



## Taxus brevifolia Nutt.

### Family: Taxaceae

### Pacific Yew

The genus *Taxus* is composed of 10 species native to North America [3], Central America [1] and Eurasia [6]. The word *taxus* is the classical Latin name, from the Greek *taxos*. The word *brevifolia* means short leaf, referring to the size of its needles, relative to the English yew (*Taxus baccata* L.). Recently, taxol, an anti-cancer agent, has been isolated from the bark of *Taxus brevifolia*.

**Other Common Names:** Canadese taxus, Canadian yew, if a feuilles courtes, if du Canada, if occidental, kanadensk idegran, mountain mahogany, Oregon yew, Pacific yew, pazifische eibe, tassi d'america, tasso americano, taxo americano, tejo americano, western yew, westerse taxus, yew.

**Distribution:** Pacific yew is native to the Pacific Coast region from southeast Alaska, south in western British Columbia, western Washington, western Oregon and northern and central California (including the Sierra Nevada). It is also grows in the Rocky Mountain region from southeast British Columbia south to northwest Montana, northern Idaho, eastern Washington and northeast Oregon.

**The Tree:** Pacific yew trees reach heights of 50 feet, with diameters of 2 feet. The largest tree on record was 60 feet tall, with a diameter of 6 feet.

**General Wood Characteristics:** The wood from Pacific yew has a thin light tan sapwood, while the heartwood is brown to bright orange. It is dense, very hard and strong, heavy and has a very fine, straight and close grain with a fine texture. It has a high luster and has no characteristic odor or taste.

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

	Specific gravity	MOE x10 <sup>6</sup> lbf/in <sup>2</sup>	MOR lbf/in <sup>2</sup>	Compression		WML <sup>a</sup> in-lbf/in <sup>3</sup>	Hardness lbf	Shear lbf/in <sup>2</sup>
				Parallel lbf/in <sup>2</sup>	Perpendicular lbf/in <sup>2</sup>			
Green	0.60	0.99	10100	4650	1040	20.2	1150	1620
Dry	0.67	1.35	15200	8100	2100	18.7	1600	2230

<sup>a</sup>WML = Work to maximum load.  
Reference (153).

#### Drying and Shrinkage

Type of shrinkage	Percentage of shrinkage (green to final moisture content)		
	0% MC	6% MC	20% MC
Tangential	5.4	4.3	1.8
Radial	4.0	3.2	1.3
Volumetric	9.7	7.8	3.2

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

### Conventional temperature/moisture content-controlled schedules<sup>a</sup>

Condition	4/4, 5/4 stock	6/4 stock	8/4 stock	10/4 stock	12/4 stock	British schedule 4/4 stock
Standard	T8-B3	NA	T5-B2	NA	NA	G

<sup>a</sup>Reference (74, 185).

**Working Properties:** Pacific yew wood works well with tools. It splits during nailing but hold screws well. It bends easily, is excellent for turnery and finishes smoothly.

**Durability:** Pacific yew is rated as exceptionally high in resistance to heartwood decay (10). It may be used for outdoor purposes without preservative treatment.

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

**Uses:** Archery bows, turnery, cabinetry, canoe paddles, veneer, marquetry, panelling, carvings, furniture, joinery, fences, door, tables, rustic furniture.

**Toxicity:** May cause irritation and /or dermatitis (3,7&11). The word toxic is based on *Taxus*.

### Additional Reading and References Cited (in parentheses)

1. Bolsinger, C. L. and Jaramillo, A. E. *Taxus brevifolia* Nutt. Pacific Yew. in: Burns, R. M. and Honkala, B. H., tech. coords. Silvics of North America. Volume 1, Conifers. Washington, DC: USDA Forest Service; 1990; pp. 573-579.
2. Boone, R. S.; Kozlik, C. J.; Bois, P. J., and Wengert, E. M. Dry kiln schedules for commercial woods - temperate and tropical. Madison, WI: USDA Forest Service, FPL-GTR-57; 1988.
3. Hausen, B. M. Woods injurious to human health. A manual. New York, NY: Walter de Gruyter; 1981.
4. Henderson, F. Y. A handbook of softwoods. London: HMSO; 1977.
5. Hyam, R. and Pankhurst, R. Plant and their names. A concise dictionary. Oxford, UK: Oxford University Press; 1995.
6. Markwardt, L. J. and Wilson, T. R. C. Strength and related properties of woods grown in the United States. Washington, DC: USGPO, USDA Forest Service, Tech. Bull. No. 479; 1935.
7. Mitchell, J. and Rook, A. Botanical dermatology: plants and plant products injurious to the skin. Vancouver, BC: Greenglass Ltd.; 1979.
8. Simpson, W. T. Dry kiln operator's manual. Madison, WI: USDA Forest Service, FPL Ag. Handbook No. 188; 1991.
9. Summitt, R. and Sliker, A. CRC handbook of materials science. Vol. 4. Boca Raton, FL: CRC Press, Inc.; 1980.
10. USDA. Wood handbook: wood as an engineering material. Madison, WI: USDA Forest Service, FPL Ag. Handbook No. 72; 1974.
11. Woods, B. and Calnan, C. D. Toxic woods. British Journal of Dermatology. 1976; 95(13):1-97.