



# POISON Sumac

{*Toxicodendron vernix*}

By Fred Nation, Educator, Baldwin County

**P**oison sumac is a small tree with large, handsome leaves, masses of small white fruits that feed the birds, and brilliant orange and red fall foliage. These characteristics would make it an attractive, desirable ornamental, except for one problem: *Toxicodendron vernix* is one of the most toxic plants in North America, causing untold misery to thousands of people each year! It can be found scattered in swamps, marshes and wet forests throughout the eastern United States from Maine to Minnesota, south to central Florida, and westward to eastern Texas. In Alabama, poison sumac is most frequently seen in the southern two-thirds of the state, becoming rare or absent in the piedmont and ridge and valley sections.

Since it usually grows from a single stem to about 5 inches in diameter and occasionally reaches 25 or 30 feet in height, poison sumac is generally considered to be a small tree. The crown is open and irregular, with smooth, stout branches and a conical terminal bud about 1/4-inch long. The leaves are alternate, odd-pinnately compound, with a distinctive reddish or purple rachis (main stem). The leaflets are hairless, 7 to 15 in number, ovate, abruptly pointed, to about 4 inches long, with smooth edges. The bark is thin, gray or gray-brown, smooth except for a number of horizontal, raised corky lenticels.

An old folk name for poison sumac is “thunderwood,” and old field guides placed it in the genus *Rhus*. The modern genus, *Toxicodendron*, is from two Greek words that mean literally “poison tree.” The species name, “*vernix*,” is from the Latin and means “varnish,” and therein lies an interesting story. The sap of poi-



son sumac is clear, but upon exposure to air it thickens and darkens to an opaque black color. Despite the obvious dangers, a black fabric dye and a lustrous black varnish have been produced from the oxidized sap. In fact, the sap of the closely-related Japanese lacquer tree, *Toxicodendron vernicifluum*, is applied in many layers on wooden objects to produce authentic Japanese lacquerware.

The toxic agent in poison sumac – and its two infamous relatives, poison oak and poison ivy – is urushiol, a sap phenol

that causes the painful reaction called “allergic contact dermatitis.” The sap is oily and non-volatile, which means that actual contact, usually from bruised leaves, is required to get the itch. The sap will adhere to smoke particles when burned, however, which can cause critical medical problems for some people, including swelling of the bronchial passages. Urushiol is very stable, and it is an incredibly potent substance. We can get the rash from indirect physical contact by untying our shoes after walking through poison ivy, by petting our dogs, from tool handles, or even from handling dried herbarium specimens that are many decades old. The misery of poison sumac is apparently limited to mankind. The fruits are foraged by birds and small animals, and the leaves are sometimes browsed by white-tailed deer with no ill effects.

Many states have recognized a state champion poison sumac tree, but *Toxicodendron vernix* is an open species in the current listing of *Champion Trees of Alabama* (available online, under the Publications heading, at [www.forestry.alabama.gov](http://www.forestry.alabama.gov)). A specimen about 25 feet tall with a trunk circumference of 12 inches or so would be a very respectable state champion for this species, if you can convince a forester to measure it – very carefully! 🌲



Photos by Fred Nation



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