

Comparison of polysaccharides extracted from cultivated mycelium of *Inonotus obliquus* with polysaccharide fractions obtained from sterile conk (Chaga) and birch heart rot

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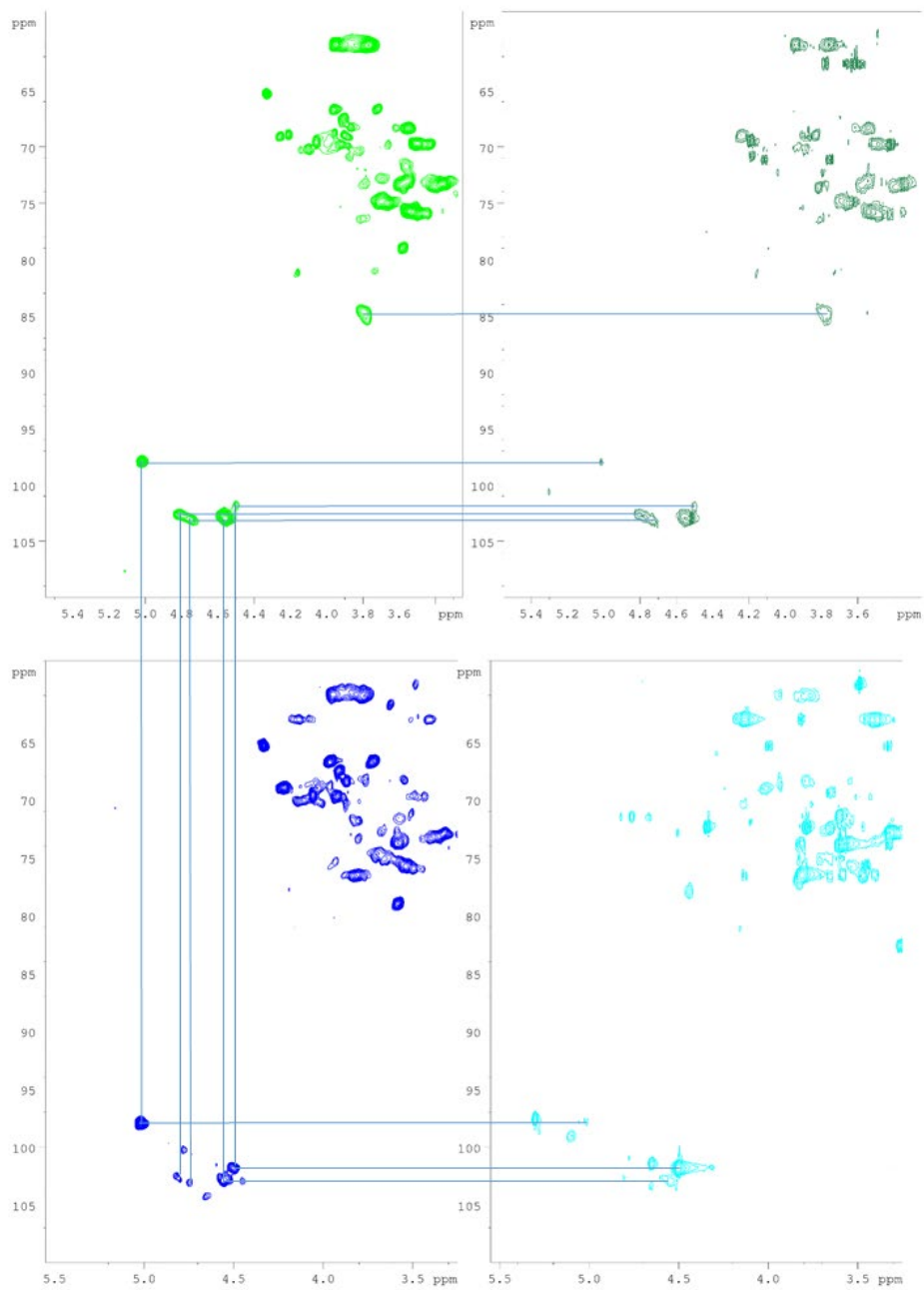


Figure S1. HSQC spectra of F-Chaga HW (green), F-Chaga 2% (dark green), Heart Rot HW (blue), and Heart Rot 2% (light blue). NMR spectra were recorded in D₂O at 308 K. See **Table 2** and **Table 3** for signal assignments.

