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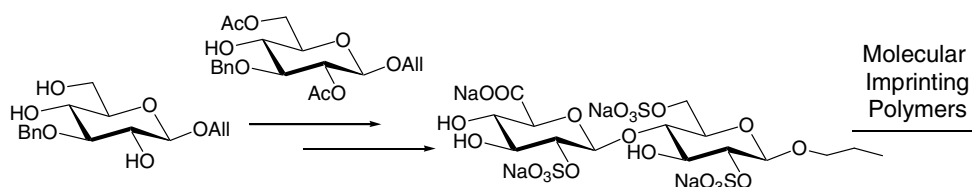
Announcement

p 585

FULL PAPERS

- Synthesis of a trisulfated heparan sulfate disaccharide analog and its use as a template for preliminary molecular imprinting studies** pp 587–595

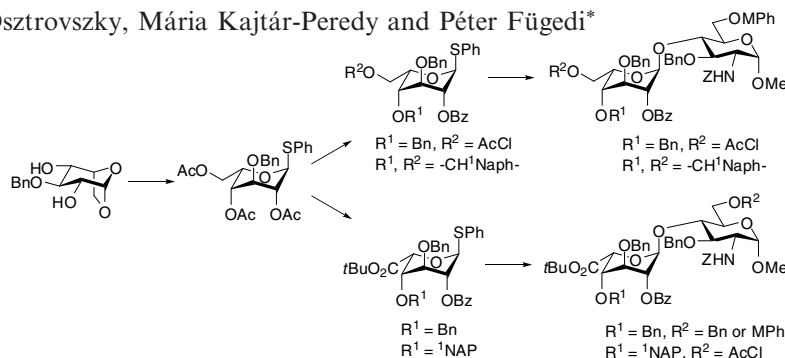
Yasunori Ikeda, Fernando Siñeriz, Laurent Bultel, Eric Grand, José Kovensky* and Dulce Papy-Garcia*



i⁺

- An efficient synthesis of L-idose and L-iduronic acid thioglycosides and their use for the synthesis of heparin oligosaccharides** pp 596–606

János Tatai, Györgyi Osztrovszky, Mária Kajtár-Peredy and Péter Fügedi*

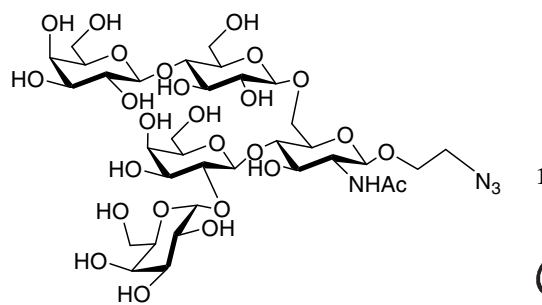


i⁺

- Facile synthesis of a pentasaccharide mimic of a fragment of the capsular polysaccharide of *Streptococcus pneumoniae* type 15C** pp 607–614

Chen Yong-Xiang, Zhao Wei, Zhao Lei, Zhao Yu-Fen and Li Yan-Mei*

A pentasaccharide mimic of a fragment of the capsular polysaccharide of *Streptococcus pneumoniae* type 15C β -D-Galp-(1→4)- β -D-Glcp-(1→6)-[α -D-Galp-(1→2)- β -D-Galp-(1→4)]- β -D-Glcp-NAc-(1→OCH₂CH₂N₃) **1** was synthesized.

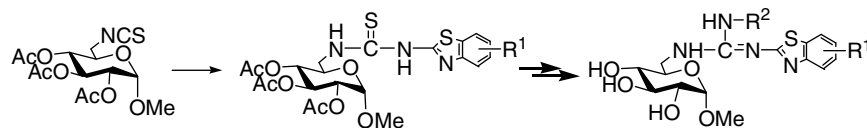


i⁺

Synthesis and bioactivity of novel methyl 6-deoxy-6-(*N'*-alkyl/aryl-*N'*-benzothiazol-2-yl)guanidino- α -D-glucopyranosides

