Supplementary Material

Figure S1 shows the contribution of SHG (a,d,g) and TPEF (b,e,h) signals as individual channels of the merged images (c,f,i) for the three analyzed species (poplar, beech, chestnut). All images were acquired under the same experimental conditions (objective lens, laser power, dwell time, target, detector gain, working distance, resolution, etc.) and as such are comparable to each other. In this way, we show that it is possible to quantify the contributions of SHG and TPEF based on the signal intensity, which is expressed in grey scale in the b/w images of the individual channels.
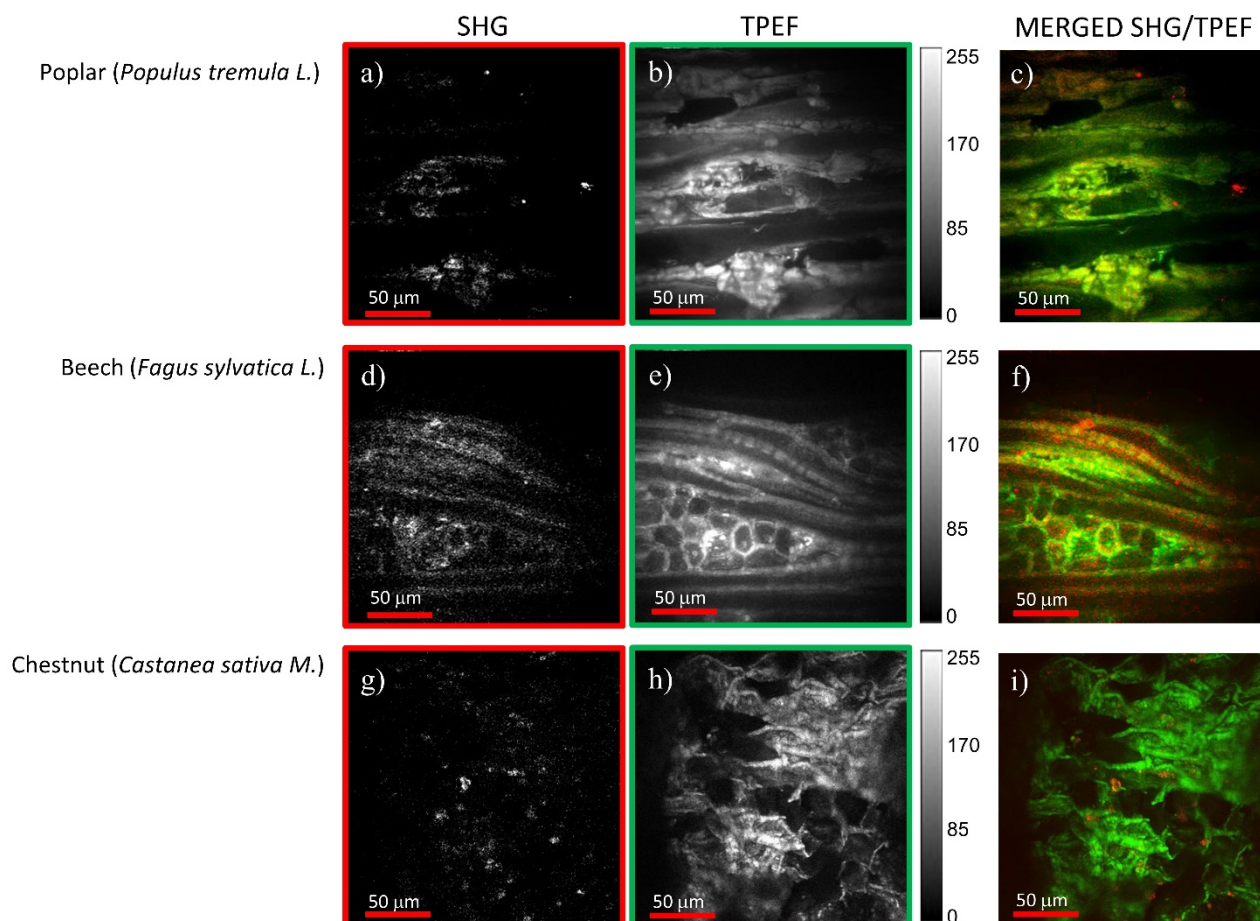

Figure S1. NLO microscopy images of poplar (a-c), beech (d-f), chestnut (g-i) shavings cut in the tangential section along the stem length direction. Images were acquired under the same experimental conditions and with 840-850 nm excitation wavelength. The 8-bit grey-scale images are the individual channels (red = SHG, and green = TPEF) of the merged SHG/TPEF images (c,f,i), and show the contribution of SHG (a,d,g) and TPEF (b,e,h) signals as the intensity of light at each pixel in the dynamic range 0-255.