

POSTERS

P1 – P24

OCCURRENCE – MYCOTOXIGENIC FUNGI AND MYCOTOXINS

- P1 *The risk of contamination with moulds and mycotoxins, dietary supplements in the form of dried plants*
Iwona Altyn and M. Twarużek
Department of Physiology and Toxicology, Faculty of Biological Sciences, Kazimierz Wielki University, Poland
- P2 *Co-occurrence of moniliformin, fumonisins and deoxynivalenol in maize and wheat grown in Italy*
Terenzio Bertuzzi¹, P. Giorni², G. Leni¹, P. Vaccino³, C. Lanzanova³ and S. Locatelli³
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²Department of Sustainable Crop Production, Università Cattolica del Sacro Cuore, Italy;
³Research Center for Cereal and Industrial Crops, Council for Agricultural Research and Economics, Italy
- P3 *The occurrence of mycotoxins in various spices purchased in retail stores in the USA*
Julie L. Brunkhorst, J. Bierbaum and R. Niemeijer
Trilogy Analytical Laboratory, USA
- P4 *Occurrence of ochratoxin a in cheese from the Italian market and efsa race tool risk assessment*
S. Bonan¹, M. Peloso¹, P. Roncada², A. Guerrini² and **Elisabetta Caprai**¹
¹Food Chemical Department, Istituto Zooprofilattico Sperimentale Lombardia ed Emilia Romagna 'Bruno Ubertini', Italy; ²Department of Veterinary Medical Sciences, University of Bologna, Italy
- P5 *High occurrence of aflatoxins and cyclopiazonic acid producing Aspergillus section Flavi species isolated from Ethiopian peanut-growing areas*
Carla Cervini¹, C. Verheecke-Vaessen¹, A. Mohammed², N. Magan¹ and A. Medina¹
¹Applied Mycology Group, Environment and AgriFood Theme, Cranfield University, UK; ²School of Plant Sciences, Haramaya University, Ethiopia
- P6 *Occurrence and variation of Fusarium regulated, masked and emerging mycotoxins in maize from agriculture regions of South Africa*
Theodora I. Ekwomadu^{1,2}, R.E. Gopane¹ and M. Mwanza²
¹Department of Biological Sciences, Faculty of Natural and Agricultural Sciences, North-West University, South Africa; ²Food Security and Food Safety Niche Area, North-West University, South Africa
- P7 *Presence of ochratoxin A in red and white wines sourced from Southern Italy (Sicily)*
Vincenzo Ferrantelli, F.G. Galluzzo, E. Bacchi, M.D. Buscemi, L. Pantano, V. Cumbo, G. Vincenzo, V. Macaluso, A. Macaluso and S. Seminara
Istituto Zooprofilattico Sperimentale della Sicilia, Italy
- P8 *Screening on the presence of Ochratoxin A in dry cured meat products collected in Southern Italy (Sicily) during 2019-2021*
Francesco Giuseppe Galluzzo, L. Pantano, V. Cumbo, V. Macaluso, C. Castronovo, M.D. Buscemi, E. Bignardelli, A. Macaluso, A. Vella and V. Ferrantelli
Istituto Zooprofilattico Sperimentale della Sicilia, Italy
- P9 *Preliminary investigation of the presence of fungal pathogens and mycotoxins in seed hemp varieties*
Paola Giorni¹, T. Bertuzzi², S. Locatelli³ and C. Lanzanova
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²Department of Animal, Food and Nutrition Science, Università Cattolica del Sacro Cuore, Italy;
³Research Centre for Cereal and Industrial Crops, Council for Agricultural Research and Economics, Italy

- P10 *Fungal species and mycotoxins in wheat straw used for dairy cattle feeding in North Portugal*
Jesús M. González-Jartín¹, O. Aguin², M.J. Sainz³, V. Ferreiroa², I. Rodríguez-Cañás¹,
 A. Alfonso¹, R. Alvarino¹, M.R. Vieytes⁴, C. Salinero³ and L.M. Botana¹
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- P11 *Mycotoxin prevalence in 2021: European feeds and raw materials*
Swamy Haladi and A. Bhat
 Trouw Nutrition, the Netherlands
- P12 *Mycotoxin prevalence in 2021: Asian feeds and raw materials*
Swamy Haladi and A. Bhat
 Trouw Nutrition, the Netherlands
- P13 *Mycotoxin prevalence in 2021: Middle East and African feeds and raw materials*
