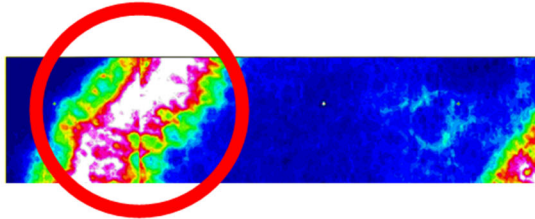
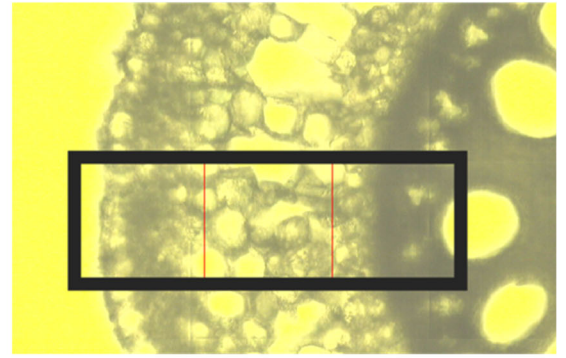
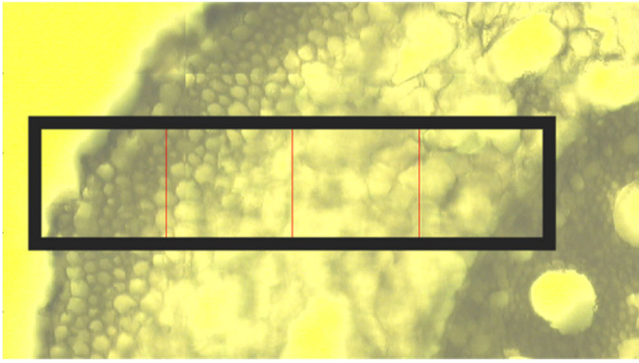
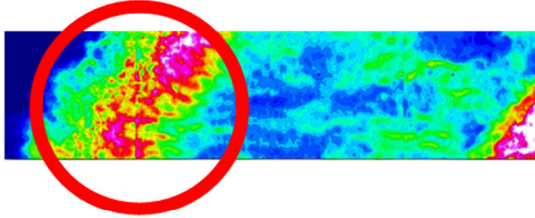
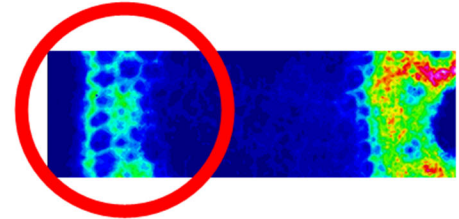


MCS

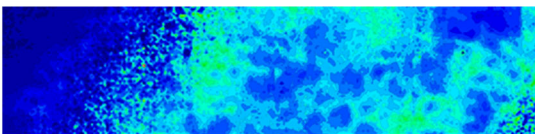
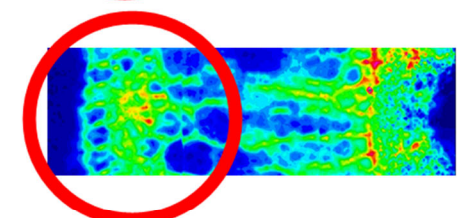
No MCS



Lignin/Pectin



Lignin



Cellulose/Pectin

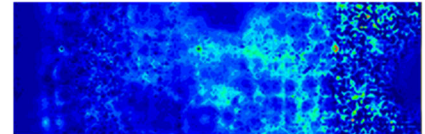


Figure 2. Fourier-transform infrared spectroscopy (FTIR) demonstrates that outer cortical cells in genotypes with MCS are embedded with lignin (highlighted in red circles) and do not have elevated concentrations of pectin or cellulose when compared to non-MCS genotypes (n=2). The heatmap displays the concentration of the cell wall component and the hotter the color, the greater the concentration. Heatmap colors are scaled for each cell wall component. Images are of nodal, field-grown maize roots. All images are of a fourth node root. Genotype with MCS (IBM14) and a genotype with no MCS (IBM178) are shown. Scale bar represents 50  $\mu\text{m}$ .