Graphical Abstracts

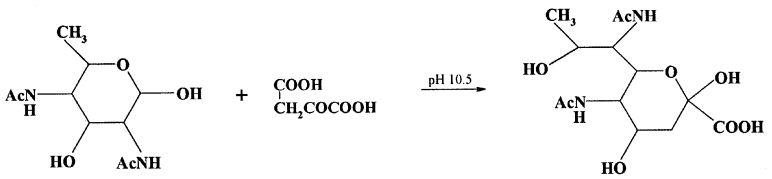
Synthesis and NMR spectroscopy of nine stereoisomeric 5,7-diacetamido-3,5,7,9-tetradeoxynon-2-ulosonic acids

Carbohydr. Res. **2001,** *335*, 221

Yury E. Tsvetkov,[a] Alexander S. Shashkov,[a] Yuriy A. Knirel,[a] Ulrich Zähringer[b]

[a]*N.D. Zelinsky Institute of Organic Chemistry, Russian Academy of Sciences, Leninsky Prospeckt 47, 119991 Moscow, Russian Federation*

[b]*Forschungszentrum Borstel, Zentrum für Medizin und Biowissenschaften, Parkallee 22, D-23845 Borstel, Germany*

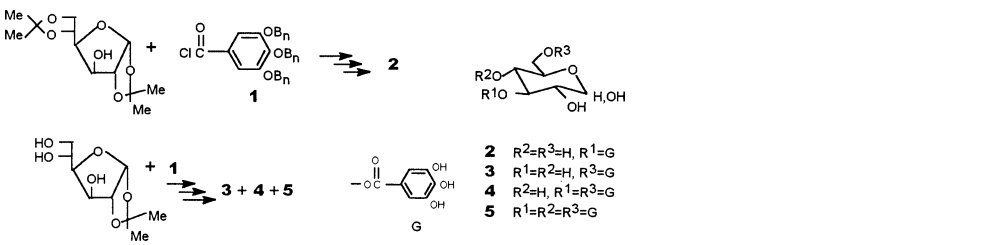


Synthesis of gallotannins

Carbohydr. Res. **2001,** *335*, 245

Qiang He, Bi Shi, Kai Yao, Yi Luo, Zhihong Ma

The Key Laboratory of Leather Chemistry and Engineering of Ministry of Education, Sichuan University, Chengdu 610065, P.R. China



A rapid and sensitive procedure for determination of 5-*N*-acetyl neuraminic acid in lipopolysaccharides of *Haemophilus influenzae*: a survey of 24 non-typeable *H. influenzae* strains

Carbohydr. Res. **2001,** *335*, 251

Sebastian H.J. Bauer,[a] Martin Månsson,[a] Derek W. Hood,[b] James C. Richards,[c] E. Richard Moxon,[b] Elke K.H. Schweda[a]

[a]*Clinical Research Centre, Karolinska Institutet and University College of South Stockholm, NOVUM, S-141 86 Huddinge, Sweden*

[b]*Molecular Infectious Diseases Group and Department of Paediatrics, Institute for Molecular Medicine, John Radcliffe Hospital, Headington, Oxford 0X3 9DS, UK*

[c]*Institute for Biological Sciences, National Research Council of Canada, Ottawa, Ont., Canada K1A OR6*

A sensitive method for the determination of 5-*N*-acetyl neuraminic acid levels in lipopolysaccharides is described and applied to 24 different non-typeable *Haemophilus influenzae* strains.

Modeling of deoxy- and dideoxyaldohexopyranosyl ring puckering with MM3(92)

Carbohydr. Res. **2001,** *335*, 261

William M. Rockey,[a] Michael K. Dowd,[b] Peter J. Reilly,[a] Alfred D. French[b]

[a]*Department of Chemical Engineering, Iowa State University, Ames, IA 50011, USA*

[b]*Southern Regional Research Center, U.S. Department of Agriculture, New Orleans, LA 70179, USA*

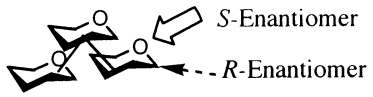
MM3(92) molecular modeling of seven deoxy- and dideoxyaldohexopyranoses allowed assignment of conformational ring forms, and the computed proton–proton coupling constants in general agreed with the experimental values.

