



## Poison Ivy

As summer encourages many types of outdoor activities, it pays to be aware of certain plants that can make the outdoor experience unpleasant. Poison ivy leads the list of plants that cause skin irritation, or dermatitis. For those who are very sensitive to the effects of the oil produced by the poison ivy plant, direct contact with the plant can require medical attention.

### Identifying poison ivy isn't always easy



summer leaves  
<https://www.canr.msu.edu/>



yellow or green flowers/mid-summer  
<https://www.maine.gov/>



Mid-May leaves  
 Rob Routledge/Bugwood.org.

### Plant Description

Recognizing the poison ivy plant (*Toxicodendron radicans*) can be tricky because it has many forms, colors and shapes. It can be a vine traveling along the ground or climbing a tree. It can be a shrub. The edges of the leaves can be toothed or smooth. The surface can be shiny or dull depending on its age. Young plants have flexible, smooth stems while mature vines can be ropey and rough. Leaves can be as large as 3-4 inches across or as small as 2 inches. They go from maroon red in the spring, bright green in the summer to gold and orange in the fall. Regardless of other features, poison ivy can be identified by its consistent pointed 3-leaf structure, with the middle leaf stalk longer than the other two side leaves. The mantra “Leaves of 3, let it be” holds true for every form of the plant. This is the one guarantee of poison ivy plants – leaves will **always** be in groups of 3. It grows in most parts of the United States.

Another feature that distinguishes poison ivy plants from similar-looking plants is the abundant aerial roots that attach the growing vine to trees or other structures. These rootlets give the stems of older vines a hairy appearance. Note: this feature does not appear on the native Virginia Creeper vine,

another good climber that can be confused with climbing poison ivy. The assertive Virginia Creeper vine has 5 leaves and usually does not cause an irritating rash on contact.

Reproduction of the poison ivy plant is primarily by underground stems that spread horizontally, forming new roots and shoots when the stem contacts soil. New poison ivy plants can also grow by seeds dispersed by birds and animals. The new plants that emerge from seed have 2 leaves that are narrow and oval. The identifying 3-leaf structure appears as the plant grows.

### **Contact Results**

The poisonous oil *urushiol* (u-ROO-she-ol), a compound found in all parts of the poison ivy plant, causes the identifying itchiness and skin blisters associated with plant contact. Allergic reactions can occur by contact with the plant itself or with any object, such as pets, clothing, gardening tools, or camping or sports equipment, that has come in contact with any part of the plant. Reaction can occur even when exposed to smoke from burning the plant. For the majority (70%) of people who are allergic to the plant, caution when outdoors is important.

For some, sensitivity to the plant's oil occurs on first contact while others develop sensitivity with repeated contact. Research shows that the oil binds to proteins in skin cells within 15 minutes of contact. If the exposed skin and surfaces under the fingernails are washed off with soap and water within that time, reaction can be prevented or reduced. After the *urushiol* has entered the skin cells it cannot be washed off or transferred to another surface. Fingers can transfer the oil from one part of the body to another. The reaction usually develops within 12 to 48 hours after exposure. Once a rash appears an irritating itch begins that can last for several weeks. Severity of the rash depends on how much *urushiol* was left on the skin. Areas with more of the oil may develop a rash sooner. Fluid that oozes from blisters comes from affected cells. The fluid doesn't spread the rash.

Reaction by someone especially allergic to *urushiol* can lead to a medical emergency called anaphylaxis. This is a severe reaction that can be life threatening. It can occur within seconds to minutes after a person is exposed to a substance they are allergic to. Symptoms include swelling of the lips, tongue or throat, shortness of breath or trouble breathing, and dizziness or faintness, as well as other symptoms. These symptoms can be mild, moderate or severe but should never be ignored.

### **Treatment**

Recommended home treatment of a mild case of poison ivy exposure includes lotions and cool compresses or baths to soothe the itch. Use clean compresses to dry the rash's fluid. Some reports note that heat from a comfortably hot shower seems to stop the itching for a short time. Avoid water so hot that it can cause a burn. However, a severe rash that affects any part of the face or genitals requires treatment with a medical prescription.

### **Prevention of Exposure**

The best way to avoid exposure to poison ivy is to recognize the plant and where it grows, and to stay away from the area. If you must work near or will potentially come in contact with the plant, wear gloves, a long sleeve shirt and long pants to avoid having the vegetation come in contact with skin. Don't touch any protective equipment or tools that may have come in contact with the plant. Do not touch pets or animals that may have come in contact with poison ivy. Oil on any surface can be transferred to skin by contact. Remove any clothing that may have been exposed and wash immediately in hot water separately from other laundry. If pets have been exposed, use rubber gloves and a barrier cream on your

exposed skin to protect against contact with the oil on the animal's skin or fur. Then use a liquid dishwashing detergent to wash the oils from the animal's coat or skin and rinse the animal with large amounts of cool water for a long time. If the pet develops a weeping rash or irritated skin, contact a veterinary office for advice.

### **Plant Management**

Poison ivy plants produce the irritating oil throughout the growing season, even during winter. Small flower produced in the summer form long whitish clusters that become small white clusters of fruit that are highly nutritious bird food. Poison ivy plants prefer sun and moist soil but can grow in shade and dry soil. It doesn't tolerate full shade and young plants cannot tolerate frequent cutting. To stop active plant growth, cut young, active new growth frequently. If thick vines are present, cut at the base and paint the exposed rooted end with a systemic herbicide. If re-growth appears on the cut end, reapply herbicide to that surface. Remember that any tools used to control the plant will have oil on the surface and should be handled with care until they can be thoroughly cleaned with a degreasing detergent.

Don't allow new plants to become established. Spot treatment with a non-selective herbicide formulated specifically for use on poison ivy is effective. These herbicides also kill desirable plants so cut back any poison ivy plants and use the herbicide on the freshly cut stems or vine stump. Always read and follow directions for use provided by the manufacturer and follow state and local guidelines when applying herbicides.

The best time to control the plant or apply herbicide is when the plant is actively growing in late spring or early summer. Depending on weather and temperature it may take several weeks before the plant is successfully eradicated. It may also take several applications for complete removal. Remember: plant stems, aerial vines and underground stems can also produce new offshoots and leaves so continuous monitoring is required to remove the plant.



Poison ivy vine climbing a tree  
Richard Gardner, Bugwood.org



Rootlets on climbing poison ivy plant distinguish it  
from other climbers, such as native Virginia Creeper.

Despite good cultural practices, pests and diseases at times may appear. Chemical control should be used only after all other methods have failed. For pesticide information or other questions please call toll free: 877-486-6271.

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