GRAPHICAL ABSTRACTS

Carbohydr. Res. **1998**, *305*, 127

Structures of polyrotaxane models

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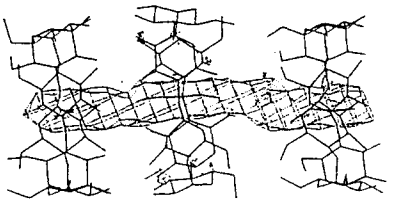

Carbohydr. Res. **1998**, *305*, 147

Crystal and molecular structures of the penta-acetates of D-gluconic acid and derived *tert*-butyl- and *tert*-butylperoxy-esters and the tetra-*O*-acetyl-1,2-*O*-*tert*-butyl-peroxyorthoacetyl derivative

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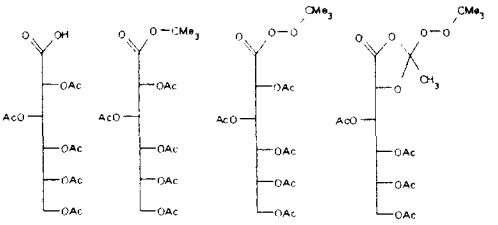

Carbohydr. Res. **1998**, *305*, 155

Pullulan Nonaacetate: Assignment of Chemical Shifts of the Acetyl Protons and Acetyl Carbonyl Carbons by 2D-NMR Spectroscopy

Yasuyuki Tezuka

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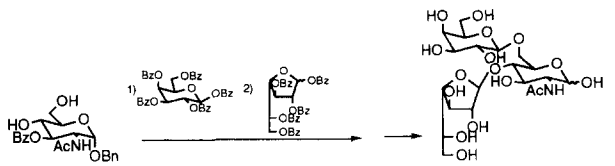
A series of 2D-NMR experiments was performed to fully assign the proton and carbon chemical shifts of pullulan nonaacetate. The determination of long-range correlations between acetyl protons and maltotriosyl carbons, and between acetyl carbonyl carbons and maltotriosyl protons by a field-gradient HMBC experiment was of particular utility.

Carbohydr. Res. **1998**, *305*, 163

One-pot synthesis of Gal*f*β(1 → 4)[Gal*p*β(1 → 6)]GlcNAc, a "core" trisaccharide linked *O*-glycosidically in glycoproteins of *Trypanosoma cruzi*

Carola Gallo-Rodriguez, Oscar Varela, Rosa M. de Lederkremer

CIHIDECAR. Departamento de Química Orgánica, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Ciudad Universitaria, Pabelló II, 1428. Buenos Aires, Argentina.



Carbohydr. Res. **1998,** *305*, 181

Synthesis of *O*-(2-*O*-sulfo-α-L-idopyranosyluronic acid)-(1 → 3)-2-acetamido-2-deoxy-4-*O*-sulfo-D-galactopyranose trisodium salt, a disaccharide fragment of dermatan sulfate

Laurence Rochepeau-Jobron, Jean-Claude Jacquinet
Institut de Chimie Organique et Analytique, UPRES-A CNRS 6005, U.F.R. Faculté des Sciences, Université d'Orléans, B.P. 6759, F-45067 Orléans, France

Carbohydr. Res. **1998,** *305*, 209

Barley β-D-glucan exohydrolases. Substrate specificity and kinetic properties

Maria Hrmova, Geoffrey B. Fincher
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The substrate specificities, action patterns, glycosyl transfer reactions and kinetic properties of the two β-glucan exohydrolases, purified from germinated barley (*Hordeum vulgare*) and designated isoenzymes ExoI and ExoII, have been studied. Amino acid sequence similarities suggest that the enzymes are members of the family 3 group of glycosyl hydrolases.

Carbohydr. Res. **1998,** *305*, 223

Core oligosaccharide regions of Lipo-oligosaccharides from strains of *Campylobacter jejuni* serotype O:10

J.E.N. Shin [a], S. Ackloo [a], A.S. Mainkar [a], M.A. Monteiro [a], H. Pang [b], J.L. Penner [c], G.O. Aspinall [a]
[a] *Department of Chemistry, York University, North York, Toronto, Ontario M3J 1P3, Canadab*[b] *Departments of Molecular and Medical Genetics*
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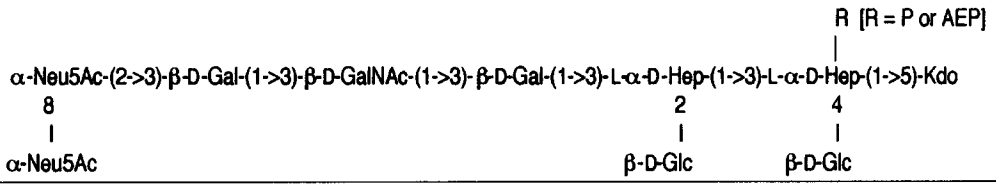

