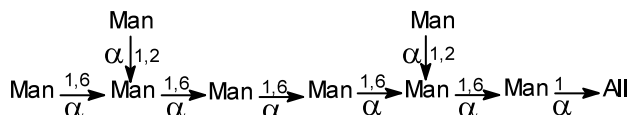


A highly efficient synthesis of an octasaccharide, the repeating unit of the cell-wall mannan of *Trichophyton mentagrophytes* and *T. rubrum*

Jun Ning,^a Linsen Heng,^b Fanzuo Kong^a

^aResearch Center for Eco-Environmental Sciences, Chinese Academy of Sciences, PO Box 2871, Beijing 100085, PR China

^bDaxian Normal College, Department of Chemistry, Sichuan, PR China

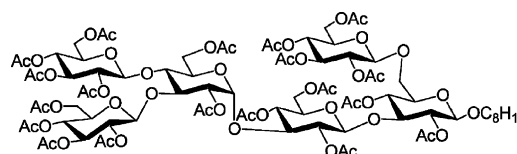


Unexpected α -stereochemical outcomes of attempted β -glycosylations

Feng Yang,^a Hongmei He,^a Yuguo Du,^a Mujian Lü^b

^aResearch Center for Eco-Environmental Sciences, Academia Sinica, PO Box 2871, Beijing 100085, PR China

^bCollege of Chemistry and Molecular Engineering, Peking University, Beijing 1000871, PR China

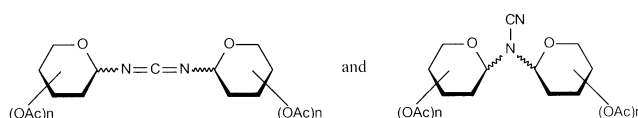


Convenient syntheses of symmetrical and unsymmetrical glycosyl carbodiimides and *N,N*-bis(glycosyl)cyanamides

László Kovács,^a Erzsébet Ősz,^b Zoltán Györgydeák^a

^aDepartment of Organic Chemistry, University of Debrecen, H-4010 Debrecen, PO Box 20, Hungary

^bDepartment of Medicinal Chemistry, University of Pécs, H-7624 Pécs, Szigeti út 12, Hungary



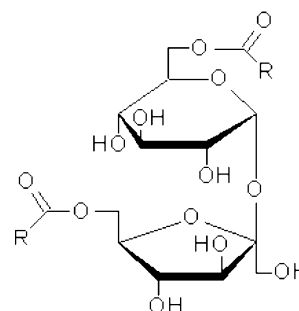
Effect of fatty acid chain length on initial reaction rates and regioselectivity of lipase-catalysed esterification of disaccharides

Ninfa R. Pedersen,^a Reinhard Wimmer,^a Jeppe Emmersen,^a Peter Degn,^b Lars H. Pedersen^a

^aInstitute of Life Sciences, Department of Biotechnology, Aalborg University, Sohngaardsholmsvej 49, DK-9000 Aalborg, Denmark

^bDanisco A/S, Edwin Rahrs Vej 38, 8220 Brabrand, Denmark

Fatty acid esters of sucrose and maltose were synthesised in a lipase-catalysed esterification process. R = (CH₂)_nCH₃ n = 3 and 9.



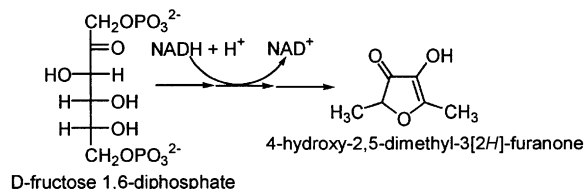
Chemical formation of 4-hydroxy-2,5-dimethyl-3[2H]-furanone from D-fructose 1,6-diphosphate

Carbohydr. Res. 2002, 337, 1185

Tobias Hauck,^a Christian Landmann,^a Thomas Raab,^a Fredi Brühlmann,^b Wilfried Schwab^a

