

## ACER

Vessels moderately small (50-100  $\mu$  mean tangential diameter): solitary and in multiples of 2-3 cells. 30-60 per sq. mm. with spiral thickening. Perforations simple; the smallest vessels occasionally with foraminate perforation plates. Intervascular pitting typically alternate, but may have not-infrequent regions of opposite pitting; sometimes moderately large and often with hexagonal borders; pits to ray and wood parenchyma similar to intervacular pitting. Mean member length 0.3-0.5 mm.

Parenchyma very sparse or absent except at boundary of growth ring; usually with a few cells round vessels, e.g. *A. ginnala* and *A. pseudosieboldianum*. Terminal parenchyma varying from a few scattered cells to bands 1 to several cells wide and typically composed of thick-walled fusiform cells with an occasional strand divided into 2 cells, strands of 2-4 cells moderately common in a few spp. e.g. *A. thompsoni*. Strands of paratracheal parenchyma usually of 4 cells.

Rays 2-10, mostly 5-7 cells wide, with a tendency to be of 2 distinct sizes in some spp. or specimens. e.g. *A. nigrum*, *A. saccharum*, and *A. pseudoplatanus*. Less than 1 mm. in height except in a few specimens, e.g. of *A. pictum* and *A. saccharum*. With moderately numerous uniseriate's composed of procumbent cells, and often only a few cells high, 3-12, mostly 6-10 rays per sq. mm. Homogeneous (Kribs's Type I), and composed of small cells.

Fibres typically with simple pits, though narrow borders occur in a few spp. Pits more numerous on radial than tangential walls; often with conspicuous intercellular spaces. Mean length 0.6-0.9 mm.

Acer syriacum Boiss. et Gaill.

Diffuse-porous. Pores solitary and in short radial multiples, occasionally in chains 7 pores long; pores very small, maximum tangential diameter  $50 \mu$ ; numerous but not crowded. Vessels with simple perforations; pits alternate, medium sized; spiral thickenings. Wood parenchyma very sparingly paratracheal. Rays homogeneous; 3 to 4 cells wide; 25 to 50 cells high; ray-vessel pitting medium sized, short oval in outline. Fibres with numerous distinctly bordered pits. Crystals in wood parenchyma strands. (Ilanoth Specimen No. 33)