



Bibliography of analytical food chemistry

2 GENERAL

- Gertz C// Chem Untersuchungsamt Stadt Hagen, Pappelstr 1, D-58099 Hagen, FRG
Fett Wiss Technol 1993 **95** (8) 288
 Principles of laboratory management systems (LIMS) in an analytical working laboratory (German, English Abstract)
- Skurikhin IM// Russian Acad Med Sci, Inst Nutr, Moscow, Russia
Dokl Akad Nauk 1993 **330** (6) 723
 Calculation of a new metrological characteristic MQS(M) for methods used in safety control of food and environmental objects (Russian)

3 AMINO ACIDS, PROTEINS & ENZYMES

- Anderson JS, Lall SP*, Anderson DM, McNiven MA// *Fisheries & Oceans Canada, Halifax Fisheries Res Lab, 1707 Lower Water St, POB 550, Halifax, Nova Scotia, Canada B3J 2S7
Aquaculture 1993 **115** (3-4) 305
 Evaluation of protein quality in fish meals by chemical and biological assays
- Bitri L, Rolland MP, Besancon P// Univ Montpellier 2, Dept Agroressources & Procedes Biol, Unite Nutr Genie Biol & Sci Aliments, F-34095 Montpellier 05, France
Milchwissenschaft 1993 **48** (7) 367
 Immunological detection of bovine caseinomacropeptide in ovine and caprine dairy products
- Chiang BH, Su CK, Tsai GJ, Tsao GT// Natl Taiwan Univ, Grad Inst Food Sci & Technol, Taipei, Taiwan
J Food Sci 1993 **58** (2) 303
 Egg white lysozyme purification by ultrafiltration and affinity chromatography
- Dumas B, Sailland A, Cheviet JP, Freyssinet G, Pallett K// Rhone Poulen Agro, Biochim Molec & Biol Cellulaire Lab, BP 9163, F-69263 Lyon 09, France
C R Acad Sci Ser III-Vie 1993 **316** (8) 793
 Identification of barley oxalate oxidase as a germin-like protein (French, English Abstract)
- Galleschi L, Grilli I, Capocchi A, Moroni P// Univ Pisa, Dept Bot Sci, via L Ghini 5, I-56123 Pisa, Italy
Phytot-Ann Rei Bot Austria 1992 **32** (3) 7
 Gliadin extraction for reversed-phase high-performance liquid chromatography - An assessment of methodology
- Gonzalez JM, Lopez LA, Bernard S, Jouve N// Univ Alcala de Henares, Dept Biol Cellular & Genet, E-28871 Alcala de Henares, Spain
Plant Breed 1993 **111** (1) 42
 Prolamin analysis of progenies from androgenetic plants of Triticale
- Huebner FR, Bietz JA// USDA ARS, Natl Ctr Agr Utilizat Res, Peoria, IL 61604, USA
Cereal Chem 1993 **70** (5) 506
 Improved chromatographic separation and characterization of ethanol-soluble wheat proteins
- Inbors J, Gronlund A// Finnsugar GmbH, Raboisen 58, D-20095 Hamburg 1, FRG
Agr Sci Finland 1993 **2** (2) 125
 Stability of feed enzymes in physiological conditions assayed by *in vitro* methods
- Klugland H, Bosnes M// Agr Univ Norway, Dept Food Sci, POB 5036, N-1432 A/S, Norway
Z Naturforsch C 1993 **48** (7-8) 609
 Immunological identification of organ specific proteins and transcripts in developing barley grains
- Madl RL// Address not available.
Cereal Food World 1993 **38** (8) 576
 Evolution of protein quality determination
- Manteuffel R, Panitz R// *Inst Plant Genet & Crop Plant Res, Corrensstr 3, D-06466 Gatersleben, FRG
Plant Mol Biol 1993 **22** (6) 1129
In situ localization of *faba* bean and oat legumin-type proteins in transgenic tobacco seeds by a highly sensitive immunological tissue print technique
- Metakovsky EV, Ng PKW, Chernakov VM, Bushuk W// Ist Sperimentale Cerealicoltura, 20079 S Angelo Lodigiano, Milan, Italy
Genome 1993 **36** (4) 743
 Gliadin alleles in Canadian Western Red spring wheat cultivars - Use of 2 different procedures of acid polyacrylamide gel electrophoresis for gliadin separation
- Morales M, Pedreno MA, Munoz R, Barcelo AR*, Calderon AA// *Univ Murcia, Dept Plant Biol (Plant Physiol) E-30100 Murcia, Spain
Food Chem 1993 **48** (4) 391
 Purification and kinetic characterization of a basic peroxidase isoenzyme responsible for lignification in Gamay rouge grape (*Vitis vinifera*) berries
- Morris ER, West J, Morgan JB, Hampton SM// *Univ Surrey, Sch Biol Sci, Div Biomed Res, Guildford GU2 5XH, Surrey, England
Eur J Clin Nutr 1993 **47** (9) 673
 Enzyme-linked immunosorbent assays for gliadin and ovalbumin and their application in normal subjects
- Murata M, Kurokami C, Homma S, Matsuhashi C// Ochanomizu Univ, Dept Nutr & Food Sci, 2-1-1 Otsuka, Bunkyo ku, Tokyo 112, Japan
J Agr Food Chem 1993 **41** (9) 1385
 Immunohistochemical study of apple chlorogenic acid oxidase
- Nagae M, Fuda H, Hara A, Kawamura H, Yamauchi K// *Hokkaido Univ, Fac Fisheries, Dept Biol & Aquaculture, Hakodate, Hokkaido 041, Japan
Comp Biochem Physiol Pt A 1993 **106** (1) 69
 Changes in serum immunoglobulin M (IgM) concentrations during early development of chum salmon (*Oncorhynchus keta*) as determined by sensitive ELISA technique
- Ngalani JA, Signoret A, Crouzet J// *Univ Montpellier 2, Inst Sci Ingénierie Biol & Sci Aliments, Equipe Microbiol & Biochim Ind, F-34095 Montpellier 05, France
Food Chem 1993 **48** (4) 341
 Partial purification and properties of plantain polyphenol oxidase
- Peitz DG, Lochmiller RL// Oklahoma State Univ, Dept Zool, Stillwater, OK 74078, USA
J Mammal 1993 **74** (3) 777
 Assessing quality of dietary protein through analysis of stomach digesta
- Preston KR, Symons SJ// Canadian Grain Commiss, Grain Res Lab, Winnipeg, Manitoba, Canada R3C 3G8
J Cereal Sci 1993 **18** (1) 53
 Measurement of heat damage in wheat by assessment of protein fibril formation
- Schnabl H, Klockenbring T, Huhn M, Schulz M// Univ Bonn, Inst Landwirtschaftliche Bot, Meckenheimer Allee 176, D-53115 Bonn, FRG
Electrophoresis 1993 **14** (8) 817
 Purification of phosphoenolpyruvate carboxylase subunits and isoforms from *Vicia faba* L. by preparative gel electrophoresis and their detection by enzyme-linked immunosorbent assay
- Silvela L, Ayuso MC, Gil-Delgado LG, Salaices L// INIA, Ctra Coruna, Km 7 Apdo 8111, E-28040 Madrid, Spain
Theor Appl Genet 1993 **86** (7) 889
 Genetic and environmental contributions to bread wheat flour quality using the SDS sedimentation test as an index
- Singla SL, Grover A// Univ Delhi Sth Campus, Dept Plant Molec Biol, New Delhi 110021, India
Plant Mol Biol 1993 **22** (6) 1177
 Antibodies raised against yeast HSP-104 cross react with heat-regulated and abscisic acid-regulated polypeptide in rice
- Sogaard M, Andersen JS, Roepstorff P*, Svensson B// *Odense Univ, Inst

