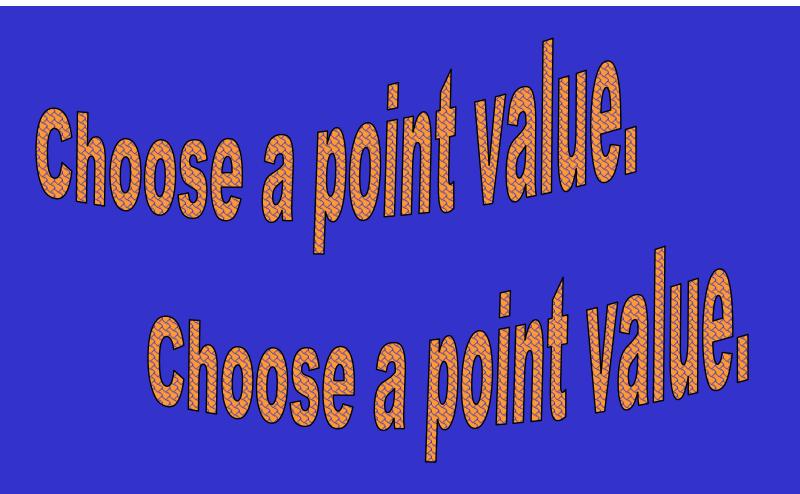


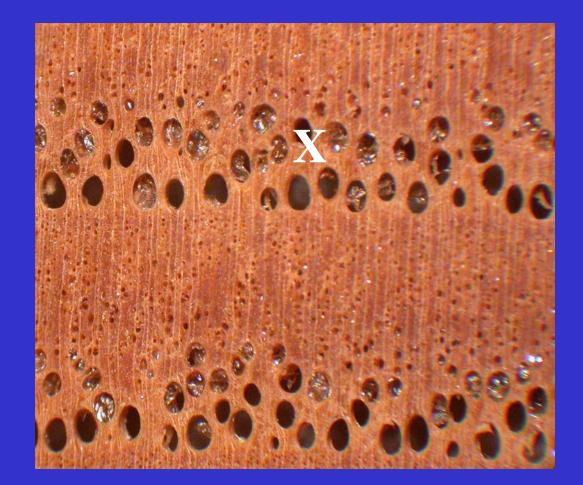
Choose a category. You will be given the answer. You must give the correct question.



<u>Click here for</u> <u>Final Jeopardy</u>

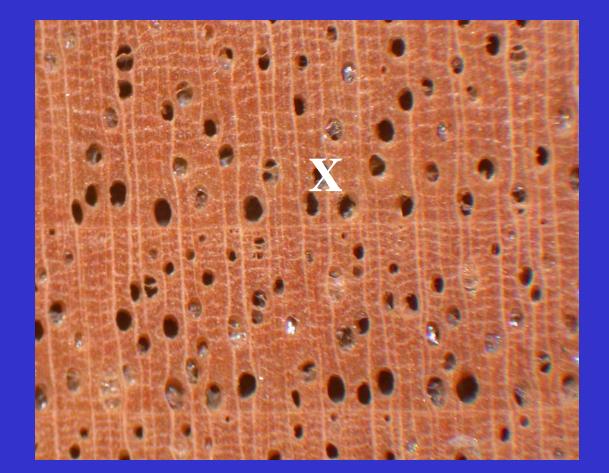
Pore Arrangement	Hardwoods	Wood Structure Used for ID	Hardwood Or Softwood	Softwoods
<u> 10 Point</u>	<u> 10 Point</u>	<u> 10 Point</u>	<u>10 Point</u>	<u>10 Points</u>
<u>20 Points</u>	<u>20 Points</u>	<u>20 Points</u>	<u>20 Points</u>	<u>20 Points</u>
<u>30 Points</u>	<u>30 Points</u>	<u>30 Points</u>	<u>30 Points</u>	<u>30 Points</u>
<u>40 Points</u>	<u>40 Points</u>	<u>40 Points</u>	<u>40 Points</u>	<u>40 Points</u>
<u>50 Points</u>	<u>50 Points</u>	<u>50 Points</u>	<u>50 Points</u>	<u>50 Points</u> <u>Final Jeopardy</u>

