Poison Sumac

FACT SHEET 18-049-0718

Poison sumac grows as a shrub or small tree and is found from Maine, south to Florida, west to Texas, and north to Minnesota. It thrives in wet soil and is most commonly encountered in swamps, marshes, and along river or pond shorelines. These plants are poisonous if eaten and cause skin irritation to humans at all times of the year and at all stages of growth. All parts of the plant, except the pollen, contain urushiol, a toxin that causes irritation and blistering of the skin. To cause injury, urushiol must contact the skin, either directly by touching the plant, or indirectly by touching things that have touched the plant such as clothing, tools, animals, or firewood. Although some skin-applied products are marketed that claim to protect against or reduce the severity of dermatitis, the best prevention is to learn to recognize poison sumac and always avoid it.

What does poison sumac look like?

Poison sumac (*Toxicodendron vernix* (L.) Kuntze, also known as “poison elder,” “poison dogwood,” “swamp sumac,” “poison-wood,” and “poison-tree,” is a woody, perennial plant that grows as a shrub or small tree (average height, 5 to 6 feet, maximum, 25 feet). The leaves are arranged in groups of 7 to 13 oval leaflets with smooth edges. The leaf stems are always red. The bark is gray and smooth. Small yellow-green flowers develop into glossy pale-yellow or cream colored berries, arranged in slender, drooping clusters. Plants are reproduced from seeds in the fruit.

Leaves of poison sumac consist of 7 to 13 leaflets arranged in pairs with a single leaflet at the end of the midrib. The veins from which the leaflets grow are always red. The leaflets are oval-shaped with smooth edges. Mature plants range in height from 5 to 6 feet, but can grow to 25 feet. Photo: Norman Melvin, hosted by the USDA-NRCS PLANTS Database.

Where am I likely to encounter poison sumac?

Poison sumac is found from Maine, south to Florida, west to Texas, and north to Minnesota. It is most abundant within the coastal plains and Great Lakes regions, and thrives in wet soil associated with swamps, marshes, and along river or pond shorelines.

How can I tell the harmless types of sumac from poison sumac?

Smooth sumac (*Rhus glabra*), staghorn sumac (*Rhus typhina*), and dwarf sumac (*Rhus copallinum*) are harmless plants. These species are found in drier, upland habitats, whereas poison sumac prefers wet soils. All three harmless species have red fruits that together form a distinctive terminal seed head. Smooth and staghorn sumacs have more than 13 leaflets and the leaflet edges are serrated.

Poison sumac occurs in the United States from Maine, south to Florida, west to Texas, and north to Minnesota (green shaded states). It is most abundant within the coastal plains and Great Lakes regions. Map: USDA-NRCS PLANTS Database, accessed 29 February 2016.

Why is it important not to come in contact with poison sumac?

All parts of poison sumac plants, except the pollen, contain a toxic, oily substance, called urushiol (pronounced "you-ROO-shee-ol"). It is present in the plant throughout the year. Urushiol causes irritation and blistering of the skin. To cause dermatitis, the oil must contact the skin, either directly by touching the plant, or indirectly by touching things that have touched the plant such as gloves or other clothing, tools, pets, water, or firewood. The dermatitis is an anaphylactic reaction as it occurs only after sensitization

Army Public Health Center, Entomological Sciences Program
5158 Blackhawk Road, APG, MD 21010-5403
COM 410-436-3613 / DSN 312-584-3613 / Website: http://phc.amedd.army.mil

by previous exposure. Individual sensitivity can vary from extreme susceptibility to near immunity. Dermatitis usually appears within 12 to 24 hours, but may appear in as little to 3 or 4 hours or be delayed for several days.

What can I do if I suspect that my skin or clothes have been exposed to urushiol?

After contact with urushiol, it usually takes a little while for it to penetrate the skin. Washing thoroughly within 5-10 minutes after contact can significantly reduce the likelihood/severity of dermatitis. Wash the exposed skin with soap and cold water, followed with rubbing alcohol or a solution of water and alcohol in equal proportions to dissolve the unabsorbed urushiol. Rinse thoroughly, since this solution only flushes away the irritant, and does not inactivate it. Urushiol can remain active on contaminated clothing, shoes, pet fur, tools, and other surfaces for years. Ordinary hot temperature laundering will usually get rid of urushiol on fabrics. Thoroughly rinse contaminated tools or equipment with water.

Contact dermatitis on the forearm from exposure to urushiol. Symptoms such as skin itchiness, swelling, inflammation, and the formation of blisters usually appear within 12 to 24 hours after contact with the sap of poison sumac. Photo: Public Domain www.poisonsumacrashpictures.com

How can I protect myself against the dermatitis caused by poison sumac?

The best prevention is recognizing and avoiding poison sumac plants. Barrier creams containing 5% bentoquatam are the only FDA-approved, skin-applied products that have been proven to protect against or reduce the severity of the rash caused by poison sumac when applied at least 15 minutes prior to exposure.

How can I eliminate poison sumac from my property?

The presence of poison sumac should not be tolerated around child day care facilities or schools, and can be a significant nuisance when present in the landscaping outside dwellings and workplaces. Consult with Preventive Medicine personnel at your supporting clinic to identify suspect plants found around a building. Seek assistance from the Installation Pest Management Coordinator before applying herbicides for poison sumac control.

Nonchemical Approaches. Young shoots can be repeatedly mowed/cut until the energy stored in the roots is exhausted and the plants die. Roots can be dug up and pulled out of the soil. All the roots must be removed to achieve eradication. Dispose of plant parts where they cannot contaminate people or animals. Never try to destroy poison sumac with fire. When a poison sumac plant is burned, urushiol goes into the air on the soot in smoke and can result in an allergic reaction when it comes in contact with the skin, eyes, and respiratory tract.

Chemical Approaches. Herbicide products that contain the active ingredient glyphosate or triclopyr are two of the most effective tools for poison sumac elimination around a property. Sprays must contact the leaves to be effective. However, care must be exercised when using these herbicides, since most shrubs, broadleaf ground covers, or herbaceous garden plants will also be killed by these sprays. Herbicides may not provide 100% control from a single application, and repeat applications to treat regrowth may be necessary.

Where can I find more information about poison sumac?

U.S. Centers for Disease Control and Prevention (CDC). Poisonous Plants, available online: http://www.cdc.gov/niosh/topics/plants/ accessed 2 July 2018

U.S. Department of Agriculture Plants Profile *Toxicodendron vernix* (L.) Kuntze, poison sumac, available online: http://plants.usda.gov/core/profile?symbol=TOVE accessed 2 July 2018

U.S. Department of the Interior, Office of Public Health, Poison Ivy & Kin Fact Sheet, available online: http://www.nps.gov/public_health/info/factsheets/fs_pivy.htm accessed 2 July 2018