^aLehrstuhl für Lebensmittelchemie, Universität Würzburg, Am Hubland, D-97074 Würzburg, Germany

^bFirmenich SA, Route des Jeunes 1, CH-1211 Geneva, Switzerland



Novel lipochitin oligosaccharide structures produced by *Rhizobium etli* KIM5s

Carbohydr. Res. 2002, 337, 1193

Cristina Pacios-Bras,^a

Yuri E.M. van der Burgt,^b

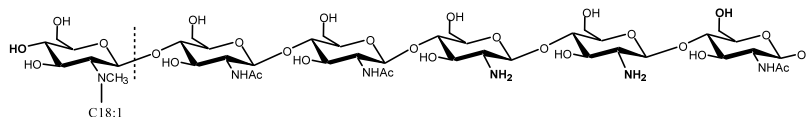
Andre M. Deelder,^b Pablo Vinuesa,^c Dietrich Werner,^c Herman P. Spaink^a

^aInstitute of Molecular Plant Sciences, Leiden University, Wassenaarseweg 64, NL-2333 AL Leiden, The Netherlands

^bDepartment of Parasitology, Leiden University Medical Center, PO Box 9600, NL-2300 RC Leiden, The Netherlands

^cFB Biologie, Fachgebiet für Zellbiologie und Angewandte Botanik, Philipps-Universität Marburg, D-35032 Marburg, Germany

The lipochitin oligosaccharide (LCOs) structures produced by *Rhizobium etli* KIM5s were elucidated using a nanoHPLC RP/ion-trap mass spectrometer system. The predominant LCOs contained six monosaccharide residues. Structures in which the chitin backbone was deacetylated at one or more GlcNAc moieties were found as minor compounds.



New exopolysaccharides produced by *Aureobasidium pullulans* grown on glucosamine

Carbohydr. Res. 2002, 337, 1203

Paola Cescutti,^a Raffaella Pupulin,^a Franco Delben,^a Maria Abbate,^b

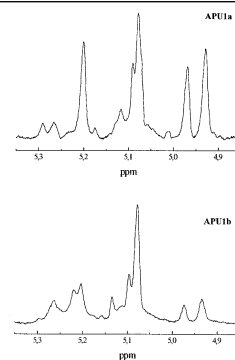
Mariella Dentini,^b Lorenzo Sparapano,^c Roberto Rizzo,^a Vittorio Crescenzi^b

^aDipartimento di Biochimica, Biofisica e Chimica delle Macromolecole, Università di Trieste, via L. Giorgieri 1, I-34127 Trieste, Italy

^bDipartimento di Chimica, Università 'La Sapienza', p. le A. Moro 5, 00185 Rome, Italy

^cDipartimento di Biologia e Patologia Vegetale, Università di Bari, Via G. Amendola 165/A, 70126 Bari, Italy

Polysaccharides different from pullulan are produced by *A. pullulans* when grown using glucosamine as a carbon source. They are branched mannans and galactomannans. The latter contains galactose in the furanose form.

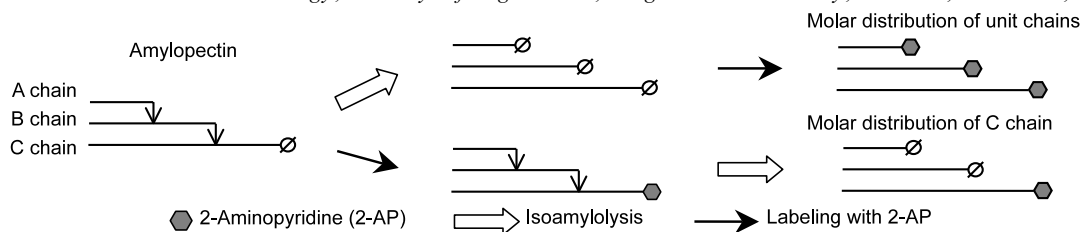


Examination of molar-based distribution of A, B and C chains of amylopectin by fluorescent labeling with 2-aminopyridine