Swamy Haladi and A. Bhat
 Trouw Nutrition, the Netherlands
- P14 *Mycotoxin prevalence in 2021: Latin American feeds and raw materials*
Swamy Haladi and A. Bhat
 Trouw Nutrition, the Netherlands
- P15 *Analysis of the presence of ochratoxin A in coffee and coffee-based products collected from Southern Italy (Sicily) during 2019-2021*
Andrea Macaluso, G. Cammilleri, F.G. Galluzzo, E. Bacchi, M.D. Buscemi, L. Pantano,
 A. Letizia, V. Macaluso, V. Cumbo and V. Ferrantelli
 Istituto Zooprofilattico Sperimentale della Sicilia, Italy
- P16 *Enniatins and beauvericin: emerging mycotoxins of concern in Fusarium.*
 E. Gritti¹, **Paolo Matteini**¹, F. Rosi¹, G. Sammarco¹, S. Robert², J. Alappat³, S. Deng⁴,
 E. De Dominicis¹, S. Saner⁵ and P. Metra²
^{1,5}Mérieux NutriSciences R&D – ¹Italy, ²France, ³North America, ⁴China, ⁵Turkey
- P17 *Natural toxins in plant commodities used in plant-based meat alternatives: A systematic review*
Octavian Augustin Mihalache, L. Dellafiora and C. Dall'Asta
 Department of Food and Drug, University of Parma, Italy
- P18 *Occurrence of major mycotoxins, masked/modified forms and emerging mycotoxins in Europe in 2021 as detected by Spectrum Top® 50*
Anneliese Mueller¹, D. Steiner², K. Hasler² and U. Hofstetter¹
¹DSM Austria GmbH, Austria; ²Romer Labs Diagnostic GmbH, Austria
- P19 *Fungal diversity and targeted metabolomics in stored cereals under different interacting abiotic factors*
Abimbola Oluwakayode¹, J. Meneely², R. Krska^{2,3}, N. Magan¹ and A. Medina¹
¹Applied Mycology Group, Environment and AgriFood Theme, Cranfield University, UK;
²Institute for Global Food Security Biological Sciences, Queen's University Belfast, UK;
³Department IFA-Tulln, BOKU Vienna, Austria
- P20 *Occurrence of selected Fusarium toxins in samples of Polish maize and wheat cereal grain from the 2020 and 2021 harvest*
Adam Pierzgalski and M. Bryła
 Department of Food Safety and Chemical Analysis, Institute of Agricultural and Food Biotechnology – State Research Institute, Poland

- P21 *Total mixed ration – mycological and mycotoxicological contamination*
Magdalena Twarużek, J. Grajewski, R. Kosicki, P. Skrzydlewski, E. Soszczyńska and G. Pilarska
 Faculty of Biological Sciences, Department of Physiology and Toxicology, Kazimierz Wielki University, Poland
- P22 *Occurrence of mycotoxins and crop agronomic characteristics in maize with different endosperm textures*
 C.T. Simões¹, **Denize Tyska**^{1,2}, C. Rosa da Silva¹, J.A. Sarturi¹, L. Medianeira de Lima Schlösser¹, B. Somavilla¹, L.B. Casal¹, T. Moreira da Silva¹, A.O. Mallmann² and C.A. Mallmann¹
¹Laboratory of Mycotoxicological Analyses, Department of Preventive Veterinary Medicine, Federal University of Santa Maria, Brazil; ²Pegasus Science, Brazil
- P23 *Potential mycotoxin-producing species in organic cereals from Spain*
 S. Berguices-Miguel, M. García-Díaz, C. Melguizo, J. Gil-Serna, **Covadonga Vázquez** and B. Patiño
 Department of Genetics, Physiology and Microbiology, Faculty of Biology, Complutense University of Madrid, Spain
- P24 *Sterigmatocystin occurrence in traditional meat products of households seated in different Croatian regions*
Ana Vulić¹, T. Lešić¹, N. Kudumija¹, M. Zadravec², M. Škrivanko³, N. Vahčić⁴ and J. Pleadin¹
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EXPOSURE ASSESSMENT AND HEALTH

- P25 *Early-life exposure to mycotoxins and its impact on health – a case study*
Paula Alvito^{1,2*}, R. Assunção^{1,2,3}, P. Bastos-Amador⁴, M. De Boevre⁵, E.L. Duarte^{6,7}, C. Martins^{1,2,8,9}, I. Serrenho¹, I. Silva⁶, L. Visintin⁵ and M. Ferreira^{4,10}
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- P26 *Innovative 2D and 3D in vitro models to evaluate toxicological effects of ochratoxin A and fumonisin B1 on human cells*