### **Porous?**



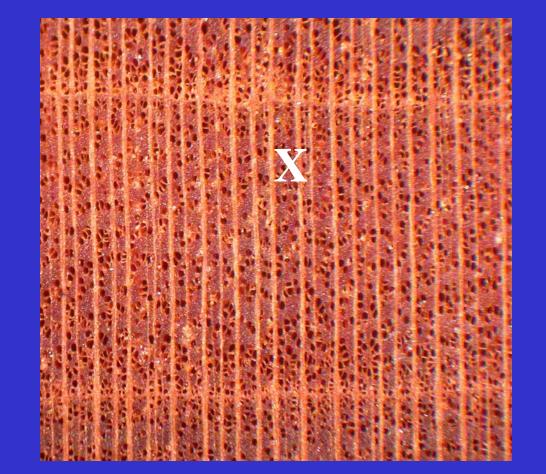
# **Ring Porous**

# **Porous?**



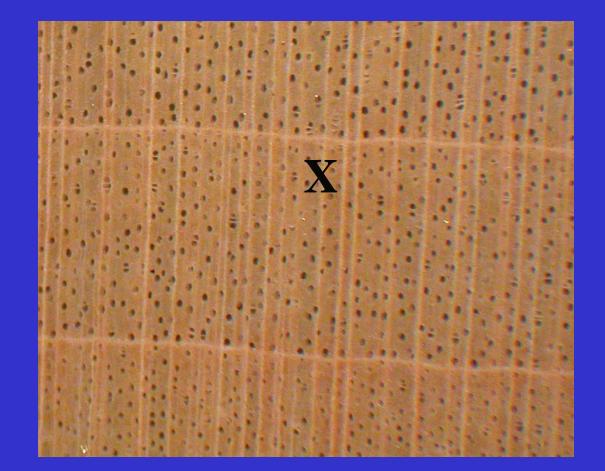
# **Semi-ring Porous**

#### **Porous**?



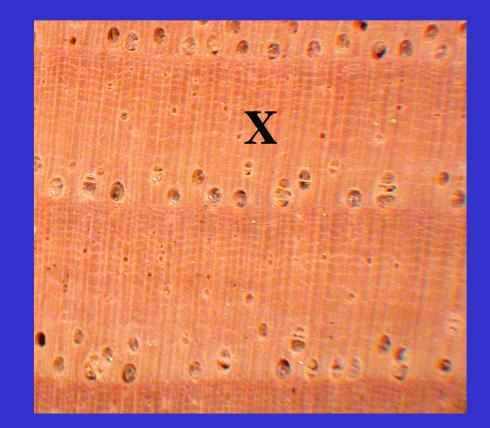
#### **Diffuse Porous**

# **Porous?**

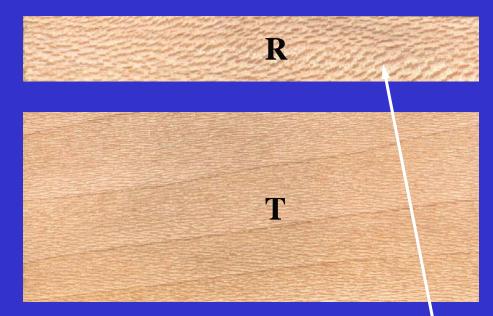


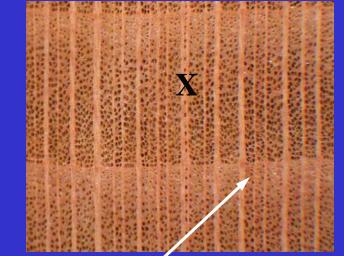
#### **Diffuse Porous**

## **Porous**?



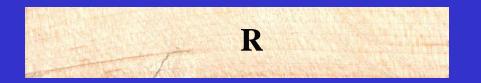
# **Semi-ring Porous**

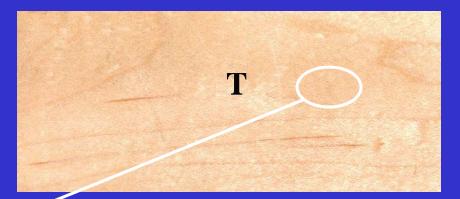


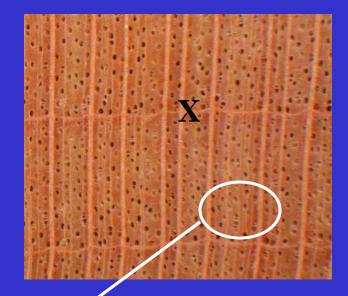


Key Features: rays very distinct on the tangential surface, usually has distinct ray fleck on the radial surface, latewood tissue lighter than the earlywood tissue.

