

## FRAGRANT SUMAC

*Rhus aromatica* Ait. var.  
*aromatica*

plant symbol = RHARA2

Contributed By: USDA, NRCS, National Plant Data Center & the Biota of North America Program



Oklahoma Biological Survey

### Alternate common names

Aromatic sumac, lemon sumac, polecat bush

### Uses

The fruit is an important winter food for birds, including turkey, ruffed grouse, robins, and flickers, and for various small mammals (e.g., raccoon, opossum, chipmunk). The foliage is relatively unpalatable to most species of wildlife and domestic livestock. Thickets of fragrant sumac provide cover for many species of birds and small mammals.

Fragrant sumac is not widely used for landscape plantings, probably because of its relatively small size, but it is used as a ground cover, especially on banks. The plants are hardy and can grow in sun or partial shade. The main ornamental feature is the orange to red fall foliage color. Several cultivars have been selected – mostly for variation in growth form. Fragrant sumac also has been used for rehabilitating disturbed sites such as banks, cuts, and fills.

American Indians made a tart drink (“Indian lemonade”) from the ripe fruits of fragrant sumac (larger-fruited *Rhus* species provide a larger quantity of the same substance). The bark of all sumacs has been used as an astringent, and leaves and bark can be used for tanning leather because of the high tannin

content. Various Indian tribes have used fragrant sumac in treatment for various illnesses and health problems. The leaves, mixed with tobacco, were used as a smoking mixture.

### Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant’s current status, such as, state noxious status and wetland indicator values.

### Description

*General:* Sumac family (Anacardiaceae). Straggling to upright native shrubs 0.5-2(-2.5) meters tall (rarely tree-like), forming colonial thickets of up to 10 feet spread, suckering from the roots, the branches slender ascending, puberulent, glabrate, or densely pilose; buds naked, tiny, yellow, hairy, surrounded by a raised, circular leaf scar. Leaves: deciduous, alternate, compound with 3 leaflets, variable in shape, lobing, and margin, the leaflets unstalked, ovate to rhomboid, more or less wedge-shaped at the base, coarsely-toothed, usually shiny-glabrous above, the terminal leaflet 3-6.5 cm long; summer foliage green to glossy blue-green, turning orange to red or purple in the fall. Flowers: yellow, in small, dense inflorescences on short lateral shoots, opening before the leaves, bisexual and unisexual, both types borne on the same plant (the species polygamodioecious); male (staminate) flowers in yellowish catkins, female (pistillate) flowers in bright yellow, short panicles at the ends of branches. Fruits: 5-7 mm in diameter, bright red at maturity and densely hairy, containing a single nutlet 3.8-4.5 mm long, in terminal clusters. The common name “sumac” is from the Middle English for related tree. The leaves are fragrant or at least odorous.

*Variation within the species:* three varieties are currently recognized, based on differences in geography, leaf shape, and pubescence of stems, leaves, and fruits. Var. *aromatica* occurs over nearly the whole range of the species.

*Rhus aromatica* var. *arenaria* (Greene) Fern. – restricted to Ohio, Indiana, and Illinois.

*Rhus aromatica* var. *serotina* (Greene) Rehd. – the western segment, occurring from South Dakota to Texas and eastward to Arkansas, Missouri, Iowa, and Illinois. It apparently intergrades with forms of *Rhus trilobata* where their ranges meet in the Great Plains (mainly from Texas to South Dakota).

*Distribution:* Fragrant sumac is native to most of the US east of the Rocky Mountains, from Ontario and western Quebec, Massachusetts and New Hampshire to Florida and west to the Great Plains in Texas to South Dakota. For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site.

#### **Adaptation**

Fragrant sumac is common along the forested eastern margins of the Great Plains and in open or otherwise disturbed sites on the margins of the Gulf Coast prairie. It grows at a range of sites including open rocky woodlands, valley bottoms, lower rocky slopes, and roadsides. Flowering: March-May, usually before the leaves expand; fruiting: June-August.

#### **Establishment**

Fragrant sumac reproduces from seed or clonally via root suckers. It is a pioneer species, establishing rapidly from seed after heavy disturbance, particularly fire. Browsing by deer may be responsible for rapid early removal of mature fruits; birds are the primary dispersal later. Individual plants may live about 20-30 years; clones can live substantially longer. Fragrant sumac sprouts vigorously after fire and can be propagated from root cuttings.

Seed dormancy results from the presence of a hard, impermeable seed coat. Fire scarifies seeds, promoting germination; various artificial methods of pretreatment have been tested, including sulfuric acid, and hot water soaks, mechanical scarification, and cold treatment. Pretreated sumac seeds generally begin germination within 10-20 days. The resistant seed coats probably allow the seeds to remain viable for several years in the humus layer, as do those in seeds of some other *Rhus* species, allowing re-establishment through seed progeny when conditions are favorable for germination and growth.

#### **Management**

Fragrant sumac reportedly sprouts vigorously after fire in the southern Great Plains, and the primary mode of colonization after disturbance is through sprouting from the adventitious-bud root crown.

#### **Cultivars, Improved and Selected Materials (and area of origin)**

Please check the Vendor Database, expected to be on-line through the PLANTS Web site in 2001 by clicking on Plant Materials. These plant materials are readily available from commercial sources.

#### **References**

- Barkley, F.A. 1937. *A monographic study of Rhus and its immediate allies in North and Central America, including the West Indies*. Ann. Missouri Bot. Gard. 24:265-498.
- Brizicky, G.K. 1962. *The genera of Anacardiaceae in the Southeastern United States*. J. Arnold Arbor. 43:359-375.
- Brizicky, G.K. 1963. *Taxonomic and nomenclatural notes on the genus Rhus (Anacardiaceae)*. J. Arnold Arbor. 44:60-80.
- Frankel, E. 1991. *Poison ivy, poison oak, poison sumac, and their relatives*. The Boxwood Press, Pacific Grove, Calif. For review see Bull. Torrey Bot. Club 120(1):76. 19xx.
- Gilbert, E.F. 1966. *Structure and development of sumac clones*. Amer. Midl. Nat. 75:432-445.
- Hardin, J.W. & L.L. Phillips 1985. *Hybridization in eastern North American Rhus (Anacardiaceae)*. ASB Bull. 32(3):99-106.
- Johnson, T. 2000. *Rhus aromatica*. Herbweb.com. [<http://www.herbweb.com/index.html>]
- Oklahoma Biological Survey 2000. *Rhus aromatica Ait.* IN *Catalog of woody plants of Oklahoma*. Norman, Oklahoma. 20sep2000. <<http://www.biosurvey.ou.edu/shrub/rhara3.htm> >
- Tirmenstein, D. 1987. *Rhus aromatica*. IN: W.C. Fischer (compiler). *The fire effects information system* [Data base]. U.S.D.A., Forest Service, Intermountain Research Station, Intermountain Fire Sciences Laboratory, Missoula, MT. <<http://www.fs.fed.us/database/feis/>>
- Uttal, L.J. 1984. *An environmental race of Rhus aromatica Ait. in western Virginia*. Jeffersonia 15:75-76.
- Xiaojie L., J.M. Baskin, & C.C. Baskin 1999. *Contrasting dispersal phenologies in two fleshy-fruited congeneric shrubs, Rhus aromatica Ait. and Rhus glabra L. (Anacardiaceae)*. Canad. J. Bot. 77:976-988.
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