

Linum lewisii adventitious and hairy-roots cultures as lignan plant factories

Supplementary Materials

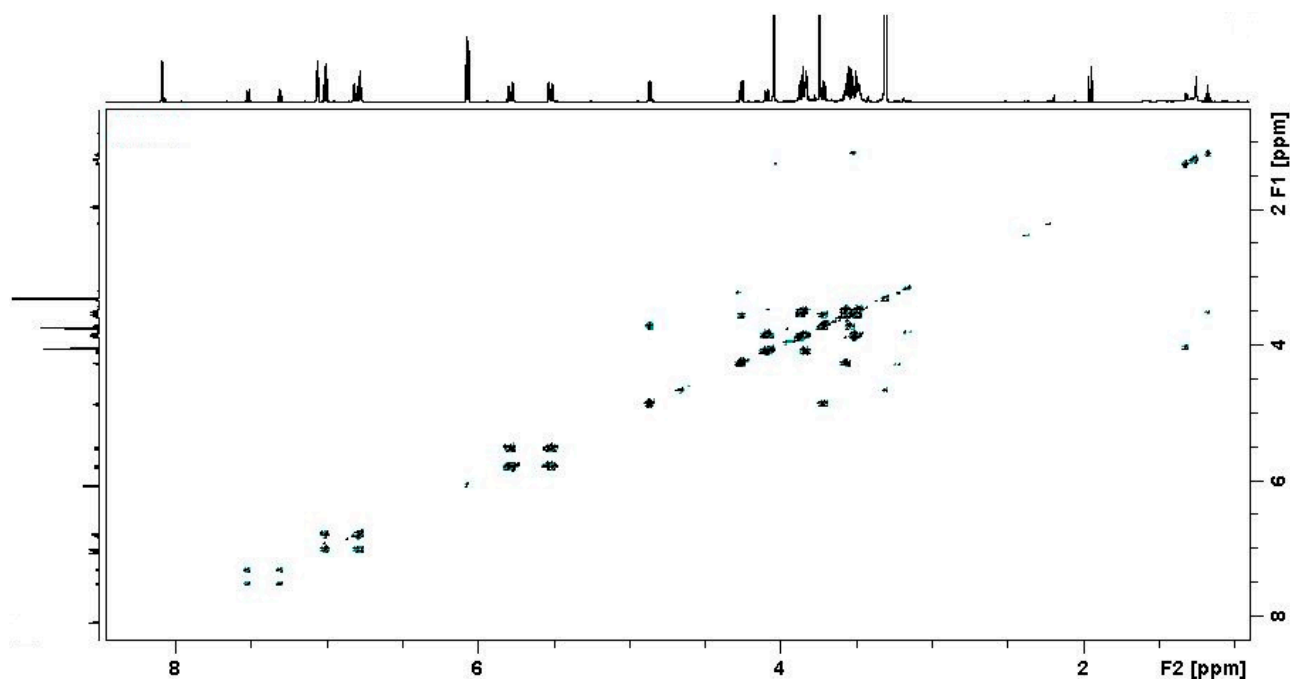


Figure S1. COSY-DQF of 7-O-β-D-xylofuranosyl-(1→5)-O-β-D-xylofuranosyl-diphyllin.

