

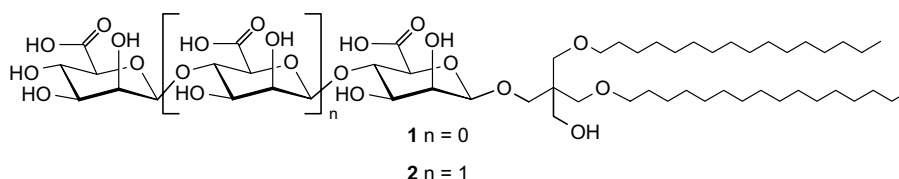
Contents

FULL PAPERS

Synthesis of β -(1 $\rightarrow$ 4)-oligo-D-mannuronic acid neoglycolipids

Rongsong Xu and Zi-Hua Jiang*

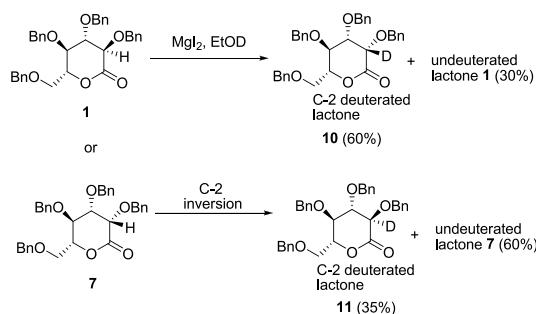
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C-2 Epimerization of aldonolactones promoted by magnesium iodide: a new way towards non-enzymatic epimerization

Julie Gratien, Marie-Pierre Heck* and Charles Mioskowski

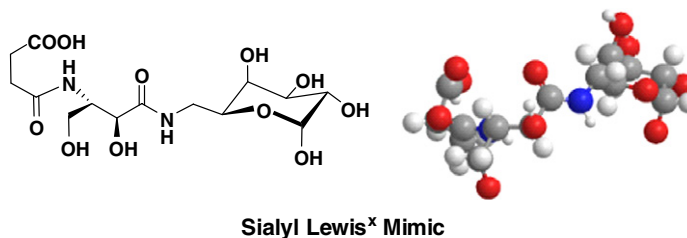
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New sialyl Lewis^x mimic containing an α -substituted β^3 -amino acid spacer

Silvana Pedatella,* Mauro De Nisco, Beat Ernst, Annalisa Guaragna, Beatrice Wagner, Robert J. Woods and Giovanni Palumbo

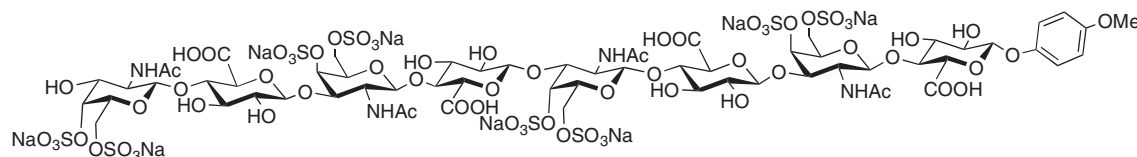
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Synthesis of chondroitin sulfate E octasaccharide in a repeating region involving an acetamide auxiliary

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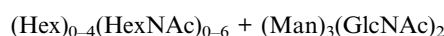
Jun-ichi Tamura,* Yuka Nakada, Kayo Taniguchi and Manami Yamane



N-Glycosylation in *Chrysosporium lucknowense* enzymes

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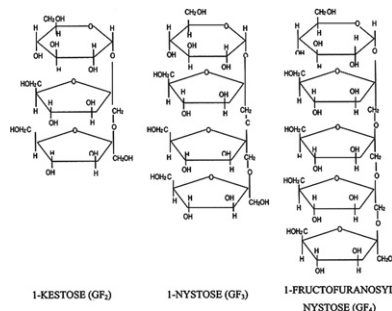
Alexander V. Gusakov,* Alexey I. Antonov and Boris B. Ustinov



