Rhamnaceae

PALIURUS

Vessels mostly small (less than 100 μ mean tangential diameter); never exclusively solitary; no spiral thickening. Perforation plates exclusively simple. Intervascular pitting alternate, with coalescent apertures in many spp. very marked in Paliurus; pits small to minute; pits to parenchyma and ray cells similar to the intervascular pitting, occasionally unilaterally compound. Tyloses recorded for P. samosissimus Poir. Mean member length 0.3-0.7 mm.

Parenchyma very sparse to moderately abundant, predominantly paratracheal in most spp., most commonly as a few cells round the vessels; with some diffuse parenchyma in addition to paratracheal in P. ramosissimus Poir; with uniseriate to biseriate terminal bands. Very thin-walled in most spp. Chambered crystals sometimes present.

Rays exclusively uniseriate; less than 1 mm. high; about 10-20 rays per mm. Woods with wholly homogeneous (Kribs's Type III), heterogeneous (Kribs's Type III) or composed entirely of square and upright cells; cells very commonly containing gum-like deposits and single crystals.

UNISERIATE RAYS

Fibres with simple pits, more numerous on the radial than the tangential walls, usually very sparse, but more numerous in some of the woods with thin-walled fibres. Walls thick to very thick; very commonly with a gelatinous inner layer. Mean length 0.7-1.7 mm.

Vascular tracheids present in woods with vessels in radial "flames"; often spirally thickened.

Paliurus spina-Christi Mill.
Diffuse-porous, in some growth rings a tendency towards ring-porosity. Pores solitary and in short radial multiples of 2 to 3; pores small, maximum tangential diameter 85 μ; numerous and crowded. Vessels with simple perforations; pits alternate, medium sized. Wood parenchyma sparingly paratracheal. Rays heterogeneous, procumbent and square cells in irregular arrangement as seen on the tangential section; uniseriate and biseriate in part; up to 20 cells high; ray-vessel pitting medium sized, short oval in outline. Fibres with simple pits (Ilanoth Specimen No. 46)