

Supporting Information
for
A study of Anhydrocelluloses – Is a cellulose structure with residues
in 1C_4 -conformation more prone to hydrolysis?

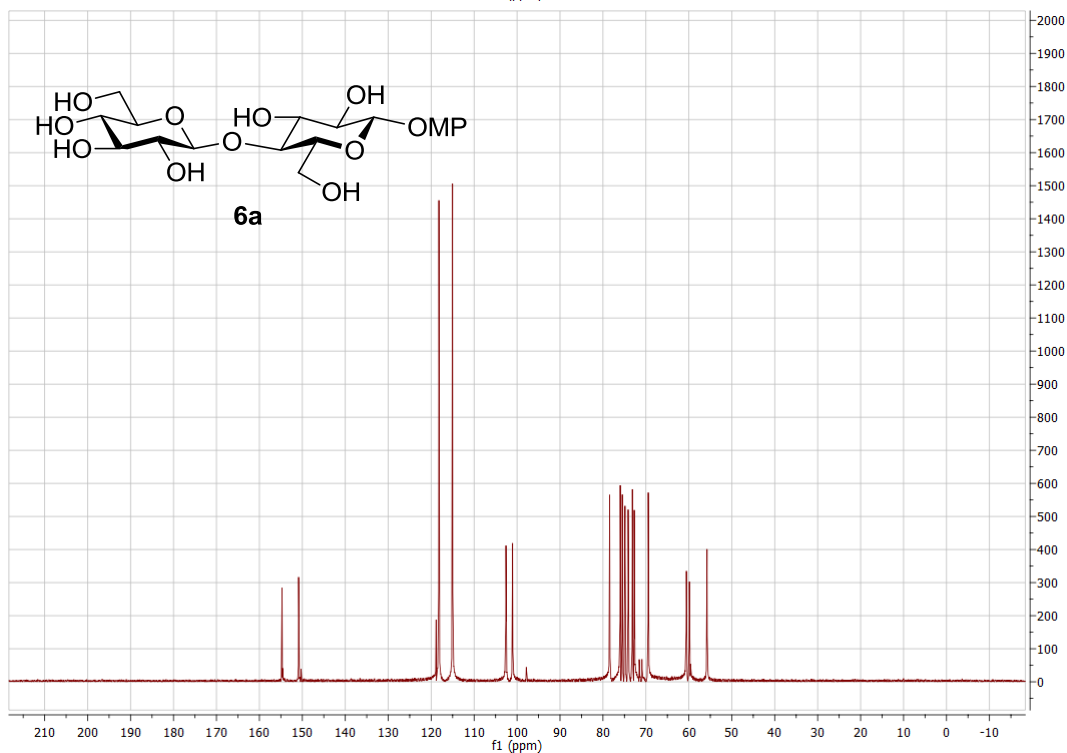
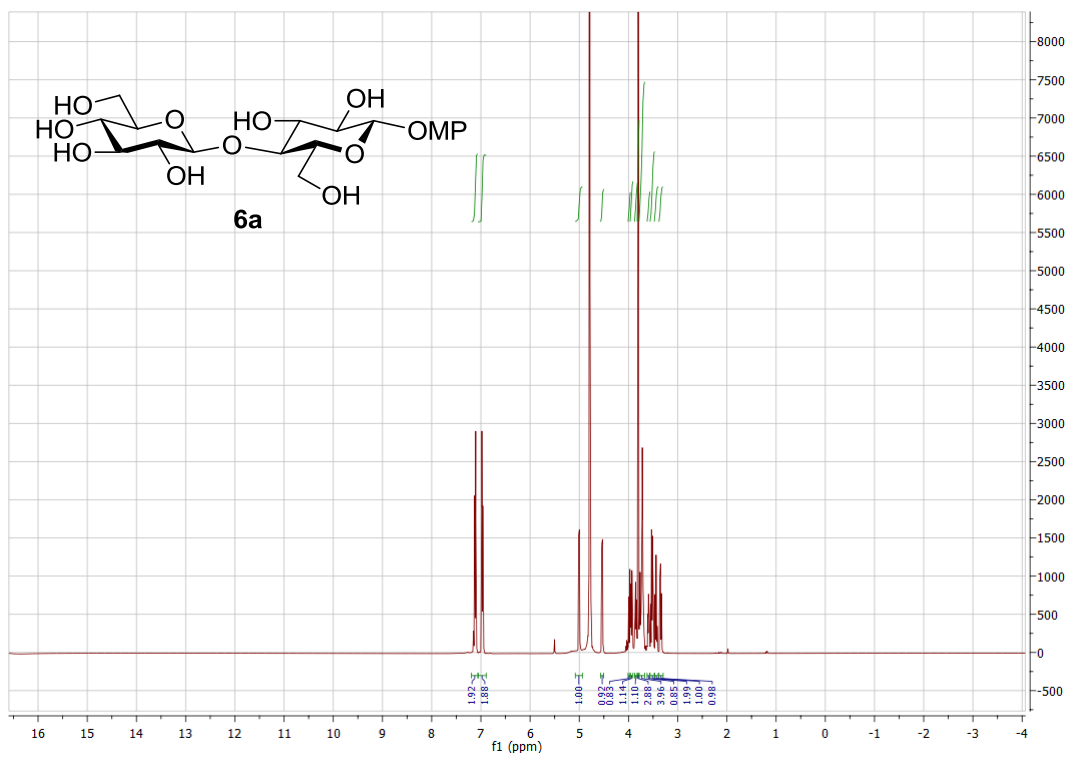
Vrushali Jadhav, Christian M. Pedersen* and Mikael Bols*

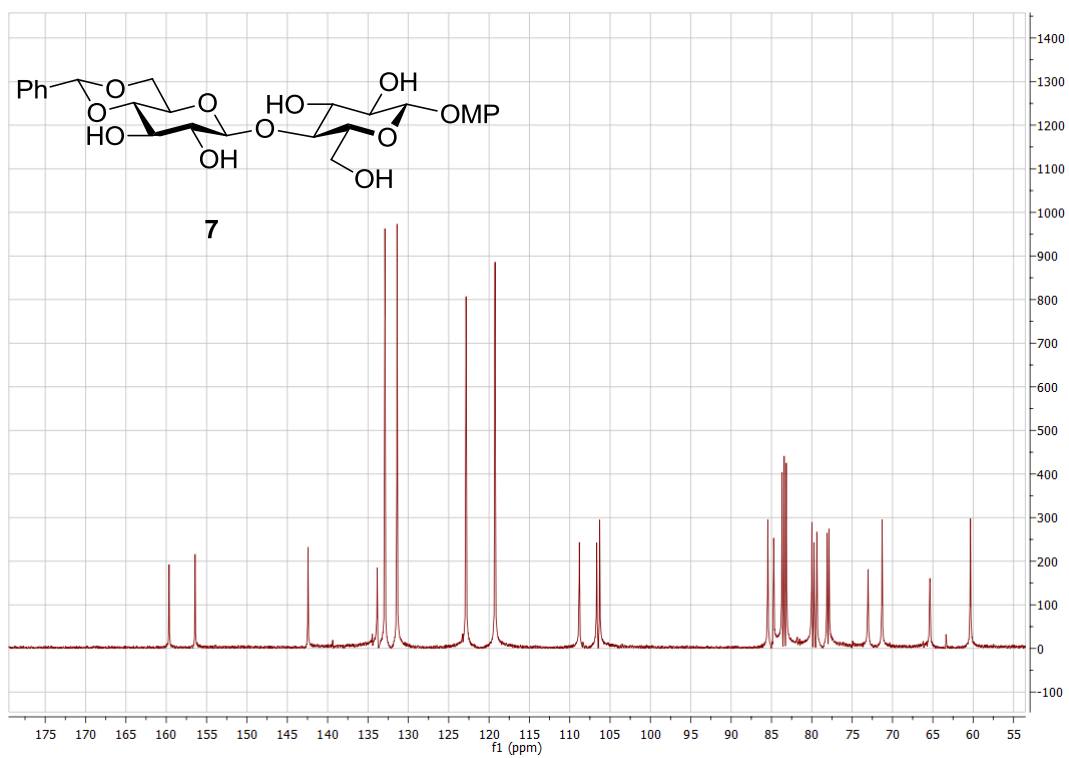
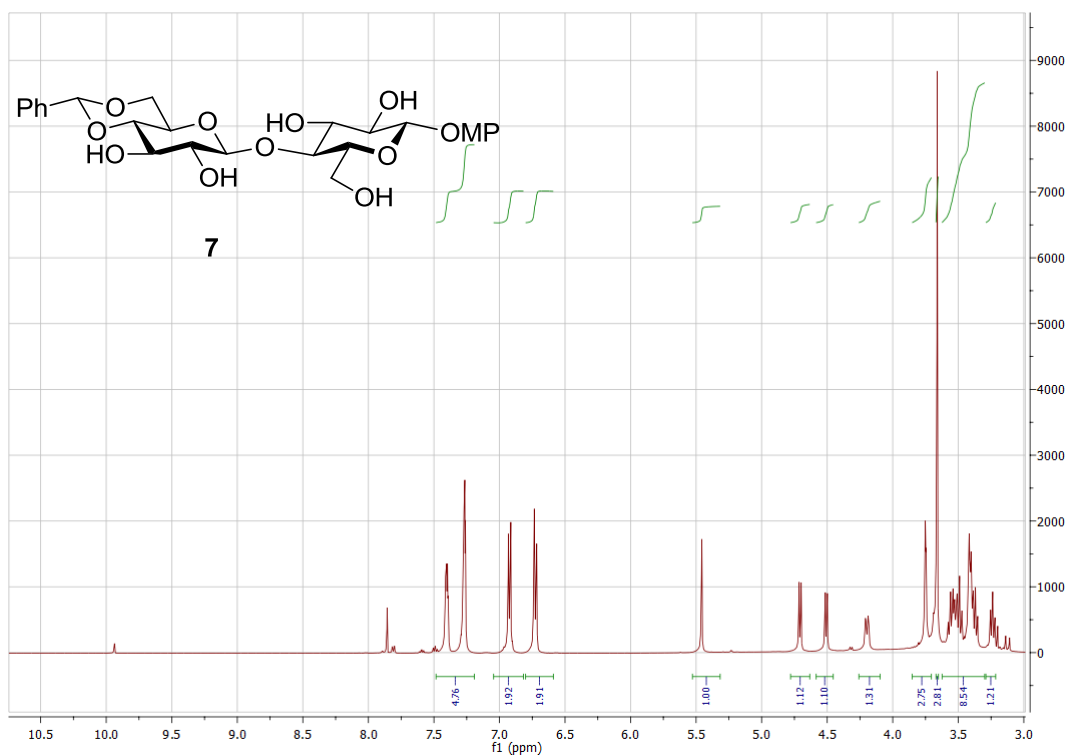
Contribution from the Department of Chemistry, University of Copenhagen, DK-2100

