

Poison Ivy

(*Phus radicans L*)

Poison ivy is a member of the Cashew family (Anacardiaceae) and belongs to the same genus as common sumac. It is sometimes called "three-leaved ivy." Every year it causes discomfort and poisoning to thousands of people in all walks of life, more than any other plant. Since it is not outstanding in appearance, it is often discovered only after persons have come in contact with it.

Every nature lover, hiker, and hunter should be thoroughly familiar with poison ivy. It is poisonous the year around, from the time it resumes growth in the spring, until its brilliant-colored leaves are shed in the fall, and even its dormant, winter condition.

Geographical Distribution and Description

Poison ivy grows in rocky fields, railroad embankments, pastures, roadsides, parks, preserves, fence rows, under telephone lines, and in rich, alluvial woodlands. It is especially common along streams and rivers. It is native in Iowa and is widespread throughout the United States and Canada. As many as 26 different birds are responsible for the wide dissemination of poison ivy seed. Birds eat the berries largely as "emergency" food in the winter when snow covers other food plants.

STEMS of poison ivy are usually woody. The plant may appear as an erect shrub or as a vine climbing by aerial rootlets on fences, walls, or trees. The plants also produce slender, creeping rootstocks from the base of the stem. These rootstocks often ramify the soil for a distance of several yards from the parent plant, sending up short, slender, leafy shoots from their nodes.

LEAVES of poison ivy are alternate on the stem, compound, and always borne in groups of three leaflets. These leaflets may be glossy or dull-green, usually smooth, but occasionally somewhat hairy. The edges of the leaves vary widely; some are smooth, others are toothed or even somewhat lobed. Leaves in the same group can vary distinctly.

FLOWERS of poison ivy are borne in slender, open, axillary racemes. The same plant bears both perfect and imperfect flowers. The calyx is five-lobed, while the corolla is composed of five yellowish-green petals. There are five separate stamens, a single solitary pistil, and a one-seeded ovary. Flowering usually occurs in June or July. The fruit is a small, white or cream-colored drupe (dry stone fruit). It is nearly globular in shape, about 3/16-inch diameter and has a grayish striped, one-seeded stone about 1/8-inch in diameter.

Conditions of Poisoning

Contact with poison ivy frequently produces severe inflammation and blistering. Though many persons claim immunity, recent investigations indicate that susceptibility is a matter of degree and it is doubtful if anyone is absolutely immune. Thus, it is a good precautionary measure for everyone to avoid the plant. The degree of immunity seems to vary with the health and susceptibility of the individual, the circumstances under which he is exposed, and the condition of the plant.

Poisonous Principle and Symptoms of Poisoning

All parts of the plant are poisonous at all times of the year. The poisonous principle secreted by the plant is a yellowish volatile oil. It is produced in the resinous ducts of leaves, flowers, and fruit, as well as in the bark of stems and roots.

The poison may be carried by soot particles in smoke to individuals who are clearing brush land, ivy-infested areas, or rubbish.

Poisoning does not actually occur unless a sensitive person comes in contact with the poison either by touching parts of the plant itself, or touching equipment, clothing, or animals — such as dogs, cats, sheep, goats and cows — that have been in contact with the plant or its volatile oil. Wearing clothes — or carrying tools or wood — that have come in contact with poison ivy often results in severe cases of poisoning. A hot wind blowing over poison-ivy patches may poison extremely susceptible persons nearby.

The poison, when brought into contact with the skin of a susceptible person, causes inflammation and swelling accompanied by painful irritation and formation of blisters. When these blisters break, the exuding liquid, upon drying, forms scaly, crusty scabs. The time elapsing between contact with the poison and the appearance of irritating inflammation varies with different individuals according to the amount of poison contacting the skin, the development or stage of growth of the plant, the temperature, and the season. Usually, symptoms of poisoning appear within 12 to 24 hours after exposure, but sometimes they may appear within 3 or 4 hours, or they may be delayed for several days.

First Aid

The following procedure is merely first aid in case of suspected exposure. Severe cases should be placed in the hands of a physician.