As a service to subscribers of Food Chemistry, this bibliography contains newly published material in the field of analytical food chemistry. The bibliography is divided into fourteen sections: 1 Books, Reviews & Symposia; 2 General; 3 Amino Acids, Proteins & Enzymes; 4 Carbohydrates; 5 Lipids; 6 Vitamins & Co-factors; 7 Trace Elements & Minerals; 8 Drug, Biocide & Processing Residues; 9 Toxins; 10 Additives; 11 Flavours & Aromas; 12 Organic Acids; 13 Animal Products; 14 Plant & Microbial Products. Within each section, articles are listed in alphabetical order with respect to the author. Where there are no papers to appear under a heading, it will be omitted.

Food Chemistry 49 (1994) — © 1994 Elsevier Science Limited, England. Printed in Great Britain

- Molec Biol, Campusvej 55, DK-5239 Odense, Denmark
Bio/Technology 1993 11 (10) 1162
- Electrospray mass spectrometry characterization of post-translational modifications of barley α -amylase-1 produced in yeast
 Suard CL, Feinberg MH, Ireland-Ripert J, Mourel RM// INA PG, Chim Analyt Lab, 16 rue Claude Bernard, F-75231 Paris 05, France
Analysis 1993 21 (6) 287
- Interlaboratory validation analysis of the mineralisation by microwave digestion - Application to Kjeldahl nitrogen in foods (French, English Abstract)
 Tao YX, Hara A, Hodson RG, Woods LC, Sullivan CV*// *Nth Carolina State Univ, Dept Zool, Raleigh, NC 27695, USA
Fish Physiol Biochem 1993 12 (1) 31
- Purification, characterization and immunoassay of striped bass (*Morone saxatilis*) vitellogenin
 Utsumi S, Gidamis AB, Mikami B, Kito M// Kyoto Univ, Food Sci Res Inst, Uji, Kyoto 611, Japan
J Mol Biol 1993 233 (1) 177
- Crystallization and preliminary X-ray crystallographic analysis of the soybean proglycinin expressed in *Escherichia coli*
 Wang M, Sedeek NJA, Heidekamp F, Snar-Jagalska BE// TNO, RUL, Ctr Phytotechnol, Dept Plant Molec Biotechnol, Wassenaarseweg 64, 2333 AL Leiden, The Netherlands
FEBS Lett 1993 329 (3) 245
- Detection of GTP-binding proteins in barley aleurone protoplasts
- ## 4 CARBOHYDRATES
- Boros D, Marquardt RR*, Slominski BA, Guenter W// *Univ Manitoba, Dept Anim Sci, Winnipeg, Manitoba, Canada R3T 2N2
Cereal Chem 1993 70 (5) 575
- Extract viscosity as an indirect assay for water-soluble pentosan content in rye
 Bradbury AGW, Bello AB// Kraft Gen Foods, White Plains, NY, USA
Cereal Chem 1993 70 (5) 543
- Determination of molecular size distribution of starch and debranched starch by a single procedure using high-performance size-exclusion chromatography
 Cho KC, White PJ*// *Iowa State Univ Sci & Technol, Dept Food Sci & Human Nutr, Ames, Ia 50011, USA
Cereal Chem 1993 70 (5) 539
- Enzymatic analysis of β -glucan content in different oat genotypes
 Delgado C, Talou T, Gaset A// Ecole Natl Super Chim, Inst Natl Polytech Toulouse, Chim Agroressources Lab, CATAR, F-31077 Toulouse, France
Analysis 1993 21 (6) 281
- Application of capillary electrophoresis to the qualitative analysis of sugars in a sorghum hydrolysate (French, English Abstract)
 Emmerich A// Inst Landwirtschaftliche Technol & Zuckerind, Postfach 46 36, D-38036 Braunschweig, FRG
Zuckerindustrie 1993 118 (8) 591
- Measurement of the polarization (optical rotation) of white sugar - Description of a modified method and collaborative tests
 Emneus J, Nilsson G, Gorton L// Lund Univ, Dept Analyt Chem, POB 124, S-22100 Lund, Sweden
Starch 1993 45 (8) 264
- A flow injection system for the determination of starch in starch from different origins with immobilized α -amylase and amyloglucosidase reactors
 Engelhardt UH, Finger A, Kuhr S// Inst Lebensmittelchem, Schleinitzstr 20, D-38106 Braunschweig, FRG
Z Lebensmittel-Untersuch Fors 1993 197 (3) 239
- Determination of flavone C-glycosides in tea
 Galea CF, Inkerman PA// Sugar Res Inst, Mackay, Qld 4740, Australia
Int Sugar J 1993 95 (1136) 309
- Dextran analysis of raw sugar. 1. A specific method for total dextran
 Kawano S, Fujiwara T, Iwamoto M// Minist Agr Forestry & Fisheries, 2-1-2 Kannondai, Tsukuba, Ibaraki 305, Japan
Jpn Soc Hort Sci 1993 62 (2) 465
- Nondestructive determination of sugar content in satsuma mandarin using near infrared (NIR) transmittance
 Lamb JD, Myers GS, Edge N// Brigham & Womens Hosp, Dept Chem, Boston, Ma 02115, USA