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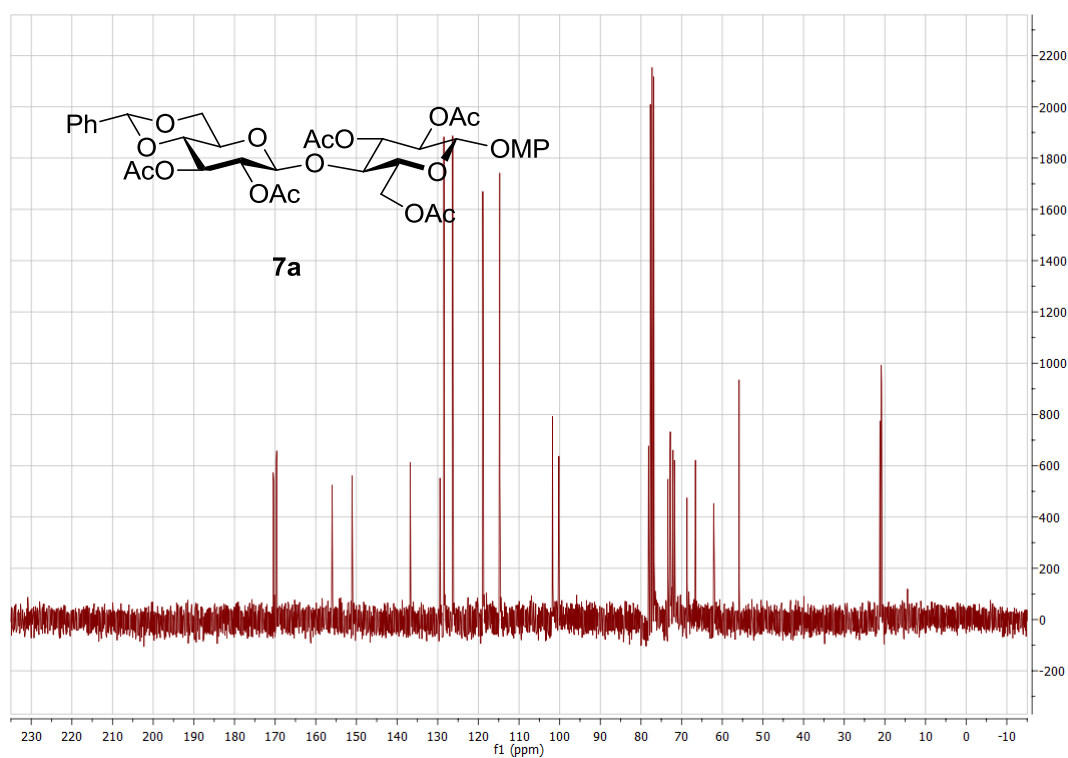
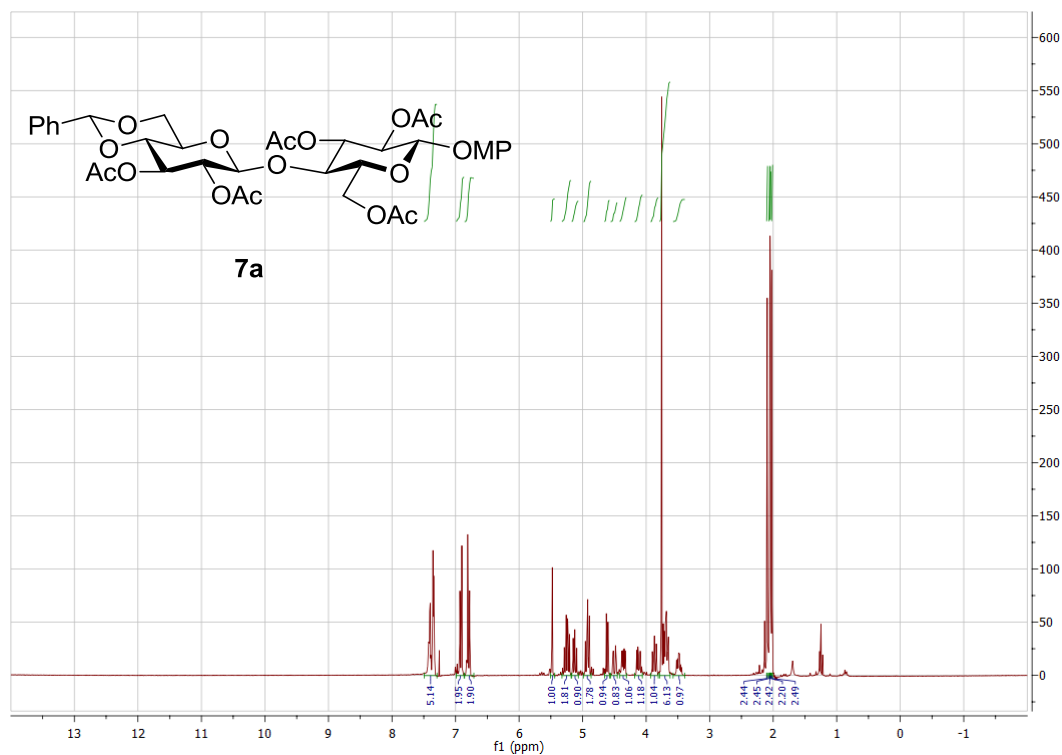
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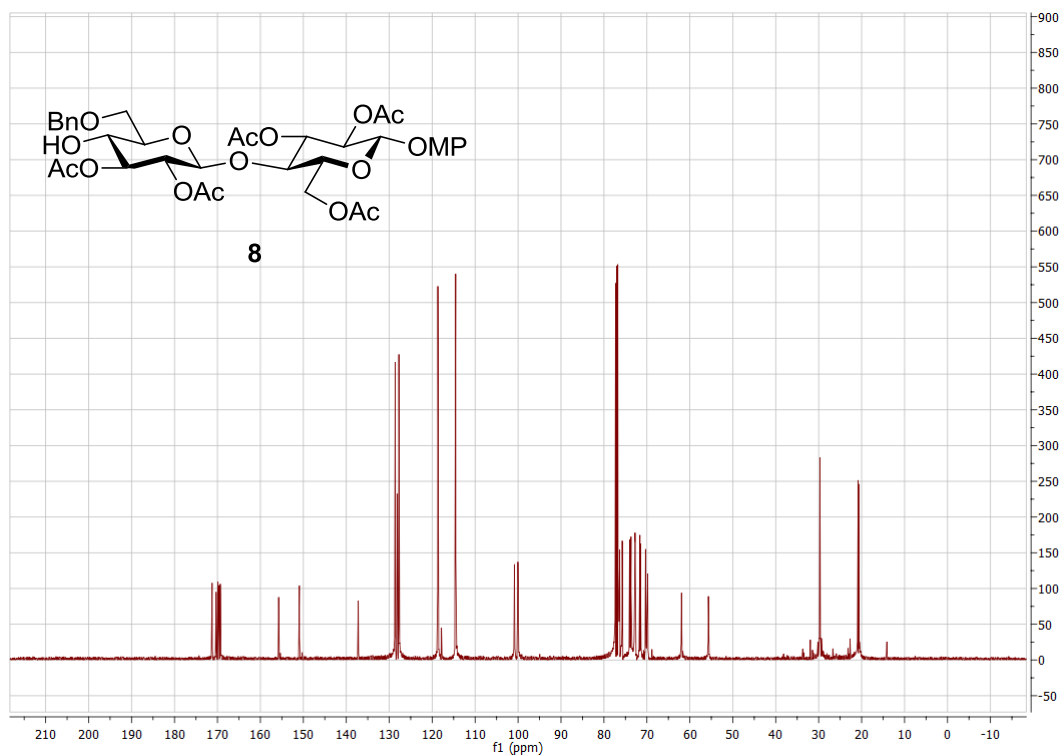
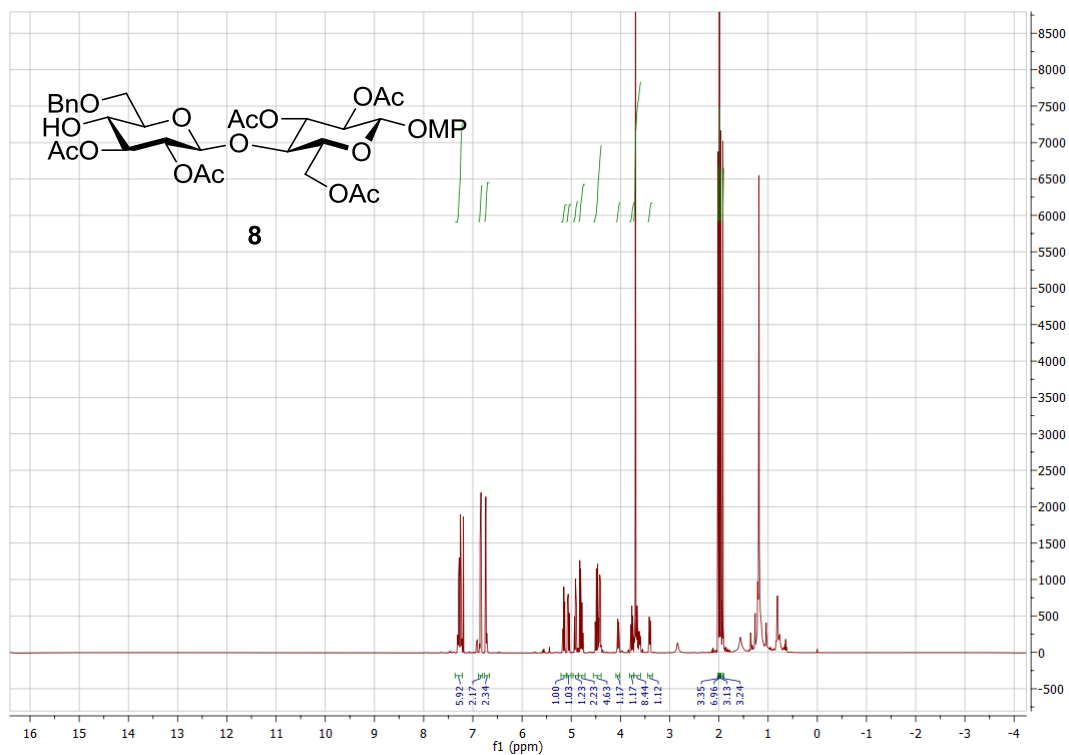
S2-S16	NMR spectra of compounds
S17	Figure S1. Progress curves for formation of glucose from anhydrocelluloses by acidic hydrolysis.
S17	Figure S2. Progress curve for formation of BMF (21).
S18	Figure S3. Progress curve for formation of CMF (22).
S18	Figure S4. Progress curve for formation of HMF (23).

