

## Bibliography of carbohydrate polymers

(5 weeks journals. Search completed at 3rd. Dec. 2003)

### 1. Books, reviews & symposia

- Hoover R, Zhou Y// Mem Univ Newfoundland, Dept Biochem, St John's, Newfoundland, Canada A1B 3X9  
*Carbohydr Polym* 2003 **54** (4) 401  
*In vitro* and *in vivo* hydrolysis of legume starches by  $\alpha$ -amylase and resistant starch formation in legumes - a review
- Tolstoguzov V// Nestle Res Ctr, Dept Food Sci, Route Vevey 47, CH-1009 Pully, Switzerland  
*Carbohydr Polym* 2003 **54** (3) 271  
Thermodynamic considerations on polysaccharide functions. Polysaccharides came first

### 2. Cellulose

- Dias GJ, Peplow PV, Teixeira F// Univ Otago, Dept Anat & Struct Biol, POB 913, Dunedin, New Zealand  
*J Mater Sci-Mater Med* 2003 **14** (9) 739  
Osseous regeneration in the presence of oxidized cellulose and collagen
- Methacanon P, Chaikumpollert O, Thavorniti P, Suchiva K// Nat Metal & Mater Technol Ctr, 114 Paholyothin Rd, Klong 1, Klong Luang, TH-12120 Pathumthani, Thailand  
*Carbohydr Polym* 2003 **54** (3) 335  
Hemicellulosic polymer from vetiver grass and its physicochemical properties
- Sasaki M, Adschiri T, Arai K// Kumamoto Univ, Dept Appl Chem & Biochem, 2-39-1 Kurokami, Kumamoto 860 8555, Japan  
*J Agric Food Chem* 2003 **51** (18) 5376  
Production of cellulose II from native cellulose by near- and supercritical water solubilization
- Tarvainen M, Sutinen R, Peltonen S, Mikkonen H, Maunus J, Vaha-Heikkilä K, Lehto VP, Paronen P// Univ Kuopio, Dept Pharmaceut, POB 1627, FI-70211 Kuopio, Finland  
*Eur J Pharm Sci* 2003 **19** (5) 363  
Enhanced film-forming properties for ethyl cellulose and starch acetate using *n*-alkenyl succinic anhydrides as novel plasticizers

### 3. Cellulose-degrading enzymes

- Lee SJ, Altaner C, Puls J, Saake B// \*Fed Res Ctr Forestry & Forest Prod, Inst Wood Chem & Chemical Technol Wood, DE-21031 Hamburg, Germany  
*Carbohydr Polym* 2003 **54** (3) 353  
Determination of the substituent distribution along cellulose acetate chains as revealed by enzymatic and chemical methods

### 4. Chitin/Chitosan

- Denkbass EB, Ozturk E, Ozdemir N, Kececi K, Ergun MA// Univ Hacettepe, Div Biochem, Dept Chem, TR-06100 Ankara, Turkey  
*J Bioact Compat Polym* 2003 **18** (3) 177  
EGF loaded chitosan sponges as wound dressing material
- Filipovic-Grcic J, Perissutti B, Moneghini M, Voinovich D, Martinac A, Jalsenjak I// Univ Zagreb, Fac Pharm & Biochem, Dept Pharmaceut, A Kovacica 1, HR-10000 Zagreb, Croatia  
*J Pharm Pharmacol* 2003 **55** (7) 921

Spray-dried carbamazepine-loaded chitosan and HPMC microspheres: Preparation and characterisation