Beatriz Arce-López, M. Coton, E. Coton and N. Hymery
 Laboratoire Universitaire de Biodiversité et Ecologie Microbienne, Université de Brest, INRAE, France
- P27 *Prolonged vascular contractile response induced by the R and S-epimers of the ergot alkaloid ergocristine, and attenuation by a non-competitive antagonist*
Jensen E. Cherewyk¹, S.E. Parker¹, Barry R. Blakley² and A.N. Al-Dissi³
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- P28 *Combinatory effects of endocrine disruptive mycotoxins and foodborne xenoestrogens on breast cancer progression*
 J. Groestlinger¹, C. Chroma¹, N. Saraiva², A.S. Fernandes², H. Gohlke³, D. Marko¹ and **Giorgia Del Favero**^{1,4}
¹Department for Food Chemistry and Toxicology, Faculty of Chemistry, University of Vienna, Austria; ²Research Centre for Biosciences and Health Technologies, Lusófona University of Humanities and Technologies, Portugal; ³Institut für Pharmazeutische und Medizinische Chemie, Heinrich-Heine University Düsseldorf, Germany; ⁴Core Facility Multimodal Imaging, Faculty of Chemistry, University of Vienna, Austria
- P29 *Calcium dysregulation is involved in enniatins cytotoxicity in neuronal cells*
 N. Pérez-Fuentes¹, R. Alvariano¹, **Jesús González-Jartín**¹, A. Alfonso¹, S. Gegunde^{1,2} and L.M. Botana¹
¹Departamento de Farmacología, Facultad de Veterinaria, Universidad de Santiago de Compostela, Spain; ²Fundación Instituto de Investigación Sanitario Santiago de Compostela, Hospital Universitario Lucus Augusti, Spain
- P30 *Potentially harmful exposure to mycotoxins during the critical prenatal period: a human biomonitoring study in a pregnant cohort in rural Bangladesh*
Nicholas N. A. Kyei^{1,2,3}, B. Cramer⁴, H.-U. Humpf⁴, G.H. Degen⁵, N. Ali⁶ and S. Gabrysch^{1,2,3}
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- P31 *Determination of pharmacokinetic parameters of efavirenz and aflatoxin B1: An approach to unravel possible interactions*
Orphélie Lootens^{1,2,3}, A. Vermeulen², J. Van Bocxlaer², S. De Saeger^{1,3,4}, M. De Boevre^{1,3}
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- P32 *Impact of Fusarium-derived mycotoxins enniatin B, B1 and beauvericin fed to weaned piglets*
Barbara Novak¹, A. Lopes Hasuda^{2,3}, M. Ghanbari¹, V.M. Maruo^{3,4}, A.P.F.R.L. Bracarense², M. Neves³, C. Emsenhuber¹, S. Wein¹, I.P. Oswald³, P. Pinton³ and D. Schatzmayr¹
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- P33 *Assessment of mycotoxin exposure of rural workers through diet and urinary biomarkers in Brazil*
 T.F. Franco and **Carlos A.F. Oliveira**
 Faculdade de Zootecnia e Engenharia de Alimentos, Universidade de São Paulo, Brazil
- P34 *A metaproteomic approach to elucidate the effects of deoxynivalenol and zearalenone on the porcine gut microbiome*
 J.S. Sáenz^{1,2}, A. Kurz^{1,2}, U. Ruczizka³, M. Büniger³, M. Dippel³, B. Grenier⁴, **Gerd Schatzmayr**⁴, A. Ladinig³, J. Seifert^{1,2} and E. Selberherr⁵
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- P35 *The first extensive and global mycotoxin exposure survey in livestock*
Arnaud Vidal¹, M. Devreese², S. De Baere², S. Croubels² and C. Gougoulias¹
¹Innovad Global, Belgium; ²Department of Pharmacology and Toxicology, Faculty of Veterinary Medicine, Ghent University, Belgium
- P36 *Concentration of zearalenone, α -zearalenol and β -zearalenol in the myocardium and the results of isometric analyses of the coronary artery in prepubertal gilts*
M. Gajęcka¹, M.S. Majewski², **Łukasz Zielonka**¹, W. Grzegorzewski^{3,4}, E. Onyszek⁵, S. Lisieska-Zołnierczyk⁶, J. Juśkiewicz⁷, A. Babuchowski⁵ and M.T. Gajęcki¹
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P37 – P65 MITIGATING THE NEGATIVE IMPACT OF MYCOTOXINS

