

Carbohydrate Research Vol. 340, No. 15, 2005

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Xiangdong Mei, Linsen Heng,* Mingkun Fu, Zhimin Li and Jun Ning*

Investigations of different carbohydrate anomers in copper(II) complexes with D-glucose, D-fructose, and D-galactose by Raman and EPR spectroscopy

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Giselle Cerchiaro, Antonio Carlos Sant'Ana, Marcia Laudelina Arruda Temperini and Ana Maria da Costa Ferreira*

The application of phenylmethanethiol and benzenethiol derivatives as odorless organosulfur reagents in the synthesis of thiosugars and thioglycosides

pp 2360-2368

Jun-ya Hasegawa, Masahiro Hamada, Tetsuo Miyamoto, Kiyoharu Nishide, Tetsuya Kajimoto, Jun-ichi Uenishi and Manabu Node*

$$C_{8}H_{17}O \longrightarrow CH_{2}SH + \bigcup_{BnO}O \longrightarrow OMe \xrightarrow{HCl}BnO \xrightarrow{SR}SR \xrightarrow{2 \text{ steps}}BnO \xrightarrow{SR}SR \xrightarrow{R = p-C_{8}H_{17}-C_{6}H_{4}-CH_{2}}SR \xrightarrow{AcO}OAc \xrightarrow{OAc}AcO \xrightarrow{OAc}AcO \xrightarrow{OAc}AcO \xrightarrow{OAc}BF_{3} \cdot Et_{2}O \xrightarrow{AcO}OAc \xrightarrow{OAc}AcO \xrightarrow{OAc}BF_{3} \cdot Et_{2}O \xrightarrow{OAc}AcO \xrightarrow{OAc}BF_{3} \cdot Et_{2}O \xrightarrow{OAc}AcO \xrightarrow{OAc}BF_{3} \cdot Et_{2}O \xrightarrow{OAc}AcO \xrightarrow{OAc}BF_{3} \cdot Et_{2}O \xrightarrow{OAc}AcO$$

The structure of the O-polysaccharide of the Pseudoalteromonas rubra ATCC 29570 T lipopolysaccharide containing a keto sugar

pp 2369-2375

Michelle Kilcoyne, Alexander S. Shashkov, Yuriy A. Knirel, Raisa P. Gorshkova, Evgeny L. Nazarenko, Elena P. Ivanova, Natalya M. Gorshkova, Sof'ya N. Senchenkova and Angela V. Savage*

 \rightarrow 4)- α -L-GalpNAm3AcA-(1 \rightarrow 3)- α -Sugp-(1 \rightarrow 4)- β -D-GlcpNAc3NAcylA-(1 \rightarrow

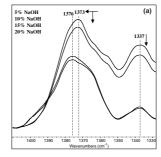
where Sug is 2-acetamido-2,6-dideoxy-D-xylo-hexos-4-ulose, Am is acetimidoyl and Acyl is a malic acid residue, which is O-acetylated in \sim 70% of the units.

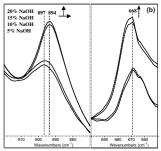
Crystalline structure analysis of cellulose treated with sodium hydroxide and carbon dioxide by means of X-ray diffraction and FTIR spectroscopy

Sang Youn Oh, Dong Il Yoo,* Younsook Shin, Hwan Chul Kim, Hak Yong Kim,

Yong Sik Chung, Won Ho Park and Ji Ho Youk

FTIR spectra of Cell 2/25 (a) at 1450–1320cm–1 and (b) at 920–870 and 700–650cm–1.





Structural analysis and antiviral activity of a sulfated galactan from the red seaweed *Schizymenia binderi* (Gigartinales, Rhodophyta)

pp 2392-2402

Betty Matsuhiro,* Ana F. Conte, Elsa B. Damonte, Adriana A. Kolender, María C. Matulewicz, Enrique G. Mejías, Carlos A. Pujol and Elisa A. Zúñiga

The mean structure for the alkali-treated sulfated galactan from *Schizymenia binderi* is proposed.

The enzymatic degradation and swelling properties of chitosan matrices with different degrees of N-acetylation

Dongwen Ren, Hongfu Yi, Wei Wang and Xiaojun Ma*

750 quilibrium water and swelling (%)

450 and swelling (%)

150 begree of deacetylation (%)

pp 2403-2410

Structural characterization of a series of 10-carbon sugar derivatives by electrospray-ionization MS^n mass spectrometry

pp 2411-2421

Da-Peng Zou, Shu-Xia Cao, Wei-Chao Xu and Hong-Min Liu*

4a-4h
$$_{\rm R}$$
 5a-5h $_{\rm R}$ 6a-6f $_{\rm R}$ 7a-7f $_{\rm R}$ a R = p-CH₃; b R = o-CH₃; c R = p-F; d R = p-CI; e R = p-Br; f R = p-OCH₃; g R = H; h R = m-CH₃

X-ray structure of the dipotassium salt of D-mannose 1-phosphate 3.25 hydrate

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Lucjan B. Jerzykiewicz,* Tadeusz Lis and Ewa Zuziak

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Synthesis of methyl 4'-O-methyl- 13 C $_{12}$ - β -D-cellobioside from 13 C $_6$ -D-glucose. Part 1: Reaction optimization and synthesis

pp 2428-2435

Yuko Yoneda, Toshinari Kawada,* Thomas Rosenau* and Paul Kosma

A facile synthesis of the GalNAcβ1→4Gal target sequence of respiratory pathogens

pp 2436-2442

Reshma Autar, Rob M. J. Liskamp and Roland J. Pieters*

An optimized synthesis of the carbohydrate sequence GalNAc β 1 \rightarrow 4Gal is reported. This is the target sequence for the adhesion of several respiratory pathogens.



Glycosylation of acid sensitive acceptors. Synthesis of (2,3-epoxy-1-propyl) glycosides

pp 2443-2446

Anna Kasprzycka,* Wiesław Szeja and Grzegorz Grynkiewicz

$$R-O-CN_{NH-CH_2-CH=CH_2} + HOCH_2-CH-CH_2 \xrightarrow{Br_2} R-O-CH_2-CH-CH_2$$

$$\beta \text{-thiocarbamates} \qquad 2 R, S \qquad \alpha \text{-glycosides}$$

$$1a \text{-c} \qquad 3 R \qquad 2a, 2b, 2c \qquad 3a, 4a$$

$$R:$$

$$R:$$

$$BnO \xrightarrow{OBn} OBn \qquad OBn$$

Chemical characteristics of a polysaccharide from *Porphyra capensis* (Rhodophyta)

pp 2447-2450

Quanbin Zhang,* Huimin Qi, Tingting Zhao, Eric Deslandes, Ninasayaeli Mbise Ismaeli, F. Molloy and Alan T. Critchley

The chemical characteristics of a polysaccharide extracted from *Porphyra capensis* was investigated.

*Corresponding author

(1) Supplementary data available via ScienceDirect

COVER

Model of blood group A trisaccharide in the binding site of the *Dolichos biflorus* lectin as established by a combination of theoretical and experimental approaches. Molecular modeling of the oligosaccharide demonstrated that two different conformations could be adopted by the trisaccharide in the binding site. NMR experiments using transferred nuclear Overhauser effects (TRNOE) displayed intermolecular contacts (blue arrows) corresponding to only one of the two theoretical conformations. This work is a collaboration between Anne Imberty (CERMAV, Grenoble) and Thomas Peters (University of Lübeck) and was presented during the XXIInd International Carbohydrate Symposium (Glasgow, 2004) on the occasion of the Whistler award.

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