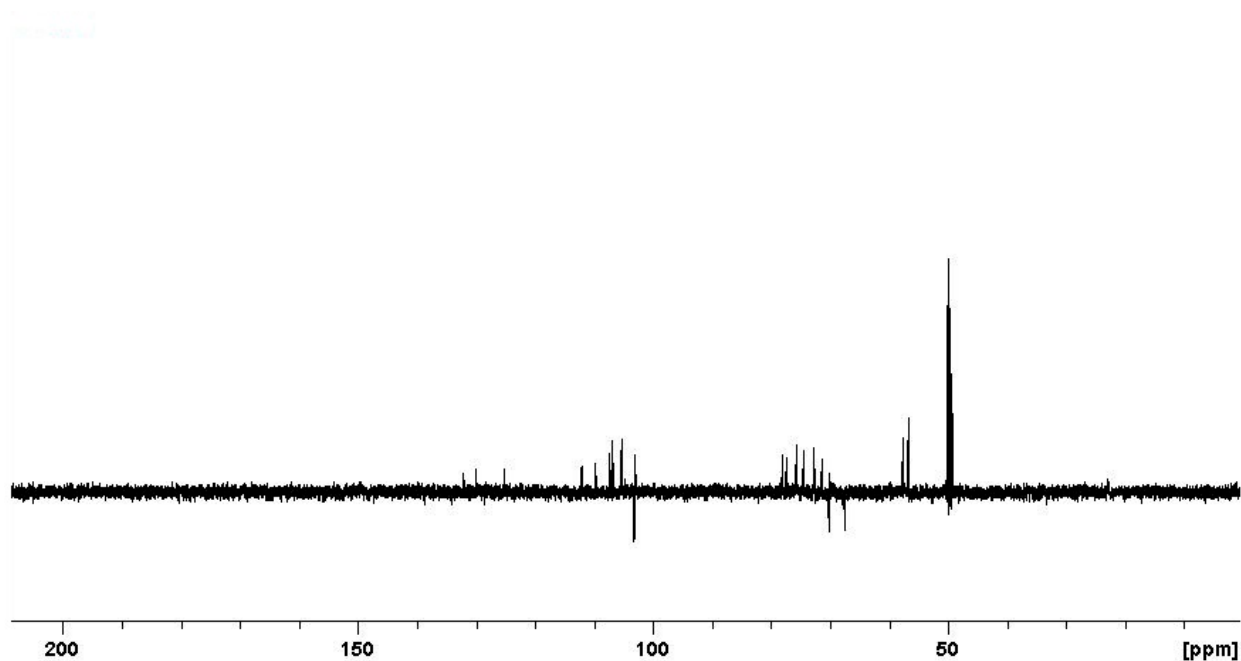


Figure S2. ¹³C DEPT-135 of 7-O-β-D-xylofuranosyl-(1→5)-O-β-D-xylofuranosyl-diphyllin.