Carbohydr. Res. **2001,** *335*, 275

Combinatorial evaluation of the chiral discrimination of permethylated carbohydrates using fast-atom bombardment mass spectrometry

Motohiro Shizuma,[a] Hiroshi Adachi,[b] Yoshio Takai,[c] Masayuki Hayashi,[d] Jyuichi Tanaka,[d] Tokuji Takeda,[a] Masami Sawada[c]

[a]*Osaka Municipal Technical Research Institute, 1-6-50 Morinomiya, Joto-ku, Osaka 536-8553, Japan*
[b]*Faculty of Science, Osaka University, 1-1 Machikaneyama, Toyonaka, Osaka 560-0043, Japan*
[c]*Materials Analysis Center, The Institute of Scientific and Industrial Research, Osaka University, 8-1 Mihogaoka, Ibaraki, Osaka 567-0047, Japan*
[d]*Faculty of Engineering, Osaka Institute of Technology, 16-1 Omiyama 5-chome, Asahi-ku, Osaka 535-0002, Japan*



The chiral discrimination abilities of many and various permethylated carbohydrates toward various amino acid ester salts was combinatorially evaluated using FAB mass spectrometry.

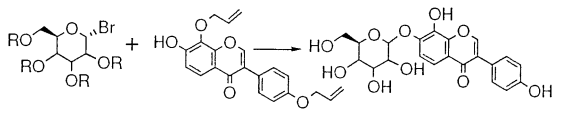
Carbohydr. Res. **2001,** *335*, 283

Synthesis and biological activity of 4′,8-dihydroxyisoflavon-7-yl D-hexopyranosides

Yukiko Watanabe, Masao Shiozaki, Reiko Kamegai

Exploratory Chemistry Research Laboratories, Sankyo Co., Ltd., Hiromachi 1-2-58, Shinagawa-ku, Tokyo 140-8710, Japan

4′,8-Dihydroxyisoflavon-7-yl hexopyranosides were synthesized by the glucosidation of O-protected α-D-hexopyranosyl bromides and 4′,8-diallyloxy-7-hydroxyisoflavone, and successive deprotection of hydroxy groups. Their biological activities toward rat liver α-glucosidase were much less than that of A-76202.

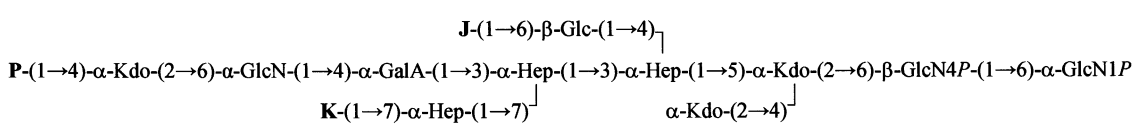


Carbohydr. Res. **2001,** *335*, 291

Structural analysis of the core region of the lipopolysaccharides from eight serotypes of *Klebsiella pneumoniae*

Evgeny Vinogradov, Malcolm B. Perry

Institute for Biological Sciences, National Research Council, 100 Sussex Drive, Ottawa, Ont., Canada K1A 0R6



where **P** is H or α-Hep, **J**, **K** is H or β-GalA. Additional phosphate present in various amounts.

Carbohydr. Res. **2001,** *335*, 297

A water-soluble galactomannan from the seeds of *Phoenix dactylifera* L.

Omar Ishrud, Muhammad Zahid, Hui Zhou, Yuanjiang Pan

Department of Chemistry, Zhejiang University, Hangzhou, 310027, China

The structure of a water-soluble galactomannan from the seeds of dates has been investigated and shown to contain a backbone of (1→4)-β-D-mannopyranosyl residues, along with a single (1→4)-α-D-galactopyranosyl residue.