

CONTENTS

Volume 135, issue 3, 1 December 2012 (Published 31 August 2012)

General Papers

- 861 Defensin protein from sweet potato (*Ipomoea batatas* [L.] Lam 'Tainong 57') storage roots exhibits antioxidant activities *in vitro* and *ex vivo*
G.-J. HUANG, J.-S. DENG, H.-J. CHEN, S.-S. HUANG, J.-C. LIAO, W.-C. HOU & Y.-H. LIN (Taiwan)
- 868 New nitrogen-containing bromophenols from the marine red alga *Rhodomela confervoides* and their radical scavenging activity
K. LI, X.-M. LI (PR China), J.B. GLOER (United States) & B.-G. WANG (PR China)
- 904 Combined effects of high-pressure and enzymatic treatments on the hydrolysis of chickpea protein isolates and antioxidant activity of the hydrolysates
T. ZHANG, B. JIANG, M. MIAO, W. MU & Y. LI (China)
- 921 Changes in Maillard reaction products in ghee during storage
P. ANDREWES (New Zealand)
- 929 Berry components inhibit α -glucosidase *in vitro*: Synergies between acarbose and polyphenols from black currant and rowanberry
A.S. BOATH, D. STEWART & G.J. MCDUGALL (UK)
- 937 Evaluation of polycyclic aromatic hydrocarbons content in different stages of soybean oils processing
M.C. ROJO CAMARGO, P.R. ANTONIOLLI & E. VICENTE (Brazil)
- 943 High antioxidant activity of coffee silverskin extracts obtained by the treatment of coffee silverskin with subcritical water
Y. NARITA & K. INOUE (Japan)
- 950 Germinated grains – Sources of bioactive compounds
O.N. DONKOR, L. STOJANOVSKA, P. GINN, J. ASHTON & T. VASILJEVIC (Australia)
- 960 Six cytotoxic annonaceous acetogenins from *Annona squamosa* seeds
Y. CHEN, J.-W. CHEN, Y. WANG, S.-S. XU & X. LI (PR China)
- 967 Fucosterol isolated from *Undaria pinnatifida* inhibits lipopolysaccharide-induced production of nitric oxide and pro-inflammatory cytokines via the inactivation of nuclear factor- κ B and p38 mitogen-activated protein kinase in RAW264.7 macrophages
M.-S. YOO, J.-S. SHIN, H.-E. CHOI, Y.-W. CHO, M.-H. BANG, N.-I. BAEK & K.-T. LEE (Republic of Korea)

Continued on inside back cover

CONTENTS—Continued from outside back cover

- 976 Wild bitter melon (*Momordica charantia* Linn. var. *abbreviata* Ser.) extract and its bioactive components suppress *Propionibacterium acnes*-induced inflammation
C. HSU, T.-H. TSAI, Y.-Y. LI, W.-H. WU, C.-J. HUANG & P.-J. TSAI (Taiwan)
- 985 Reductions in flesh discolouration and internal morphological changes in Nanhui peaches (*Prunus persica* (L.) Batsch, cv. Nanhui) by electrolysed water and 1-methylcyclopropene treatment during refrigerated storage
R. ZHOU, G. ZHANG, Y. HU, H. WU, J. XIE & Y. LUO (China)
- 993 The functional property of egg yolk phosvitin as a melanogenesis inhibitor
S. JUNG, D.H. KIM, J.H. SON, K. NAM (South Korea), D.U. AHN (South Korea, USA) & C. JO (South Korea)
- 999 Cocoa polyphenols are absorbed in Caco-2 cell model of intestinal epithelium
A. KOSIŃSKA (Switzerland, Poland) & W. ANDLAUER (Switzerland)
- 1011 Synthesis and antioxidant activity of hydroxylated phenanthrenes as *cis*-restricted resveratrol analogues
D.-J. DING, X.-Y. CAO, F. DAI, X.-Z. LI, G.-Y. LIU, D. LIN, X. FU, X.-L. JIN & B. ZHOU (China)
- 1020 Effects of cyclodextrins on the antimicrobial activity of plant-derived essential oil compounds
H. LIANG, Q. YUAN (People's Republic of China), F. VRIESEKOP (United Kingdom) & F. LV (People's Republic of China)
- 1028 Antioxidant activity, ascorbic acid, phenolic compounds and sugars of wild and commercial *Tuberaria lignosa* samples: Effects of drying and oral preparation methods
J. PINELA (Portugal), L. BARROS (Portugal, Spain), M. DUEÑAS (Spain), A.M. CARVALHO (Portugal), C. SANTOS-BUELGA (Spain) & I.C.F.R. FERREIRA (Portugal)
- 1036 Inhibition of β -carotene degradation in oil-in-water nanoemulsions: Influence of oil-soluble and water-soluble antioxidants
C. QIAN, E.A. DECKER, H. XIAO & D.J. MCCLEMENTS (United States)
- 1044 Endothelium-dependent vasodilator and antioxidant properties of a novel enzymatic extract of grape pomace from wine industrial waste
R. RODRIGUEZ-RODRIGUEZ, M.L. JUSTO, C.M. CLARO, E. VILA, J. PARRADO, M.D. HERRERA & M. ALVAREZ DE SOTOMAYOR (Spain)
- 1052 Behaviour of polydiacetylene vesicles under different conditions of temperature, pH and chemical components of milk
C.P.D. OLIVEIRA, N. DE FÁTIMA FERREIRA SOARES, E.A.F. FONTES, T.V. DE OLIVEIRA & A.M.M. FILHO (Brazil)
- 1057 Chemical composition and starch digestibility in flours from Polish processed legume seeds
M. PIECYK, R. WOŁOSIAK, B. DRUŻYŃSKA & E. WOROBIJ (Poland)
- 1065 Effect of salinity stress on phenolic compounds and carotenoids in buckwheat (*Fagopyrum esculentum* M.) sprout
J.-H. LIM, K.-J. PARK, B.-K. KIM, J.-W. JEONG & H.-J. KIM (Republic of Korea)
- 1071 Monitoring pesticide residues in greenhouse tomato by combining acetonitrile-based extraction with dispersive liquid-liquid microextraction followed by gas-chromatography-mass spectrometry
A. MELO, S.C. CUNHA, C. MANSILHA, A. AGUIAR, O. PINHO & I.M.P.L.V.O. FERREIRA (Portugal)
- 1091 Tyrosinase inhibitory components of immature calamondin peel
S.-N. LOU, M.-W. YU (Taiwan) & C.-T. HO (USA)
- 1097 Structure characterization of a novel neutral polysaccharide isolated from *Ganoderma lucidum* fruiting bodies
D. PAN, L. WANG, C. CHEN, B. TENG, C. WANG, Z. XU, B. HU & P. ZHOU (PR China)
- 1104 Bioavailability of glycitein relatively to other soy isoflavones in healthy young Caucasian men
S. SHINKARUK, M. DURAND, V. LAMOTHE, A. CARPAYE, A. MARTINET, P. CHANTRE, S. VERGNE, X. NOGUES, N. MOORE & C. BENNETAU-PELISSERO (France)
- 1118 Gelatin hydrolysate from blacktip shark skin prepared using papaya latex enzyme: Antioxidant activity and its potential in model systems
P. KITTIPHATTANABAWON (Thailand, Canada), S. BENJAKUL, W. VISESSANGUAN (Thailand) & F. SHAHIDI (Canada)
- 1127 Optimization of espresso machine parameters through the analysis of coffee odorants by HS-SPME-GC/MS
G. CAPRIOLI, M. CORTESE, G. CRISTALLI, F. MAGGI, L. ODELLO, M. RICCIUTELLI, G. SAGRATINI, V. SIROCCHI, G. TOMASSONI & S. VITTORI (Italy)

