

Key: Softwoods¹

The identification of softwoods (coniferous woods like pine and spruce) has been thought to be more difficult than for the hardwood species. This is not the case, as conifers have fewer anatomical features, but more than enough to accurately separate genera and species groups in some. This key is constructed using the microscopic characters of wood (and charcoal). It has been designed for the archaeologist, anthropologist, archaeobotanist, conservator, forensic scientist and others interested in this area. Each of the microscopic characters are described and illustrated, followed by detailed descriptions of the genera included in Part 3 – ID of Softwoods. The taxa listed below are all softwoods native to eastern North America. The taxa noted in bold are included in this study.

¹ Modified from: Identification of Coniferous Woods. B. Francis Kukachka. TAPPI, Vol. 43, No. 11, pages 887-896, November 1960.

Characters	<i>Larix laricina</i>	<i>Picea</i> spp.	<i>Pinus</i> (Yellow Group)	<i>Pinus</i> (Red Group)	<i>Pinus</i> (White Group)	<i>Tsuga canadensis</i>	<i>Abies</i> (Eastern)	<i>Juniperus</i> spp.	<i>Thuja occidentalis</i>	<i>Chamaecyparis thyoides</i>	<i>Taxodium distichum</i>
Canals											
Present	X	X	X	X	X						
Epithelium Thick-walled	X	X									
Rays											
Tracheids Present	X	X	X	X	X	X					
Tracheids Dentate			X	X							
Indenture Present	X	X				X		X	X		
End Walls Nodular	X	X	X	X	X	X	X	(X)			
Cross-field Pitting											
1-2(4) Large				X	X						
1-6 Pinoid			X								
Piceoid	X	X				X					
Cupressoid								X		X	X
Taxodioid									X		X
Axial Tracheids											
Pits 2-4 Opposite		(X)				X			(X)		X
Axial Parenchyma											
Present						X		X	(X)	X	X
Cross Walls Nodular						X		X	X		X
Abrupt EW/LW	X		X	X		X			X		X