

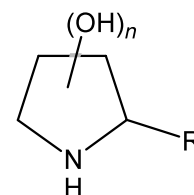
Synthesis of mono- and di-hydroxylated prolines and 2-hydroxymethylpyrrolidines from non-carbohydrate precursors

Carbohydr. Res. **2003**, 338, 2265

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^bEnvironmental Division, National Institute of Oceanography and Fisheries, Kayet Bay, Alexandria, Egypt



R = CH₂OH or CO₂H;
n = 1 or 2

Synthesis and structural characterization of 1-(D-glycosyloxy)phthalazines

Carbohydr. Res. **2003**, 338, 2291

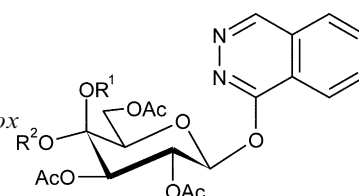
Abdellfattah Z. Haikal,^a El Sayed H. El Ashry,^b Joseph Banoub^{c,d}

^aDepartment of Chemistry, Faculty of Science, University of United Arab Emirates, P.O. Box 17551, Al Ain, United Arab Emirates

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5, R¹=H, R²=Ac
8, R¹=Ac, R²=H

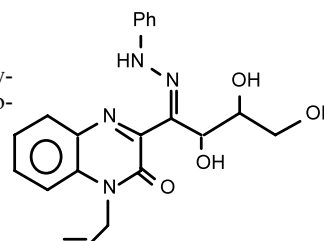
A novel synthesis of acyclonucleosides via allylation of 3-[1-(phenylhydrazono)-L-threo-2,3,4-trihydroxybut-1-yl]quinoxalin-2(1H)one

Carbohydr. Res. **2003**, 338, 2301

Hamida Mohamed Abdel Hamid

Department of Chemistry, Faculty of Science, Alexandria University, Alexandria, Egypt

3-[1-(Phenylhydrazono)-L-threo-2,3,4-trihydroxybut-1-yl]quinoxalin-2(1H)one has been allylated to give in addition the anticipated 1-N-allyl derivative, the dehydrative cyclized product 1-N-allyl-3-[5-(hydroxymethyl)-1-phenylpyrazol-3-yl]quinoxalin-2-one and its isomeric O-allyl derivative.



Electrospray tandem mass-spectrometric analysis of diastereo- and stereoisomeric pyrimidine nucleoside analogues based on the 1,3-dihydrobenzo[c]furan core

Carbohydr. Res. **2003**, 338, 2311

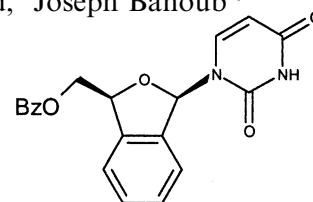
Christophe Len,^a Grahame Mackenzie,^b David F. Ewing,^b George Sheppard,^c Joseph Banoub^{c,d}

^aLaboratoire des Glucides, Université de Picardie-Jules Verne, F-80039 Amiens, France

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Characterization of the alginates from algae harvested at the Egyptian Red Sea coast

Carbohydr. Res. **2003**, 338, 2325

Bjorn Larsen,^a Dalia M.S.A. Salem,^b Mohammed A.E. Sallam,^c Morcos M. Mishrikey,^c Ali I. Beltagy^b

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^bNational Institute of Oceanography and Fisheries, Marine Chemistry Laboratory, Kayet Bey, Alexandria, Egypt

^cChemistry Department, Faculty of Science, Alexandria University, Alexandria, Egypt

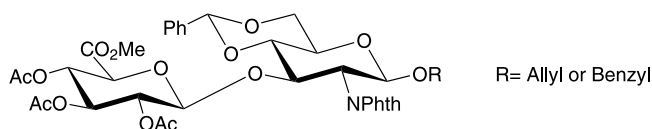
The alginate of five species of brown algae from the Egyptian Red Sea coast: *Cystoseira trinode*, *Cystoseira myrica*, *Sargassum dentifolium*, *S. asperifolium* and *S. latifolium*, were isolated and their structures studied by ¹H NMR spectroscopy. They contain more guluronic acid (G) than mannuronic acid (M). The G- and M-blocks from *C. trinode* and *S. latifolium* were separated and studied by ¹H NMR spectroscopy.

