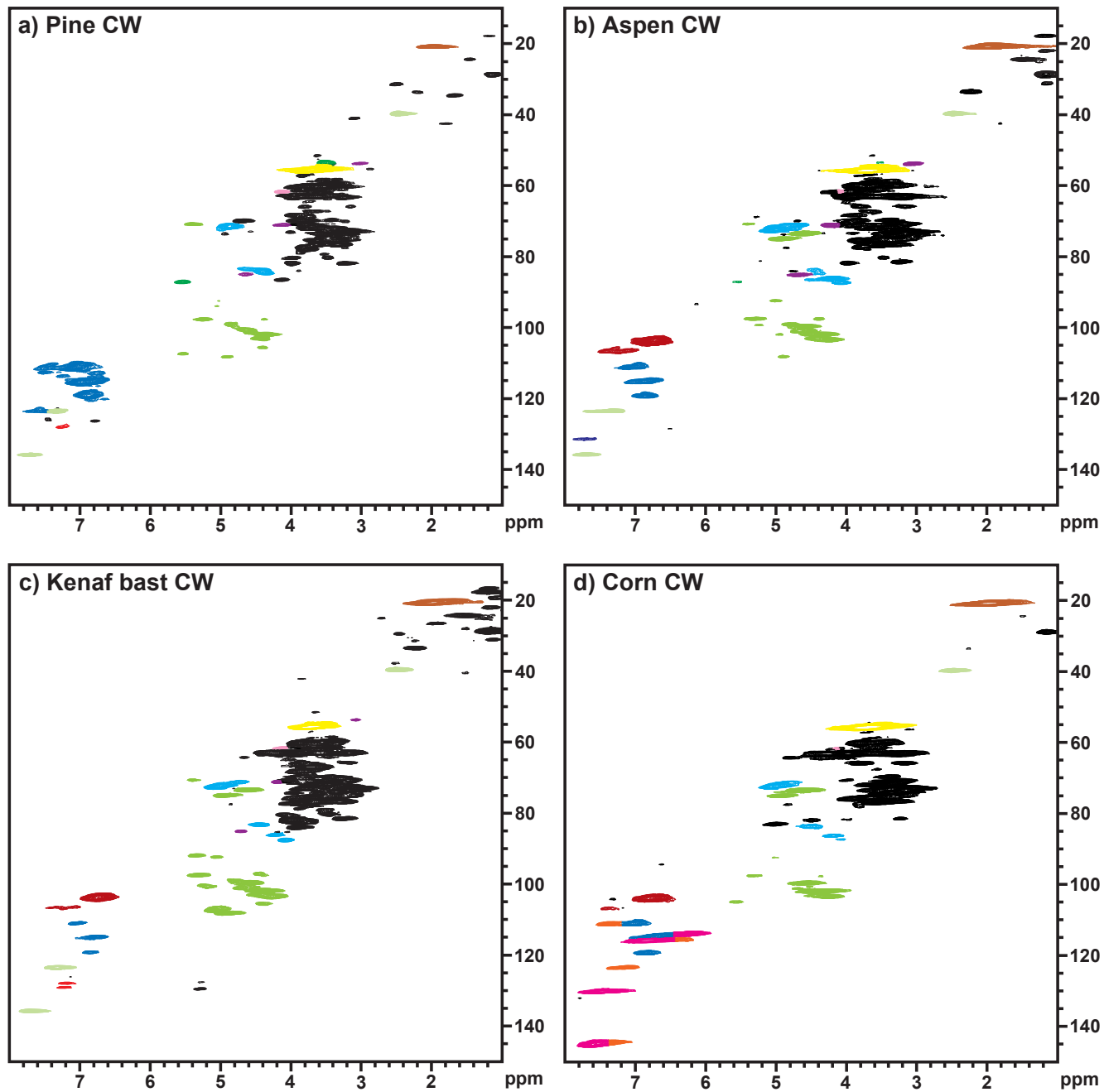


# SUPPLEMENTARY MATERIAL

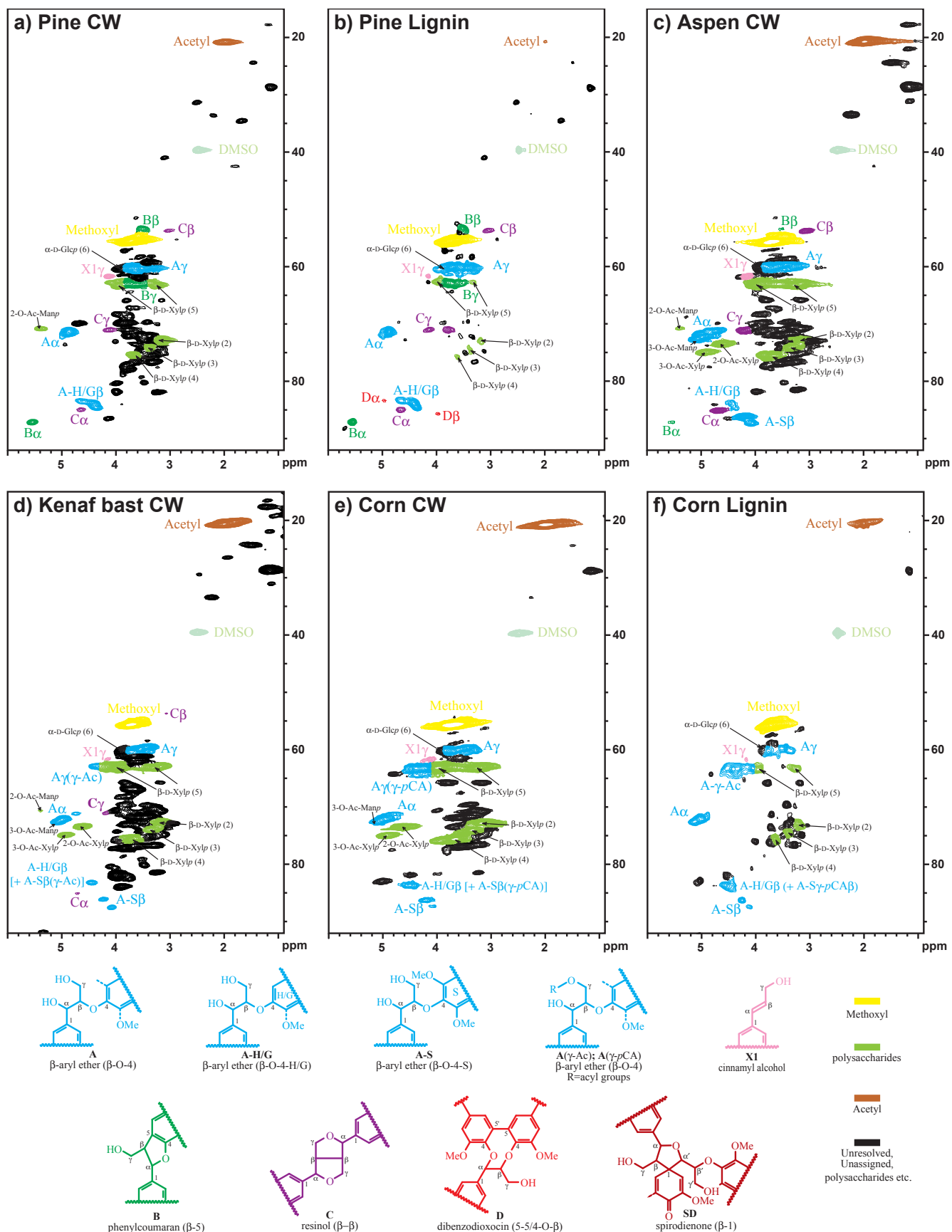
Solution-state 2D NMR of Ball-milled Plant Cell Wall Gels in DMSO-d<sub>6</sub>/pyridine-d<sub>5</sub>

Hoon Kim and John Ralph

Organic and Biomolecular Chemistry (2009)



**Figure S1.** Complete 2D <sup>13</sup>C-<sup>1</sup>H correlation (HSQC) spectra from cell wall gel samples in DMSO-d<sub>6</sub>/pyridine-d<sub>5</sub> (4:1) from cell walls from various samples. a) Pine, b) Aspen, c) Kenaf bast fiber, d) Corn stems. Figure corresponds with Figure 1 in the main paper.



**Figure S2.** Full aliphatic (sidechain) regions of 2D  $^{13}\text{C}$ - $^1\text{H}$  correlation (HSQC) spectra from cell wall gels and soluble lignins from various samples in  $\text{DMSO-}d_6/\text{pyridine-}d_5$  (4:1). a) Pine, b) Pine isolated lignin, c) Aspen, d) Kenaf bast fiber, e) Corn stems, f) Corn isolated lignin. Correlations from lignin components, and some of the characteristic polysaccharide correlations such as those from O-acetylated xylans and mannans, are well isolated from the other densely packed polysaccharides peaks; color coding is according to the structures shown. Figures plot a wider chemical shift range than their counterparts in Figure 2 of the main paper, to illustrate acetyl signals mentioned in the text.