Continued on last page

CONTENTS—Continued from inside back cover

- 1134 Utilisation of chitinous materials in pigment adsorption
S.-L. WANG, Y.-C. CHEN, Y.-H. YEN & T.-W. LIANG (Taiwan)
- 1141 Influence of sulphur-fumigation on the quality of white ginseng: A quantitative evaluation of major ginsenosides by high performance liquid chromatography
X. JIN, L.-Y. ZHU, H. SHEN, J. XU, S.-L. LI, X.-B. JIA, H. CAI, B.-C. CAI & R. YAN (PR China)
- 1157 Degradation of white wine haze proteins by Aspergillopepsin I and II during juice flash pasteurization
M. MARANGON, S.C. VAN SLUYTER, E.M.C. ROBINSON, R.A. MUHLACK, H.E. HOLT, P.A. HAYNES, P.W. GODDEN, P.A. SMITH & E.J. WATERS (Australia)
- 1166 Induction of electrophile-responsive element (EpRE)-mediated gene expression by tomato extracts *in vitro*
L. GIJSBERS, H.D.L.M. VAN EEKELLEN, T.H. NGUYEN, L.H.J. DE HAAN, B. VAN DER BURG, J.M.M.J.G. AARTS, I.M.C.M. RIETJENS & A.G. BOVY (The Netherlands)
- 1173 *Picea mariana* bark: A new source of *trans*-resveratrol and other bioactive polyphenols
M.-E. GARCÍA-PÉREZ, M. ROYER (Canada), G. HERBETTE (France), Y. DESJARDINS, R. POULIOT & T. STEVANOVIĆ (Canada)
- 1183 Hydrolysis of surimi wastewater for production of transglutaminase by *Enterobacter* sp. C2361 and *Providencia* sp. C1112
A. H-KITTIKUN, C. BOURNEOW & S. BENJAKUL (Thailand)
- 1192 Production and functional characterisation of antioxidative hydrolysates from corn protein via enzymatic hydrolysis and ultrafiltration
K. ZHOU, S. SUN & C. CANNING (USA)
- 1205 Fatty acid alkyl esters presence in olive oil vs. organoleptic assessment
R.B. GÓMEZ-COCA, W. MOREDA & M.C. PÉREZ-CAMINO (Spain)
- 1210 Children's hedonic response to berry products: Effect of chemical composition of berries and *hTAS2R38* genotype on liking
J.-P. SUOMELA, J. VAARNO, M. SANDELL, H.-M. LEHTONEN, R. TAHVONEN, J. VIIKARI & H. KALLIO (Finland)
- 1220 Nitric oxide fumigation stimulates flavonoid and phenolic accumulation and enhances antioxidant activity of mushroom
J. DONG, M. ZHANG, L. LU, L. SUN & M. XU (China)
- 1226 Histamine stability in Rihaakuru at -80, 4 and 30°C
A. NAILA, S. FLINT, G.C. FLETCHER, P.J. BREMER (New Zealand) & G. MEERDINK (United Kingdom)
- 1230 Comparative proteome analysis of seed storage and allergenic proteins among four narrow-leafed lupin cultivars
S. ISLAM (Australia, Bangladesh), G. YAN, R. APPELS & W. MA (Australia)
- 1239 Hypohalous acid-mediated halogenation of resveratrol and its role in antioxidant and antimicrobial activities
X.-Z. LI, X. WEI, C.-J. ZHANG, X.-L. JIN, J.-J. TANG, G.-J. FAN & B. ZHOU (China)
- 1253 *Thymus lotocephalus* wild plants and *in vitro* cultures produce different profiles of phenolic compounds with antioxidant activity
P. COSTA, S. GONÇALVES, P. VALENTÃO, P.B. ANDRADE, N. COELHO & A. ROMANO (Portugal)
- 1268 Determination of quarantine period in African catfish (*Clarias gariepinus*) fed with pig (*Sus* sp.) offal to assure compliance with *halal* standards
M.N. WAN NORHANA, G.A. DYKES, B. PADILAH, A.A. AHMAD HAZIZI & A.R. MASAZURAH (Malaysia)
- 1273 Impact of lipid oxidation-derived aldehydes and ascorbic acid on the antioxidant activity of model melanoidins
V. KITRYTĖ (Belgium, Lithuania), A. ADAMS (Belgium), P.R. VENS KUTONIS (Lithuania) & N. DE KIMPE (Belgium)
- 1284 Metabolomic profiling of beer reveals effect of temperature on non-volatile small molecules during short-term storage
A.L. HEUBERGER, C.D. BROECKLING (USA), M.R. LEWIS (USA, United Kingdom), L. SALAZAR, P. BOUCKAERT & J.E. PRENNI (USA)