J Chromatogr Sci 1993 31 (9) 353
- Ion chromatographic analysis of glucose, fructose, and sucrose concentrations in raw and processed vegetables
 Lin H, Huang AS*// *Univ Hawaii Manoa, Dept Food Sci & Human Nutr, 1800 East-West Rd, Honolulu, Hi 96822, USA
Food Chem 1993 48 (4) 403
- Chemical composition and some physical properties of a water-soluble gum in taro (*Colocasia esculenta*)
 Matsui T// Kagawa Univ, Fac Agr, Dept Agroind Sci, Miki, Kagawa 76107, Japan
J Jpn Soc Food Sci Technol 1993 40 (8) 596
- Free amino acid, organic acid and carbohydrate contents in Japanese traditional starch syrup *gyousen* (Japanese, English Abstract)
 Mogele R, Schulte E, Galensa R// Tech Univ Carolo Wilhelmena Braunschweig, Inst Lebensmittelchem, Schleinitzstr 20, D-38106 Braunschweig, FRG
Deut Lebensm-Rundsch 1993 89 (8) 251
- Determination of raffinose in orange juice coupling HPLC with an enzyme reactor and electrochemical detection (German, English Abstract)
 Needs PW, Selvendran RR// AFRC Inst Food Res, Dept Food Molec Biochem, Norwich Lab, Norwich Res Pk, Norwich NR4 7UA, England
Phytochem Analysis 1993 4 (5) 210
- An improved methylation procedure for the analysis of complex polysaccharides including resistant starch and a critique of the factors which lead to undermethylation
 Reeves JB// USDA Ruminant Nutr Lab, Beltsville, Md 20705, USA
Vib Spectrosc 1993 5 (3) 303
- Infrared spectroscopic studies on forage and byproduct fibre fractions and lignin residues determination
 Roscher R, Winterhalter P*// *Univ Wurzburg, Lehrstuhl Lebensmittelchem, Hubland, D-97074 Wurzburg, FRG
J Agr Food Chem 1993 41 (9) 1452
- 1,6-trimethyl-1,2-dihydronaphthalene (TDN) formation in wine. 2. Application of multilayer coil countercurrent chromatography for the study of *Vitis vinifera* cv. Riesling leaf glycosides
- ## 5 LIPIDS
- Ajuyah AO, Fenton TW, Hardin RT, Sim JS// Univ Alberta, Dept Anim Sci, Edmonton, Alberta, Canada T6G 2P5
J Food Sci 1993 58 (2) 270
- Measuring lipid oxidation volatiles in meats
 Cebula DJ, Ziegleder G// Unilever Res, Colworth Lab, Sharnbrook MK44 1LQ, Beds, England
Fett Wiss Technol 1993 95 (9) 340
- Studies of bloom formation using X-ray diffraction from chocolates after long-term storage
 De Kock J// Int Lecithin & Phospholipid Soc, European Analyt Subgrp, POB 40, B-8870 Izegem, Belgium
Fett Wiss Technol 1993 95 (9) 352
- The European Analytical Subgroup of ILPS - A joint effort to clarify lecithin and phospholipid analysis
 Frega N, Bocci F, Lercker G// Univ Firenze, Dipt Sci & Microbiol Alimentari & Microbiol, Sez Ind & Tecnol Alimentari, I-50144 Florence, Italy
J Amer Oil Chem Soc 1993 70 (9) 919
- High-resolution gas chromatographic determination of alkanols in oils extracted from olives
 Hatakeyama K, Ito S, Sato O, Saito N, Ikushima Y, Goto T// Govt Ind Res Inst, Sendai 983, Japan
Nippon Kagaku Kaishi 1993 (4) 408
- Characterization of fatty acid components in lipid of fudaraku (*Pachymeniopsis lanceolata*)
 Roy SS, Bhattacharyya DK*// *Univ Calcutta, Univ Coll Sci & Technol, Dept Chem Technol, Calcutta 700009, West Bengal, India
J Amer Oil Chem Soc 1993 70 (9) 923
- Detection of interesterified fat in hydrogenated fat by lipase hydrolysis and by cooling curve analysis
 Vermeulen GJ, Lambert JDG*, Lenczowski MJP, Goos HJT// *Univ Utrecht, Dept Exptl Zool, Comparat Endocrinol Res Grp, Padualaan 8, 3584 CH Utrecht, The Netherlands
Fish Physiol Biochem 1993 12 (1) 21
- Steroid hormone secretion by testicular tissue from African catfish, *Clarias gariepinus*, in primary culture - Identification and quantification by gas chromatography-mass spectrometry
 Yukawa N, Takamura H, Matoba T*// *Nara Womens Univ, Fac Home Econ, Dept Food Sci & Nutr, Nara 630, Japan
J Amer Oil Chem Soc 1993 70 (9) 881
- Determination of total carbonyl compounds in aqueous media
- ## 6 VITAMINS & CO-FACTORS
- Benlloch R, Farre R, Frigola A// Univ Valencia, Avda Vicent Andreu Estelles S-N, E-46100 Burjassot, Spain
J Liq Chromatogr 1993 16 (14) 3113
- A quantitative estimate of ascorbic and isoascorbic acid by high performance liquid chromatography - Application to citric juices
 Epler KS, Ziegler RG, Craft NE// US Technol Adm, Natl Inst Standards