pp 615–625

Yong-Hua Liu and Ling-Hua Cao*



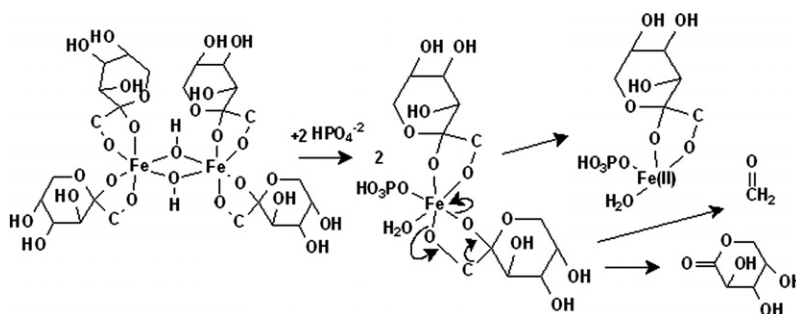
A series of new methyl 6-deoxy-6-guanidino- α -D-glucopyranosides were synthesized, some of which displayed obvious anti-influenza activity.



Promotion by phosphate of Fe(III)- and Cu(II)-catalyzed autoxidation of fructose

pp 626–635

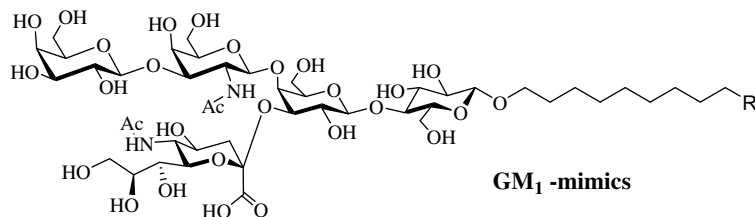
Glen D. Lawrence,* Ahmet Mavi and Kadem Meral



GM3, GM2 and GM1 mimics designed for biosensing: chemoenzymatic synthesis, target affinities and 900 MHz NMR analysis

pp 636–650

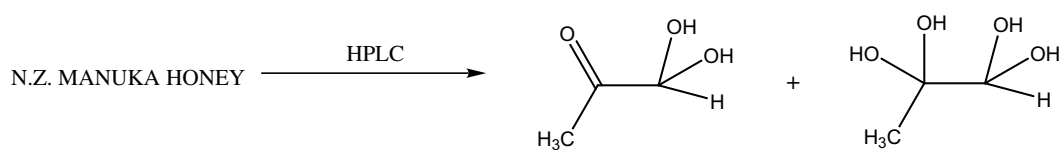
Aliaksei V. Pukin, Carel A. G. M. Weijers, Barend van Lagen, Rainer Wechselberger, Bin Sun, Michel Gilbert, Marie-France Karwaski, Dion E. A. Florack, Bart C. Jacobs, Anne P. Tio-Gillen, Alex van Belkum, Hubert P. Endtz, Gerben M. Visser* and Han Zuillhof*



Isolation by HPLC and characterisation of the bioactive fraction of New Zealand manuka (*Leptospermum scoparium*) honey

pp 651–659

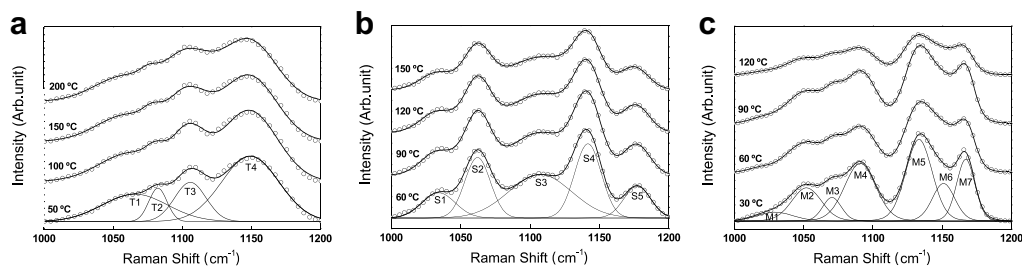
Christopher. J. Adams, Cherie H. Boulton, Benjamin J. Deadman, Judie M. Farr, Megan N. C. Grainger, Merilyn Manley-Harris* and Melanie J. Snow



Temperature dependent vibrational modes of glycosidic bond in disaccharide sugars

