Oral Presentations

Titles

O 1

Past, present and future of LC-MS

Lutz Alder
Federal Institute for Risk Assessment, Germany
E-mail: lutz.alder@bfr.bund.de

O 2

Update of EU pesticides legislation EC 396/2005, import tolerances and monitoring results relevant for Latin American products

Arne Andersson
National Food Administration, Box 622, SE-751 26 Uppsala, Sweden
E-mail: aran@slv.se

O 3

Integrated pesticides and mycotoxins multi-residue analysis by modified QuEChERS method

Ionara R. Pizzutti[1], André de Kok[2], Rosselei da Silva[1], Marijke de Kroon[2], Bárbara Noronha[1], Jos Scholten[2], Cristiano Spiazzi[1], Wagner Azambuja[1] and Wouter Wind[2]
[1]*Federal University of Santa Maria – Chemistry Department – Center of Research and Analysis of Residues and Contaminants (CEPARC), Santa Maria, RS, Brazil*
[2]*VWA-Food and Consumer Product Safety Authority-National Reference Laboratory (NRL) for Pesticides and Mycotoxins Analysis in Food, Amsterdam, The Netherlands*
E-mail: pizzutti@quimica.ufsm.br; andré.de.kok@vwa.nl

O 4

Why still using GC-MS(/MS) for pesticide residue analysis?

André de Kok
VWA - Food and Consumer Product Safety Authority – National Reference Laboratory (NRL) for Pesticides and Mycotoxins Analysis in Food, Chemistry Laboratory – R&D Group, Amsterdam, The Netherlands
E-mail: andré.de.kok@vwa.nl

O 5

Analysis and monitoring of illegal or misused pesticides in European and imported Latin-American fruits and vegetables

Amadeo R. Fernandez-Alba, Octavio Malato and Milagros Mezcua
University of Almeria, Pesticide Residue Research Group, EU Community Reference Laboratory for Fruits and Vegetables, 04071 Almeria, Spain
E-mail: amadeo@ual.es

O 6
Determination of pesticide residues in Colombia

Jairo Arturo Guerrero Dallos
National University of Colombia, Pesticide Residue Analysis Laboratory, Bogotá, Colombia
E-mail: jaguerrerod@unal.edu.co

O 7
An Australian approach to chemical residue management – concepts, programs and results

Ian C. Reichstein
National Residue Survey, Australian Government Department of Agriculture, Fisheries and Forestry, PO Box 858, Canberra, ACT, 2601, Australia
E-mail: ian.reichstein@daff.gov.au

O 8
Harvest and post-harvest factors influencing the presence of pesticide residues in soy, wheat and corn

Alejandra P. Ricca[1] and María J. Martínez[2]
[1]*National Agrotechnical Institute (INTA), Food Technology Institute (ITA), Argentina*
[2]*Grain Quality Laboratory, EEA-INTA Manfredi, Córdoba, Argentina*
E-mail: aricca@cnia.inta.gov.ar

O 9
Present relevant issues for pesticide residue analysis, focused on Argentinean experiences

Horacio Beldoménico, María R. Repetti, Juan J. De Jesús and Silvia R. García
National University of Litoral, School of Chemical Engineering, Central Laboratory, Santa Fe, Argentina
E-mail: hbeldo@fiq.unl.edu.ar

O 10
Agrochemicals in horticultural ecosystems in Cartago, Costa Rica

Clemens Ruepert, Maria Luisa Fournier, Fernando Ramírez and Seiling Vargas
National University, IRET Regional Institute for Toxic Substances Studies, Heredia, Costa Rica
E-mail: cruepert@una.ac.cr

O 11

New developments in sample preparation for the multi-residue analysis of pesticides in complex matrices from the food and pharmaceutical industries

Andrés Pérez, Joaquín González, Silvina Niell, Lucia Geis, Lucía Pareja, Gabriel González, Eduardo Dellacassa, Verónica Cesio and Horacio Heinzen
University of the Republic, UdelaR, School of Chemistry, Organic Chemistry Department, Pharmacognosy and Natural Products, Montevideo, Uruguay
E-mail: heinzen@fq.edu.uy

O 12

Developments in full scan mass spectrometric detection techniques in LC analysis of pesticide residues

Hans Mol, Paul Zomer and Paula Rutgers
RIKILT Institute of Food Safety, Bornsesteeg 45, 6708 PD, Wageningen, Netherlands
E-mail: hans.mol@wur.nl

O 13

Catching up with QuEChERS: New developments and results

Steven J. Lehotay and Katerina Mastovska
U.S. Dept. of Agriculture, Agricultural Research Service, Eastern Regional Research Center, Wyndmoor, Pennsylvania, USA
E-mail: steven.lehotay@ars.usda.gov

O 14

Method validation and quality control procedures for pesticide residue analysis in European Official Control Laboratories

Antonio Valverde
University of Almeria, Pesticide Residue Research Group, Almería, Spain
E-mail: avalverd@ual.es

O 15

How to operate a pesticide residues laboratory efficiently

Stewart Reynolds
Food and Environment Research Agency (FERA), Sand Hutton, York YO 41 1LZ, UK
E-mail: Stewart.Reynolds@fera.gsi.gov.uk

O 16

Use of uncertainty information in compliance with specifications for determination of pesticides

Celia Puglisi
National Institute of Industrial Technology (INTI), Department of Scientific and Industrial Metrology, Argentina
E-mail: cpuglisi@inti.gob.ar

O 17

Management of residue testing in foods by DILAB– SENASA, Argentina

Nora M. Angelini
National Animal Health and Agri-food Quality Service (SENASA), Directorate for Laboratories and Technical Control (DILAB), Buenos Aires, Argentina
E-mail: nangelin@senasa.gov.ar

O 18

Pesticide dietary risk assessment in Latin America

Eloisa Dutra Caldas
University of Brasilia, Laboratory of Toxicology, DF, Brazil
E-mail: eloisa@unb.br

O 19

The analysis of glyphosate and other ionic pesticides using suppressed ion chromatography-tandem mass spectrometry

Richard J Fussell, Michael Dickinson and Dawn Findlay
Food and Environment Research Agency (FERA), Sand Hutton, York, North Yorkshire, YO41 1LZ, UK
E-mail: *richard.fussell@fera.gsi.gov.uk*

O 20

Environmental and eco-toxicological aspects of glyphosate and other pesticides used in soybean culture

Argelia M. Lenardón and María I. Maitre
Instituto de Desarrollo Tecnológico para la Industria Química (INTEC) CONICET-UNL, Santa Fe, Argentina
E-mail: lenardon@santafe-conicet.gov.ar

O 21

Management of pesticide residues in Indian grapes for export through comprehensive pre-harvest residue monitoring – a success story

Kaushik Banerjee, P. G. Adsule, A.K. Upadhyay, S.D. Sawant, N.S. Kulkarni, S.D. Ramteke and R.G. Somkuwar
National Research Centre for Grapes, P.O. Manjri Farm, Pune, India-412 307
E-mail: kbgrape@yahoo.com

O 22

Accreditation: Delivering trust in the global market

Laura Pastore
Argentinean Accreditation Body, Argentina
E-mail: lpasto@mecon.gov.ar

O 23
Residue proficiency testing in Argentina

Patricia Gatti[1], Liliana Castro [2] and Célia Puglisi[2]
[1]*National Institute of Industrial Technology (INTI-CITIL), Argentina.*
[2]*National Institute of Industrial Technology (INTI), Department of Scientific and Industrial Metrology, Argentina*
E-mail: pagatti@inti.gob.ar

O 24
Pesticides in the environment: Toxicological risk for wetland top predator species

Mónica M. Muñoz-de-Toro
Laboratory of Endocrinology and Endocrine-dependent Tumors, School of Biochemistry and Biological Sciences, National University of Litoral, Santa Fe, Argentina.
E-mail: monicamt@fbcb.unl.edu.ar

O 25
Progress in the analysis of pesticides not amenable to multiresidue methods

Michelangelo Anastassiades, Dorothea Mack and Diana Inês Kolberg
EU-Community Reference Laboratory for Pesticide Residues using Single Residue Methods (CRL-SRM) hosted at the Chemisches und Veterinäruntersuchungsamt Stuttgart (CVUA), Schaflandstrasse 3/2, D-70736 Fellbach
E-mail: michelangelo.anastassiades@cvuas.bwl.de

Vendor Technical Seminars

Titles of Oral Presentations

V1
GERSTEL GmbH
Advanced monitoring of pesticides in fruits and vegetables
Ralf Loescher
GERSTEL GmbH, Germany
E-mail: Ralf_Loescher@gerstel.de

V 2
VARIAN INC.
The measurement of pesticide residue in food using Triple Quadrupole and Ion Trap based mass Spectrometers coupled with Gas and Liquid Chromatographs
Elizabeth Almasi, John George and Haibo Wang
Varian Inc., Walnut Creek, California, USA.
E-mail: elizabeth.almasi@varianinc.com

V 3
AGILENT TECHNOLOGIES
Analysis workflow using hyphenated mass spectrometry techniques
Chin-Kai Meng
Agilent Technologies, Wilmington, DE 19808 USA
E-mail: chin_meng@agilent.com

V 4
APPLIED BIOSYSTEMS
Multiplex analysis of pesticides: Experience in south America
Nancy Torres[1] and Luis Enrique Servin[2]
[1]*Genesys Chile ltd, Santiago, Chile*
[2]*Applied Biosystems part of Life Technologies, Mexico City, Mexico*
E-mail: servinle@appliedbiosystems.com

V 5
WATERS
Pesticide analysis: Triple-quad MS versus Time-of-Flight (TOF) MS in residue screening
Emerson Anunciação[1] and Antonietta Gledhill[2]
[1]*Waters Technologies do Brasil*
[2]*Waters Corporation, Manchester, UK*
E-mail: emerson_anunciacao@waters.com

V 6

THERMO FISHER SCIENTIFIC

Taking the solvent out of extractions for multi-residue pesticide analysis

Eric Phillips, James Chang, Hans-Joachim Huebschamn and David Steiniger
Thermo Fisher Scientific – Austin TX
E-mail: eric.phillips@thermofisher.com

V 7

APPLIED BIOSYSTEMS

Ultra fast and sensitive LC/MS/MS for the quantitation and identification of pesticides in food and water samples

André Schreiber[1], Doina Caraiman[2], Nadia Pace[2] and CJ Baker[3]
[1]*Applied Biosystems, Concord, Ontario, Canada,*
[2]*MDS Analytical Technologies, Concord, Ontario, Canada*
[3]*University of Calgary, Calgary, Alberta, Canada*
E-mail: andre.schreiber@appliedbiosystems.com

