

JUGLANS

Vessels usually medium sized, often solitary, but some multiples and clusters. Ring-porous. Perforations simple or simple and scalariform. Intervascular pitting alternate and moderately large: Pits to parenchyma usually similar.

Parenchyma typically apotracheal as scattered cells, short uniseriate bands, or continuous bands 1-3 cells wide, often with a little paratracheal parenchyma as well. Some spp. eg.g. *J. cinerea* L. and *J. colombinensis* Dode have not very marked association of parenchyma bands with vessels. Terminal bands of parenchyma connected with growth rings.

Rays typically 2-4 but may be 5-7. Uniseriates moderately numerous, cells procumbent to square. Almost homogeneous (Kribs's Type I) in some spp. Commonly has numerous uniseriate marginal rows of cells that are barely distinguishable in tangential section from the cells of multiseriate parts, though distinct in radial section as square to barely procumbent cells.

Fibres typically with bordered pits, almost entirely limited to radial walls. Walls usually medium thickness.