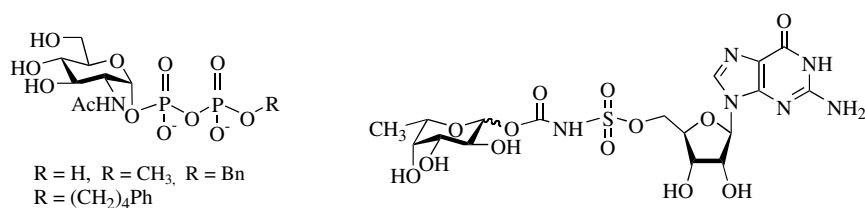


Contents

FULL PAPERS

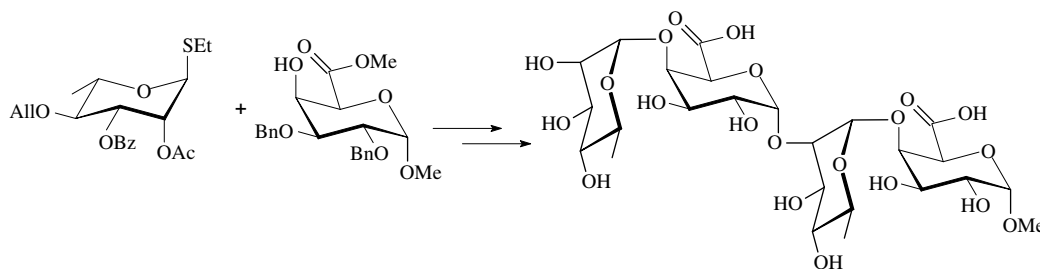
- Exploring specificity of glycosyltransferases: synthesis of new sugar nucleotide related molecules as putative donor substrates** pp 167–178

Amira Khaled, Olga Piotrowska, Katarzyna Dominiak and Claudine Augé*



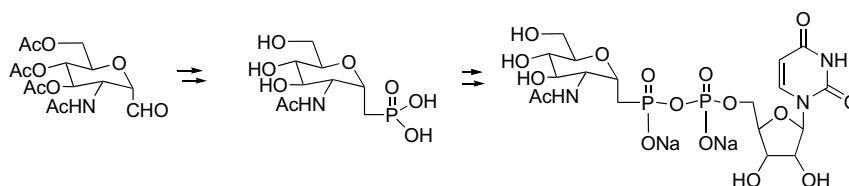
- Synthesis of two repeat units corresponding to the backbone of the pectic polysaccharide rhamnogalacturonan I** pp 179–188

Dominic Reiffarth and Kerry B. Reimer*



- A convenient synthesis of the C-1-phosphonate analogue of UDP-GlcNAc and its evaluation as an inhibitor of O-linked GlcNAc transferase (OGT)** pp 189–195

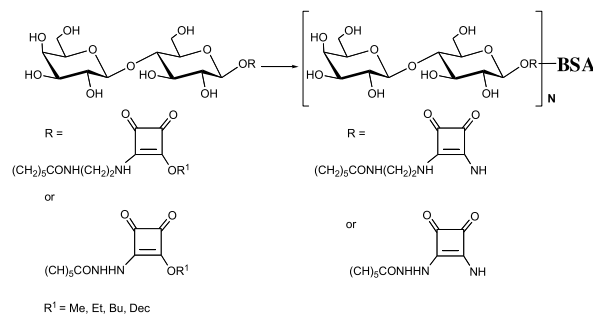
Jan Hajduch, Ghilsoo Nam, Eun Ju Kim, Roland Fröhlich, John A. Hanover and Kenneth L. Kirk*



Preparation of glycoconjugates by dialkyl squarate chemistry revisited

Shu-jie Hou, Rina Saksena and Pavol Kováč*^{*}

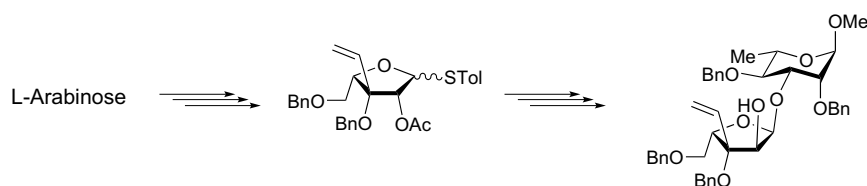
pp 196–210



Indirect approach to C-3 branched 1,2-*cis*-glycofuranosides: synthesis of aceric acid glycoside analogues