- P37 *Efficacy assessment of a yeast cell wall-based product in reducing the mycotoxins oral bioavailability in rats*
D. Greco¹, V. D'Ascanio¹, V. Marquis², D. Tricarico³, M. Antonacci³, A.F. Logrieco¹ and **Giuseppina Avantaggiato**¹
¹Institute of Sciences of Food Production (CNR-ISPA), Italy; ²Phileo by Lesaffre, France; ³Section of Pharmacology, Department of Pharmacy-Pharmaceutical Sciences, University of Bari, Italy
- P38 *First *in vitro* evidences of sporidesmins adsorption by a clay-based material*
V. D'Ascanio¹, D. Greco¹, M. Abbasciano¹, A.F. Logrieco¹, D. Wilde² and **Giuseppina Avantaggiato**¹
¹Institute of Sciences of Food Production (CNR-ISPA), Italy; ²Anpario plc, UK
- P39 *Evaluation of a yeast hydrolysate from a novel strain of *Saccharomyces cerevisiae* for mycotoxin mitigation using *in vitro* and *in vivo* models*
Paul Bruinenberg¹ and M. Castex²
¹Trouw Nutrition R&D, the Netherlands; ²Lallemand SAS, France
- P40 *Machine learning-aided design for atox nature silver detoxifier for animal feed*
G. Lo Dico^{1,2,3}, S. Croubels⁴, **Verónica Carcelén**³ and M. Haranczyk¹
¹IMDEA Materials Institute, Spain; ²Department of Materials Science and Engineering, Universidad Carlos III de Madrid, Spain; ³Tolsa Group, Spain; ⁴Department of Pharmacology, Toxicology and Biochemistry, Ghent University, Belgium
- P41 *Effect of lactic acid bacteria in ochratoxin A and aflatoxin B1 reduction during bread fermentation*
Laura Escrivá, C. Luz, C. Lafuente, M. Vitali, M. Riolo, T. Nazareth, R. Torrijos, L. Musto, P. Puigcerver and G. Meca
Laboratory of Food Chemistry and Toxicology, Faculty of Pharmacy, University of Valencia, Spain
- P42 *A mycotoxin-mitigating feed additive reduces the chronic adverse effects of moderate levels of *Fusarium* mycotoxins in dairy cows*
Antonio Gallo¹, A. Catellani¹, M. Marotta¹, M. Mosconi¹, A. Mulazzi¹, S. van Kuijk² and Y. Han²
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- P43 *In ovo effects of phyto-synthesized silver/zinc oxide nanoparticles on attenuating aflatoxin B1 oxidative stress, liver injury and gene expression in indigenous chickens*
Martha Cebile Jobe and M. Mwanza
 Department of Animal Health, North-West University, South Africa
- P44 *Review of the efficacy of different mycotoxin binders to adsorb mycotoxins in vitro*
Abdelhacib Kihal, M. Rodríguez-Prado and S. Calsamiglia
 Servei de Nutrició i Benestar Animal, Facultat de Veterinària, Universitat Autònoma de Barcelona, Spain
- P45 *Meta-analysis on the efficacy of different mycotoxin binders to reduce aflatoxin M1 in milk after aflatoxin B1 challenge in dairy cows*
Abdelhacib Kihal, M. Rodríguez-Prado and S. Calsamiglia
 Servei de Nutrició i Benestar Animal, Facultat de Veterinària, Universitat Autònoma de Barcelona, Spain
- P46 *Efficacy of a postbiotic yeast cell wall in alleviating effects of naturally contaminated fusaria toxins in commercial broiler birds*
Manoj B. Kudupoje¹, V. Malathi², R. Power¹ and A. Yiannikouris¹
¹Center for animal Nutrigenomics and Applied Animal Nutrition, Alltech Inc., USA; ²Poultry Science Department, Veterinary College, India
- P47 *Accumulation of fumonisins in broilers tissue with or without algoclay technology*
Julia Laurain¹, D. Tardieu², M. Matard-Mann¹, M.A. Rodriguez¹ and P. Guerre²
¹Olmix S.A., France; ²National Veterinary School of Toulouse, ENVT, Université de Toulouse, France
- P48 *The ability of an algoclay-based mycotoxin decontaminant to decrease the serum levels of zearalenone and its metabolites in lactating sows*
 X. Benthem de Grave¹, J. Saltzmann², **Julia Laurain**³, M.A. Rodriguez³, F. Molist¹, S. Dänicke² and R.R. Santos¹
¹Schothorst Feed Research, the Netherlands; ²Institute of Animal Nutrition, Friedrich-Loeffler-Institute Federal Research Institute for Animal Health, Germany; ³Olmix SA, France