- & Technol, Organ Analyt Res Div, Chem Sci & Technol Lab, Gaithersburg, Md 20899, USA
J Chromatogr-Biomed Appl 1993 **619** (1) 37
- Liquid chromatographic method for the determination of carotenoids, retinoids and tocopherols in human serum and in food
- Hoare M, Jones S, Lindsay J// Chem Ctr Western Australia, 125 Hay St, Perth, WA 6004, Australia
Food Aust 1993 **45** (7) 341
- Total vitamin C analysis of orange juice
- Madden UA, Stahr HM// Iowa State Univ Sci & Technol, Coll Vet Med, Vet Diagnost Lab, Ames, Ia 50011, USA
J Liq Chromatogr 1993 **16** (13) 2825
- Reverse-phase thin layer chromatography assay of vitamin K in bovine liver
- Muhammad K, Briggs D, Jones G// Univ Pertanian Malaysia, Fac Food Sci & Biotechnol, 43400 UPM Serdang, Selangor Darul Ehsan, Malaysia
Food Chem 1993 **48** (4) 423
- The appropriateness of using cyanocobalamin as calibration standards in competitive binding assays of vitamin B₁₂
- Muhammed K, Briggs D, Jones G// Univ Pertanian Malaysia, Fac Food Sci & Biotechnol, 43400 UPM Serdang, Selangor Darul Ehsan, Malaysia
Food Chem 1993 **48** (4) 427
- The appropriateness of using cyanocobalamin as calibration standards in *Lactobacillus leichmannii* ATCC 7830 assay of vitamin B₁₂
- Muhammed K, Briggs D, Jones G// Univ Pertanian Malaysia, Fac Food Sci & Biotechnol, 43400 UPM Serdang, Selangor Darul Ehsan, Malaysia
Food Chem 1993 **48** (4) 431
- Comparison of a competitive binding assay with *Lactobacillus leichmannii* ATCC 7830 assay for the determination of vitamin B₁₂ in foods
- Uchiyama S, Hasebe Y, Suzuki S// Saitama Inst Technol, Dept Environm Engn, 1690 Fusajji, Okabe, Saitama 36902, Japan
Electroanal 1993 **5** (8) 653
- Amplified vitamin C sensor based on the cyclic reaction between L-ascorbic acid and dehydroascorbic acid
- Distribution of Pb and Cd in equine liver - Direct determination by means of solid sampling ZAAS
- Lucker E, Thoriuschler S// Justus Liebig Univ, Inst Tierarzt Nahrungsmittekkunde, Frankfurter Str 92, D-35392 Giessen, FRG
Fresenius J Anal Chem 1993 **346** (12) 1072
- Solid sampling ZAAS determination of endogenous Pb contamination in muscle tissue caused by calcification
- Miller-Illi NJ, Greene FE// USDA, Beltsville Human Nutr Res Ctr, Nutrient Composit Lab, Bldg 161 BARC E, Beltsville, Md 20705, USA
At Spectrosc 1993 **14** (4) 85
- Direct determination of lead in sugars using graphite furnace atomic absorption spectrometry
- Quintela MJ, Gallego M, Valcarcel M*// *Univ Cordoba, Fac Sci, Dept Analyt Chem, E-14004 Cordoba, Spain
Analyst 1993 **118** (9) 1199
- Flow injection spectrophotometric method for the speciation of aluminium in river and tap waters
- Vanhoe H, Van Allemersch F, Versieck J, Dams R// State Univ Ghent, Inst Nucl Sci, Analyt Chem Lab, Proeftuinist 86, B-9000 Ghent, Belgium
Analyst 1993 **118** (8) 1015
- Effect of solvent type on the determination of total iodine in milk powder and human serum by inductively-coupled plasma mass spectrometry