- Harish Prashanth KV, Tharanathan RN// \*Central Food Technol Res Inst, Dept Biochem & Nutr, IN-570013 Mysore, India  
*Carbohydr Polym* 2003 **54** (3) 343  
Studies on graft copolymerization of chitosan with synthetic monomers
- Jiang X, Chen L, Zhong W// \*Fudan Univ, Dept Macromol Sci, Key Lab Mol Engn Polymers, CN-200433 Shanghai, Peoples Rep China  
*Carbohydr Polym* 2003 **54** (4) 457  
A new linear potentiometric titration method for the determination of deacetylation degree of chitosan
- Kuroiwa T, Ichikawa S, Sato S, Mukataka S// \*Univ Tsukuba, Inst Appl Biochem, 1-1-1 Tennodai, Tsukuba, Ibaraki 305 8572, Japan  
*Biotechnol Bioeng* 2003 **84** (1) 121  
Improvement of the yield of physiologically active oligosaccharides in continuous hydrolysis of chitosan using immobilized chitosanases
- Murakami R, Takashima R// Sojo Univ, Dept Appl Chem, Ikeda 4-22-1, Kumamoto 860-0082, Japan  
*Food Hydrocolloid* 2003 **17** (6) 885  
Mechanical properties of the capsules of chitosan-soy globulin polyelectrolyte complex
- No HK, Lee KS, Kim ID, Park MJ, Kim SD, Meyers SP// Catholic Univ Daegu, Dept Food Sci & Technol, Hayang 712 702, South Korea  
*J Food Sci* 2003 **68** (2) 680  
Chitosan treatment affects yield, ascorbic acid content, and hardness of soybean sprouts
- Park PJ, Je JY, Kim SK// \*Pukyong Natl Univ, Dept Chem, Pusan 608 737, South Korea  
*J Agric Food Chem* 2003 **51** (17) 4930  
Angiotensin I converting enzyme (ACE) inhibitory activity of hetero-chitooligosaccharides prepared from partially different deacetylated chitosans
- Romoren K, Pedersen S, Smistad G, Evensen O, Thu BJ// Univ Oslo Sch Pharm, Dept Pharmaceut, POB 1068, NO-0316 Oslo, Norway  
*Int J Pharm* 2003 **261** (1-2) 115  
The influence of formulation variables on *in vitro* transfection efficiency and physicochemical properties of chitosan-based polyplexes
- Sakkinen M, Tuononen T, Jurjenson H, Veski P, Marvola M// Univ Helsinki, Dept Pharm, Div Biopharmaceut & Pharmacokinetics, POB 56, FI-00014 Helsinki, Finland  
*Eur J Pharm Sci* 2003 **19** (5) 345  
Evaluation of microcrystalline chitosans for gastro-retentive drug delivery
- Surini S, Akiyama H, Morishita M\*, Nagai T, Takayama K// \*Hoshi Univ, Dept Pharmaceut, Ebara 2-4-41, Tokyo 142 8501, Japan  
*J Controlled Release* 2003 **90** (3) 291  
Release phenomena of insulin from an implantable device composed of a polyion complex of chitosan and sodium hyaluronate
- Suzuki Y, Miyatake K, Okamoto Y, Muraki E, Minami S// \*Tottori Univ, Fac Agr, Dept Vet Surg, 4-101 Koyama-minami, Tottori 680-8553, Japan  
*Carbohydr Polym* 2003 **54** (4) 465  
Influence of the chain length of chitosan on complement activation
- Tan TW, Hu B, Jin XH, Zhang M// Beijing Univ Chem Technol, Bioproc Key Lab Beijing, CN-100029 Beijing, Peoples Rep China  
*J Bioact Compat Polym* 2003 **18** (3) 207  
Release behavior of ketoprofen from chitosan/alginate microcapsules
- Twu YK, Huang HI, Chang SY, Wang SL// Da-Yeh Univ, Dept Bioindust

As a service to subscribers of the journal, this bibliography contains newly published material in the field of carbohydrate polymers. The bibliography is divided into thirteen sections: 1 Books, reviews & symposia; 2 Cellulose; 3 Cellulose-degrading enzymes; 4 Chitin/Chitosan; 5 Cyclodextrins; 6 Lignin; 7 Lipopolysaccharides; 8 Pectin; 9 Starch; 10 Starch-degrading enzymes; 11 Polysaccharides - Microbial; 12 Polysaccharides - Plant; 13 Polysaccharides - Other. Within each section, articles are listed in alphabetical order with respect to author. When there are no publications to appear under one of these headings, that section will be omitted.