Marcelo T. de Oliveira, David L. Hughes, Sergey A. Nepogodiev* and Robert A. Field*

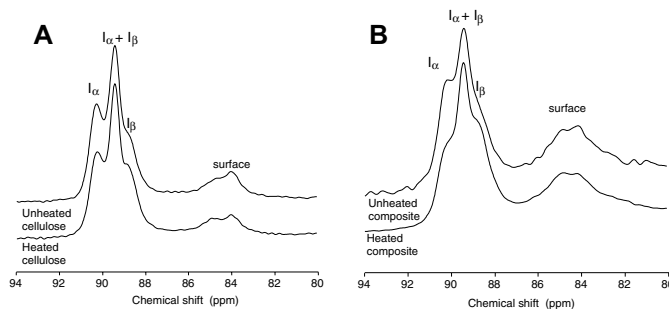
pp 211–220



WAXS and ¹³C NMR study of *Gluconoacetobacter xylinus* cellulose in composites with tamarind xyloglucan

Tracey J. Bootten, Philip J. Harris,* Laurence D. Melton and Roger H. Newman

pp 221–229



Preparation of chitosan–nylon-6 blended membranes containing silver ions as antibacterial materials

Yunli Ma, Tao Zhou and Changsheng Zhao*

pp 230–237

Chitosan–nylon-6 blended membranes containing silver ions were prepared in two steps, and their antibacterial properties with variation of the chitosan content, pH value and concentration of the silver nitrate solution used to prepare the membranes were systematically discussed.

pp 238–248

α -D-Glcp-(1→6)-β-D-Glcp-(1→3)- γ Cm-7 γ
 α -L-Rhap-(1→6)- α -D-Glcp-(1→4)- α -D-GalpNAc-(1→3)-L- α -D-Hepp-(1→3)-L- α -D-Hepp-(1→5)-Kdop
 α -D-Glcp-(1→4)- α -D-GalpNAc-(1→3)-L- α -D-Hepp-(1→3)-L- α -D-Hepp-(1→5)-Kdop
 α -D-GalpNAc-(1→3)-L- α -D-Hepp-(1→3)-L- α -D-Hepp-(1→5)-Kdop

pp 249–255

The diagram shows a rectangular box labeled "Borate complex layer" and three smaller rectangular boxes labeled "Cellulose". A bracket groups the "Cellulose" boxes with the text "Protection against acid-catalyzed reaction".

pp 256–266

$$[\beta\text{-D-Xylp}]_n-(1 \rightarrow 4)-[\beta\text{-D-Xylp}]_{5^*}-(1 \rightarrow 4)-[\beta\text{-D-Xylp}]_{48^*}-(1 \rightarrow 4)-[\beta\text{-D-Xylp}]_{17^*}-(1 \rightarrow 4)-[\beta\text{-D-Xylp}]_{23^*}-(1 \rightarrow 4)-[\beta\text{-D-Xylp}]_7-(1 \rightarrow$$

4-O-Me- α -D-GlcNAc/ α -D-GlcA

pp 267–273

Diagram illustrating the chemical structures of Crosslinking Product I and Crosslinking Product II.

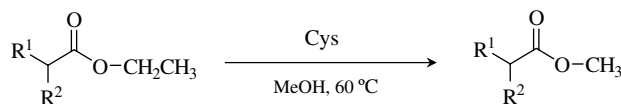
Crosslinking Product I: A linear polymer chain structure. The backbone consists of amide groups ($\text{NHCH}_2\text{CH}_2\text{CONH}$) and amine groups (H_2N). The structure is labeled with **C** and **S** at the ends. Arrows indicate **Intergroup crosslinking** (between amide groups) and **Intragroup crosslinking** (within amine groups).

Crosslinking Product II: A crosslinked polymer structure. The backbone consists of amide groups ($\text{NHCH}_2\text{CH}_2\text{CONH}$) and amine groups (H_2N). The structure is labeled with **C** and **S** at the ends. A central crosslinking site is labeled **CTS**. Arrows indicate **Intergroup crosslinking** (between amide groups) and **Intragroup crosslinking** (within amine groups).

