

BALANITES

Vessels medium-sized (mean tangential diameter 100-200 μ), in large clusters, mostly of solitary vessels; sometimes with a radial or oblique pattern; usually fewer than 5 per mm. Perforations exclusively simple. Intervascular pitting alternate, very small and numerous; pits to ray cells absent as the vessels do not touch the rays. Mean member length 0.07-0.22 mm.

Parenchyma predominantly apotracheal, diffuse and in numerous, irregular, uniseriate bands; apparently terminal bands sometimes present. Storied, usually with 8-11 stories per mm. Fusiform cells very common and sometimes almost the only type of parenchyma present apart from crystalliferous strands. Crystals absent in Balanites. Markedly disjunctive and with conspicuously grouped pits.

Rays all broad (uniseriate rays absent), up to 20 cells wide and 1.7 mm. high and with sheath cells.

Fibres with distinctly bordered pits, which are more numerous in the tangential than in the radial walls. Heimsch states that the fibrous elements are in most cases tracheids and seldom fibre-tracheids. Not storied. Walls thick. Mean length about 1.0 mm.

Vasicentric tracheids typically present.

Balanites aegyptiaca (L) Del.

Ring-porous, based on the pores being more numerous in the earlywood rather than on difference in size. Pores in short radial multiples and in clusters; in radial and oblique arrangement, occasionally zig-zag; medium sized, maximum tangential diameter 145 μ ; pores in latewood few and scattered. Vessels with simple perforations; pits alternate, small. Wood parenchyma diffuse, in numerous crowded uniseriate lines, reticulate. Rays homogeneous; up to 15 cells wide; up to 2 mm. high: ray-vessel pitting fine, short oval in outline. Fibres with bordered pits. Vasicentric tracheids Present. Ripple marks present, fine, not regular. (Ilanoth Specimen No. 60)