Technol, Da-Tsuen, Chang-Hwa 51505, Taiwan

*Carbohydr Polym* 2003 **54** (4) 425

Preparation and sorption activity of chitosan/cellulose blend beads

Tyan YC, Liao JD, Lin SP// Natl Cheng Kung Univ, Coll Med, Dept Environm & Occupat Hlth, 1 Univ Rd, Tainan 70101, Taiwan

*J Mater Sci Mater Med* 2003 **14** (9) 775

Surface properties and *in vitro* analyses of immobilized chitosan onto polypropylene nonwoven fabric surface using antenna-coupling microwave plasma

Vold IMN, Varum KM\*, Guibal E, Smidsrod O// \*Norwegian Univ Sci & Technol, Dept Biotechnol, Norwegian Biopolym Lab, Sem Soelands vei 6/8, NO-7491 Trondheim, Norway

*Carbohydr Polym* 2003 **54** (4) 471

Binding of ions to chitosan: Selectivity studies

Yi HM, Wu LQ, Sumner JJ, Gillespie JB, Payne GF, Bentley WE\*// \*Univ Maryland, Inst Biotechnol, Ctr Biosyst Res, 5115 Plant Sci Bldg, College Park, Md 20742, USA

*Biotechnol Bioeng* 2003 **83** (6) 646

Chitosan scaffolds for biomolecular assembly: Coupling nucleic acid probes for detecting hybridization

Yilmaz E, Bengisu M// Eastern Med Univ, Dept Chem, via Mersin 10, Fama-gusta TRNC, Turkey

*Carbohydr Polym* 2003 **54** (4) 479

Preparation and characterization of physical gels and beads from chitin solutions

Zheng LY, Zhu JF// Zhejiang Univ, Dept Chem & Biochem Engr, CN-310027 Hangzhou, Peoples Rep China

*Carbohydr Polym* 2003 **54** (4) 527

Study on antimicrobial activity of chitosan with different molecular weights

## 5. Cyclodextrins

Debouzy JC, Gadelle A, Paillet JY, Fusai T, Dabouis V, Pradines B, Fauvelle F, Crouzier D// CRSSA, Unite BCM, 24 Ave Maquis du Gresivaudan, FR-38702 La Tronche, France

*STP Pharma Sciences* 2003 **13** (3) 209

*In vitro* cellular toxicity and *in vivo* lethality studies of alkylated  $\alpha$ -anhydro cyclodextrins

Li SL, Vigh G\*// \*Texas A&M Univ, Dept Chem, POB 30012, College Station, Tx 77842, USA

*Electrophoresis* 2003 **24** (15) 2487

Synthesis, analytical characterization and initial capillary electrophoretic use in acidic background electrolytes of a new, single-isomer chiral resolving agent: Hexakis(2,3-di-O-acetyl-6-O-sulfo)- $\alpha$ -cyclodextrin

Liu Y, Li L, Zhang HY, Liang P, Wang H// Nankai Univ, State Key Lab Elementoorgan Chem, Dept Chem, Weijin Rd 94, CN-300071 Tianjin, Peoples Rep China

*Carbohydr Res* 2003 **338** (17) 1751

Inclusion complexation behavior of dyestuff guest molecules by a bridged bis(cyclomaltoheptaose)[bis( $\beta$ -cyclodextrin)] with a pyromellitic acid diamide tether

Martins RF, Plieva FM, Santos A, Hatti-Kaul R\*// \*Lund Univ, Dept Biotechnol, Ctr Chem & Chem Engr, POB 124, SE-22100 Lund, Sweden

*Biotechnol Lett* 2003 **25** (18) 1537

Integrated immobilized cell reactor-adsorption system for  $\beta$ -cyclodextrin production: A model study using PVA-cryogel entrapped *Bacillus agaradhaerens* cells

Rudaz S, Calleri E, Geiser L, Cherkaoui S, Prat J, Veuthey JL// Univ Geneva, Sch Pharm, Lab Pharmaceut Analyt Chem, 20 Blvd Yvoy, CH-1211 Geneva 4, Switzerland

*Electrophoresis* 2003 **24** (15) 2633

Infinite enantiomeric resolution of basic compounds using highly sulfated cyclodextrin as chiral selector in capillary electrophoresis