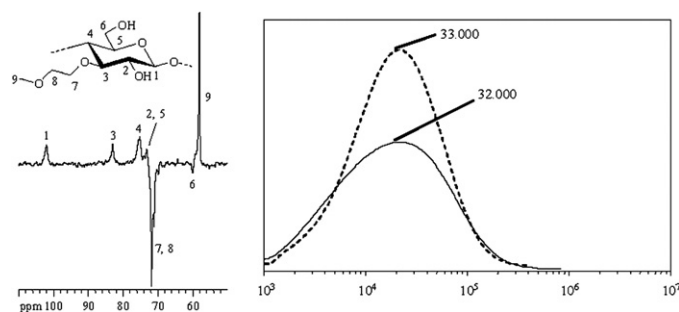
pp 660–667

Jeong-Ah Seo, Hyun-Joung Kwon, Hyung Kook Kim and Yoon-Hwae Hwang*

**Water-soluble 3-*O*-(2-methoxyethyl)cellulose: synthesis and characterization**

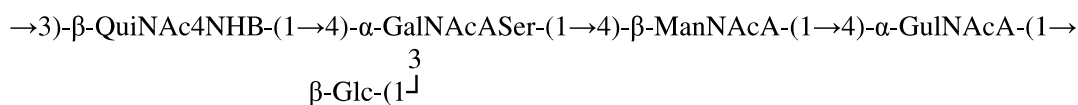
pp 668–673

Thomas Heinze* and Andreas Koschella

**The structure of the O-specific polysaccharide from the lipopolysaccharide of *Pseudomonas* sp. OX1 cultivated in the presence of the azo dye Orange II**

pp 674–684

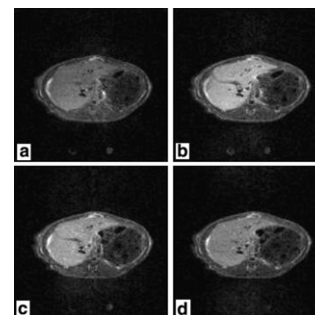
Serena Leone, Rosa Lanzetta, Roberta Scognamiglio, Fabiana Alfieri, Viviana Izzo, Alberto Di Donato, Michelangelo Parrilli, Otto Holst and Antonio Molinaro*

**Synthesis and evaluation of Gd-DTPA-labeled arabinogalactans as potential MRI contrast agents**

pp 685–694

Weisheng Li, Zhongfeng Li, Fengying Jing, Yuefeng Deng, Lai Wei, Peiqiu Liao, Xiangguang Yang, Xiaojing Li,* Fengkui Pei,* Xuxia Wang and Hao Lei

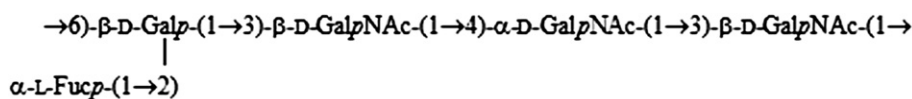
Arabinogalactan derivatives conjugated with Gd-DTPA by ethylenediamine (Gd-DTPA-CMAG-A₂) or hexylamine (Gd-DTPA-CMAG-A₆) have been synthesized. The products showed higher *T*₁-relaxivities than Gd-DTPA. *T*₁-weighted MRI of rats' liver showed a remarkable enhancement after i.v. injection of Gd-DTPA-CMAG-A₂. The results indicate that the arabinogalactan-bound complexes may be potential liver-specific contrast agents for MRI.



Structural studies of the O-antigenic polysaccharides from the enteroaggregative *Escherichia coli* strain 87/D2 and international type strains from *E. coli* O128

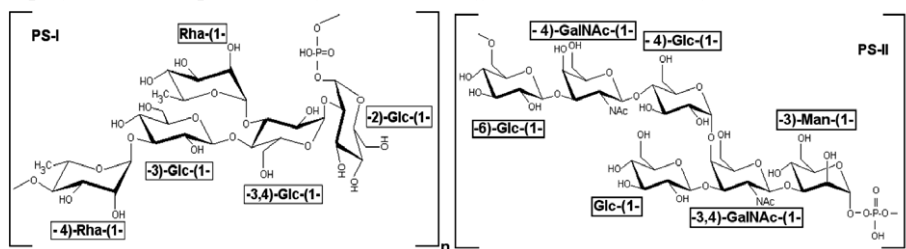
pp 695–702

Tara Ali, Andrej Weintraub and Göran Widmalm*


***Clostridium difficile* cell-surface polysaccharides composed of pentaglycosyl and hexaglycosyl phosphate repeating units**

