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Publishers' Announcement

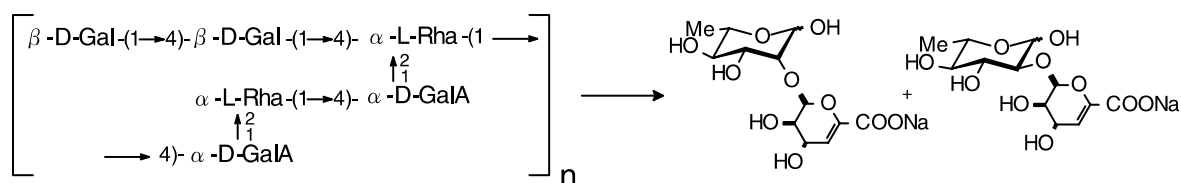
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FULL PAPERS

A convenient synthesis of lepidimoid from okra mucilage and its growth-promoting activity in hypocotyls

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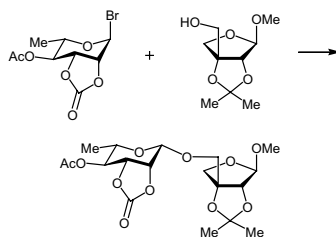
Katsutoshi Hirose,* Keiichiro Endo and Koji Hasegawa



Synthesis of an apiose-containing disaccharide fragment of rhamnogalacturonan-II and some analogues

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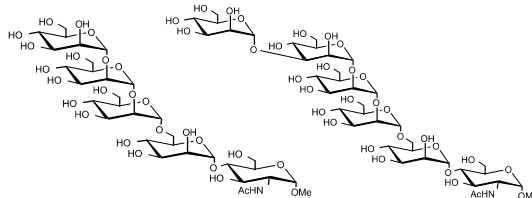
Anne-Laure Chauvin, Sergey A. Nepogodiev* and Robert A. Field



Synthesis of two oligosaccharides, the GPI anchor glycans from *S. cerevisiae* and *A. fumigatus*

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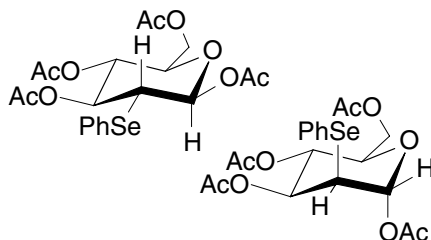
Zuchao Ma, Jianjun Zhang and Fanzuo Kong*



Electrochemical synthesis and X-ray crystal structures of β -D-2-phenylselenenyl-1,3,4,6-tetra-O-acetylglucopyranose and α -D-2-phenylselenenyl-1,3,4,6-tetra-O-acetylmannopyranose

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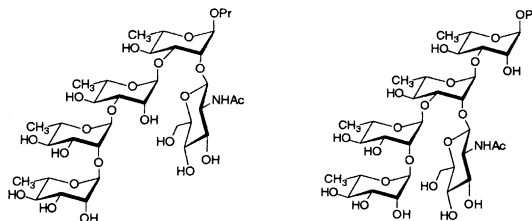
Jasmina Predojević, Mirjana D. Vukićević, Klaus Wurst, Karl-Hans Ongania, Gerhard Laus and Rastko D. Vukićević*



A concise synthesis of two isomeric pentasaccharides, the O repeat units from the lipopolysaccharides of *P. syringae* pv. *porri* NCPPB 3364^T and NCPPB 3365

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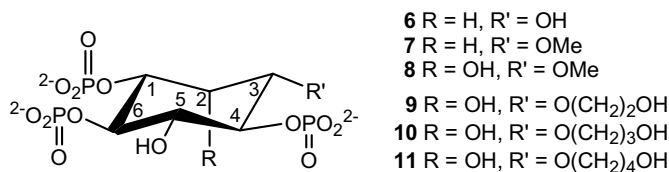
Zuchao Ma, Jianjun Zhang and Fanzuo Kong*