## 7. Lipopolysaccharides

Bystrova OV, Lindner B, Moll H, Kocharova NA, Knirel YA\*, Zahringer U, Pier GB// \*Russian Acad Sci, ND Zelinskii Organ Chem Inst, RU-119991 Moscow, Russia

*Carbohydr Res* 2003 **338** (17) 1801

Structure of the biological repeating unit of the O-antigen of *Pseudomonas aeruginosa* immunotype 4 containing both 2-acetamido-2,6-dideoxy-D-glucose and 2-acetamido-2,6-dideoxy-D-galactose

## 8. Pectin

Cardoso SM, Coimbra MA, Lopes da Silva JA// Univ Aveiro, Dept Quim,

PT-3810-193 Aveiro, Portugal

*Food Hydrocolloid* 2003 **17** (6) 801

Temperature dependence of the formation and melting of pectin-Ca<sup>2+</sup> networks: A rheological study

Gilsenan PM, Richardson RK, Morris ER\*// \*Univ Coll Cork, Dept Food & Nutr Sci, Cork, Rep Ireland

*Food Hydrocolloid* 2003 **17** (6) 723

Associative and segregative interactions between gelatin and low-methoxy pectin: Part 1. Associative interactions in the absence of Ca<sup>2+</sup>

Gilsenan PM, Richardson RK, Morris ER\*// \*Address as above

*Food Hydrocolloid* 2003 **17** (6) 739

Associative and segregative interactions between gelatin and low-methoxy pectin: Part 2. Co-gelation in the presence of Ca<sup>2+</sup>

Gilsenan PM, Richardson RK, Morris ER\*// \*Address as above

*Food Hydrocolloid* 2003 **17** (6) 751

Associative and segregative interactions between gelatin and low-methoxy pectin. Part 3. Quantitative analysis of co-gel moduli

Naidu GSN, Panda T\*// \*Indian Inst Technol, Dept Chem Engr, Biotechnol Res Ctr, IN-600036 Madras, India

*Biochem Eng J* 2003 **16** (1) 57

Studies on pH and thermal deactivation of pectolytic enzymes from *Aspergillus niger*

Wicker L, Ackerley JL, Hunter JL// Univ Georgia, Dept Food Sci & Technol, Physical Properties Grp, Athens, Ga 30602, USA

*Food Hydrocolloid* 2003 **17** (6) 809

Modification of pectin by pectinmethylesterase and the role in stability of juice beverages

## 9. Starch

Butler MF, Heppenstall-Butler M// Unilever R&D Colworth, Colworth House, Sharnbrook MK44 1LQ, England

*Food Hydrocolloid* 2003 **17** (6) 815

Phase separation in gelatin/dextran and gelatin/maltodextrin mixtures

Byars JA, Fanta GF, Felker FC// USDA/ARS, Cereal Prod & Food Sci Res Unit, Nat Ctr Agr Utilization Res, 1815 Nth Univ St, Peoria, IL 61604, USA

*Carbohydr Polym* 2003 **54** (3) 321

The effect of cooling conditions on jet-cooked normal corn starch dispersions

Chen Z, Schols HA, Voragen AGJ\*// \*Univ Wageningen & Res Ctr, Dept Agrotechnol & Food Sci, Food Chem Lab, Bomenweg 2, Wageningen, The Netherlands

*J Food Sci* 2003 **68** (2) 431

Physicochemical properties of starches obtained from three varieties of Chinese sweet potatoes

Chung HJ, Jeong HY, Lim ST\*// \*Korea Univ, Grad Sch Life Sci & Biotechnol, 5-1 Anam-dong, Sungbuk-ku, Seoul 136-701, South Korea

*Carbohydr Polym* 2003 **54** (4) 449

Effects of acid hydrolysis and defatting on crystallinity and pasting properties of freeze-thawed high amylose corn starch

Chung HJ, Lim ST\*// \*Address as above

*Food Hydrocolloid* 2003 **17** (6) 855

Physical aging of glassy normal and waxy rice starches: Effect of aging time on glass transition and enthalpy relaxation