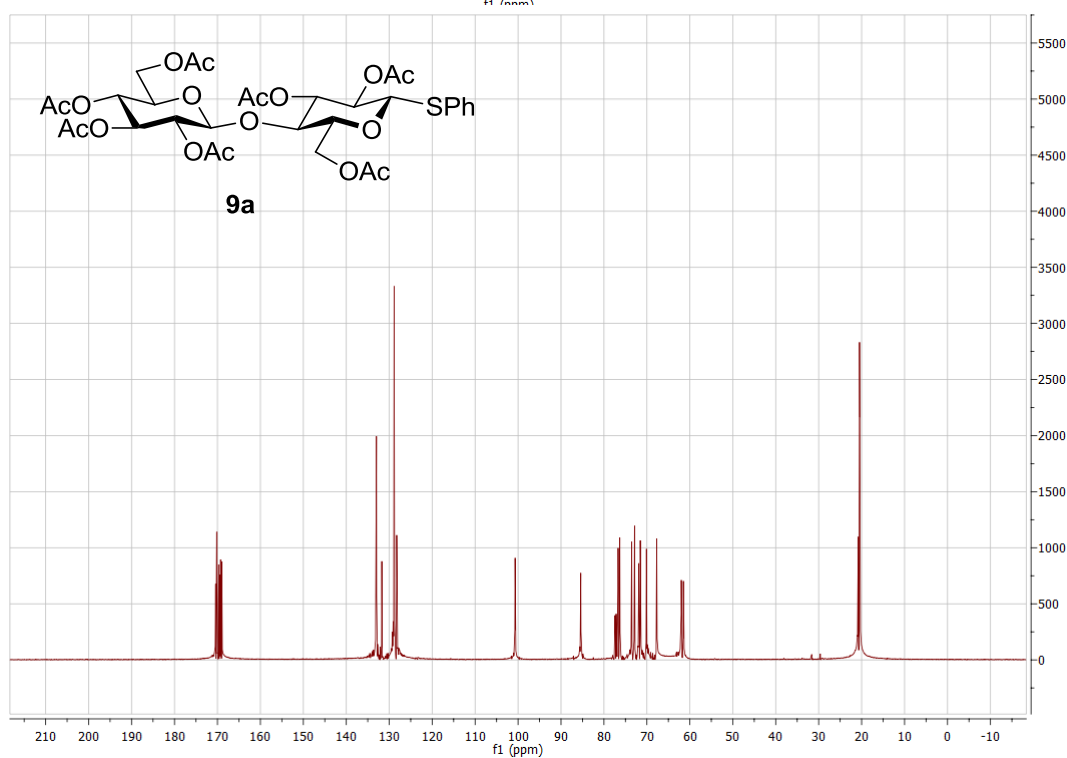
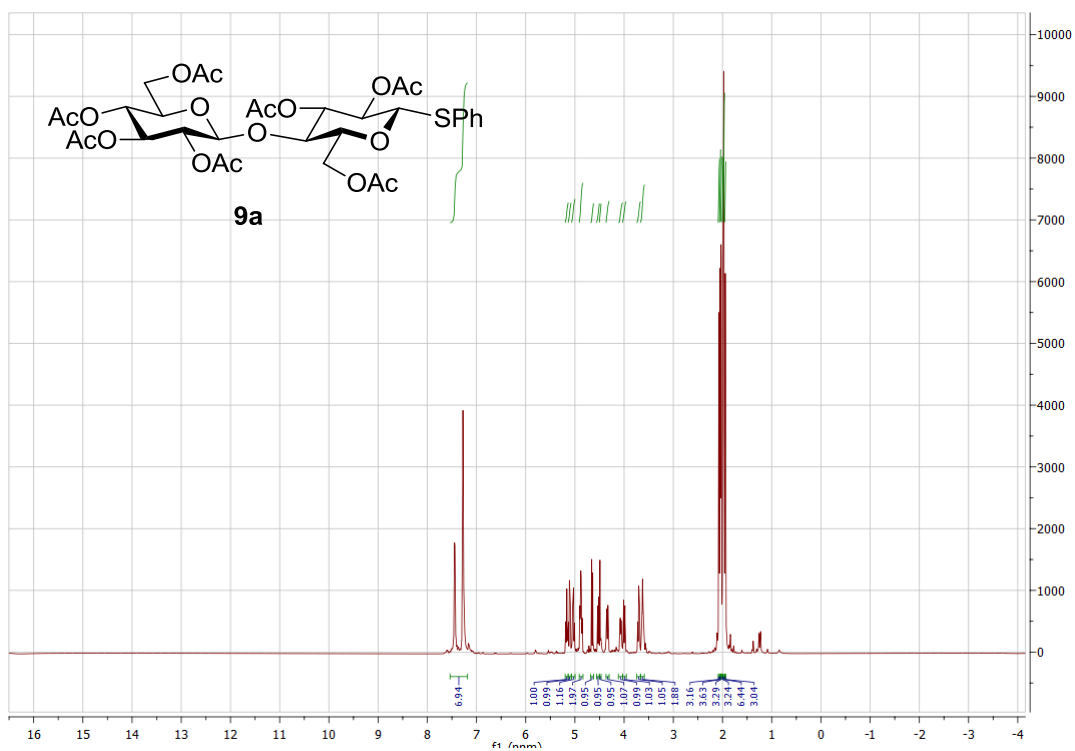


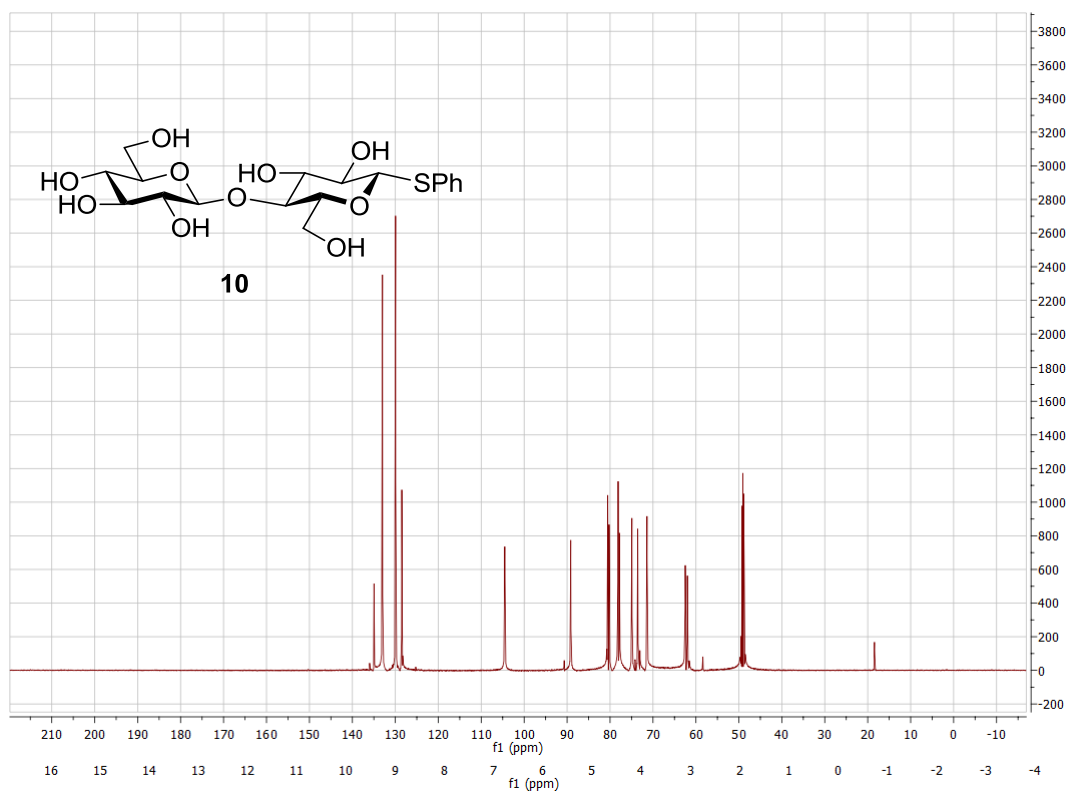
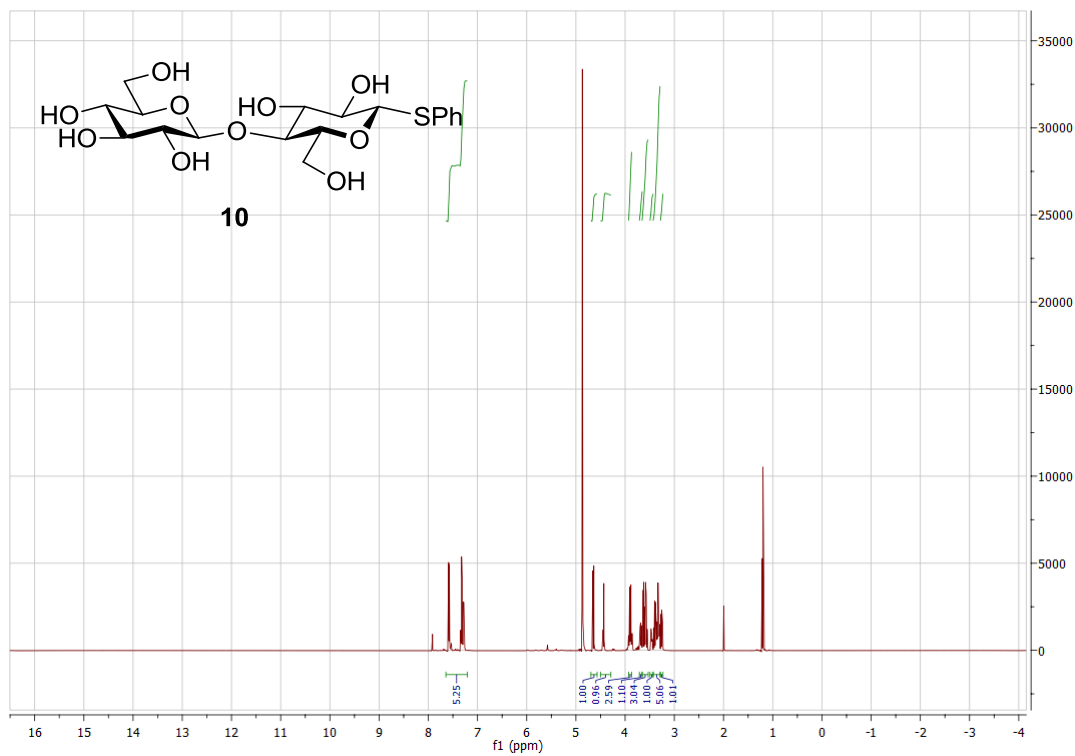