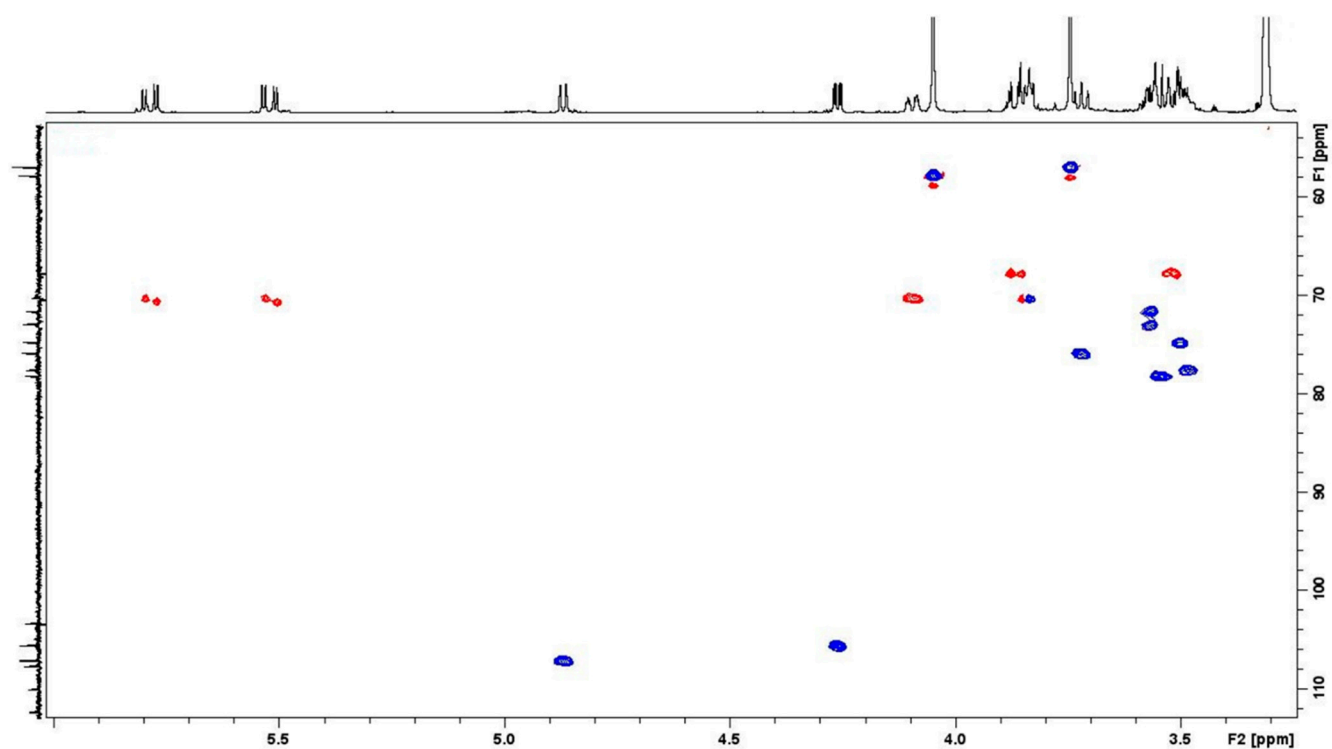


Figure S3. ^1H - ^{13}C edited HSQC of 7-O- β -D-xylofuranosyl-(1 \rightarrow 5)-O- β -D-xylofuranosyl-diphyllin.

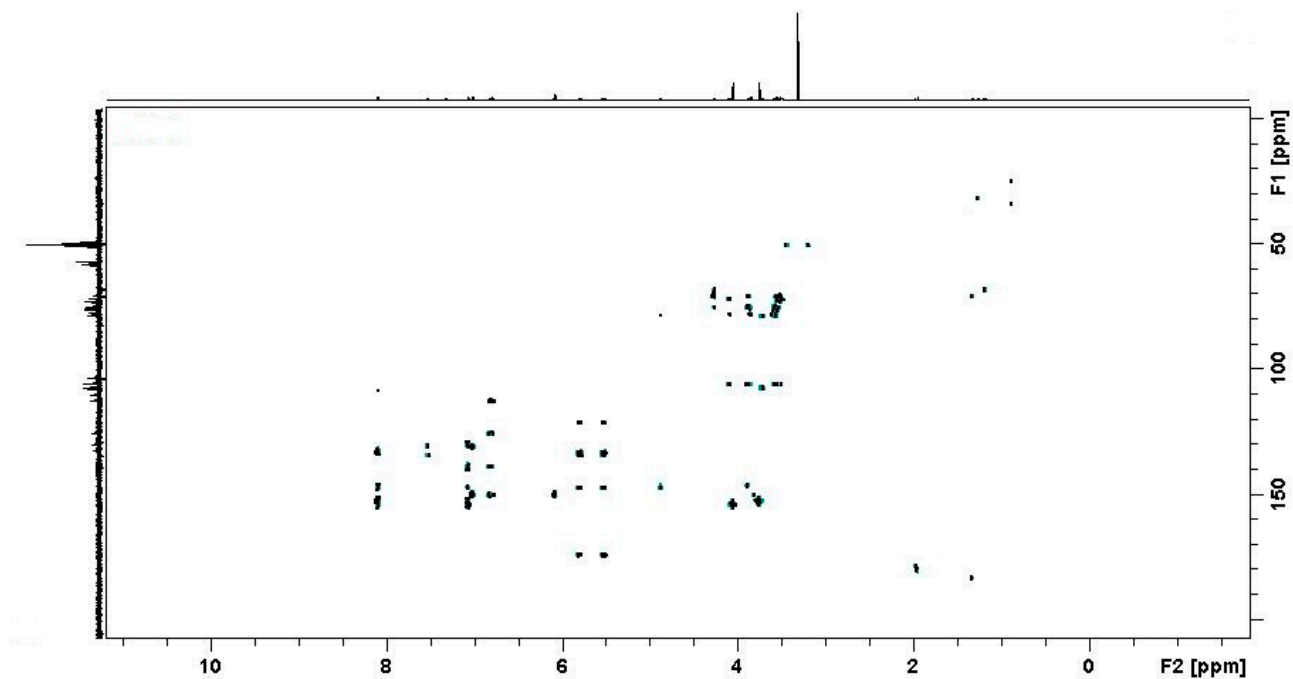


Figure S4. ^1H - ^{13}C HMBC of 7-O- β -D-xylofuranosyl-(1 \rightarrow 5)-O- β -D-xylofuranosyl-diphyllin.