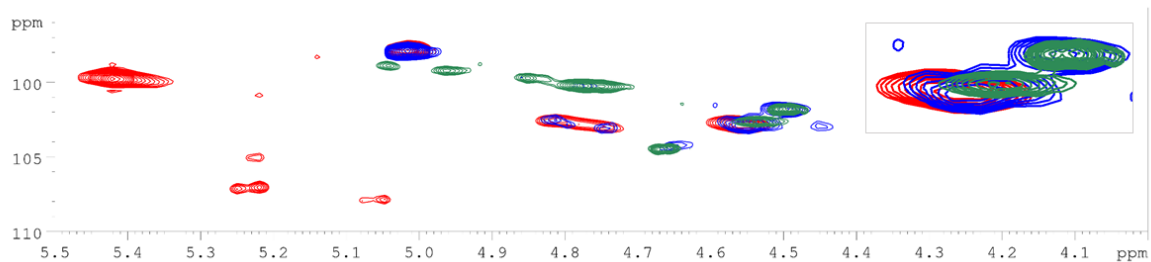


Figure S2. Anomeric region of the HSQC spectra of IPs**Sb0-2.5** HW (red), Heart Rot HW (blue), and galactoglucomannan standard (olive). NMR spectra were recorded in D₂O at 308 K. See **Table 2** and **Table 3** for signal assignments.

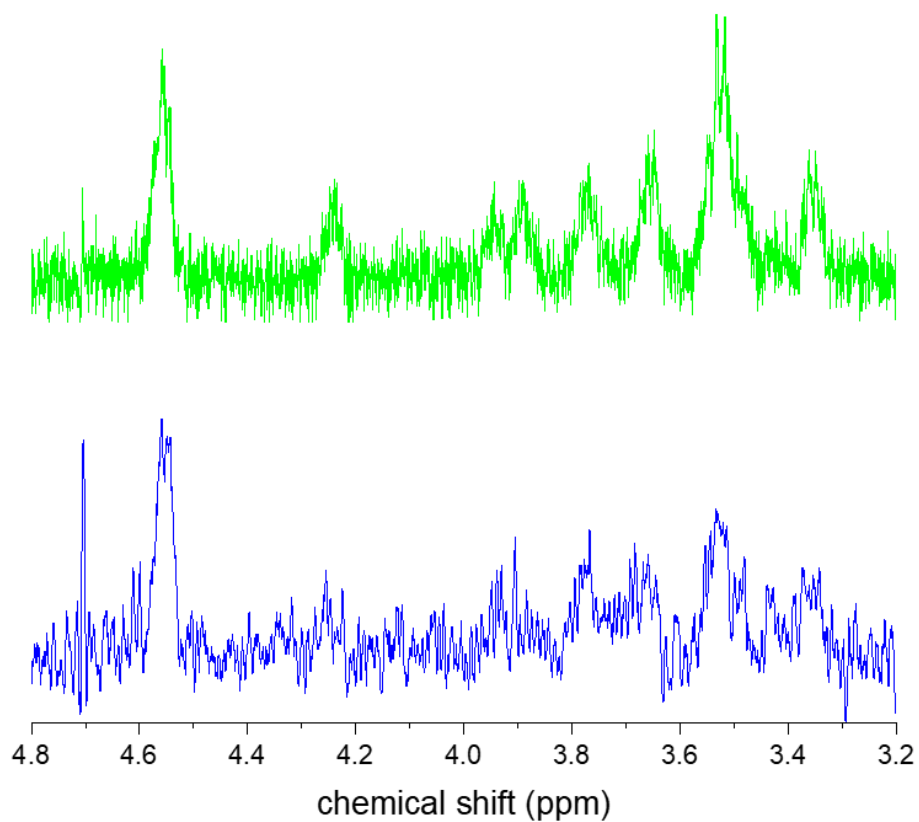


Figure S3. 1D-TOCSY spectra of F-Chaga HW (green), and Heart Rot HW (blue). NMR spectra were recorded in D₂O at 308 K, with an irradiation frequency of 4.55 ppm. See **Table 2** for signal assignments.

