Cornus florida

Family: Cornaceae

Flowering Dogwood

The genus Cornus contains about 40 species which grow in the northern temperate regions of the world. The name cornus is derived from the Latin name of the type species Cornus mas L., Cornelian-cherry of Europe, from the word for horn (cornu), referring to the hardness of the wood.

Cornus alternifolia- Alternate Leaf Dogwood, Blue Dogwood, Green-Osier, Pagoda, Pagoda Cornel, Pagoda Dogwood, Pigeonberry, Purple Dogwood, Umbrella-tree

Cornus drummondii-Roughleaf Dogwood, Rough-leaved Dogwood

Cornus florida- Arrowwood, Boxwood, Bunchberry, Cornel, Dogwood (used bark to treat dog's mange), False Boxwood, Florida Dogwood, Flowering Dogwood, White Cornel

Cornus glabrata-Brown Dogwood, Flowering Dogwood, Mountain Dogwood, Pacific Dogwood, Smooth Dogwood, Western Flowering Dogwood

Cornus nuttallii-California Dogwood, Flowering Dogwood, Mountain Dogwood, Pacific Dogwood, Western Dogwood, Western Flowering Dogwood

Cornus occidentalis-Western Dogwood

Cornus racemosa-Blue-fruit Dogwood, Gray Dogwood, Stiffcornel, Stiff Cornel Dogwood, Stiff Dogwood, Swamp Dogwood

Cornus rugosa-Roundleaf Dogwood

Cornus sessilis-Blackfruit Dogwood, Miners Dogwood

Cornus stolonifera-American Dogwood, California Dogwood, Creek Dogwood, Kinnikinnik, Red Dogwood, Red-Osier Dogwood, Red-panicled Dogwood, Redstem Dogwood, Squawbush, Western Dogwood

Cornus stricta-Bluefruit Dogwood, Stiffcornel, Stiffcornel Dogwood, Swamp Dogwood

The following is for Flowering Dogwood:

Distribution

North America, from Maine to New York, Ontario, Michigan, Illinois and Missouri south to Kansas, Oklahoma and Texas east to Florida.

The Tree

Flowering dogwood is well known for its white flower clusters with large white bracts opening in the spring. The fall foliage is bright red. It is a slow growing tree which attains a height of 40 feet and a

diameter of 16 inches. The bark looks like reddish brown alligator skin. It grows best along streams and in well drained soils. clusters. The fruits are large bean-like structures, resembling cigars. Catalpa trees can reach 100 ft (30 m) in height and 3 ft (1 m) in diameter. The bark is thick, with reddish-brown scales.

The Wood

General

The sapwood of dogwood is wide and creamy in color, while the heartwood is reddish brown to brown, sometimes streaked in white. The wood has a fine, uniform texture with a hard compact interlocked grain.

Mechanical Properties (2-inch standard)

			Compression					
	Specific gravity	MOE x10 ⁶ lbf/in ²	${\displaystyle \mathop{MOR}_{x10^3lbf/in^2}}$	Parallel x10 ³ lbf/in ²	Perpendicular x10 ³ lbf/in ²	$\begin{array}{c} WML^a\\ in-lbf/in^3 \end{array}$	Hardness lbf	Shear x10³ lbf/in²
Green	.64	1.18	8.80	3.64	1.03	21.0	1410	1.52
Dry	.80	1.53	14.9	7.70	1.92	19.5	2150	2.26

^aWML = Work to maximum load.

Drying and Shrinkage

	Percentage of shrinkage (green to final moisture content)				
Type of shrinkage	0% MC	6% MC	20% MC		
Tangential	11.3	9.4	3.9		
Radial	7.1	5.9	2.5		
Volumetric	19.9	16.6	6.9		
^a Birch shrinks considerably during drying. References: 0% MC (98),					

^aBirch shrinks considerably during drying. References: 0% MC (98), 6% and 20% MC (90).

Kiln Drying Schedules^a

	Stock					
Condition	4/4, 5/4, 6/4	8/4	10/4	12/4	16/4	
Standard	T6-C3	T3-C2	-	-	-	
^a References (6, 86).						

Working Properties: Dogwood can be sawn, planed and turned easily and takes a glossy finish.

Durability: Susceptible to deterioration, due to large percentage of heartwood.

Preservation: No information available at this time.

Uses: Weaving shuttles, spool and bobbin heads, small pulleys, skewers, golf club heads, tool handles, charcoal for gunpowder, red dye from bark of roots, stem bark has medicinal properties.

Toxicity: No information at this time.

Additional Reading and References Cited (in parentheses)

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- 2. Elias, T.S. 1980. The complete trees of North America, field guide and natural history. Van Nostrand Reinhold Co., New York, 948 pp.

^bReference (98).

^cReference (59).

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- 4. Markwardt, L.J. and T.R.C. Wilson. 1935. Strength and related properties of woods grown in the United States. USDA Forest Service, Tech. Bull. No. 479. USGPO, Washington, DC.
- 5. Panshin, A.J. and C. de Zeeuw. 1980. Textbook of Wood Technology, 4th Ed., McGraw-Hill Book Co., New York, 722 pp.
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- 7. Simpson, W.T. 1991. Dry kiln operator's manual. USDA Forest Service, FPL Ag. Handbook 188.
- 8. Summitt, R. and A. Sliker. 1980. CRC handbook of materials science. Volume 4, wood. CRC Press, Inc., Boca Raton, FL. 459 pp. Harry A. Alden, 1994