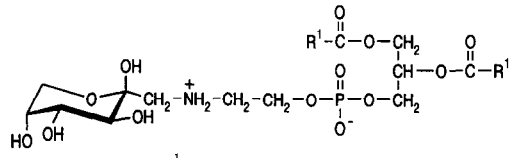
GRAPHICAL ABSTRACTS

Carbohydr. Res. **1997**, *301*, 111

Amadori products from model reactions of D-glucose with phosphatidyl ethanolamine — Independent synthesis and identification of 1-deoxy-1-(2-hydroxyethylamino)-D-fructose derivatives

Markus O. Lederer *, Claudia M. Dreisbusch, Rainer M. Bundschuh
Institut für Lebensmittelchemie und Analytische Chemie, Universität Stuttgart, Pfaffenwaldring 55, D-70569 Stuttgart, Germany

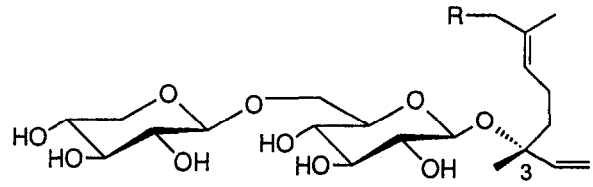


$R^1 = -C_{13}H_{27}, -C_{15}H_{31}$

Carbohydr. Res. **1997**, *301*, 123

First total synthesis of two new diglycosides, neohancosides A and B, from *Cynanchum hancockianum*

Yaeko Konda [a,*], Tsuneyuki Toida [a], Eisuke Kaji [a], Kazuyoshi Takeda [b], Yoshihiro Harigaya [a]
[a] *School of Pharmaceutical Sciences, Kitasato University, Shirokane, Minato-ku, Tokyo, 108, Japan*
[b] *Department of Chemistry, School of Science, Kitasato University, Kitasato, Sagamihara-shi, Kanagawa, 228, Japan*



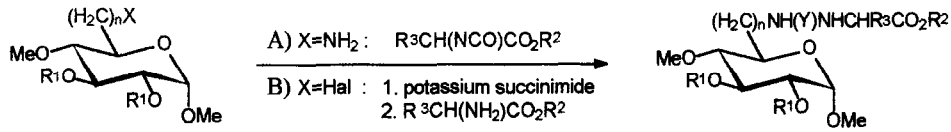
1 R = H Neohancoside A
2 R = OH Neohancoside B

Carbohydr. Res. **1997**, *301*, 145

Synthesis of novel amino acid glycoside conjugates

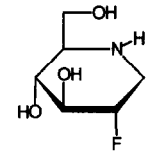
Thorsten Heidelberg, Joachim Thiem *
Institut für Organische Chemie, Universität Hamburg, Martin-Luther-King-Platz 6, D-20146 Hamburg, Germany

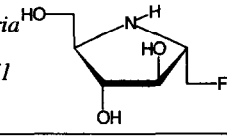
Syntheses of novel spacer-bridged conjugates between amino acid and glycoside derivatives is described.



Carbohydr. Res. **1997**, *301*, 155

Two isosteric fluorinated derivatives of the powerful glucosidase inhibitors, 1-deoxynojirimycin and 2,5-dideoxy-2,5-imino-D-mannitol: Syntheses and glycosidase-inhibitory activities of 1,2,5-trideoxy-2-fluoro-1,5-imino-D-glucitol and of 1,2,5-trideoxy-1-fluoro-2,5-imino-D-mannitol





Sören M. Andersen [a], Michael Ebner [b], Christian W. Ekhart [b], Günther Gradnig [b], Günter Legler [c], Inge Lundt [a], Arnold E. Stütz [b,*], Stephen G. Withers [d], Tanja Wrodnigg [b]
[a] *Department of Organic Chemistry, Technical University of Denmark, Building 201, DK-2800 Lyngby, Denmark*
[b] *Institut für Organische Chemie der Technischen Universität Graz, Stremayrgasse 16, A-8010 Graz, Austria*
[c] *Institut für Biochemie der Universität Köln, Otto-Fischer-Str. 12–14, D-50674 Köln, Germany*
[d] *Department of Chemistry, University of British Columbia, Vancouver, British Columbia, Canada V6T 1Z1*

Title compounds were synthesized by chemical and chemo-enzymatic routes.

