EUPHORBIA

Euphorbiaceae

Vessels mostly moderately small (50-100 μ mean tangential diameter) to medium sized, about 50 μ or less in some species; 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 species with very small vessels. Perforation plates typically simple. Intervascular pitting typically medium-sized to large, often with apertures small and not extending to the borders; pitting opposite or scalariform in some species. Pits to ray and wood parenchyma commonly large and elongated and often scalariform. Mean member length usually 0.3-0.85 mm.

Parenchyma typically abundant and apotracheal. Most commonly as scattered cells or short, irregular, uniseriate lines. Predominantly paratracheal, aliform to confluent. Terminal bands not usually distinguishable often containing chambered crystals. Strands most commonly of 8 cells. Silica occasionally present.

Rays typically up to 2-3 cells wide, but wholly uniseriate or with only rare biseriate rays in some species; lower than 1 mm. high. Rays 7-25 per mm, mostly 11-21; markedly heterogeneous (Kribs 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. In woods with uniseriate rays only, as some species, the cells are all square or upright, but most commonly markedly heterogeneous. Commonly containing crystals.

Fibres typically with small pits, more numerous on radial than on tangential walls. Walls usually moderately thin, but sometimes thick. Mean length 0.7-1.65 mm.