

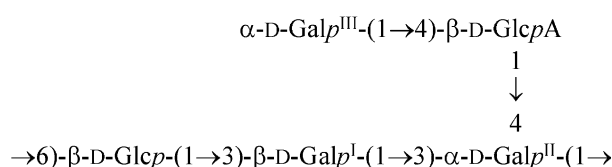
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### RAPID COMMUNICATION

#### Structural studies on the exopolysaccharide from *Erwinia persicina*

pp 1761–1765

Peggy Kiessling, Sof'ya N. Senchenkova, Michael Ramm\* and Yuriy A. Knirel

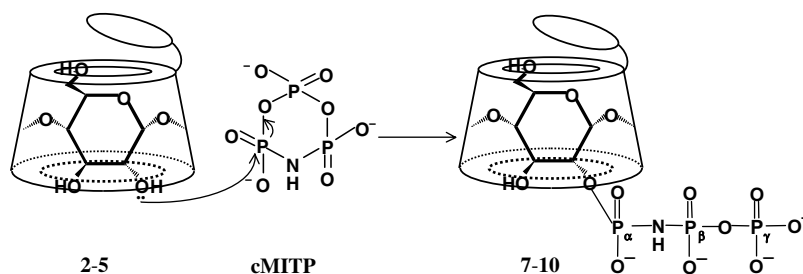


### FULL PAPERS

#### Regioselective phosphorylation of branched cyclodextrins with *cyclo*-mono- $\mu$ -imidotriphosphate

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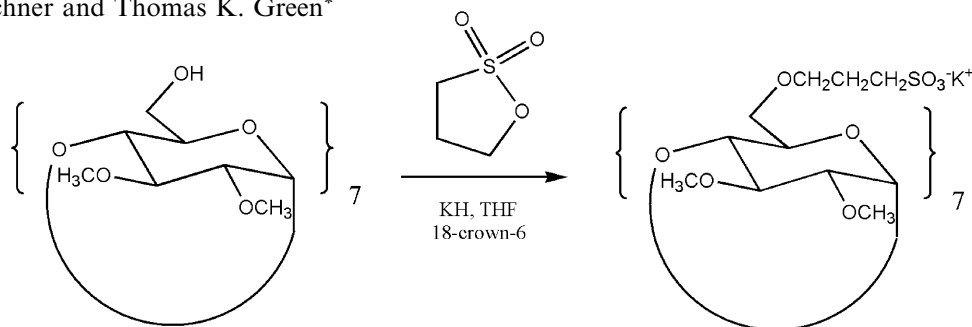
Hideko Inoue, Toyohiro Kawashita, Hirokazu Nakayama and Mitsutomo Tshako\*



#### Nonaqueous synthesis of a selectively modified, highly anionic sulfopropyl ether derivative of cyclomaltoheptaose ( $\beta$ -cyclodextrin) in the presence of 18-crown-6

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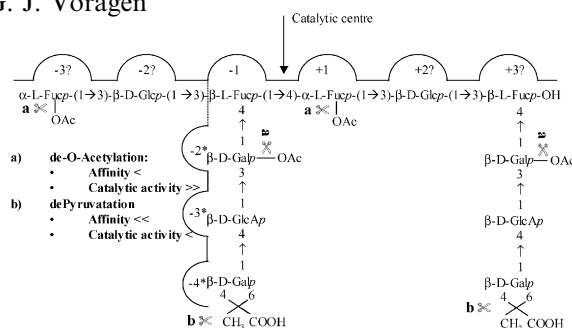
Daniel L. Kirschner and Thomas K. Green\*



**Characterisation of a 1,4- $\beta$ -fucoside hydrolase degrading colanic acid**

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René Verhoef, Gerrit Beldman, Henk A. Schols, Matti Siika-aho, Marjaana Rättö, Johanna Buchert and Alphons G. J. Voragen\*

