

Compositae

## SANTOLINA

Vessels typically small (less than 100  $\mu$  mean tangential diameter), very small (less than 50  $\mu$ ) in some spp.; sometimes with groups of minute angular vessels, looking like tracheids; in tangential rows; commonly more than 40 per sq. mm.; spiral striations recorded as common in several genera. Perforations typically simple and only slightly oblique. Intervascular pitting alternate; pits to ray and wood parenchyma usually similar to the intervacular pitting. Mean member length 0.2-0.3 mm.

Parenchyma often sparse and seldom abundant; typically paratracheal, limited to occasional cells touching the vessels; in occasional groups mixed with numerous minute vessels. Typically without contents. Strands most commonly of 1-2 cells.

Rays typically 4-10 cells wide; without rays in *S. chamaecyparissus* Linn. Woods with multiseriate rays typically with few or very low (often only 1 or 2 cells high) uniseriate rays; uniseriate rays composed of mixed procumbent and upright cells; mostly 5-11 rays per mm. multiseriate rays typically composed of an irregular mixture of square or upright cells and procumbent cells, with upright sheath cells on the margins; sheath cells present in several genera but sometimes not very distinct.

Fibres typically with small simple pits, or the pits with very small borders, usually more numerous on the radial than on the tangential walls. Mean length 0.5-1.4 mm.