Acetylated methyl glucopyranuronate trichloroacetimidate as a glycosyl donor for efficient synthesis of disaccharides

Carbohydr. Res. **2003**, 338, 2337

Sameh E. Soliman, Rafik W. Bassily, Ramadan I. El-Sokkary, Mina A. Nashed

Department of Chemistry, Faculty of Science, University of Alexandria, Ibrahimia, P.O. Box 426, Alexandria 21321, Egypt



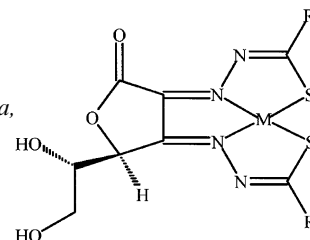
Sugar hydrazone-metal complexes: transition- and non-transition metal complexes of monosaccharide *S*-alkylhydrazonocarbodithioates and dehydro-L-ascorbic acid bis(*S*-alkylhydrazonocarbodithioates)

Carbohydr. Res. **2003**, 338, 2341

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Transition- and non-transition metal complexes of monosaccharide *S*-alkylhydrazonocarbodithioates and dehydro-L-ascorbic acid bis(*S*-alkylhydrazonocarbodithioates) have been synthesized and characterized.



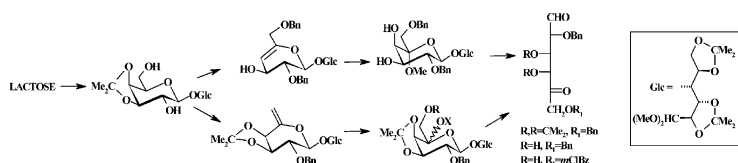
Convenient preparation of *L*-arabino-hexos-5-ulose derivatives from lactose

Carbohydr. Res. **2003**, 338, 2349

Giorgio Catelani,^a Antonino Corsaro,^b Felicia D'Andrea,^a Manuela Mariani,^a Venerando Pistarà,^b Elisa Vittorino^b

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^bDipartimento di Scienze Chimiche, Università di Catania, viale A. Doria 6, I-95125 Catania, Italy

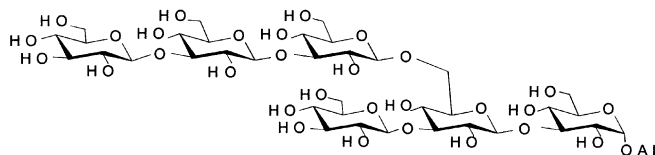


Synthesis of β -D-glucose oligosaccharides from *Phytophthora parasitica*

Carbohydr. Res. **2003**, 338, 2359

Youlin Zeng, Fanzuo Kong

Research Center for Eco-Environmental Sciences, Academia Sinica, P.O. Box 2871, Beijing 100085, PR China



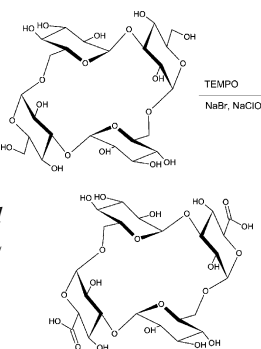
Oxidation and metal-ion affinities of a novel cyclic tetrasaccharide

Carbohydr. Res. **2003**, 338, 2367

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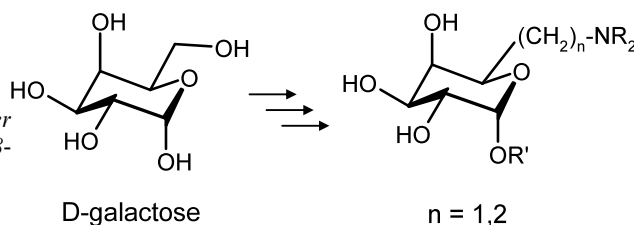


Synthesis of amino-substituted hexo- and heptopyranoses from D-galactose

Carbohydr. Res. **2003**, 338, 2375

Benedikt Streicher, Bernhard Wunsch

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Structure of the O-polysaccharide of *Proteus mirabilis* O38 containing 2-acetamidoethyl phosphate and N-linked D-aspartic acid

