technology transfer fact sheet



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Prunus serotina Family:Rosaceae

Black Cherry

Prunus is a genus of 120 to 400 species that contain fruitwoods like cherry, plum and almond. The species are native to North America, Asia, Europe and the Mediterranean region. All species look alike microscopically. The word *prunus* is the classical Latin name for the cherry tree.

Prunus serotina-American cherry, black wild cherry, cabinet cherry, chisos wild cherry, Edwards Plateau cherry, escarpment cherry, gila chokecherry, mountain black cherry, rum cherry, southwest choke cherry, southwestern chokecherry, wild black cherry, wild cherry, whisky cherry

Distribution

Cherry is found in the eastern half of the United States, from the plains to the Atlantic Ocean and from the Great Lakes to the Gulf of Mexico. It also occurs in high elevations in Mexico.

The Tree

The tree reaches a height of 100 ft (30 m), with a diameter of 4 to 5 ft (1.2 to 1.5 m). It is shrubby under poor growth conditions and at the northern limit of its range. It does best on the rich, moist soil of the Appalachians.

The Wood

General

The sapwood is light yellow, while the heartwood is brownish with a greenish tinge, darkening upon exposure to a deep reddish brown with a golden luster. The wood has a mild, aromatic scent, but no characteristic taste. It is of medium density, firm, and strong, with a fine, uniform texture. The grain is generally straight.

Mechanical Properties (2-inch standard)

				Compression				
	Specific gravity	MOE x10 ⁶ lbf/in ²	MOR lbf/in ²	Parallel lbf/in ²	Perpendicular lbf/in ²	WML ^a in-lbf/in ³	Hardness lbf	Shear lbf/in ²
Green	0.47	1.31	8,000	3,540	360	12.8	660	1,130
Dry	0.50	1.49	12,300	7,110	690	11,400	950	1,700
^a WML = Work to maximum load. Reference (59, 98).								

Drying and Shrinkage

	Pere (green te	Percentage of shrinkage (green to final moisture content)				
Type of shrinkage	0% MC	6% MC	20% MC			
Tangential	7.1	5.7	2.4			
Radial	3.7	3.0	1.2			
Volumetric	11.5	9.2	3.8			
References: 0% MC (96 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			
Black Cherry								
Standard	T8-B4	T5-B3	T5-B2	T3-B2	T3-A1			
Bitter Cherry (P. emarginata)								
Standard	T5-B2	T3-A1	-	-	-			

^aReferences (6, 86).

Working Properties: Cherry is easy to work, finishes smoothly, and is dimensionally stable. It is easily machined. It can be sawn cleanly, turned well, and planed excellently with standard cutting angles. Screwholding ability is good, as is gluing, except where gum streaks are present.

Durability: Rated as very resistant to heartwood decay.

Preservation: No information available at this time.

Uses: Fine furniture, printing and engraving blocks, patterns, professional and scientific instruments, piano actions, handles, wooden ware, toys, and specialty items.

Toxicity: No information available at this time.

Additional Reading and References Cited (in parentheses)

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