- P49 *Adsorption of aflatoxin B1 and fumonisin B1 by maize, wheat, and oat bran*
Youngsun Lee, H. Nihtilä¹, J.M. Lemmetty and H.N. Maina
 Department of Food and Nutrition, Faculty of Agriculture and Forestry, University of Helsinki, Helsinki, Finland
- P50 *Detoxification of aflatoxin B1 by microbial binding*
Jenna Lemmetty, T. Laitila, Y. Lee and N.H. Maina
 Department of Food and Nutrition, Faculty of Agriculture and Forestry, University of Helsinki, Finland
- P51 *Evaluation of whey from cow's milk fermented by lactic acid bacteria as a bread bio-preservative agent*
 C. Luz, F. Lluenca, J. Calpe, V. D'Opazo, R. Torrijos, T. Nazaret, J.M. Quiles, L. Escrivà and **Giuseppe Meca**
 Laboratory of Food Chemistry and Toxicology, Faculty of Pharmacy, University of Valencia, Spain
- P52 *Zearalenone hydrolase ZenA (ZENzyme®) and its ability to degrade ZEN in the rumen of dairy cows*
Barbara Novak¹, T. Hartinger², J. Faas¹, M. Killinger¹, A. Höbartner-Gußl¹, B. Doupovec¹, D. Schatzmayr¹, Q. Zebeli² and G. Vogtentanz¹
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- P53 *Mycotoxin deactivator improves performance, antioxidant status, and reduces oxidative stress in gestating and lactating gilts fed diets containing mycotoxins*
S.P. Siqueira¹, H.F. De Brito¹, W.A.G. Araújo¹, M.S. Benfato², D.M. Canata², E.M. Gloria³, **Damien P. Prévéraud**⁴, D.V. Jacob⁵ and B.A.N. Silva⁶
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- P54 *Efficacy of mycotoxin deactivator on health and growth of broiler chickens under chronic dietary challenge of aflatoxins*
P.S. Ingewar¹, V. Patil², N. Kurkure², J. Dvorska³ and **Damien P. Prévéraud**³
¹A2 Livestock Farms and Research, India; ²Department of Pathology, Nagpur Veterinary College, Maharashtra Animal and Fishery Science University, India; ³Adisseo France SAS, France
- P55 *The remediation of toxins in the food chain using a novel multicomponent mycotoxin detoxifying agent (MMDA)*
Jog Raj, H. Farkaš, Z. Jakovčević, S. Čujić, J. Bošnjak-Neumüller and M. Vasiljević
PATENT CO, DOO., Serbia
- P56 *Degradation of deoxynivalenol using Devosia lucknowensis NCIMB 30593*
Z. Jakovčević, **Jog Raj**, H. Farkaš, S. Čujić, J. Bošnjak-Neumüller and M. Vasiljević
PATENT CO, DOO., Serbia
- P57 *The effect of mycotoxin adsorbents on alleviating the negative effects of zearalenone in gilts: a field case*
Jolien van Soest¹, A.J.L. Frio² and M.J. Serrano³
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- P58 *Evaluation of the efficacy of an anti-biotoxin solution supplemented in feed in dairy cows*
Clarisse Techer, A.-L. Tournay and L. Drouet
MiXscience, France
- P59 *Carboxypeptidase immobilization on nylon nanofibrous membranes for ochratoxin A detoxification*
T. Calado^{1,2}, R. Ferreira³, J.A. Lopes da Silva³ and **Armando Venâncio**^{1,2}
¹Centre of Biological Engineering, University of Minho, Portugal; ²LABELLS – Associate Laboratory, Portugal; ³LAQV-REQUIMTE and Department of Chemistry, University of Aveiro, Portugal
- P60 *Efficacy of TOXO®-XL on emerging mycotoxin adsorption at different pH levels*
Guan-Lin Wang and H.V.L.N. Swamy
Trouw Nutrition, the Netherlands
- P61 *Efficacy of TOXO®-MX on ergot alkaloids adsorption at different pH levels*
Guan-Lin Wang and H.V.L.N. Swamy
Trouw Nutrition, the Netherlands
- P62 *In vitro assessment of the potential interaction between vitamin B-complex and a commercial mycotoxin-mitigating product*
O. Daud, H.V.L.N. Swamy and **Guan-Lin Wang**
Trouw Nutrition, the Netherlands

- P63 *Effect of Mycosorb A+ on the uptake and deposition of deoxynivalenol and zearalenone in growing pigs*
Alexandros Yiannikouris¹, S. Vartiainen², E. Koivunen², K. Raatikainen², J. Apajalahti² and C.A. Moran³.