El-Khayat GH, Samaan J, Brennan CS\*// \*Univ Plymouth, Fac Sci, Appl Food Res Grp, Seale Hayne Campus, Newton Abbot TQ12 6NQ, England

*Starch* 2003 **55** (8) 358

Evaluation of vitreous and starchy Syrian durum (*Triticum durum*) wheat grains: The effect of amylose content on starch characteristics and flour pasting properties

Genkina NK, Noda T, Koltisheva GI, Wasserman LA, Tester RF, Yuryev VP\*// \*Russian Acad Sci, Inst Biochem Phys, Kosygina Str 4, RU-117334 Moscow, Russia

*Starch* 2003 **55** (8) 350

Effects of growth temperature on some structural properties of crystalline lamellae in starches extracted from sweet potatoes (Sunnyred and Ayamurasaki)

Han TL, Kumar RN\*, Rozman HD, Noor MAM// \*Univ Sains Malaysia, Sch Ind Technol, MY-11800 Pulau Pinang, Malaysia

*Carbohydr Polym* 2003 **54** (4) 509

GMA grafted sago starch as a reactive component in ultra violet radiation curable coatings

Ji Y, Wong K, Hasjim J, Pollack LM, Duvick S, Jane J, White PJ\*// \*Iowa State Univ, Dept Food Sci & Human Nutr, 2312 Food Sci Bldg, Ames, Ia 50011, USA

*Carbohydr Polym* 2003 **54** (3) 305

Structure and function of starch from advanced generations of new corn lines

- Laurentin A, Cardenas M, Ruales J, Perez E, Tovar J\*// \*Cent Univ Venezuela, Inst Expt Biol, POB 47069, VE-1041-A Caracas, Venezuela  
*J Agric Food Chem* 2003 **51** (18) 5510  
 Preparation of indigestible pyrodextrins from different starch sources
- Leonel M, Sarmento SBS, Cereda MP// UNESP, Ctr Raizes Amidos Tropicais-CERAT, CP 237, Botucatu, SP, Brazil  
*Carbohydr Polym* 2003 **54** (3) 385  
 New starches for the food industry: *Curcuma longa* and *Curcuma zedoaria*
- Liu H, Eskin NAM\*, Cui SW// \*Univ Manitoba, Dept Human Nutr Sci, Winnipeg, Manitoba, Canada R3T 2N2  
*Food Hydrocolloid* 2003 **17** (6) 863  
 Interaction of wheat and rice starches with yellow mustard mucilage
- Noosuk P, Hill SE, Pradipasena P, Mitchell JR\*// \*Univ Nottingham, Sch Biosci, Div Food Sci, Sutton Bonnington Campus, Loughborough LE12 5RD, England  
*Starch* 2003 **55** (8) 337  
 Structure-viscosity relationships for Thai rice starches
- Perez OE, Haros M\*, Suarez C, Rosell CM// \*Consejo Super Invest Cient, Inst Agroquim & Tecnologia Alimentos, Lab Cereales, POB 73, ES-46100 Valencia, Spain  
*J Food Eng* 2003 **60** (3) 281  
 Effect of steeping time on the starch properties from ground whole corn
- Shamai K, Bianco-Peled H, Shimoni E\*// \*Technion-Israel Inst Technol, Dept Food Engn & Biotechnol, IL-32000 Haifa, Israel  
*Carbohydr Polym* 2003 **54** (3) 363  
 Polymorphism of resistant starch type III
- Tako M, Hizukuri S// Univ Ryukyus, Dept Biosci & Biotechnol, Nishihara, Okinawa 903 0213, Japan  
*Starch* 2003 **55** (8) 345  
 Rheological properties of wheat (Halberd) amylopectin
- Thitipraphunkul K, Uttapap D\*, Piyachomkwan K, Takeda Y// \*King Mongkut Univ Technol Thonburi, Sch Bioresources & Technol, Div Biochem Technol, 83 moo 8 Tha-kham, Bangkok, Thailand  
*Carbohydr Polym* 2003 **54** (4) 489  
 A comparative study of edible canna (*Canna edulis*) starch from different cultivars. Part II. Molecular structure of amylose and amylopectin
- Vaananen T, Ikonen T, Jokela K, Serimaa R\*, Pietila L, Pehu E// \*Univ Helsinki, Dept Phys Sci, Div X-ray Phys, PO Box 64, FI-00014 Helsinki, Finland  
*Carbohydr Polym* 2003 **54** (4) 499  
 X-ray scattering study on potato (*Solanum tuberosum* L.) cultivars during winter storage

