

#### **Britt A. Bunyard**

hen I lead groups of people into the woods, it's most often for the purpose of finding mushrooms and other fungi. But if I sense there are some neophytes along, I usually make sure we "see" the poison ivy first.

"Leaves of three, leave it be." Yes, almost everyone seems to know this old rhyme. Even so, I'm amazed at how many people these days do not know what poison ivy, poison oak, or poison sumac look like. So, I usually make it a point to show people the warning signs of these irritating plants. (Do YOU know the signs?) I also make it a point to dispel some myths about poison ivy and poison oak.

First off, poison ivy is not actually an ivy (*Hedera* species); poison oak is not actually an oak (well-known trees of the genus *Quercus*). But both are members of the sumac family (Anacardiaceae), along with poison sumac *Toxicodendron vernix* (formerly *Rhus vernix*), mango trees, cashew, and Japanese lacquer tree.

Where do these plants occur? This is a good question. Westerners, and especially Californians, are much more familiar with poison oak, *Toxicodendron diversilobum* (formerly *Rhus diversiloba*). But there is a western species of poison ivy, *T. rydbergii*. Those of us east of the Rocky Mountains are more familiar

with poison ivy, Toxicodendron radicans (formerly known as Rhus toxicodendron and Rhus radicans), but we too have an eastern species of poison oak, T. pubescens (formerly Rhus toxicarium). Western poison oak (T. diversilobum) is so common in some parts of California that entire hillsides seem to be overgrown with it. The native Chumash people of modern day southern California were fond of the plant and had many uses for it, including weaving the flexible stems into baskets. (They seemed to develop complete immunity after life-long handling of the plants.) Curiously, Los Angeles takes its name from the plant; originally known as yangna or lyaanga, which translates as "poison oak place."

Of all the species of Toxicodendron (toxico- "toxic," -dendron "tree"), the common poison ivy of the East, T. radicans, has by far the largest range in North America (and is even known in Asia). Indeed, it's thought to have become much more widespread since the arrival of Europeans to the New World. Poison ivy (and its "toxicleaf" cousins) favors open areas on the margins of woods or openings in wooded areas where a bit more sunlight is available. Roadsides, along trails, camping and picnic areas, the edges of parking lots, parks, empty lots, and many other "waste" areas are perfect habitat ... and most often frequented by people. Know the signs of poison ivy.





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8948 Illinois Hwy 18 • Magnolia, IL 61336 PH: 800-438-4213 • FX: 309-364-2960 EMAIL: tom@morelmania.com Are YOU sensitive to poison ivy or oak? If so, you're likely starting to itch by now. If you're not sensitive you're one of the lucky ones—I've read many authorities say that somewhere between

5 and 50% of the population is not sensitive to urushiol, the irritating oily compound on the leaves and in the sap of these widespread plants. (If you are sensitive, you're very likely sensitive to the skins of mango fruits, too.) A skin reaction to poison ivy (more correctly, to urushiol) is termed an allergic contact dermatitis—an allergic reaction. Wherever the oil makes contact with your skin you may suffer from a mild to severe rash, blisters, and so much itching. For those who are super sensitive the reaction can be much more severe, as can anyone's reaction if urushiol is ingested or inhaled

(which can happen if you are around a fire that's burning up large stems of the stuff). The first signs of a reaction by your skin may take days to manifest. And it may not all happen all over you at once. This has no doubt led to the myth that your mother likely told you: "Don't scratch, you'll spread it around!" It won't happen. You cannot spread it around. In fact, the juice in those blisters on your skin is made by you as part of your immune reaction. Furthermore, you cannot spread it to another person for the same reason. Only the oil of the plant can cause the reaction. You CAN re-expose your skin to poison oak or ivy days and probably weeks after your encounter with the plants by handling contaminated clothing. It's happened to me numerous times! In fact, I've been in poison oak in California, very diligently scrubbed with soap right afterwards and avoided all signs of affliction, only to go home to Wisconsin and unload a suitcase full of dirty (and contaminated) clothing days later and come down with a bad case of rashes on my arms.

Take a good look at these images and be sure you can spot the signs of poison oak and ivy next time you go into the woods. The plants are pretty easy to spot in the summer with their shiny green leaves "of three." But all species of *Toxicodendron* can take

Not only is poison ivy more common now than prior to Europeans' arrival to North America, scientists expect poison ivy to continue to flourish. The increased carbon dioxide in the air now, compared with centuries ago seems to benefit the plant. It is expected that as carbon dioxide continues to increase during the current century, so too will the prevalence of this noxious weed. 👔

on different growth habits: in one location they will grow up the sides of trees with thick hairy stems (the "hairs" are actually lots and lots of epicormic rootlets that allow it to stick to just about any surface), at other times they will creep low along the ground, in other locations they will grow upright like a bush. Early in the spring, the newly emerging leaves





in the fall when the plants are actually fairly attractive in fall colors and showy white berries. Californians, you have it most difficult. The plant is dormant and

t's uncertain why species of Toxicodendron produce urushiol. It is certainly not to deter herbivory by mammals as humans seem to be the only ones affected. Many grazing mammals love to eat poison oak and ivy-especially goats. Dogs are unaffected, even on their exposed noses. But that doesn't mean they are unable to share their experience with the plant—if the urushiol oil gets onto a dog's fur coat and it comes in contact with your skin, a rash is sure to ensue! T

leafless during the winter months when your best mushroom season is full on. Leafless may make it less noticeable, but does not make it any less noxious.

#### Are you *really* sensitive to

poison oak or ivy? Try Tecnu for relief before the rash sets in. Tecnu is a skin cleanser manufactured by Tec Laboratories, a pharmaceutical company based in Albany, Oregon. You can use it on your skin, clothing, and pets. Tecnu is made from deodorized mineral spirits, water, propylene glycol, octylphenoxypolythoxethanol, mixed fatty acid soap, and fragrance. The invention of the cleanser has an interesting story. Tecnu was invented by Robert Smith, a Mead Johnson chemist, during the early 1960s. Tecnu (for "Technically New") was intended to remove radioactive fallout dust from skin. Several years later, Smith's wife discovered another use for the cleanser. After an exposure to poison oak, she washed with Tecnu and did not suffer any signs of rash that she was expecting. In 1977 the company began to market Tecnu to foresters, firefighters, surveyors, and utility crews. I can vouch for the effectiveness of Tecnu. Furthermore, it's been tested clinically and found to reduce the exposure of urushiol by around 70% compared to about 50% for soap (and about 0% for water). Tecnu is a bit pricey in stores, but if you're sensitive you may be willing to pay *anything* for relief of the itching!

# BEWARE OF POISON IVY

### Irritated by poison ivy? Technology to the rescue!

Rebecca Braslau, a professor of biochemistry at the University of California-Santa Cruz, has developed a fluorescent nitroxide-based compound that sticks to urushiol oils. Just spray on this chemical and if you've had a brush with poison ivy or oak, the urushiol will glow on your skin or clothing, taking the guesswork out of where you need to apply soap and water or Tecnu. Braslau published her results in the *Journal of Organic Chemistry* (2013; 78[2]: 238-245) and she is now working on patenting her discovery.

## After Many Attempts

Just because it wasn't here yesterday doesn't mean it won't be here today.

Some things arrive only in their own time.

Just because I am talking about morels doesn't mean I'm not talking about love.

And here it is, golden and misshapen, something I step over once before discovering.

I mean, isn't it wonderful when sometimes we choose to show up and then, well, it's not really an accident, is it, that we find ourselves with our hands, our hearts so full.

Rosemerry Wahtola Trommer Placerville, Colorado