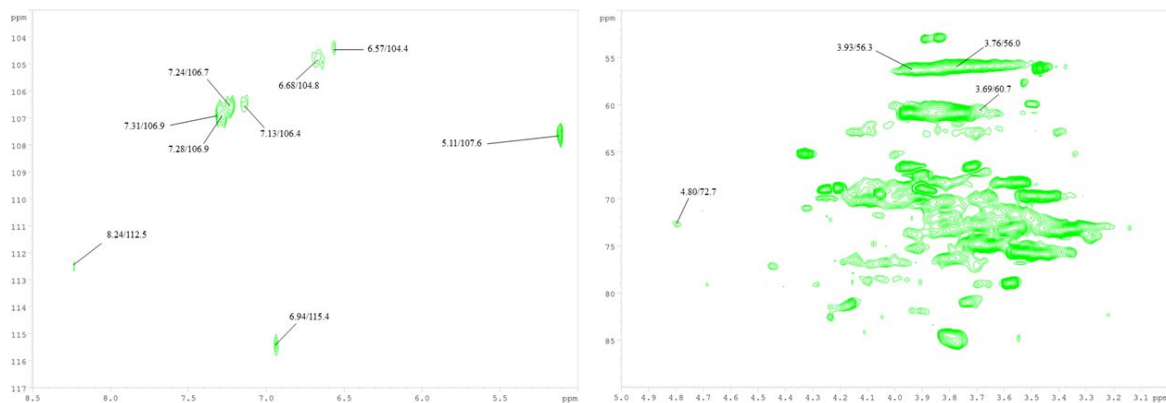


Figure S4. HSQC spectrum of F-Chaga HW, with zoom on the aromatic region (left). NMR spectrum were recorded in D₂O at 308 K.

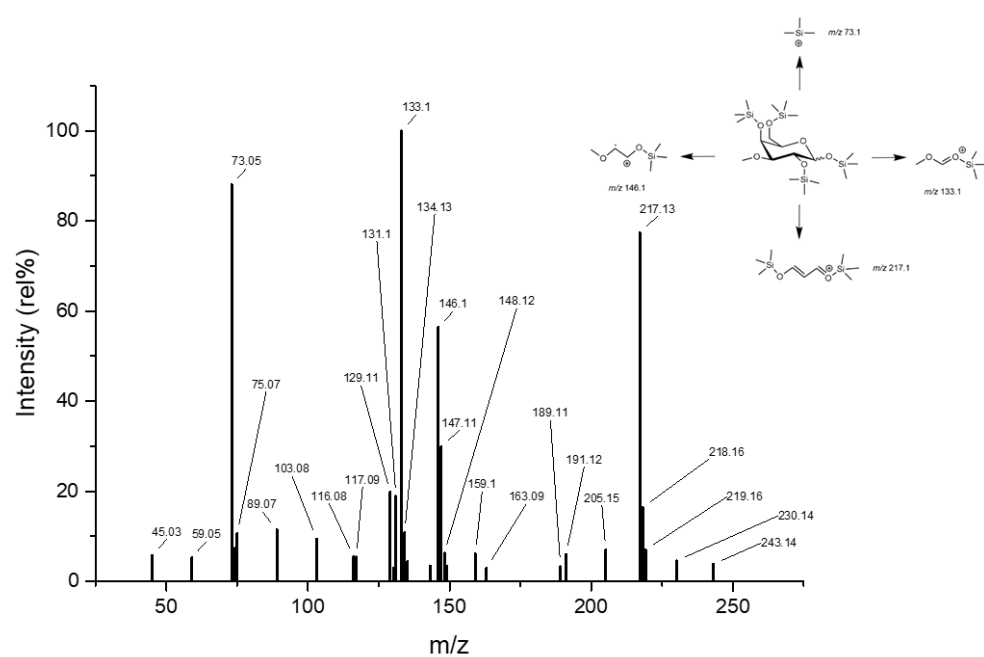


Figure S5. GC-MS fragmentation pattern of persilylated 3-O-Me-Galactose.