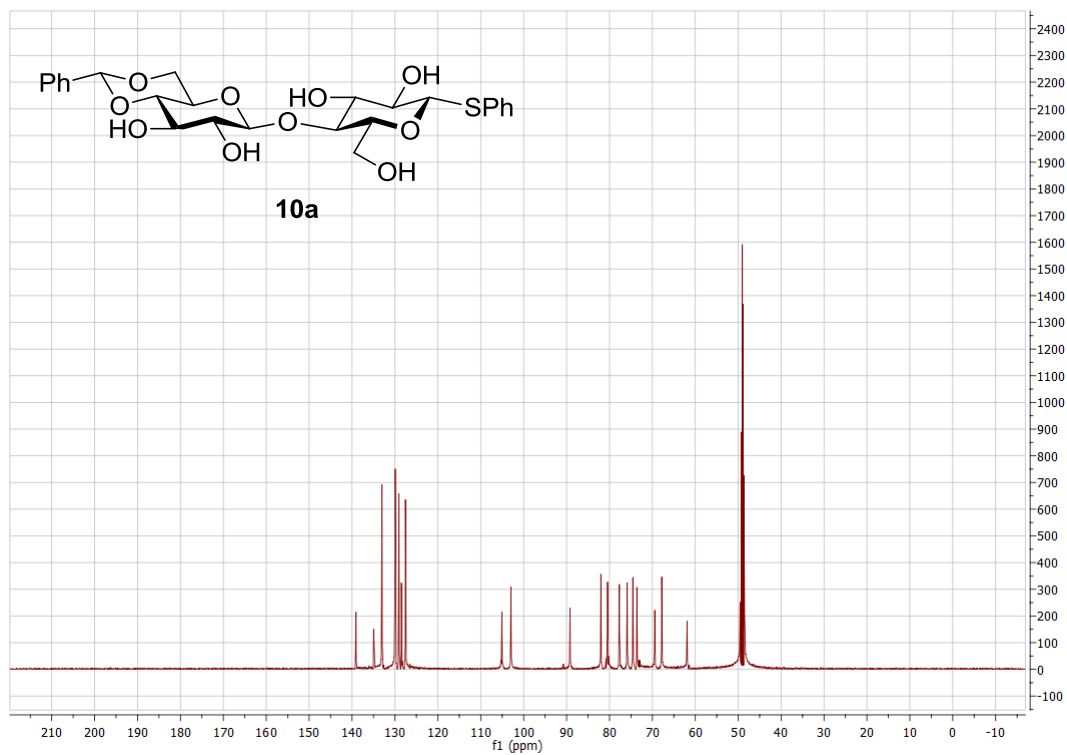
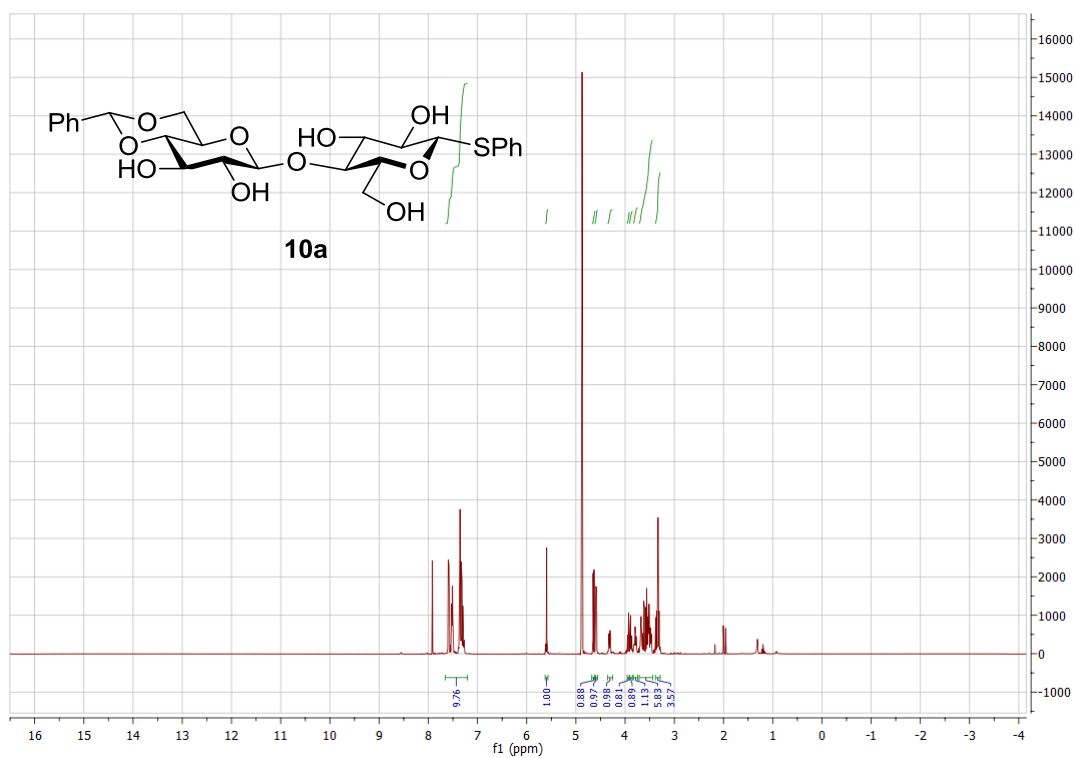
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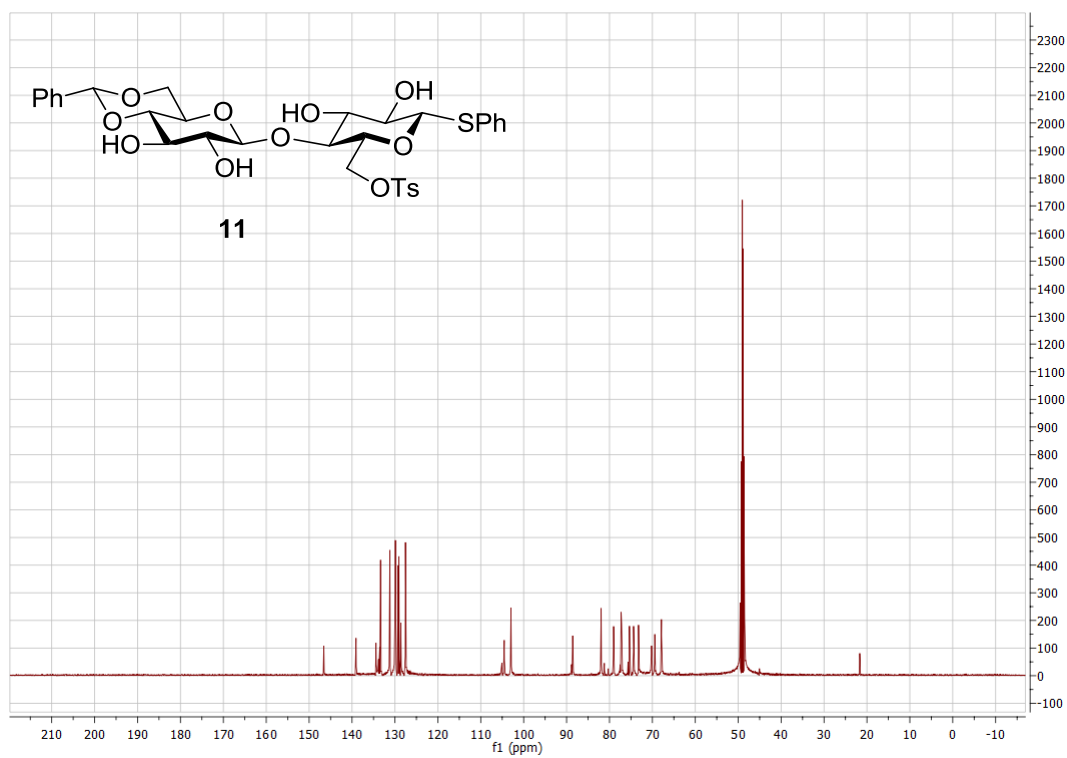
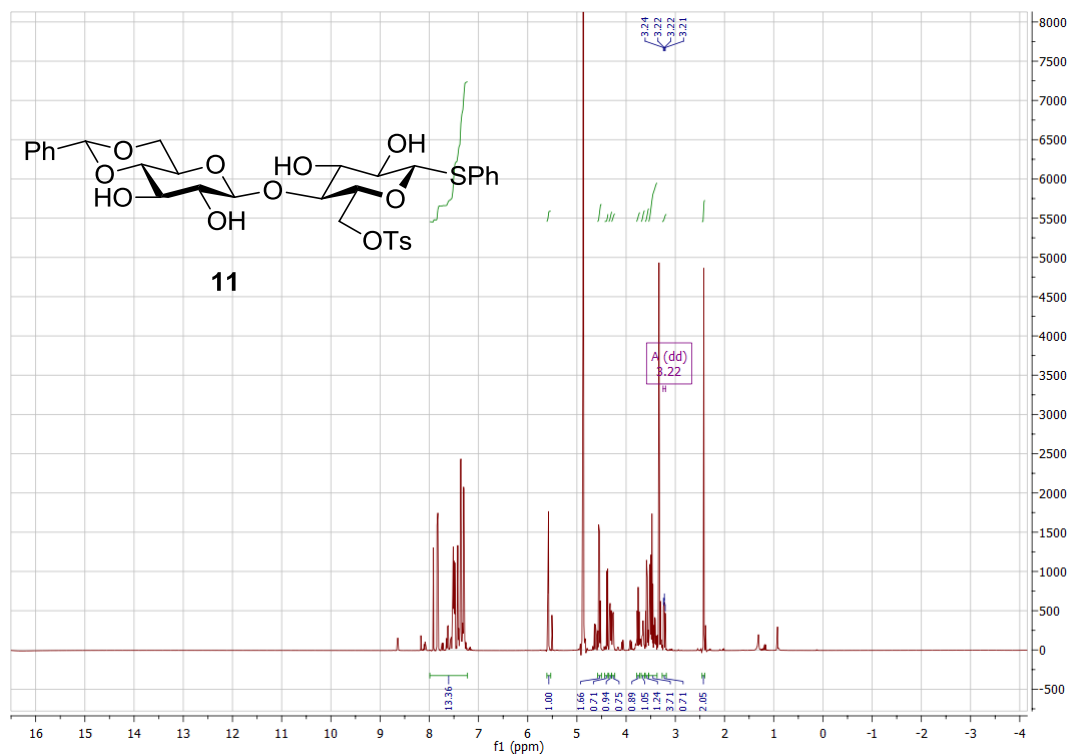