Physicochemical characterization of fructooligosaccharides and evaluation of their suitability as a potential sweetener for diabetics

pp 56–66

M. J. Mabel, P. T. Sangeetha, Kalpana Platel, K. Srinivasan and S. G. Prapulla*

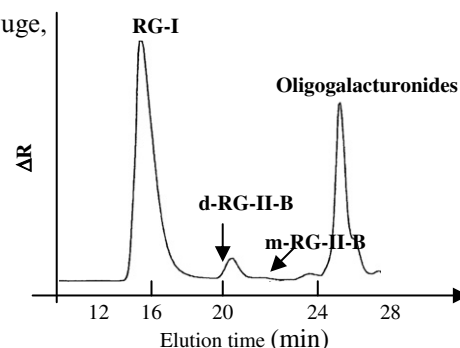


Cell wall carbohydrates from fruit pulp of *Argania spinosa*: structural analysis of pectin and xyloglucan polysaccharides

pp 67–72

Sophie Aboughe-Angone,* Eric Nguema-Ona, Partha Ghosh, Patrice Lerouge, Tadashi Ishii, Bimalendu Ray and Azeddine Driouch

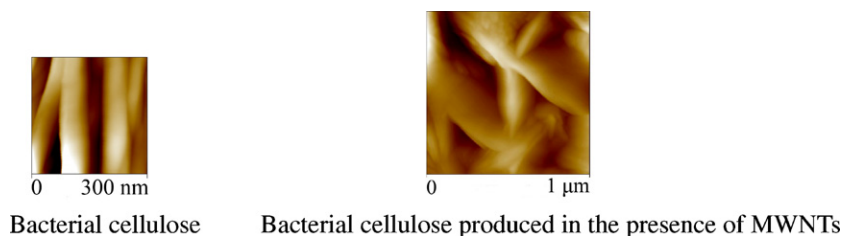
Pectins (RG-I) are very ramified and contain highly arabinosylated and galactosylated side-chains. In addition, the structure of XyG of the fruits of *Argania* is different from that found on the leaves (XUFG contains a novel β -D-Xylp-(1 $\rightarrow$ 2)- α -D-Xylp side-chain linked to C-6 of the second glucose unit from non-reducing end of cellotetraose sequence) [Ray, B.; Loutelier-Bourhis, C.; Condamine, E.; Driouch, A.; Lerouge, P. *Carbohydr. Res.* **2004**, 339, 201–208].



Cellulose synthesized by *Acetobacter xylinum* in the presence of multi-walled carbon nanotubes

pp 73–80

Zhiyong Yan, Shiyan Chen, Huaping Wang,* Biao Wang, Chaosheng Wang and Jianming Jiang

**Macromolecular properties of cepacian in water and in dimethylsulfoxide**

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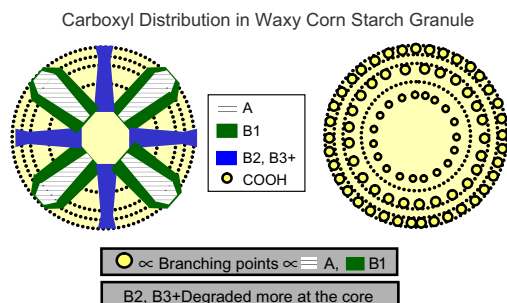
Yury Herasimenka, Paola Cescutti, Carlos E. Sampaio Noguera, Josè R. Ruggiero, Ranieri Urbani, Giuseppe Impallomeni, Flavio Zanetti, Stéphane Campidelli, Maurizio Prato and Roberto Rizzo*

The macromolecular properties of the exopolysaccharide produced by strains of the *Burkholderia cepacia* complex, involved in lung infection of cystic fibrosis patients, were investigated. The formation of double stranded structures and the intrinsic rigidity of the polymer chains are described and discussed in relationship to biofilm formation.

