### A new synthetic method for preparing indole derivatives from 2-keto glycosides

Carbohydr. Res. 2001, 331, 229

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Ph O O H Ph O O CH<sub>3</sub> R<sup>1</sup> 
$$R^{1}$$
  $R^{2}$   $R^{1}$   $R^{2}$   $R^{1}$   $R^{2}$   $R^{1}$   $R^{2}$   $R^{1}$   $R^{2}$   $R^{2}$   $R^{1}$   $R^{2}$   $R^{2}$   $R^{1}$   $R^{2}$   $R^{2}$   $R^{1}$   $R^{2}$   $R^{2}$   $R^{3}$   $R^{2}$   $R^{3}$   $R^{2}$   $R^{3}$   $R^{2}$   $R^{3}$   $R^{3}$   $R^{2}$   $R^{3}$   $R^{3}$   $R^{4}$   $R^{5}$   $R$ 

Synthesis and identification in bacterial lipopolysaccharides of 5,7-diacetamido-3,5,7,9-tetradeoxy-D-glycero-D-galacto- and -D-glycero-D-talo-non-2-ulosonic

Carbohydr. Res. 2001, 331, 233

acids

Yury E. Tsvetkov, a,b Alexander S. Shashkov, Yuriy A. Knirel, a,b Ulrich Zähringer b

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New evidence for the mechanism of the tin(II) chloride

Carbohydr. Res. 2001, 331, 239

catalyzed reactions of vicinal diols with diazodiphenylmethane in 1,2-dimethoxyethane

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Synthesis of methyl  $\alpha$ -D-glucopyranosyl- $(1 \rightarrow 4)$ - $\alpha$ -D-

Carbohydr. Res. 2001, 331, 247

galactopyranoside and methyl  $\alpha$ -D-xylo-hex-4-ulopyranosyl- $(1 \rightarrow 4)$ - $\alpha$ -D-galactopyranoside

Louis J. Liotta, Rita D. Capotosto, Rachel A. Garbitt, Brian M. Horan, Pamela J. Kelly, Andrew P. Koleros, Lisa M. Brouillette, Amy M. Kuhn, Sonia Targontsidis

Department of Chemistry, Stonehill College, 320 Washington Street, Easton, MA 02357, USA

# A study of the donor properties of sially phosphites having an auxiliary 3-(S)-phenylseleno group

Carbohydr. Res. 2001, 331, 255

Teddy Ercegovic, Ulf J. Nilsson, Göran Magnusson

Organic Chemistry 2, Chemical Center, The Lund Institute of Technology, University of Lund, PO Box 124, S-221 00 Lund, Sweden

# Location of O-acetyl groups in S-657 using the reductive cleavage method

Carbohydr. Res. 2001, 331, 265

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CP Kelco 8355 Aero Drive, San Diego, CA 92123, USA

S-657 polysaccharide is shown to contain *O*-acetyl groups on the 2-position and 2,6-positions of 3-linked glucopyranosyl residues.

### On the structure of κ/ι-hybrid carrageenans

Carbohydr. Res. 2001, 331, 271

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- <sup>b</sup> Carbohydrate Technology Department, TNO Nutrition and Food Research Institute, PO Box 360, 3700 AJ Zeist, The Netherlands
- <sup>c</sup> Protein Technology Department, TNO Nutrition and Food Research Institute, PO Box 360, 3700 AJ Zeist, The Netherlands
- d Product Technology Department, NIZO food research, PO Box 20, 6710 BA Ede, The Netherlands

The coil-to-helix transition of  $\kappa/\iota$ -hybrid carrageenans are significantly different from those of pure  $\kappa$ - and  $\iota$ -carrageenan, and from hand made mixtures thereof. This provides evidence that the  $\kappa/\iota$ -hybrid carrageenans are mixed chains, containing both  $\kappa$ - and  $\iota$ -repeating units.

### Structural studies of S-7, another exocellular polysaccharide containing 2-deoxy-arabino-hexuronic acid

Carbohydr. Res. 2001, 331, 285

Sofia Gulin, a,b Anders Kussak, b Per-Erik Jansson, b Göran Widmalm c

- <sup>a</sup> University College of South Stockholm, S-141 04 Huddinge, Sweden
- <sup>b</sup> Clinical Research Centre, Analytical Unit, Karolinska Institute, Huddinge Hospital, Novum, S-141 86 Huddinge, Sweden
- <sup>c</sup> Department of Organic Chemistry, Arrhenius Laboratory, Stockholm University, S-106 91 Stockholm, Sweden

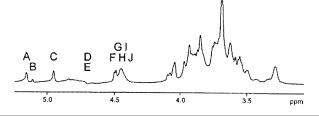
$$\rightarrow$$
4)-β-D-Glc $p$ -(1 $\rightarrow$ 4)-α-L-Rha $p$ -(1 $\rightarrow$ 3)-β-D-Glc $p$ -(1 $\rightarrow$ 4)-β-D-2-deoxy- $arabino$ -Hex $p$ A-(1 $\rightarrow$ 6)  $\uparrow$ 1  $\beta$ -D-Glc $p$ -(1 $\rightarrow$ 6)-β-D-Glc $p$ 

