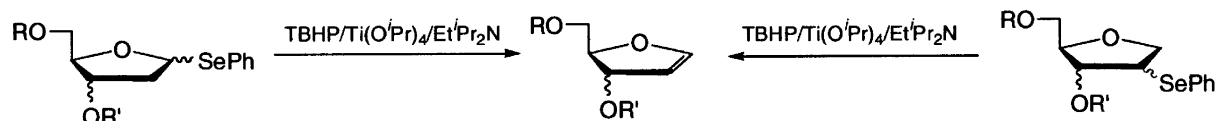


### Synthesis of erythro and threo furanoid glycals from 1- and 2-phenylselenenyl-carbohydrate derivatives

*Carbohydr. Res.* **2001**, *336*, 83

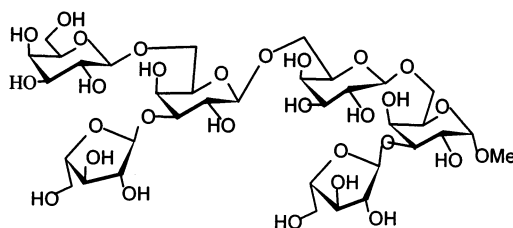
Fernando Bravo, Mohamed Kassou, Yolanda Díaz, Sergio Castellón

*Departament de Química Analítica i Química Orgànica, Universitat Rovira i Virgili, Pça. Imperial Tàrraco 1, E-43005 Tarragona, Spain*


### Synthesis of a hexasaccharide that relates to the arabinogalactan epitope

*Carbohydr. Res.* **2001**, *336*, 99

Guofeng Gu, Feng Yang, Yuguo Du, Fanzuo Kong

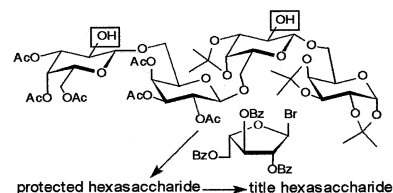
*Research Center for Eco-Environmental Sciences, Academia Sinica, PO Box 2871, Beijing 100085, PR China*


### Synthesis of the $\alpha$ -L-Araf-(1 $\rightarrow$ 2)- $\beta$ -D-Galp-(1 $\rightarrow$ 6)- $\beta$ -D-Galp-(1 $\rightarrow$ 6)-[ $\alpha$ -L-Araf-(1 $\rightarrow$ 2)]- $\beta$ -D-Galp-(1 $\rightarrow$ 6)-D-Gal hexasaccharide as a possible repeating unit of the cell-cultured exudates of *Echinacea purpurea* arabinogalactan

*Carbohydr. Res.* **2001**, *336*, 107

 Magdolna Csávás,<sup>a</sup> Anikó Borbás,<sup>a</sup> Lóránt Jánosy,<sup>b</sup> Gyula Batta,<sup>c</sup> András Lipták<sup>a,b</sup>
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### Enzymatically and chemically de-esterified lime pectins: characterisation, polyelectrolyte behaviour and calcium binding properties

*Carbohydr. Res.* **2001**, *336*, 117

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<sup>b</sup>Danisco Cultor, Edwin Rahrs Vej 38, DK-8220 Braband, Denmark

Pectins with different levels and patterns of methyl esterification were produced. The  $pK_a$  values depend on the methylesterification but a value of  $2.90 \pm 0.15$  was estimated for  $pK_0$ . Calcium binding was measured and a dimerisation for pectins with a blockwise distribution of carboxyl groups is hypothesised.

**Chemical modifications of the (1 → 3)- $\alpha$ -D-glucan from spores of *Ganoderma lucidum* and investigation of their physicochemical properties and immunological activity**

*Carbohydr. Res.* **2001**, 336, 127

Xingfeng Bao, Jinyou Duan, Xuya Fang, Jinian Fang

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Six different functionalized derivatives of the (1 → 3)- $\alpha$ -D-glucan from spores of *Ganoderma lucidum* with varying degrees of substitution were synthesized and investigated concerning their structural features, physicochemical properties, and immunological activity.

**An orthorhombic crystal form of cyclohexaicosaoase, CA26·32.59 H<sub>2</sub>O: comparison with the triclinic form**

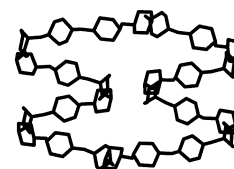
*Carbohydr. Res.* **2001**, 336, 141

Olaf Nimz,<sup>a</sup> Katrin Geßler,<sup>b</sup> Isabel Usón,<sup>c</sup> Wolfram Saenger<sup>a</sup>

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<sup>b</sup>*Xerox GmbH, Vor dem Lauch 15, D-70567 Stuttgart, Germany*

<sup>c</sup>*Institut für Anorganische Chemie, Universität Göttingen, Tammannstrasse 4, D-37077 Göttingen, Germany*



Hydrated CA26 molecules are folded like figure “8” with two short V-amylose helices linked by four-glucose segments showing band-flip motifs. The  $\sim 5$  Å wide channels in the helices are filled by disordered water molecules stabilized by C–H $\cdots$ O<sub>w</sub> contacts.

**A fucoidan fraction from *Ascophyllum nodosum***

*Carbohydr. Res.* **2001**, 336, 155

Marie-France Marais, Jean-Paul Joseleau

*Centre de Recherches sur les Macromolécules Végétales (CERMAV-CNRS, UPR 5301 and Université Joseph Fourier), BP 53, F-38041 Grenoble, France*

A fraction purified from an acidic aqueous extract from *Ascophyllum nodosum* was characterized as sulfated fucoidan highly branched with single and oligofucosyl side-chains.