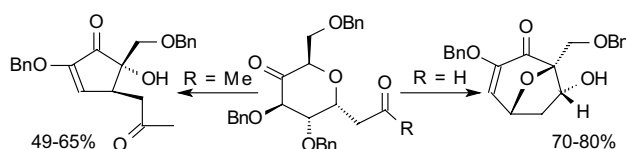


Contents

FULL PAPERS

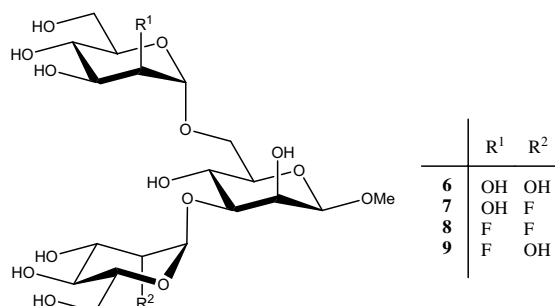
- Intramolecular aldol cyclization of C-4-ulopyranosyl-2'-oxoalkanes controlled by steric effects.** pp 2475–2485
Asymmetric synthesis of substituted 8-oxabicyclo[3.2.1]octanones and -octenones and cyclopentenones

Wei Zou,* Huawu Shao and Shih-Hsiung Wu



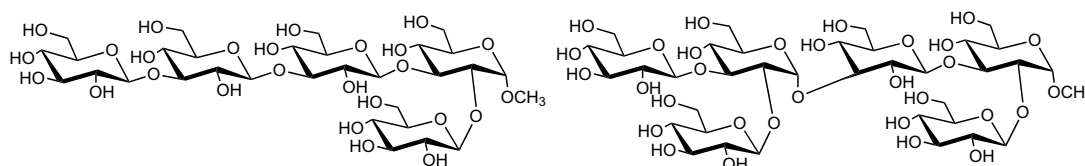
- The synthesis of a series of modified mannotrisaccharides as probes of the enzymes involved in the early stages of mammalian complex N-glycan formation** pp 2487–2497

Chris A. Tarling and Stephen G. Withers*



- Synthesis of an α -linked dimer of the trisaccharide repeating unit of the exopolysaccharide produced by *Pediococcus damnosus* 2.6** pp 2499–2506

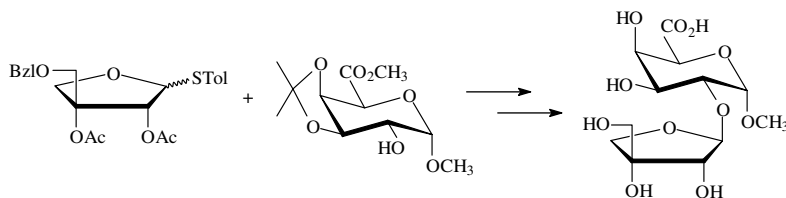
Aixiao Li and Fanzuo Kong*



Synthesis of a disaccharide fragment of rhamnogalacturonan II

pp 2507–2513

Magali A. J. Buffet, Jamie R. Rich, Robert S. McGavin and Kerry B. Reimer*

**Preparation of low-molecular-weight and high-sulfate-content chitosans under microwave radiation and their potential antioxidant activity in vitro**

pp 2515–2519

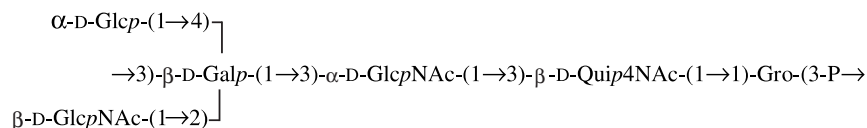
Rong Xing, Song Liu, Huahua Yu, Quanbin Zhang, Zhien Li and Pengcheng Li*

Preparation of low-molecular-weight and high-sulfate-content chitosans under microwave radiation and their in vitro antioxidant activity are reported.