**Structure-immunomodulating activity relationships of a pectic arabinogalactan from *Vernonia kotschyana* Sch. Bip. ex Walp.**

pp 1789–1801

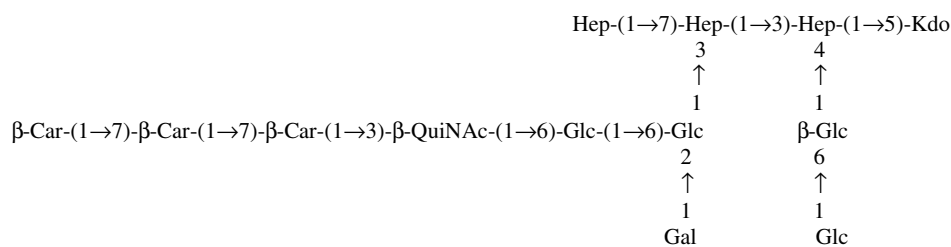
Cecilie Sogn Nergard,\* Hiroaki Kiyohara, James C. Reynolds, Jane E. Thomas-Oates, Tsukasa Matsumoto, Haruki Yamada, Terje E. Michaelsen, Drissa Diallo and Berit Smestad Paulsen

After removal of the galacturonan moiety and partial degradation of the neutral side chains attached to the rhamnogalacturonan backbone the remains of the pectic arabinogalactan still expressed potent complement fixation and B-cell mitogenic activity. Bioactive sites seem to be located both in the peripheral parts of the molecule and also in the inner core of the enzyme resistant ramified region.

**The linkage between O-specific caryan and core region in the lipopolysaccharide of *Burkholderia caryophylli* is furnished by a primer monosaccharide**

pp 1802–1807

Cristina De Castro, Antonio Molinaro,\* Rosa Lanzetta, Otto Holst and Michelangelo Parrilli



Caryan O-chain-[3- $\beta$ -D-**QuiNAc**]-core region-lipid A. QuiNAc is the primer monosaccharide, which connects the core oligosaccharide to caryan O-chain.

**Carbohydrate, glycolipid, and lipid components from the photobiont (*Scytonema* sp.) of the lichen, *Dictyonema glabratum***

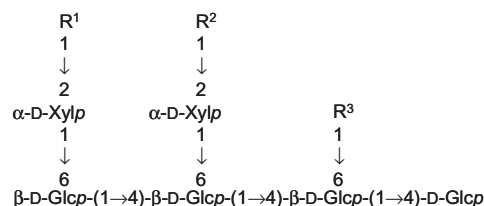
pp 1808–1817

Guilherme L. Sassaki,\* Philip A. J. Gorin, Rodrigo A. Reis, Rodrigo V. Serrato, Selene L. Elíffio and Marcello Iacomini

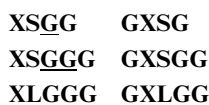
The photobiont *Scytonema* sp. contained glycolipids typical of plants. Its polysaccharide contained Glc, Gal, and Man, with some 3-MeRha and 2-MeXyl units.  $\beta$ -Gal $\beta$  units, typical of fungi, were surprisingly present.

**NMR characterization of endogenously O-acetylated oligosaccharides isolated from tomato (*Lycopersicon esculentum*) xyloglucan****pp 1818–1825**

Zhonghua Jia, Michael Cash, Alan G. Darvill and William S. York\*

**Structural analysis of xyloglucans in the primary cell walls of plants in the subclass *Asteridae*****pp 1826–1840**

Matt Hoffman, Zhonghua Jia, Maria J. Peña, Michael Cash, April Harper, Alan R. Blackburn, II, Alan Darvill and William S. York\*

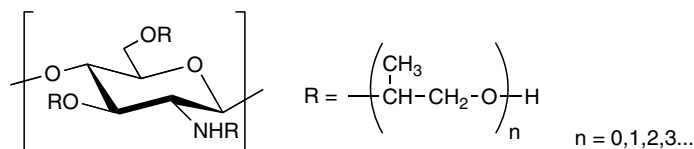
**AFM studies of water-soluble wheat arabinoxylans—effects of esterase treatment****pp 1841–1845**

Elizabeth L. Adams, Paul A. Kroon, Gary Williamson and Victor J. Morris\*

An *Aspergillus niger* ferulic acid esterase FAEA capable of cleaving 5,5' and 8-O-4'-ferulic acid dimers has been found to depolymerise water-soluble wheat arabinoxylans into smaller oligosaccharides.

