

***Rhus copallinum* L.**
ANACARDIACEAE

shining sumac

Synonyms: None

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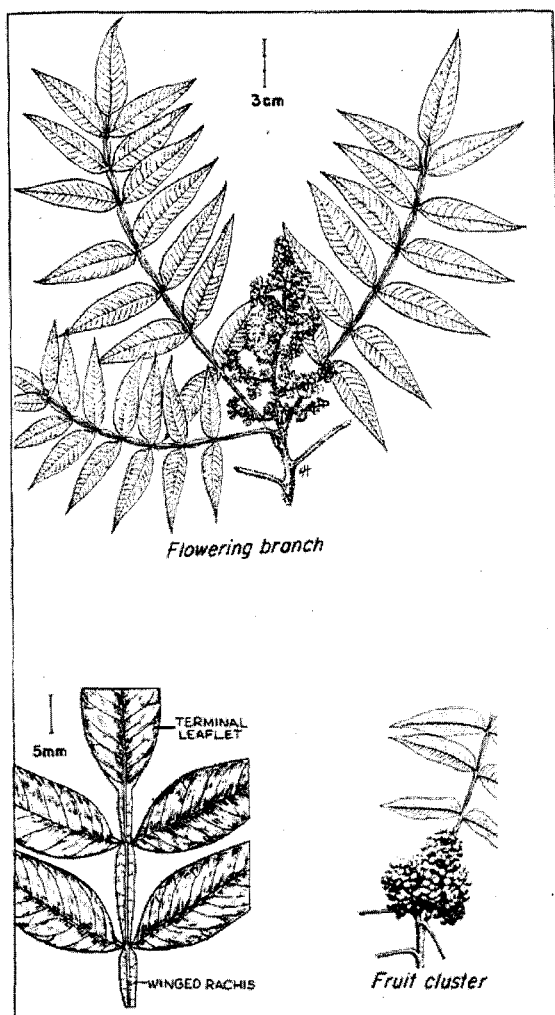


Illustration source: Grelen and Duvall 1966

General Description.—Shining sumac, also known as black sumac, dwarf sumac, flameleaf sumac, mountain sumac, shiny sumac, and winged sumac, is an upright, deciduous shrub or (rarely) small tree from 3 to 6 m tall (Bailey and Bailey 1976, Odenwald and others 1996). Bark ranges in color from light brown to gray to reddish-brown. Shoots and twigs are hairy and reddish in color. Twigs have conspicuous lenticels. The sparsely branched, flat crown is composed of alternate, pinnately compound leaves approximately 15 to 30 cm long, with wings between each of the 7 to 27

glossy, dark green leaflets (Brickell and Zuk 1996, Odenwald and others

1996, Seiler and Peterson 2001). Leaflets are paired, oblong-lanceolate in shape, and from 3 to 10 cm long (Bailey and Bailey 1976, Krussmann 1976, Johnson and Hoagland 1999). Buds are glabrous, and terminal buds are absent (Synor and Cowen [no date]). Sap is sticky and yellow (Johnson and Hoagland 1999).

Range.—Shining sumac grows from southern Ontario south along the Coastal Plain to Florida. It extends westward into eastern Texas, and inland from central Michigan and Wisconsin to Kansas and Oklahoma (USDA-ARS [no date], Coladonato 1992). It is also found in Cuba. Recognized varieties are *R. copallinum* var. *latifolia* Engl., *R. copallinum* var. *lanceolata* Gray, and *R. copallinum* var. *leucantha* (Jacq.) DC (USDA-ARS [no date], USDA-NRCS 2001).

Ecology.—Shining sumac is a deciduous, clonal shrub. It is an early pioneer species and grows best on well drained soils in full sunlight (Coladonato 1992, Odenwald and others 1996, Seiler and Peterson 2001). It can form thickets in abandoned fields, along roadsides, in glades and open woods, and in waste areas (Tenaglia 2002, Oplin 2001, Arborquest 2001). It is difficult to get rid of, once established, due to its ability to spread from rhizomes (Arborquest 2001). This characteristic also makes it well adapted to fire (Coladonato 1992). Shining sumac will tolerate compacted soil, drought, pollution, heavy pruning, and transplanting, but the shallow roots make it susceptible to uprooting and the stems can break in strong wind storms (Arborquest 2001). It can be a serious competitor with young pines and hardwoods (Coladonato 1992).

Reproduction.—Shining sumac is a clonal species which sprouts from roots and the root crown. It also regenerates sexually (Coladonato 1992). From May to August, plants produce panicles of small yellow-green dioecious flowers that have five petals and five sepals (Tenaglia 2002). The

panicles are pubescent, about 12 to 15 cm long, and can be either terminal or axillary (Brickell and Zuk 1996, Johnson and Hoagland 1999, Krussmann 1976). Brown and Kirkman (1990) report the presence of polygamous flowers but state that shining sumac is functionally dioecious since the pistils of the polygamous flowers abort. Thus, both male and female plants are needed for good fruit set to occur (Arborquest 2001). The 3- to 5- mm pubescent fruits are small drupes that contain a single nutlet (Coladonato 1992). Fruits ripen from August to October. They turn dark red when ripe and often remain on the plant throughout the winter. The hard-coated seeds germinate poorly without pretreatment, but a 1 hr soak in sulfuric acid at room temperature can result in a 75 percent germinative capacity (Brinkman 1974).

Growth and Management.—Shining sumac is a fast growing but short lived clonal shrub, first cultivated in 1688 (Brinkman 1974). It is planted as an ornamental and used in mass plantings because of its brilliant red fall foliage but it can spread well beyond desired borders because of its ability to sprout from the roots.

Benefits.—Shining sumac is nonpoisonous to humans (USDA-ARS [no date], Seiler and Peterson 2001, Synor and Cowen [no date]), and the fresh fruits can be used to make a lemon-tasting beverage. It was also used by Native Americans to treat dysentery and mouth sores (Tenaglia 2002). Dense thickets of shining sumac serve as cover for birds and mammals. The seeds are eaten by a variety of birds, while the flowers attract butterflies. Deer and rabbits commonly browse the twigs in winter; rabbits also eat the bark (Grelen and Duvall 1966, Oplin 2001, Arborquest 2001, Coladonato 1992). It is not, however, a preferred food and is considered a poor to moderately important browse (Coladonato 1992). However, the seeds, bark and leaves, while low in nutritive value, have a high tannin content and have been used by the leather industry (Bailey and Bailey 1976, Brown and Kirkman 1990, Coladonato 1992). Its ability to sprout from the roots, coupled with its rapid growth rate, make shining sumac a good species to plant for erosion control (Arborquest 2001).

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