The O-acetylation patterns in the O-antigens of *Hafnia alvei* strains PCM 1200 and 1203, serologically closely related to PCM 1205

pp 2521–2527

Semiha Dag, Tomasz Niedziela, Monika Dzieciatkowska, Jolanta Lukasiewicz, Wojciech Jachymek, Czesław Lugowski and Lennart Kenne*

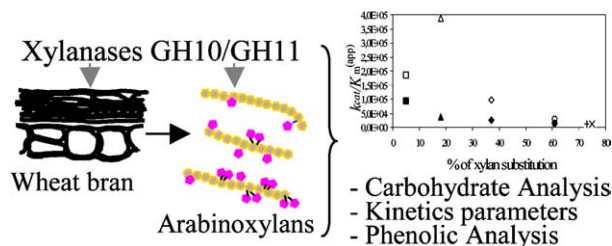


Strain PCM 1200 is O-acetylated at O-3 of the terminal β -D-GlcpNAc group and strain PCM 1203 at O-3 of the terminal β -D-GlcpNAc group and at O-6 of the chain α -D-GlcpNAc residue.

Impact and efficiency of GH10 and GH11 thermostable endoxylanases on wheat bran and alkali-extractable arabinoxylans

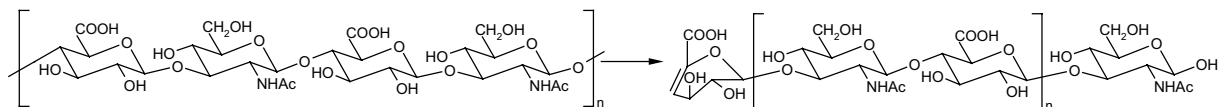
pp 2529–2540

Johnny Beaugrand, Gérard Chambat, Vicky W. K. Wong, Florence Goubet, Caroline Rémond, Gabriel Paës, Samina Benamrouche, Philippe Debeire, Michael O'Donohue and Brigitte Chabbert*



Complementary exploration of the action pattern of hyaluronate lyase from *Streptococcus agalactiae* using capillary electrophoresis, gel-permeation chromatography and viscosimetric measurements pp 2541–2547

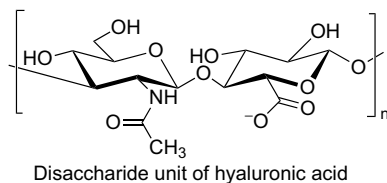
Andrea V. Kühn, Jörg-H. Ozegowski, Gundela Peschel and Reinhard H. H. Neubert*



Metal-ion environment in solid Mn(II), Co(II) and Ni(II) hyaluronates

pp 2549–2554

Elizabeta Tratar Pirc,* Iztok Arčon, Alojz Kodre and Peter Bukovec



Purification, structure and immunobiological activity of an arabinan-rich pectic polysaccharide from the cell walls of *Prunus dulcis* seeds

pp 2555–2566

Fernando Dourado, Pedro Madureira, Vera Carvalho, Ricardo Coelho, Manuel A. Coimbra, Manuel Vilanova, Manuel Mota and Francisco M. Gama*

A polysaccharide isolated from the cell walls of *Prunus dulcis* was studied for its structure and bioactivity. It was shown to be a highly branched arabinan-rich pectin, with arabinosyl linkages T-Araf:(1→5)-Araf:(1→3,5)-Araf:(1→2,3,5)-Araf in the relative proportions 3:2:1:1. This polysaccharide induces a murine lymphocyte stimulatory effect, especially on B-cells.

Correlation of structure to antitumor activities of five derivatives of a β-glucan from *Poria cocos* sclerotium

pp 2567–2574

Yifeng Wang, Lina Zhang,* Yunqiao Li, Xiaohua Hou and Fanbo Zeng

The M_w values and chain stiffness of five derivatives of a β-glucan from *Poria cocos* sclerotium in PBS solution were determined by SEC-LLS. The derivatives all exhibited better antitumor activities than native β-glucan. Good water solubility, relatively high chain stiffness and moderate molecular mass of the derivatives are beneficial to enhancement of the antitumor activity.