## 10. Starch-degrading enzymes

- Kim SK, Kwak JE, Kim WK// Dankook Univ, Dept Food Sci & Nutr, San 8 Hannam dong, Yongsan gu, Seoul 140 714, South Korea  
*Starch* 2003 **55** (8) 366  
 A simple method for estimation of enzyme-resistant starch content
- Raviyan P, Tang JM, Rasco BA\*// \*Washington State Univ, Dept Food Sci & Human Nutr, Box 646376, Pullman, Wa 99164, USA  
*J Agric Food Chem* 2003 **51** (18) 5462  
 Thermal stability of  $\alpha$ -amylase from *Aspergillus oryzae* entrapped in polyacrylamide gel
- Soni SK, Kaur A, Gupta JK// Panjab Univ, Dept Microbiol, IN-160014 Chandigarh, India  
*Process Biochem* 2003 **39** (2) 185  
 A solid state fermentation based bacterial  $\alpha$ -amylase and fungal glucoamylase system and its suitability for the hydrolysis of wheat starch

## 11. Polysaccharides - Microbial

- Arias S, Del Moral A, Ferrer MR, Tallon R, Quesada E\*, Bejar V// \*Univ Granada, Fac Pharm, Dept Microbiol, Exopolysaccharide Res Grp, ES-18071 Granada, Spain  
*Extremophiles* 2003 **7** (4) 319  
 Mauran, an exopolysaccharide produced by the halophilic bacterium *Halomonas maura*, with a novel composition and interesting properties for biotechnology
- Chaitali M, Kapadi M, Suraishkumar GK\*, Gudi RD// \*Indian Inst Technol, Dept Chem Engn, Biochem Engn Grp, IN-400076 Bombay, India  
*Biotechnol Prog* 2003 **19** (4) 1190  
 Productivity improvement in xanthan gum fermentation using multiple substrate optimization
- Cordeiro LMC, Stocker-Worgotter E, Gorin PAJ, Iacomini M\*// \*Univ Fed Parana, Dept Bioquim, CP 19-046, BR-81531-990 Curitiba, Parana, Brazil