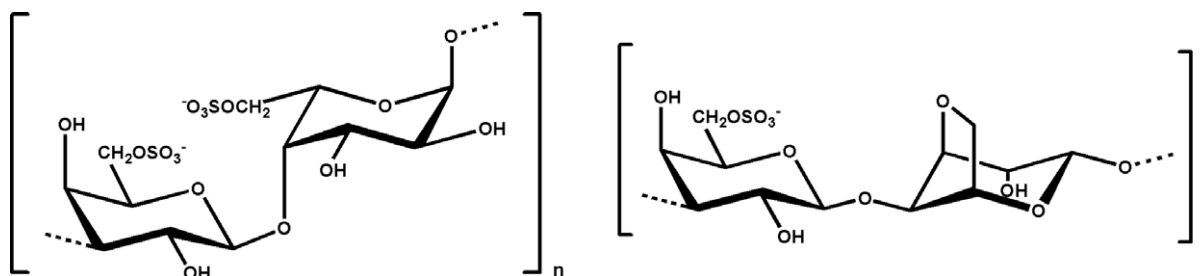
pp 703–710

Jeyabarathy Ganeshapillai, Evgenii Vinogradov, Joyce Rousseau, J. Scott Weese and Mario A. Monteiro*

Two teichoic acid-like polysaccharides produced by *Clostridium difficile* were structurally elucidated:
Agarans from the red seaweed *Polysiphonia nigrescens* (Rhodomelaceae, Ceramiales)

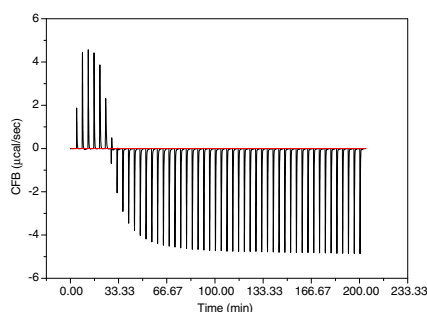
pp 711–718

Héctor J. Prado, Marina Ciancia and María C. Matulewicz*


Calorimetric studies of the interaction between sodium alginate and sodium dodecyl sulfate in dilute solutions at different pH values

pp 719–725

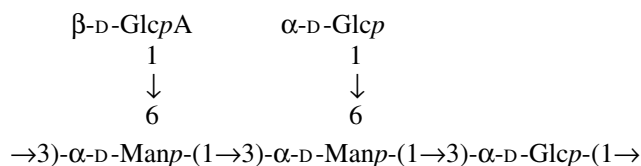
Jisheng Yang,* Jianyu Zhao and Yun Fang*



Structural studies on exopolysaccharides produced by three different propionibacteria strains

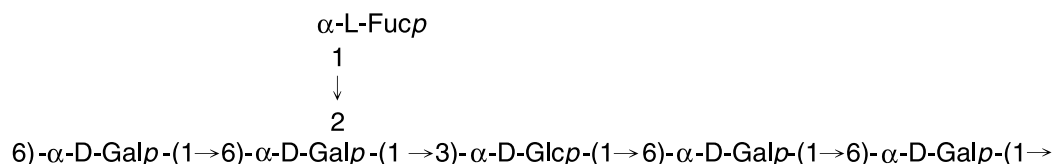
pp 726–745

Justyna M. Dobruchowska, Gerrit J. Gerwig, Andrzej Babuchowski and Johannes P. Kamerling*

**Structural elucidation of the polysaccharide moiety of a glycopeptide (GLPCW-II) from *Ganoderma lucidum* fruiting bodies**

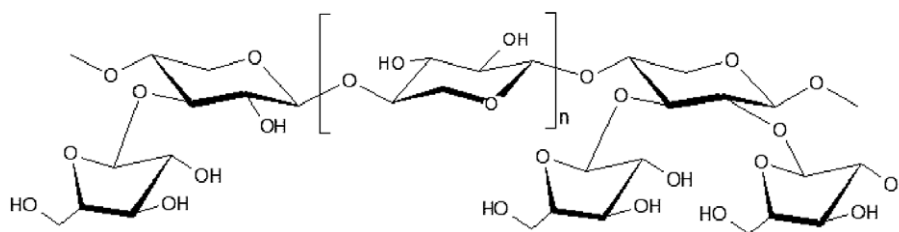
pp 746–752

LiBin Ye, JingSong Zhang,* XiJun Ye, QingJiu Tang, YanFang Liu, ChunYu Gong, XiuJui Du and YingJie Pan*