Methanolysis of ethyl esters of *N*-acetyl amino acids catalyzed by cyclosophoraoses isolated from *Rhizobium meliloti*

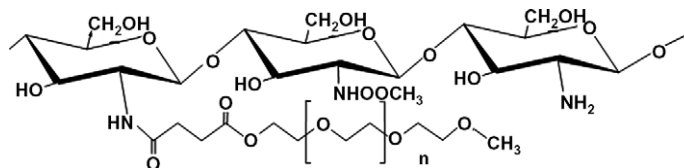
pp 274–281

Heylin Park and Seunho Jung*

APEE R¹ = benzyl, R² = *N*-acetylaminoAYEE R¹ = 4-hydroxybenzyl, R² = *N*-acetylaminoAWEE R¹ = 3-methylindolyl, R² = *N*-acetylaminoEPA R¹ = phenyl, R² = H
Preparation and spectroscopic characterization of methoxy poly(ethylene glycol)-grafted water-soluble chitosan

pp 282–289

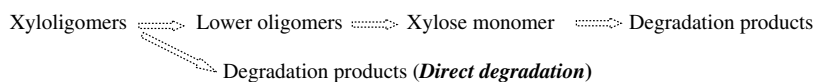
Young-Il Jeong, Don-Gon Kim, Mi-Kyeong Jang and Jaw-Woon Nah*


The impact of dilute sulfuric acid on the selectivity of xylooligomer depolymerization to monomers

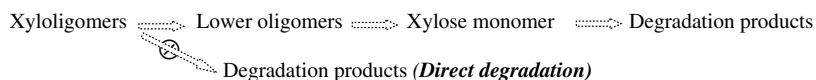
pp 290–300

Rajeev Kumar and Charles E. Wyman*

Depolymerization and significant oligomer degradation at near neutral pH without added acid

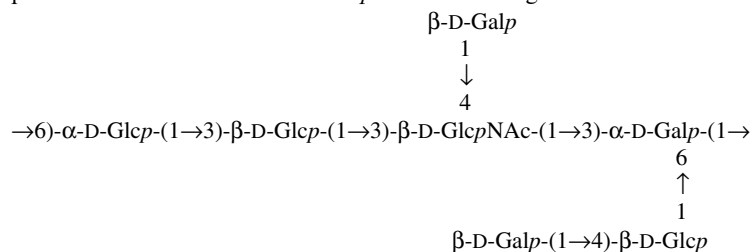


Depolymerization with little oligomer degradation at lower pH with added acid


Determination of the structure and molecular weights of the exopolysaccharide produced by *Lactobacillus acidophilus* 5e2 when grown on different carbon feeds

pp 301–307

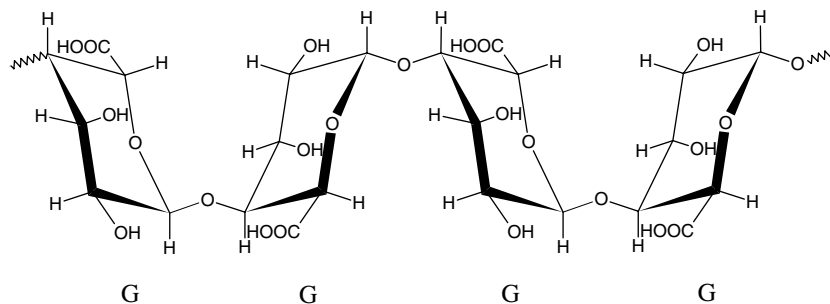
Andrew P. Laws,* Marcus J. Chadha, Mariana Chacon-Romero, Valerie M. Marshall and Mohammed Maqsood

A novel exopolysaccharide is produced from *Lactobacillus acidophilus* 5e2 when grown in skimmed milk supplemented with glucose:

FT-IR spectra of alginic acid block fractions in three species of brown seaweeds

pp 308–316

David Leal, Betty Matsuhira,* Miriam Rossi and Francesco Caruso

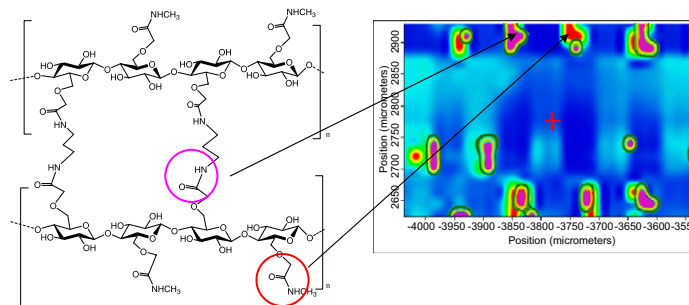


The homopoly-L-guluronic blocks presented in the IR spectra two characteristics bands at 812 and 781 cm⁻¹.

