

Menu structure

MICROSCOPIC WOOD CHARACTERISTICS

GROWTH RINGS

- Ring Porous Growth Rings
- Semi-ring Porous Growth Rings
- Diffuse Porous Growth Rings

VESSEL ELEMENT FEATURES

PATTERNS OF VESSEL ARRANGEMENT

- Exclusively Solitary Vessels
- Radial Groups of 2 to 4 Vessels
- Radial Groups of 4 or more Vessels
- Radial/Oblique Vessel Arrangement
- Tangential Vessel Arrangement
- Vessels Arranged in Pore Clusters

VESSEL ELEMENT PERFORATION PLATES

- Simple Perforation Plates
- Multiple Perforation Plates
- Scalariform Plates with > 20 Bars

VESSEL ELEMENT CELL WALL FEATURES

- Vessels with Spiral Thickenings
- Vessels with Minute Pits
- Vessels with Alternate Pits
- Vessels with Opposite Pits
- Vessels with Scalariform Pits

VESSEL ELEMENT LUMEN FEATURES

- Abundant Tyloses in Vessel Lumens
- Sclerosed Tyloses in Vessel Lumens
- Deposits or Gum in Vessel Lumens

VESSEL DENSITY IN CROSS SECTION

- < 5 Vessels per square mm
- 5 - 20 Vessels per square mm
- 20 - 40 Vessels per square mm
- > 40 Vessels per square mm

## TRANSVERSE VESSEL ELEMENT DIAMETER

- < 50 microns - not visible
- 50-99 microns - barely visible
- 100-200 microns - fairly distinct
- > 200 microns - very distinct

## OTHER ELONGATED AXIAL CELLS PRESENT

- Fibers Present
- Fiber-Tracheids Present
- Vascular Tracheids Present
- Vasicentric Tracheids Present
- Spiral Thickenings Present
- Vertical Canals Present

## MICROSCOPIC RAY FEATURES

### OVERALL MICROSCOPIC RAY FEATURES

- Rays Commonly > 1 mm High
- Aggregate Rays
- Storied Rays

### RAY SERIATION

- Exclusively 1-seriate Rays
- 2- or 3- seriate Rays
- 4- to 10- seriate Rays
- > 10-seriate Rays
- Rays of Two Distinct Widths

### RAY MARGINAL CELL CHARACTERISTICS

- Homocellular Rays
- Heterocellular Marginal Cells 1-3
- Heterocellular Marginal Cells 4-9
- Heterocellular Marginal Cells =>10
- 2-,3-seriate = 1-seriate Width
- Tile Cells Present
- Sheath Cells Present
- Radial Canals or Tubes Present
- Ray-Vessel Pits > 10 microns

### TANGENTIAL/TRANSVERSE RAY DENSITY

- < 4 Rays per mm
- 4-12 Rays per mm
- > 12 Rays per mm

## AXIAL PARENCHYMA DISTRIBUTION

- Axial Parenchyma Absent or Rare
- Apotracheal Axial Parenchyma
- Diffuse/Scanty Axial Parenchyma
- Paratracheal Axial Parenchyma
- Vasicentric Axial Parenchyma
- Aliform-confluent Axial Parenchyma
- Banded Axial Parenchyma
- A Prnchyma Bands Mostly Uniseriate
- A Prnchyma Bands > 4-seriate
- Bands > 6/mm in Radial Direction
- Mariginal or Zonate Axial Prnchyma
- Storied Parenchyma
- Fusiform Parenchyma

## MACROSCOPIC WOOD CHARACTERISTICS

### RAY VISIBILITY TO UNAIDED EYE

- Rays Obscure to Unaided Eye
- Rays Distinct to Unaided Eye

### WOOD FIGURE

- Even Figured Wood
- Uneven Figured Wood

### WOOD TEXTURE

- Smooth Texture Wood
- Rough Textured Wood
- Greasy Textured Wood

### WOOD HARDNESS

- Very Soft Wood
- Soft Wood
- Medium Wood
- Hard Wood
- Very Hard Wood

### GREEN WOOD WEIGHT

- Very Light Weight Wood
- Light Weight Wood
- Heavy Weight Wood
- Very Heavy Weight Wood

### DRY WOOD WEIGHT

- Very Light Weight Wood
- Light Weight Wood
- Heavy Weight Wood
- Very Heavy Weight Wood

### WOOD LUSTER

- Wood Reflects Light
- Wood Appears dull

### COLOR OF FRESH SAPWOOD

- Whitish Sapwood
- Pinkish Sapwood
- Reddish Sapwood
- Orangish Sapwood
- Golden Sapwood
- Yellowish Sapwood
- Greenish Sapwood
- Purplish Sapwood
- Brownish Sapwood
- Grayish Sapwood
- Blackish Sapwood

### COLOR OF FRESH HEARTWOOD

- Whitish Heartwood
- Pinkish Heartwood
- Reddish Heartwood
- Orangish Heartwood
- Golden Heartwood
- Yellowish Heartwood
- Greenish Heartwood
- Purplish Heartwood
- Brownish Heartwood
- Grayish Heartwood
- Blackish Heartwood

### SMELL OF FRESH HEARTWOOD

- Unpleasant Smell
- Pleasant Smell
- Strong Tannic Acid Smell
- Resinous Smell
- Aromatic Smell
- Smells Faintly Like Rose Blossoms
- Earthy Smell

- [Leathery Smell](#)
- [Spicy Smell](#)

#### [TASTE OF FRESH HEARTWOOD](#)

- [Astringent Taste](#)
- [Spicy Taste](#)