# Sycamore



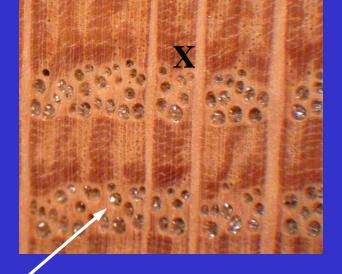




Key Features: large rays with several thin rays in between, very hard, difficult to scratch with thumbnail, rays appear on the
tangential surface as little red lines and difficult to see

### **Hard Maple**

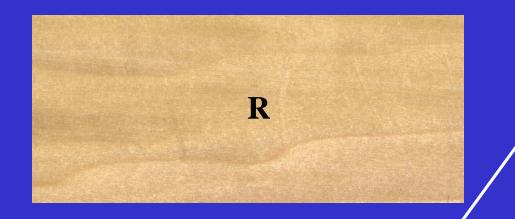


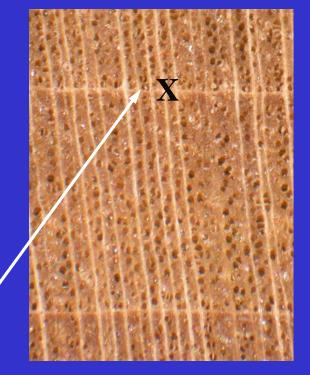


Key Features: majority of rays in the tangential surface greater than 3/4" in length, normally pores filled with tyloses, very large ray fleck in the radial plane can be present.

### White Oak



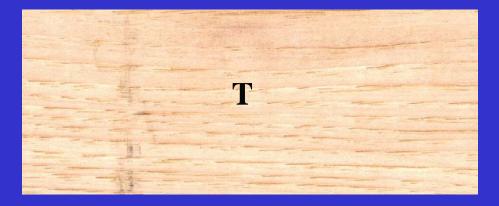


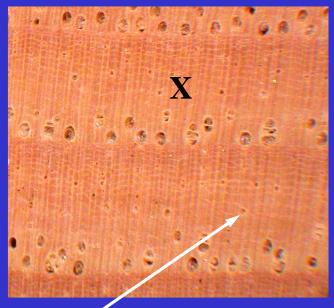


Key Features: marginal parenchyma at the annual growth appears white in the crosssection surface, heartwood is green and can have streaks of purple and black.

### **Yellow Poplar**







Key Features: semi-ring porous, parenchyma cells appear as little white squiggly lines perpendicular to the rays on the crosssection surface, fish in a net.



- Is generally characterized by alternating light and dark lines.
- From one dark line to the next is one year of growth.
- These lines are created from the difference in the way the tree forms cells in spring (earlywood growth) and the way cells are formed in the late summer or fall (latewood growth).



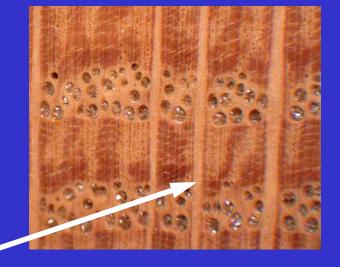
### **Annual Growth Rings**

is usually darker than the sapwood and has materials deposited in this portion of the tree stem that are called extractives. These extractive materials in some cases gives the wood smell and the ability to resist decay.