**Preparation and antimicrobial activity of hydroxypropyl chitosan****pp 1846–1851**

Yanfei Peng,\* Baoqin Han, Wanshun Liu and Xiaojuan Xu

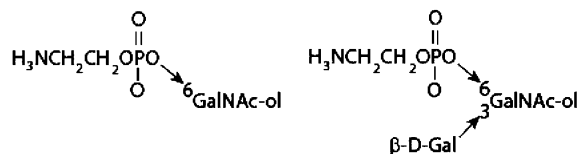


Seven hydroxypropyl chitosan derivatives with different degrees of substitution and molecular weights were prepared and their antimicrobial activities were evaluated.

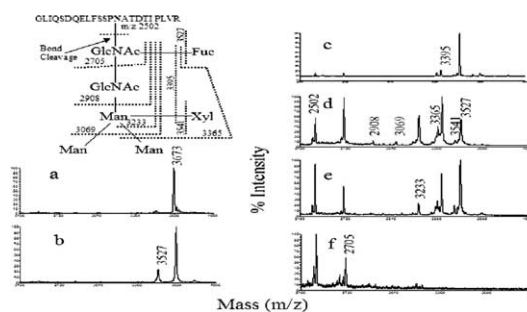
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Emmanuel Maes, Estelle Garénaux, Gérard Strecker, Yves Leroy, Jean-Michel Wieruszeski, Colette Brassart and Yann Guérardel\*

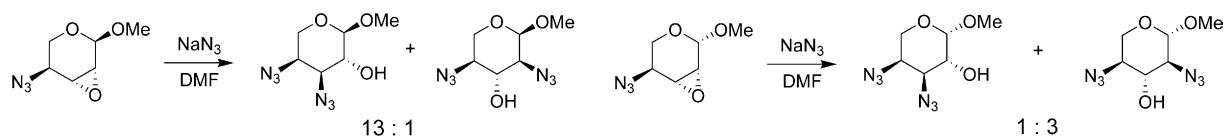
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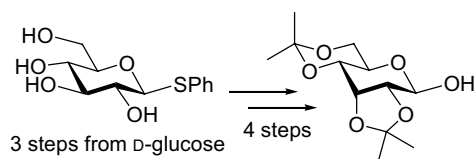
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Velimir Popsavin,\* Goran Benedeković, Mirjana Popsavin, Bojana Srećo and Dejan Djoković

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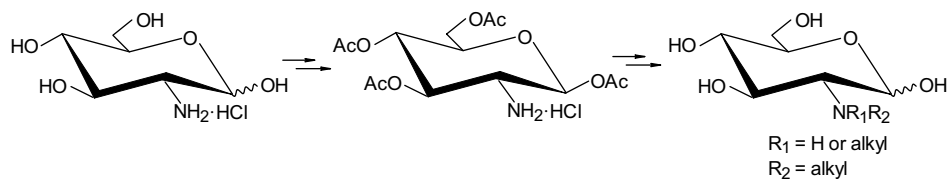
pp 1872–1875

Ana M. Gómez,\* María D. Company, Attila Agocs, Clara Uriel, Serafín Valverde and J. Cristóbal López\*



