Graphical Abstracts

Carbohydr. Res. 2003, 338, 1711

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Synthesis of a mannose nonasaccharide existing in the exopolysaccharide of Cryphonectria parasitica

Jianjun Zhang, Zuchao Ma, Fanzuo Kong

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$$\alpha \operatorname{Man} p1 \rightarrow 2 \alpha \operatorname{Man} p1 \rightarrow 2 \alpha \operatorname{Man} p1 \rightarrow 6$$
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Synthesis of a hexasaccharide, the repeating unit of Odeacetylated GXM of C. neoformans serotype A

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Synthesis of mannose-containing analogues of $(1 \rightarrow 6)$ branched $(1 \rightarrow 3)$ -glucohexaose (I)

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 α -D-Manp- $(1 \to 3)$ - $[\alpha$ -D-Manp- $(1 \to 6)]$ - α -D-Glcp- $(1 \to 3)$ - β -D-Glcp- $(1 \to 3)$ - $[\alpha$ -D-Manp- $(1 \to 6)]$ -D-Glcp α -D-Manp- $(1 \to 3)$ - $[\beta$ -D-Glcp- $(1 \to 6)]$ - α -D-Glcp- $(1 \to 3)$ - $[\beta$ -D-Glcp- $(1 \to 3)$ - $[\alpha$ -D-Manp- $(1 \to 6)]$ -D-Glcp.

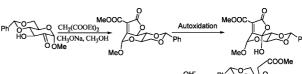
Novel autoxidation and Michael addition of a butenolide-

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containing sugar leading to a C-branched-chain glucopyranosidulose, and X-ray structure of intermediates

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Complexes of sodium vanadate(V) with methyl α -D-mannopyranoside, methyl α - and β -D-galactopyranoside, and selected α -methyl derivatives: a 51 V and 13 C NMR study

Guilhermina R. Noleto, Cesar A. Tischer, Philip A.J. Gorin, Marcello Iacomini, Maria Benigna M. Oliveira

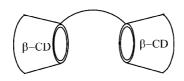
Departamento de Bioquímica, Universidade Federal do Paraná, Caixa Postal 19046, Curitiba PR 81530-990, Brazil

Complexation of Me α -Manp, Me α - and β -Galp and selected OMe derivatives with NaVO₃ in D₂O at pD 7.8 was evaluated by ⁵¹V and ¹³C NMR spectroscopy. The former mode served to show structurally different complexes, each one quantitatively, and the latter showing the positions of esterification. Bidentate complexes were formed with vicinal *cis*-diols, but in the Me Galp series OH-4,6 did not complex, and OH-6 did not participate to form a tridentate OH-3,4,6 complex.

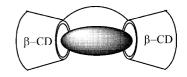
Inclusion complexation behavior of dyestuff guest molecules by a bridged bis(cyclomaltoheptaose)[bis(β-cyclodextrin)] with a pyromellitic acid diamide tether

Yu Liu, Li Li, Heng-Yi Zhang, Peng Liang, Hao Wang

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Biodegradation of poly(\(\varepsilon\)-caprolactone)/starch blends and composites in composting and culture environments: the effect of compatibilization on the inherent biodegradability of the host polymer

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Biodegradability of different PCL-starch composites, prepared by different routes, was studied. It was observed that the weight loss during biodegradation studies increased with the decrease in interfacial tension between filler and polymer. In general, the inherent biodegradability does not depend very significantly on the concentration of starch in polyester matrix but on the compatibilization efficiency.

PER CONTROL CONTROL

Dilute liquid crystals used to enhance residual dipolar couplings may alter conformational equilibrium in oligosaccharides

Patrick Berthault,^a Damien Jeannerat,^b Franck Camerel,^c Francisco Alvarez Salgado,^{a,d}

Yves Boulard, d Jean-Christophe P. Gabriel, c,e Hervé Desvaux a

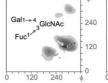
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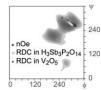
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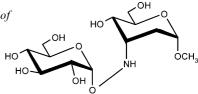
Synthesis of a novel N-O-interglycosidic disaccharide

Carbohydr. Res. 2003, 338, 1787

Miklós Hornyák, Ferenc Sztaricskai, István F. Pelyvás, Gyula Batta

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An N-O-interglycosidic disaccharide, structurally related to those present in the enediyne antibiotics was synthesized.



Carbohydr. Res. 2003, 338, 1793

Synthesis and characterization of a sulfated pentasaccharide containing the Lewis^x motif

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Carbohydr. Res. 2003, 338, 1797 Synthetic methyl hexagalacturonate hapten inhibitors of

anti-homogalacturonan monoclonal antibodies LM7, JIM5 and JIM7 Mads H. Clausen, a,b William G.T. Willats, J. Paul Knox

^aCentre for Plant Sciences, University of Leeds, Leeds LS2 9JT, UK

^bDepartment of Chemistry, Technical University of Denmark, Kemitorvet, Building 201, DK-2800 Kgs. Lyngby, Denmark A range of synthetic methyl hexagalacturonates were used as potential hapten inhibitors in competitive-inhibition enzymelinked immunosorbent assays (ELISAs) with anti-homogalacturonan monoclonal antibodies LM7, JIM5 and JIM7. The selective inhibition of these antibodies by different haptens provides insight into the structures of the partially methyl-esterified pectin epitopes of these widely used monoclonal antibodies.

Structure of the biological repeating unit of the O-antigen

Carbohydr. Res. 2003, 338, 1801

of Pseudomonas aeruginosa immunotype 4 containing both 2-acetamido-2,6-dideoxy-D-glucose and 2-acetamido-2,6-dideoxy-D-galactose

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→4)-α-D-GalpNAc-(1→4)-β-D-GlcpNAc3NAcA-

 $(1\rightarrow 3)$ - α -D-FucpNAc- $(1\rightarrow 3)$ - α -D-QuipNA- $(1\rightarrow$