V 8

BÜCHI

Process optimization for highest recovery rates

Franzisca Widmer
BÜCHI Labortechnik Meierseggstrasse Postfach CH-9230 Flawil 1 Switzerland
E-mail:widmer.f@buchi.com

Poster Presentations
Development and Application of Analytical Methods

Titles

PA 1
Comparison of sample processing procedures for the analyses of 'total dithiocarbamates' residues

Richard J Fussell, Michael T Hetmanski, Stuart Adams, Michael Dickinson, Sadat Nawaz, Alison Colyer and Matthew Sharman
Food and Environment Research Agency (FERA), Sand Hutton, York, North Yorkshire, YO41 1LZ, UK
E-mail: richard.fussell@fera.gsi.gov.uk

PA 2
An update from the EU BioCop project; evaluation of ambient ionization - mass spectrometry techniques for the analysis of strobilurin pesticides in wheat

Richard J Fussell[1], Jakub Shurek[2], Matthew Sharman[1], Michel W. F. Nielen[3] and Jana Hajslova[2]
[1]*Food and Environment Research Agency (FERA), Sand Hutton, York, North Yorkshire, YO41 1LZ, UK*
[2]*Institute of Chemical Technology Prague (VSCHT), Technická 5, 6 Prague 16628, Czech Republic*
[3]*RIKILT Institute of Food Safety, P.O. Box 230, 6700 AE Wageningen*
E-mail: richard.fussell@fera.gsi.gov.uk

PA 3
Comparison of two approaches for GC-MS based screening of pesticides in food/feed: GCxGC-hsTOF-MS vs GC-hrTOF-MS

Martijn V.D. Lee[1], Michael Dickinson[2], Peter Hancock[3], Richard Fussell[2] and Hans Mol[1]
[1]*RIKILT Institute of Food Safety, Bornsesteeg 45, 6708 PD, Wageningen, Netherlands*
[2]*CSL, Sand Hutton, York YO41 1LZ, UK*
[3]*Waters, Atlas Park, Manchester, UK*
E-mail: martijn.vanderlee@wur.nl

PA 4

Generic sample preparation for residues and contaminants in food and feed matrices (part 1)

Hans Mol[1], Patricia Plaza-Bolaños[2], Paul Zomer[1], Theo de Rijk[1] and Linda Stolker[1]
[1]*RIKILT Institute of Food Safety, Bornsesteeg 45, 6708 PD, Wageningen, Netherlands*
[2]*University of Almeria, Dept. Analytical Chemistry, 04120 Almeria, Spain*
E-mail: hans.mol@wur.nl

PA 5

Generic sample preparation for residues and contaminants in food and feed matrices (part 2)

William Tilburgs, Arjen Punt and Hans Mol
RIKILT Institute of Food Safety, Bornsesteeg 45, 6708 PD, Wageningen, Netherlands
E-mail: hans.mol@wur.nl

PA 6

Critical evaluation of applicability of UPLC-TOF-MS for automatic pesticide screening in complex food/feed matrices

Paul Zomer[1], Petra Decker[2] and Hans Mol[1]
[1]*RIKILT Institute of Food Safety, Bornsesteeg 45, 6708 PD, Wageningen, Netherlands*
[2]*C Bruker Daltonik GmbH, Fahrenheitstrasse 4, 28359 Bremen, Germany*
E-mail: paul.zomer@wur.nl

PA 7

Coacervative microextraction: Innovative preconcentration technique for determination of organophosphate pesticides in honey samples by GC-MS

Ariel R. Fontana[1], Rodolfo G. Wuilloud[1,2], Alejandra B. Camargo[2,3] and Jorgelina C. Altamirano[1,2]
[1]*Laboratorio de Investigaciones y Servicios Ambientales Mendoza (LISAMEN), CCT-CONICET-Mendoza. P.O. 131, 5500 Mendoza, Argentina*
[2]*Departamento de Química, Instituto de Ciencias Básicas, Universidad Nacional de Cuyo. Parque General San Martín, 5500 Mendoza, Argentina*
[3]*Laboratorio de Análisis de Residuos Tóxicos - Facultad de Cs. Agrarias, Universidad Nacional de Cuyo*
E-mail: jaltamirano@mendoza-conicet.gov.ar

PA 8

Simple approach based on dispersive liquid-liquid microextraction technique for determination of polibrominated flame retardants in water samples by GC–MS/MS

Ariel R. Fontana[1], Rodolfo G. Wuilloud[1,2] and Jorgelina C. Altamirano[1,2]
[1]*Laboratorio de Investigaciones y Servicios Ambientales Mendoza (LISAMEN), CCT-CONICET-Mendoza. P.O. Box 131, 5500 Mendoza, Argentina*
[2]*Departamento de Química, Instituto de Ciencias Básicas, Universidad Nacional de Cuyo. Parque General San Martín, 5500 Mendoza, Argentina*
E-mail: jaltamirano@mendoza-conicet.gov.ar

PA 9

Simultaneous analysis of targeted/untargeted organic chemicals of interest in fish oils using direct sample introduction-GCxGC/ToF-MS

Eunha Hoh[1], Steven J. Lehotay[2], Katerina Mastovska[2]
[1]*Graduate School of Public Health, San Diego State University, San Diego, CA, USA*
[2]*US Dept. of Agriculture, Agricultural Research Service, Eastern Regional Research Center; Wyndmoor, Pennsylvania; USA*
E-mails: eunha.hoh@mail.sdsu.edu; steven.lehotay@ars.usda.gov

PA 10

The supercritical fluid extraction of antibiotic and pesticide residues from eggs

Al Kaziunas[1], Ileana García[2], Cristian Gasloli[3] and Rolf Schlake[1]
[1]*Applied Separations, Inc., Allentown, PA 18101*
[2]*Konik Instruments, Inc., 12221 SW 129 Ct. Miami – FL 33186, USA*
[3]*Instrumentación Analítica, Grupo Konik Srl, Buenos Aires, Argentina*
E-mail: miami@konik-group.com

PA 11

The supercritical fluid extraction and clean-up of PCBs and dioxin from fish matrices

Al Kaziunas[1], Ileana García[2], Cristian Gasloli[3] and Rolf Schlake[1]
[1]*Applied Separations, Inc., Allentown, PA 18101*
[2]*Konik Instruments, Inc., 12221 SW 129 Ct. Miami – FL 33186, USA*
[3]*Instrumentación Analítica, Grupo Konik Srl, Buenos Aires, Argentina*
E-mail: miami@konik-group.com

PA 12

Operational aspects in the development of multirresidue methods by LC-qqq-MS

Milagros Mezcua, Bela Kmellar, Lucía Pareja, Carmen Ferrer and Amadeo R. Fernández-Alba
Community Reference Laboratory (DG SANCO) for Residues of Pesticides in Fruits and Vegetables. Pesticide Residue Research Group, Department of Hydrogeology and Analytical Chemistry, University of Almería, 04120 La Cañada de San Urbano, Almería, Spain

PA 13

Combination of a screening and a quantitation method for the determination of 300 target pesticides by HPLC-MS/MS, achievements and pitfalls

Béla Kmellár, László Polgár, László Abrankó and Péter Fodor
Corvinus University of Budapest, Faculty of Food Science, Department of Applied Chemistry, 1118 Villányi str. 29-43, Budapest, Hungary
E-mail: bela.kmellar@uni-corvinus.hu

PA 14

Simultaneous screening and target analytical approach by GC-q-MS for pesticide residues in fruits and vegetables

Mª Angeles Martínez-Uroz, Milagros Mezcua and Amadeo R. Fernández-Alba
Community Reference Laboratory (DG SANCO) for Residues of Pesticides in Fruits and Vegetables. Pesticide Residue Research Group, Department of Hydrogeology and Analytical Chemistry, University of Almería, 04120 La Cañada de San Urbano, Almería, Spain

PA 15

Use of GC-MS and LC-TOF-MS in a large screening of contaminants and their degradation products in waters

Mª José Gómez[1], Mª del Mar Gómez-Ramos[2], Octavio Malato[2], Sonia Herrera[2], Ana Ucles[2], Ana Agüera[2] and Amadeo R. Fernández-Alba[2]
[1]*Department of Chemical Engineering, University of Alcala, 28771 Alcala de Henares, Spain*
[2]*Pesticide Residue Research Group, University of Almeria, 04010 Almeria, Spain*
E-mail: mjramos@ual.es

PA 16

Development of a method for determination of thiosultap and thiocyclam in red pepper samples

Carmen Ferrer, Milagros Mezcua, Lucia Pareja, Mª Angeles Martínez-Uroz and Amadeo Rodríguez Fernández-Alba
Community Reference Laboratory (DG SANCO) for Residues of Pesticides in Fruits and Vegetables. Pesticide Residue Research Group, Department of Hydrogeology and Analytical Chemistry, University of Almería, 04120 La Cañada de San Urbano, Almería, Spain

PA 17

Evaluation for the efficiency of the main MRMs used in Europe in the analysis of amitraz and its major metabolites

Carmen Ferrer[1], Milagros Mezcua[1], Ana Agüera[1], Miguel Gamón[1], Michelangelo Anastasiades[2] and Amadeo R. Fernández-Alba[1]
[1]*Community Reference Laboratory (DG SANCO) for Residues of Pesticides in Fruits and Vegetables*
[2]*Community Reference Laboratory (DG SANCO) for single residue methods*

PA 18

Application of QuEChERS method to non-fatty (vegetables) and fatty (milk) baby food matrices

Maria R. Repetti, Silvia R. García, Jaquelina Vierling, Micaela Albarracín, Juan J. De Jesús and Horacio R. Beldoménico
Central Laboratory, School of Chemical Engineering, UNL, Santa Fe, Argentina
E-mail: mrepetti@fiq.unl.edu.ar

PA 19

Development of a semiautomatic and miniaturized solid-liquid extraction method using ethyl acetate for the determination of 85 gas chromatography amenable pesticides in vegetable samples

Micaela Albarracin[1], Horacio R. Beldoménico[2], Mª Angeles Martínez-Uroz[1], Milagros Mezcua[1], Mariano Contreras[3] and Amadeo R. Fernández-Alba[1]
[1]*Pesticide Residue Research Group, Community Reference Laboratory for pesticides in fruits and vegetables (CRL-FV). University of Almería. Ctra. Sacramento s/n. 04120 Almería, Spain.*
[2]*Central Laboratory, School of Chemical Engineering – UNL, Santa Fe, Argentina.*
[3]*Laboratorio de Análisis Agrícolas de COEXPHAL, Cosecheros-Exportadores de Hortalizas de Almería, 04070, Almería, Spain.*
E-mail: mica_alb@yahoo.com.ar

PA 20

Comparison of QuEChERS and MAE as extraction procedures for the multi-residue determination of pesticides in Yerba Maté

Silvina Niell[1], Lucía Pareja[1], Joaquín González[1], Zisis Vryzas[2], Euphemia P. Mourkidou[2], Verónica Cesio[1] and Horacio Heinzen[1]
[1]*Pharmacognosy & Natural Products, Organic Chemistry Department, UdelaR, Montevideo, Uruguay*
[2]*Pesticide Science Laboratory, AUTH, Thessaloniki, Greece*
E-mail: heinzen@fq.edu.uy

PA 21

Behaviour of pesticides residues in maté drinking

Andrés Pérez, Lucía Geis Asteggiante, Marcos Colazzo, Joaquín González, Gabriel González and Horacio Heinzen
Farmacognosia & Productos Naturales, Facultad de Química, UdelaR, Gral. Flores 2124, 11800, Montevideo, Uruguay
E-mail: heinzen@fq.edu.uy

PA 22

Ocratoxin production detection by thin layer chromatography of *Aspergillus* section nigri strains isolated from composed Yerba maté.

