



Paulownia Log Grades

Specifications and Uses

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The following grade specifications can be used as a guideline for determining the relative value of Paulownia logs. While there is NOT a recognized standard for Paulownia log grading in the United States, these specifications are widely used throughout central and southeastern states for buying logs. Pricing is sensitive to these grading specifications, market fluctuations, and subjective criteria such as color, increment variability, length, ring shake, stain, etc.

GRADE	Rings Per Inch	Scaling Diameter (inches)	Minimum Clear Faces (number)	Log Length (feet)	Relative Prices (1992 \$)
AA	8	16	4	6.5	8.00
A	6	12	4	6.5	6.00
B	6	10	4 (1 knot)	6.5	2.50
C	4	8	3	5	2.00
D	4	8	2	5	1.50
E	<4	6	0	5	1.00

	LOG POSITION	PITH LOCATION
AA	butt	center
A	butt	center
B	butt or upper	undefined
C	butt or upper	undefined
D	butt or upper	undefined
E	butt or upper	undefined

Grading Specifications

Rings per Inch: the minimum number of allowable growth rings per inch of log diameter. Normally this value is averaged across the entire cross-sectional diameter (see increment variability).

Scaling Diameter: diameter inside the bark at the small end of the log.

Minimum Clear Faces: the outside circumference of the log is divided into quarters; a face is a section of the outside of the log which is one quarter of the circumference running the entire length of the log. B grade logs can have only 1 knot on the log surface.

Log Length: the minimum length required for a grade.

Relative Price: average price paid per board foot for each grade in 1991. While the absolute value may fluctuate, the relative difference between grades should remain stable. [Note: in some instances lower grade logs (D and E) may not be merchantable.]

Log Position: butt denotes mainstem logs next to the ground. Uppers are any logs above the butt in the mainstem or branches.

Pith Location: for grade AA and A the pith is required to be in the center of the log; all other grades may have an un-centered pith.

Subjective

Criteria

The following criteria are not included in the grading specifications but may affect price. The relative impact of these criteria on price are contingent upon the buyer and the market conditions.

Color: while Paulownia logs are generally white they can be tinted yellow, green, or a medium gray. Whitish logs are preferred, especially in the higher grades (AA, A, B).

Increment variability: for AA logs the ring width must be consistent across the log. Small variations in ring width can be tolerated in A and B logs. However, higher prices are paid if ring width is constant, especially in the outer 1/2 to 2/3 of the diameter.

Ring shake and stain: Paulownia logs can contain a relatively high amount of ring shake and stain. Stains in the logs when cut (primarily purple) devalue the log, as can ring shake. Do not cut Paulownia trees in the late spring or summer as the logs can develop a tan stain which decreases their value. Higher grades are more sensitive.

Predominant Uses

- AA** Koto (high priced, stringed musical instrument)
- A** Tansu (furniture) - show parts and Koto
- B** Tansu - show parts
- C** Tansu - generic parts (backs, interior parts)
- D** furniture - generic parts
- E** common use - bowls, shoes, boxes, etc.

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