technology transfer fact sheet



Rhusspp.

Family: Anacardiaceae

Sumac

Sumac contains 100 to 150 species which grow in: Eurasia/Africa [100], Central America [5] and North America [54]. All species look alike microscopically and are fluorescent under long-wave UV light. One species, *R. vernicifera* is used for oriental lacquer. The word rhus is from the classical Greek and Latin name of the type species, Sicilian sumac, *Rhus coriara* L.

Rhus coriara-Sicilian Sumac (Europe)

Rhus choriophylla-Mearns Sumac, New Mexico Evergreen Sumac, Tough Leaf Sumac

Rhus copallina-Black Sumac, Common Sumac, Dwarf Sumac, Flame Leaf Sumac, Mountain Sumac, Mountain Dwarf Sumach, Mountain Wing-rib Sumach, **Shining Sumac**, Smooth Sumac, Southern Sumac, Upland Sumac, Varnish Sumac, Whiteflower Dwarf Sumach, Winged Sumac, Wing Rib Sumac

Rhus copallina var. copallina-Black Sumac, Common Sumac, Dwarf Sumac, Flame Leaf Sumac, Mountain Sumac, Mountain Dwarf Sumach, Mountain Wing-rib Sumach, Shining Sumac (typical), Smooth Sumac, Southern Sumac, Upland Sumac, Varnish Sumac, Whiteflower Dwarf Sumach, Winged Sumac, Wing Rib Sumac

 $\textit{Rhus glabra}\text{-}\mathsf{Common Sumac}, \, \mathsf{Red Sumac}, \, \mathsf{Rocky Mountain Sumac}, \, \mathsf{Scarlet Sumac}, \, \mathsf{Smooth Sumac}, \, \mathsf{Smoo$

Rhus integrifolia-California Mahogany, California Sumac, California Sumach, Lemonade-berry, **Lemonade Sumac**, Lemonade Sumach, Lentisco, Mahogany, Mahogany Sumac, Mahogany Sumach, Sourberry, Sourwood, Western Sumach

Rhus kearneyi-Kearney Sumac

Rhus lanceolata-Dwarf Sumac, Dwarf Sumach, Lanceleaf Dwarf Sumach, Prairie Dwarf Sumach, Prairie Flame Leaf Sumac, Prairie Shining Sumac, Prairie Sumac, Texan Sumac

Rhus laurina-Laurel Sumac, Laurel Sumach

Rhus microphylla-Desert Sumac, Flame Leaf Sumac, Littleleaf Sumac, Scrub Sumac, Small Leaf Dwarf Sumac, Small-leaf Sumac, Winged Sumac, Wing Rib Sumac,

Rhus ovata-Bush Laurel, Chaparral Sumac, Mountain Laurel, Sugarbush, Sugar Sumac

Rhus typhina-American Sumac, Hairy Sumach, Staghorn Sumac, Staghorn Sumach, Velvet Sumach, Velvet Sumach, Vinegar Tree, Virginia Sumach

Rhus vernicifera-Lacquer Varnish Tree (China)

Rhus virens-Evergreen Sumac, Lentisco, Tobacco Sumac

The following is for *Rhus typhina*:

Distribution

North America, form Quebec to Maine, southern Ontario, northern Michigan, Wisconsin and Minnesota, south to northeastern Iowa, Illinois, Indiana, northern Kentucky, West Virginia and Maryland. In the mountains to Virginia, North Carolina, northern Georgia and central Tennessee.

The Tree

Staghorn Sumac is the largest of the native sumacs. It is classed as a large shrub reaching 40 feet in height and 1 foot wide at base. Sumacs are fast growing, short lived plants important to wildlife for cover. The fruits are produced in large amounts and are eaten by many species of birds and mammals. The leaves are also eaten by mammals. Sumacs can be shrubs, vines and trees with alternate pinnately compound leaves, which may be evergreen or deciduous. Shoot buds are covered with hairs. The flowers are yellowish green and are produced in small clusters. The flower spikes turn into velvety bunches (staghorns) in the fall, with the fruits berry-like, small and round or oval, with a pit and seed. The leaves turn to red, purple and yellow in the fall. Tannins can be obtained from bark and leaves.

The Wood

General

The wood of Sumac is ring porous to semi-ring porous, with a whitish gray sapwood with yellow or green streaks. The heartwood is olive green to greenish yellow to russet brown with dark streaks. The wood is fluorescent under UV radiation. It is light weight, soft and brittle. It has a high luster.

Mechanical Properties (2-inch standard)

| | | | | Compression | | | | |
|-------|---------------------|---|----------------|---------------------|--------------------------|---|-----------------|------------------|
| | Specific gravity | MOE x10 ⁶ lbf/in ² | MOR lbf/in² | Parallel lbf/in² | Perpendicular lbf/in² | $\begin{array}{c} WML^a\\ in\text{-lbf/in}^3 \end{array}$ | Hardness lbf | Shear lbf/in² |
| Green | 0.45 | 0.81 | 5,800 | 2,680 | 480 | 10.8 | 590 | _ |
| Dry | 0.47 | 1.19 | 10,200 | 5,940 | 1,010 | 8.4 | 680 | _ |

Drying and Shrinkage

Sumac is easily air dried without cracks or checks. The fresh cut wood exudes a sticky fluid at the cambium (junction between bark and wood), which dries after seasoning.

Kiln Drying Schedules: No information available at this time.

Working Properties: Sumac wood is easily worked with sharp tools. It frays on turning.

Durability: No information available at this time.

Preservation: No information available at this time.

Uses: Novelties, carving, turnery.

Toxicity: Sap & wood cause dermatitis. (40,54,64,105)

Additional Reading and References Cited (in parentheses)

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