

## GENISTA

Vessels medium sized (100-200  $\mu$  mean tangential diameter) Some spp., especially those with an oblique or tangential pattern the larger vessels may themselves be small, and be set in a matrix of extremely small, angular storied vessels that are comparable with tracheids in cross-section. The tendency for the vessels to be mostly solitary with a few multiples and clustered is not characteristic of most of the Papilionaceae (Genista); some spp. of Genista have an oblique pattern; clusters common in nearly all woods with a distinct vessel pattern. Apart from the woods with very numerous vessels in oblique or tangential rows most spp. have either fewer than 5 vessels per sq. mm. or between 20 and 40 per sq. mm., ring-porous or semi-ring-porous in at least some spp. Spiral thickening, often limited to the smaller vessels. Perforations simple. Intervascular pitting alternate, typically small; pits to parenchyma and ray cells usually similar to the intervascular pits; pits vestured. Mean member length 0.1-0.4 mm.

Parenchyma usually moderately to very abundant and either predominantly paratracheal or in moderately regular bands that tend to be replaced by definitely paratracheal forms where the parenchyma is less abundant. Round or diamond-shaped sheaths occur in some genera but are less common than the confluent or other banded types; confluent, forming irregular bands or the matrix for oblique or tangential bands of vessels, in some spp; terminal parenchyma present in some genera. Strands of parenchyma cells almost exclusively fusiform.

Rays of more than half the genera 2-3 cells wide; woods with multiseriate rays usually with few uniseriate; mostly from 4-12 rays per mm. Moderately heterogeneous (Kribs's Type II and occasionally III) with marginal rows of square or upright cells; procumbent cells small in tangential diameter (less than 10  $\mu$ ). Usually storied in woods with low rays, but in most of the genera the rays are several times as high as the parenchyma strands and exhibit no storying.

Fibres typically with few, small, simple pits, more numerous on the radial than on the tangential walls. In most genera walls moderately to very thick, often with a gelatinous inner layer. Mean length 0.6-1.7 mm.

Genista sphacellata Decne.

Diffuse-porous. Pores in clusters; flame-like arrangement; small to very small, maximum tangential diameter  $75\mu$ ; numerous and crowded within the pattern. Vessels with simple perforations; pits alternate, medium sized, vestured pits not observed; spiral thickenings. Wood parenchyma paratracheal, abundant within the pore pattern. Rays heterogeneous, procumbent and square cells in irregular arrangement as seen on the tangential section; 1 to 4 cells wide; up to 40+ cells high; ray-vessel pitting medium sized, short oval in outline. Fibres with distinctly bordered pits. (Ilanoth Specimen no. 69)