berry) contains a single seed. Birds and other wildlife feed on the berries and consequently spread poison ivy in their droppings.

Although poison ivy is easily identified, other weedy species have somewhat similar characteristics. Fragrant Sumac (*Rhus aromatica*), with three leaflets, is commonly confused with poison ivy. However, this species differs in that both fruit and leaves may be pubescent (hairy). The degree of pubescence varies because there are three subspecies with wide distribution in the state.

Virginia creeper (*Parthenocissus quinquefolia*), also called woodbine, is found throughout Indiana. An aggressive vine, it will grow to the top of the tallest tree. It can be readily identified and distinguished from poison ivy by the five leaflets making up the compound leaf. Neither Virginia creeper nor fragrant sumac contain toxic substances that irritate the skin.

Poison ivy can be found almost anywhere. It usually grows along fence rows, roadside areas, and along the edge of wooded tracts. However, it may also be found around the home in shrubbery, flower beds, and along lot boundaries. Since it is inconspicuous during the growing season, the home owner may be unaware of its presence. However, the vivid fall color makes poison ivy a tempting addition to winter bouquets.

### Control

Apparently, birds can eat the berries without harm but in so doing, they spread the plants by seed. Once established, the woodiness of the plant makes it difficult to control. Repeated cutting of the plant back to the ground may may eventually starve the plant. However, each time you cut you are potentially exposing yourself to the oil. Small plants can be dug up and discarded. However, if any portion of the root system is left behind, the plant will likely resprout.

Several herbicides are available for control of poison ivy. Keep in mind, though, that any herbicide that will kill poison ivy, will also kill any desirable plants. So if the poison ivy is growing among shrubs and trees, chemical controls must be applied directly to the poison ivy plant and not to any of the other plants. In some cases, it may be worth sacrificing some desirable plants to eliminate the poison ivy.

Several herbicides can be used to eradicate poison ivy. Amino triazole sold under the name Amitrol, is highly effective and safe to use. Available as a liquid or wettable powder, it should be applied during periods of rapid plant growth to insure maximum kill. Thorough vegetative coverage is essential and repeated applications may be needed. The herbicide glyphosate (Roundup, Kleenup) is also effective in eradicating the pest. A combination of dicamba (Banvel) and 2,4-D can be used to advantage where herbicide drift is not a factor. However, 2,4-D should not be applied in locations where other sensitive species grow in close proximity to poison ivy. Read and understand instructions on the herbicide label before making applications.

No matter what control method you use, be careful to avoid exposing your skin to the plant. Wear gloves, long pants, socks and shoes, and a long-sleeved shirt. NEVER burn poison ivy! The smoke from burning the plant contains particles that can cause serious injury to the eyes, skin, and respiratory tract.

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