I bet you would need to go to a rather remote place on the planet to find someone who is not familiar with this song. And it would be harder to find anyone in the South who has not had an experience with the plant itself. For the lucky ones, perhaps the experience is only through a family member or classmate. In that case often a good laugh, right? If there were some way to tally up all the negative encounters with hornets, bees, poisonous snakes, sharks, disease-bearing ticks, skunks, jellyfish stings, lighting and perhaps even fire ants, I suspect rashes from poison ivy would outscore their combined suffrage.

Poison ivy is but one of over 700 North American plants known to be toxic to people or livestock. The list includes algae, fungi, lichens, ferns, horsetails, certain pines and various flowering plants. The majority of these are poisonous only if eaten, but poison ivy and its relatives are unusual in that their poison can be transmitted by simple contact with the plant. Did you ever wonder about all the products that boast “made of 100 percent natural ingredients?” Well, perhaps you should, because toxic plants are packed with only natural substances. So here is a little hint, don’t try to eat poison ivy, the all-natural plant, as it can get you that way too.

Poison ivy, a ubiquitous species, grows throughout most parts of the eastern and central United States and southern Canada. It is found throughout the South. People become confused because this plant does not always take on its ivy-like growth habit. Poison ivy can grow into an ivy-like vine, a woody shrub or simply as little woody stems poking upward from the forest floor.

The syndromes caused by poison ivy have been known since the days of Captain John Smith and they have been described in various American Indian cultures. This plant was one of the earliest formally named North American species when Jacob Comnus described it in his “Plantarum Canadensis” in 1635. Since then the taxonomic name has been revised several times, and the current name for the genus does not even have a Latin equivalent and dates back to one used by ancient Greeks for Old World plants with similar toxic traits.

Measles make you bumpy
And mumps’ll make you lumpy
And chicken pox’ll make you jump and twitch
A common cold’ll fool ya
And whooping cough can cool ya
But poison ivy, Lord’ll make you itch!!

© Jerry Leiber & Mike Stoller, 1959

“Leaves of three, let it be.” This seemingly innocuous vine has been the scourge of countless outdoor enthusiasts.

POISON IV-Y-Y-Y-Y-Y,
WRITTEN BY DAVID S. LEE & PHOTOGRAPHED BY MELISSA McGAW

WRITTEN BY DAVID S. LEE & PHOTOGRAPHED BY MELISSA McGAW
The poison ivy plant produces an organic oil called urushiol which causes an allergic skin rash on contact. This is known medically as urushiol-induced contact dermatitis. The skin rash causes intense itching and leads to the formation of blisters. Open blisters lead to sores and these sores can become infected. The urushiol produced by poison ivy is very potent and can remain active for several years after the plant is dead.

The toxic effect is caused by urushiol, a chemical that is present in the leaves, stems, and flowers of poison ivy. This chemical can be absorbed through the skin, eyes, or mucous membranes. Poison ivy contains urushiol, a chemical that causes an allergic reaction in people who are sensitive to it. This reaction is known as contact dermatitis.

To identify the plant, consider the following:

- **Skin contact with poison ivy:** The rash begins as a cluster of red spots that blister. The blisters are filled with a milky fluid that contains a protein called urushiol. When the blisters rupture, they leave behind a reddish rash that often spreads to other areas of the body from scratching.
- **Inhalation of urushiol:** The rash on the face and hands may be more severe than on other parts of the body. The rash may be delayed by several days and can last for weeks or months.
- **Ingestion of urushiol:** If urushiol is swallowed, it can cause a severe allergic reaction. This reaction can be life-threatening and may require medical attention.
- **Eating poison ivy:** Eating poison ivy can cause a severe allergic reaction. This reaction can be life-threatening and may require medical attention.
- **Exposure to the skin:** If you come in contact with poison ivy, you can develop a rash. The rash can develop within hours or days after contact.

**How does the poison work?**

The poison ivy plant produces a chemical called urushiol, which is absorbed through the skin, eyes, or mucous membranes. This chemical causes an allergic reaction in people who are sensitive to it. The reaction is known as contact dermatitis.