Carbohydr. Res. **1998,** *305*, 233

Dimers of a GFG hexasaccharide occur in apple fruit xyloglucan

Bertina A. Spronk [a], Geert Jan Rademaker [b], Johan Haverkamp [b], Jane E. Thomas-Oates [b], Jean-Paul Vincken [c], Alphons G.J. Voragen [c], Johannis P. Kamerling [a], Johannes F.G. Vliegenthart [a]
[a] *Bijvoet Center, Department of Bio-Organic Chemistry, Utrecht University, Utrecht, The Netherlands*
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[c] *Department of Food Science, Wageningen Agricultural University, Wageningen, The Netherlands*

Two fragments, isolated from an endoglucanase IV digest of apple fruit xyloglucan, were identified as GFG and a dimer of GFG (GFGGFG). The finding of the dodecasaccharide is most unusual. **GFGGFG** α-L-Fuc *p*-(1 → 2)-β-D-Gal *p*-(1 → 2)-α-D-Xyl *p*-(1 → 6)-β-D-Glc *p*-(1 → 4)-β-D-Glc *p*-(1 → 4)-β-D-Glc *p*-(1 → 4)-β-D-Glc *p*-(1 → 4)-β-D-Glc *p*-(1 → 4)-D-Glc *p*-α-L-Fuc *p*-(1 → 2)-β-D-Gal *p*-(1 → 2)-α-D-Xyl *p*-(1 → 6)

Carbohydr. Res. **1998,** *305*, 253

Structural studies on a sulfated polysaccharide from an *Arthrobacter* sp. by NMR spectroscopy and methylation analysis

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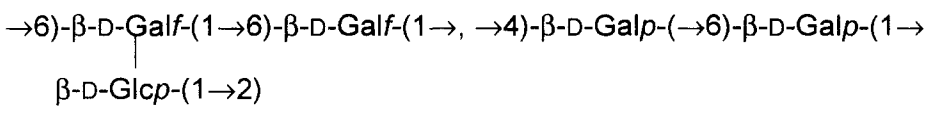
Daiichi Pharmaceutical Co., Ltd., 16-13, Kitakasai 1-Chome, Edogawa-ku, Tokyo 134, Japan



Carbohydr. Res. **1998,** *305*, 261

The enzymatic susceptibility of cellulose microfibrils of the algal-bacterial type and the cotton-ramie type

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Carbohydr. Res. **1998,** *305*, 271

Isolation and structural characterisation of rahmnogalacturonan oligomers generated by controlled acid hydrolysis of sugar-beet pulp

Catherine M.G.C. Renard [1], Marc Lahaye [c], Margien Mutter [2], Fons G.J. Voragen [2], Jean-François Thibault [1]
[1] *Laboratoire de Biochimie et Technologie des Glucides, I.N.R.A., B.P. 71627, 44316 Nantes cedex 03, France*
[2] *Laboratory of Food Chemistry, Agricultural University of Wageningen, P.O. Box 8129, 6700 EV Wageningen, The Netherlands*

Most of the rhamnose present in sugar-beet pulp could be accounted for in oligomers of the structure: α-D-GalA *p*-(1[→ 2)-α-L-Rha *p*-(1 → 4)-α-D-GalA *p*-(1]nar2)-L-Rha *p*.

Carbohydr. Res. **1998,** *305*, 281

Enzymatic hydrolysis of bacterial cellulose

Masahiro Samejima [a], Junji Sugiyama [b], Kiyohiko Igarashi ua, Karl-Erik L. Eriksson [c]
[a] *Department of Biomaterials Sciences, School of Agricultural and Life Sciences, The University of Tokyo, Bunkyo-ku, Tokyo 113, Japan*
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[c] *Department of Biochemistry and Molecular Biology, Center for Biological Resource Recovery, The University of Georgia, Athens, Georgia 30602-7229, USA*

The assembling pattern of microfibrils must be one of the major reasons for the significant synergism of CBH I and EG II for the native bacterial cellulose.

Carbohydr. Res. **1998,** *305*, 289

Use of a phenyl 1-selenogalactofuranoside as a glycosyl donor for the synthesis of galactorfuranosyl-containing disaccharides as a glycosyl donor for the synthesis of galactofuranosyl-containing disaccharides

Blair D. Johnston, B. Mario Pinto

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Carbohydr. Res. **1998,** *305*, 293

4,6-Di-*O*-benzoyl-3-*O*-benzyl-α-D-*arabino*-2-keto-hexosyl bromide: A conveniently accessible glycosyl donor for the expedient construction of diantennary β-D-mannosides

F.W. Lichtenthaler, U. Kläres, Z. Szurmai, B. Werner