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Preparation of individual galactan oligomers, their prebiotic effects, and use in estimating galactan chain length in pectin-derived polysaccharides

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Highlights

- Individual galactan oligomers (GOs) up to DP15 were prepared and characterized.
- GOs were analyzed by ¹H-¹³C HSQC/HMBC NMR and their resonances assigned.
- Intensity ratios of various peaks were correlated to DP.
- Correlation plots are used to estimate galactan side chain length in RG-I pectin.
- Prebiotic effects from GOs suggest an application in studying the gut microbiome.

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