After contact with poison ivy, a person should wash and rinse the exposed skin area as soon as possible, using an abundance of lukewarm water and strong alkali laundry soap. Repeat washing and rinsing several times. Oil soaps should not be used since the oil tends to spread the poisonous principle.

Control Methods

CAUTION: *Only persons who are known to be highly resistant to the action of poison ivy should attempt the job of exterminating it by any method.*

As a rule, poison ivy is not found in areas which are under cultivation. For that reason, the eradication of poison ivy is a relatively simple process in such areas. Persistently cutting off the plant below the surface of the ground would eventually control it in a garden or flower bed. This results in slow starvation and depletion of food reserves in the roots. Planting infested areas to small grain or corn, plus the necessary seedbed preparation and cultivation for one or two years, controls poison ivy.

If poison ivy is found among valuable trees or shrubs, it may be mowed closely several times a year for two or three years, or the rootstocks may be grubbed out, or the plants hoed-off repeatedly until no more growth appears. In lawns, where repeated close mowing is practical, the plant is usually now problem.

Amitrol (Weedazole, Amitrol-T, Cytrol)

Amitrol is also effective for the eradication of poison ivy. This chemical is non-selective and injures all plants with which it comes into contact but leaves no extensive residual in the soil. It is used at the rate of 1/2 cup Amitrol-T (or Cytol) per gallon of water applied until plants are wet, in June or July on plants with fully-expanded leaves. Both may be used under well-

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(The Use of Sod cont'd.)

ming roots to penetrate the sod bed. No fertilizer should be applied to the turf after it is transplanted or before it has successfully rooted. Another practice that has proven very useful is to roll the transplanted sod with a light roller (200-300 lbs.) between 24 and 48 hr. after transplanting. The time delay between transplanting sod and rolling allows the sod and soil moisture levels to equilibrate thereby creating a uniform soil profile for rooting. You can imagine the impact a layer of dead soil would have on attempts to create a uniform soil profile. There are three basic management concerns in long term management: nutrient status; cultural practices; and pest control. The scope of this paper will not permit me to discuss these at any length. The approaches, methods, and materials used in turf management differ from location to location and between operators. I would suggest however, that the grass plant has evolved with a more predictable set of requirements for growth. As I alluded to earlier, it is the crowns, roots, and rhizomes i.e., the subterranean tissues, that are vital for longevity and quality of turfgrass. I will close by suggesting that if long term management practices are directed at promoting root and rhizome development and directed less at shoot and leaf growth and quality the sod will be more resistant to stress, grow longer, and still maintain reasonable quality.

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established trees and shrubs. Spray ivy plants until moist but avoid excessive runoff. Repeat treatment as necessary.

The use of herbicides usually requires a second treatment in a season. Make the second application in the same way as the first when regrowth is 4 to 6 inches high.

In wooded areas, poison ivy make take on a climbing habit to the point where the leaves and fruit may be as high as 40 feet from the ground. To kill these vines, wrap strips of cloth around the vine to a height of 18 inches and a thickness of 1 to 2 inches. Carefully saturate the wrapping with a mixture of 1 point of low-volatile "Brush Killer" concentrate and 1 pint of fuel oil. Repeat if necessary. The solution must in no way touch the desirable tree upon which the ivy vine is growing.

Another method is to cut the vine off 6 inches above the ground line, then carefully paint the stump with the same solution. Dormant ivy vines crawling upon fence posts may also be dormant sprayed to runoff with low-volatile brush killer solution, at the rate of 1 quart to concentrate to 5 gallons of fuel oil.

If single plants occur in ornamental hedges, carefully locate the individual poison ivy vines, cut them off 6 inches above the ground and paint the stumps carefully with a mixture of 1 pint of low-volatile "Brush Killer", or low-volatile 2,4,5-T and 1 pint of fuel oil. This is best done in late fall or winter when there is less danger from fumes in such areas.

As an added precaution to prevent fume damage, slip a plastic sack over the treated stumps, then cover with soil. This is especially advisable in areas where susceptible plants, such as grapes, iris, peonies, and privet hedges are growing.

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