Locations of hypochlorite oxidation in corn starches varying in amylose content

pp 90–100

Daris Kuakpetoon and Ya-Jane Wang*

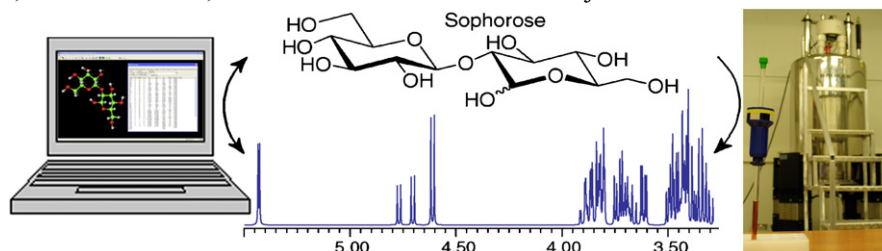


Distribution of amylose and amylopectin in starch granule.

Complete assignments of the ^1H and ^{13}C chemical shifts and $J_{\text{H,H}}$ coupling constants in NMR spectra of D-glucopyranose and all D-glucopyranosyl-D-glucopyranosides

pp 101–112

Mattias U. Roslund,* Petri Tähtinen, Matthias Niemitz and Rainer Sjöholm*



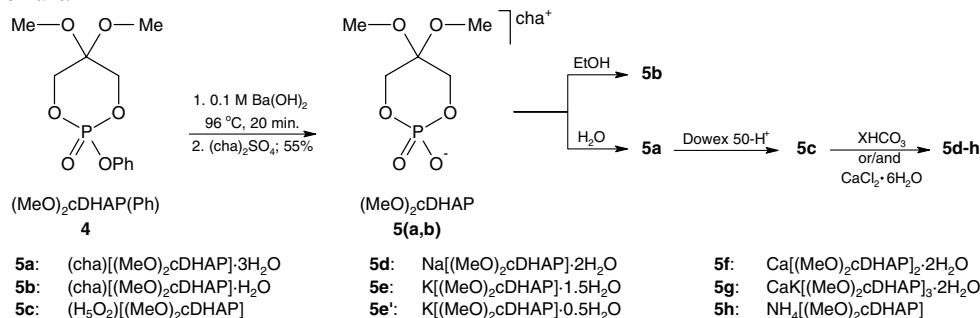
Computational spectral analyses by simulation and iteration were made to achieve full agreement between experimental and calculated ^1H NMR spectra of glucobioses.



Structure of cyclic dihydroxyacetone phosphate dimethyl acetal, a cyclic DHAP precursor, in the crystalline state

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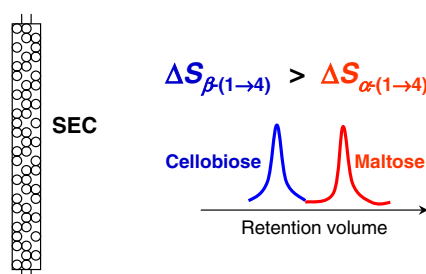
Katarzyna Ślepokura



Determining the solution conformational entropy of O-linked oligosaccharides at quasi-physiological conditions: size-exclusion chromatography and molecular dynamics

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Marcus A. Boone, Hugh Nymeyer and André M. Striegel*

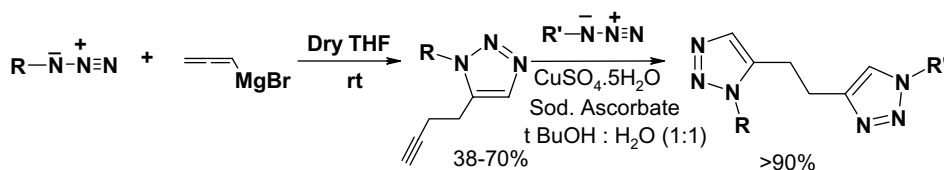


NOTES

A novel domino-click approach for the synthesis of sugar based unsymmetrical bis-1,2,3-triazoles