Maria Lorena Castrillo, Gladis Jerke and Marta Aurelia Horianski
Laboratorio de Microbiología, Módulo de Bioquímica y Farmacia, Facultad de Ciencias Exactas Químicas y Naturales, Universidad Nacional de Misiones, Posadas, Misiones, Argentina
E-mail: mlc_827@hotmail.com

PA 23

Multi-residue method development and validation for pesticides analysis in cocoa beans. Part 1: Determination of 111 pesticides by GC-MS (ITD-EI and SQ-NCI-SIM) and GC-MS/MS (TQ-EI)

André de Kok[1], Ionara R. Pizzutti[2], Wagner M. Azambuja[2], Cristiano C. Spiazzi[2], Bárbara V. Noronha[2], Marijke de Kroon[1] and Wouter Wind[1]
[1]*VWA - Food and Consumer Product Safety Authority - Chemistry Laboratory - R&D Group, National Reference Laboratory (NRL) for Pesticides and Mycotoxins Analysis in Food, Amsterdam, The Netherlands*
[2]*Federal University of Santa Maria – Chemistry Department – Center of Research and Analysis of Residues and Contaminants (CEPARC), Santa Maria, RS, Brazil*
E-mail: andré.de.kok@vwa.nl; pizzutti@quimica.ufsm.br

PA 24

Multi-residue method validation for pesticides analysis in cocoa beans. Part 2: Determination of 149 pesticides by UPLC-MS/MS

Ionara R. Pizzutti[1], André de Kok[2], Wagner M. Azambuja[1], Cristiano C. Spiazzi[1], Bárbara V. Noronha[1] and Jos Scholten[2]
[1]*Federal University of Santa Maria - Chemistry Department - Center of Research and Analysis of Residues and Contaminants (CEPARC) - Santa Maria - RS - Brazil*
[2]*VWA - Food and Consumer Product Safety Authority - Chemistry Laboratory - R&D Group, NRL for Pesticide Analisys and Mycotoxins in Food, Amsterdam, The Netherlands*
E-mail: pizzutti@quimica.ufsm.br; andre.de.kok@vwa.nl

PA 25

Direct injection for the analysis of atrazine and imazapyr using ultra performance liquid chromatography – mass spectrometry

Manuel J. Zelaya[1], Nanci S. Kloster[2] and Valeria Gianelli[1]
[1]*Laboratorio de Pesticidas, UI Balcarce – INTA, Balcarce, Argentina*
[2]*Laboratorio de Suelo y Agua, EEA Anguil – INTA, Anguil, Argentina*
E-mail: mzelaya@balcarce.inta.gov.ar

PA 26

Evaluation of several packing materials for large volume injection (LVI) in multiresidues with GC using programmed-temperature vaporization (PTV)

Juan C. Andini and Silvina M. Addona
SECEGRIN UAT CCT - CONICET, Santa Fe Argentina
E-mail: jcandini@santafe-conicet.gov.ar

PA 27

Large Volume Injection of water in GC-MS using the TOTAD (Through Oven Transfer Adsorption Desorption) interface: Application to multiresidue analysis of pesticides

Rosa M. Toledano[1], José M. Cortes[1], Juan C. Andini[2], Ana M. Vázquez[3] and Jesús Villén[1]
[1]*Escuela Técnica Superior de Ingenieros Agrónomos. Universidad de Castilla-La Mancha. Campus Universitario s/n. 02071 Albacete. Spain*
[2]*CCT CONICET. Santa Fe. Argentina*
[3]*Escuela Universitaria de Magisterio de Albacete. Departamento de Química-Física. Universidad de Castilla-La Mancha. Campus Universitario s/n. 02071 Albacete. Spain*
E-mail: ana.vazquez@uclm.es

PA 28

Improvement of the sensitivity for the determination of anilines by LC-MS/MS

Nadin Epperlein[1], Madeleine Adolf[3], Melinda Bittner[1], Berthold Kettner[1], Alfredo Montes-Nino[2] and Karl Speer[3]
[1]*ILAU GmbH, Unterwöhrn 15, 83543 Rott am Inn, Germany*
[2]*Laboratorios Microbioticos s/c/ Ltda Residue Laboratory, Av. Santa Isabel 2116, Caixa Postal 6175, Campinas, Estado de Sao Paulo, CEP 13083-970, Brazil*
[3]*TU Dresden, Institut für Lebensmittelchemie, Bergstraße 66, 01062 Dresden, Germany*
E-mail: Nadin.Epperlein@ilau.de

PA 29

Determination of quinclorac in rice by LC-MS/MS

Nadin Epperlein[1], Melinda Bittner[1], Berthold Kettner[1], Alfredo Montes-Nino[2] and Karl Speer[3]
[1]*ILAU GmbH, Unterwöhrn 15, 83543 Rott am Inn, Germany*
[2]*Laboratorios Microbioticos s/c/ Ltda Residue Laboratory, Av. Santa Isabel 2116, Caixa Postal 6175, Campinas, Estado de Sao Paulo, CEP 13083-970, Brazil*
[3]*TU Dresden, Institut für Lebensmittelchemie, Bergstraße 66, 01062 Dresden, Germany*
E-mail: Nadin.Epperlein@ilau.de

PA 30

Comparing GC/QQQ to GC/Q methods for the analysis of pesticide residues in fruits and vegetables

Chin-Kai Meng and Philip L. Wylie
Agilent Technologies, Wilmington, DE 19808 USA
E-mail: chin_meng@agilent.com

PA 31

Multi-residue method development and validation for pesticides analysis in maize. Part 1: Determination of 111 pesticides by GC-MS (ITD-EI and SQ-NCI-SIM) and GC-MS/MS (TQ-EI)

André de Kok[1], Ionara R. Pizzutti[2], Cristiano C. Spiazzi[2], Bárbara V. Noronha[2], Wagner M. Azambuja[2], Marijke de Kroon[1]and Wouter Wind[1]
[1]*VWA - Food and Consumer Product Safety Authority - Chemistry Laboratory - R&D Group, National Reference Laboratory (NRL) for Pesticides and Mycotoxins Analysis in Food, Amsterdam, The Netherlands*
[2]*Federal University of Santa Maria – Chemistry Department – Center Of Research and Analysis of Residues and Contaminants (CEPARC), Santa Maria, RS, Brazil*
E-mail: andre.de.kok@vwa.nl; pizzutti@quimica.ufsm.br

PA 32

Multi-residue method development and validation for pesticides analysis in maize. Part 2: Determination of 149 pesticides by UPLC-MS/MS (ESI^+)

Ionara R. Pizzutti[1], André de Kok[2], Cristiano C. Spiazzi[1], Wagner M. Azambuja[1], Bárbara V. Noronha[1] and Jos Scholten[2]
[1]*Federal University of Santa Maria – Chemistry Department – Center Of Research and Analysis of Residues and Contaminants (CEPARC), Santa Maria, RS, Brazil*
[2]*VWA - Food and Consumer Product Safety Authority - Chemistry Laboratory - R&D Group, National Reference Laboratory (NRL) for Pesticides and Mycotoxins Analysis in Food, Amsterdam, The Netherlands*
E-mail: pizzutti@quimica.ufsm.br; andre.de.kok@vwa.nl

PA 33

Comparison of analytical methods for the determination of pesticide residues in rice

Lucía Pareja[1], Verónica Cesio[2], Horacio Heinzen[2] and Amadeo R. Fernández-Alba[1]
[1]*Pesticide Residue Research Group. University of Almeria, Almeria, Spain*
[2]*Pharmacognosy and Natural Products. Organic Chemistry Department. Faculty of Chemistry. UdelaR, Montevideo, Uruguay*
E-mail: lpareja@fq.edu.uy

PA 34

Simultaneous supercritical fluid derivatization and extraction of pesticides and plant growth regulators in fruits and vegetables: an unsuccessful project

Ana Aguilera[1], Antonio Valverde [1], Mourad Boulaid[1], Francisco Camacho[1] and Luis Piedra[2]
[1]*Pesticide Residue Reserach Group, University of Almería, Almería, Spain*
[2]*Centro de Innovación y Desarrollo Tecnológico COEXPHAL, Almería, Spain*
E-mail: aaguiler@ual.es

PA 35

The European Commission Proficiency Test for fruits and vegetables from 1996 to 2008 - history and main achievements

P. Medina[1], O. Malato[1], A. R. Fernández-Alba[1] and A. Andersson[2]
[1]*Community Reference Laboratory for pesticides in fruits and vegetables (CRL-FV) Université of Almería. Ctra. Sacramento s/n. 04120 Almería, Spain*
[2]*National Food Administration. Box 622. 75126 Uppsala, Sweden*
www.crl-pesticides.eu

PA 36

Application of comprehensive GCXGC-time-of-flight mass spectrometry in resolving matrix influences in multiresidue analysis of 165 pesticides in grape and wine

Kaushik Banerjee, Soma Dasgupta, Sangram H. Patil, Rahul H. Savant, Dasharath P. Oulkar, Manjusha R. Jadhav, Shubhangi B. Patil, Manoj Ghaste and Pandurang G. Adsule
National Research Centre for Grapes, P.O. Manjri Farm, Pune, India-412 307
E-mail: kbgrape@yahoo.com

PA 37

Determination of 2,4,6-trichloroanisole and 2,4,6-tribromoanisole in wines by dispersive liquid–liquid micro-extraction combined with gas chromatography-mass spectrometry detection