- Phytochemistry* 2003 **63** (8) 967  
 Comparative studies of the polysaccharides from species of the genus *Ramalina* - lichenized fungi - of three distinct habitats
- Francois NJ, Rojas AM, Daraio ME, Bernik DL\*// \*Univ Buenos Aires, Fac Ciencias Exactas & Nat, Inst Quim Fis Mat Ambiente & Energia, AR-1428 Buenos Aires, DF, Argentina  
*J Controlled Release* 2003 **90** (3) 355  
 Dynamic rheological measurements and drug release kinetics in swollen scleroglucan matrices
- Fuchigami M, Teramoto A// Okayama Prefectural Univ, Fac Hlth & Welfare Sci, Dept Nutr Sci, 111 Kuboki, Soja, Okayama 719-1197, Japan  
*Food Hydrocolloid* 2003 **17** (6) 895  
 Texture and structure of high-pressure-frozen gellan gum gel
- Huang Y, Tang J\*, Swanson BG, Rasco BA// \*Washington State Univ, Dept Biol Syst Engn, 213 LJ Smith Hall, Box 646120, Pullman, Wa 99164, USA  
*Carbohydr Polym* 2003 **54** (4) 517  
 Effect of calcium concentration on textural properties of high and low acyl mixed gellan gels
- Jin ZG, Chu CY, Robbins JB, Schneerson R// NIH/NICHD, Lab Dev & Mol Immun, Bldg 6, Rm 424, Bethesda, Md 20892, USA  
*Infect Immun* 2003 **71** (9) 5115  
 Preparation and characterization of group A meningococcal capsular polysaccharide conjugates and evaluation of their immunogenicity in mice
- Kai A, Kikawa M, Hatanaka K\*, Matsuzaki K, Mimura T, Kaneko Y// \*Univ Tokyo, Inst Ind Sci, Meguroko, Tokyo 153-8505, Japan  
*Carbohydr Polym* 2003 **54** (3) 381  
 Biosynthesis of hetero-polysaccharides by *Pestalotiopsis microspora* from various monosaccharides as carbon source
- Kalogiannis S, Iakovidou G, Liakopoulou-Kyriakides M, Kyriakidis DA, Skaracis GN\*// \*Hellenic Sugar Ind, Dept Plant Breeding & Biotechnol, GR-57400 Thessaloniki, Greece  
*Process Biochem* 2003 **39** (2) 249  
 Optimization of xanthan gum production by *Xanthomonas campestris* grown in molasses
- Liu Z, Ballinger JR\*, Rauth AM, Bendayen R, Wu XY// \*Guys & St Thomas Hosp, Dept Nucl Med, St Thomas St, London SE1 9RT, England  
*J Pharm Pharmacol* 2003 **55** (8) 1063  
 Delivery of an anticancer drug and a chemosensitizer to murine breast sarcoma by intratumoral injection of sulfolpropyl dextran microspheres
- Lo YM, Robbins KL, Argin-Soysal S, Sadar LN// Univ Maryland, Dept Nutr & Food Sci, 3102 Marie Mount Hall, College Park, Md 20742, USA  
*J Food Sci* 2003 **68** (6) 2057  
 Viscoelastic effects on the diffusion properties of curdlan gels
- Peng Y, Zhang L\*, Zeng F, Xu Y// \*Wuhan Univ, Dept Chem, CN-430072 Wuhan, Peoples Rep China  
*Carbohydr Polym* 2003 **54** (3) 297  
 Structure and antitumor activity of extracellular polysaccharides from mycelium
- Pickard D, Wain J, Baker S, Line A, Chohan S, Fookes M, Barron A, Gaora PO, Chabalgoity JA, Thanky N, Scholes C, Thomson N, Quail M, Parkhill J, Dougan G // Univ London, Imperial Coll Sci Technol & Med, Dept Biol Sci, Ctr Mol Microbiol & Infect, London SW7 2AZ, England  
*J Bacteriol* 2003 **185** (17) 5055  
 Composition, acquisition, and distribution of the Vi exopolysaccharide-encoding *Salmonella enterica* pathogenicity island SPI-7
- Schmidt D, Rath PM\*// \*Univ Essen Gesamthsch Klinikum, Inst Med Mikrobiol, Hufelandstr 55, DE-45122 Essen, Germany  
*J Med Microbiol* 2003 **52** (8) 653  
 Faster genetic identification of medically important aspergilli by using gellan gum as gelling agent in mycological media
- Selbmann L, Stingle F, Petruccioli M\*// \*Univ Tuscia, Dipt Agrobiol & Agrochim, Via San Camillo de Lellis, IT-01100 Viterbo, Italy  
*Antonie van Leeuwenhoek* 2003 **84** (2) 135  
 Exopolysaccharide production by filamentous fungi: The example of *Botryosphaeria rhodina*
- Tako M, Tohma S, Taira T, Ishihara M// Univ Ryukyus, Dept Biosci & Biotechnol, Nishihara, Okinawa 903-0213, Japan  
*Carbohydr Polym* 2003 **54** (3) 279  
 Gelation mechanism of deacetylated rhaman gum
- Trujillo-Roldan MA, Pena C, Galindo E// Univ Nacl Autonoma Mexico, Inst Biotechnol, Dept Ingn Cellular & Biocatalisis, Apartado Postal 510-3, MX-62250 Cuernavaca, Morelos, Mexico  
*Biotechnol Lett* 2003 **25** (15) 1251  
 Components in the inoculum determine the kinetics of *Azotobacter vinelandii* cultures and the molecular weight of its alginate
- Welman A, Maddox I, Archer R// Fonterra Co-operat Grp Ltd, Fonterra Res