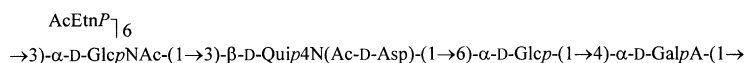
Carbohydr. Res. **2003**, 338, 2387

Anna N. Kondakova,^a Sof'ya N. Senchenkova,^a Andrei I. Gremyakov,^a Alexander S. Shashkov,^a Yuriy A. Knirel,^a Rafal Fudala,^b Wiesław Kaca^{b,c}

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^bInstitute of Microbiology and Immunology, University of Lodz, 90-237 Lodz, Poland

^cCenter of Microbiology and Virology, Polish Academy of Sciences, 93-232 Lodz, Poland



Structure and potential immunological activity of a pectin from *Centella asiatica* (L.) Urban

Carbohydr. Res. **2003**, 338, 2393

Xue-Song Wang, Qun Dong, Jian-Ping Zuo, Ji-Nian Fang

Shanghai Institute of Materia Medica, Shanghai Institutes for Biological Sciences, Chinese Academic of Sciences, 555 Zu-Chong-Zhi Road, Zhangjiang Hi-Tech Park, Shanghai 201203, PR China

A potential immunologically active pectin was isolated from *Centella asiatica* (L.) Urban. Following chemical analyses and pharmacological tests, the structural features and bioactivity are discussed.

Physical investigations of surface membrane–water relationship of intact and gelatinized wheat–starch systems

Carbohydr. Res. **2003**, 338, 2403

Albert Linton Charles,^a Hsien-Ming Kao,^b Tzou-Chi Huang^c

^a*Institute of Tropical Agriculture and International Cooperation, National Pingtung University of Science and Technology, Pingtung, Taiwan*

^b*Department of Chemistry, National Central University, Chung-Li, Taiwan*

^c*Department of Food Science, National Pingtung University of Science and Technology, Pingtung, Taiwan*

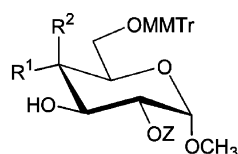
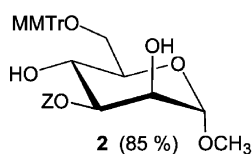
The correlation of water activity to water mobility in intact and gelatinized starch granules was investigated by gravimetric water sorption, scanning electron microscopy and ¹H NMR. The analysis infers the presence of a surface membrane barrier responsible for the observed different surface structures, water components and adsorption behavior among starch granules.

High yield regioselective monobenzyloxycarbonylation of secondary alcohols in glycopyranoside series

Carbohydr. Res. **2003**, 338, 2409

Alain Morère, Fouzi Mouffouk, Audrey Jeanjean, Alain Leydet, Jean-Louis Montero

Laboratoire de Chimie Biomoléculaire (UMR 5032), Université Montpellier II-ENSCM, 8 Rue de l'Ecole Normale, F-34296 Montpellier, France



4 : R¹ = OH, R² = H (80%)

6 : R¹ = H, R² = OH (74%)

Crystal structure and chirality of natural floridoside

Carbohydr. Res. **2003**, 338, 2413

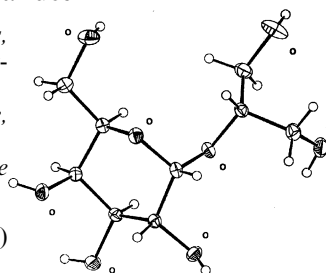
Christelle Simon-Colin,^a François Michaud,^b Jean-Michel Léger,^c Eric Deslandes^a

^a*Laboratoire d'Ecophysiologie et de Biotechnologie des Halophytes et des Algues Marines, Institut Universitaire Européen de la Mer, Université de Bretagne Occidentale, Technopôle Brest-Iroise, F-29280 Plouzané, France*

^b*Service Commun d'Analyse par Diffraction des Rayons X, Université de Bretagne Occidentale, 6 avenue Victor Le Gorgeu, F-29285 Brest, France*

^c*Laboratoire de Chimie Physique et Cristallographie, Faculté de Pharmacie, Université de Bordeaux 2, 146 rue Léo Saignat, F-33076 Bordeaux, France*

The structure and absolute configuration of floridoside (2-O- α -D-galactopyranosylglycerol) was determined by single-crystal X-ray diffraction.



An efficient preparation of 6^{I,IV} dihydroxy permethylated β -cyclodextrin

Thomas Lecourt, Jean-Maurice Mallet, Pierre Sinaÿ

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