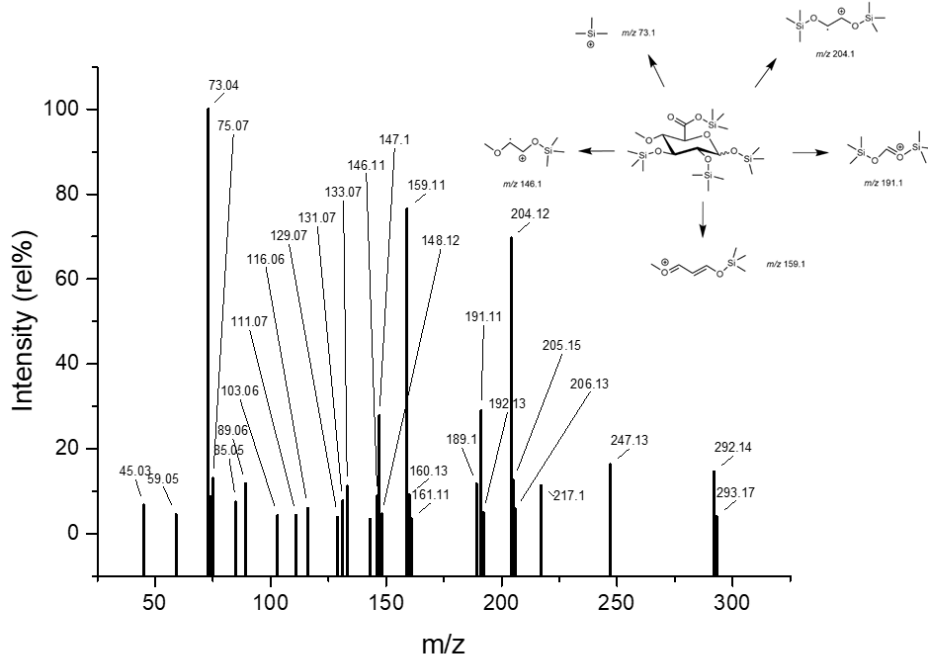


Figure S6. GC-MS fragmentation pattern of persilylated 4-O-Me-Glucuronic acid.

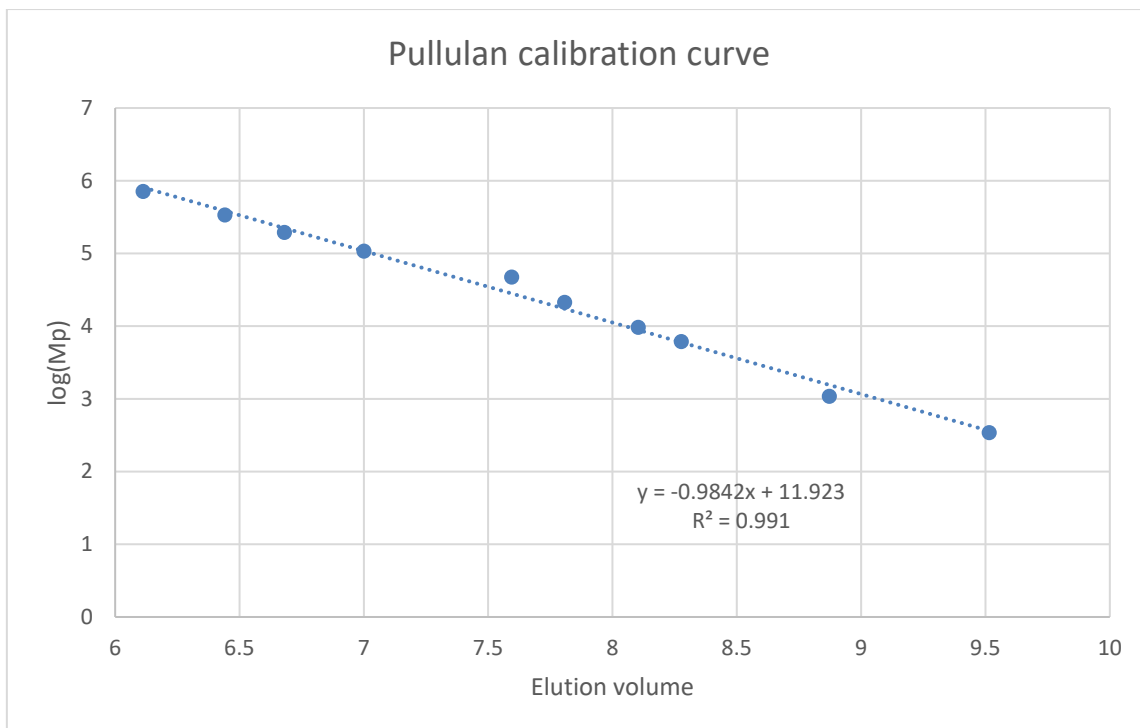


Figure S7. HPSEC calibration curve with pullulan standard set.

Table 1. Tentative assignments of the lignin-correlated signals found in the HSQC spectrum of F-Chaga HW.

¹ H	¹³ C	Assignment
3.76	56.0	OMe
3.93	56.3	OMe condensed aromatic units
3.69	60.7	H γ /C γ of β -O-4 substituted units
4.8	72.7	H α /C α of β -O-4 substituted units
6.57	104.4	H2/C2 of free 4-OH syringyl units
6.68	104.8	H2/C2 of syringyl units
7.31	106.9	H2/C2 of α oxidized syringyl units
5.11	107.6	H/C aryl enol ether
7.67	113.7	H2/C2 of α oxidized guaiacyl units
6.94	115.4	H2/C2 of guaiacyl units