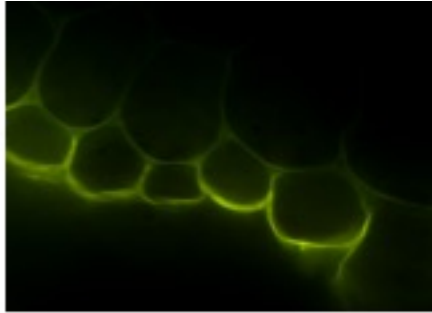


Fluorol Yellow 80:  
lipids



Autofluorescence:  
phenolics



Acid Resistant  
cell walls

Soybean root cross sections were stained with either Fluorol Yellow 80 (left) to detect aliphatic suberin (lipids) or viewed under fluorescent light to observe the autofluorescence of cell wall phenolics (centre). In either case, the same layer of cells is stained/viewed, indicating the presence of both aliphatic and phenolic components in the same cells. That these are polymeric is evident from the resistance of these cells to acid digestion. (Modified from Ranathunge et al., (2008) *Phytopathology* **98**, 1179-1189)