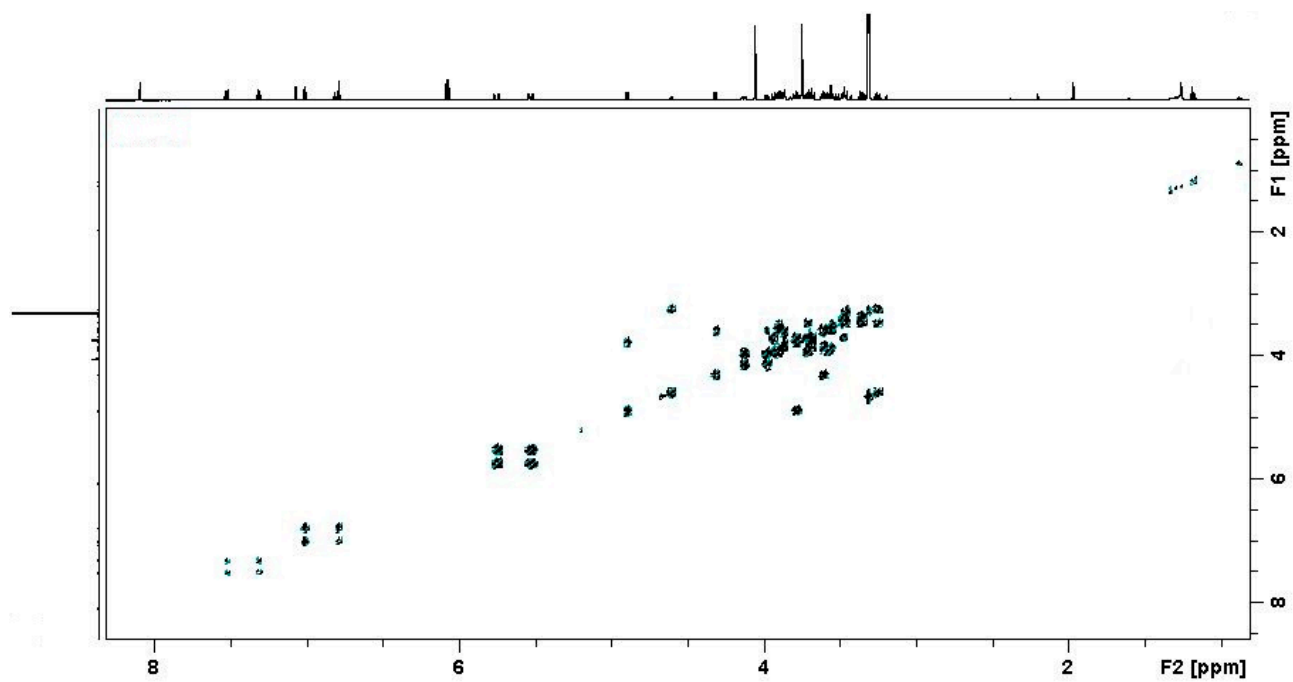


Figure S5. COSY-DQF of 7-O- β -D-xylofuranosyl-(1 \rightarrow 5)-O- β -D-xylofuranosyl-(1 \rightarrow 5)-O- β -D-glucosyl-diphyllin.