CONTENTS—Continued from last page of the issue

- 1290 Lycopene degradation, isomerization and *in vitro* bioaccessibility in high pressure homogenized tomato puree containing oil: Effect of additional thermal and high pressure processing
G. KNOCKAERT, S.K. PULISSERY, I. COLLE, S. VAN BUGGENHOUT, M. HENDRICKX & A. VAN LOEY (Belgium)
- 1298 Antioxidant capacity and angiotensin I converting enzyme inhibitory activity of a melon concentrate rich in superoxide dismutase
J. CARILLON (France), D. DEL RIO (Italy), P.-L. TEISSÈDRE, J.-P. CRISTOL, D. LACAN & J.-M. ROUANET (France)
- 1303 Colloidal astaxanthin: Preparation, characterisation and bioavailability evaluation
N. ANARJAN, C.P. TAN (Malaysia), I.A. NEHDI (Saudi Arabia) & T.C. LING (Malaysia)
- 1316 Pyrolytic formation of polycyclic aromatic hydrocarbons from sesquiterpenes
G.W. FRANCIS, A.A. CHRISTY & J. ØYGARDEN (Norway)
- 1344 Isolation and identification of lutein esters, including their regioisomers, in tritordeum (*×Tritordeum* Ascherson et Graebner) grains: Evidence for a preferential xanthophyll acyltransferase activity
E. MELLADO-ORTEGA & D. HORNERO-MÉNDEZ (Spain)
- 1353 Isorhapontigenin: A novel bioactive stilbene from wine grapes
M.I. FERNÁNDEZ-MARÍN, R.F. GUERRERO, M.C. GARCÍA-PARRILLA, B. PUERTAS (Spain), T. RICHARD (France), M.A. RODRIGUEZ-WERNER, P. WINTERHALTER (Germany), J.-P. MONTI (France) & E. CANTOS-VILLAR (Spain)
- 1369 The role of electron-transfer and H-atom donation on the superb antioxidant activity and free radical reaction of curcumin
A. BARZEGAR (Iran)
- 1377 Temperature-dependent stability and DPPH scavenging activity of liposomal curcumin at pH 7.0
Y. NIU, D. KE, Q. YANG, X. WANG, Z. CHEN, X. AN & W. SHEN (China)
- 1383 Effect of natural antioxidant combinations on lipid oxidation in cooked chicken meat during refrigerated storage
G.R. SAMPAIO, T. SALDANHA, R.A.M. SOARES & E.A.F.S. TORRES (Brazil)
- 1397 Isolation and identification of phenolic compounds from the seeds of *Perilla frutescens* (L.) and their inhibitory activities against α -glucosidase and aldose reductase
T.J. HA, J.H. LEE, M.-H. LEE, B.W. LEE, H.S. KWON, C.-H. PARK, K.-B. SHIM, H.-T. KIM, I.-Y. BAEK & D.S. JANG (Republic of Korea)
- 1404 Effects of gelation temperature on Mozzarella-type curd made from buffalo and cows' milk: 2. Curd yield, overall quality and casein fractions
I. HUSSAIN, J. YAN, A.S. GRANDISON & A.E. BELL (United Kingdom)
- 1411 Probiotic viability and physico-chemical and sensory properties of plain and stirred fruit yogurts made from goat's milk
C. SENAKA RANADHEERA (Australia, Sri Lanka), C.A. EVANS, M.C. ADAMS & S.K. BAINES (Australia)
- 1419 Isolation of powerful antioxidants from the medicinal halophyte *Limoniastrum guyonianum*
N. TRABELSI (Tunisia, France), S. OUESLATI, H. FALLEH (Tunisia), P. WAFFO-TÉGUO, Y. PAPASTAMOULIS, J.-M. MÉRILLON (France), C. ABDELLY & R. KSOURI (Tunisia)
- 1432 Moisture absorption and retention properties, and activity in alleviating skin photodamage of collagen polypeptide from marine fish skin
H. HOU, B. LI, Z. ZHANG, C. XUE, G. YU, J. WANG, Y. BAO, L. BU, J. SUN, Z. PENG & S. SU (PR China)
- 1440 Nanoemulsion delivery systems: Influence of carrier oil on β -carotene bioaccessibility
C. QIAN, E.A. DECKER, H. XIAO & D.J. MCCLEMENTS (USA)
- 1448 Effect of high hydrostatic pressure on antimicrobial activity and quality of Manuka honey
N.A. AL-HABSI & K. NIRANJAN (UK)
- 1455 Analysis on the effectiveness of co-solute on the network integrity of high methoxy pectin
O. ALMRHAG, P. GEORGE, A. BANNIKOVA, L. KATOPO, D. CHAUDHARY & S. KASAPIS (Australia)