8 DRUG, BIOCIDE & PROCESSING RESIDUES

7 TRACE ELEMENTS & MINERALS

- Ahn DU, Wolfe FH, Sim JS// Univ Alberta, Dept Food Sci, Edmonton, Alberta, Canada T6G 2P5
J Food Sci 1993 **58** (2) 288
- 3 methods for determining nonheme iron in turkey meat
- Atkinson SA, Shah JK, Webber CE, Gibson IL, Gibson RS// McMaster Univ, Dept Pediat, Hamilton, Ontario, Canada L8N 3Z5
J Nutr 1993 **123** (9) 1586
- A multi-element isotopic tracer assessment of true fractional absorption of minerals from formula with additives of calcium, phosphorus, zinc, copper and iron in young piglets
- Benson RL, Worsfold PJ// Univ Plymouth, Dept Environm Sci, Plymouth PL4 8AA, England
Sci Total Envir 1993 **135** (1-3) 17
- A flow-injection approach to the continuous monitoring of residual coagulants (aluminium and iron) in potable and treated waters
- Cervera ML, Navarro A, Montoro R, Gomez J// Univ Valencia, Dept Quim Analit, Moliner 50, E-46100 Burjassot, Spain
Fresenius J Anal Chem 1993 **347** (1-2) 58
- Inductively-coupled plasma atomic emission spectrometric determination of arsenic in mussel products - Interference study
- Dobrowolski R, Mierzwa J// Marie Curie Skłodowska Univ, Cent Lab, PL-20031 Lublin, Poland
Fresenius J Anal Chem 1993 **346** (12) 1058
- Determination of trace elements in plant materials by slurry sampling graphite furnace AAS - Some analytical problems
- Garg AN, Weginwar RG, Chutke NL// Nagpur Univ, Dept Chem, Nagpur 440010, Maharashtra, India
J Radioanal Nucl Chem Art 1993 **172** (1) 125
- A comparative study of minor and trace elements in human, animal and commercial milk samples by neutron activation analysis
- Kyrs M, Selucky P// Nucl Res Inst, CS-25068 Rez, Czechoslovakia
J Radioanal Nucl Chem Art 1993 **172** (2) 213
- Rapid concentrating of radiostrontium from model fallout, drinking and technological water, using solvent extraction with cobalt dicarbollide and Slovafol 909
- Lucker E, Gerbig C, Kreuzer W// Justus Liebig Univ, Inst Tierarzt Nahrungsmittekkunde, Frankfurter Str 92, D-35392 Giessen, FRG
Fresenius J Anal Chem 1993 **346** (12) 1062
- Distribution of Pb and Cd in the liver of the mallard - Direct determination by means of solid sampling ZAAS
- Lucker E, Meuthen J, Kreuzer W// Justus Liebig Univ, Inst Tierarzt Nahrungsmittekkunde, Frankfurter Str 92, D-35392 Giessen, FRG
Fresenius J Anal Chem 1993 **346** (12) 1068

J Food Hyg Soc Jpn 1993 **34** (4) 330

Several issues on residual pesticides in foods with special reference to the development of concise analytical method (Japanese, English Abstract)

J Food Hyg Soc Jpn 1993 **34** (4) 333

Rapid and systematic determination of N-methyl carbamate pesticides (Japanese, English Abstract)

J Food Hyg Soc Jpn 1993 **34** (4) 336

Simultaneous determination of nitrogenous pesticides (Japanese, English Abstract)

J Food Hyg Soc Jpn 1993 **34** (4) 338

Opinion on taking part in the project for examining analytical methods for pesticide residues (Japanese, English Abstract)

Abjean JP// Minist Agr & Foret, CNEVA, Medicaments Vet Lab, F-35133 Fougeres, France

J Planar Chromat-Mod TLC 1993 **6** (4) 319

Qualitative screening for nitrofuran residues in food by planar chromatography

Bagheri H, Brouwer ER, Ghijssen RT, Brinkman UAT// Free Univ Amsterdam, Dept Analyt Chem, De Boelelaan 1083, 1081 HV Amsterdam, The Netherlands

J Chromatogr 1993 **647** (1) 121

On-line low-level screening of polar pesticides in drinking and surface waters by liquid chromatography-thermospray mass spectrometry

Barkby CT, Lawson G// De Montfort Univ, Sch Appl Sci, Leicester LE1 9BH, England

Food Addit Contam 1993 **10** (5) 541

Analysis of migrants from nylon-6 packaging films into boiling water

Benchaoui HA, McKellar QA// Univ Glasgow, Sch Vet, Dept Vet Pharmacol, Bearsden Rd, Glasgow G61 1QH, Scotland

Biomed Chromatogr 1993 **7** (4) 181

Determination of raxofonide and closantel in ovine plasma by high-performance liquid chromatography

Corpet DE// IRA, Xenobiot Lab, BP 3, F-31931 Toulouse, France

Vet Human Toxicol 1993 **35** (Suppl 1) 37

Current status of models for testing antibiotic residues

Dellacassa E, Martinez R, Moyna P*// *Fac Quim Montevideo, Catedra Farmacognosia & Prod Nat, Casilla Correo 1157, Montevideo, Uruguay

J Planar Chromat-Mod TLC 1993 **6** (4) 326

Simultaneous determination of o-phenylphenol, imazalil, and thiabendazole residues in citrus fruits by TLC densitometry

Desrosiers MF, Le FG, Harewood PM, Josephson ES, Montesalvo M// US Technol Adm, Natl Inst Stand & Technol, Phys Lab, Div Ionizing Radiat, Gaithersburg, Md 20899, USA

J Agr Food Chem 1993 **41** (9) 1471

Estimation of the absorbed dose in radiation-processed food. 4. EPR measurements on eggshell

Elder HA, Roy I, Lehman S, Phillips RL, Kass EH// Loma Linda Univ, Sch Med, Dept Med, Loma Linda, Ca 92350, USA