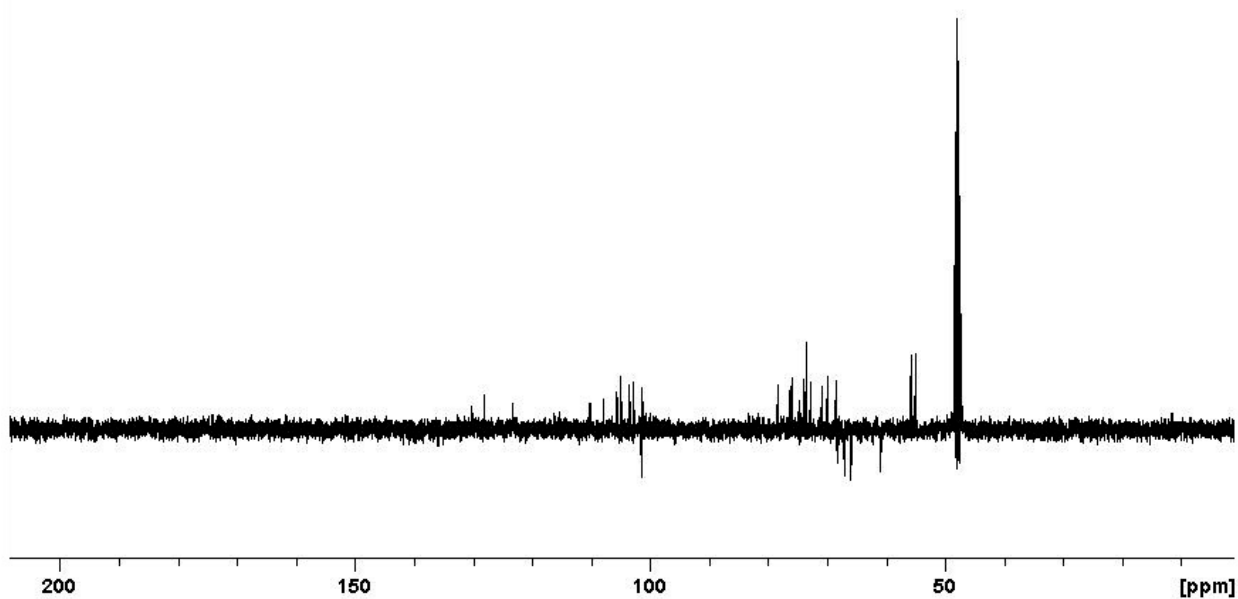


Figure S6. ^{13}C DEPT-135 of 7-O- β -D-xylofuranosyl-(1 \rightarrow 5)-O- β -D-xylofuranosyl-(1 \rightarrow 5)-O- β -D-glucosyl-diphyllin.

