



Magnolia virginiana Magnolia

Family: Magnoliaceae

The genus *Magnolia* contains about 80 species native to: North America [8], West Indies [8], and Asia [50]. The name *magnolia* is named for Pierre Magnol (1638-1715), professor of botany and medicine and director of the botanic garden at Montpellier, France. The name *virginiana* means "of Virginia".

Other Common Names: Arbre du Castor, Bat-tree, Bay, Bay-tree, Beaver Tree, Big Laurel, Black Lin, Bullbay, Cucumberwood, Evergreen Magnolia, Indian Bark, Laurel Magnolia, Magnolia, Magnolia de Virginie, Magnolia Virginiana, Magnolier Bleu, Magnolier des Marais, Mountain Magnolia, Quinquina Virginie, Small Magnolia, Southern Magnolia, Southern Sassafras, Southern Sweetbay, Swampbay, Swamp Laurel, Swamp Magnolia, Swamp Sassafras, Sweet Bay, Sweetbay Magnolia, Sweet Magnolia, Virginia Magnolia, Virginische Magnolia, Whitebay, White Laurel.

Distribution

North America, along the coastal plain from Long Island, New Jersey, and Pennsylvania, south to Florida and west to Texas and north to Arkansas and Tennessee. Also occurs in locally in eastern Massachusetts.

The Tree

Sweetbay grows in wet, sandy soil along streams bottom lands and swamps. It is deciduous and shrubby in the northern parts of its range, but evergreen in the south. It is a slow growing and it flowers in spring. It grows in association with redbay, maples, holly and loblolly bay. It reaches heights of 80 feet, with a diameter of 1.5 feet. The gray to gray brown bark is thin, smooth and irregularly furrowed due to plates. The bark is also aromatic.

The Wood

General

The wood is soft and pale brown, with a brown, aromatic heartwood and is straight grained.

Mechanical Properties (2-inch standard)

	Specific gravity	MOE GPa	MOR MPa	Compression		WML ^a kJ/m ³	Hardness N	Shear MPa
				Parallel MPa	Perpendicular MPa			
Green	.42	–	–	–	–	–	–	–
Dry	.48	11.31	75.3	39.2	3.9	--	--	11.6

^aWML = Work to maximum load.

^bReference (98).

^cReference (59).

Drying and Shrinkage

Type of shrinkage	Percentage of shrinkage (green to final moisture content)		
	0% MC	6% MC	20% MC

Tangential	8.3	-	-
Radial	4.7	-	-
Volumetric	12.9	-	-

References: 0% MC (98),
6% and 20% MC (90).

Kiln Drying Schedules^a

Condition	Stock				
	4/4, 5/4, 6/4	8/4	10/4	12/4	16/4
Standard	T10-D4	T8-D3	-	-	-

^aReferences (6, 86).

Working Properties: It is easily worked and finishes well.

Durability: No information available at this time.

Preservation: No information available at this time.

Uses: Lumber, veneer, furniture, boxes & containers.

Toxicity: No information available at this time.

Additional Reading and References Cited (in parentheses)

1. Boone, R.S., C.J. Kozlik, P.J. Bois & E.M. Wengert. 1988. Dry kiln schedules for commercial woods - temperate and tropical. USDA Forest Service, FPL General Technical Report FPL-GTR-57.
2. Elias, T.S. 1980. The complete trees of North America, field guide and natural history. Van Nostrand Reinhold Co., New York, 948 pp.
3. Little, Jr., E.L. 1979. Checklist of United States trees (native and naturalized). USDA Forest Service, Ag. Handbook No. 541, USGPO, Washington, DC.
4. Simpson, W.T. 1991. Dry kiln operator's manual. USDA Forest Service, FPL Ag. Handbook 188.
5. Summitt, R. and A. Sliker. 1980. CRC handbook of materials science. Volume 4, wood. CRC Press, Inc., Boca Raton, FL. 459 pp.