



Common Name: DWARF SUMAC

Scientific Name: *Rhus michauxii* Sargent

Other Commonly Used Names: Michaux's sumac, false poison sumac

Previously Used Scientific Names: *Rhus pumila* Michaux

Family: Anacardiaceae (sumac)

Rarity Ranks: G2G3/S1

State Legal Status: Endangered

Federal Legal Status: Endangered

Federal Wetland Status: none

Description: Colonial **shrub** with erect **stems** 1 - 3 feet (30 - 90 cm) tall; young shoots with reddish tinge. **Leaves** deciduous, alternate, compound with 9 - 13 **leaflets** on a reddish leaf stalk. **Leaf stalk** winged only between the 2 - 3 uppermost pairs of leaflets. **Leaflets** 1½ - 3½ inches

(4 - 9 cm) long, oval to oblong, sharply toothed, mostly opposite; with very short or no stalks except the terminal leaflet which has a winged stalk 2 inches (5 cm) long. **Female and male flowers** are on separate plants. **Flowers** in a dense, tightly branched cluster at the top of the stem; flowers with 4 - 5 tiny, greenish-yellow **petals**. **Fruit** less than ¼ inch (5 - 6 mm) long, dark red, in dense clusters. All parts of the plant – stems, leaves, stalks, and fruit – are densely hairy.

Similar Species: Winged sumac (*Rhus copallina*) has hairy stems and forms colonies, but grows to 20 feet (6 meters) tall; its leaves have wings between each pair of its lance-shaped leaflets, which are pale green beneath and not toothed. Smooth sumac (*R. glabra*) is a tall, colonial shrub with smooth (not hairy) stems and leaves, and long, lance-shaped leaflets without teeth.

Related Rare Species: Staghorn sumac (*Rhus typhina*, Special Concern) is a shrub or small tree to 30 feet (9 meters) tall with very hairy stems, smooth leaves with no wings, and 15 - 31 long-pointed, toothed leaflets. It occurs in open mountain forests in Murray, Fannin, Lumpkin, Towns, and White Counties.

Habitat: Dry, open, rocky, or sandy woodlands over mafic bedrock with high levels of calcium, magnesium, or iron; often on ridges and river bluffs.

Life History: Dwarf sumac is dioecious – female flowers and male flowers are on separate plants. Because of habitat fragmentation, female and male plants are often isolated from one another and the plants cannot reproduce sexually. (Some plants may also be hermaphroditic - changing sex from year to year - and a few plants may be monoecious.) Plants spread vegetatively by extending underground stems (rhizomes) as much as 20 feet away. Although some large, mixed-sex populations of dwarf sumac produce fruit, the seeds are often sterile. Pollinators and seed dispersers are unknown but the flowers of other sumac species are visited by bees, and their fruits are dispersed by birds. Where dwarf sumac occurs with smooth sumac (*Rhus glabra*), the two may hybridize.

Survey Recommendations: Flowers June–August, fruits August–October. Plants may be identified throughout growing season by hairy leaves and stems.

Range: Georgia, North Carolina, and Virginia; extirpated from Florida.

Threats: Conversion of habitat to development and pine plantations, clearcutting, herbicide use.

Georgia Conservation Status: Georgia has two very small populations of dwarf sumac; three other populations were destroyed. One of the two existing sites was restored with plants rescued from that site before a construction project; the plants were later re-introduced. The restored population has only female-flowered plants, the other population has only male-flowered plants. The two populations are about 80 miles apart and, therefore, do not reproduce sexually. Efforts to produce fertile seed by manual pollination have not been successful.

Conservation and Management Recommendations: Dwarf sumac is intolerant of shade and requires fire or hand-clearing to maintain sunny conditions. Clear competing vegetation by hand or with prescribed fire. Avoid mechanical clearing and the use of herbicides and heavy equipment. Support efforts to introduce female plants at male-only site (and vice versa) and to artificially pollinate the female plants.

Selected References:

Barden, L.S. and J.F. Matthews. 2004. Andre Michaux's sumac – *Rhus michauxii* Sargent: why did Sargent rename it and where did Michaux find it? *Castanea* 69(2): 109-115.

Burke, J.M. and J.L. Hamrick. 2002. Genetic variation and evidence of hybridization in the genus *Rhus* (Anacardiaceae). *Journal of Heredity* 93(1): 37-41.

Center for Plant Conservation. 2007. National Collection Plant Profile.
<http://www.centerforplantconservation.org>

Chafin, L.G. 2007. Field guide to the rare plants of Georgia. State Botanical Garden of Georgia and University of Georgia Press, Athens.

Hardin, J.W. and L.L. Phillips. 1985. Hybridization in eastern North American *Rhus* (Anacardiaceae). *ASB Bulletin* 32(3): 99-106.

NatureServe. 2008. NatureServe Explorer. Arlington, Virginia.
<http://www.natureserve.org/explorer>

North Carolina Natural Heritage Program. 2001. Guide to federally listed endangered and threatened species of North Carolina. North Carolina Natural Heritage Program, Raleigh, North Carolina. <http://www.ncnhp.org/web/nhp>

Patrick, T.S., J.R. Allison, and G.A. Krakow. 1995. Protected plants of Georgia. Georgia Department of Natural Resources, Natural Heritage Program, Social Circle.