Vet Human Toxicol 1993 **35** (Suppl 1) 31

Human studies to measure the effect of antibiotic residues

Facsar I, Bekei A*, Erdelyi J// *Istvan U 2, H-1078 Budapest, Hungary

Magy Allatorv Lapja 1993 **48** (8) 501

Demonstration of foreign inhibitory substances in milk, originating from

- udder medicaments (Hungarian, English Abstract)
- Fink W, Auch J// Landesvet Untersuchungsamt Rheinland Pflaz, Blucherstr 34, D-56073 Koblenz, FRG
Deut Lebensm-Rundsch 1993 **89** (8) 246
- Determination of residues of malachite green, crystal violet and brilliant green in edible fish by HPLC (German, English Abstract)
- Günther WJ, Lintelmann J, Rose E, Kettrup A*// *GSF Forschungszentrum Umwelt & Gesundheit GmbH, Ingolstädter Landstr 1, D-85764 Neuherberg, FRG
Fresenius J Anal Chem 1993 **347** (1-2) 37
- Behaviour of polycyclic aromatic hydrocarbons and triazine herbicides in water and aquifer material of a drinking water recharge plant. 3. Investigations of the behaviour of triazine herbicides during the underground passage
- Hitchcock CHS// Univ Surrey, Sch Biol Sci, Food Safety Res Grp, Guildford GU2 5XH, Surrey, England
J Sci Food Agr 1993 **62** (3) 301
- Determination of hydrogen using a novel hydrogen-specific electronic sensor - A potential method for detecting irradiated food
- Horie M, Saito K, Nose N, Nakazawa H// Saitama Prefectural Inst Publ Hlth, 639-1 Kamiokubo, Urawa, Saitama 338, Japan
J Food Hyg Soc Jpn 1993 **34** (4) 289
- Determination of enrofloxacin in meat and fish by high-performance liquid chromatography (Japanese, English Abstract)
- Ius A, Iacobello C, Meroni G, Bacigalupo MA// CNR Ist Chim Ormoni, via Mario Bianco 9, I-20131, Milan, Italy
Eur J Clin Chem Clin Biochem 1993 **31** (8) 537
- Comparison of two time-resolved fluoroimmunoassays (TR-FIA), as applied to oestriol in human serum and progesterone in bovine milk
- Janecek M, Quilliam MA*, Bailey MR, North DH// *Natl Res Council Canada, Atlantic Reg Lab, Inst Marine Biosci, 1411 Oxford St, Halifax, Nova Scotia, Canada B3H 3Z1
J Chromatogr-Biomed Appl 1993 **619** (1) 63
- Determination of erythromycin A by chromatography and electrochemical detection, with application to salmon tissue
- Johansen HR, Rossland OJ, Becher G// Natl Inst Publ Hlth, Dept Environ Med, N-0462 Oslo, Norway
Chemosphere 1993 **27** (7) 1245
- Congener specific determination of PCBs in crabs from a polluted fjord region
- Kaniou IP, Zachariadis GA, Stratis JA// Aristotelian Univ Salonia, Vet Inst Food Hyg Thessaloniki, GR-54006 Salonia, Greece
J Liq Chromatogr 1993 **16** (13) 2891
- Separation and determination of five penicillins by reversed-phase HPLC
- Kennedy DG, Cannavan A, Hewitt SA, Rice DA, Blanchflower WJ// Dept Agr Northern Ireland, Div Vet Sci, Stoney Rd, Belfast BT4 3SD, Northern Ireland
Food Addit Contam 1993 **10** (5) 579
- Determination of ivermectin residues in the tissues of Atlantic salmon (*Salmo salar*) using HPLC with fluorescence detection
- Nyman PJ, Perfetti GA, Joe FL, Diachenko GW// US FDA, Div Prod Manufacture & Use, Washington, DC 20204, USA
Food Addit Contam 1993 **10** (5) 489
- Comparison of 2 clean-up methodologies for the gas chromatographic-mass spectrometric determination of low nanogram levels of polynuclear aromatic hydrocarbons in seafood
- Ohkubo T, Shimoyama R, Sugawara K// Hirosaki Univ Hosp, Dept Pharm, Hirosaki 036, Japan
Biomed Chromatogr 1993 **7** (4) 227
- High-performance liquid chromatographic determination of levomepromazine in human breast milk and serum using solid phase extraction
- Rose E, Martens D, Lintelmann J, Kicinski HG, Günther WJ, Kettrup A*// *GSF Forschungszentrum Umwelt & Gesundheit GmbH, Inst Okol Chem, Ingolstädter Landstr 1, D-85764 Neuherberg, FRG
Fresenius J Anal Chem 1993 **347** (1-2) 44
- Behaviour of polycyclic aromatic hydrocarbons and triazine herbicides in water and aquifer material of a drinking water recharge plant. 4. PAHs in the solid phase
- Samouris G, Nathanael B, Tsoukali-Papadopoulou H, Papadimitriou N// Aristotelian Univ Salonia, Fac Med, Forens Med & Toxicol Lab, Salonia, Greece
Vet Human Toxicol 1993 **35** (5) 406
- Determination of chloramphenicol residues in eggs by high-performance liquid chromatography (HPLC)
- Schneider RP, Ericson JF, Lynch MJ, Fouda HG*// *Pfizer Inc, Cent Res Div, Drug Metab Dept, Eastern Point Rd, Groton, Ct 06340, USA
Biol Mass Spectrom 1993 **22** (10) 595
- Confirmation of danofloxacin residues in chicken and cattle liver by microbore high-performance liquid chromatography electrospray ionization tandem mass spectrometry
- Wittmann C, Hock B*// *Tech Univ Munich, Dept Bot, D-85350 Freising Weihenst, FRG
J Agr Food Chem 1993 **41** (9) 1421
- Analysis of atrazine residues in food by an enzyme immunoassay
- Yu KN// City Polytech Hong Kong, Dept Appl Sci, Tat Chee Ave, Kowloon, Hong Kong
Health Phys 1993 **65** (3) 318
- Monitoring ⁹⁰Sr contamination in terms of ¹³¹I contamination in imported food
- ## 9 TOXINS
- Herian AM, Taylor SL*, Bush RK// *Univ Nebraska, Dept Food Sci & Technol, Lincoln, Ne 68583, USA
J Food Sci 1993 **58** (2) 385
- Allergenic reactivity of various soybean products as determined by RAST inhibition
- Lin LM, Zhang J, Sui K, Sung WB// Chinese Acad Sci, Dalian Inst Chem Phys, Dalian 116012, Peoples Rep China
J Planar Chromat-Mod TLC 1993 **6** (4) 274
- Simultaneous thin layer chromatographic determination of zearalenone and patulin in maize
- Richard JL, Bennett GA, Ross PF, Nelson PE// USDA ARS, Natl Ctr Agr Utilizat Res, Peoria, Il 61604, USA
J Anim Sci 1993 **71** (9) 2563
- Analysis of naturally occurring mycotoxins in feedstuffs and food
- Seidel V, Lang B, Fraissler S, Lang C, Schiller K, Filek G, Lindner W*// *Graz Univ, Inst Pharmaceut Chem, A-8010 Graz, Austria
Chromatographia 1993 **37** (3-4) 191
- Analysis of trace levels of trichothecene mycotoxins in Austrian cereals by gas chromatography with electron capture detection
- Vernoux JP, Lebaut C, Masselin P, Marais C, Baron B, Choumiloff R, Proniewski F, Nizard G, Bohec M// Univ Caen Esplande Paix, Physiol Cellulaire & Molec Lab, F-14032 Caen, France
Food Addit Contam 1993 **10** (5) 603
- The use of *Daphnia magna* for detection of okadaic acid in mussel extracts
- Weiss W, Vogelmeier C, Gorg A*// *Tech Univ Munich, Lehrstuhl Allgemeine Lebensmitteltechnol, D-85350 Freising Weihenst, FRG
Electrophoresis 1993 **14** (8) 805
- Electrophoretic characterization of wheat grain allergens from different cultivars involved in bakers' asthma
- Zohri AA, Abdel-Gawad KM// Univ Assiut, Fac Sci, Dept Bot, Assiut, Egypt
J Basic Microb 1993 **33** (4) 279
- Survey of mycoflora and mycotoxins of some dried fruits in Egypt
- ## 10 ADDITIVES
- Fraser PD, Albrecht M, Sandmann G*// *Univ Constance, Lehrstuhl Physiol & Biochem Pflanzen, POB 5560, W-7750 Constance, FRG
J Chromatogr 1993 **645** (2) 265
- Development of high-performance liquid chromatographic systems for the separation of radiolabelled carotenes and precursors formed in specific enzymatic reactions
- Nevado JJB, Flores JR, Llerena MJV// Univ Castilla La Mancha, Dept Analyt Chem & Food Technol, E-13071 Ciudad Real, Spain
Talanta 1993 **40** (9) 1391
- Simultaneous determination of tartrazine and sunset yellow by derivative spectrophotometry and ratio spectra derivative
- Nice DJ, Robinson DS*// *Univ Leeds, Procter Dept Food Sci, Leeds LS2 9JT, England
Food Chem 1993 **48** (4) 353
- Co-purification of a heat-stable antioxidant with the superoxide dismutase activity from dried peas
- Tomlinson AJ, Mlotkiewicz JA, Lewis IAS// Mayo Clin, Mass Spectrometry Facil, Guggenheim C016Z, Rochester, Mn 55905, USA
Food Chem 1993 **48** (4) 373
- An investigation of the compounds produced by spray-drying an aqueous solution of glucose and glycine
- ## 11 FLAVOURS & AROMAS
- Analyt Methods Comm// Royal Soc Chem, Analyt Div, Burlington House, London W1V 0BN, England
Analyst 1993 **118** (8) 1089
- Application of gas-liquid chromatography to the analysis of essential oils. XVI. Monographs for five essential oils
- Chung TY, Eiserich JP, Shibamoto T*// *Univ Calif Davis, Dept Envi-