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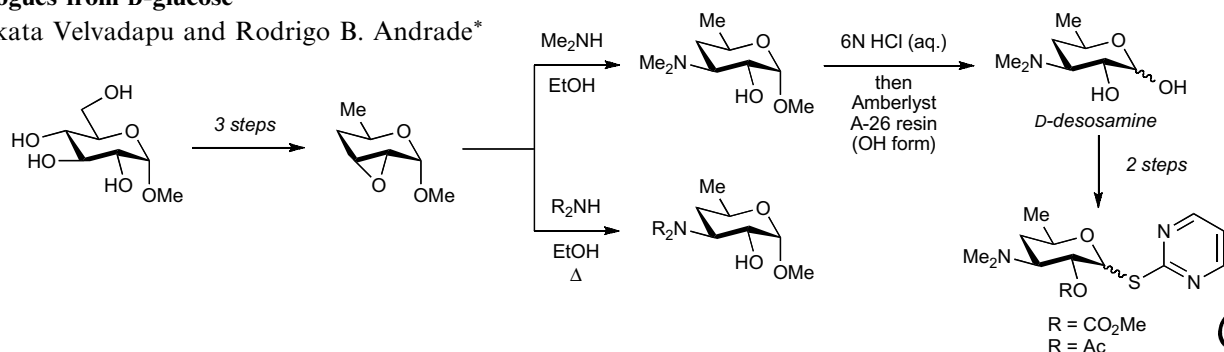
Bhupinder Singh Arora, Syed Shafi, Swarn Singh, Tabasum Ismail and H. M. Sampath Kumar*



Concise syntheses of D-desosamine, 2-thiopyrimidinyl desosamine donors, and methyl desosaminide analogues from D-glucose

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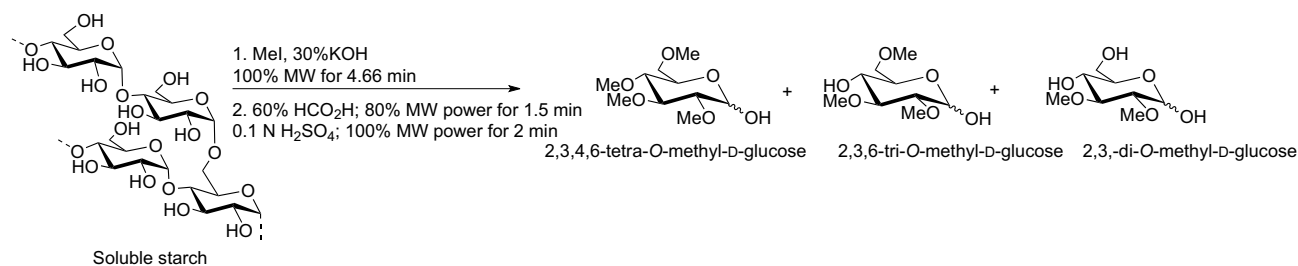
Venkata Velvadapu and Rodrigo B. Andrade*



Microwave-accelerated methylation of starch

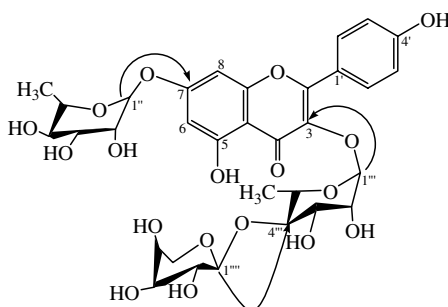
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Vandana Singh* and Ashutosh Tiwari

**A new kaempferol triglycoside from *Fagonia taekholmiana*: cytotoxic activity of its extracts**

pp 155–158

Lamyaa F. Ibrahim, Salwa A. Kawashty, Ali M. El-Hagrassy, Mahmoud I. Nassar* and Tom J. Mabry



*Corresponding author

i+ 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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