Carbohydr. Res. 2002, 337, 1211

Isao Hanashiro, Masataka Tagawa, Shunpei Shibahara, Kazutaka Iwata, Yasuhito Takeda

Department of Biochemical Science and Technology, Faculty of Agriculture, Kagoshima University, 1-21-24, Korimoto, Kagoshima 890-0065, Japan



Application of mass spectrometry to determine the activity and specificity of pectin lyase A

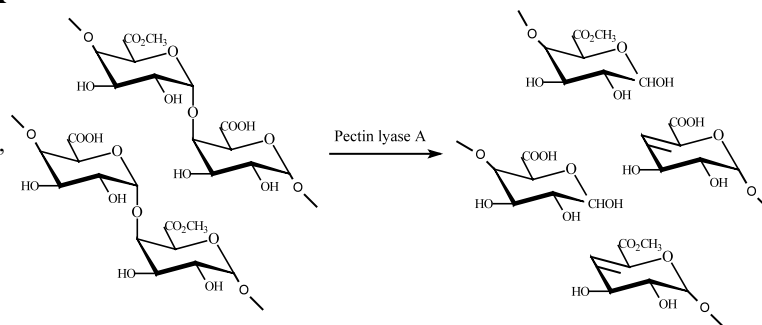
Carbohydr. Res. **2002**, *337*, 1217

Kudzai E. Mutenda,^a Roman Körner,^b
Tove M. I. E. Christensen,^c
Jørn Mikkelsen,^c Peter Roepstorff^a

^aDepartment of Biochemistry and Molecular Biology,
University of Southern Denmark, Campusvej 55,
DK-5230, Odense M, Denmark

^bDepartment of Cell Biology, Max-Planck Institute
for Biochemistry, Am Klopferspitz 18a, D-82152
Martinsried, Germany

^cDanisco Biotechnology, Langebrogade 1,
DK-1001 Copenhagen, Denmark



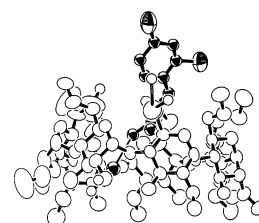
Structure of the complex of heptakis(2,6-di-*O*-methyl)- β -cyclodextrin with (2,4-dichlorophenoxy)acetic acid

Carbohydr. Res. **2002**, *337*, 1229

Frantzeska Tsorteki, Dimitris Mentzafos

Physics Laboratory, Agricultural University of Athens, Iera Odos 75, GR-11855 Athens, Greece

The host molecules stack along the *a* screw axis forming a column. The dichlorophenyl moiety of the guest molecule is found outside the host cavity in the space among three successive hosts of the column. Its oxyacetic acid chain penetrates the cavity from the primary face of the host.

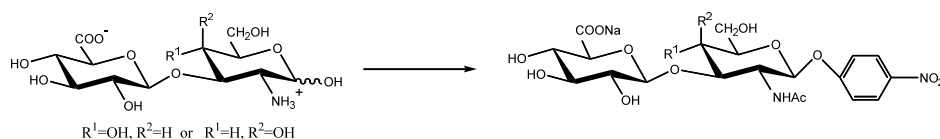


Syntheses of the 4-nitrophenyl glycosides of hyalobiuronic acid and chondrosine

Carbohydr. Res. **2002**, *337*, 1235

Derek K. Watt, Keith Clinch, George C. Slim

Industrial Research Ltd., Gracefield Road, PO Box 31-310, Lower Hutt, New Zealand



Anticoagulant activity of a sulfated chitosan

Carbohydr. Res. **2002**, *337*, 1239

Preeyanat Vongchan,^a Warayuth Sajomsang,^b Dumrat Subyen,^b Prachya Kongtawelert^a

^aDepartment of Biochemistry, Faculty of Medicine, Chiang Mai University, Chiang Mai 50200, Thailand

^bDepartment of Chemistry, Faculty of Sciences, Chiang Mai University, Chiang Mai 50200, Thailand