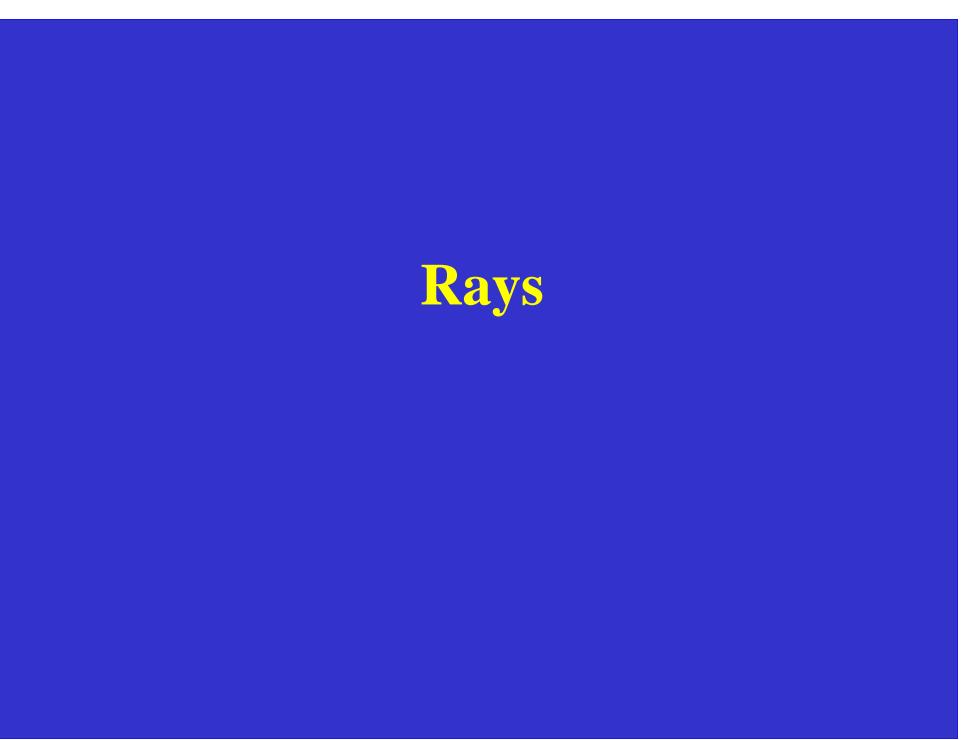


### Heartwood

#### **Cross Section Surface**

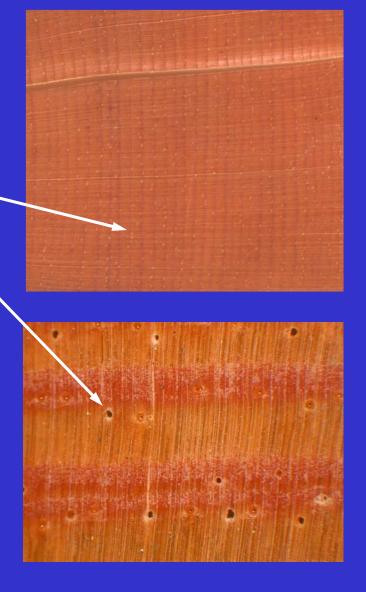


What structure are these arrows pointing to.



These are only found in all species of the four genera within the *Pinaceae* family

Larches (*Larix* spp.)
Pines (*Pinus* spp.)
Douglas firs (*Pseudotsuga menziesii*)
Spruces (*Picea* spp.)