**Effect of arabinose substitution on the material properties of arabinoxylan films**

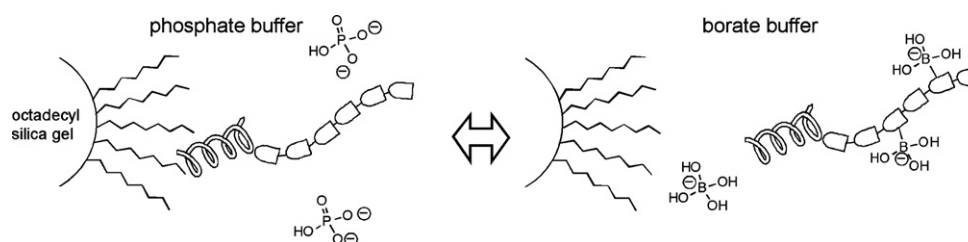
pp 753–757

Erik Sternemalm, Anders Höjje and Paul Gatenholm*

**Comparative RP-HPLC for rapid identification of glycopeptides and application in off-line LC-MALDI-MS analysis**

pp 758–768

Yoshimi Kanie, Akiko Enomoto, Satoshi Goto and Osamu Kanie*



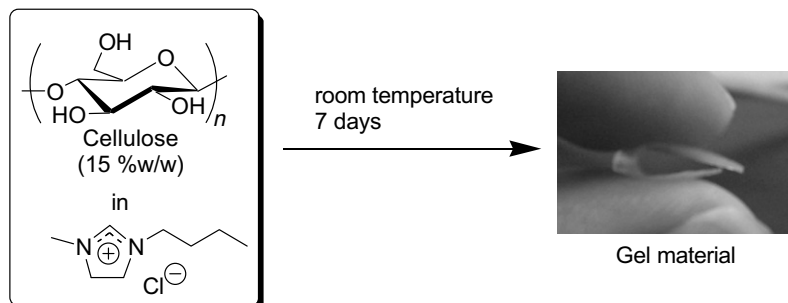
Glycan itself could act as a tag for the discrimination of glycopeptide.

NOTES

A facile preparation of gel materials from a solution of cellulose in ionic liquid

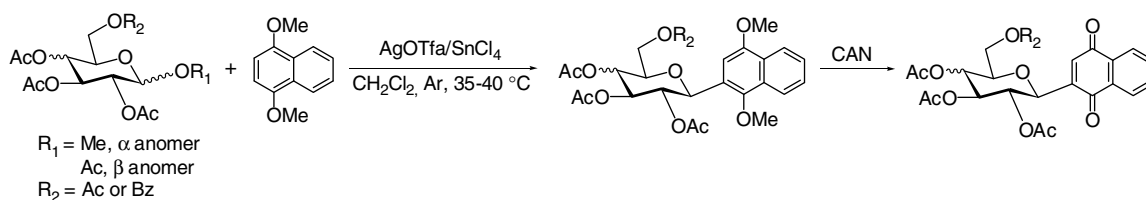
pp 769–772

Jun-ichi Kadokawa,* Masa-aki Murakami and Yoshiro Kaneko

**Synthesis of β -C-glycopyranosyl-1,4-naphthoquinone derivatives and their cytotoxic activity**

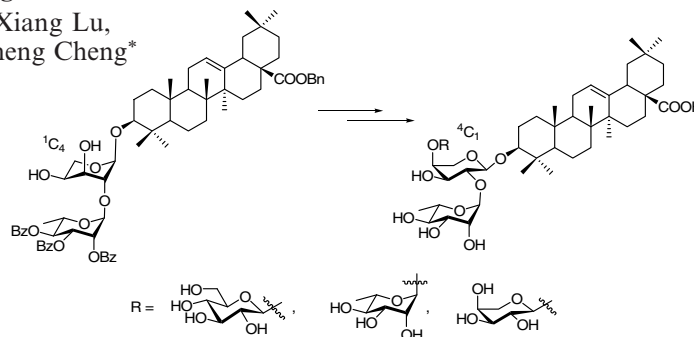
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Li Lin, Xiao-Peng He, Qing Xu, Guo-Rong Chen* and Juan Xie*

**Facile synthesis and cytotoxicity of triterpenoid saponins bearing a unique disaccharide moiety: hederacolchiside A₁ and its analogues**