- 1463 Isolation and identification of flavour peptides from Puffer fish (*Takifugu obscurus*) muscle using an electronic tongue and MALDI-TOF/TOF MS/MS
M.-X. ZHANG, X.-C. WANG, Y. LIU, X.-L. XU & G.-H. ZHOU (PR China)
- 1471 Purification of naringin and neohesperidin from Huyou (*Citrus changshanensis*) fruit and their effects on glucose consumption in human HepG2 cells
J. ZHANG, C. SUN, Y. YAN, Q. CHEN, F. LUO, X. ZHU, X. LI & K. CHEN (PR China)
- 1479 Functional properties and *in vitro* antioxidant activity of roe protein hydrolysates of *Channa striatus* and *Labeo rohita*
N.R. GALLA, P.R. PAMIDIGHANTAM, S. AKULA & B. KARAKALA (India)
- 1485 Deconvolution of matrix-assisted laser desorption/ionization time-of-flight mass spectrometry isotope patterns to determine ratios of A-type to B-type interflavan bonds in cranberry proanthocyanidins
R.P. FELICIANO, C.G. KRUEGER, D. SHANMUGANAYAGAM, M.M. VESTLING & J.D. REED (USA)
- 1494 Effect of the production method on the properties of RS3/RS4 type resistant starch. Part 1: Properties of retrograded starch (RS3) produced under various conditions and its susceptibility to acetylation
M. KAPELKO, T. ZIĘBA, A. GOLACHOWSKI & A. GRYSZKIN (Poland)
- 1505 *Lavandula luisieri* essential oil as a source of antifungal drugs
M. ZUZARTE, M.J. GONÇALVES, M.T. CRUZ, C. CAVALEIRO, J. CANHOTO, S. VAZ, E. PINTO & L. SALGUEIRO (Portugal)
- 1511 Free amino acids and biogenic amines in Alicante Monastrell wines
M.P. ARRIETA (Spain, Argentina) & M.S. PRATS-MOYA (Spain)
- 1520 Chemical, technological and *in vitro* antioxidant properties of mango, guava, pineapple and passion fruit dietary fibre concentrate
R. MARTÍNEZ, P. TORRES, M.A. MENESES, J.G. FIGUEROA (Ecuador), J.A. PÉREZ-ÁLVAREZ & M. VIUDA-MARTOS (Spain)
- 1527 Effect of pre-dehydration treatment on the *in vitro* digestibility of starch in cookie
K. KAWAI, H. KAWAI, Y. TOMODA, K. MATSUSAKI & Y. HAGURA (Japan)
- 1533 Can artisanal “Coalho” cheese from Northeastern Brazil be used as a functional food?
R.A. SILVA, M.S.F. LIMA, J.B.M. VIANA, V.S. BEZERRA, M.C.B. PIMENTEL, A.L.F. PORTO, M.T.H. CAVALCANTI & J.L. LIMA FILHO (Brazil)
- 1539 Antioxidant properties and essential oil composition of *Calamintha grandiflora* L.
D. DOBRAVALSKYTĖ (Lithuania, France), P.R. VENSKUTONIS (Lithuania) & T. TALOU (France)
- 1547 Enzymatic synthesis and identification of oligosaccharides obtained by transgalactosylation of lactose in the presence of fructose using β -galactosidase from *Kluyveromyces lactis*
Q. SHEN, R. YANG, X. HUA, F. YE, H. WANG, W. ZHAO & K. WANG (China)
- 1563 Enrichment of eggs in n-3 polyunsaturated fatty acids by feeding hens with different amount of linseed oil in diet
M. PETROVIĆ, M. GAČIĆ, V. KARAČIĆ, Ž. GOTTSTEIN, H. MAZIJA & H. MEDIĆ (Croatia)
- 1575 Human dietary exposure to perfluoroalkyl substances in Catalonia, Spain. Temporal trend
J.L. DOMINGO (Spain), I.E. JOGSTEN, U. ERIKSSON (Sweden), I. MARTORELL, G. PERELLÓ, M. NADAL (Spain) & B. VAN BAVEL (Sweden)
- 1592 Prebiotic effects of yacon (*Smallanthus sonchifolius* Poepp. & Endl), a source of fructooligosaccharides and phenolic compounds with antioxidant activity
D. CAMPOS, I. BETALLELUZ-PALLARDEL, R. CHIRINOS, A. AGUILAR-GALVEZ (Peru), G. NORATTO (United States) & R. PEDRESCHI (The Netherlands)
- 1600 Effects of addition of egg ovotransferrin-derived peptides on the oxygen radical absorbance capacity of different teas
W. HUANG (PR China, Canada), S. SHEN, C. NIMALARATNE, S. LI, K. MAJUMDER & J. WU (Canada)
- 1619 Postharvest dehydration of wine white grapes to increase genistein, daidzein and the main carotenoids
F. DE SANCTIS, M.G. SILVESTRINI, R. LUNEIA, R. BOTONDI, A. BELLINCONTRO & F. MENCARELLI (Italy)