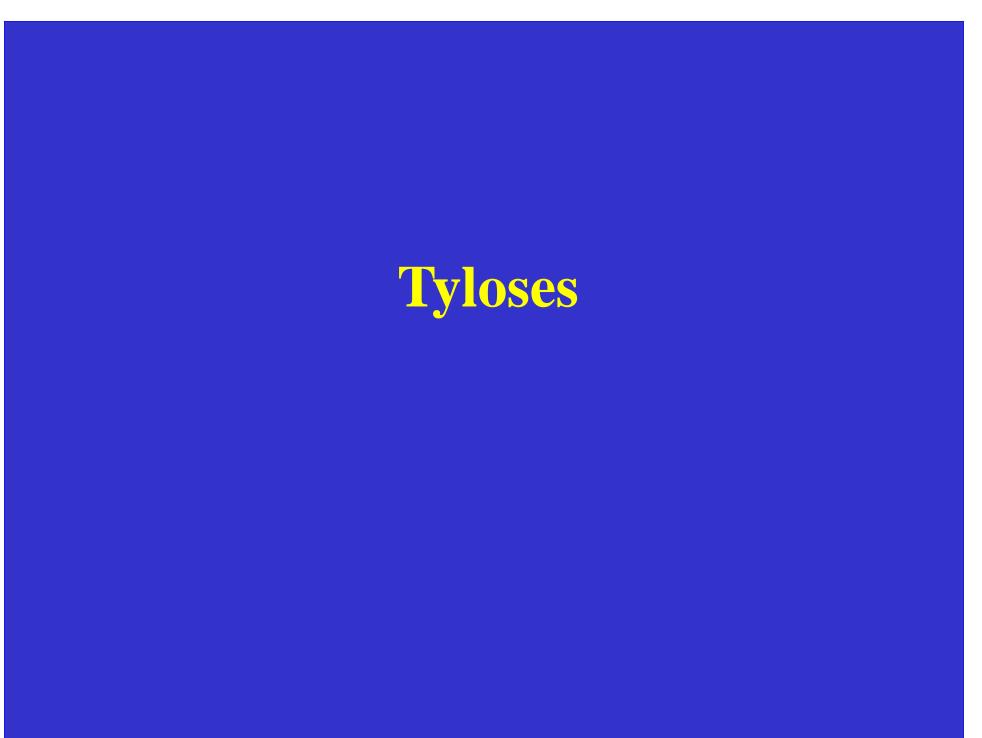


### **Resin Canals**

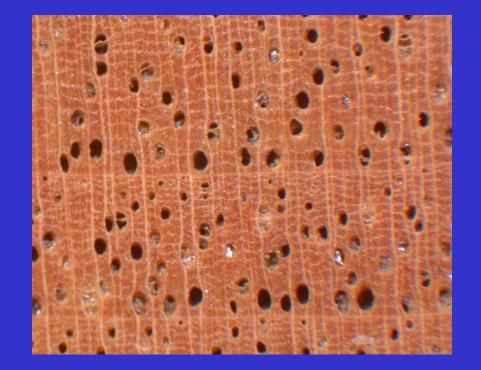
\_\_\_\_\_ are crystal-like substances that can be present in the opening of pores.

It is these substances that prevents White Oak whiskey barrels from leaking their contents. These substances are normally very abundant in white oak and is one of the key features separating White Oak from Red Oak.



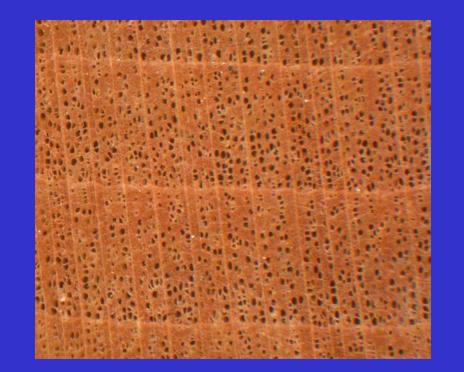


#### **Black Walnut**



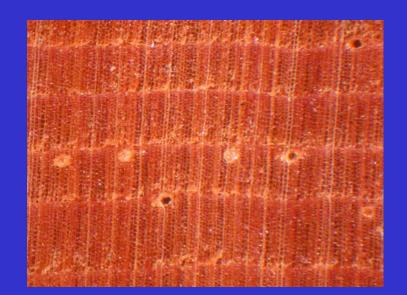
#### Hardwood

#### **American Basswood**



## Hardwood

#### White Pine



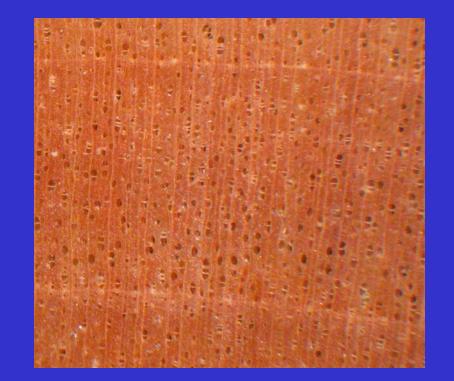
### Softwood

#### **Eastern Redcedar**



#### Softwood

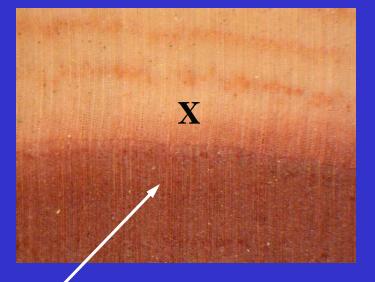




## Hardwood

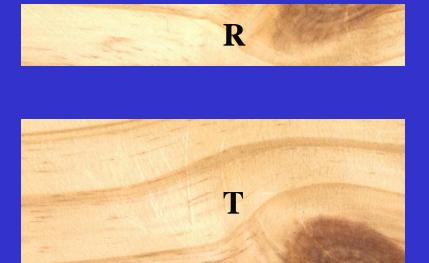


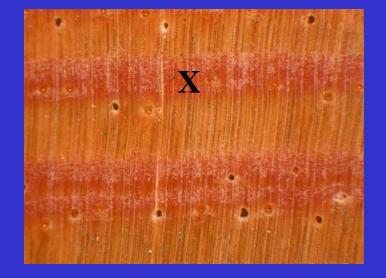
T



Key Features: heartwood deep purple color, sapwood white color, distinctive cedar chest smell.

