HEDERA

Vessels very small to medium sized (mean tangential diameter ranging from about 30-120 /u); in short radial pore multiples and in clusters, sometimes in radial groups of 4 or more. Very numerous, ring-porous, with spiral thickening. Perforations usually simple. Intervascular pitting alternate. Pits to ray cells often larger than the intervascular pitting, irregular, with very narrow borders, or simple. Tyloses sometimes present. Mean vessel member length 0.4-1.3 mm.

Parenchyma paratracheal only, often extremely sparse. Strands usually up to 4 or 8 cells.

Rays up to 3-15 cells wide, usually 4-6 cells. Usually less than 1 mm. high. Uniseriates typically very few and often only a few cells high, composed entirely of square to upright cells or with some procumbent cells, but H. Helex composed of procumbent cells only. 1-8, mostly 3-5 rays per mm. Homogeneous (Kribs's Type I). Procumbent cells small.

Fibres with small simple pits, mostly on the radial walls and often rather few even there. Commonly septate particularly round the vessels. Septate fibres observed or reported in Hedera. Walls thin to moderately thick. Mean length usually 0.7-1.6 mm. From such figures as are available appear to show that the fibres are on an average seldom more than half as long again as the vessel members.