CONTENTS—Continued from last page of the issue

- 1626 Estimation of freezing storage time and quality changes in hake (*Merluccius merluccius*, L.) by low field NMR
I. SÁNCHEZ-ALONSO, I. MARTINEZ (Spain, Norway), J. SÁNCHEZ-VALENCIA & M. CARECHE (Spain)
- 1635 Effect of alkali treatment on structure and function of pea starch granules
S. WANG & L. COPELAND (Australia)
- 1643 Apoptotic effects of cooked and *in vitro* digested soy on human prostate cancer cells
X. DONG, W. XU, R.A. SIKES & C. WU (USA)
- 1659 Evaluation of hypolipidemic effects of peanut skin-derived polyphenols in rats on Western-diet
R.R. BANSODE, P. RANDOLPH, S. HURLEY & M. AHMEDNA (USA)
- 1667 Degreening and postharvest storage influences 'Star Ruby' grapefruit (*Citrus paradisi* Macf.) bioactive compounds
P. CHAUDHARY, G.K. JAYAPRAKASHA (United States), R. PORAT (Israel) & B.S. PATIL (United States)
- 1685 Colour and surface fluorescence development and their relationship with Maillard reaction markers as influenced by structural changes during cornflakes production
A. FARRONI & M.D.P. BUERA (Argentina)
- 1700 Evaluation of mutagenic and antimutagenic activities of oligorutin and oligoesculin
G. BEN RHOUMA (France, Tunisia), L. CHEBIL (France), M. KRIFA (Tunisia), M. GHOUL (France) & L. CHEKIR-GHEDIRA (Tunisia)
- 1730 Polymorphism, microstructure and rheology of butter. Effects of cream heat treatment
S. RØNHOLT, J.J.K. KIRKENSGAARD, T.B. PEDERSEN, K. MORTENSEN & J.C. KNUDSEN (Denmark)
- 1740 The potential of extracts of *Caryocar villosum* pulp to scavenge reactive oxygen and nitrogen species
R.C. CHISTÉ (Brazil), M. FREITAS (Portugal), A.Z. MERCADANTE (Brazil) & E. FERNANDES (Portugal)
- 1756 Instant food products as a source of silicon
A. PRESCHA, K. ZABŁOCKA-SŁOWIŃSKA, A. HOJKA & H. GRAJETA (Poland)
- 1762 *In vitro* attenuation of acrolein-induced toxicity by phloretin, a phenolic compound from apple
Q. ZHU, N.Q.-S. ZHANG, C.F. LAU, J. CHAO, Z. SUN, R.C.-C. CHANG, F. CHEN & M. WANG (PR China)
- 1769 Heat-oxidation stability of palm oil blended with extra virgin olive oil
A. DE LEONARDIS & V. MACCIOLA (Italy)
- 1789 Antioxidant and metal chelating activities of peptide fractions from phaseolin and bean protein hydrolysates
J. CARRASCO-CASTILLA, A.J. HERNÁNDEZ-ÁLVAREZ, C. JIMÉNEZ-MARTÍNEZ, C. JACINTO-HERNÁNDEZ (Mexico), M. ALAIZ, J. GIRÓN-CALLE, J. VIOQUE (Spain) & G. DÁVILA-ORTIZ (Mexico)
- 1818 Purification, partial characterization and anti-inflammatory characteristics of lotus (*Nelumbo nucifera* Gaertn) plumule polysaccharides
C.-H. LIAO & J.-Y. LIN (Taiwan)
- 1836 Study on the interaction of food colourant quinoline yellow with bovine serum albumin by spectroscopic techniques
N. SHAHABADI, M. MAGHSUDI & S. ROUHANI (Iran)
- 1842 Human IgE binding and *in vitro* digestion of S-OVA
R. JIMÉNEZ-SAIZ, C. PINEDA-VADILLO, R. LÓPEZ-FANDIÑO & E. MOLINA (Spain)
- 1848 Caseinolytic and milk-clotting activities from *Moringa oleifera* flowers
E.V. PONTUAL, B.E.A. CARVALHO, R.S. BEZERRA, L.C.B.B. COELHO, T.H. NAPOLEÃO & P.M.G. PAIVA (Brazil)
- 1868 Type of packaging affects the colour stability of vitamin E enriched beef
R.T. NASSU (Canada, Brazil), B. UTTARO, J.L. AALHUS, S. ZAWADSKI, M. JUÁREZ & M.E.R. DUGAN (Canada)
- 1873 Human health risk of dietary intake of organochlorine pesticide residues in bovine meat and tissues from Veracruz, México
V. PARDÍO, D. MARTÍNEZ, A. FLORES, D. ROMERO, V. SUÁREZ, K. LÓPEZ & R. USCANGA (Mexico)
- 1914 Antioxidant activity of *Lactobacillus plantarum* strains isolated from traditional Chinese fermented foods
S. LI, Y. ZHAO, L. ZHANG, X. ZHANG, L. HUANG, D. LI, C. NIU, Z. YANG & Q. WANG (PR China)