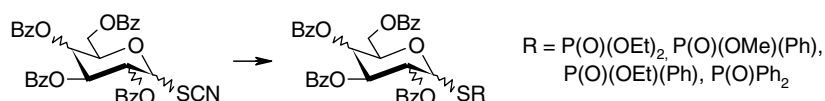
pp 780–784

Mao-Cai Yan, Yang Liu, Wen-Xiang Lu, Hui Wang, Yu Sha and Mao-Sheng Cheng*

**Synthesis of *S*-glycosyl thiophosphates, thiophosphonates and thiophosphinates by the Michaelis–Arbuzov rearrangement of anomeric thiocyanates**

pp 785–792

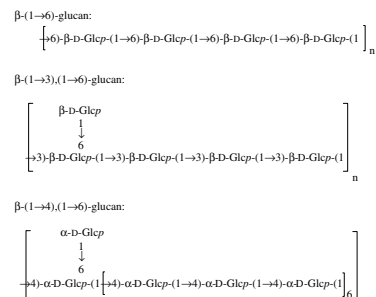
Marta Piekutowska and Zbigniew Pakulski*



Structural characterization of the cell wall D-glucans isolated from the mycelium of *Botryosphaeria rhodina* MAMB-05

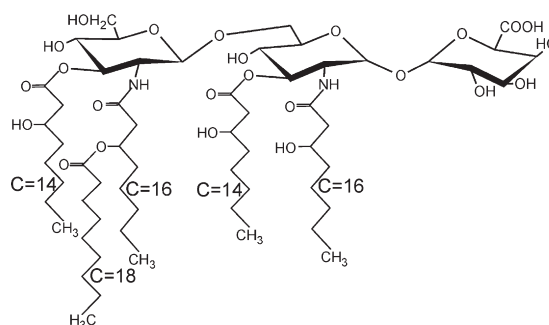
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Maria de Lourdes Corradi da Silva,* Eliane K. Fukuda,
Ana Flora D. Vasconcelos, Robert F. H. Dekker, Andreza C. Matias,
Nilson K. Monteiro, Marilsa S. Cardoso, Aneli M. Barbosa,
Joana L. M. Silveira, Guilherme L. Sassaki and Elaine R. Carbonero

**Characterization of a novel lipid A structure isolated from *Azospirillum lipoferum* lipopolysaccharide**

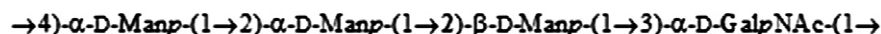
pp 799–804

Adam Choma* and Iwona Komaniecka

**Structural determination of the O-antigenic polysaccharide from the verocytotoxin-producing *Escherichia coli* O176**

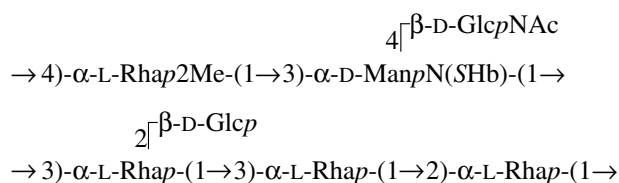
pp 805–809

Ulrika Olsson, Andrej Weintraub and Göran Widmalm*

**Structural analysis of the O-polysaccharide from the lipopolysaccharide of *Azospirillum brasilense* S17**

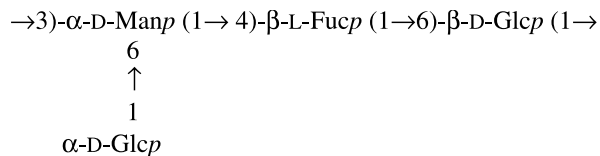
pp 810–816

Yuliya P. Fedonenko, Olga N. Konnova, Evelina L. Zdorovenko,* Svetlana A. Konnova,
George V. Zatonsky, Alexander S. Shashkov, Vladimir V. Ignatov and Yuriy A. Knirel



Isolation and characterization of a heteroglycan from the fruits of *Astraeus hygrometricus***pp 817–824**

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



*Corresponding author

 Supplementary data available via ScienceDirect

COVER

The graphic represents a molecular dynamics simulation of water density around the disaccharide $\alpha\text{-D-Araf-(1}\rightarrow\text{5)-}\alpha\text{-D-Araf-OCH}_3$, 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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