First derivatives of *myo*-inositol 1,4,6-trisphosphate modified at positions 2 and 3: structural analogues of D-*myo*-inositol 1,4,5-trisphosphate

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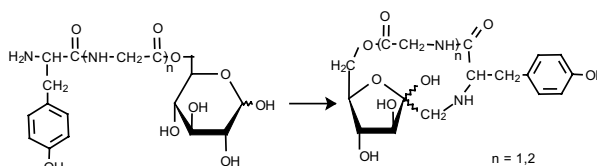
Graeme Horne, Stephen J. Mills and Barry V. L. Potter*



Synthesis and intramolecular reactions of Tyr-Gly and Tyr-Gly-Gly related 6-O-glucopyranose esters

pp 67–75

Lidija Varga-Defterdarović* and Gorana Hrlec



pp 77–86

Expression of gangliosides and neutral glycosphingolipids was investigated in lymph nodes of mice with TNF receptor 1 gene knockout, using HPTLC immunoverlay and flow cytometry. Results show that TNF receptor 1 is important for the expression of GalNAc-GM1b, especially on effector CD8⁺ T lymphocytes.

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Figure 1 consists of two parts. On the left is the chemical structure of cyclodextrin, a cyclic oligomer of D-glucopyranose units linked by $\alpha(1\rightarrow6)$ glycosidic bonds. The structure is shown with a repeating unit n . The anomeric carbons (C1) are labeled with their corresponding CD types: 1- α -CD, 2- β -CD, 3- γ -CD, 5- ϵ -CD, and 9- ι -CD. On the right is a 3D surface plot of the ^{13}C NMR spectrum. The vertical axis represents the chemical shift in ppm, ranging from 95 to 105. The horizontal axes represent the phase angles ψ and ϕ , both ranging from -100 to 100. The surface shows a complex, multi-peaked distribution of chemical shifts across the phase space.

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$$\begin{array}{c} \beta\text{-D-Xylp} \\ \downarrow 1 \\ \alpha\text{-D-Galp-(1}\rightarrow\text{3)-}\beta\text{-D-Glcp-(1}\rightarrow\text{3)-}\beta\text{-D-Xylp-(1}\rightarrow\text{4)-}\beta\text{-D-Xylp-(1}\rightarrow\text{4)-L-Galp} \\ \downarrow 2 \end{array}$$

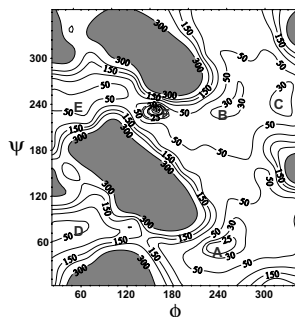
pp 105–111

The chemical feature of a sulfated galactan fraction from *Porphyra haitanensis* and its in vivo antioxidant activities in aging mice were reported.

Ab initio conformational maps for disaccharides in gas phase and aqueous solution

pp 113–122

Clarissa O. da Silva* and Marco A. C. Nascimento

**Arabinan–cellulose composite in *Opuntia ficus-indica* prickly pear spines**

pp 123–131

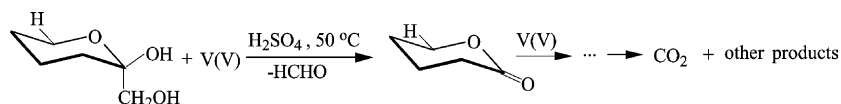
M. R. Vignon,* L. Heux, M.-E. Malainine and M. Mahrouz

The spines of *Opuntia* cactus are made up of a compact parallel arrangement of fibers composed of two polysaccharides, cellulose and arabinan (1:1), intimately associated inside the fibers, forming a natural and complex composite of cellulose microfibrils embedded in an α -L-arabinofuranan matrix.