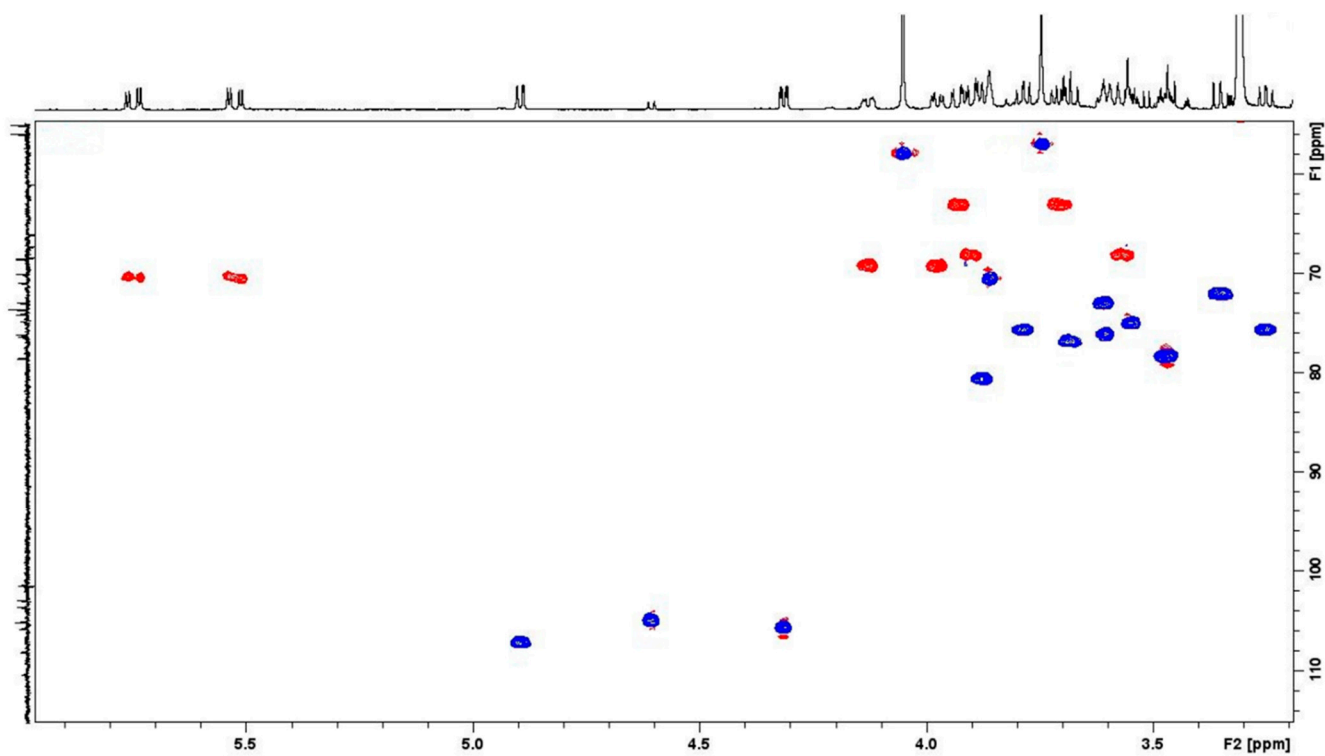


Figure S7. ^1H - ^{13}C edited HSQC of 7-O- β -D-xylofuranosyl-(1 \rightarrow 5)-O- β -D-xylofuranosyl-(1 \rightarrow 5)-O- β -D-glucosyl-diphyllin.

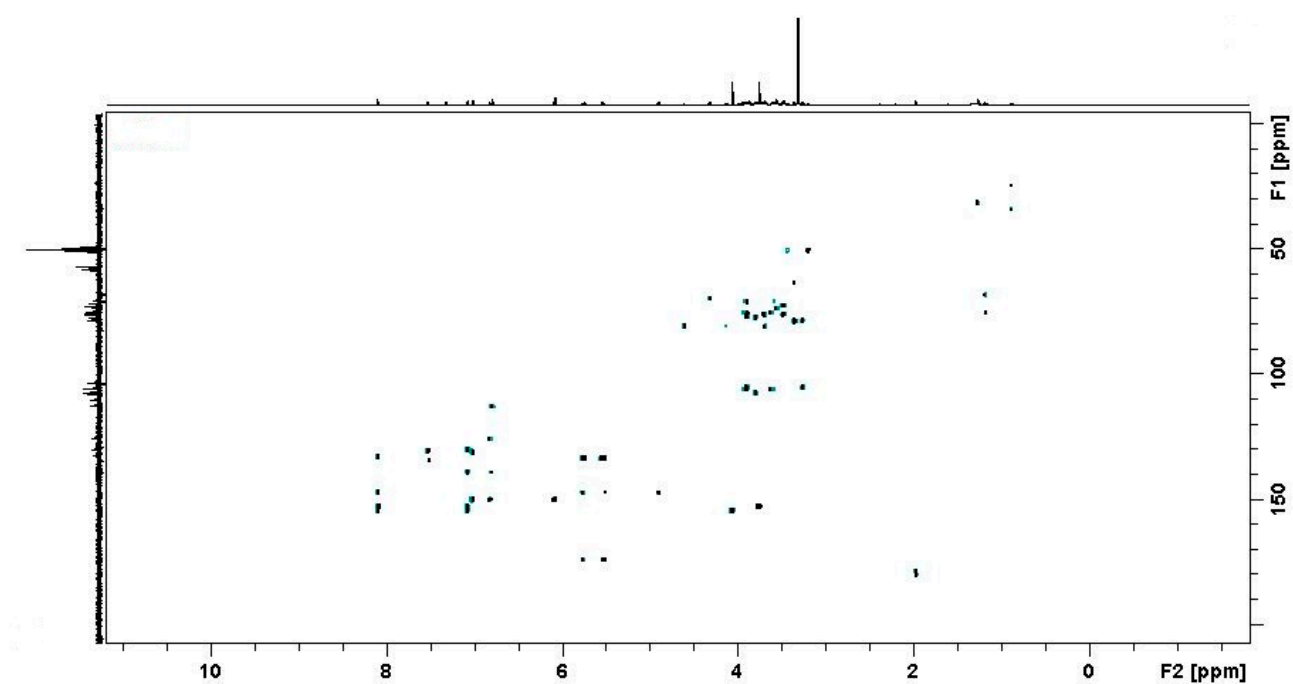


Figure S8. ^1H - ^{13}C HMBC of 7-O- β -D-xylofuranosyl-(1 \rightarrow 5)-O- β -D-xylofuranosyl-(1 \rightarrow 5)-O- β -D-glucosyl-diphyllin.