Fagaceae

FAGUS

Vessels moderately small (50-100 μ mean tangential diameter), with moderately numerous small multiples and clusters; usually rather more than 50 per sq. mm. Perforation plates predominantly scalariform (Inst. slide seems to have simple plates only). (No.; have a number of scalariform). Intervascular pitting opposite to transitional, and occasionally scalariform. Pits to ray and wood parenchyma typically large elongated and simple, with long axes usually horizontal.

Parenchyma apotracheal, typically as scattered cells or irregular uniseriate bands. Strands usually of 8 cells.

Rays. In most species rays are of 2 distinct sizes, uniseriate or many cells wide, but sometimes a complete graduation from smallest to largest sizes. (In woods with large rays there is usually abundant evidence of the aggregation of small rays or the dissection of large ones and a complete series of types from "aggregate" to "compound" can be found within the genus. These seem to apply to Lithocarpus and perhaps not to Fagus; see fig. 313 A and E). Uniseriates moderately to very numerous, composed wholly of procumbent cells or of procumbent and square cells. Usually 8-16 rays per mm. Homogeneous (Kribs's Types I and III). Large rays extend to the pith.

Fibres with numerous pits, which tend to be more abundant on radial than on tangential walls, the pits having very small to distinct borders. Walls moderately thin to very thick. Mean length 0.75-1.75 mm.