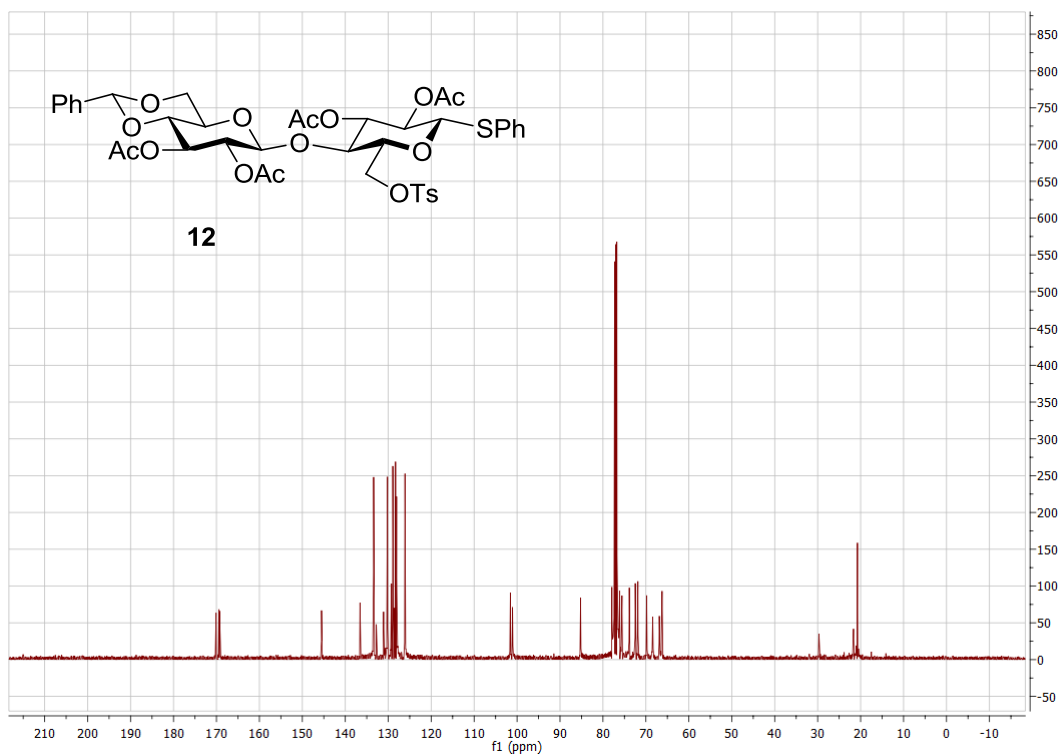
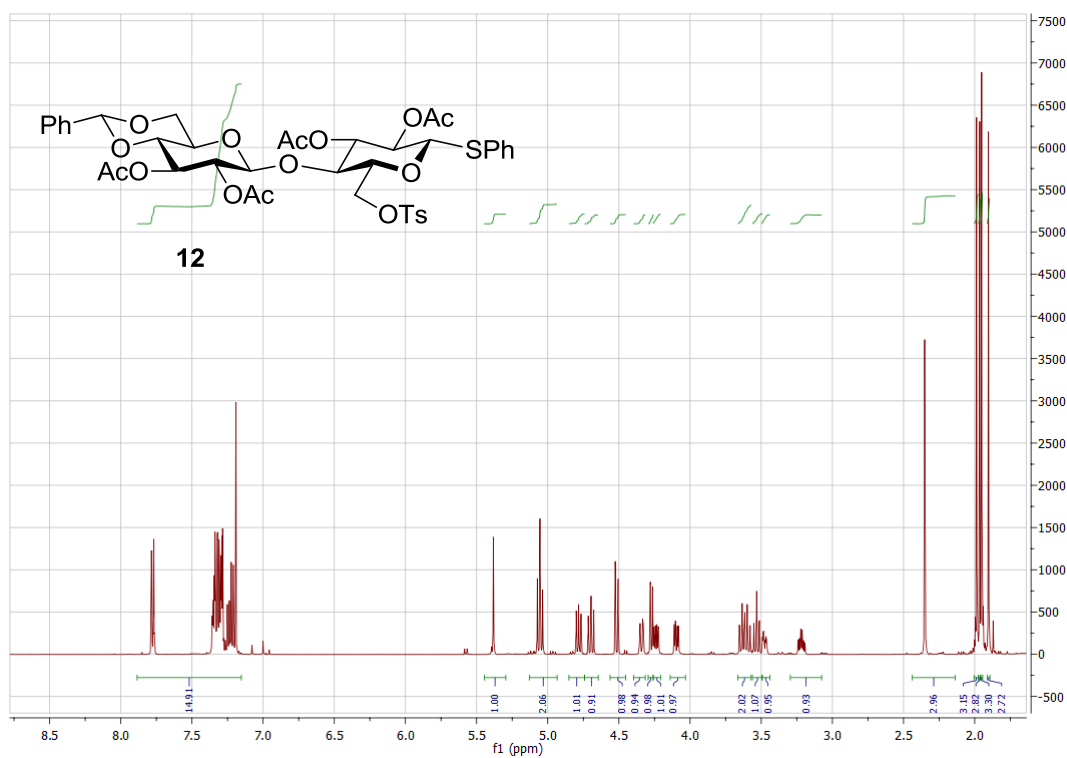


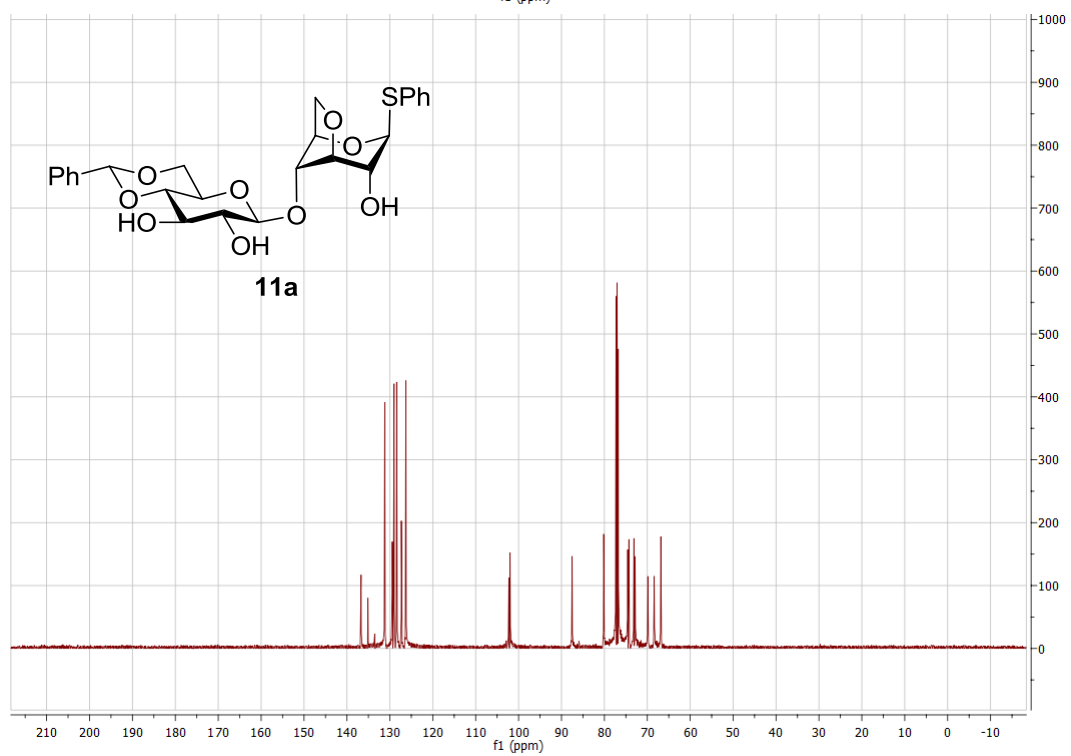
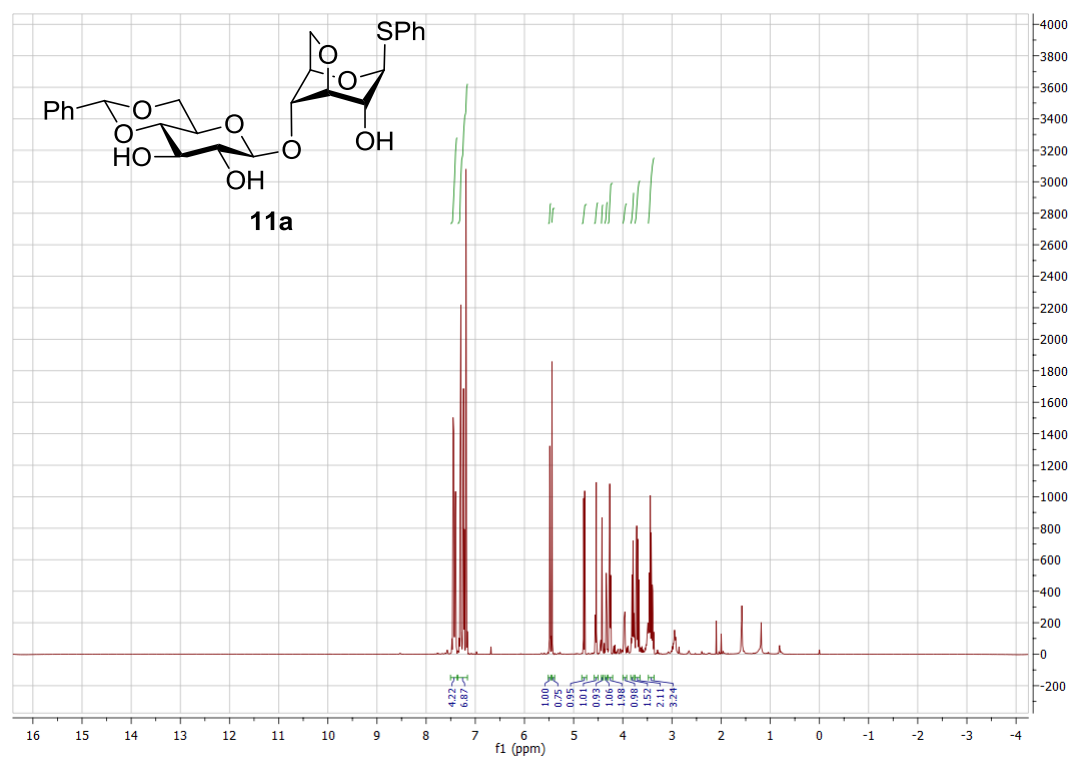


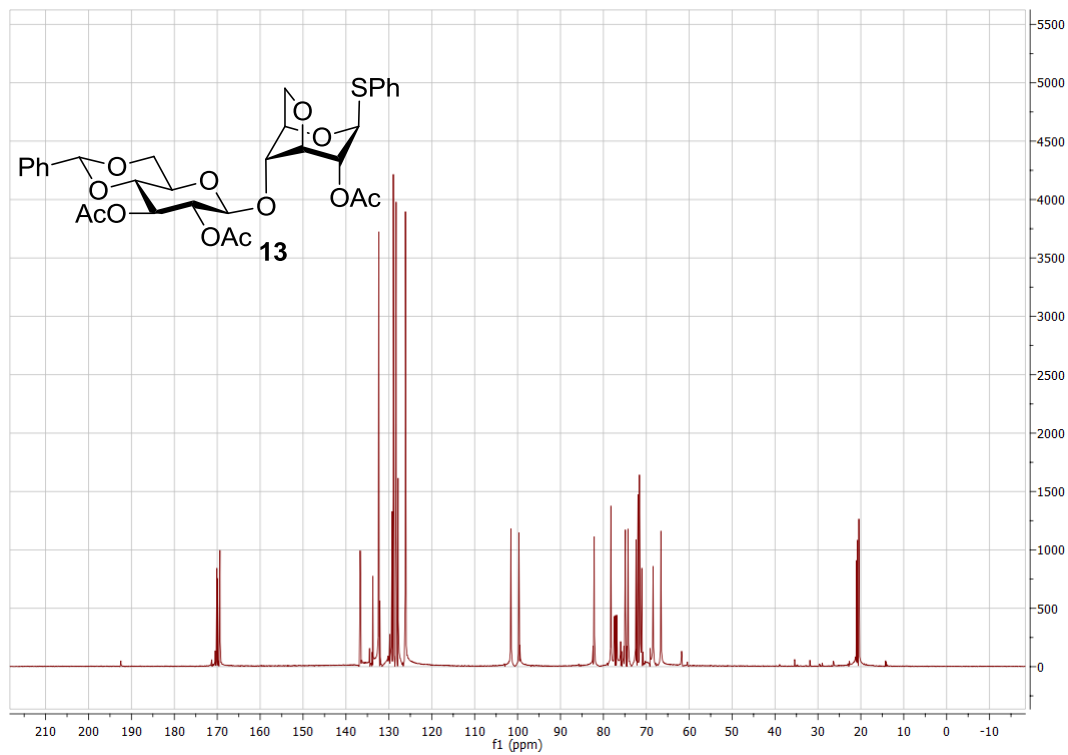
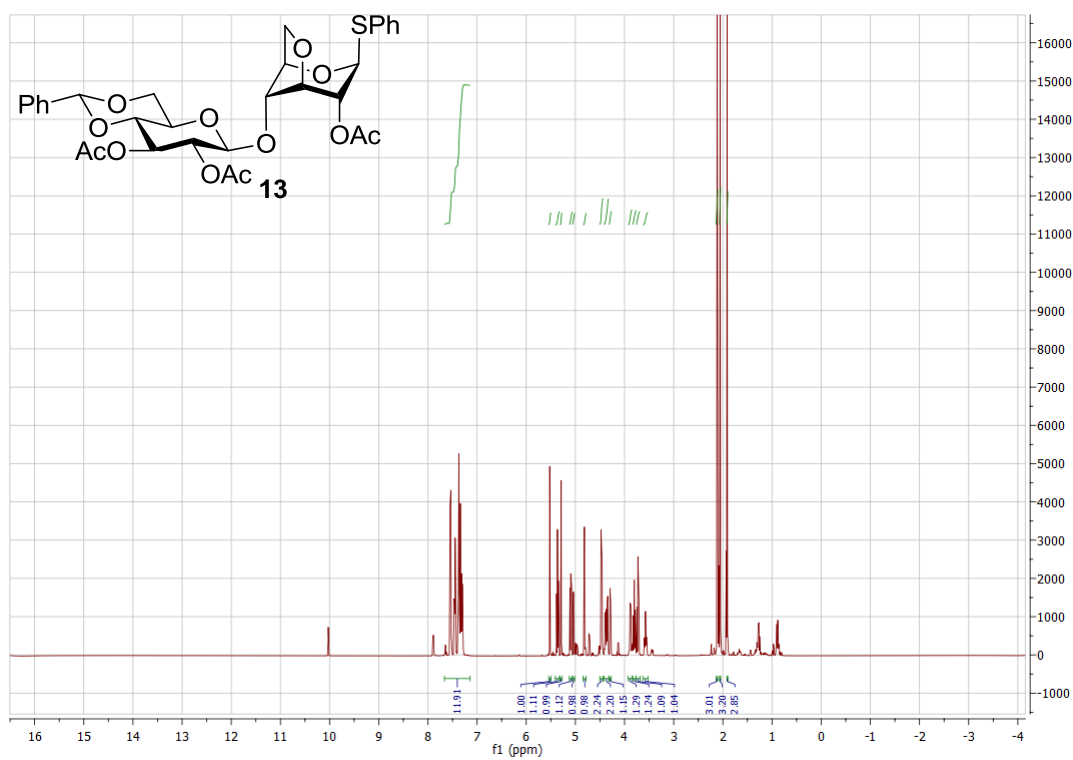


