Poison Ivy

Poison ivy (*Toxicodendron radicans*) is a woody, perennial vine or shrub that can be found in fields, pastures, woodlands, farms and home landscapes. As a vine, it attaches itself to trees or other structures with hairy, aerial roots borne along the stem.

Poison Ivy

Poison Ivy has compound leaves that occur in threes (trifoliate or three leaflets). The edges of the leaflets can be smooth, wavy, lobed or toothed. Some leaves may resemble oak leaves. Poison oak (*T. pubescens*) looks similar to poison ivy, but it grows more erect and has hairs on both upper and lower leaf surfaces. Most mature poison ivy plants will flower and produce clusters of white, waxy fruit.

The entire plant is poisonous because all parts contain the irritating oil urushiol. Urushiol is a colorless or slightly yellow oil found in the leaves, stems and roots. The oil can remain active for months on objects. It can be picked up on tools, clothing and the fur of pets. Therefore, anything that may carry the oil should be carefully washed. Even dead plants may cause allergic reactions for a couple of years.

Some people are more sensitive than others to the effects of poison ivy. Sensitive people often develop a severe skin rash within hours after contact. Highly allergic people may develop a rash if they inhale smoke when burning poison ivy in brush piles, or if they contact pets with the toxin on their fur. However, sensitivity can change from time to time so that someone who was not affected by it at one time can have a reaction at another time.

The plants are most dangerous in spring and summer when oil content is highest. For those sensitive to the oil, a linear rash, resembling small insect bites, will appear within 12 to 48 hours, but a reaction can take up to two weeks to occur. This rash develops into a more severe rash and blisters. Washing with running water is recommended. Washing with soaps that contain oils, such as complexion soaps, can actually spread the irritating oil and make the rash more widespread. Unless the oil is removed from the skin within 10 minutes of exposure, a reaction is inevitable in extremely sensitive individuals. Less sensitive people may have up to four hours to wash it off, although it is generally accepted that the oil binds to the skin in 30 minutes. Thereafter, it is extremely difficult to remove with water. Rubbing alcohol is a better solvent for the oil than is water.

There are specially prepared cleansing agents (such as Tecnu and Zanfel) on the market that remove much of the rash-causing oil if applied within four to eight hours of contact.

Another treatment to help prevent a rash following exposure is with a manganese sulfate solution. A manganese sulfate solution has been shown to be effective both to inactivate urushiol on the skin, to relieve itching, and probably acts as a chelating agent for detoxification of urushiol.
Dr. West's Poison Ivy, Oak, Sumac Cleanser is the most common manganese sulfate solution available for treatment of poison ivy rashes.

Ivy Shield and Ivy Block Lotion are protective agents for sensitive individuals to reduce the risk of a rash when spending time in areas with these plants.

**Control**

Poison ivy grows fairly quickly and propagates itself by underground rhizomes and seeds. Seeds are quickly spread by birds and other animals that eat the small fruits. Poison ivy can get started in the landscape from a seed dropped by a bird and may quickly become a widespread problem. It often grows in shrubs and groundcovers making it difficult to control.

For light infestations, dig up or handpull small plants. You can also repeatedly cut back the plants to ground level. Eventually they starve to death. Start cutting early in the spring, about the time leaves unfold. When new growth appears, cut again. Inspect the plants every week or two. Whenever you see green growth, cut the shoots back to the ground.

If you choose to eradicate poison oak or poison ivy by cutting back the plants, you should protect your hands and arms. Always wear a long-sleeved shirt and long pants. Use protective gloves. Launder the clothing separately from the family laundry. Instead of disposable gloves, consider using plastic bags, the long kind that newspapers and bread loaves come in. Slip each hand into a bag and keep the bags secured to your arms with rubber bands. When you have finished cutting, remove the bags by turning them inside out. Then be sure to discard them, because the bags will now be contaminated with urushiol, the oil that causes the allergic skin reaction.

To eradicate poison oak and poison ivy chemically, use a herbicide that contains glyphosate (such as Roundup or Eraser), 2,4-D amine, or triclopyr. These herbicides can kill desirable plants, so be careful. If the poison ivy or poison oak is growing among plants you want to save, you can cut back the poison ivy or poison oak and spray or paint the herbicide only on the freshly cut stems or stump. If there are no desirable plants nearby, you can spray or paint poison ivy and poison oak without cutting them back first. Read and follow label directions whenever using any herbicides.

The herbicides glyphosate, 2,4-D amine and triclopyr are translocated from the leaves and cut stems to the rest of the plant, eventually killing the shoots and roots. Repeated applications may be necessary. Depending on weather and other factors, it may be several weeks before you discover whether you have successfully eradicated the plant, so be patient.

Herbicides work better when you spray at the right time. Poison ivy and poison oak are most sensitive to 2,4-D amine in late spring or early summer when the plants are actively growing rapidly. Triclopyr offers the best control after the leaves fully expand in the spring and before leaf color changes in the fall. Glyphosate offers the best control when applied between 2 weeks before and 2 weeks after full bloom (early summer) and should be mixed to a 2% solution.

Prepared by Debbie Shaughnessy, HGIC Information Specialist, and Bob Polomski, Extension Consumer Horticulturist, Clemson University. Revised by Joey Williamson, HGIC Horticulture Information Specialist. (New 06/99. Revised 12/06.)

This information is supplied with the understanding that no discrimination is intended and no endorsement by the Clemson University Cooperative Extension Service is implied. All recommendations are for South Carolina conditions and may not apply to other areas. Use pesticides only according to the directions on the label. All recommendations for pesticide use are for South Carolina only and were legal at the time of publication, but the status of registration and use patterns are subject to change by action of state and federal regulatory agencies. Follow all directions, precautions and restrictions that are listed.