CONTENTS—Continued from last page of the issue

- 1920 Vitamin C induces apoptosis in AGS cells by down-regulation of 14-3-3 σ via a mitochondrial dependent pathway
A. NAGAPPAN, K.I. PARK, H.S. PARK, J.A. KIM, G.E. HONG, S.R. KANG, D.H. LEE, E.H. KIM, W.S. LEE, C.K. WON & G.S. KIM (Republic of Korea)
- 1929 Antioxidant and α -glucosidase inhibitory phenolics isolated from highbush blueberry flowers
C. WAN (United States, China), T. YUAN, A.L. CIRELLO & N.P. SEERAM (United States)
- 1938 Folate in oats and its milling fractions
M. EDELMANN, S. KARILUOTO (Finland), L. NYSTRÖM (Switzerland) & V. PIIRONEN (Finland)
- 1948 Pancreatic islet proteome profile in Zucker fatty rats chronically treated with a grape seed procyanidin extract
L. CEDÓ, A. CASTELL-AUVÍ, V. PALLARÈS (Spain), C.U. MOHIEN (United States), I. BAIGES, M. BLAY, A. ARDEVOL & M. PINENT (Spain)
- 1957 NMR-based metabolic profiling and *in vitro* antioxidant and hepatotoxic assessment of partially purified fractions from Golden germander (*Teucrium polium* L.) methanolic extract
S. PACIFICO, B. D'ABROSCA, M. SCOGNAMIGLIO, G. D'ANGELO, M. GALLICCHIO, S. GALASSO, P. MONACO & A. FIORENTINO (Italy)
- 1968 Wholeness and primary and secondary food structure effects on *in vitro* digestion patterns determine nutritionally distinct carbohydrate fractions in cereal foods
S. MISHRA & J. MONRO (New Zealand)
- 1975 Structure and characteristics of acid and pepsin-solubilized collagens from the skin of cobia (*Rachycentron canadum*)
S. ZENG, J. YIN, S. YANG, C. ZHANG, P. YANG & W. WU (China)
- 1991 Water at room temperature as a solvent for the extraction of apple pomace phenolic compounds
S.F. REIS, D.K. RAI & N. ABU-GHANNAM (Ireland)
- 1999 *o*-Quinone involvement in the prooxidant tendency of a mixture of quercetin and caffeic acid
V.S. CHEDEA (Romania, Japan), L. CHOUEIRI (Greece), M. JISAKA (Japan) & P. KEFALAS (Greece)
- 2005 Biogenic amine formation and bacterial contribution in *Natto* products
B. KIM, B.Y. BYUN & J.-H. MAH (Republic of Korea)
- 2012 Is lowering reducing sugars concentration in French fries an effective measure to reduce acrylamide concentration in food service establishments?
M. SANNY (The Netherlands), S. JINAP (Malaysia), E.J. BAKKER, M.A.J.S. VAN BOEKEL & P.A. LUNING (The Netherlands)
- 2021 Effects of pH and ionic strength of NaCl on the stability of diacetyl and (–)- α -pinene in oil-in-water emulsions formed with food-grade emulsifiers
G. BORTNOWSKA (Poland)
- 2029 Antimutagenic and antioxidant activity of *Lisosan G* in *Saccharomyces cerevisiae*
S. FRASSINETTI, C.M. DELLA CROCE, L. CALTAVUTURO & V. LONGO (Italy)
- 2035 Effect of the production method on the properties of RS3/RS4 type resistant starch. Part 2. Effect of a degree of substitution on the selected properties of acetylated retrograded starch
M. KAPELKO, T. ZIĘBA & A. MICHALSKI (Poland)
- 2043 Searching ingredients polluted by polycyclic aromatic hydrocarbons in feeds due to atmospheric or pyrolytic sources
I. YEBRA-PIMENTEL, R. FERNÁNDEZ-GONZÁLEZ, E. MARTÍNEZ CARBALLO & J. SIMAL-GÁNDARA (Spain)
- 2052 Proteomic changes involved in tenderization of bovine *Longissimus dorsi* muscle during prolonged ageing
R. POLATI, M. MENINI, E. ROBOTTI, R. MILLIONI, E. MARENGO, E. NOVELLI, S. BALZAN & D. CECCONI (Italy)
- 2070 Free radical scavenging activity of morin 2'-O⁻ phenoxide anion
Z. MARKOVIĆ, D. MILENKOVIĆ, J. ĐOROVIĆ, J.M. DIMITRIĆ MARKOVIĆ (Serbia), V. STEPANIĆ, B. LUČIĆ & D. AMIĆ (Croatia)

CONTENTS—Continued from last page of the issue

- 2078 Anti-diabetic activity peptides from albumin against α -glucosidase and α -amylase
Z. YU, Y. YIN, W. ZHAO, J. LIU (PR China) & F. CHEN (USA)
- 2086 Chemical and antifungal investigations of six *Lippia* species (Verbenaceae) from Brazil
C.S. FUNARI, F.P. GULLO (Brazil), A. NAPOLITANO (Italy), R.L. CARNEIRO, M.J.S. MENDES-GIANNINI,
A.M. FUSCO-ALMEIDA (Brazil), S. PIACENTE, C. PIZZA (Italy) & D.H.S. SILVA (Brazil)
- 2095 Crude caffeine reduces memory impairment and amyloid β_{1-42} levels in an Alzheimer's mouse model
Y.-F. CHU (USA), W.-H. CHANG (Taiwan), R.M. BLACK, J.-R. LIU, P. SOMPOL, Y. CHEN, H. WEI, Q. ZHAO (USA)
& I.H. CHENG (Taiwan)
- 2112 Acanthoic acid induces cell apoptosis through activation of the p38 MAPK pathway in HL-60 human
promyelocytic leukaemia
K.-N. KIM, Y.M. HAM, J.-Y. MOON, M.-J. KIM, Y.-H. JUNG, Y.-J. JEON, N.H. LEE, N. KANG, H.-M. YANG, D. KIM
& C.-G. HYUN (Republic of Korea)
- Short Communication**
- 1360 Nutritional quality of protein in the leaves of eleven *Asphodeline* species (*Liliaceae*) from Turkey
G. ZENGİN, A. AKTUMSEK, G.-O. GULER, Y.-S. ÇAKMAK (Turkey), J. GIRÓN-CALLE, M. ALAIZ & J. VIOQUE
(Spain)
- Corrigendum**
- 1391 Corrigendum to 'Characterisation and functionality of fructo-oligosaccharides affecting water status of
strawberry fruit (*Fragaria vesca* cv. Mara de Bois) during postharvest storage' [Food Chemistry 134 (2012) 912–
919]
M. BLANCH, O. GOÑI, M.T. SANCHEZ-BALLESTA, M.I. ESCRIBANO & C. MERODIO (Spain)
- ANALYTICAL METHODS: Papers**
- 873 Electrochemical detection of carbamate pesticides in fruit and vegetables with a biosensor based on
acetylcholinesterase immobilised on a composite of polyaniline-carbon nanotubes
I. CESARINO, F.C. MORAES, M.R.V. LANZA & S.A.S. MACHADO (Brazil)
- 880 Multi-elemental composition and physical properties of honey samples from Malaysia
L.S. CHUA, N.-L. ABDUL-RAHAMAN, M.R. SARMIDI & R. AZIZ (Malaysia)
- 888 A disposable amperometric immunosensor for chlorpyrifos-methyl based on immunogen/platinum doped
silica sol-gel film modified screen-printed carbon electrode
W. WEI, X. ZONG, X. WANG, L. YIN, Y. PU & S. LIU (PR China)
- 898 Classification of Spanish DO white wines according to their elemental profile by means of support vector
machines
J.M. JURADO, Á. ALCÁZAR, A. PALACIOS-MORILLO & F. DE PABLOS (Spain)
- 913 Analytical comparison and sensory representativity of SAFE, SPME, and Purge and Trap extracts of volatile
compounds from pea flour
C. MURAT, K. GOURRAT, H. JEROSCH & N. CAYOT (France)
- 1006 Assay of tyrosol and hydroxytyrosol in olive oil by tandem mass spectrometry and isotope dilution method
F. MAZZOTTI (Italy), H. BENABDELKAMEL (Italy, Saudi Arabia), L. DI DONNA, L. MAIUOLO, A. NAPOLI &
G. SINDONA (Italy)
- 1078 Development and validation of the high performance liquid chromatography-ion exclusion method for
detection of lactic acid in milk
M.P. MILAGRES, S.C.C. BRANDÃO, M.A. MAGALHÃES, V.P.R. MINIM & L.A. MINIM (Brazil)
- 1083 The influence of flavonoids on the binding of pantoprazole to bovine serum albumin by spectroscopic
methods: With the viewpoint of food/drug interference
S. SHI, Y. ZHANG, X. XIONG, K. HUANG, X. CHEN & M. PENG (China)
- 1112 Influence of barley variety and malting process on lipid content of malt
E. BRAVI, O. MARCONI, G. PERRETTI & P. FANTOZZI (Italy)
- 1148 Synthesis and utilisation of molecular imprinting polymer for clean-up of propachlor in food and
environmental media
J.R. QU, J.J. ZHANG, Y.F. GAO & H. YANG (China)