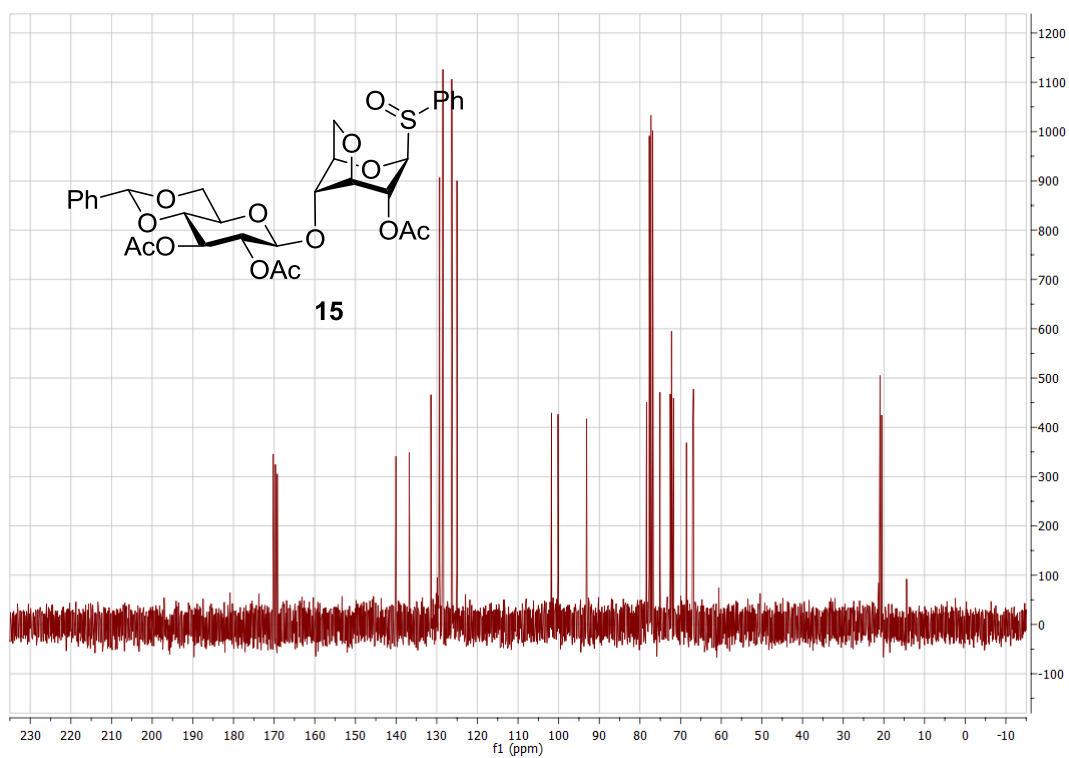
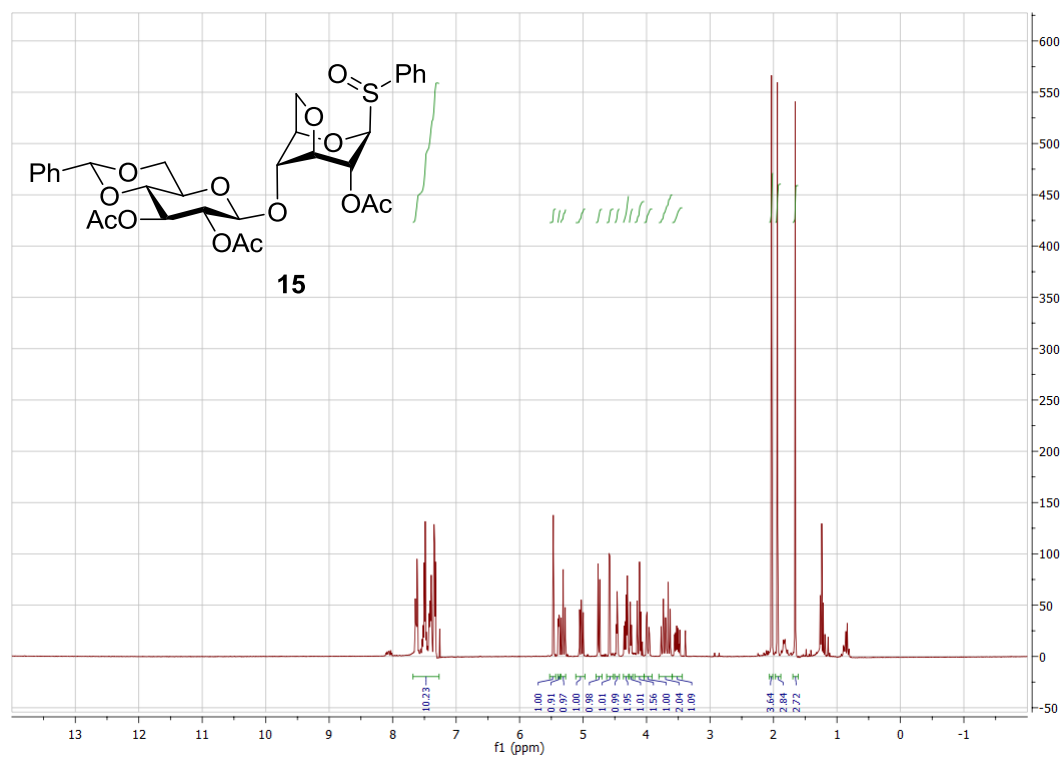


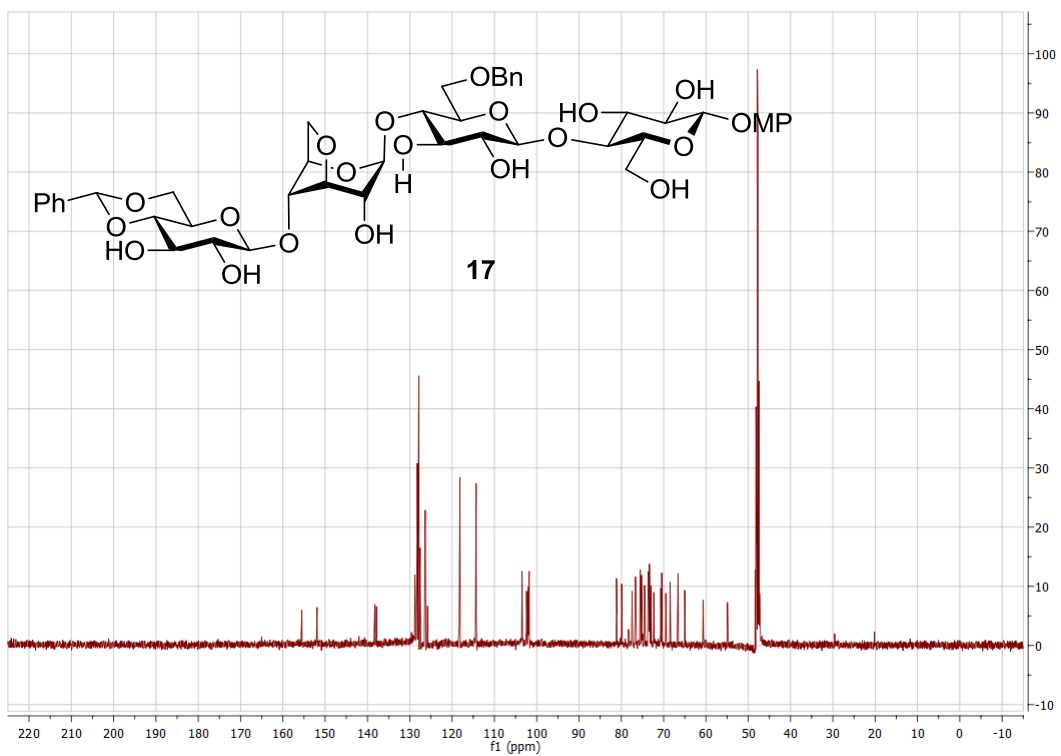
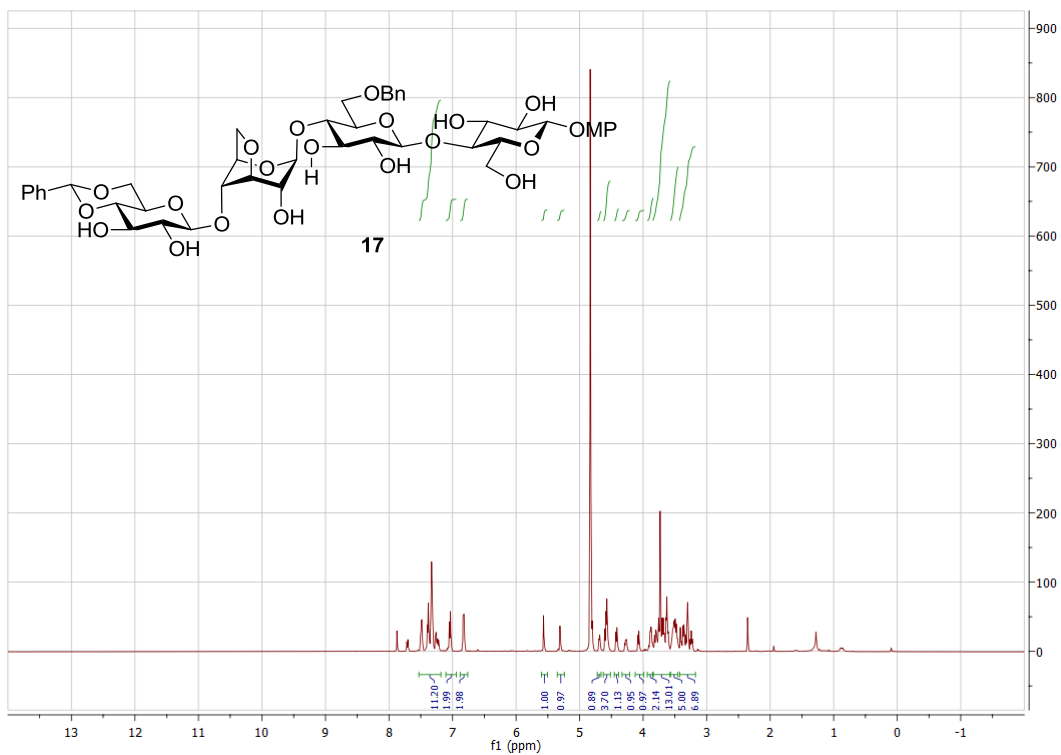


