

Caprifoliaceae

VIBURNUM

Vessels small (mean tangential diameter less than 100 μ), exclusively solitary, apart from tangential pairs due to overlapping ends. Typically ~~more than~~ 30 per sq. mm. Typically ring-porous or semi-ring-porous, with faint spiral thickenings in some spp. Perforation plates exclusively or predominantly scalariform, with more than 20 bars. Intervascular pitting alternate, medium sized to moderately small. Pits to ray cells similar to the intervascular pitting. Mean member length 0.3-1.2 mm.

Parenchyma rather sparse, apotracheal, scattered among the fibres (diffuse) (as in fig. 177 F, though this is section of *Diervilla*). Strands usually of 8 cells.

Rays usually up to 3 or 4 cells wide, but seldom more than 2 cells wide in some spp. Commonly about 1 mm. high, with fused rays higher. Uniseriates composed entirely of square to upright cells, typically numerous and moderately high. Typically 11-19 rays per mm. Heterogeneous (Kribs's Types I and II A), usually with 1-4 marginal rows of square to upright cells.

Fibres typically with distinctly bordered pits that are sometimes slightly less numerous on the tangential than on the radial walls. Walls moderately thin. Spiral thickening present. Mean length 0.8-1.8 mm.