Poison Ivy Control

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Poison ivy, botanically named *Rhus radicans*, is found in many habitats throughout Michigan. Every year it causes discomfort and poisoning to thousands of people. The plant is not usually noticed until after contact has occurred.

Poison ivy grows in both woods and open sites. Soil conditions for poison ivy adaptation range from very moist to dry. Common sites for poison ivy infestations are the edges of woods, fencerows, along roads and paths and in old stone walls. Poison ivy often climbs trees and telephone poles. It is not unusual to find poison ivy in the home landscape along with shrubs, ornamentals and other perennial plants.

Poison ivy is recognized by the presence of leaflets borne in groups of three, as the old saying "leaflets three, let it be" indicates. Other plants, such as Boston ivy, can also have three leaflets, but not all will be divided into three leaflets. Some leaves will have only one deeply cut leaflet. Virginia creeper is often confused with poison ivy, but Virginia creeper has five to seven leaflets per group, not three.

In the spring, young poison ivy leaves are reddish and drooping. As the leaves expand, the color changes to glossy or dull green. The leaves are usually smooth, although hairy forms are found. The leaf shape can vary widely.

Clusters of small greenish flowers may develop where the leaves join the stem after the leaves appear. The berrylike waxy fruits produced by these flowers in the summer commonly are grey to white. The berries also have lines running lengthwise which can give them the appearance of a "peeled orange." Poison ivy is easily identified by the presence of these berries after the leaves drop in the fall. Sometimes the berries are found covered with hair.

Poison ivy is spread by seed from these fruits. Seed is scattered by birds that use the fruit as an emergency food source in the winter. The poison ivy plant also has an extensive underground root system which can produce new plants. For this reason, simply killing the above ground portions of the plant will not eliminate this pest.

Poison ivy grows in several forms: 1) a climbing woody vine attached to trees, fences, or other objects; 2) an erect shrub a few inches high; 3) a creeping vine without support. Small aerial roots attach climbing vines to trees and other supports, giving the appearance of a "fuzzy rope." This attachment does not injure the tree.

Poisoning Principle

Skin irritation from poison ivy is caused by an oil present in leaves, stems, roots, flowers, and fruit. The oil is present at all times of the year. Soot particles produced by burning poison ivy can carry the oil. Severe cases of poisoning have been reported following the burning of poison ivy plants.

Contact with the plant is normally required for poisoning to occur. However, contact with contaminated objects, equipment, clothing, or animals, can also produce the poisoning symptoms.
The period between contact and appearance of symptoms varies, but a slight irritation and itching usually appears within 12 to 24 hours. As few as 3 to 4 hours or as long as several days can elapse between exposure and the appearance of symptoms.

Individual sensitivity to poison ivy varies greatly, and many people have never suffered the ill effects. Natural immunity is originally present in all persons, but is reduced by contact with the poison. Because immunity does not necessarily persist for all time, care should always be taken when dealing with poison ivy.

**First Aid**

The following is merely a first aid in case of suspected exposure. A rash may not necessarily be due to poison ivy, but can be caused by a communicable disease or other serious disorder. It is advisable to consult a physician if a rash appears.

In the case of suspected contact with poison ivy, wash the affected area using lukewarm water and a strong alkali laundry soap. An oil based soap should not be used as it tends to spread the poisonous oil. Wash several times with rinsing. It is undesirable to spread the poisonous oil by washing. However, this procedure will help prevent spreading the oil to other parts of the body.

**Control**

**Warning.** All poison ivy control procedures carry a high risk of exposure to the poisonous oil. Only persons known to be resistant should attempt the control of poison ivy.

**Cultural Control.** Digging the roots of poison ivy can eradicate the pest if done well. This is best done after rainfall or irrigation has softened the soil. Roots which are broken off in the ground can resprout.

Frequent mowing of the leaves can starve the roots due to the lack of food production. This must be a continual process (do not allow new leaf growth to remain for any length of time) to be successful.

**2,4-D.** The herbicide 2,4-D (2,4-dichlorophenoxy acetic acid) will kill the foliage of poison ivy and may kill the roots. Repeat treatments may be necessary if regrowth occurs. The "ester" form of 2,4-D is more effective than the "amine" form of 2,4-D on woody plants such as poison ivy. The ester form penetrates the plant tissue more readily than the amine form. However, 2,4-D vapors produced by ester forms can injure nearby vegetation. Grapes, tomatoes, and several other vegetables are extremely sensitive to 2,4-D. Care must be exercised to insure the chemical does not contact desirable plants. Grasses are not injured by properly applied 2,4-D. The amine form is recommended for use in the home landscape. The formulation is indicated on the product label. This material is available under several tradenames.

Spray poison ivy on a bright, still, and warm day when there is no danger of spray drift. Do not spray if rainfall is expected within 6 to 10 hours. This will wash the herbicide from the poison ivy leaves. Maximum movement of 2,4-D to poison ivy roots will occur during active growth in warm and sunny conditions. The poison ivy leaves should be thoroughly wet with the spray, but avoid excessive leaf runoff. Low spraying pressures (maximum of 20 psi) should be used when spraying 2,4-D to minimize drift. Should poison ivy regrowth occur following treatment, retreat when the plants are 4 to 6 inches high. Follow the herbicide label directions for proper application rates and other use guidelines.

A separate sprayer should be used for 2,4-D applications. This herbicide is difficult to remove and small amounts left in the sprayer can damage sensitive vegetation. If the sprayer must be used for other purposes, best cleaning of the sprayer can be obtained by rinsing with ammonia, including spraying through the nozzle. Follow with three water rinses, again spraying through the nozzle.

**Amitrol.** Amitrol can also be used to control poison ivy. This herbicide is nonselective and will kill or injure all plants it contacts. However, amitrol is also nonvolatile and will not injure nearby vegetation by vapor movement. Amitrol may be used under established trees and shrubs, but do not contact the leaves with the spray. It will remain active in the soil for short periods (4-6 weeks).

Treat the poison ivy in environmental conditions similar to those recommended for 2,4-D. The best time to treat is late spring to early summer (June or July). Retreat, if necessary, when the regrowth is 4 to 6 inches high. Spray the poison ivy plants until the foliage is thoroughly wet, but avoid excessive runoff.

Because amitrol moves throughout the roots and shoots of the poison ivy, eradication can be obtained with 2 to 3 applications.

Amitrol is sold under several tradenames including Amitrol-T, Cytoil, and Weedazol.

Follow the label directions for rates and other usage guidelines.

Herbicides can be effective tools for poison ivy control. All pesticides should only be used in accordance with the instructions and limitations found on the label.