

Field Safety – Insidious Plant Dangers and Prevention

By Todd Jones, ACRT, Inc.

Utility vegetation management professionals are for the most part, lucky folks by most measures. We get to spend a fair amount of time outdoors, walking amongst the trees – sometimes in remote areas. We will occasionally happen across some wildlife along the way, maybe get a chance to see a nice old growth specimen and all the while we get to experience the changes in the weather, for better or for worse; while it has its moments, it would be hard to argue that we'd rather sit in an office all day staring at a computer screen.

But being outside so much, and with that, sometimes bush-whacking our way into right-of-ways, we face often hidden dangers that have the capacity to debilitate with just a simple whisper like, hardly noticeable contact. These seemingly harmless adversaries are indeed poisonous plants.

Any of us that have spent enough time in this business have likely been affected. For ACRT, Inc., severe poisonous plant reactions represent approximately 40% of all OSHA recordable injuries each year. Fortunately, with a little education, training and knowledge of preventative measures, these exposures can be managed.

Poison Oak / Poison Ivy

Only the oil (Urushiol) from Poison Oak and Ivy plants can cause a rash (allergic contact dermatitis). The best way to avoid contact with Urushiol and development of a rash is to avoid the plants all together. Since this isn't always possible, there are times when we don't even know we've come in contact with them, it's important to learn to recognize these plants, and then take some preventive measures to protect yourself when in areas where these plants live even if you don't see them. Both Poison Oak and Ivy remain toxic even in the winter when leaves are off – making identification and avoidance even more difficult.

Poison Oak has leaves that look like small Oak leaves, usually with three leaflets but sometimes up to seven leaflets per leaf group. It usually grows as a vine or a shrub. This plant is found in two varieties: Eastern and Western (it's not just a western U.S. species.) But Western Poison Oak probably causes more trouble than any of the other poisonous plants. As California's most prevalent woody shrub, exposure seems inevitable (i.e. – it's everywhere!)

Poison Ivy is a highly toxic plant is found in most regions of the United States. It can grow as a low shrub, ground cover, or as a climbing vine. It has three leaves on a red stem and white, berry-like fruit in clusters under the leaves. The leaves are shiny and green in the summer and brilliant orange-red in the autumn. The leaf margins can be smooth or slightly lobed.

But that's not all, there are others;

Poison Sumac is found in the Eastern United States in swamps and peat bogs, growing from 6 to 20 feet in height. It is considered one of North America's most dangerous plants. The leaves are innately compound with 5 to 13 smooth leaflets per stalk and the fruit, green to whitish-gray, is berry-like and grows in clusters between the branch and the leaf. Poison Sumac is similar in shape to other sumacs whose fruit grows on the ends of the branches and is usually red. Poison Sumac can be distinguished from harmless sumac by its drooping clusters of green berries. Harmless Sumac has red, upright berry clusters.

Giant Hogweed plants thrive in many habitats but do particularly well where the soil has been disturbed, such as on wasteground or on riverbanks, where erosion combined with a good supply of groundwater provide ideal

conditions. The plant, a member of the cow parsnip (Apiaceae) family which includes the humble carrot, has a base of large foliage surrounding the main stem which can grow to a height of 15 feet (5 meters). The small white flowers and seed pods radiate out from the top of the main stem and form a distinctive white canopy. This is similar to, but much larger than, the flowering heads found on the Common Hogweed and can cause a very severe reaction when contacted. The growing season starts in late March, with full height and flowering being reached in late June and July. Hogweed is an invasive species, native to Eurasia, that is known to now be established in parts of Maine, New York, Pennsylvania, Illinois, Washington, Oregon and likely other states as well.

Coming into contact with the sap of Giant Hogweed, followed by exposure to sunlight, can produce painful, burning blisters, also known as photo-dermatitis. Hogweed stems contain a large amount of sap that squirts out when stems are broken or cut into. Contact with the toxic sap usually happens when people cut down hogweed plants without taking precautions.

While their appearance changes with the seasons, Poison Oak/Ivy usually contains the same amount of Urushiol year-round, even in the winter when they sometimes appear as bare sticks. Black areas on the plants may help to identify them in winter (Urushiol turns black when exposed to air). Living, dormant, and dead Poison Oak/Ivy plants all contain Urushiol, although dead leaves do not contain significant amounts. Poison Ivy, Poison Oak, and Poison Sumac all contain a light oil that is a skin irritant to most people although there are a fortunate few who seem unaffected. The oil itself can stay active for days on clothes, shoes, pets, tools, and pieces of wood. You do not have to touch the plant itself to be affected, you only have to come in contact with the oil.

If you are going to be working in heavily infested where Poison Oak or Ivy grows, it's very important to get and use products like Tecnu or Zanel that are designed to remove the plant oil (Urushiol) from your skin. (These items are available at most drugstores or online.) Equally important is to plan ahead and wear proper clothing: (long pants, long sleeves, gloves, etc) that will help prevent the oil from touching your skin. Remember, clothing or any other object that has touched the plant must be handled carefully and washed thoroughly following exposure.

Barrier creams and lotions can also be used to prevent Urushiol from contacting your skin or to reduce the severity of a reaction. Less than 1 hour before contact with the plant, apply the product in a thick, complete layer. It's recommended that you wash off barrier creams within 4 hours (or as soon as possible) after contact with the plants. These products only delay the penetration of the Urushiol. Products containing 5% Bantoquatam (such as Ivy Block) have been shown to be highly effective in preventing the rash and reducing its severity. These products are available without prescription and are easily found on the internet.

If you think your skin has touched Poison Oak or Ivy:

1. Wash affected skin surfaces with Tecnu Extreme, or other post exposure product, or wipe skin down with rubbing alcohol immediately following exposure - most of the oil is absorbed into the skin within 30 minutes.
2. Rinse the area thoroughly with water
3. Clothing should also be washed right away, separately from other clothing.

Urushiol Facts:

- 500 people could itch from the amount covering the head of a pin
- Specimens of Urushiol several centuries old have found to cause dermatitis in sensitive people.