

Supplementary Material 1. Representative transverse cross-sections of 12-year-old Pinus spp. showing the general anatomy of the different tissues and organisation of polyphenolic parenchyma (PP) cells at five time points post-wounding. (a), (b) In P. sylvestris, one day postwounding (dpw), large axial resin canals are observed in the cortex. These canals are lined with small epithelial cells and surrounded by sheet cells. No visible tissue damage is present. The xylem tissue showed an absence of lignification and contains xylem resin canals surrounded by living parenchyma cells, Bar 75 µm; (c), (d), (e) Cross sections from P. pinea, three dpw, showing typical cortex and secondary phloem tissue with concentric layers of PP cells separated by sieve cells. The xylem tissue remains intact and non-lignified, Bar 75 µm; (f), (g), (h). In P. halepensis, seven dpw, the phloem tissue showed an increase of PP cells, maintaining separation by sieve cells. Starch granules (yellow arrow) and occasional calcium oxalate crystals (green arrow) are present. No damage or anatomical responses are observed in the xylem tissue. Bars = 75 µm (f, h); 25 µm (g); (i), (j). In P. pinaster, 16 dpw, no anatomical changes were detected in any tissues. Presence of starch granules (yellow arrow), Bar 75 μm; (k), (l) Cross-sections from P. halepensis, 28 dpw, show disorganised phenolic content in the secondary phloem, along with signs of traumatic resin canal formation.