¹Alltech Inc., USA; ²Alimetrics, Finland; ³Alltech SARL, France
- P64 *Broiler performance and environmental impact of production in response to mycotoxins and yeast cell wall extract supplementation: a meta-analysis*
A. Weaver¹, D.M. Weaver², **Alexandros Yiannikouris**¹ and N. Adams³
¹Alltech Inc., USA; ²Independent Researcher, USA; ³Alltech UK, UK
- P65 *Partner-assisted artificial selection of a secondary function for efficient aflatoxin bioremediation*
M. Zaccaria¹, **Natalie Sandlin**¹, Y. Soen², M. Reverberi³ and B. Momeni¹
¹Biology Department, Boston College, USA; ²Department of Biomolecular Sciences, Weizmann Institute of Science, Israel; ³Department of Environmental and Evolutionary Biology, University of Rome La Sapienza, Italy

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CONTROLLING PLANT DISEASE AND MYCOTOXIN FORMATION

- P66 *Optimizing fumonisin B1 production on liquid synthetic media*
G. Wiesenberger, M.M. Sopel, M. Lemmens, G. Adam and **Franz Berthiller**
University of Natural Resources and Life Sciences (BOKU Vienna), Austria
- P67 *Enhancement of agri-food by-products: green extractions to obtain bioactive molecules against maize mycotoxigenic fungi*
Giulia Bulla¹, T. Bertuzzi², A. Mulazzi², G. Leni², M. Soldano³, M. Tacchini⁴, A. Guerrini⁴, G. Sacchetti⁴ and P. Giorni¹
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- P68 *Deoxynivalenol and pigmented grains: from organisms to cells*
Maria Cavallero¹, L. Righetti², M. Blandino³, C. Dall'Asta² and E. Rolli¹
¹Department of Chemistry, Life Sciences and Environmental Sustainability, University of Parma, Italy; ²Department of Food and Drug, University of Parma, Italy; ³Department of Agricultural, Forest and Food Sciences, University of Turin, Italy
- P69 *Bioformulate to reduce the accumulation of aflatoxins in maize based on a biopolymer as a carrier and support for growth of the biocontrol agent*
M.S. Alaniz Zanon¹, C. Oddino¹, D. Giovanini¹, C. Barbero², M.L. Chiotta¹ and **Sofia N. Chulze**¹
¹Research Institute on Mycology and Mycotoxicology, National Research Council from Argentina – National University of Rio Cuarto, Argentina; ²Research Institute on Energy Technology and Advanced Materials, National Research Council from Argentina – National University of Rio Cuarto, Argentina
- P70 *Influence of temperature and water activity on growth and aflatoxin production of *Aspergillus flavus* strains isolated from chickpeas*
C.J. Romero¹, J.F. Humaran¹, M.J. Nichea¹, V. Zachetti¹, E. Cendoya¹, L. Demonte^{2,3}, M.R. Repetti², **Sofia N. Chulze**¹ and M.L. Ramirez¹
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- P71 *From the treasure chest of plant bioactives to the future of new crop protectants for a sustainable agriculture: the possible exploitation of *Citrullus colocynthis* L. (SCHRAD.) extracts against *Aspergillus flavus* and aflatoxins and other stories*
Francesca Degola¹, M. Refifà¹, B. Marzouk², M. Commisso³, S. Montalbano⁴ and A. Buschini^{1,4}
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- P72 *Biocontrol activity of antagonistic yeasts against *Penicillium expansum* – major patulin producer in apples*
Tatjana Dudaš, D. Budakov, M. Loc, M. Grahovac and V. Stojšin
 University of Novi Sad, Faculty of Agriculture, Department of Plant and Environmental Protection, Faculty of Agriculture, University of Novi Sad, Serbia
- P73 *Pydiflumetofen co-formulated with prothioconazole: a novel fungicide for *Fusarium* head blight and deoxynivalenol control*
Simon G. Edwards
 Harper Adams University, UK
- P74 *Microbial modulation in wheat disease: mitigating the climate change impact of water scarcity using artificial intelligence*
 C. Polano¹, I. Sanseverino², L. Gomez Cortes², A. Navarro Cuenca², S. Sarrocco³, R. Baroncelli⁴, P. Ermacora¹, **Monica Ermolli**², G. Firrao¹ and T. Lettieri²
