BUXUS

Vessels typically very small (mean tangential diameter 25-50 a) to extremely small (less than 25 a); exclusively solitary, apart from tangential pairs due to overlapping ends; typically about 200 per sq. mm. or more. Perforation plates exclusively scalariform except for rare simple perforations reported in Buxus, the plates usually with fewer than 20 bars (Inst. slide mostly about 10), but commonly with 30 or more in B. subcolumnaris of the section Tricera; the bars not exceeding 15 in spp. of Buxus belonging to section Enbuxus; occasionally foraminite e.g. in Natobuxus acuminata. Intervascular pitting rare, typically opposite and small to minute. Pits to wood and ray parenchyma similar to the intervascular pitting. Mean member length usually about 0.5-0.6 mm.

Parenchyma apotracheal, typically as isolated cells scattered among the fibres, tending to be associated with the vessels in some specimens of Buxus, particularly of B. sempervirens (fig. 297 F). Strands of 2-8, mostly 4 cells.

Rays typically 2 cells wide; typically low; uniseriates numerous (Inst. slide nearly biseriate), usually composed of square to upright cells only, but of mixed procumbent and upright cells in B. macowani. 12-19 rays per mm. Fairly markedly heterogeneous (Kribs's Type II A), with 1-4 marginal rows of upright cells, but homogeneous (Kribs's Type I) in B. macowani.

Fibres with bordered pits, the bordens small and sometimes rather indistinct. Pits equally numerous on radial and tangential walls. Walls thick. Mean length usually 0.6-0.9 mm.