Laura Flores[1], Laura Fariña[2], Mauricio Tomasso[2], Eduardo Boido[2], Francisco Carrau[2] and Eduardo Dellacassa[2, 3]
[1]*Laboratorio Tecnológico del Uruguay (LATU), Montevideo, Uruguay*
[2]*Sección Enología, Facultad de Química, Universidad de la república, Montevideo, Uruguay*
[3]*Cátedra de Farmacognosia y Productos Naturales, Facultad de Química, Universidad de la república, Montevideo, Uruguay*
E-mail: edellac@fq.edu.uy

PA 38

Practical application of the QuEChERS method in the multiresidual determination of pesticides in fruits and wines

Mauricio Valdivia R., Ma. Alejandra Ríos, Paola Torres M. and Francisca Corthorn B.
Instrumental area - Corthorn Quality (Chile) S.A. Palace Riesco 4549 Huechuraba Santiago of Chile
E-mail: mauriciov@corthorn.cl

PA 39

Method development and validation for multi-residue analysis of pesticides in grape juice. Part 1: Determination of 111 pesticides by GC-MS (ITD-EI), GCMS (SQ-NCI-SIM) and GC-MS/MS (TQ-EI)

André de Kok[1], Ionara R. Pizzutti[2], Bárbara V. Noronha[2], Cristiano C. Spiazzi[2], Wagner M. Azambuja[2], Marijke de Kroon[1] and Wouter Wind[1]
[1]*VWA -Food and Consumer Product Safety Authority -Chemistry Laboratory -R&D Group, National Reference Laboratory (NRL) for Pesticides and Mycotoxins Analysis in Food, Amsterdam, The Netherlands*
[2]*Federal University of Santa Maria – Chemistry Department – Center of Research and Analysis of Residues and Contaminants (CEPARC), Santa Maria, RS, Brazil*
E-mail: andré.de.kok@vwa.nl, pizzutti@quimica.ufsm.br

PA 40

Method development and validation for multi-residue analysis of pesticides in grape juice. Part 2: Determination of 149 pesticides by UPLC-MS/MS (ESI^+)

Ionara R. Pizzutti[1], André de Kok[2], Bárbara V. Noronha[1], Cristiano C. Spiazzi[1], Wagner M. Azambuja[1] and Jos Scholten[2]
[1]*Federal University of Santa Maria – Chemistry Department – Center of Research and Analysis of Residues and Contaminants (CEPARC), Santa Maria, RS, Brazil*
[2]*VWA -Food and Consumer Product Safety Authority -Chemistry Laboratory -R&D Group, National Reference Laboratory (NRL) for Pesticides and Mycotoxins Analysis in Food, Amsterdam, The Netherlands*
E-mail: pizzutti@quimica.ufsm.br, andré.de.kok@vwa.nl

PA 41

Advantages of a multidimensional HPLC + HRGC-MS system for multi-residue pesticide analysis in food, beverages and environmental samples

Nieves Sarrión[1], Ariadna Galve[1], Ileana García[2], Cristian Gasloli[3] and Jesús Villén[4]
[1]*KONIK-Tech S.A., Apdo 136, Sant Cugat del Vallés. 08190 Barcelona, Spain*
[2]*KONIK Instruments, 12221 SW 129 Ct. Miami – FL 33186, USA*
[3]*Instrumentación Analítica, Grupo KONIK Srl, Buenos Aires, Argentina*
[4]*Escuela Técnica Superior de Ingenieros Agrónomos, Universidad de Castilla-La Mancha. Campus Universitario s/n 02076 Albacete, Spain*
E-mail: applications.lab@konik-group.com

PA 42

Triazoles determination in blueberry juice by solid phase microextraction and gas chromatography

María Tatiana Montti, Silvia Visciglio, María Chaulet, Jorge Gerard, Fabricio Raviol, Gladys Subovich, Lilian Lesieux, Martín Munitz, Celia Williman and Evangelina González

Facultad de Ciencias de la Alimentación- Laboratorio de Investigación de Residuos de Plaguicidas en Alimentos- Universidad Nacional de Entre Ríos, Concordia, Argentina.

E-mail: monttim@fcal.uner.edu.ar

PA 43

Optimization and validation of methods using DLLME, SPE, HPLC-DAD and LC-ESI-MS/MS for the determination of pesticides in groundwater

Sergiane S. Caldas, Fabiane P. Costa, Adriana Demoliner and Ednei G. Primel

Post-graduation Program in Technological and Environmental Chemistry, Universidade Federal do Rio Grande - FURG, Rio Grande, RS, Brazil

E-mail: sergianecaldas@hotmail.com

PA 44

Validation of methodology for pesticide residues in drinking water by micro-extraction and gas chromatography

Adriana De Romedi, Roxana Córpora and Mirtha Nassetta

Subsecretaria Ceprocor - Ministerio de Ciencia y Tecnología de Córdoba- Álvarez de Arenales 230-Córdoba – Argentina

E-mail; aderomedi@ceprocor.uncor.edu

PA 45

Multiresidue determination of pesticides in surface water by SPE-HPLC-ESI and SPE-UPLC-ESI tandem mass spectrometry (MS/MS – triple quadrupole analyzer)

Sonia C.N.Queiroz, Vera L. Ferracini, Maria A. Rosa, Márcia R. Assalin, Débora R.C. Souza

Laboratório de Resíduos e Contaminantes- Embrapa Meio Ambiente, Jaguariuna São Paulo, Brazil

E-mail: sonia@cnpma.embrapa.br

PA 46

Chemiluminescent determination of metsulfuron-methyl in surface waters

Laura I. Tonelli, Carolina C. Acebal and Adriana G. Lista

Instituto de Química del Sur, INQUISUR (UNS-CONICET) – Departamento de Química, Universidad Nacional del Sur, Bahía Blanca, Buenos Aires, Argentina

E-mail: cacebal@uns.edu.ar

PA 47

A multi-residue analysis of pesticides in agrochemical plastic containers (post consumer resin) using the technology of the micro-extraction

S. Abdel-Baky[1], J. Jones[2], D. Dohnert[3] and A. Finch[1]
[1]*Consumer & Environmental Safety*
[2]*Formulation Development & Analytics, Agricultural Research Center, BASF Corporation, 26 Davis Drive, Durham, NC, 27709, US*
[3]*Packaging & Labelling, Agricultural products, BASF SE, Limburgerhof, Germany*
E-mail: samy.abdel-baky@basf.com

PA 48

The use of the Scheduled MRM™ algorithm to extend the scope and increase the throughput of pesticide screening by LC/MS/MS

Luis Enrique Servin Vega[1], André Schreiber[2], Nadia Pace[3]
[1]*Applied Biosystems part of Life Technologies, Mexico City, Mexico,*
[2]*Applied Biosystems part of Life Technologies, Darmstadt, Germany*
[3]*Applied Biosystems part of Life Technologies, Concord, Ontario, Canada*
E-mail: servinle@appliedbiosystems.com

PA 49

Development of multitoxin method in cereals by LC/ESI-MS/MS

Matías N. Baldo, Román G. Bassani, Marisel M. Corelli and Roberto E. Sandrini
JLA ARGENTINA SA, Bv Italia 1150, General Cabrera-Córdoba-Argentina
E-mail: mbaldo@jla.com.ar

PA 50

Development of sensitive immunoassay formats for the detection of pesticides, algal toxins, veterinary residues and pharmaceuticals

Fernando M. Rubio, Lisa Kamp, Jennifer Church and Richard Slawecki
Abraxis LLC, Warminster, Pennsylvania, USA
E-mail: frubio@abraxiskits.com

PA 51

Environmental pollutants detection by electrochemical bioassays

Silvina V. Kergaravat, Silvia R. Hernandez and M. Isabel Pividori
Laboratory of Sensors & Biosensors, FBCB - National University of Littoral, Santa Fe, Argentina
E-mail: shernand@fbcb.unl.edu.ar

PA 52

Development of an immunological technique for the detection of clomazone and its use in the monitoring of rice culture in two irrigation treatments

Mariana Carlomagno[1], Guillermina Cantou [2], Cecilia Matho[1], David González[1], Alvaro Roel[2] and Gualberto González-Sapienza[1]
[1]*Cátedra de Inmunología, Cátedra de Química Orgánica, Facultad de Química, Universidad de la República, Montevideo, Uruguay*
[2]*Instituto Nacional de Investigación Agropecuaria (INIA), Treinta y Tres, Uruguay*
E-mail: maricarl@cin.edu.uy

PA 53

Noncompetitive immunoassay for the detection of clomazone using cyclic peptides isolated from phage display libraries

Martin A. Rossotti, Mariana Carlomagno, Cecilia Matho and Gualberto González-Sapienza
Cátedra de Inmunología, Facultad de Química, Universidad de la República, Montevideo, Uruguay
E-mail: martinrossotti@yahoo.com

PA 54

Application of rapid bioassay of pesticide residues on fruits and vegetables as a complement to conventional chemical analysis techniques

Jorge Requena[1] and Brenda Checa[2]
[1]*Laboratorio de Control de Residuos de Plaguicidas en Plantas y Otros Productos Vegetales – Ministerio de Desarrollo Agropecuario de Panamá*
[2]*Laboratorio de Control de Residuos de Plaguicidas en Plantas y Otros Productos Vegetales – Ministerio de Desarrollo Agropecuario de Panamá*
E-mail: jrequena@mida.gob.pa

PA 55

Simultaneous determination of glyphosate, glufosinate, and aminomethyl phosphoric acid (AMPA) in different matrices by LC-ESI-MS/MS

Matías N. Baldo, Román G. Bassani, Marisel M. Corelli and Roberto E. Sandrini.
JLA ARGENTINA SA, Bv Italia 1150, General Cabrera-Córdoba-Argentina
E-mail: mbaldo@jla.com.ar

PA 56

Multiresidue liquid chromatography tandem mass spectrometry determination pesticides in cereals and vegetables samples

Román Bassani, Matías Baldo, Marisel Corelli and Roberto Sandrini
JLA: ARGENTINA, Bv Italia 1150, General Cabrera, Córdoba Argentina
E-mail rbassani@jla.com.ar

PA 57

Optimization of matrix solid-phase dispersion (MSPD) for the determination of pesticide multi-residues in onion by LC-ESI-MS/MS

Sherol A. Rodrigues, Liziara Cabrera, Ana Raisa N. Paiva, Sergiane Caldas, Fábio F. Gonçalves and Ednei G. Primel
Post-graduation Program in Technological and Environmental Chemistry, Universidade Federal do Rio Grande - FURG, Rio Grande, RS, Brazil
E-mail: sherol_rodrigues@yahoo.com.br

PA 58

Anion exchange solid phase extraction for selective isolation and concentration of glyphosate and AMPA from apples for determination by HPLC with fluorescence detector

