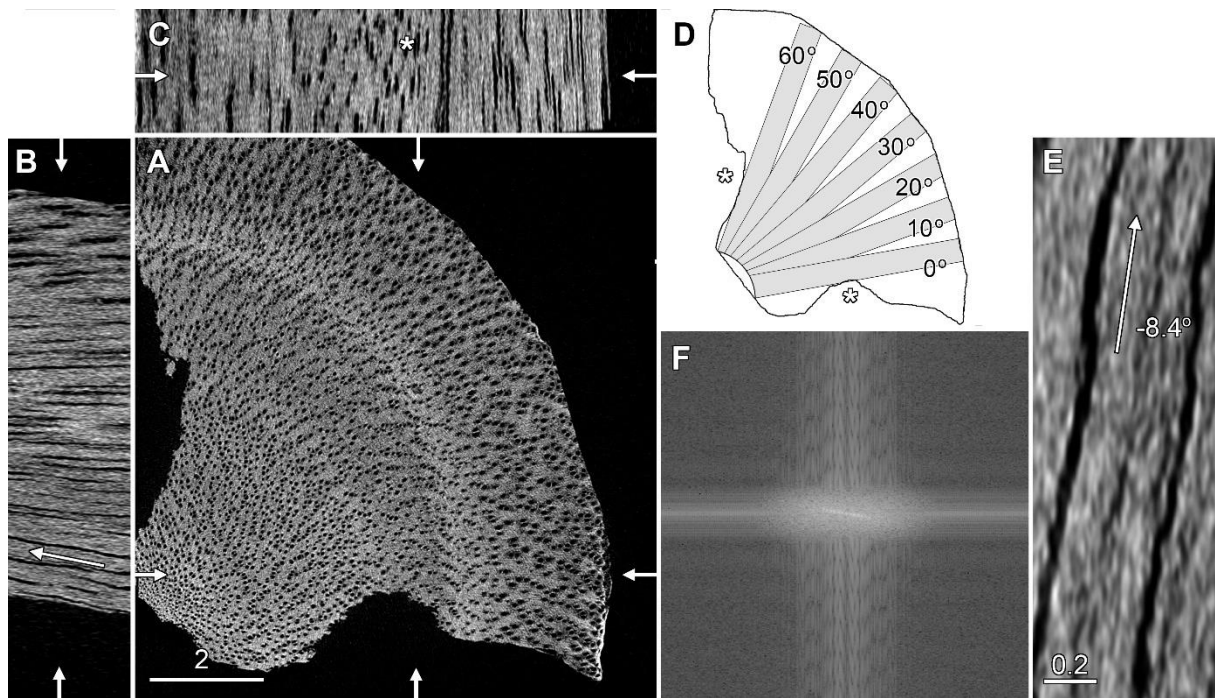


Supplementary Information 3



Supplementary Information 3. Protocol for measuring wood grain using a Fast Fourier Transform. **A - C** Microtomographs calculated in orthogonal planes at the locations indicated by arrows. **A** Cross section, with the small circles being vessels. **B** Longitudinal section which at the top of the image is a tangential longitudinal section showing inclined grain (arrow), but which is non-tangential towards the bottom of the image. **C** Radial longitudinal section. Angled vessels in the centre of the image are short (asterisk) indicating that they are inclined across the image plane. **D** Map of different strips that are separated by 10° increments used for measuring grain. Note that strips avoided areas with large areas of wood missing (asterisks), as these areas compromised grain measurements. **E** Tangential longitudinal section calculated from the centre of the 0° strip, with the arrow indicating the average grain angle of the fibres. Grain was measured at -8.4° in this section using FFT. **F** FFT map of (E). Bar in **A** = 2 mm for **A-C**; bar in **E** = 0.2 mm.