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Wood Technology Transfer Fact Sheet

Pterocarpus macrocarpus

Burma Padauk

Family: Leguminosae

Other Common Names: Mai Pradoo, Pradoo (Thailand).

Distribution: Sometimes rather common in the upper mixed and dry forests of Burma; also found in mixed deciduous forests of Thailand.

The Tree: A medium-sized tree, up to 80 ft in height, boles clear to 25 ft straight and cylindrical, sometimes irregular; trunk diameters 2 to 3 ft.

The Wood:

General Characteristics: Heartwood bright yellowish red to dark brick red, streaked with darker lines, lustrous when freshly cut but becoming a dull but attractive golden brown on exposure; sapwood grayish, narrow. Texture moderately coarse; grain interlocked; has a faint spicy odor.

Weight: Basic specific gravity (ovendry weight/green volume) 0.75; air-dry density 54 pcf.

Mechanical Properties: (2-in. standard)

Moisture content Bending strength Modulus of elasticity Maximum crushing strength

(%) (Psi) (1,000 psi) (Psi)

Green (38) 15,975 1,900 8,200

12% 20,640 2,080 10,945

Janka side hardness 2,040 lb for green material and 2,170 lb for dry.

Drying and Shrinkage: Seasons well with little degrade, but does have a slight tendency to surface check. Kiln schedule T6-D4 is suggested for 4/4 stock and T3-D3 for 8/4. Shrinkage green to ovendry: radial 3.4%; tangential 5.8%; volumetric 8.4%

Working Properties: Rather difficult to saw, especially when dry, and also difficult to work with handtools, turns well, dresses to a smooth finish, glues satisfactorily

Durability: The heartwood is rated as very durable and also resistant to termite attack. Sapwood liable to attack by powder-post beetles.

Preservation: Heartwood extremely resistant to preservation treatments.

Uses: Decorative flooring, furniture, cabinetwork, tool handles, billiard tables.

Additional Reading: (17), (26), (38), (47)

17. Farmer, R. H. (Editor). 1972. Handbook of hardwoods. H. M. Stationery Office, London.

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38. Limaye, V. D. 1933. The physical and mechanical properties of woods grown in India. Third interim Report on Project 1. Indian Forest Records 16(1 0):1 -70.

47. Pearson, R. S., and H. P. Brown. 1932. Commercial timbers of India. Gov. of India Central Publ. Br., Calcutta.

From: Chudnoff, Martin. 1984. Tropical Timbers of the World. USDA Forest Service. Ag. Handbook No. 607.