CONTENTS—Continued from last page of the issue

- 1198 Voltammetric determination of caffeine in beverage samples on bare boron-doped diamond electrode
L. ŠVORC, P. TOMČÍK, J. SVÍTKOVÁ, M. RIEVAJ & D. BUSTIN (Slovak Republic)
- 1245 ACE inhibitory peptides and antioxidant peptides derived from *in vitro* digestion hydrolysate of hen egg white lysozyme
S. RAO, J. SUN, Y. LIU, H. ZENG, Y. SU & Y. YANG (China)
- 1261 Enzymatic-fluorometric quantification of cholesterol in bovine milk
T. LARSEN (Denmark)
- 1310 A LC-MS/MS method for the determination of BADGE-related and BFDGE-related compounds in canned fish food samples based on the formation of $[M+NH_4]^+$ adducts
J. MÍGUEZ, C. HERRERO, I. QUINTÁS, C. RODRÍGUEZ, P.G. GIGOSOS & O.C. MARIZ (Spain)
- 1323 Sensitive detection of ochratoxin A in wine and cereals using fluorescence-based immunosensing
B. PRIETO-SIMÓN, I. KARUBE & H. SAIKI (Japan)
- 1330 Direct detection of 3-amino-5-methylmorpholino-2-oxazolidinone (AMOZ) in food samples without derivatisation step by a sensitive and specific monoclonal antibody based ELISA
J. SONG, H. YANG, Y. WANG, W. SI & A. DENG (China)
- 1337 Quantification of furanic compounds in coated deep-fried products simulating normal preparation and consumption: Optimisation of HS-SPME analytical conditions by response surface methodology
T. PÉREZ-PALACIOS, C. PETISCA, A. MELO & I.M.P.L.V.O. FERREIRA (Portugal)
- 1392 Determination of biogenic amines in wine by thin-layer chromatography/densitometry
A. ROMANO, H. KLEBANOWSKI, S. LA GUERCHE (France), L. BENEDUCE, G. SPANO (Italy), M.-L. MURAT & P. LUCAS (France)
- 1425 Classification and characterisation of Spanish red wines according to their appellation of origin based on chromatographic profiles and chemometric data analysis
D. SERRANO-LOURIDO, J. SAURINA, S. HERNÁNDEZ-CASSOU & A. CHECA (Spain)
- 1555 Detection of postharvest changes of ascorbic acid in fresh-cut melon, kiwi, and pineapple, by using a low cost telemetric system
A. BARBERIS, A. FADDA, M. SCHIRRA, G. BAZZU & P.A. SERRA (Italy)
- 1569 Authentication of Italian Espresso coffee blends through the GC peak ratio between kahweol and 16-*O*-methylcafestol
D. PACETTI, E. BOSELLI, M. BALZANO & N.G. FREGA (Italy)
- 1583 Quality of farmed and wild sea bass lipids studied by 1H NMR: Usefulness of this technique for differentiation on a qualitative and a quantitative basis
N.P. VIDAL, M.J. MANZANOS, E. GOICOECHEA & M.D. GUILLÉN (Spain)
- 1608 A rapid method for detection of fumonisins B₁ and B₂ in corn meal using Fourier transform near infrared (FT-NIR) spectroscopy implemented with integrating sphere
B. GASPARDI, S. DEL ZOTTO, E. TORELLI, S.R. CIVIDINO, G. FIRRAO, G. DELLA RICCIA & B. STEFANON (Italy)
- 1613 Microextraction by packed sorbent (MEPS) as a suitable selective method for l-ascorbic acid determination in beverages
M. ADAM, P. PAVLÍKOVÁ, A. ČÍŽKOVÁ, P. BAJEROVÁ & K. VENTURA (Czech Republic)
- 1653 Identification of Baiying (*Herba Solani Lyrati*) commodity and its toxic substitute Xungufeng (*Herba Aristolochiae Mollissimae*) using DNA barcoding and chemical profiling techniques
M. LI, K.-Y. AU, H. LAM, L. CHENG, R.-W. JIANG, P.P.-H. BUT & P.-C. SHAW (China)
- 1676 Fast determination of *N*-phenylpropenoyl-L-amino acids (NPA) in cocoa samples from different origins by ultra-performance liquid chromatography and capillary electrophoresis
M. LECHTENBERG, K. HENSCHL, U. LIEFLÄNDER-WULF, B. QUANDT & A. HENSEL (Germany)
- 1692 Development of a bioassay-coupled HPLC-SPE- μ NMR platform for identification of α -glucosidase inhibitors in apple peel (*Malus × domestica* Borkh.)
J.S. SCHMIDT, M.B. LAURIDSEN, L.O. DRAGSTED, J. NIELSEN & D. STAERK (Denmark)