ronm Toxicol, Davis, Ca 95616, USA

J Agr Food Chem 1993 41 (9) 1467

Volatile compounds identified in headspace samples of peanut oil heated under temperatures ranging from 50-200°C

Ferreira V, Rapp A, Cacho JF*, Hastrich H, Yavas I// *Univ Zaragoza, Fac Sci, Dept Analyt Chem, Zaragoza, Spain

J Agr Food Chem 1993 41 (9) 1413

Fast and quantitative determination of wine flavor compounds using microextraction with freon-113

Kikuzaki H, Kawabata M, Ishida E, Akazawa Y, Takei Y, Nakatani N*// *Osaka City Univ, Fac Human Life Sci, Dept Food & Nutr, Sumiyoshi ku, Osaka 558, Japan

Biosci Biotechnol Biochem 1993 57 (8) 1329

LC-MS analysis and structural determination of new amides from Japanese long pepper (*Piper retrofractum*)

Schnug E, Murray F, Haneklaus S// Fed Agr Res Ctr, Inst Plant Nutr & Soil Sci, Bundesallee 50, D-38116 Braunschweig, FRG

Fett Wiss Technol 1993 95 (9) 334

Preparation techniques of small sample sizes for sulphur and indirect total glucosinolate analysis in *Brassica* seeds by X-ray fluorescence spectroscopy

12 ORGANIC ACIDS

Herrera MO, Garcia HL, Mir MV, Martinez MCL// Univ Granada, Fac Pharm, Dept Nutr & Bromatol, E-18011 Granada, Spain

J Liq Chromatogr 1993 16 (14) 3101

Determination by high-performance liquid chromatography of organic acids in Spanish rose wines from the Alpujarra Contraviesa region of Granada

Perez-Cerrada M, Casp A, Maquieira A*// *Univ Politecn Valencia, Dept Chem, Camino Vera S-N, E-46071 Valencia, Spain

Amer J Enol Viticult 1993 44 (3) 292

Chromatographic determination of the anion content in Spanish rectified concentrated musts

Planta M, Lazaro F, Puchades R, Maquieira A*// *Univ Politecn Valencia, Dept Chem, E-46071 Valencia, Spain

Analyst 1993 118 (9) 1193

Determination of citric acid and oxalacetic acid in foods by enzyme flow injection

13 ANIMAL PRODUCTS

Analyt Methods Comm// Royal Soc Chem, Analyt Div, Burlington House, London W1V 0BN, England

Analyst 1993 118 (9) 1217

Nitrogen factors for beef - A reassessment

Ayranci E, Balci O// Akdeniz Univ, Dept Chem, POB 750, Antalya, Turkey

Nahrung 1993 37 (4) 395

Determination of chloride and nitrate in butter, margarine, cheese and meat products using ion selective electrodes

Hop E, Luinge HJ*, Van Hemert H// *Univ Utrecht, POB 80083, 3508 TB Utrecht, The Netherlands