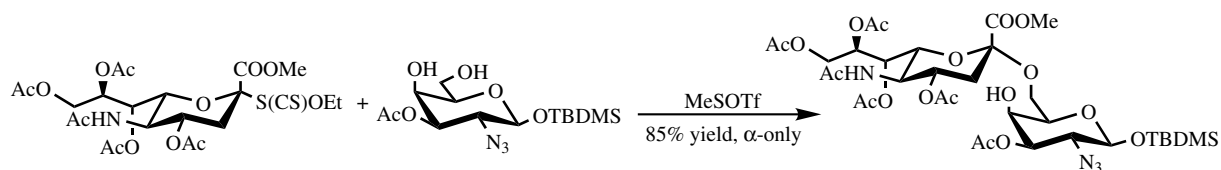
**N-Alkyl derivatives of 2-amino-2-deoxy-D-glucose**

pp 1876–1884

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Sławomir Milewski and Andrzej Wiśniewski**An alternative high yielding and highly stereoselective method for preparing an  $\alpha$ -Neu5NAc-(2,6)-D-GalN<sub>3</sub> building block suitable for further glycosylation**

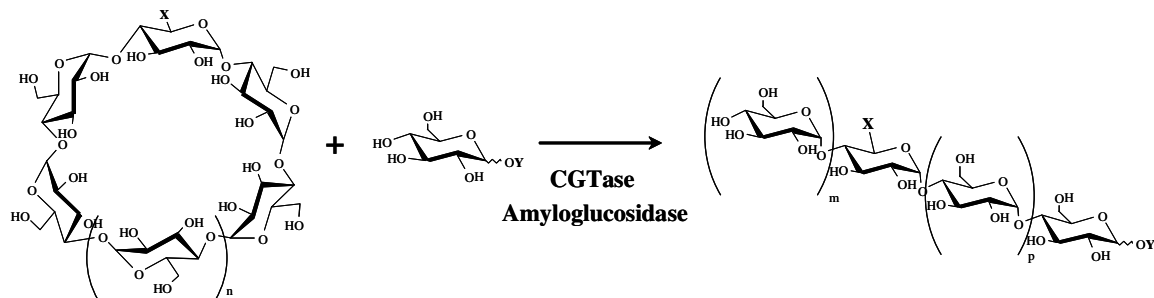
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Nicolas Laurent, Dominique Lafont, Paul Boullanger\* and Jean Maurice Mallet

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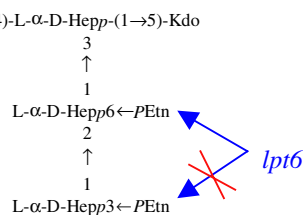
Carole Fraschini, Lionel Greffe, Hugues Driguez and Michel R. Vignon\*

**Structural investigation of lipopolysaccharides from nontypeable *Haemophilus influenzae*: investigation of inner-core phosphoethanolamine addition in NTHi strain 981**

pp 1900–1907

Ann-Sofie Tinnert, Martin Månsson, Håkan H. Yildirim,  
Derek W. Hood and Elke K. H. Schweda\*

*lpt6* = biosynthetic gene

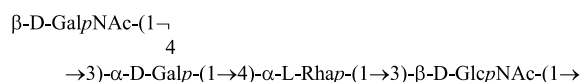


# Structure of the O-polysaccharide of *Proteus mirabilis* OC (CCUG 10702) from a new proposed *Proteus* serogroup O75

pp 1908–1913

Agnieszka Zabłotni, Andrei V. Perepelov, Yuriy A. Knirel and Zygmunt Sidorczyk\*

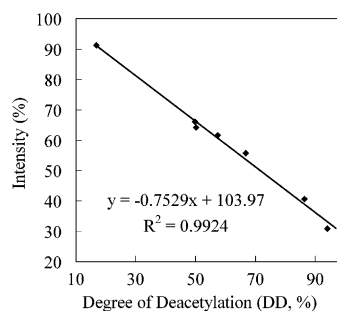
The structure of the polysaccharide classified into a new separate *Proteus* serogroup, O75, was established:



## Determination of the degree of deacetylation of chitin and chitosan by X-ray powder diffraction

pp 1914–1917

Yongqin Zhang, Changhu Xue,\* Yong Xue, Ruichang Gao and Xiuli Zhang



\*Corresponding author

### 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 XXII<sup>nd</sup> International Carbohydrate Symposium (Glasgow, 2004) on the occasion of the Whistler award.

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ISSN 0008-6215