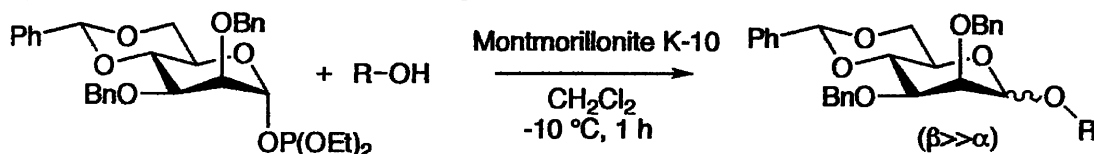


Carbohydr. Res. **2003**, 338, 1531

Environmentally benign and stereoselective formation of β -mannosidic linkages utilizing 2,3-di-*O*-benzyl-4,6-*O*-benzylidene-protected mannopyranosyl phosphite and montmorillonite K-10

Hideyuki Nagai, Shuichi Matsumura, Kazunobu Toshima

Department of Applied Chemistry, Faculty of Science and Technology, Keio University, 3-14-1 Hiyoshi, Kohoku-ku, Yokohama 223-8522, Japan



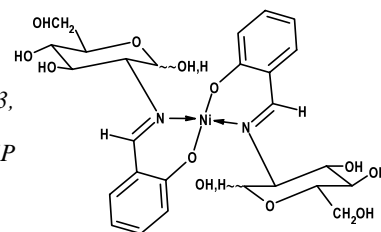
Carbohydr. Res. **2003**, 338, 1535

Ni(II) complexes with Schiff bases derived from amino sugars

Juan Costamagna,^a Luis E. Lillo,^a Betty Matsuhira,^a
Miguel D. Nosedá,^b Manuel Villagrán^a

^aFacultad de Química y Biología, Universidad de Santiago de Chile, Casilla 40, Correo 33, Santiago, Chile

^bDepartamento de Bioquímica, Universidade Federal do Paraná, P.O. Box 19046, CEP 81531-990 Curitiba, Paraná Brazil



Carbohydr. Res. **2003**, 338, 1543

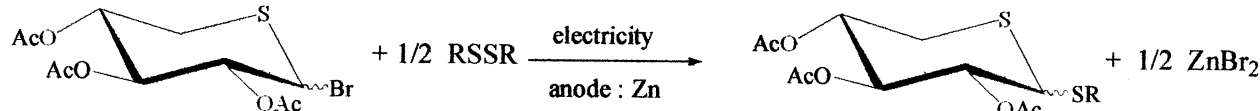
New efficient electrochemical synthesis of 1,5-dithioxypyranosides in the presence of a sacrificial anode

David Brevet,^a Yves Mugnier,^a Soth Samreth,^b Philippe Dellis^c

^aLaboratoire de Synthèse et d'Electrosynthèse Organometalliques–LSEO-UMR5632, faculté des Sciences Gabriel, 21000 Dijon, France

^bLaboratoires Fournier SA, Centre de Recherches, 50 Rue de Dijon, F-21121 Daix, France

^cSynkem, 47 rue de Longvic, 21301 Chenôve Cedex, France



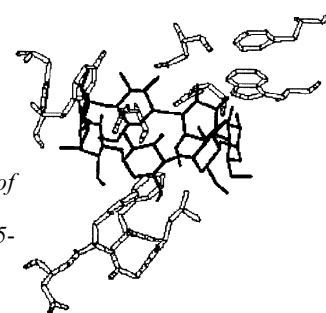
Carbohydr. Res. **2003**, 338, 1553

Mutual conversion of substrate specificities of *Thermoactinomyces vulgaris* R-47 α -amylases TVAI and TVAII by site-directed mutagenesis

Akashi Ohtaki,^a Akihiro Iguchi,^a Masahiro Mizuno,^b Takashi Tonozuka,
^b Yoshiyuki Sakano,^b Shigehiro Kamitori^a

^aDepartment of Biotechnology and Life Science, Faculty of Technology, Tokyo University of Agriculture and Technology, 2-24-16 Naka-cho, Koganei, Tokyo 184-8588, Japan

^bDepartment of Applied Biological Science, Tokyo University of Agriculture and Technology, 3-5-8 Saiwai-cho, Fuchu, Tokyo 183-8509, Japan



Solid-state ^{13}C NMR spectroscopy studies of xylans in the cell wall of *Palmaria palmata* (L. Kuntze, Rhodophyta)

Carbohydr. Res. **2003**, 338, 1559

Marc Lahaye,^a Corinne Rondeau-Mouro,^b Estelle Deniaud,^{a,c} Alain Buléon^b

^aINRA-Unité de Recherches sur les Polysaccharides, leurs Organisations et Interactions, BP 71627, F-44316 Nantes, France

^bINRA-Unité de Physico-Chimie des Macromolécules, Centre de Recherches de Nantes, BP 71627, F-44316 Nantes, France

^cInstitut Français de Recherche et d'Exploitation de la MER, Laboratoire de Biochimie des Protéines et Qualité, Rue de l'Ile d'Yeu, BP 21115, F-44311 Nantes, France

The liquid-like magic-angle-spinning (MAS) and cross-polarization MAS (CPMAS) solid-state ^{13}C NMR spectroscopic analysis of the chemical structure and interactions of the cell wall polysaccharides from the red seaweed *Palmaria palmata* are reported.