Appl Spectrosc 1993 47 (8) 1180

Quantitative analysis of water in milk by FT-IR spectrometry

Kennedy SW, James CA// Environm Canada, Canadian Wildlife Serv, Natl Wildlife Res Ctr, 100 Gamelin Blvd, Hull, Quebec, Canada K1A 0H3

J Chromatogr-Biomed Appl 1993 619 (1) 127

Improved method to extract and concentrate porphyrins from liver tissue for analysis by high-performance liquid chromatography

Lopez-Sabater EI, Rodriguez-Jerez JJ, Roig-Sagües AX, Mora-Ventura MT// Univ Autonoma Barcelona, Fac Vet Med, Dept Food Hyg, E-08193 Barcelona, Spain

Food Addit Contam 1993 10 (5) 593

Determination of histamine in fish using an enzymatic method

Straub B, Schollenberger M, Kicherer M, Luckas B, Hammes WP*// *Univ Hohenheim, Inst Lebensmitteltechnol, Garbenstr 25, D-70599 Stuttgart, FRG

Z Lebensmittel-Untersuch Fors 1993 197 (3) 230

Extraction and determination of biogenic amines in fermented sausages and other meat products using reversed-phase-HPLC

Tagliavini J, Bolchi A, Bracchi PG, Ottanello S// Univ Parma, Inst Genet, I-43100 Parma, Italy

J Food Sci 1993 58 (2) 238

Sex determination on samples of bovine meat by polymerase chain reaction

14 PLANT & MICROBIAL PRODUCTS

Atrih A, Rekhif N, Michel M, Lefebvre G*// *Ecole Natl Super Agron & Ind Alimentaires, Inst Natl Polytech Lorraine, Microbiol Alimentaire Lab, F-54500 Vandoeuvre Nancy, France

Microbios 1993 75 (303) 117

Detection of bacteriocins produced by *Lactobacillus plantarum* strains isolated from different foods

Buckee GK, Mundy AP// Address not available.

J Inst Brew 1993 99 (5) 381

Determination of ethanol in beer by gas chromatography (Direct injection) - Collaborative trial

Demeke T, Kawchuk LM, Lynch DR// Agr Canada, Lethbridge Res Stn, POB 3000 Main, Lethbridge, Alberta, Canada T1J 4B1

Amer Potato J 1993 70 (8) 561

Identification of potato cultivars and clonal variants by random amplified polymorphic DNA analysis

De Mora SJ, Lee P, Shooter D, Eschenbruch R// Univ Auckland, Dept Chem, Private Bag 92019, Auckland, New Zealand

Amer J Enol Viticult 1993 44 (3) 327

The analysis and importance of dimethylsulfoxide in wine

Freeston MR, Baker CD// Address not available.

J Inst Brew 1993 99 (5) 377

The determination of alcohol in beer using the SCABA automated method (Collaborative trial)

Gallignani M, Garrigues S, De la Guardia M*// *Univ Valencia, Dept Analyt Chem, 50 Dr Moliner St, E-46100 Burjassot, Spain

Analyst 1993 118 (9) 1167

Direct determination of ethanol in all types of alcoholic beverages by near-infrared derivative spectrometry

Garcia-Viguera C, Tomas-Barberan FA*, Ferreres F, Artes F, Tomas-Lorente F// *CSIC, CEBAS, Dept Ciencia & Tecnol Alimentos, POB 4195, E-30080 Murcia, Spain

Z Lebensmittel-Untersuch Fors 1993 197 (3) 255

Determination of citrus jams genuineness by flavonoid analysis

Garver KL, Muriana PM*// *Purdue Univ, Dept Food Sci, West Lafayette, In 47907, USA

Int J Food Microbiol 1993 19 (4) 241

Detection, identification and characterization of bacteriocin-producing lactic acid bacteria from retail food products

Gomez-Cordoves C, Bartolome B// CSIC, Inst Fermentac Ind, Juan Cierva 3, E-28006 Madrid, Spain

Z Lebensmittel-Untersuch Fors 1993 197 (3) 260

Application of principal component analysis to simple determinations of brandies as a means of verifying quality

Mailer RJ, Daun J, Scarth R*// *Univ Manitoba, Dept Plant Sci, Winnipeg, Manitoba, Canada R3T 2N2

J Amer Oil Chem Soc 1993 70 (9) 863

Cultivar identification in *Brassica napus* L by reversed-phase high-performance liquid chromatography of ethanol extracts

Makkar HPS, Becker K*// *Univ Hohenheim 480, Inst Anim Prod Trop & Subtrop, D-70593 Stuttgart, FRG

J Sci Food Agr 1993 62 (3) 295

Behaviour of tannic acid from various commercial sources towards redox, metal complexing and protein precipitation assays of tannins

Martinez-Anaya MA, Pitarch B, De Barber CB// CSIC, Inst Agroquim & Tecnol Alimentos, Cereales Lab, C Jaime Roig 11, E-46010 Valencia, Spain

J Food Sci 1993 58 (2) 419

Chemometrics assess quality of breadmaking starters

McFeeeters RF// USDA ARS, Food Fermentat Lab, Raleigh, NC 27695, USA

J Agr Food Chem 1993 41 (9) 1439

Single-injection HPLC analysis of acids, sugars, and alcohols in cucumber fermentations

Owuama CI, Ododo JC// Fed Univ Technol Yola, Dept Biol Sci, PMB 2076, Yola, Nigeria

Food Chem 1993 48 (4) 415

Refractometric determination of ethanol concentration

Rapp A, Markowitz A// Univ Stellenbosch, Stellenbosch, Rep Sth Africa

Chem Unserer Zeit 1993 27 (3) 149

NMR spectroscopy in wine analysis

Williamson B, Goodman BA, Chudek JA// Scottish Crop Res Inst, Dundee DD2 5DA, Scotland

Micron 1993 24 (4) 377

The structure of mature gooseberry (*Ribes grossularia*) fruits revealed non-invasively by NMR microscopy