

ARBUTUS

Vessels typically very small (less than 50 μ mean tangential diameter). Moderately small (50-100 μ) in some spp. Spiral thickening present. Perforation plates simple and scalariform in some spp. and exclusively simple, or with only rare scalariform plates in other spp. Intervascular pitting typically opposite and rather small or transitional. Pits to ray cells usually similar to the opposite pitting and small but sometimes with many large elongated pits. Mean member length 0.4-0.8 mm.

Parenchyma typically very sparse or absent; when present, often in contact with vessels, possibly owing to the frequency of the vessels rather than to any tendency to be paratracheal. More abundant and diffuse in *Arbutus*. Strands varying from 2 cells to 8 cells.

Rays usually of 2 distinct sizes where the larger rays are 4 or more cells wide. Up to 3 cells wide in some spp. and 4-10 cells wide in other spp. Typically less than 1 mm. high. Uniseriates usually numerous and only a few cells high and consisting of square cells. Usually 10-15 rays per mm. and rather fewer than 12 in some spp. Heterogeneous (Kribs's Type IIA or, less commonly, I), commonly with up to 4 marginal rows of upright cells.

Fibres typically with numerous bordered pits, the borders large and distinct. With a few septate fibres with simple pits mixed with fibre-tracheids or with septate fibres predominating in some spp. Fibre-tracheids with spiral thickening present in some spp. Sometimes with very numerous bordered pits in cells adjacent to the vessels and suggestive of tracheids. Mean length 0.5-1.3 mm.

Arbutus Andrachne L.

Diffuse porous, with slight tendency towards ring porosity. Pores solitary and in multiples of 2 to 4; small, maximum tangential diameter 60 μ ; numerous but not crowded. Vessels with simple perforations; pits alternate, small, not crowded; spiral thickenings. Wood parenchyma very sparingly paratracheal. Rays heterogeneous, both upright and procumbent cells present, marginal tiers of upright cells 1 to 5,

uniseriate rays composed almost wholly of upright cells; 3 to 4 cells wide; up to 25 cells high; ray-vessel pitting fine, short oval in outline. Fibres with numerous distinctly bordered pits; spiral thickenings. Gum-like deposits in heartwood vessels and rays, bright orange in colour. (Ilanoth Specimen No. 10)