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- P75 *A rapid multiwell test to assay the effect of natural metabolites on growth and mycotoxin production of *Aspergillus flavus**
Rosita Silvana Fratini¹, M. Beccaccioli¹, V. Cecchetti¹, R. Ragno² and M. Reverberi¹
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- P76 *Culture conditions for the enrichment of *Fusarium* spp. inoculum in food matrices*
Jéssica Gil-Serna, C. Melguizo, C. Vázquez and B. Patiño
 Department of Genetics, Physiology and Microbiology, Complutense University of Madrid, Spain
- P77 *The effect of fungi co-occurrence on plant and fungal gene expression profiles and mycotoxin production in maize kernels and in vitro*
Paola Giorni¹, A. Lanubile¹, T. Bertuzzi², A. Marocco¹ and P. Battilani¹
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- P78 *Gene editing of *Aspergillus niger* CBS 513.88 using a CRISPR-Cas9 based system*
Carolina Gómez-Albarrán, B. Patiño, C. Vázquez and J. Gil-Serna
 Department of Genetics, Physiology and Microbiology, Faculty of Biology, Complutense University of Madrid, Spain
- P79 *In-depth study of mycotoxin accumulation in relation to anthocyanin composition in pigmented wheat*
Marco Gozzi, M. Blandino, L. Calani, L. Righetti, C. Dall'Asta and R. Bruni
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- P80 *Fungal growth and mycotoxin production in a new formulated meat product with structured emulsions as substitutes for pork rigid fat*
Ana Guimarães^{1,2}, A.J. Martins³, M.A. Cerqueira³, L. M. Pastrana³, P. Sousa⁴ and A. Venâncio^{1,2}
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- P81 *The ability of cyclopiazonic acid production expressed by surface moulds isolated from dry cured meat products*
Tina Lešić¹, M. Zadavec², A. Vulić¹, N. Vahčić³, N. Kudumija¹, I. Perković⁴ and J. Pleadin¹
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- P82 *Antifungal activity of lemon peel medium fermented by lactic acid bacteria isolated from citrus fruits and metabolomic profile of citrus contaminating mycotoxigenic fungi*
Carlos Luz, L. Escrivá, C. Lafuente, M. Vitali, J. Quiles, J. Calpe, V. Dopazo, F. Illueca, B. Merenciano and G. Meca
 Laboratory of Food Chemistry and Toxicology, Faculty of Pharmacy, University of Valencia, Spain
- P83 *Ecology and control of *Aspergillus flavus* and aflatoxin B1 in chilli powder and whole red chillies*
 D. Al-Jaza, A. Medina and **Naresh Magan**
 Applied Mycology Group, Environment and AgriFood Theme, Cranfield University, UK
- P84 *Climate change and acclimatization of *Aspergillus flavus* strains influenced colonisation, biosynthetic gene expression and aflatoxin B1 production by *A. flavus* in raw pistachio nuts*
 A. Baazeem¹, A. Rodriguez², A. Medina³ and **Naresh Magan**³
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- P85 **Hanseniaspora uvarum* as biocontrol agent against *Aspergillus flavus**
Clara Melguizo, J. Gil-Serna, C. Vázquez and B. Patiño
 Department of Genetics, Physiology and Microbiology, Faculty of Biology, Complutense University of Madrid, Spain
- P86 *Antagonistic properties of selected *Trichoderma* fungi against *Fusarium* species biosynthesizing fumonisins and beauvericin*
Marta Modrzewska and M. Bryła
 Institute of Agricultural and Food Biotechnology – State Research Institute, Poland
- P87 *Industrial manufacturing of aflatoxin biocontrol products allows farmers across Sub-Saharan Africa to produce safe crops*
 L. Kaptoge¹, **Alejandro Ortega-Beltran**¹, J. Atehnkeng^{1,2}, P.J. Cotty^{3,4} and R. Bandyopadhyay¹
¹International Institute of Tropical Agriculture, Nigeria; ²International Institute of Tropical Agriculture, Democratic Republic of Congo; ³U.S. Department of Agriculture, Agricultural Research Service, USA; ⁴School of Food Science and Engineering, Ocean University of China, China
- P88 *Biocontrol of *Aspergillus flavus* and aflatoxin production with ecological vineyard isolated bacteria*
