Juglandaceae

PTEROCARYA

Vessels usually medium sized (100-200 / mean tangential diameter) or slightly larger; mostly solitary, though with some small multiples and clusters; sometimes in distinct oblique lines or flames; usually about 5 per sq. mm. ring-porous, and tending to be ring-porous in P. paliurus Bat; with spiral thickening in the small vessels. Perforations simple, or simple and scalariform. Intervascular pitting alternate and moderately large; pits to parenchyma usually similar. Thin-walled tyloses common in almost all the spp. Mean member length 0.4-0.9 mm.

<u>Parenchyma</u> typically apotracheal, as scattered cells, short uniseriate bands, or continuous bands 1-3 cells wide, often with a little paratracheal parenchyma in addition; continuous bands characteristic. Strands usually of 8 cells.

Rays typically up to 2-4 cells wide; less than 1 mm. high; uniseriates moderately numerous, the cells tending to be all procumbent to almost square. 6-13 rays per mm; almost homogeneous (Kribs's Type I) in some spp; this genus commonly has numerous uniseriate marginal rows of cells that are barely distinguishable in tangential section from the cells of the multiseriate parts, though distinct in radial section as square to barely procumbent cells. Sometimes containing crystals.

Fibres typically with bordered pits; pits almost entirely limited to the radial walls. Walls usually of medium thickness, very thin in P. rhoifolia Sieb. et Succ; some fibres with gelatinous layers reported to be present in each genus. Mean length 1.1-15 mm.