The system of galactans of the red seaweed, *Kappaphycus alvarezii*, with emphasis on its minor constituents

pp 2575–2592

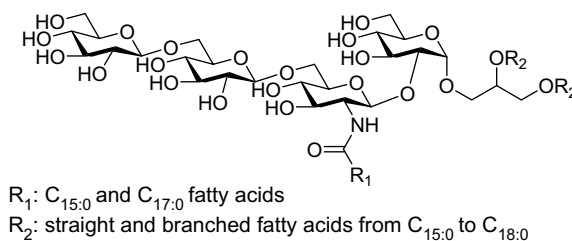
José M. Estevez, Marina Ciancia and Alberto S. Cerezo*

The hot-water extract from *Kappaphycus alvarezii* is composed of 74% of κ -carrageenans, 3% of μ -carrageenans, and 14% of sulfated agarans and DL-hybrid galactans with significant amounts of single stubs. The great tendency to retain Ca^{2+} and Mg^{2+} was studied.

Structure of a major glycolipid from *Thermus oshimai* NTU-063

pp 2593–2598

Tzu-Li Lu, Chien-Sheng Chen, Feng-Ling Yang, Jim-Min Fung, Mao-Yen Chen, San-San Tsay, Jianjun Li, Wei Zou and Shih-Hsiung Wu*

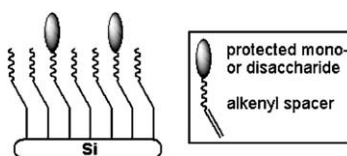


NOTES

Syntheses of alkenylated carbohydrate derivatives toward the preparation of monolayers on silicon surfaces

pp 2599–2605

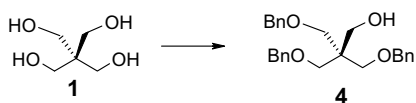
Louis C. P. M. de Smet, Aliaksei V. Pukin, Gerrit A. Stork, C. H. Ric de Vos, Gerben M. Visser,* Han Zuilhof and Ernst J. R. Sudhölter



Syntheses of monohydroxy benzyl ethers of polyols: tri-*O*-benzylpentaerythritol and other highly benzylated derivatives of symmetrical polyols

pp 2607–2610

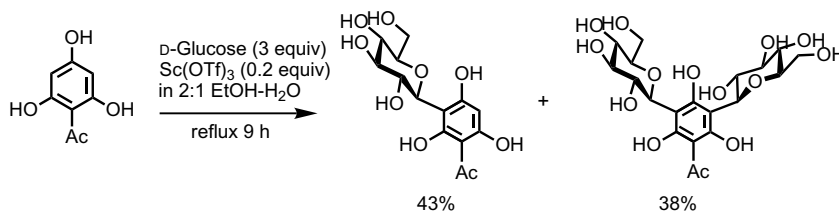
Hussein Al-Mughaid and T. Bruce Grindley*



Environmentally friendly C-glycosylation of phloracetophenone with unprotected D-glucose using scandium(III) trifluoromethanesulfonate in aqueous media: key compounds for the syntheses of mono- and di-C-glucosylflavonoids

pp 2611–2614

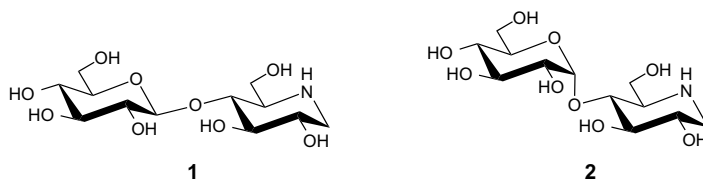
Shingo Sato,* Toshiki Akiya, Toshiyuki Suzuki and Jun-ichi Onodera