The applicability of an amidated polysaccharide hydrogel as a cartilage substitute: structural and rheological characterization

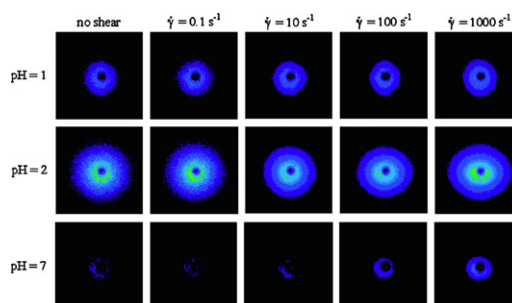
pp 317–327

Gemma Leone, Maurizio Delfini, Maria Enrica Di Cocco, Anna Borioni and Rolando Barbucci*

**Effect of pH on the association behavior in aqueous solutions of pig gastric mucin**

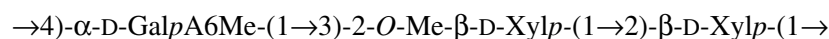
pp 328–340

Atoosa Maleki, Géraldine Lafitte, Anna-Lena Kjøniksen, Krister Thuresson and Bo Nyström*

**Structural studies of a methyl galacturonosyl-methoxyxylan isolated from the stem of *Lagenaria siceraria* (Lau)**

pp 341–349

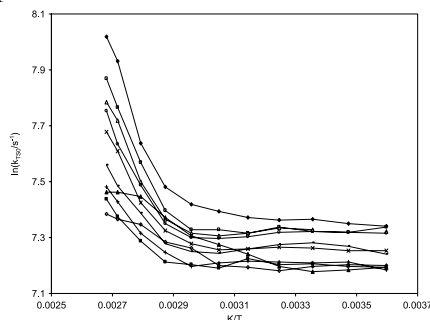
Kaushik Ghosh, Krishnendu Chandra, Sadhan K. Roy, Subhas Mondal, Debabrata Maiti, Debsankar Das, Arnab K. Ojha and Syed S. Islam*



The effect of sodium chloride on molecular mobility in amorphous sucrose detected by phosphorescence from the triplet probe erythrosin B

pp 350–363

Yumin You and Richard D. Ludescher*



Heterogeneity in iota-carrageenan molecular structure: insights for polymorph II→III transition in the presence of calcium ions

pp 364–373

Srinivas Janaswamy and Rengaswami Chandrasekaran*

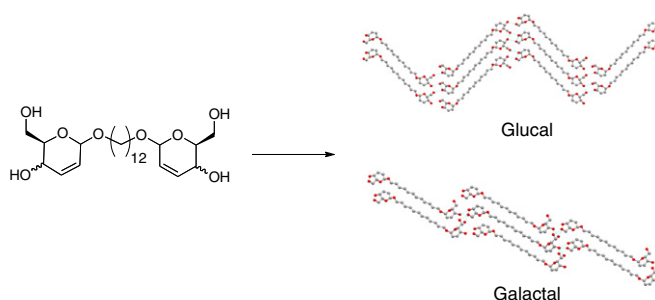
The structural details underscore unexpected flexibility in double helix polymer morphology of polymorph III, and packing arrangement offers an elegant transition mechanism from II.



Molecular structures of glycal-based bolaamphiphiles: analysis of crystal packing and hydrogen-bond networks

pp 374–382

Nathan C. Tice, Sean Parkin and Joseph J. Bozell*

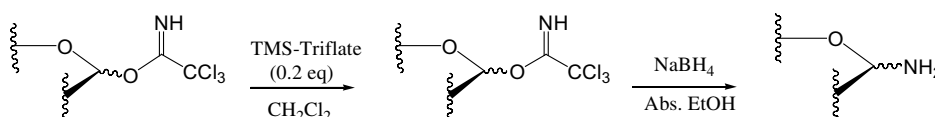


NOTES

Acid-catalysed rearrangement of glycosyl trichloroacetimidates: a novel route to glycosylamines