Juliano de A. Andrade[1], Sonia C. N. Queiroz[2], Vera L. Ferracini[2] and Isabel Cristina S. F. Jardim[1]
[1]*Laboratório de Pesquisas em Cromatografia Líquida, Instituto de Química, Universidade Estadual de Campinas, Campinas, SP, Brazil*
[2]*Laboratório de Resíduos e Contaminantes, Embrapa Meio Ambiente, Jaguariúna, SP, Brazil*
E-mail: veraf@cnpma.embrapa.br

PA 59

Determination of paclobutrazol in mango by LC/MS/MS system

Vera L. Ferracini[1], Sonia C. N. Queiroz[1], Marco A. F. Gomes[1], Maria A. Rosa[1] and Paulo R. C.Lopes[2]
[1]*Embrapa Meio Ambiente, Rod. SP 340, km 127,5. CEP 13820-000. Jaguariúna, São Paulo, Brazil*
[2]*Embrapa Semi Árido, Petrolina-PE, Brazil*
E-mail: veraf@cnpma.embrapa.br

PA 60

Development of a multiresidue pesticide analytical method in green asparagus (*Asparagus officinalis*) by QuEChERS method and LC-MS/MS detection

Orlando Lucas, Roxana Ventocilla, Miriam Tames and Liz Ramos
Control Center of Toxic Residues and Agricultural Supplies (UCCIRT) - National Agrarian Health Service SENASA, Lima, Peru
Email: olucas@senasa.gob.pe

PA 61

Evaluation of pesticide residues in soybean [*Glycine max* (L.) Merr.] and its relationship with the Maximum Residues Limits (MRL´s)

Alejandra Ricca[1], María J. Martinez[2], Mercedes P. Silva[2], Marcos Tomasoni[2], Julieta Strada[2], José M. Imwinkelried[3], Fernando D. Fava[3] and Antonio J. Ivancovich[4]
[1]*Chemical Contaminants Laboratory ITA INTA Castelar, Buenos Aires*
[2]*Grain Quality Laboratory INTA Manfredi, Cordoba*
[3]*Enthomology INTA Manfredi, Córdoba*
[4]*Phytopathology INTA Pergamino, Buenos Aires. Argentina*
E-mail: mjmartinez@manfredi.inta.gov.ar

PA 62

Triazole determination in blueberries by solid phase micro-extraction and gas chromatography

María Tatiana Montti, María Chaulet, Silvia Visciglio and Jorge Gerard
Facultad de Ciencias de la Alimentación- Laboratorio de Investigación de Residuos de Plaguicidas en Alimentos- Universidad Nacional de Entre Ríos, Concordia, Argentina
E-mail: monttim@fcal.uner.edu.ar

PA 63

Determination of carbaryl residues in blueberries by HPLC with post-column derivatization and fluorescence detection

María E. Navarro; Mariana E. Alva; Marina Lacina, Norma Kamiya and Roberto M. Ruiz
Sección Química de la Estación Experimental Agroindustrial Obispo Colombres, Avda. William Cross 3150, (4101) Las Talitas, Tucumán, Argentina
E-mail: plaguicidas@eeaoc.org.ar

PA 64

Validation of a methodology for the determination of presence/absence of pesticides residues in blueberries

Christian Contreras, Ricardo Guanco, Ángel F. Zampella, Graciela Zamorano, Marina Lacina, Norma Kamiya and Roberto M. Ruiz
Sección Química de la Estación Experimental Agroindustrial Obispo Colombres, Av. William Cross 3150, (4101) Las Talitas, Tucumán, Argentina
E-mail: plaguicidas@eeaoc.org.ar

PA 65

Determination of organophosphate pesticide residues using MSPD based extraction and column chromatography clean-up followed by GC-FPD in propolis extracts for pharmaceutical use

Andrés Pérez, Lucía Geis Asteggiante, Marcos Colazzo, Verónica Césio and Horacio Heinzen
Farmacognosia & Productos Naturales, Facultad de Química, UdelaR, Gral. Flores 2124, 11800, Montevideo, Uruguay
E-mail: heinzen@fq.edu.uy

PA 66

MSPD procedure for determining pesticide residues in medicinal herb *Hyptis pectinata* by GC/MS

Adriano Aquino, Haroldo S. Dórea, Péricles B. Alves and Sandro Navickiene
Laboratório de Análise de Compostos Orgânicos Poluentes (LCP). Departamento de Química, Universidade Federal de Sergipe, Av. Marechal Rondon, s/n. Jardim Rosa Elze. Cep. 49100-000. São Cristóvão, SE, Brazil
E-mail: sandnavi@ufs.br

PA 67

Extraction procedure for pesticide analysis in soil

Andrea Mojica and Jairo A. Guerrero
Laboratorio de Análisis de Residuos de Plaguicidas- Universidad Nacional de Colombia, Bogotá, Colombia
E-mail: admojicac@unal.edu.co; jaguerrerod@ unal.edu.co

PA 68

Development of a simple multi-residue method for rice post-emergence herbicide determination in soil samples

Lucía Geis Asteggiante[1], Lucía Pareja[1], Silvina Niell[1], Rafael Rohers[2], Ionara Pizzutti[3], Verónica Cesio[1] and Horacio Heinzen[1]
[1]*Cátedra de Farmacognosia & Productos Naturales, Departamento de Química Orgánica, Facultad de Química, UdelaR, Montevideo, Uruguay*
[2]*LARP/ Universidade Federal de Santa Maria, Rio Grande do Sul, Brasil*
[3]*CEPARC/ Universidade Federal de Santa Maria, Rio Grande do Sul, Brasil*
E-mail: cs@fq.edu.uy

PA 69

Determination of chlorpyrifos adsorption isotherms in three soils of the VI Region-Chile, using isotopic techniques

Ana M. Parada[1], Inés Pino[1], Adriana Nario[1], Ximena Videla[1], Dennisse Potenza[2], Oscar Moll[2], Walter Luzio[2], Manuel Casanova[2] and Oscar Seguel[2]
[1]*Sección Agricultura, Departamento de Aplicaciones Nucleares, Comisión Chilena de Energía Nuclear - Santiago, Chile*
[2]*Departamento de Suelos, Facultad de Ciencias Agronómicas – Universidad de Chile, Santiago, Chile*
E-mail: amparada@cchen.cl

PA 70

Determination of imazalil, chlorpyrifos and o-phenylphenol in lemon using a semi-micromethod

Christian D. Contreras, Ricardo A. Guanco, Angel F. Zampella, Marina Lacina, Norma Kamiya and Roberto M. Ruiz
Sección Química de la Estación Experimental Agroindustrial Obispo Colombres, Av. William Cross 3150, (4101) Las Talitas, Tucumán, Argentina
E-mail: plaguicidas@eeaoc.org.ar

PA 71

Acid–base extraction method for the determination of o-phenylphenol residues in citrus essential oils

Marina Lacina, Diego Tolosa, Christian Contreras, Sergio Lagoria, Norma Kamiya and Roberto M. Ruiz
Sección Química de la Estación Experimental Agroindustrial Obispo Colombres, Av. William Cross 3150, (4101) Las Talitas, Tucumán, Argentina
E-mail: plaguicidas@eeaoc.org.ar.

PA 72

Determination of ortho phenylphenol in citrus. Incidence of residual charge of fruit in essential oils

Gladys Ester Subovich, María Tatiana Montti, María Chaulet, Silvia Visciglio, Fabricio Raviol, Lilian Lesieux, Martín Munitz, Jorge Gerard, Celia Williman and Evangelina González
Facultad de Ciencias de la Alimentación - Laboratorio de Investigación de Residuos de Plaguicidas en Alimentos- Universidad Nacional de Entre Ríos, Concordia, Argentina
E-mail: subovg @fcal.uner.edu.ar

PA 73

Thiophanate, methylthiophanate and thiabendazole determination by solid phase microextraction and gas chromatography in fermented citrus products

Silvia Visciglio, María Tatiana Montti, María Chaulet and Jorge Gerard
Facultad de Ciencias de la Alimentación- Laboratorio de Investigación de Residuos de Plaguicidas en Alimentos- Universidad Nacional de Entre Ríos, Concordia, Argentina
E-mail: visciglios@fcal.uner.edu.ar

PA 74

Validation of a multi-residue method to determine organochlorine pesticides and polychlorinated biphenyls in bovine fat

Fernando A. Lopes, Elizabete M.C. Saglioni, Anuska L. Modro, Cláudia H. Kowalski and Igor R.B. Olivares
National Laboratory of Ministry of Agriculture, Livestock and Food Supply (LANAGRO-SP), Brazil
E-mail: fernando.lopes@agricultura.gov.br

PA 75

Optimization of QuEChERS methodology for the determination of cypermethrin and ethion in raw milk with GC-ECD and GC-FPD

Beatriz Munguía[1], Andres López[1], Andrés Pérez[2], Verónica Cesio[2], Horacio Heinzen[2] and Laura Domínguez[1]
[1]*Farmacología-LEA, Departamento CIENFAR Facultad de Química, UdelaR, Montevideo, Uruguay*
[2]*Cátedra de Farmacognosia y Productos Naturales, Departamento de Química Orgánica, Facultad de Química, UdelaR, Montevideo, Uruguay*
Email: munguia@fq.edu.uy

PA 76

Determination of diflubenzuron in cattle tissues using QuEChERS sample preparation method

Silvia A. V. Tfouni[1], Regina P. Z. Furlani[1], Fernanda M. Leme[1], Jefferson D. Araújo[2] and Rosália M. Souza[2]
[1]*Food Science and Quality Center, Food Technology Institute – ITAL, Campinas, São Paulo, Brazil*
[2]*Champion Farmoquímico Ltda, Anápolis, Goiás, Brazil*
E-mail: tfouni@ital.sp.gov.br

PA 77

Evaluation of QuEChERS method for analysis of cypermethrin residue in cow's milk

Silvia H. G. Brondi[1], Adriana N. Macedo[2] and Ana R. A. Nogueira[1]
[1]*Embrapa Pecuária Sudeste, São Carlos, Brasil*
[2]*Universidade Federal de São Carlos, São Carlos, Brasil*
E-mail: shgb@uol.com.br

PA 78

Detection of endosulfan residues in animal fat by GC with electron capture detector (ECD) - 24 hs method

Sergio del Castillo, Ana L. Redolfi, Juan J.Giorda, Raúl R. Benvenuto, Vanesa A. Lagier, Romina L. Fucksman and Fabián J. Piotto
Laboratorio Litoral S.A. Villa Gobernador Gálvez, Santa Fe Argentina
E-mail: litoral@laboratoriolitoral.com

PA 79

Quantification of pesticides in rat adipose tissue: Development and validation of a simple, fast and sensitive method