CONTENTS—Continued from last page of the issue

- 1718 Lipid characteristics of two subtropical *Seriola* fishes, *Seriola dumerili* and *Seriola rivoliana*, with differences between cultured and wild varieties
H. SAITO (Japan)
- 1750 NIR technology for on-line determination of superficial a_w and moisture content during the drying process of fermented sausages
C. COLLELL, P. GOU, J. ARNAU, I. MUÑOZ & J. COMAPOSADA (Spain)
- 1777 Phospholipid fingerprints of milk from different mammals determined by ^{31}P NMR: Towards specific interest in human health
C. GARCIA, N.W. LUTZ, S. CONFORT-GOUNY, P.J. COZZONE, M. ARMAND & M. BERNARD (France)
- 1785 Characterization of Spanish honeys with protected designation of origin "Miel de Granada" according to their mineral content
C. DE ALDA-GARCILLOPE, A. GALLEGO-PICÓ, J.C. BRAVO-YAGÜE, R.M. GARCINUÑO-MARTÍNEZ & P. FERNÁNDEZ-HERNANDO (Spain)
- 1796 Enantiomeric and non-enantiomeric monoterpenes of *Juniperus communis* L. and *Juniperus oxycedrus* needles and berries determined by HS-SPME and enantioselective GC/MS
Y. FOUJIL-CHERIF & N. YASSAA (Algeria)
- 1801 Rapid detection of lipid oxidation in beef muscle packed under modified atmosphere by measuring volatile organic compounds using SIFT-MS
A. OLIVARES (Spain), K. DRYAHINA, P. ŠPANĚL (Czech Republic) & M. FLORES (Spain)
- 1809 Effect of heat treatment of rennet skim milk induced coagulation on the rheological properties and molecular structure determined by synchronous fluorescence spectroscopy and turbiscan
C. BLECKER, J.-M. HABIB-JIWAN (Belgium) & R. KAROUI (France)
- 1828 Evaluation of green coffee beans quality using near infrared spectroscopy: A quantitative approach
J.R. SANTOS, M.C. SARRAGUÇA, A.O.S.S. RANGEL & J.A. LOPES (Portugal)
- 1855 Direct characterization of commercial lecithins by easy ambient sonic-spray ionization mass spectrometry
G.D. FERNANDES, R.M. ALBERICI, G.G. PEREIRA, E.C. CABRAL, M.N. EBERLIN & D. BARRERA-ARELLANO (Brazil)
- 1894 Sensitive fluorescent detection of melamine in raw milk based on the inner filter effect of Au nanoparticles on the fluorescence of CdTe quantum dots
M. ZHANG, X. CAO, H. LI, F. GUAN, J. GUO, F. SHEN, Y. LUO, C. SUN & L. ZHANG (China)
- 1901 Fast and simple extraction of pesticide residues in selected fruits and vegetables using tetrafluoroethane and toluene followed by ultrahigh-performance liquid chromatography/tandem mass spectrometry
G.T. BAKIRCI & Y. HIŞİL (Turkey)
- 1985 Riboflavin and lumichrome in Dalmatian sage honey and other unifloral honeys determined by LC-DAD technique
C.I.G. TUBEROSO (Italy), I. JERKOVIĆ (Croatia), E. BIFULCO (Italy), Z. MARIJANOVIC (Croatia), F. CONGIU (Italy) & D. BUBALO (Croatia)
- 2103 Development of a novel micro-assay for evaluation of peroxy radical scavenger capacity: Application to carotenoids and structure-activity relationship
E. RODRIGUES, L.R.B. MARIUTTI, R.C. CHISTÉ & A.Z. MERCADANTE (Brazil)
- ANALYTICAL METHODS: Review**
- 1708 Hydrolyzable tannin analysis in food
P. ARAPITSAS (Italy)
- ANALYTICAL METHODS: Short Communications**
- 893 Spectrofluorimetric determination of ellagic acid in brandy
J. SÁDECKÁ & J. TÓTHOVÁ (Slovak Republic)
- 1365 A critical evaluation on the reliability of two aluminum chloride chelation methods for quantification of flavonoids
D. MAMMEN & M. DANIEL (India)

CONTENTS—Continued from last page of the issue

- 1863 HPLC–PDA–MS fingerprinting to assess the authenticity of pomegranate beverages
G. BORGES & A. CROZIER (United Kingdom)

Letters to the Editor

- 1784 Response to the Letter to Editor regarding “*Stevia rebaudiana* Bertoni, source of a high potency natural sweetener: A comprehensive review on the biochemical, nutritional and functional aspects extraction and safety of stevioside”
R. LEMUS-MONDACA, A. VEGA-GÁLVEZ, L. ZURA-BRAVO & K. AH-HEN (Chile)
- 1861 “Extraction and safety of stevioside”; Response to the article “*Stevia rebaudiana* Bertoni, source of a high potency natural sweetener: a comprehensive review on the biochemical, nutritional and functional aspects”
M. PURI (Australia)
- I Calendar