#### Purification and characterisation of a galactoglucomannan from kiwifruit (Actinidia deliciosa)

Carbohydr. Res. 2001, 331, 291

Roswitha Schröder, <sup>a</sup> Pierre Nicolas, <sup>b</sup> Sébastien J.F. Vincent, <sup>b</sup> Monica Fischer, <sup>b</sup> Sylviane Reymond, <sup>b</sup> Robert J. Redgwell <sup>b</sup>

- <sup>a</sup> HortResearch, Mount Albert Research Centre, Private Bag 92169, Auckland. New Zealand
- <sup>b</sup> Nestlé Research Center, Nestec Ltd., Vers-chez-les-Blanc, PO Box 44, CH-1000, Lausanne 26, Switzerland



# Further evidence for the gelation ability-structure correlation in sugar-based gelators

Carbohydr. Res. 2001, 331, 307

Oliver Gronwald a, Kazuo Sakurai a, Roman Luboradzki b, Taro Kimura a, Seiji Shinkai a

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<sup>b</sup> Department of Chemistry and Biochemistry, Graduate School of Engineering, Kyushu University, Hakozaki, Hisgashi-ku, Fukuoka 812-8581, Japan

The effect of small configurational changes on the ability to gelate organic solvents was systematically investigated on eight methyl glycosides of 4,6-O-benzylidene derivatives for D-glucose, D-mannose, D-allose and D-altrose. Among the  $\beta$  anomers only D-mannose exhibits a strong gelation ability, whereas in the  $\alpha$ -series both D-glucose and D-mannose derivatives act as versatile gelators.

Molecular and crystal structures of N-arylglyco-

Carbohydr. Res. 2001, 331, 319

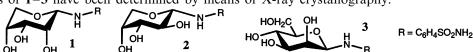
pyranosylamines formed by reaction between sulfanilamide and D-ribose, D-arabinose and D-mannose

Charles R. Ojala, <sup>a</sup> Joanne M. Ostman, <sup>a</sup> William H. Ojala, <sup>b</sup> Summer E. Hanson <sup>b</sup>

<sup>a</sup> Department of Chemistry, Normandale Community College, Bloomington, MN 55431, USA

<sup>b</sup> Department of Chemistry, University of St. Thomas, St. Paul, MN 55105, USA

The structures of 1-3 have been determined by means of X-ray crystallography.



# The anomalous reactivity of the bis(dibutylstannylene) acetal of pentaerythritol: a case of triple activation

Carbohydr. Res. 2001, 331, 327

Serge David

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Pentaerythritol only gives a bis(stannylene) acetal. While benzylation at 100 °C yields the expected dibenzyl ether, benzoylation in the cold gives a tribenzoate in conditions which are typical of the activation of three oxygen atoms as dibutyltin derivative.

Structure of the O-specific polysaccharide isolated from the lipopolysaccharide of *Citrobacter gillenii* serotype O12a,12b strain PCM 1544

Carbohydr. Res. 2001, 331, 331

Joanna Kübler-Kielb, a George V. Zatonsky, Ewa Katzenellenbogen, Nina A. Kocharova, Bernadeta Szostko, Andrzej Gamian, Aleksander S. Shashkov, Yuriy A. Knirel

<sup>a</sup> L. Hirszfeld Institute of Immunology and Experimental Therapy, Polish Academy of Sciences, Weigla 12, 53-114 Wrocław, Poland <sup>b</sup> N. D. Zelinsky Institute of Organic Chemistry, Russian Academy of Sciences, Leninsky Prospekt 47, Moscow 117913, Russian Federation

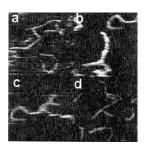
--3)-β-L-Rhap-(1--4)-β-D-GlcpNAc-(1--6)-α-D-Galp-(1--2 | 3 † OAc β-D-GlcpNAc

# Investigating the nature of branching in pectin by atomic force microscopy and carbohydrate analysis

Carbohydr. Res. 2001, 331, 337

Andrew N. Round, Neil M. Rigby, Alistair J. MacDougall, Steven G. Ring, Victor J. Morris

Institute of Food Research, Norwich Research Park, Colney, Norwich NR4 7UA, UK



ΒrΘ

Preparation, single-crystal X-ray diffraction and highresolution NMR spectroscopic analyses of N-(2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl)trimethylammonium bromide

Eugenia Skorupowa, <sup>a</sup> Maria Kurszewska, <sup>a</sup> Antoni Konitz, <sup>a,b</sup> Wiesław Wojnowski, <sup>b</sup> Andrzej Wiśniewski <sup>a</sup> CH<sub>2</sub>OAc

<sup>a</sup> Department of Chemistry, Sugar Chemistry Group, Gdańsk University, Sobieskiego 18, 80-952 Gdańsk, Poland

<sup>b</sup> Technical University, Narutowicza 11/12, 80-952 Gdańsk, Poland

Preparation of N-(2,3,4,6-tetra-O-acetyl- $\beta$ -D-glucopyranosyl)trimethylammonium bromide as the unique N-glycosylated quaternary salt derived from trialkylamine is described. Structure of the compound was determined by  $^{1}$ H and  $^{13}$ C NMR spectroscopy and single-crystal X-ray analysis.