Pedro Toledo Netto[1], Adriana Pimentel de Almeida Carvalho[1], Maria Lúcia Ribeiro[2], Mary Rosa Rodrigues de Marchi[1]and João Lauro Viana de Camargo[3]
[1]*Instituto de Química – Universidade Estadual Paulista, Araraquara, Brazil*
[2]*Mestrado em desenvolvimento regional e meio ambiente – Centro Universitário de Araraquara, Uniara, Araraquara, Brazil*
[3]*Faculdade de Medicina – Universidade Estadual Paulista, Botucatu, Brazil*
E-mail: pedrotoledo@iq.unesp.br

PA 80

Analysis of pesticides in animal liver using gas chromatography with electron-capture detector

Adriana Pimentel de Almeida Carvalho[1], Pedro Toledo Netto[1], Maria Lúcia Ribeiro[2], Mary Rosa Rodrigues de Marchi[1] and João Lauro Viana de Camargo[3]
[1]*Instituto de Química – Universidade Estadual Paulista, Araraquara, Brazil.*
[2]M*estrado em desenvolvimento regional e meio ambiente – Centro Universitário de Araraquara, Uniara, Araraquara, Brazil*
[3]*Faculdade de Medicina – Universidade Estadual Paulista, Botucatu, Brazil.*
E-mail: pedrotoledo@iq.unesp.br

PA 81

Determination of imidacloprid residues by SPE - HPLC - MS/MS in bovine tissues. Tune-up and validation of the analytical technique

Gabriel A. Hunzicker, Mariana M. Yossen, Diego F. Lencina, Julieta Barrandeguy and Mario C. Domínguez
Domínguez Laboratorios. Moussy 41. Paraná. Entre Ríos, Argentina. CP. 3100
E-mail: info@dominguezlab.com.ar

PA 82

Determination of residual imidacloprid in ovine tissues using solid phase extraction - liquid chromatography coupled with electrospray ionization tandem mass spectrometry

Mariana M. Yossen, Gabriel A. Hunzicker, Julieta Barrandeguy, Diego F. Lencina and Mario C. Domínguez
Domínguez Laboratorios. Moussy 41. Paraná. Entre Ríos, Argentina. CP. 3100
E-mail: info@dominguezlab.com.ar

PA 83

Optimization of programmable temperature vaporizer-based large volume injection for determination of triazole by gas chromatography-mass spectrometry

María Tatiana Montti, María Chaule, Silvia Visciglio and Jorge Gerard
Facultad de Ciencias de la Alimentación- Laboratorio de Investigación de Residuos de Plaguicidas en Alimentos- Universidad Nacional de Entre Ríos, Concordia, Argentina.
E-mail: monttim@fcal.uner.edu.ar

PA 84

Determination of oxytetracyclines and amitraz in honey by high resolution liquid chromatography

Fabricio Raviol, María Tatiana Montti, Silvia Visciglio, María Chaulet, Jorge Gerard, Gladys Subovich, Lilian Lesieux, Martín Munitz and Celia Williman
Facultad de Ciencias de la Alimentación - Laboratorio de Investigación de Residuos de Plaguicidas en Alimentos- Universidad Nacional de Entre Ríos, Concordia, Argentina
E-mail: raviolf@fcal.uner.edu.ar

PA 85

Increasing the scope of Method EPA 505-1 in order to transform it in a multiresidue determination of a wide range of pesticides by gas chromatography with quadrupole mass spectrometry

Cecilia Geisenblosen, Virginia Villagrán and Eleuterio Umpiérrez
Laboratorio de Análisis Orgánico-Departamento de Química Orgánica, Polo Tecnológico-Facultad de Química, UdelaR, Montevideo Uruguay
E-mail: eumpierr@fq.edu.uy

PA 86

Identification of dithiocarbamate residues in boxes of permanent dry pen

Arlene G. Schuller, Haydée Romero, Mariza Insaurralde, Eleuterio Umpiérrez, Gustavo Díaz Gill and Renate Díaz Gill
División EcoNatura - Díaz Gill Medicina Laboratorial S.A. Asunción, Paraguay
E-mail: econatura@diazgill.com.py

PA 87

Simultaneous determination of imazapyr & imazapic in water using HPLC-UV and pre-concentrated by Solid Phase Extraction whit C18 cartridge

Virginia Villagrán and Eleuterio Umpiérrez
Laboratorio de Análisis Orgánico-DQO, Polo Tecnológico, Facultad de Química, Universidad de la República, Pando Uruguay
E-mail: villagran@fq.edu.uy

Poster Presentations

Monitoring and Intake Assessment

Titles

PB 1

Distribution of pesticide residues after primary process food in wine grapes and olives

Carmen Ferrer, Paula Medina, Milagros Mezcua, Noelia Belmonte, Maria Ángeles Uroz and Amadeo R. Fernandez-Alba

Community Reference Laboratory for pesticides in fruits and vegetables (CRL-FV). University of Almería. Ctra. Sacramento s/n. 04120 Almería, Spain. www.crl-pesticides.eu

PB 2

Quality of imported commodities from Latina America in France stated on the base of official controls in the past five years.

Guy Jamet

SCL, Laboratoire de Strasbourg, Chemin du Routoir F-67400 ILLKIRCH

E-mail : guy.jamet@scl.finances.gouv.fr

PB 3

Organochlorine compound residues in eggs of broad snouted caimans (*Caiman latirostris*) and bioindicators of reproductive performance

C. Stoker[1], M.A. Zayas[1], S.R. García[2], M.R. Repetti[2], G.H. Galoppo[1], M. Durando[1], H.R. Beldoménico[2], E.H. Luque[1] and M. Muñoz-de-Toro[1]

[1]*Laboratory of Endocrinology and Hormone-dependent Tumors, School of Biochemistry and Biological Sciences, UNL, Santa Fe, Argentina*

[2]*Central Laboratory, School of Chemical Engineering, UNL, Santa Fe, Argentina*

E-mail: cstoker@fbcb.unl.edu.ar

PB 4

Simultaneous analysis of 14 mycotoxins, and 150 pesticides in crude extracts of grains by LC/MS/MS

Juergen Kunze[1], Andrea Voller[1], Hermann Scmalstieg[1], Ingrid Bujara[1], Kristin von Czapiewski[2], Birgit Schlutt[2] and André Schreiber[3]

[1]*SGS, Hamburg, Germany*

[2]*Applied Biosystems part of Life Technologies, Darmstadt, Germany*

[3]*Applied Biosystems part of Life Technologies, Concord, Ontario, Canada*

E-mail: andre.schreiber@appliedbiosystems.com

PB 5

Large scale automatic screening of 100 non European fruits samples by LC-TOF-MS using an accurate mass database

Milagros Mezcua, Octavio Malato, Ana Lozano, Carmen Ferrer and Amadeo R. Fernández-Alba
Community Reference Laboratory (DG SANCO) for Residues of Pesticides in Fruits and Vegetables. Pesticide Residue Research Group, Department of Hydrogeology and Analytical Chemistry, University of Almería, 04120 La Cañada de San Urbano, Almería, Spain

PB 6

Carbendazim's residues applied in post-harvest degreening mandarins to EU

Cecilia Kulczycki Waskowicz[1], Fernando Bello[1], Juan J. De Jesús[2], María R. Repetti[2] and Silvia R. García[2]
[1]*INTA, Agricultural Experiment Station of Concordia, 3200-Concordia, CC 34, Entre Ríos, Argentina*
[2]*Central Laboratory, School of Chemical Engineering, UNL, Santa Fe, Argentina*
E-mail: ckulczycki@correo.inta.gov.ar; srgarcia@fiq.unl.edu.ar

PB 7

Determination and degradation study of endosulfan, captan and penconazole residues in strawberries

Silvia R. García, María R. Repetti, Jaquelina Vierling and Horacio R.Beldoménico
Central Laboratory, School of Chemical Engineering, UNL, Santa Fe, Argentina
E-mail: srgarcia@fiq.unl.edu.ar

PB 8

Concentration levels of pesticide residues in vegetable products from Santa Fe, Argentina

Silvia R. García, Maria R. Repetti, Juan J. De Jesús, Jaquelina Vierling, Fernanda Nocetti and Horacio R. Beldoménico
Central Laboratory, School of Chemical Engineering, UNL, Santa Fe, Argentina
E-mail: srgarcia@fiq.unl.edu.ar

PB 9

Bentazon and MCPA water and sediment dynamics in paddy rice conditions

Marcelo Kogan, Manuel Araya and Claudio Alister.
Centro de investigación Agrícola y Ambiental-(CIAA) - Universidad de Viña del Mar, Viña del Mar Chile
E-mail: mkogan@uvm.cl

PB 10

Pesticide residues in fruit pulp, juice and nectar

Cláudia H.P. Ciscato, Amir B. Gebara, Sérgio H. Monteiro and Gisele S. Souza
Laboratório de Resíduos de pesticidas - Instituto Biológico – São Paulo, Brazil
E-mail: ciscato@biologico.sp.gov.br

PB 11

Residues of clomazone, quinclorac and propanil in soil, white grain and water in rice paddies in Uruguay

Mariana Hill and Carlos Clérici
Department of Soil and Water, Faculty of Agriculture. University of the Republic of Uruguay
Email: mhill@fagro.udu.uy

PB 12

Organochlorine pesticide residues in marketed tomato, Mérida-Venezuela

Soranyel González[1], Jorge L. Uzcátegui[1] and Marilyn Di Luca[2]
[1]*Laboratorio de Fisicoquímica Orgánica. Universidad de Los Andes, Mérida Venezuela*
[2]*Instituto Nacional de Nutrición. (INN). Caracas, Venezuela*
E-mail: soragc@gmail.com

PB 13

Evaluation and monitoring of diuron and 2,4-D in different matrices from a Cali-Colombia urban zone

Cristina del S. Ruales, Diana C. Klinger and Luis N. Benitez
Grupo de Investigación para Evaluación, Remediación e Impacto de la Contaminación Ambiental "GERICA", Universidad del Valle, Cali, Colombia.
E-mail: cristrc@yahoo.com

PB 14

Monitoring methodologies and identification of pesticide residues in food VI Region, Chile

Luis Bocaz, Lorena Espinoza, Irene Fuenzalida and Yasna Tapia
Centro de Investigaciones Aplicadas, CIAP, Universidad Técnica Federico Santa María, Rancagua, Chile
E-mail:yasna.tapia@usm.cl

PB 15

Assessment of residues of fipronil in bees and bee products from Uruguay: A correlation with the hive depopulation

