# technology transfer fact sheet



Sassafras albidum Family: Lauraceae Sassafras

Sassafras is a genus composed of three species native to North America [1], China [1] and Taiwan [1]. The name sassafras is a Native American name used by the Spanish and French in Florida in the middle of the 16th century. In 1577, the use of sassafras by Native Americans was reported and in 1587, Sir Walter Raleigh brought it back to England from the Virginia Colony. In the early 17th century (1602–1603), several ships were dispatched from England to the colonies to collect sassafras roots; the colonists used the wood to build forts. These forays were known as the Great Sassafras Hunts.

Sassafras albidum-ague-tree, black ash, cinnamon wood, common sassafras, file-gumbo, gumbo-file, red sassafras, sassafras, sassafrac, sassafrac, sassafras, sassafras, sassafras, sassafras, sassafras, sassafras, sassafras, wah-en-nah-kas, white sassafras.

#### Distribution

Sassafras is native to North America from Maine through Ontario, Michigan, Iowa, and Kansas, to Florida and Texas.

## The Tree

The tree can reach a height of 90 ft (27 m) and a diameter of 5 ft (1.5 m). The leaves vary in shape from simple (entire) to mitten-shape to tri-lobed on the same tree. Sassafras produces greenish-yellow flowers in the spring and bright red, yellow, and orange foliage in the fall. It has thick, dark red-brown bark that is deeply furrowed. Trees are either male or female, although the flowers may appear perfect. The fruits are olive-shaped to spherical, with a dark skin and thin flesh. Sassafras is a pioneer species, the first to invade abandoned fields. It spreads asexually by root runners, forming small groves of the tree. Sassafras grows alongside persimmon, oak, sweetgum, dogwood, ironwood and pawpaw.

## The Wood

#### General

Sassafras heartwood is pale brown to orange brown, resembling ash or chestnut; the sapwood is a narrow yellowish-white. The wood is coarse-grained, straight, brittle and soft, with a spicy aromatic odor. Sassafras is a ring-porous species.

## **Mechanical Properties (2-inch standard)**

Reference (98), except hardness (59).

		Compression						
	Specific gravity	$\begin{array}{c} MOE \\ x10^6 \ lbf/in^2 \end{array}$	MOR lbf/in²	Parallel lbf/in²	Perpendicular lbf/in²	WML <sup>a</sup> in-lbf/in <sup>3</sup>	Hardness lbf	Shear lbf/in²
Green	0.42	0.91	6,000	2,730	370	7.1	520	950
Dry	0.46	1.12	9,000	4,760	850	8.7	630	1,240
<sup>a</sup> WML = Work to maximum load.								

## **Drying and Shrinkage**

	Pero (green to	Percentage of shrinkage (green to final moisture content)					
Type of shrinkage	0% MC	6% MC	20% MC				
Tangential	6.2	5.0	2.1				
Radial	4.0	3.2	1.3				
Volumetric	10.3	8.2	3.4				
References: 0% MC (98 6% and 20% MC (90).	3),						

## Kiln Drying Schedules<sup>a</sup>

	Stock				
Condition	4/4, 5/4, 6/4	8/4	10/4	12/4	16/4
Standard	T8-D4	-	_	-	-
<sup>a</sup> References (6, 86).					

**Working Properties:** Sassafras is easily worked and takes a finish well. It glues well and holds screws better than nails.

**Durability:** Sassafras is very resistant to heartwood decay in exposed, damp conditions, making it good for fence posts and the sills of houses.

**Preservation:** No information available at this time.

**Uses:** Lumber, furniture, posts, fence rails and posts, kindling, boxes, cooperage (slack), general millwork, small boats, oil from root bark, colonial dye (orange) from bark.

**Toxicity:** No information available at this time.

## Additional Reading and References Cited (in parentheses)

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