Simple syntheses of 4-O-glucosylated 1-deoxynojirimycins from maltose and cellobiose

pp 2615–2619

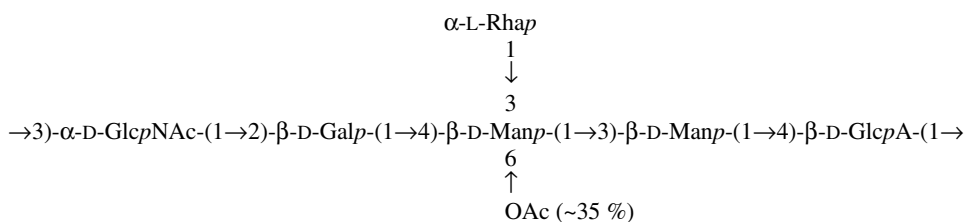
Andreas J. Steiner and Arnold E. Stütz*



The structure of the O-polysaccharide from the lipopolysaccharide of *Providencia stuartii* O47

pp 2621–2626

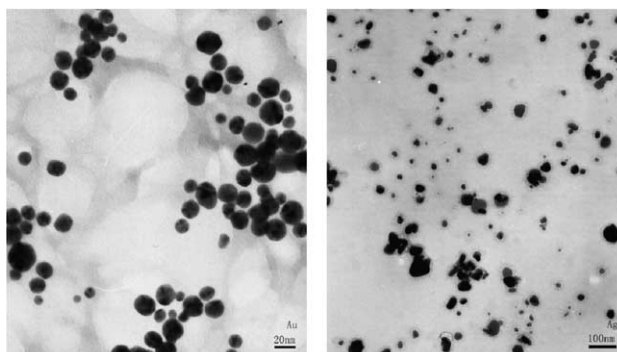
Olga G. Ovchinnikova,* Nina A. Kocharova, Leon V. Bakinovskiy, Agnieszka Torzewska, Alexander S. Shashkov, Yuriy A. Knirel and Antoni Rozalski



Synthesis of polysaccharide-stabilized gold and silver nanoparticles: a green method

pp 2627–2631

Haizhen Huang and Xiurong Yang*

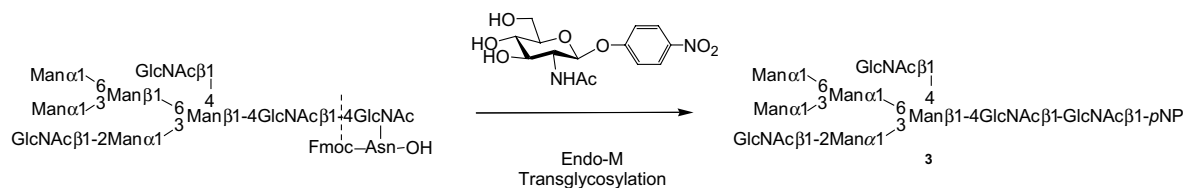


A simple, green method was developed for the synthesis of gold and silver nanoparticles by using polysaccharides as reducing/stabilizing agents.

***Mucor hiemalis* endo- β -N-acetylglucosaminidase can transglycosylate a bisecting hybrid-type oligosaccharide from an ovalbumin glycopeptide**

pp 2633–2635

Kenji Osumi, Yoshitaka Makino, Eri Akaike, Takashi Yamanoi,* Mamoru Mizuno, Midori Noguchi, Toshiyuki Inazu, Kenji Yamamoto and Kiyotaka Fujita



*Corresponding author

COVER

Well-defined glycoforms of glycoproteins can easily be obtained by oxidative coupling of synthetic thioaldoses with proteins that have a cysteine moiety in lieu of an asparagine residue carrying natural N-linked oligosaccharides. In vitro glycosylation offers several advantages such as quantitative conjugation, incorporation of oligosaccharides that display high bioactivities and the possibility of using convenient bacterial or yeast protein expression systems. The figure is related to Geert-Jan Boons' *Carbohydrate Research Award* paper, *Carbohydr. Res.*, **2004**, 339, 181–193.



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