CORNELL COOPERATIVE EXTENSION - SUFFOLK COUNTY

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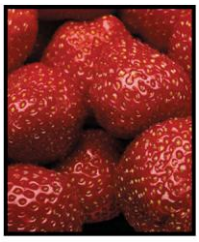

Poison Ivy

Toxicodendron radicans

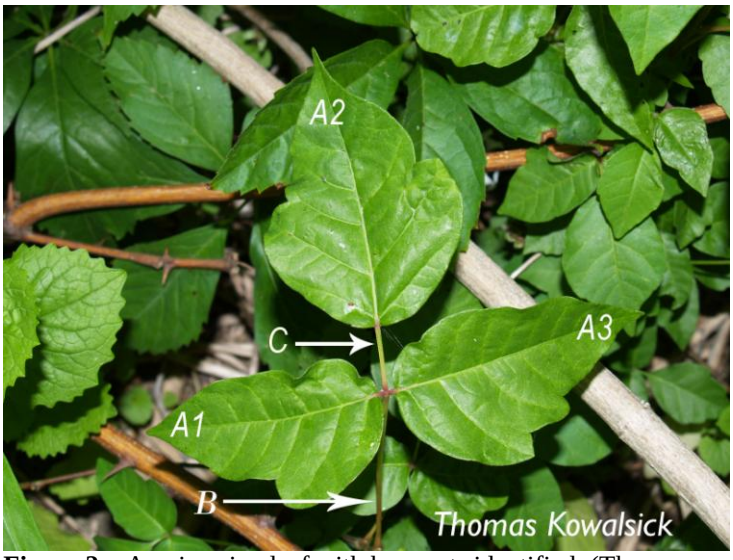

Figure 2 – A poison ivy leaf with key parts identified. (Thomas Kowalsick, Cornell Cooperative Extension – Suffolk County)

Figure 1 - A poison ivy leaf. *Note the variations of the leaf margins of the individual leaflets*. (Thomas Kowalsick, Cornell Cooperative Extension – Suffolk County)

Introduction: Poison ivy is the major cause of allergenic dermatitis in the eastern United States. All parts of the plant contain resinous compounds, known as urushiols, which cause inflammation of the skin, blistering, and itching. You can not catch poison ivy by "just walking in the vicinity of a plant." The toxic compounds can be transmitted in smoke (from burning the plant) and by direct contact with any of the plant parts. In addition it is possible to contact the toxic compounds through objects or animals, which have been exposed to the plant, including gardening tools, pets and clothing. Some feel that you can "catch" poison ivy only during the spring and summer when the leaves are present. This is not true, dermatitis response can occur year round including if you contact stems and roots during the winter months. Just because a poison ivy plant is dead does not make it incapable of causing allergenic dermatitis. The urushiols can remain active on dead plants and even other objects for over a year.

Description of the plant: Poison ivy is a deciduous vine, which grows on or just under the soil surface as well as climbing up objects such as trees and fences. As a vine it attaches to surfaces via aerial roots and can climb as high as 20 to 33 feet into trees or other objects. Poison ivy has ***alternate compound leaves*** with ***3 leaflets per leaf***. The margins (edges) of the leaflets can be toothed, lobed or entire (smooth). The leaflets can vary in shape (**Figure 1**), but are most commonly egg-shaped.

The following lettered descriptions refer to the photograph in **Figure 2**. This will help you understand the parts of a compound leaf and some key characteristics of poison leaves and leaflets. Each compound leaf consists of 3 individual leaflets identified as ***A1***, ***A2***, and ***A3***; the leaflets are attached at the tip of a long leaf-stalk called the petiole and is identified as ***B***; the middle leaflet (***A2***) is attached by a longer leaflet-stalk called a petiolule in comparison to the short petiolules of the 2 side leaflets (***A1 & A3***). When looking at the two photographs notice how the overall leaflet shape and type of toothing is highly variable between leaflets on the same stem. This

variability also exists as well among plants within a patch and between patches. The leaves are purplish to reddish when unfolding in spring (May to early June), bright green and often shiny (with a varnished appearance) in summer and turning a vivid orange-red to wine-red in autumn in sunny areas, but often lacking the bright color in shaded places. The leaves are smooth and hairless on both surfaces except for small tufts of brownish hair on the underside of the leaflet along the mid-vein and in the angles formed by the mid-vein and some of the lower branching veins. The flowers are small, white or greenish, with 5 sepals and 5 petals in branching clusters from the leaf axils (angles between the petiole and stem). These flower clusters are inconspicuous because they are often hidden below the dense leaf canopy and because many plants do not flower every year. Each flower in the cluster is followed by a whitish to dull greenish-yellow, dry berrylike fruit which is about 1/5 in. diameter and with lengthwise ridges and somewhat resembling a peeled orange. Poison ivy flowers in June and July and the berries are produced by September but often remaining on the low leafless stems all winter.

Habitat: Poison ivy can be found growing in landscapes, disturbed sites, woodlands, and wet lands. It will invade these sites via its creeping woody stems and through seeds dropped by birds. It thrives under a variety of conditions and is often seen in seashore areas on Long Island.

Management: Poison ivy may be uprooted by pulling it out of the ground when the latter has been softened by freezing and thawing in spring, usually in March. Remember that the toxic compounds are present in all plant parts year-round so obviously, all precautions and great care must be taken to insure that the skin does not come in contact with the toxic compounds, either directly or from clothing or tools. A person who knows he or she is quite sensitive to poison ivy ***should not attempt this means of control***. Poison ivy pulled out in this manner ***should never be burned*** to avoid spreading the toxic compounds in smoke.

In areas that can be plowed, poison ivy may be effectively controlled by close mowing followed by plowing. It may be necessary to repeat the plowing or to follow it with a cultivated crop to kill or starve out the pieces of stem and root that were buried in the process.

Various products containing the non-selective herbicides **glyphosate** or **triclopyr** are labeled for controlling poison ivy. You can search for products using the NYS PIMS website listed below. Because these herbicides usually kill all vegetation that is treated (thus the term non-selective) they should be used with discretion and caution to avoid killing nearby desirable plants. Read and follow all label instructions.

Information obtained from *Weeds of the Northeast*, by R.H. Uva, J.C. Neal and J.M. DiTomaso, 1997; and *Ontario Weeds Descriptions, Illustrations and Keys to their Identification*, Publication 505, by J.F. Alex and C.M. Switzer, Ontario Agricultural College, University of Guelph, Guelph, Ontario, Canada; and *Poison Ivy, Poison Sumac, and Other Rash-Producing Plants*, by J.M. Kingsbury, Information Bulletin 106, Cornell University, 6/76.

Pesticide recommendations obtained from *2009-2010 Pest Management Around the Home Part II – Pesticide Guidelines*. Copies are available from Cornell Cooperative Extension – Suffolk County.

The Pesticide Management Education Program (PMEP), in cooperation with the New York State Department of Environmental Conservation (NYSDEC), maintains a web site with a searchable database for pesticide products currently registered in New York State. Individuals who have Internet access can locate currently registered products containing the active ingredients suggested above at http://pmep.cce.cornell.edu/pims/current (NYS PIMS).

This publication contains pesticide recommendations. Changes in pesticide regulations occur constantly and human errors are still possible. Some materials mentioned may no longer be available, and some uses may no longer be legal. All pesticides distributed, sold or applied in New York State must be registered with the New York State Department of Environmental Conservation (NYSDEC). Questions concerning the legality and/or registration status for pesticide use in New York State should be directed to the appropriate Cornell Cooperative Extension Specialist or your regional NYSDEC office. Read the label before applying any pesticide.

TK 2/2010