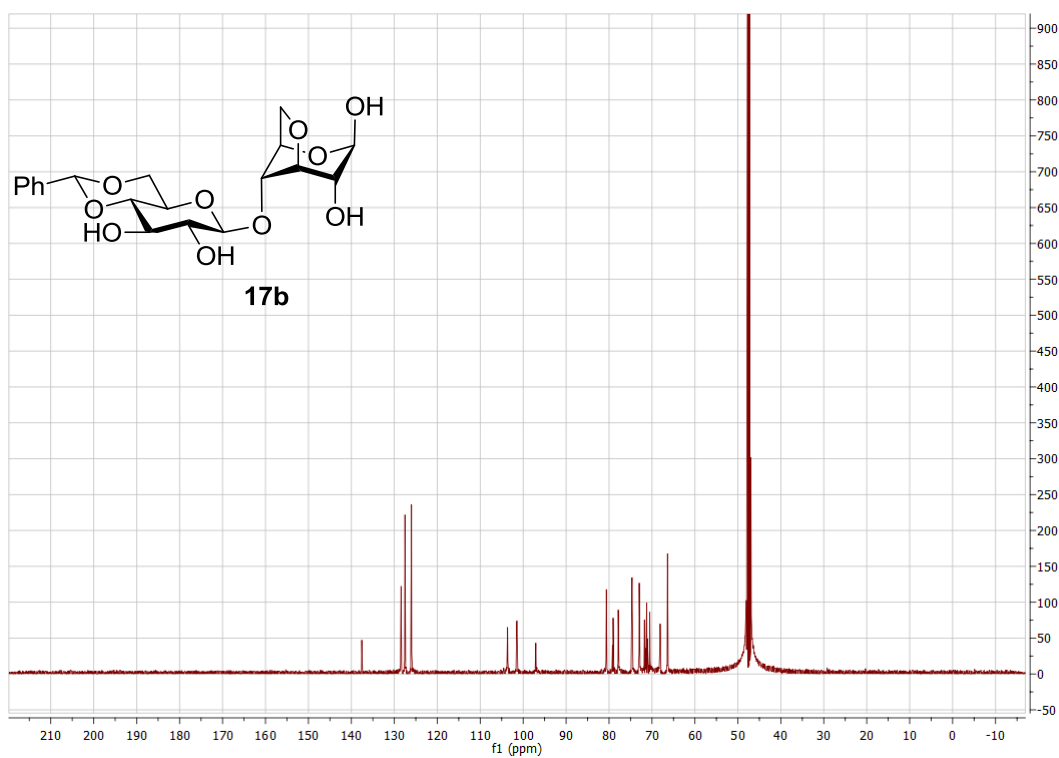
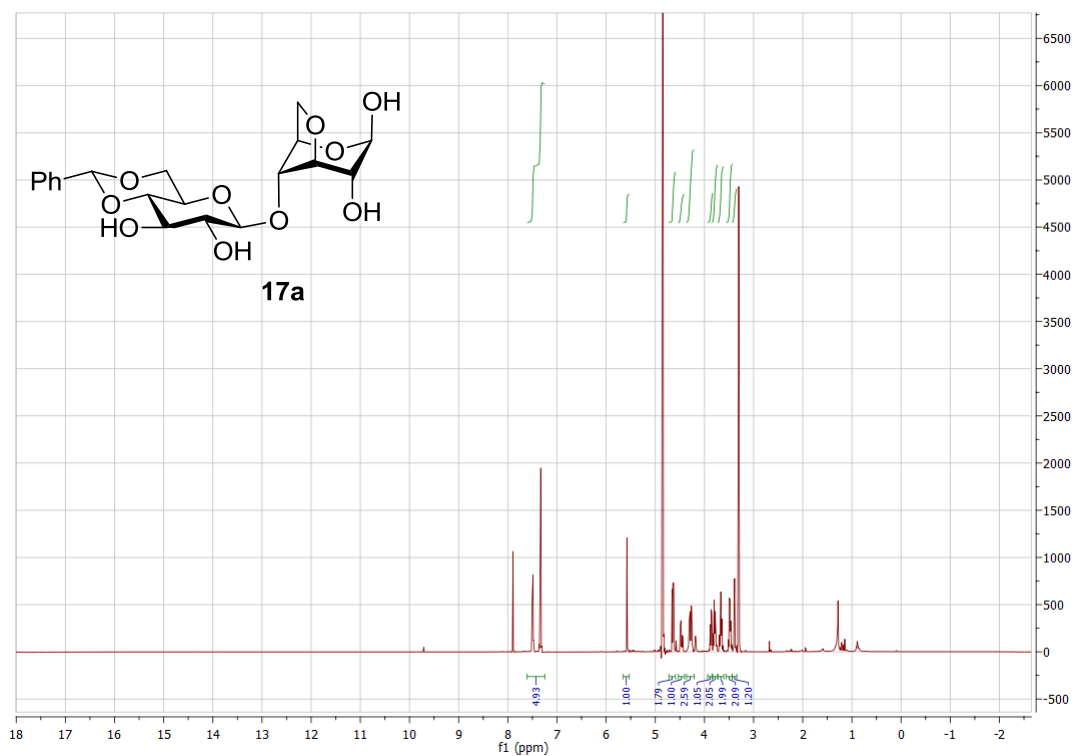


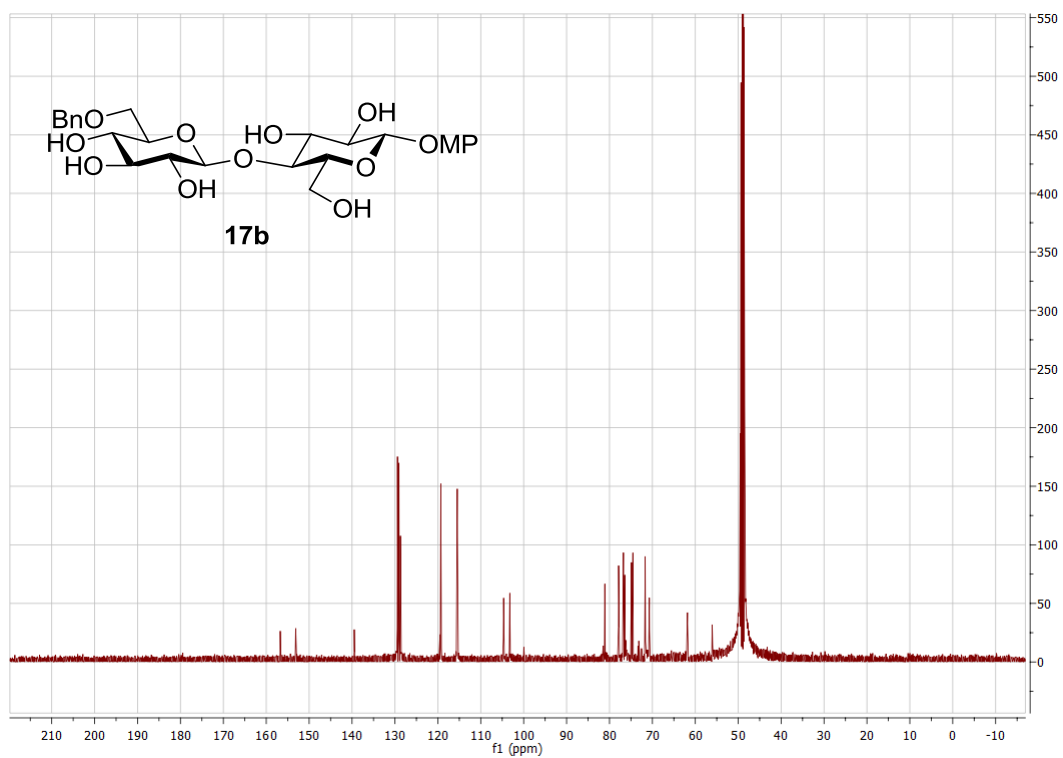
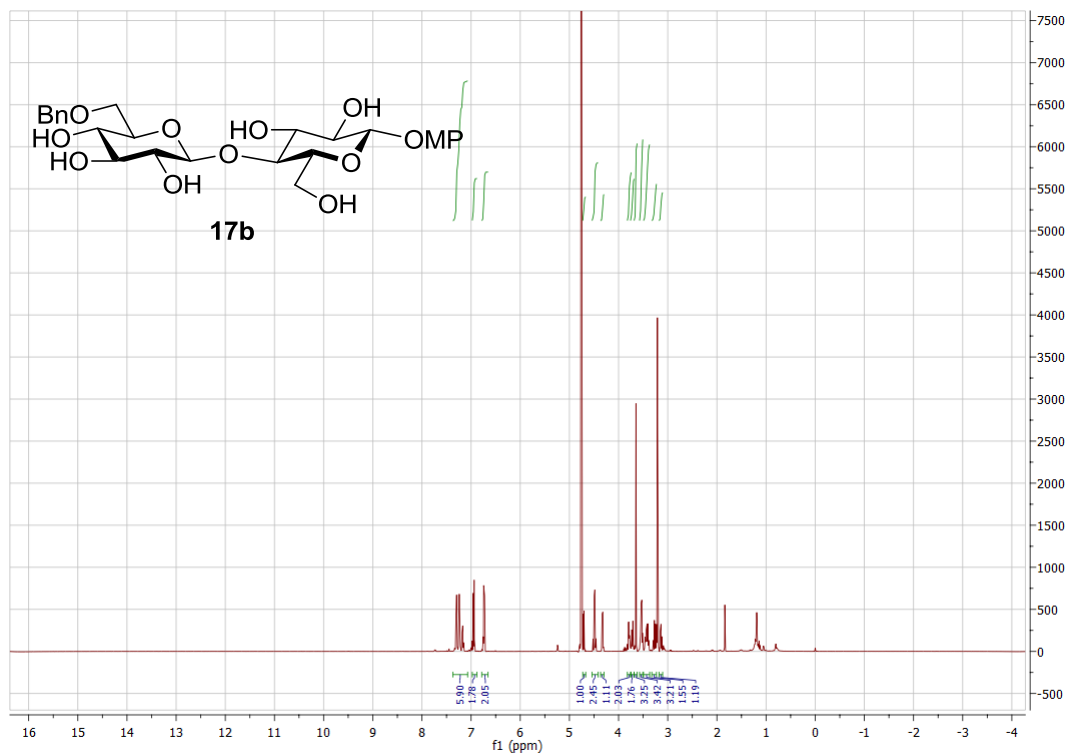












