

RICINUS

Vessels mostly moderately small (50-100 μ mean tangential diameter) to medium sized (100-200 μ); typically solitary and in numerous multiples of 2 or 3 cells and often with multiples of 4 or more cells; very commonly fewer than 5 per sq. mm. and seldom more than 17 per sq. mm. except in some of the spp. with very small vessels. Perforation plates typically simple. Intervascular pitting typically medium sized to large, often with the apertures small and not extending to the borders. Pits to ray and wood parenchyma commonly large and elongated and often scalariform. Tyloses often present; solid deposits sometimes present. Mean member length 0.3-0.85 mm.

Parenchyma typically abundant and apotracheal. Most commonly as scattered cells or short, irregular, uniseriate lines, or in moderately continuous bands, sometimes with a little paratracheal parenchyma in addition in Ricinus. Terminal bands not usually distinguishable. Often containing chambered crystals. Strands most commonly of 8 cells, sometimes fewer (4 cells). Silica occasionally present.

Rays typically up to 2-3 cells wide or wholly uniseriate, sometimes up to 4-5 cells wide in some spp; typically more than 1 mm. high; in woods with multiseriate rays the uniseriates usually high and numerous, and composed of upright cells or mixed upright and procumbent cells. Rays 7-25 per mm. mostly 11-21; markedly heterogeneous (Kribs's Types I, II and III) typically with 4 or more, and commonly with 10 or more, marginal rows of upright cells, and with 2 or more small multiseriate portions per ray; marginal rows few in some spp. in woods with uniseriate rays only, the cells varying from all square or upright to all procumbent; in various spp., but most commonly markedly heterogeneous. Commonly containing crystals and often with dark gummy contents.

Fibres typically with small pits, more numerous on the radial than on the tangential walls. Wall usually moderately thin, but sometimes thick and then often with a mucilaginous layer. Mean length 0.7-1.65 mm.