

Poison Ivy

An Identification and Control Guide

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June 1999

Range and Habit

Poison ivy is a native woody plant found throughout Kansas. There are two types of poison ivy found in Kansas. In the eastern portion of the state (primarily east of US 283 highway) the predominant form is [*Toxicodendron radicans* (L.) Kuntze]. In the western half of the state the predominant form will be Rydberg's poison ivy [*Toxicodendron rydbergii* (Small ex Rydberg) Greene]. Rydberg's poison ivy will be generally found west of US 77 highway.

The two forms have very similar growth habits and nearly identical leaf structures. Rydberg's poison ivy will tend to be more of a dwarf non-climbing shrub. The eastern form can be a small to large shrub, a low growing groundcover or an aggressive vine. Thick vines growing with trees that are attached to trees with numerous hairy aerial roots are probably poison ivy. Poison oak and poison sumac are not found in Kansas.

Poison ivy prefers damp, partial shade often in the association of trees, vines and shrubs. However it will also grow in full sunlight by itself. The author has found poison ivy growing in a fence as a solid shrub 50 feet long and 12 feet tall, appearing from a distance as a wild plum thicket. The vining form can grow in excess of 50 feet in length.

Animals appear to be immune to the toxic affects of poison ivy. Deer will browse on the plants. The berries are highly sought by birds, who are responsible for the wide distribution of poison ivy.

Leaves, Flowers and Fruit

One of the key identification characteristics of poison ivy is the leaf. Poison ivy has a compound leaf made up of 3 leaflets (*Figure #1*). The individual leaflets can be 1 to 4 inches long. It can be many different shades of green and may have a glossy leaf surface or a dull surface. The edges of the leaflets are often smooth but they can also be toothed or lobed. The same plant can have several different leaf shapes. New leaves will often be a different shade of green than older mature leaves. In the autumn, or after being cut or sprayed with herbicides, the leaves develop a beautiful scarlet color.

Poison ivy flowers in late May and may become laden with masses of small green berries that turn waxy-white as they mature (*Figure #2*). There are separate male and female plants (dioecious). Female plants growing in good light and in un-crowded conditions will produce the most berries.

A common vine that may be found growing with poison ivy is Virginia creeper. An easy way to distinguish between them is that Virginia creeper has a compound leaf made up of five leaflets and the berries will be blue. Virginia creeper is not poisonous.

Poisoning

Many people know through previous experience that they are susceptible to poison ivy. It is generally felt that about 2/3 of the population is susceptible to poison ivy to one degree or another. An individual's susceptibility to poison ivy can change over time. Some individuals will go along for years without any reaction and then break out in a severe rash after exposure to poison ivy. Many people who are sensitive become less so as they age. To reduce the risk of adverse reaction one should always assume that they are at least somewhat sensitive to poison ivy.

Poison ivy contains an oily toxicant in its sap (3-*n*-pentadecyl-catechol). Contacting the oil causes a skin irritation in sensitive people ranging from a simple itchy inflammation to a severe rash complete with water blisters. The fluid from these blisters can not spread the rash.

It is usually not found on the surface of any of the plant parts. However once a leaf, stem or any plant part is bruised, broken, cut, etc. the sap becomes exposed. After exposure to the air for just a few hours the clear fluid becomes black. This black residue is often noticeable on leaves that have been chewed by insects.

The toxic oil is very stable. It can remain active for years. It can be spread on pet fur, clothing, tool handles, gloves even steering wheels of cars.

The toxic compound can also be carried in the smoke from burning poison ivy. The oil is not very volatile, but tiny droplets can be easily carried on the particles of ash and dust in the smoke. Inhalation of this smoke by a sensitive individual can cause serious health problems.

Precautions and Treatment

Avoidance is the best approach. If you must be working in areas with poison ivy wear long pants and long sleeved shirts to reduce the chance of direct contact with poison ivy. Be careful not to wipe your face with a shirt sleeve that may have contacted poison ivy.

Wash exposed clothing separately from other clothing using strong soap and several changes of water. Then rinse your washing machine afterwards. Wash tools and other non-clothing items with strong soap and water. The oily sap is marginally soluble in water. A little water spreads it, a lot of water washes it off.

If you know you have been exposed to poison ivy the best way to reduce the severity of the rash is to wash as soon as possible with lots of cold water. Warm water allows the oil to penetrate the skin better. Sensitive individuals can start to react in a matter of minutes so immediate action is best. Even if a rash has already started, thorough washing of the skin is needed to prevent any additional spread of the oil. The red swollen areas and the blister fluid can not spread the rash, only the oil.

Highly sensitive individuals should see their physician after exposure for treatment. Mild cases may be treated with steroid gels, creams, liquids, ointments, calamine lotion and other similar products. Remember, that the next exposure may bring symptoms much worse than the current one.

Control

Poison ivy should be removed from areas of the yard where people frequent. This removal should not be attempted by someone who is sensitive to poison ivy. Using a power mower or weed eater in areas with poison ivy needs to be done with care as sap and sap covered vegetation can become airborne and land on the operator causing a risk of a reaction.

In areas with desirable ornamental plants, hand pulling or grubbing may be the best control. This should only be attempted when the soil is wet. Hand pulling works best on small seedlings before they are very old.

Large vines growing with trees may not be able to be removed without injuring the roots of the trees. Cut the vine at ground level. The above ground portion can be removed from the tree. The cut stump can be carefully treated with a brush and stump herbicide. Great care needs to be taken not to damage the desirable vegetation with the herbicide.

In fence rows, grassy areas, or waste areas, herbicides are probably the most effective control. Several herbicides are available which offer good control of poison ivy. Several products are labeled as "Poison Ivy Killers". Several of these are premixed, ready to use products containing the active ingredient

triclopyr. Glyphosate (Round-up, Kleen-up and others), 2,4-D and dicamba (Banvel) also offer fair to good control of poison ivy. Once a treatment is made wait 3 to 4 weeks for the product to work before applying any additional herbicide.

Label directions need to be read and followed and great care exercised since these chemicals can not differentiate between poison ivy and other plants. Follow all safety precautions when using any chemical and avoid spraying non-target plants.

If you do not feel comfortable trying to control poison ivy yourself either through mechanical control or herbicides it is best to hire it done by a lawn care professional.



Figure #1. Typical Poison Ivy leaves showing the distinctive 3 leaflet leaf structure.



Figure #2. Female Poison Ivy plant. Cluster of berries can be seen in the lower central portion of picture.