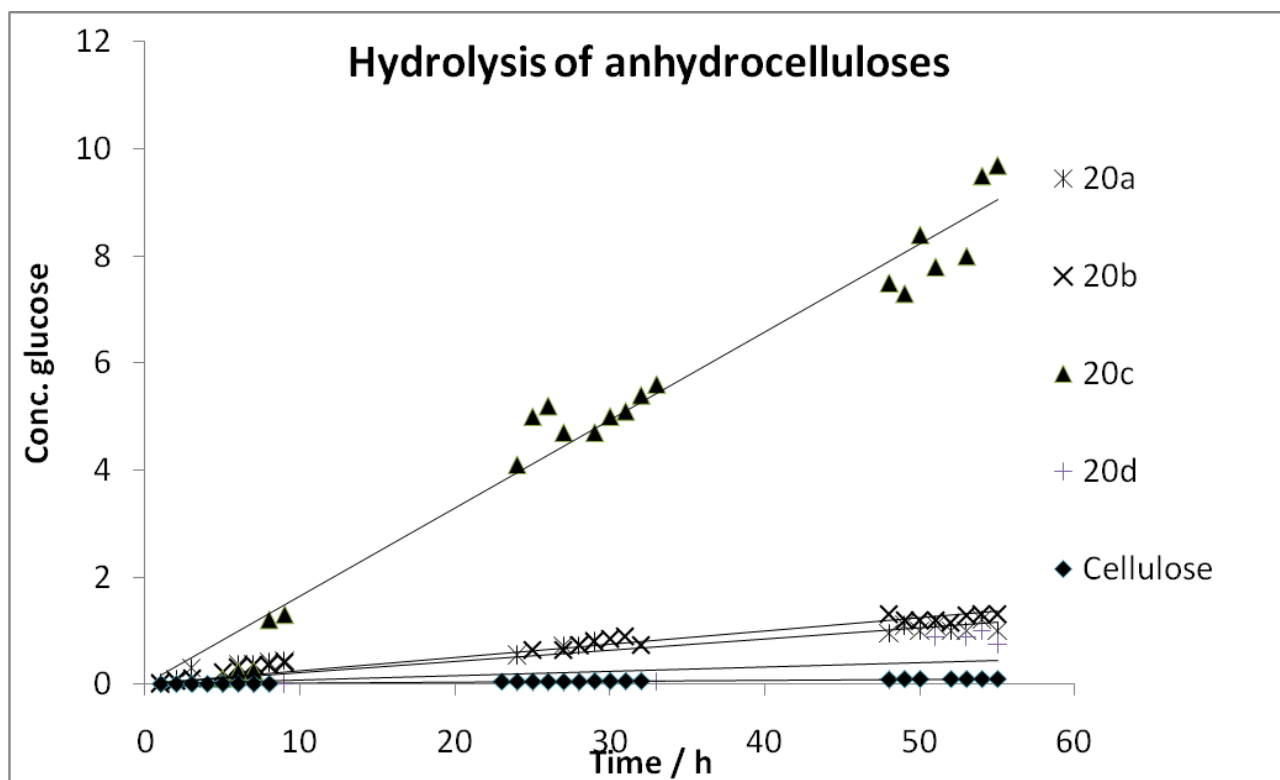


Figure S1. Formation of glucose from the hydrolysis of anhydrocelluloses **20a-d** and cellulose by treatment with 2M HCl at 60 °C. The glucose concentration is in mM (determined by ion chromatography).

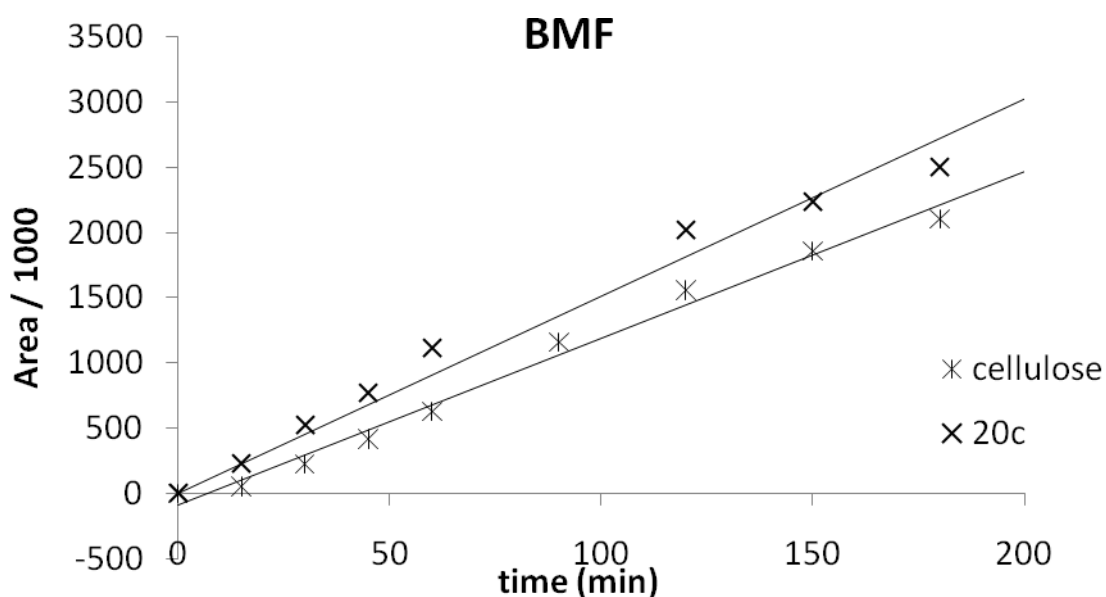


Figure S2. Formation of BMF (**21**) from anhydrocellulose **20c** and cellulose by treatment with HBr/LiBr. The concentration of **21** was determined by HPLC.

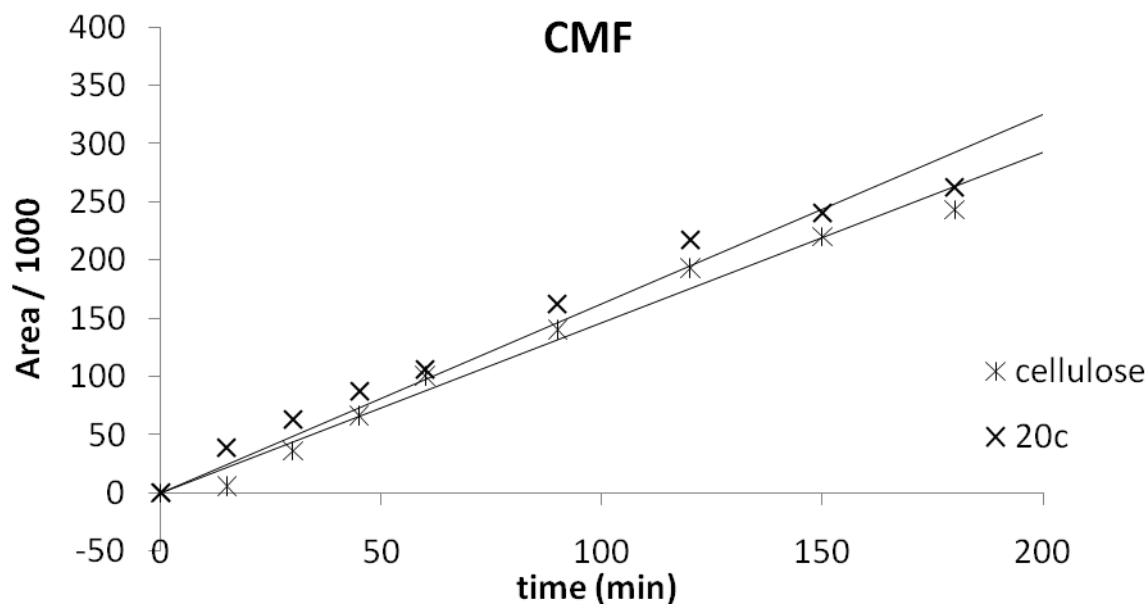


Figure S3. Formation of CMF (**22**) from anhydrocellulose **20c** and cellulose by treatment with HCl/LiCl. The concentration of **22** was determined by HPLC.

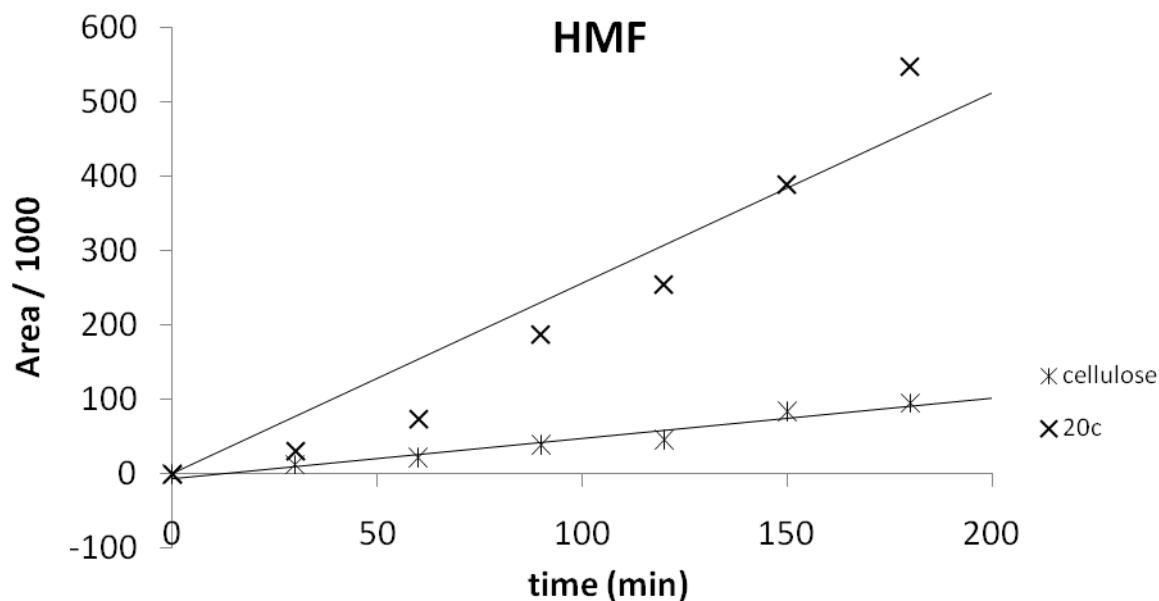


Figure S4. Formation of HMF (**23**) from anhydrocellulose **20c** and cellulose by treatment with CrCl₂/HCl. The concentration of **23** was determined by HPLC.