Polygonaceae

CALLIGONUM

Vessels mostly medium sized (100-200 μ mean tangential diameter); solitary and in small multiples; typically more numerous than 5 per sq. mm; ring-porous or semi-ring-porous in some spp. of Calligonum; spiral thickening observed or reported in some spp. Perforations simple. Intervascular pitting alternate, medium sized to very small; vestured; pitting ro ray and wood parenchyma cells similar. Mean vessel member length usually 0.3-0.5 mm, but shorter in Calligonum.

Parenchyma rather sparse paratracheal, varying from a few cells to a complete sheath round each vessel; vasicentric and diffuse in C. comosum L'Herit; tending to be storied.

Rays typically 2-3 cells wide; multiseriate rays less than 1 mm. high; uniseriates few to numerous, usually composed entirely of procumbent cells; 7-19 rays per mm. with only 2 or 3 marginal rows of upright or square cells. Cells typically filled with dark contents.

Fibres with small, simple pits, mostly in the radial walls. Septate in most genera, but not in Calligonum. Walls thin. Mean length usually about 0.7 mm. but about 0.45 in Calligonum.

Calligonum comosum L'Herit.
Ring-porous, but where the growth rate is very slow this feature becomes obscure. Pores in short radial multiples and clusters; latewood pores small to very small, maximum tangential diameter 75 μ, numerous but not crowded; earlywood pores medium sized, maximum tangential 170 μ. Vessels with simple perforations; pits alternate, medium sized vestured pits not observed. Wood parenchyma vasicentric, confluent, and terminal. Rays homogeneous; 1 to 3 cells wide; up to 30 cells high; ray-vessel pitting medium sized, short oval in outline. Fibres with simple pits; sapwood fibres containing starch grains. Gum-like substance in heartwood vessels, dark red-brown in colour. (Ilanoth Specimen No. 22)