**What about similar appearing plants?**

There are a number of plants that resemble poison ivy. These include:

- **Poison sumac:** This plant is found in the eastern United States and Canada. It has smooth, greenish-white berries and a distinctive clusters of three leaves. It is often confused with poison ivy.
- **Poison oak:** This plant is found in the western United States and Canada. It has smooth, yellow-green leaves and a distinctive clusters of three leaves. It is often confused with poison ivy.
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wardrobe, her prominence grew in both the comic books and films as the feminism movement even created a demand for botanical female super villains. So let’s never underestimate the powers of poison ivy.

**WHAT CAN I DO IF I GET IT?**

There actually is no cure, so prevention is still your best bet. Learn what the plant looks like, and since you obviously did not do a study of the changing nature of one’s body reaction to the plant, but it’s hard to ignore a good teaching moment. You have got to love nature.

Actually no one gets a reaction on first exposure, but your body becomes sensitized to it, and some people require repeated exposure before their skin reacts to the plant’s oils. However, most if not all people who continue to have no allergic response will become sensitized over time with repeated or concentrated exposure to urushiol. Studies conducted in the mid-70s showed that about 40 percent of people exposed to the quantity of urushiol in just a piece of a leaf one-quarter inch in diameter will have a reaction. This increases to about 75 percent in stronger doses.

Even minor reactions are annoying and unpleasant. You can always just scratch, but it does not do a bit of good, although it feels good while you are doing it. You do have to be concerned about the secondary skin infections resulting from your scratching later.

**SOME OTHER STUFF YOU MIGHT WANT TO KNOW**

To those susceptible to poison ivy the news is increasingly bad. As a result of land clearing and global warming, the plant is increasing in abundance and toxicity. Poison ivy needs sunny sites in open situations and along the edges of woodlands. In our yard in Raleigh, the plant was everywhere when we purchased the property in the mid-70s, but as the forest matured and the property became more shaded it is mostly died out. Today the plant grows entirely near the edges of our woods in the form of large woody vines. The ivy climbs high into the pines and oaks, vines the size of my arms climb 40 feet and more into our trees. Back in the woods, 20 to 30 feet away from the edges, the ivy totally disappeared.

Global warming is altogether another issue. Warmer temperatures makes plants more toxic, as does increased levels of carbon dioxide. Both have a positive effect on the concentration of urushiol. Years back, the first summer I worked in Florida, I had an extremely bad reaction to poison ivy. At the time I did not understand why the same plant that had I encountered many times in Maryland with mild reactions, in Florida caused severe swelling and large oozing blisters. Studies comparing the chemical composition of the principal active components of the urushiol in poison ivy leaves from New York, Maryland and Mississippi showed that there is considerable geographic variation in the plant’s potency.

The plant is not without merit. Poison ivy is a native species and it does have ecological utility. A number of songbirds eat the berries in the winter. Downy woodpeckers also eat the berries and deer can eat the poison ivy plants and not be affected by the toxins. Birds that feed on the plant’s fruit disperse the seeds in their droppings. Since I like listening to the songbirds, enjoy watching woodpeckers and deer and like venison, I guess the fact that these animals may find poison ivy enjoyable to eat gives the plant some redemption—but not much. In the fall the red hues of their colorful leaves add contrasting colors to fall landscapes. And for those of us who enjoy the outdoors, we need to appreciate poison ivy, poisonous snakes, hornets, biting insects, skunks and bears. There are vast numbers of people who never venture into the woods. The biting, stinging and irritating flora and fauna collectively attract to city folks and their unattended children out of our woodlands and in shopping malls, bowling alleys and at home with their video games.

Regular contributor David S. Lee is director of the Tortoise Reserve, an international turtle conservation organization.

**TREATMENT**

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<th>Use</th>
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<td>Application of cold water</td>
<td>to compresses to alleviate swelling.</td>
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<td>Use of antihistamines</td>
<td>to reduce itching.</td>
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<tr>
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<td>to reduce itching.</td>
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<tr>
<td>Local or systemic administration of cortisone drugs</td>
<td>to reduce itching.</td>
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<td>Removal of the antigen from the skin with alcohol or alkali soap.</td>
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<td>Application of cold water compresses to alleviate inflammation.</td>
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<tr>
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<td>Use of antibiotics to minimize secondary bacterial infections.</td>
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