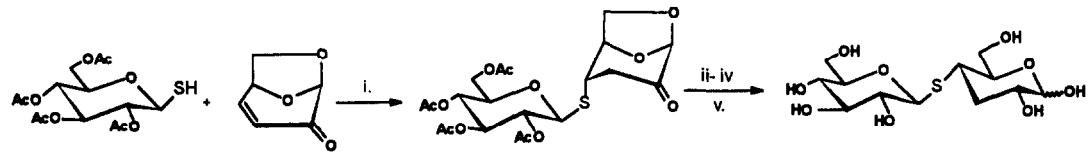
Carbohydr. Res. **1997**, *301*, 167

Thiosugars II. A novel approach to thiodisaccharides The synthesis of 3-deoxy-4-thiocellobiose from levoglucosenone

Zbigniew J. Witczak [a,*], Renu Chhabra [a], Hong Chen [a], Xiang-Qun Xie [b]

[a] *Department of Pharmaceutical Sciences, School of Pharmacy, University of Connecticut, 372 Fairfield Road, U-92, Storrs, CT 06269-2092, USA*

[b] *Institute of Materials Science, University of Connecticut, Storrs, CT 06269, USA*



i. Et_3N/MeCN . ii. L-Selectride, or DIBAH/THF. iii. Ac_2O/Py. iv. BF_3-Et_2O/Ac_2O, or TFA/Ac_2O, or $Et_3SiOSO_2CF_3$/Ac_2O/DCE. v. MeOH/H_2O/Et_3N.

Carbohydr. Res. **1997**, *301*, 177

Extraction of pectic substances from dehulled rapeseed

Ingrid Eriksson *, Roger Andersson, Per Åman

Swedish University of Agricultural Sciences, Department of Food Science, P.O. Box 7051, S-750 07 Uppsala, Sweden

Different conditions were evaluated for the extraction of pectic substances from dehulled rapeseed by chemical characterisation of the extracts.

Carbohydr. Res. **1997**, *301*, 187

Structure of the O18 antigen from *Acinetobacter baumannii*

Simon Haseley, Stephen G. Wilkinson *

School of Chemistry, University of Hull, Hull, HU6 7RX, UK

β-D-Man*p*NAc-(1→4)-α-D-Gal*p*
1
↓
4
→3)-β-D-Gal*p*NAc-(1→3)-β-D-Gal*p*-(1→

Carbohydr. Res. **1997**, *301*, 213

The structure of the capsular polysaccharide from a swarming strain of pathogenic *Proteus vulgaris*

M. Mahbubur Rahman [a], Jean Guard-Petter [b], Kokilla Asokan [a], Russell W. Carlson [a,*]

[a] *Complex Carbohydrate Research Center, University of Georgia, 220 Riverbend Road, Athens, GA 30602, USA*

[b] *United States Department of Agriculture, Agricultural Research Service, Southeast Poultry Research Laboratory, 934 College Station Road, Athens, GA 30605, USA*

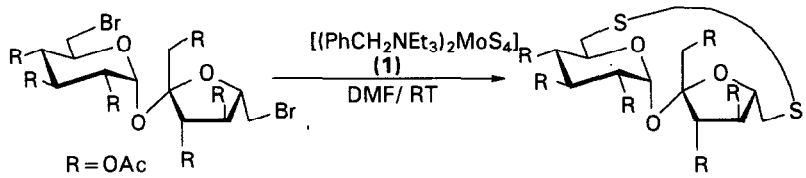
The structure was determined for the capsular polysaccharide (CPS) from a swarming strain of *Proteus vulgaris*, CP2-96 obtained from the spleen of an infected mouse. The CPS was extracted with hot water, precipitated with ethanol, and purified by gel permeation chromatography. The following structure was established by glycosyl composition and linkage analyses, and NMR spectroscopy:

→ 4)-β-D-Glc *p*-(1 → 3)-β-D-4-OAc-Gal*p*NAc-(1 → 2)-α-D-Glc *p*-(1 → 4)-α-D-Glc *p*A-(1 →

Carbohydr. Res. **1997**, *301*, 221

A simple synthesis of sugar disulfides using tetrathiomolybdate as a sulfur-transfer reagent

Debjani Bhar, Srinivasan Chandrasekaran *
Department of Organic Chemistry, Indian Institute of Science, Bangalore 560 012, India



Carbohydr. Res. **1997**, *301*, 225

Synthesis of iodobenzylidene and iodoethylidene acetals of D-glucose

Marie-Dominique Desruet, Christophe Morin *, Lionel Ogier
Laboratoire de Chimie Organique, LEDSS, UMR CNRS 5616, Université Joseph Fourier–Grenoble I, F-38402 Grenoble, France

These two iodinated acetals have been prepared towards studies of the transport of D-glucose by SPECT.