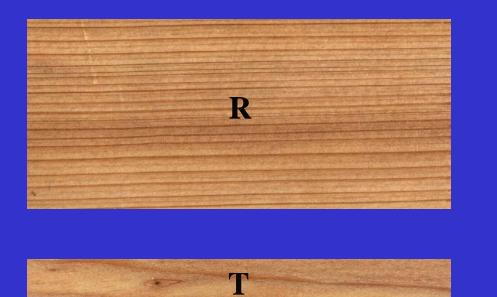
#### **Eastern Redcedar**

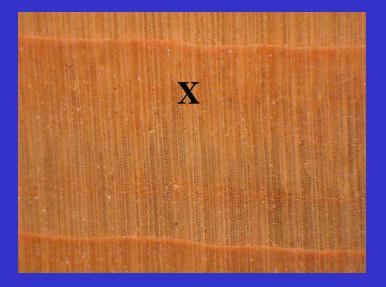




Key Features: has resin canals, earlywood to latewood transition is abrupt, pine smell, much harder than White Pine, fairly difficult to scratch with thumbnail, latewood growth very dense.

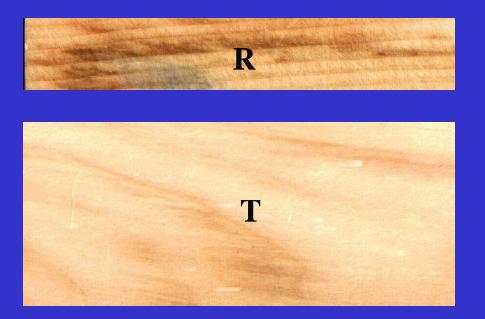
#### **Southern Yellow Pine**

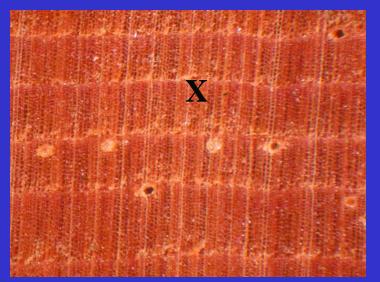




Key Features: false growth rings, waxy feel on tangential surface.

## Baldcypress

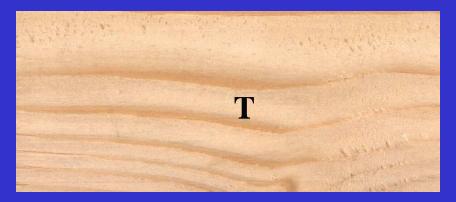


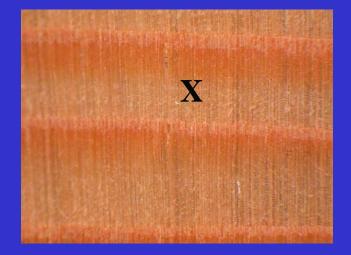


Key Features: has resin canals, earlywood to latewood transition is gradual, pine smell, much softer than Southern Yellow Pine fairly easy to scratch with thumbnail.

#### **Eastern White Pine**





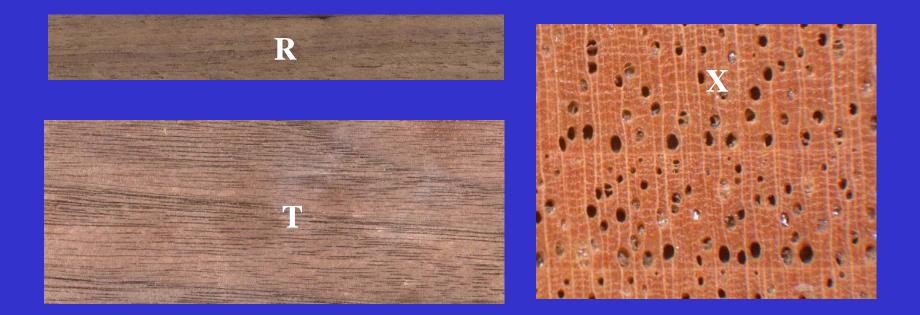


Key Features: earlywood to latewood transition is abrupt, no other real distinctive feature.

#### **Eastern Hemlock**



#### Make your wager



# **Black Walnut**