USFWS. 1990. Michaux's sumac (*Rhus michauxii*) – species account. U.S. Fish and Wildlife Service, Washington D.C. <http://endangered.fws.gov>

USFWS. 1993. Michaux's sumac (*Rhus michauxii*) recovery plan. U.S. Fish and Wildlife Service, Atlanta, Georgia. <http://endangered.fws.gov>

Weakley, A.S. 2008. Flora of the Carolinas, Virginia, Georgia, northern Florida, and surrounding areas. University of North Carolina Herbarium, Chapel Hill.
<http://www.herbarium.unc.edu/flora.htm>

Author of Species Account: Linda G. Chafin

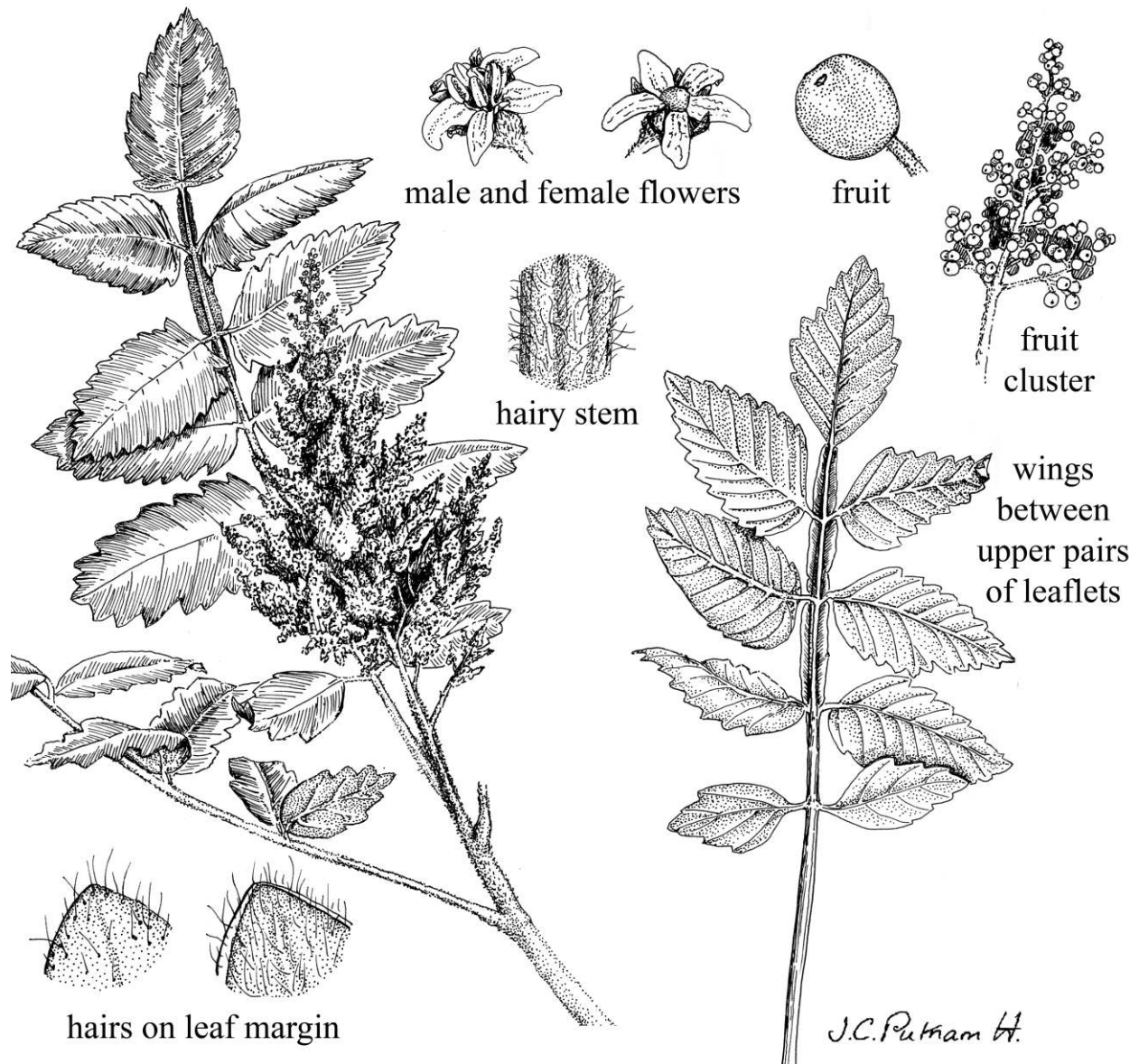
Date Compiled or Updated:

L. Chafin, July 2008: original account

L. Chafin, Oct. 2009: updated account
K. Owers, Feb. 2010: added pictures
Z. Abouhamdan, April 2016: updated link

DWARF SUMAC

Rhus michauxii





©Hugh and Carol Nourse
Inflorescence