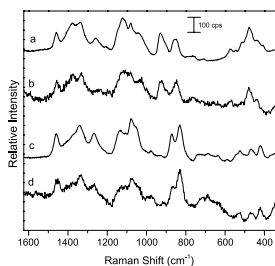
Kinetics and mechanism of the oxidation of D-fructose by vanadium(V) in H_2SO_4 medium

pp 133–140

Zaheer Khan,* P. S. S. Babu and Kabir-ud-Din

**Oligosaccharide identification and mixture quantification using Raman spectroscopy and chemometric analysis** pp 141–145

Melissa F. Mrozek, Dongmao Zhang and Dor Ben-Amotz*



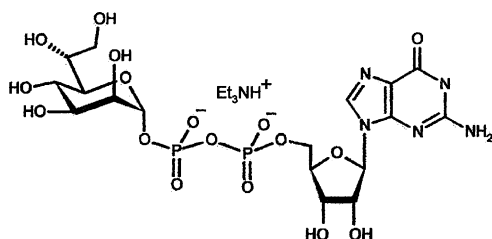
Normal Raman and SERS spectra of maltotetraose (a, b) and stachyose (c, d). SERS spectra were collected after deposition on an electrochemically roughened silver substrate.

NOTES

A convenient synthesis of GDP D-glycero- α -D-manno-heptopyranose

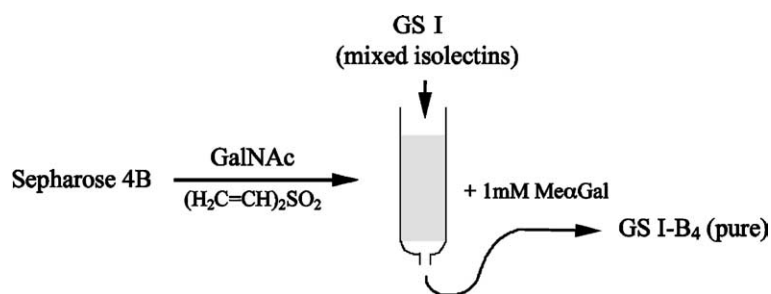
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Andrea Graziani, Alla Zamyatina and Paul Kosma*

**Facile preparation of the α -Gal-recognizing *Griffonia simplicifolia* I-B₄ isolectin**

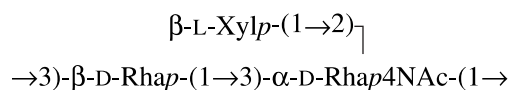
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Harry C. Winter and Irwin J. Goldstein*

**Structure of the O-polysaccharide of *Xanthomonas cassavae* GSPB 2437**

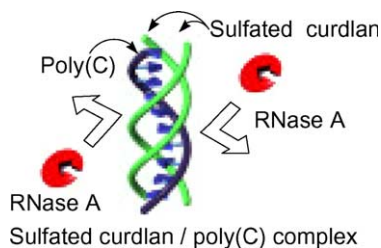
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Sof'ya N. Senchenkova, Alexander S. Shashkov, Yuriy A. Knirel,* Kerstin Wydra, Frank Witt, Athanasios Mavridis and Klaus Rudolph

**Low M_w sulfated curdlan with improved water solubility forms macromolecular complexes with polycytidylic acid**

pp 161–167

Kazuya Koumoto, Mariko Umeda, Munenori Numata, Takahiro Matsumoto, Kazuo Sakurai, Toyoki Kunitake and Seiji Shinkai*



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*Corresponding author

COVER

Well-defined glycoforms of glycoproteins can easily be obtained by oxidative coupling of synthetic thioaldoses with proteins that have a cysteine moiety in lieu of an asparagine residue carrying natural N-linked oligosaccharides. In vitro glycosylation offers several advantages such as quantitative conjugation, incorporation of oligosaccharides that display high bioactivities and the possibility of using convenient bacterial or yeast protein expression systems. The figure is related to Geert-Jan Boons' *Carbohydrate Research Award* paper, which will be published in a forthcoming issue.



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