Andrés Pérez[1], Yamandú Mendoza[2], Gabriel González[1] and Horacio Heinzen [1]
[1]*Farmacognosia & Productos Naturales, Facultad de Química, UdelaR, Gral. Flores 2124, 11800, Montevideo, Uruguay*
[2]*Instituto Nacional de Investigaciones Agropecuarias (INIA), La Estanzuela. Ruta 50, Km 11, Colonia, Uruguay*
E-mail: heinzen@fq.edu.uy

PB 16

Glyphosate losses by drainage and runoff from Mollisols under no-till agriculture

M. Carolina Sasal[1], Adrian E. Andriulo[2], Marcelo G. Wilson[1], Silvina I. Portela[2], M. Inés Maitre[3] and Susana Enrique[3]
[1]*INTA EEA Paraná, Entre Ríos, Argentina*
[2]*INTA EEA Pergamino, Buenos Aires, Argentina*
[3]*INTEC-CERIDE Santa Fe, Argentina*
E-mail: csasal@parana.inta.gov.ar

PB 17

Influence of dairy manure amendments on atrazine and dimethenamid leaching

Oscar Candia[1], Gabriela Briceño[1], Paula Aguilera[1], Rolando Demanet[2], María de La Luz Mora[1] and Graciela Palma[1]
[1]*Chemistry Department, Universidad de La Frontera, Temuco, Chile*
[2]*Agricultural Production Department, Universidad de La Frontera, Temuco, Chile*
Email: gpalma@ufro.cl

PB 18

Pesticides distribution in urban and rural areas of Lucas do Rio Verde – MT, Brazil

Elisângela Nascimento Nogueira[1], Elizaine Vaz Santos[1], Carolina Lourencetti[1], Wanderlei Pignati[2] and Eliana Freire Gaspar de Carvalho Dores[1]
[1]*Laboratório de Análise de Resíduos de Biocidas - Deparment of Chemistry, ICET, Universidade Federal de Mato Grosso (UFMT) – Cuiabá, MT, Brazil*
[2]*Instituto de Saúde Coletiva - UFMT – Cuiabá, MT, Brazil*
E-mail: elli_nn@terra.com.br.

PB 19

Glyphosate and AMPA residues evaluation in waters and sediments of hydric resources in a rice production area in Colombia

Martha C. Bustos[1], Cilia L. Fuentes[2] and Gustavo A. Peñuela[3]
[1]*Civil and Agriculture Department, Universidad Nacional de Colombia, Bogotá, Colombia*
[2]*Agronomy Faculty, Universidad Nacional de Colombia, Bogotá, Colombia*
[3]*Engineering Faculty , GDCON, Universidad de Antioquia, Medellin, Colombia*
E-mail: mcbustosl@unal.edu.co

Poster Presentations

Regulatory Issues and Risk Assessment

Titles

PC 1

Organochlorine compound egg burden and eggshell features in *Caiman Latirostris*

M.A. Zayas[1], C. Stoker[1], M.A. Ferreira[2], M. Durando[1], G.H. Galoppo[1], H.A. Rodriguez[1], H.R. Beldoménico[3], E.G. Caldini[2], E.H. Luque[1] and M. Muñoz-de-Toro[1]

[1]*Laboratory of Endocrinology and Endocrine-dependent Tumors, School of Biochemistry and Biological Sciences, Univ. Nacional del Litoral, Santa Fe, Argentina.*

[2]*Laboratory of Cell Biology (LIM 59), Department of Pathology, The University of São Paulo School of Medicine, São Paulo, Brazil*

[3]*Central Laboratory, School of Chemical Engineering, Univ. Nacional del Litoral, Santa Fe, Argentina.*

E-mail: mzayas@fbcb.unl.edu.ar

PC 2

Pesticide use in small peri-urban agricultural production units in Argentina: Potential dermal exposure and mass distribution

Enrique A. Hughes[1], Laura M. Ramos[1], Giselle A. Querejeta[1], Pamela A. Flores[1] and Javier M. Montserrat[1, 2]

[1]*Instituto de Ciencias, Universidad Nacional de General Sarmiento, J. M. Gutiérrez 1150, Los Polvorines (B1613GSX), Prov. de Bs. As*

[2]*INGEBI (CONICET), Vuelta de Obligado 2490 (1428), Buenos Aires, Argentina*

E-mail: jmontser@ungs.edu.ar

PC 3

Assessing good agricultural practice: Comparative pesticide impact in five Latin American countries

R. M. Loewy[1], M. Savini[1], L. Monza[1], V. Kirs[1], L. Luchini[2], D. Baggio[2], F. Gonzaga[2], A. Nario[3], I. Pino[3], A.M. Parada[3], X. Videla[3], R. Castro[4], Y. Pastor[4], I. Chica[4], E. Carazo[5], C. Chinchilla[5], J. Matarrita[5], B. Maestroni[6] and I. Ferris[6]

[1]*Laboratorio de Investigaciones Bioquímicas, Químicas y del Medioambiente, Facultad de Ingeniería, Universidad Nacional del Comahue, Argentina*

[2]*Instituto Biológico de Sao Paulo, Secretaria de Agricultura e Abastecimento, Brasil.*

[3]*Sección Agricultura, Comisión Chilena de Energía Nuclear, Chile*

[4]*Laboratorio de Ecotoxicología, Subsecretaría de Control, Investigación y Aplicaciones Nucleares, MEER, Ecuador*

[5]*Centro de Investigación en Contaminación Ambiental, Universidad de Costa Rica, Costa Rica*

[6]*International Atomic Energy Agency, Joint FAO/IAEA Division in Food and Agriculture, Austria. E-mail: mloewy@uncoma.edu.ar*

PC 4

Environmental risk screening of pesticides in treated wastewater used for irrigation of a tobacco biomass crop

Ivan Muñoz, Maria del Mar Gómez Ramos and Amadeo R. Fernández-Alba
Departamento de Hidrogeología y Química Analítica, Universidad de Almería, 04120, Almería, Spain
E-mail: ivanmuno@ual.es

PC 5

Evidence for negative effects of glyphosate on life history traits of *Ceriodaphnia reticulata* (Crustacea, Cladocera)

A. M. Gagneten[1], M.I. Maitre[2] and S. Roldán[1]
[1]*Departamento de Ciencias Naturales, FHUC. Universidad Nacional del Litoral. Santa Fe. Argentina*
[2]*Instituto de Desarrollo Tecnológico para la Industria Quimica. Santa Fe. Argentina*
E-mail: amgagnet@fhuc.unl.edu.ar

PC 6

Influence of sugar cane vinasse in the leaching potential of herbicides in a recharge area of the Guarani Aquifer System (Araraquara-SP, Brazil)

Carolina Lourencetti[1, 2], Mary R. R. Marchi[1] and Maria L. Ribeiro[1]
[1]*Chemistry Institute, São Paulo State University – Araraquara, SP, Brazil*
[2]*Laboratório de Análise de Resíduos de Biocidas - Deparment of Chemistry, ICET, Universidade Federal de Mato Grosso (UFMT) – Cuiabá, MT, Brazil*
E-mail: carollourencetti@yahoo.com.br

PC 7

Decontamination of azoxystrobin, cyprodinil and fludioxonil in soil from greenhouse peppers cultivation for solarization and biosolarization techniques

José Fenoll, Encarnación Ruiz, Alfredo Lacasa, Pilar Hellín and Pilar Flores
Instituto Murciano de Investigación y Desarrollo Agrario y Alimentario, IMIDA, C/ Mayor s/n, La Alberca 30150 Murcia, Spain
E-mail: encarnacion.ruiz6@carm.es

PC 8

Proposal of a validation guidance: An objective approach on SANCO 3131[1] for a multi-residues pesticides validation using Decision 2002/657/CE's concepts

Fernando A. Lopes[1], Elizabete M.C. Saglioni[1], Anuska L. Modro[1], Cláudia H. Kowalski[1] and Igor R.B. Olivares[1]
[1]N*ational Laboratory of Ministry of Agriculture, Livestock and Food Supply (LANAGRO-SP), Brazil*
E-mail: fernando.lopes@agricultura.gov.br

PC 9

Analysis of the norms on pesticides related to soil quality in Argentina, a contribution to its development and improvement

Santiago Reyna[1,2], Raquel Murialdo[1], Hugo Pesci, [1] María Lábaque[2], Teresa Reyna[2], Adolfo González[1], Pedro Santucho and Estela Reyna
[1]*Chair of Environmental Engineering, National University of Córdoba – Córdoba, Argentina*
[2]*Chair of Hydraulics Works, National University of Córdoba – Córdoba, Argentina*
E-mail: santiagoreyna@gmail.com

PC 10

Comparative evolution of propiconazole and tebuconazole application during blueberry flowering and fruit set

María Tatiana Montti, Silvia Visciglio, María Chaulet and Jorge Gerard
Facultad de Ciencias de la Alimentación - Laboratorio de Investigación de Residuos de Plaguicidas en Alimentos- Universidad Nacional de Entre Ríos, Concordia, Argentina
E-mail: monttim@fcal.uner.edu.ar

PC 11

Pesticide residues in breast milk

Susana Der Parsehian[2], M. Alejandra Rodríguez[1], Marcos Paladino, Nahuel Casá[1] and Patricia Gatti[1]
[1] *Instituto Nacional de Tecnología Industrial, Argentina*
[2] *Hospital Materno Infantil Ramón Sarda, Argentina*
E-mail: alerod@inti.gob.ar, ncasa@inti.gob.ar

PC 12

Pesticides: A risk assessment for citriculture

Lílian M. A. Bocchi[1], Maria L. Ribeiro[1], Carolina Lourencetti[2] and Luciana Camargo de Oliveira[1]
[1]*Mestrado em Desenvolvimento Regional e Meio Ambiente – Centro Universitário de Araraquara – UNIARA, Araraquara – SP, Brasil*
[2]*Mestrado em Recursos Hídricos,UFMT, Cuiabá, MT, Brasil*
E-mail: mlucia@gmail.com

PC 13

Pesticide use on crops in Córdoba province. An estimation based on information provided by agrochemical applicators

R.A. Fernández [1], R. Meyer Paz[2], M. Butinof[3], M.J. Lantieri [4], M.I. Stimolo[5] and M.P. Díaz[6]

[1]*Hospital Infantil. Municipalidad de Córdoba. Facultad de Medicina. Universidad Católica de Córdoba. Argentina*

[2]*Cátedra de Administración Rural. Facultad de Ciencias Agropecuarias. Universidad Nacional de Córdoba. Argentina*

[3]*Cátedra de Epidemiología General y Nutricional. Escuela de Nutrición. Facultad de Ciencias Médicas. Universidad Nacional de Córdoba. Argentina*