- Ctr, Private Bag 11 029, Palmerston North, New Zealand  
*Biotechnol Lett* 2003 **25** (18) 1515  
 Exopolysaccharide and extracellular metabolite production by *Lactobacillus delbrueckii* subsp *bulgaricus*, grown on lactose in continuous culture  
 Zhang JJ, Ma ZC, Kong FZ\*// \*Acad Sinica, Eco-Environm Sci Res Ctr, POB 2871, CN-100085 Beijing, Peoples Rep China  
*Carbohydr Res* 2003 **338** (17) 1711  
 Synthesis of a mannose nonasaccharide existing in the exopolysaccharide of *Cryphonectria parasitica*  
 Zhang JJ, Kong FZ\*// \*Address as above  
*Carbohydr Res* 2003 **338** (17) 1719  
 Synthesis of a hexasaccharide, the repeating unit of *O*-deacetylated GXM of *C. neoformans* serotype A  
 Zhang JJ, Kong FZ\*// \*Address as above  
*Bioorg Med Chem* 2003 **11** (18) 4027  
 Facile syntheses of the hexasaccharide repeating unit of the exopolysaccharide from *Cryptococcus neoformans* serovar A

## 12. Polysaccharides - Plant

- Attama AA, Adikwu MU, Okoli ND// Univ Nigeria, Fac Pharmaceut Sci, Dept Pharmaceut, Drug Delivery Res Unit, Nsukka, Nigeria  
*STP Pharma Sciences* 2003 **13** (3) 177  
 Studies on bioadhesive granules - II. Granules formulated with *Mucuna flagilipes* (mucuna) gum  
 Da Silva BP, Silva GM, Mendes TP, Parente JP\*// \*Fed Univ Rio de Janeiro, Lab Quim Plantas Med Nucl Pesquisas Prod Naturais, POB 68045, BR-21944-970 Rio de Janeiro, Brazil  
*Z Naturforsch C* 2003 **58** (5-6) 342  
 Structural characteristics of a bioactive polysaccharide from *Sorghum arundinaceum*  
 Deszczynski M, Kasapis S, MacNaughton W, Mitchell JR// University Nottingham, Div Food Sci, Sutton Bonington Campus, Loughborough LE12 5RD, England  
*Food Hydrocolloid* 2003 **17** (6) 793  
 Effect of sugars on the mechanical and thermal properties of agarose gels  
 Holme HK, Lindmo K, Kristiansen A, Smidsrod O// FMC Bio Polymer as/ NovaMatrix, Gaustadalleen 21, NO-0349 Oslo, Norway  
*Carbohydr Polym* 2003 **54** (4) 431  
 Thermal depolymerization of alginate in the solid state  
 Jarmoluk A, Pietrasik Z// Agr Univ Wroclaw, Dept Anim Prod Technol, C K Norwida Str 25, PL-50375 Wroclaw, Poland  
*J Food Eng* 2003 **60** (3) 327  
 Response surface methodology study on the effects of blood plasma, microbial transglutaminase and  $\kappa$ -carrageenan on pork batter gel properties  
 Lu R, Yoshida T\*// \*Kitami Inst Technol, Appl Chem Dept, 165 Koen-cho, Kitami 090-8507, Japan  
*Carbohydr Polym* 2003 **54** (4) 419  
 Structure and molecular weight of Asian lacquer polysaccharides  
 Martin S, Freitas RA, Obayashi E, Sierakowski MR\*// \*Universidade Fed Parana, Dept Quim, Lab Biopolim, PO Box 19081, BR-81531-990 Curitiba, PR, Brazil  
*Carbohydr Polym* 2003 **54** (3) 287  
 Physico-chemical aspects of galactoxyloglucan from the seeds of *Hymenaea courbaril* and its tetraborate complex  
 Murata Y, Kofuji K, Kawashima S// Hokuriku Univ, Fac Pharmaceut Sci, Ho 3, Kanazawa, Ishikawa 920 118, Japan  
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