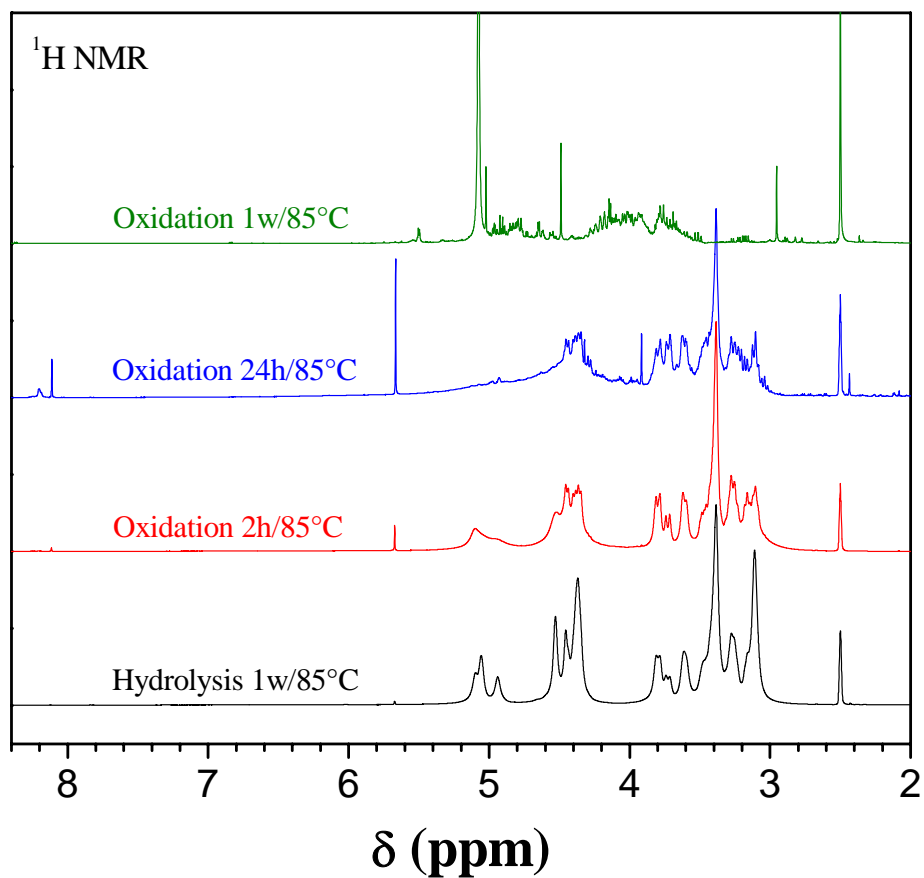
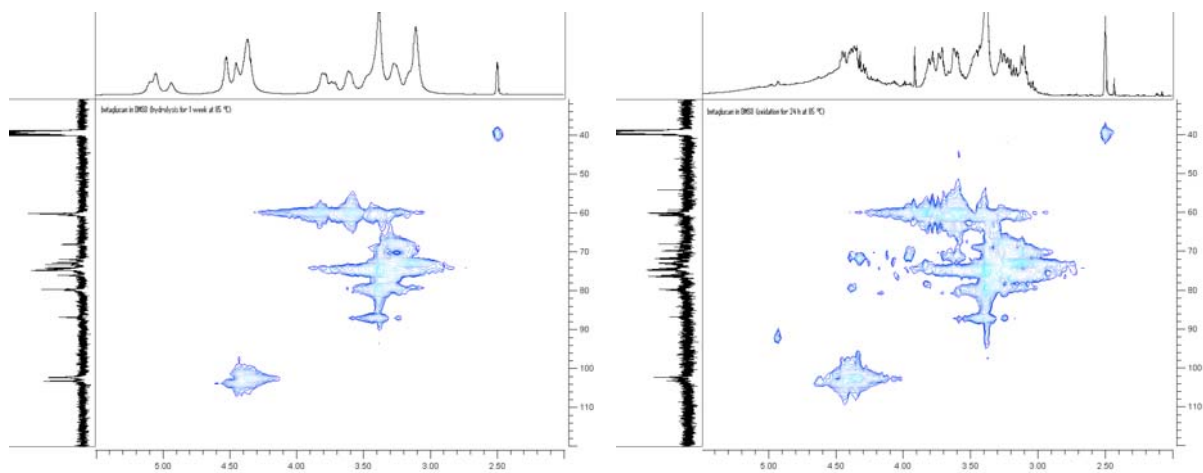


## Supporting Information



**Figure SI-T1.**  $^1\text{H}$  NMR spectra at 80 °C in  $\text{DMSO-}d_6$  for the  $\beta$ -glucan sample after 1 week hydrolysis at 85 °C (black), after 2 h oxidation at 85 °C (red), after 24 h oxidation at 85 °C (blue), and after 1 week oxidation at 85 °C (green).



**Figure SI-T2.**  $^1\text{H}$ - $^{13}\text{C}$  HSQC NMR spectra at 80 °C in  $\text{DMSO-}d_6$  for the  $\beta$ -glucan sample after 1 week hydrolysis at 85 °C (left), and after 24 h oxidation at 85 °C (right).