[4]*I[a] Cátedra de Biología Celular, Histología y Embriología e Instituto de Biología Celular. Facultad de Ciencias Médicas. Universidad Nacional de Córdoba. Argentina*

[5]*Departamento de Matemática y Estadística. Facultad de Ciencias Económicas. Universidad Nacional de Córdoba. Argentina*

[6]*Cátedra de Estadística y Bioestadística. Escuela de Nutrición. Facultad de Ciencias Médicas. Universidad Nacional de Córdoba. Argentina*

E-mail: pdiaz@fcm.unc.edu.ar

PC 14

Pesticide residues in medicinal herbs of North Africa

Ramadan I. Damja and El Mukhtar A. Belgasem

University of Al-Fateh, Chemistry Department, Tripoli, Libya

E-mail: ramadandam@yahoo.com

PC 15

Assessment of possible impact of industrial activities and the use of agrochemicals on the levels of toxic chemicals in natural environment

El-Mukhtar A. Belgasem and Ramadan I. Damja

University of Al-Fateh, Chemistry Department, Tripoli, Libya

E-mail: elmukhtara@yahoo.com

Poster Presentations

Other Posters

Titles

PD 1

Photo-fenton degradation of 2,4-D in a pilot-plant solar reactor

Jorgelina Farias[1], Enrique Albizzati[2] and Orlando Alfano[1]
[1]*INTEC, Universidad Nacional del Litoral and CONICET, Santa Fe, Argentina*
[2]*FIQ, Universidad Nacional del Litoral, Santa Fe, Argentina*
E-mail: jfarias@santafe-conicet.gob.ar

PD 2

Degradation of glyphosate in water using the UV/H_2O_2 advanced oxidation process

Cristina Zalazar, Agustina Manassero, Melisa Mariani, Antonio Negro, Rodolfo Brandi and Alberto Cassano
INTEC (UNL-CONICET), Güemes 3450, Santa Fe, Argentina.
E-mail: szalazar@santafe-conicet.gov.ar

PD 3

Degradation of 2-chlorophenol by the heterogeneous photo-fenton reaction using goethite as catalyst

G.B. Ortiz de la Plata, O.M. Alfano and A.E. Cassano
INTEC, (CONICET and Universidad Nacional del Litoral).
Güemes 3450, Santa Fe, Argentina.
E-mail: guadaortiz@santafe-conicet.gov.ar

PD 4

Application of ozone plus UVC radiation for degrading organic compounds

María Eugenia Lovato, Carlos A. Martín and Alberto E. Cassano
Instituto de Desarrollo Tecnológico para la Industria Química – INTEC (UNL_CONICET), Santa Fe, Argentina
E-mail: mlovato@santafe-conicet.gov.ar

PD 5

Detection of unintended stress effects on tomato fruits treated with carbofuran by application of chemometric techniques to LC-MS data

María J. Culzoni[3], Isidro Sánchez Pérez[1], María D. Gil García[1], Estela M. Sánchez Pérez[2], Fernando López-Ortiz[2], María Martínez Galera[1] and Héctor C. Goicoechea[3]
[1]*Departamento de Hidrogeología y Química Analítica, Universidad de Almería, 04120 Almería, España*
[2]*Departamento de Topología y Química orgánica, Universidad de Almería, 04120 Almería, España*
[3]*Laboratorio de Desarrollo Analítico y Quimiometría, Cátedra de Química Analítica I, Universidad Nacional del Litoral, Santa Fe (S3000ZAA), Argentina*
Email: mculzoni@fbcb.unl.edu.ar

PD 6

The use of natural products as a strategy for the control of insect ectoparasites in domestic animals

Heriberto Elder[1], María Guala[1], Eduardo Dellacassa[2] and Arnaldo Bandoni[3]
[1]*Departamento de Ingenieria Química, Facultad de Ingeniería Química, Universidad Nacional del Litoral, Santa Fe, Argentina*
[2]*Cátedra de Farmacognosia y Productos Naturales, Facultad de Química, Universidad de la República, Montevideo, Uruguay*
[3]*Cátedra de Farmacognosia, Facultad de Farmacia y Bioquímica, Universidad de Buenos Aires, Buenos Aires, Argentina*
E-mail: herelder@fiq.unl.edu.ar

PD 7

Biodegradation of cypermethrin and amitraz by *Aspergillus niger* in a cattle tick dipping baths.

Juan José De Jesús[1], Horacio R. Beldoménico[1], Rita C. Kappes[1], Juan C. Basílico[2] and Laura Noemí Frisón[2]
[1]*Central Laboratory, School of Chemical Engineering, UNL, Santa Fe Argentina*
[2]*Microbiology Laboratory, Food Engineering Department, School of Chemical Engineering, UNL, Santa Fe Argentina*
E-mail: jjdeje@fiq.unl.edu.ar

PD 8

Triazol content to control *phomposis helianthi* in two sunflower cultivars in Uruguay

Fernanda M. Gamba[1], Valentina Benítez[2], Jorge Franco[3], Hugo Ferrazzini[4] and Pedro Díaz[5]
[1]*Departamento de Protección Vegetal, Facultad de Agronomía - Universidad de la República Oriental del Uruguay, Paysandú, Uruguay*
[2]*Centro de Investigaciones Nucleares, Facultad de Ciencias - Universidad de la República Oriental del Uruguay, Montevideo, Uruguay*
[3]*Departamento de Biometría, Facultad de Agronomía - Universidad de la República Oriental del Uruguay, Paysandú, Uruguay*
[4]*Dirección General de Servicios Agrícolas, Ministerio de Agricultura y Pesca- Montevideo - Uruguay*
[5] *Departamento de Biología Vegetal, Facultad de Agronomía - Universidad de la República Oriental del Uruguay, Paysandú, Uruguay*
E-mail: fgamba@fagro.edu.uy

PD 9

Leaching potential of atrazine in an andisol with liquid cow manure application

Gabriela Briceño[1,] Paula Aguilera[1], Rolando Demanet[2], María de La Luz Mora and Graciela Palma[1]
[1]*Chemistry Department, Universidad de La Frontera, Temuco, Chile*
[2]*Agricultural Production Department, Universidad de La Frontera, Temuco, Chile*
E-mail: gpalma@ufro.cl

PD 10

Residual distribution in sheep, of cypermethrin applied in the dorsal mid-line region by means of the pour-on technique, for the control of ectoparasites

Hugo A. Caldironi[1], Fermín V. Olaechea[2] and F. Raffo[2]
[1]*Servicios Tecnológicos de Alto Nivel, Instituto de Investigaciones Bioquímicas (Universidad Nacional del Sur-CONICET). Bahía Blanca, Argentina.*
[2]*EEA-INTA Bariloche, Bariloche, Argentina*
E-mail: caldiron@criba.edu.ar

PD 11

Mobility of atrazine in a Vertic Argiudoll without agricultural history

Marta S. Zubillaga, Helena Rimski-Korsacov and Ma. de las Mercedes Zubillaga
Soil Fertility and Fertilizers, Faculty of Agronomy, Buenos Aires University,
San Martin Avenue 4453, Buenos Aires, Argentine
E-mail: zubillag@fagro.uba.ar

PD 12

Lethal and sub lethal effects of the formulation Aficida® on larvae of *Rhinella arenarum* (Anura: Bufonidae). I. Toxicity tests

Guillermo S. Natale[1], Josefina Vera Candioti[2], Sonia Soloneski[2], Marcelo L. Larramendy[2] and Alicia E. Ronco[1]

[1]*Centro de Investigaciones del Medio Ambiente (CIMA), Departamento de Química, Facultad de Ciencias Exactas, Universidad Nacional de La Plata, La Plata, Argentina. CONICET*

[2]*Laboratorio de Citogenética, Cátedra de Citología, Facultad de Ciencias Naturales y Museo, Universidad Nacional de La Plata, La Plata, Argentina. CONICET-ANPCyT*

E-mail: gnatale@quimica.unlp.edu.ar

PD 13

Lethal and sub lethal effects of the formulation Aficida® on larvae of *Rhinella arenarum* (Anura: Bufonidae). II. Genotoxicity and cytotoxicity tests

Josefina Vera Candioti[1], Guillermo S. Natale[2], Sonia Soloneski[1], Alicia E. Ronco[2] and Marcelo L. Larramendy[1]

[1]*Laboratorio de Citogenética, Cátedra de Citología, Facultad de Ciencias Naturales y Museo, Universidad Nacional de La Plata, La Plata, Argentina. CONICET-ANPCyT*

[2]*Centro de Investigaciones del Medio Ambiente (CIMA), Departamento de Química, Facultad de Ciencias Exactas, Universidad Nacional de La Plata, La Plata, Argentina. CONICET*

E-mail: josefinavc@hotmail.com

PD 14

Partition of chlorpyrifos in aquatic microcosms

María P.Tieri, Fernando G. Reymundo, Guido J. Casanovas, Cecilia I. Valea, Roberto J.M. Serafini, Silvana Arreghini and Alicia F. de Iorio.

Cátedra de Química Analítica, Departamento de Recursos Naturales y Ambiente, Facultad de Agronomía, UBA. Av. San Martín 4453, 1417, Buenos Aires, Argentina

E-mail: tieri@agro.uba.ar

PD 15

Comparative studies of genotoxicity and citotoxicity induced *in vitro* by Ivermectin on mammalian and mosquito cells

Gabriela Molinari, Sonia Soloneski and Marcelo L. Larramendy

Laboratorio de Citogenética, Cátedra de Citología, Facultad de Ciencias Naturales y Museo, Universidad Nacional de La Plata, La Plata, Argentina

E-mail: g_molinari26@hotmail.com

PD 16

Lethal and sub lethal effects of lambda-cyhalothrin in *Eisenia fetida* (*ANNELIDA, OLIGOCHAETA, LUMBRICIDAE*)

Tamara, Ricardo[1], Ma Inés Maitre [1,2] and Alba Rut Rodríguez[1,2]
[1]*Química Ambiental, FHUC, Universidad Nacional del Litoral, Santa Fe, Rpca Argentina*
[2]*Grupo Medio Ambiente, INTEC, Universidad Nacional del Litoral, CONICET, Santa Fe, Rpca Argentina*
E-mail: tamita83ar@yahoo.com.ar

PD 17

Proficiency testing for agrochemical formulation

Soraya Sandoval R.[1] and Marcelo Soto V.[2]
[1]*Food and Environmental Metrology Division, Environmental Health Department, Public Health Institute of Chile (ISP), Santiago, Chile*
[2]*Nutrition and Food Division, Environmental Health Department, Public Health Institute of Chile (ISP), Santiago, Chile*
E-mail: soraya@ispch.cl, msoto@ispch.cl