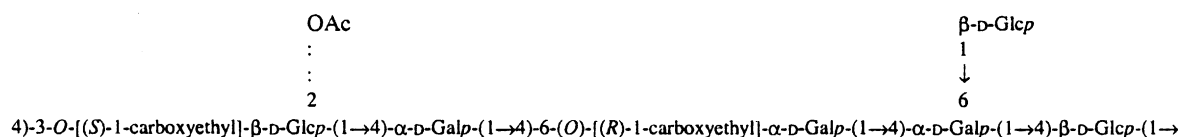
Structural studies of the extracellular polysaccharide produced by *Butyrivibrio fibrisolvens* strain H10b

Carbohydr. Res. **2003**, 338, 1571

Lars Andersson,^a Michael A. Cotta,^b Lennart Kenne^a

^aDepartment of Chemistry, Swedish University of Agricultural Sciences, P.O. Box 7015, SE-750 07 Uppsala, Sweden

^bNational Center for Agricultural Utilization Research, Agricultural Research Service, U.S. Department of Agriculture, 1815 N. University Street, Peoria, IL 61604, USA



A new crystal form of β -cyclodextrin-ethanol inclusion complex: channel-type structure without long guest molecules

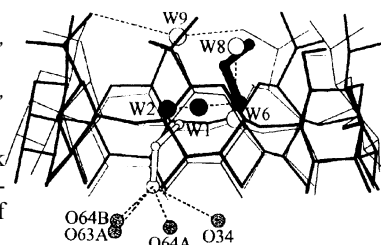
Carbohydr. Res. **2003**, 338, 1581

Thammarat Aree,^a Narongsak Chaichit^b

^aDepartment of Chemistry, Faculty of Science, Chulalongkorn University, Phyathai Rd., Pathumwan, Bangkok 10330, Thailand

^bDepartment of Physics, Faculty of Science and Technology, Thammasat University, Rangsit, Pathum Thani 12121, Thailand

Superposition of β -CD-ethanol-hydrate structures (C2 (form II): thick line-black ball-and-stick; P2₁ (form I): thin line-white ball-and-stick); small balls are C and bigger O. Gray balls are O3-H, O6-H groups that are hydrogen bonded to ethanol of form I.



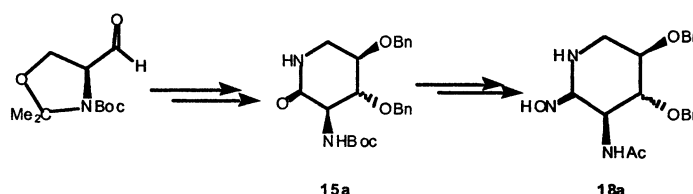
Synthesis of protected 2-amino-2-deoxy-D-xyllothionolactam derivatives and some aspects of their reactivity

Carbohydr. Res. **2003**, 338, 1591

Laurent Devel,^{a1} Louis Hamon,^b Hubert Becker,^a Annie Thellend,^a Anne Vidal-Cros^a

^aStructure et Fonction de Molécules Bioactives, Université Pierre et Marie Curie, Tour 44-45, 3^{ème} étage, 4 place Jussieu, F-75252 Paris, France

^bLaboratoire de Synthèse asymétrique, Université Pierre et Marie Curie, Bâtiment F, 2^{ème} étage, 8 rue Cuvier, F-75252 Paris, France

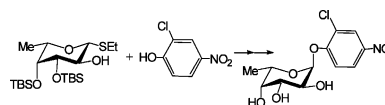


Synthesis of 2-chloro-4-nitrophenyl α -L-fucopyranoside: a substrate for α -L-fucosidase (AFU)

Guofeng Gu,^a Yuguo Du,^a Hongyan Hu,^b Cheng Jin^b

^aResearch Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Academia Sinica, 18 Shuangqing Road Haidian District, P.O. Box 2871, Beijing 100085, PR China

^bInstitute of Microbiology, Chinese Academy of Sciences, Beijing 100080, PR China



An alkali-soluble heteroxylan from seeds of *Phoenix dactylifera* L.

Omar Ishurd,^a Yousef Ali,^b Wanxing Wei,^a Fatma Bashir,^b Amna Ali,^b Ahmed Ashour,^c Yuanjiang Pan^a

^aDepartment of Chemistry, Zhejiang University, Hangzhou 310027, PR China

^bIRC Libyan. Organization., Tripoli, Libya

^cDepartment of Food Science, College of Agriculture, Alftateh University, Tripoli, Libya

An alkali-soluble polysaccharide, isolated from the seeds of dates, has been investigated using methylation and partial hydrolysis studies and is shown as the following:

