



Poison Ivy, Poison Oak and Similar Plant Identification

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“Leaves of three let it be.” From that rhyme, you would think identifying poison ivy would be simple, but that isn’t necessarily the case. Knowing how to recognize poison ivy, oak and sumac can save you from a miserable red itchy rash. All three of these closely related plants contain an irritating, oily sap called urushiol. Urushiol causes many people to break out in a rash when it comes in contact with their skin. Being able to identify these plants is beneficial considering there are many plants that look similar, but are harmless. This Fact Sheet is to help inform and educate the general public on how to identify poison ivy, poison oak and poison sumac so they can be avoided.

Poison ivy (*Toxicodendron radicans*) is located throughout the lower 48 states and grows in a variety of conditions, although it is most abundant along forest edges and in open forests with moderate sunlight. In Oklahoma, poison ivy is distributed across most of the state but is less abundant in the southwest and panhandle areas of the state. **Poison oak** (*Toxicodendron toxicarium*) is mostly in coastal states in the east and west and not as common in the central region. Poison oak does occur in scattered locations across Oklahoma but is generally less abundant than poison ivy. **Poison sumac** (*Toxicodendron vernix*) is mainly found in the eastern and southeastern parts of the U.S. because it prefers to grow in wet, forested areas. It does not occur in Oklahoma except for few isolated spots along the Red River.

Poison ivy leaves are compound and consists of three individual leaflets (Figure 1). The leaves can vary from smooth to being lobed (looking like a pair of mittens) or toothed (pointed). Poison oak leaves are usually in clusters of three leaflets. Its leaves are lobed or deeply toothed, with rounder edges (Figure 3). Just as leaf shape varies, so do the colors of leaves on each plant. Poison ivy leaves start out a shiny green in the spring and become a dull green during the summer. In the autumn, poison ivy leaves turn yellow or scarlet (Figure 2). Poison oak is green throughout the spring and summer



Figure 1. Poison ivy in the summer. This poison ivy has lobed edge leaflets. Photo courtesy of David Hillock.

and become yellow with brown undertones in the fall (Figure 4).

Flowers of poison ivy and oak are greenish yellow appearing in panicles from the leaf axils on the stem. Fruit of poison ivy and oak are grayish-white to creamy white and have ridges that make it look like a tiny pumpkin.

There are many common plants people confuse with poison ivy and poison oak. The common ones in Oklahoma



Figure 2. Poison ivy in the autumn. It has smooth-edged leaflets. Photo courtesy of www.poison-ivy.org



Figure 3. Poison oak in the spring/summer with lobed edge leaflets. Photo courtesy of Bailey Lockhart



Figure 4. Poison oak in the autumn. Photo credit Linda Tanner Flickr



Figure 5. Virginia creeper has toothed edge leaflets. Photo courtesy of Randy Evans

are Virginia creeper, fragrant sumac, skunkbush sumac and boxelder.

Virginia creeper (*Parthenocissus quinquefolia*) leaves are compound and contain five leaflets, (Figure 5) though leaves with three leaflets can sometimes be present. Virginia creeper looks like it is giving you a “high five” so it is easier to identify amongst the similar-looking plants. Each leaflet has toothed (pointed) edges, which makes it look more similar to poison ivy than poison oak or sumac. Furthermore, Virginia creeper, like poison ivy is red when it first emerges, but then turn green as it matures. During the autumn, it turns back to red or maroon color. It can cause a mild rash in some individuals, but usually not like the rash that poison ivy/oak causes.

Fragrant sumac (*Rhus aromatica*) has trifoliate-toothed leaves that are a green-blue shade (Figure 6). During the autumn, the leaf color changes to shades of red and purple. Fragrant sumac, unlike poison oak, produces red, hairy fruits (Figure 7) on female plants; this is a good identifying clue. Poison ivy and oak have whitish or yellowish berries. Sumac also tends to form dense compact mottes (grove of trees) rather than having the more open structure of poison oak.

Skunkbush sumac (*Rhus trilobata*) looks very similar to fragrant sumac. Leaves are compound and the leaflets are waxy and soft-textured, and grow in groups of three (Figure 8). The leaves are green during the summer and spring, then turn a bright red or orange during the autumn. The fruit of skunkbush also are red to orange and hairy, which distinguishes sumacs from poison ivy and oak, which has whitish or yellowish berries.



Figure 6. Fragrant Sumac has toothed edge leaflets. Photo courtesy of David Hillock



Figure 7. Fragrant sumac with berries. It has tooth-edged leaflets. Photo courtesy of David Hillock



Figure 8. Skunkbush sumac has lobed edge leaflets. Photo courtesy of Patrick J. Alexander, hosted by the USDA-NRCS PLANTS Database



Figure 9. Boxelder has toothed edge leaves. Photo courtesy of Randy Evans

Boxelder (*Acer negundo*) leaves are compound and consists of three to five toothed leaflets (Figure 9). The leaves are in opposite pairs and are light green in the summer with little color variation in the fall. Young boxelder can be mistaken for poison ivy, but the difference between the two is that boxelder leaves are opposite, while poison ivy leaves are alternating.

Control

There are several different methods to control poison ivy, oak and sumac. Lawnmowers or weed eaters can remove the aboveground portion of the plant, but this is not a permanent solution as they will resprout from the root. The urushiol oil from the plants will likely adhere to equipment and clothing. Keep in mind the proper attire that should be worn with potential exposure to the urushiol oil. This includes eye protection, gloves, long pants and long sleeves. For smaller gardens or flower beds, hand pulling works but it is best done when the seedling is still small. Be sure to wear disposable gloves to keep the oils off your skin and note that even the stems and roots contain the oils. A simple method that limits contact with the plant when pulling it by hand is using a plastic bag over your hand. With your hand in the bag, grab the plant and pull it out of the ground; while still holding onto the plant pull your hand out of the bag; the plant is now in the bag and you never had to touch it. Poison ivy will grow up into trees and the stem can be cut at ground level with a hatchet or saw. Herbicides are the only effective way to permanently kill poison ivy or oak. Several herbicides are effective: Glyphosate and triclopyr are two of

the more common effective herbicides. Both can be applied as foliar application to actively growing plants. Alternatively, the cut stem can be treated anytime during the year except early spring during sap flow. Following herbicide directions precisely is critical to ensure the safety of yourself and other plants surrounding the poison ivy. Hiring a professional can give you peace of mind and is always an option if you do not feel comfortable handling the herbicides yourself. Burning poison ivy or oak is not recommend because the urushiol oil is still active in smoke and can cause severe eye, nose and lung irritation if breathed.

If you come in contact with any poison ivy, oak or sumac, steps can be taken to help control or even prevent the spreading of the developing rash. Consult a physician first and follow their professional advice if you get a rash.

To help prevent a reaction, immediately wash the skin where urushiol oil is suspected. Use rubbing alcohol, dishwashing liquid or a special soap made for use after contact with poison ivy or oak. Do not scrub the area when washing, because that can cause the oil to spread further onto more skin. Rinse thoroughly with cool water. The itchy rash can be relieved by using topical lotions and creams such as hydrocortisone or calamine lotions. Cool compresses can help to reduce itching and inflammation.

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