pp 383–387

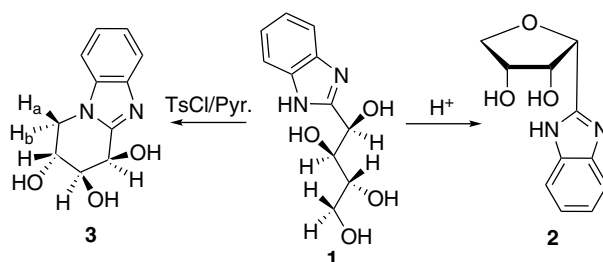
Kim Larsen, Carl Erik Olsen and Mohammed Saddik Motawia*



Synthesis of N-bridgehead heterocycles from saccharide benzimidazoles

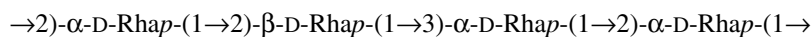
pp 388–391

Mohammed A. E. Sallam,* Viggo Waagen and Thorleif Anthonsen

**The structure of the O-specific polysaccharide of the lipopolysaccharide from *Pantoea agglomerans* strain FL1**

pp 392–396

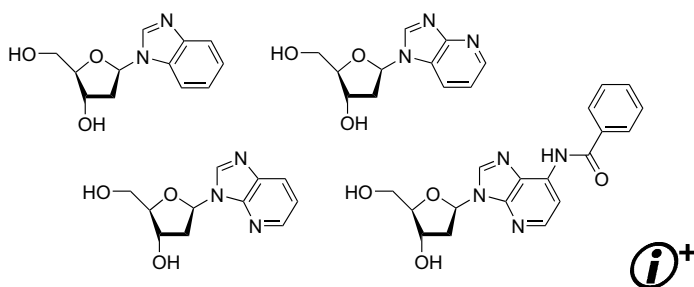
Alessio Cimmino, Guido Marchi, Giuseppe Surico, Anna Hanuszkiewicz, Antonio Evidente and Otto Holst*

**X-ray crystallographic study of several 2'-deoxy- β -D-ribonucleosides with 1-deazapurine-derived aglycones**

pp 397–403

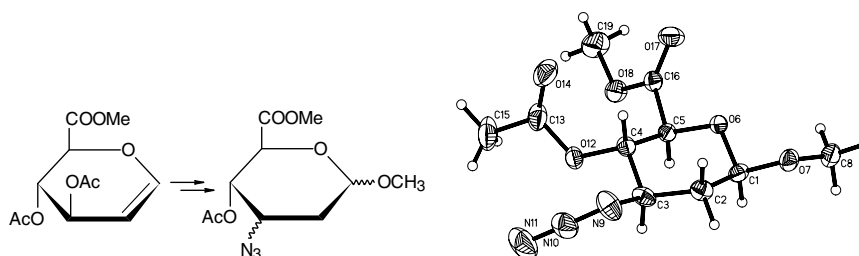
Jens Müller,* Fabian-Alexander Polonius, Eva Freisinger and Elisa Gil Bardají

A series of 2'-deoxy- β -D-ribonucleosides with deazapurine-derived aglycones has been prepared and structurally characterized by X-ray crystallography.

**Synthesis and geometry of methyl (methyl 4-O-acetyl-3-azido-2,3-dideoxy- α / β -D-arabino- and - α / β -D-ribo-hexopyranosid)uronates**


pp 404–411

Dorota Tuwalska, Artur Sikorski and Beata Liberek*



OTHER CONTENT**Corrigendum****pp 412–413**

*Corresponding author

 *Supplementary data available via ScienceDirect**COVER**

The graphic represents a molecular dynamics simulation of water density around the disaccharide α -D-Araf-(1 \rightarrow 5)- α -D-Araf-OCH₃, highlighting the interglycosidic linkage. The red clouds represent regions where the probability of finding an oxygen atom is high while the gray clouds are for hydrogen atoms. This work is the result of a collaboration in the Alberta Ingenuity Centre for Carbohydrate Science and Department of Chemistry at the University of Alberta between the groups of Pierre-Nicolas Roy and Todd L. Lowary (Castillo, N.; Roy, P. N.; Lowary, T. L. Manuscript in Preparation).

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