 P. de la Huerta Bengoechea, J. Gil-Serna, C. Vázquez Estévez and **Belén Patiño Álvarez**
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- P89 *Looking inside the maize/aflatoxin interplay: the effect of aflatoxin B1 interaction with maize plants in vitro unravelled*
F. Degola¹, **Enrico Rolli**¹, L. Righetti² and C. Dall'Asta²
¹Department of Chemistry, Life Science and Environmental Sustainability, University of Parma, Italy; ²Department of Food and Drug, University of Parma, Italy
- P90 *Combination of propidium monoazide (PMA) with real-time PCR and recombinase polymerase amplification coupled with SYBR Green I for the detection of patulin-producing fungi in apples and by-products*
Foteini Roumani^{1,2}, J. Barros-Velázquez², A. Garrido-Maestu¹ and M. Prado¹
¹International Iberian Nanotechnology Laboratory, Food Quality and Safety Research Group, Portugal; ²Department of Analytical Chemistry, Nutrition and Food Science, University of Santiago de Compostela, Spain
- P91 *The role of maize kernels lipophilic antioxidants in resistance against Fusarium graminearum*
Jean-Marie Savignac¹, F. Richard-Forget², V. Ortega¹, V. Atanasova² and M.N. Verdal-Bonnin²
¹Syngenta Seeds, France; ²INRAE, UR1264, Mycology and Food Safety (MycSA), France
- P92 *Effect of water activity and temperature on growth and trichothecene production by Fusarium cerealis isolated from durum wheat grains*
J. Erazo, S. Palacios, A. Del Canto, S. Plem, M.L. Ramírez and **Adriana M. Torres**
Research Institute on Mycology and Mycotoxicology, National Scientific and Technical Research Council – Universidad Nacional de Rio Cuarto, Argentina

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Francesca Bravin¹, A. Revello Chion², D. Giordano², F. Cavarero², R. Baudino² and F. Diana¹
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- P94 *Validation of aflatoxin M1 fluorescence quantitative rapid test for milk (15-150 ppt) for determination of aflatoxin M1 in milk*
W. Reybroeck, S. Ooghe and **K. Broekaert**
Research institute for Agriculture, Fisheries and Food, Belgium
- P95 *The effects of grind and extraction size on result variability for aflatoxin, deoxynivalenol, fumonisin and zearalenone*
J. Bierbaum, **Julie Brunkhorst** and R. Niemeijer
Trilogy Analytical Laboratory, USA
- P96 *How green are the sample preparations commonly used in multi-mycotoxin analysis?*
Laura Carbonell-Rozas¹, L. Van der Cruyssen², L. Righetti¹ and C. Dall'Asta¹
¹Department of Food and Drug, University of Parma, Italy; ²Department of Bioanalysis, University of Ghent, Belgium
- P97 *Multi-mycotoxin determination in apple puree samples by hplc-ms/ms*
Laura Carbonell-Rozas¹, L. Van der Cruyssen², L. Calani¹, L. Righetti¹ and C. Dall'Asta¹
¹Department of Food and Drug, University of Parma, Italy; ²Department of Bioanalysis, University of Ghent, Belgium
- P98 *Beer analysis: mycotoxins in brewing process by LC-MS/MS*
D. Rodrigo, A. Cantalapiedra and **Luís Gallego**
Chromatography Department, Analiza Calidad Madrid S.L., Analiza Calidad Group, Spain
- P99 *The design, development and implementation of an LC-MS method as a 'toxicity alert system' in the animal feed sector*
Brett Greer, O. Kolawole, S. Haughey and C. Elliott
Institute for Global Food Security, Queen's University Belfast, UK

- P100 *A new immunoaffinity column with high recovery and organic solvent tolerance for aflatoxins*
Jianmin Liu, J. Yu and L. Chen
 VICAM Waters Corporation, USA
- P101 *Exploiting hyperspectral imaging and chemometrics for the rapid on-site measurement of aflatoxin in chillies*
Natasha Logan, O. Kolawole, B. Greer, S.A. Haughey, J. Meneely and C.T. Elliott
 Institute for Global Food Security, School of Biological Science, Queen's University Belfast, UK
- P102 *Analysis of aflatoxin and ochratoxin in vegan food products*
 C. Mair, M. Norris, E. Marley, B. Houston, C. Milligan and **Elizabeth Manning**
 R-Biopharm Rhône, UK
- P103 *Acetonitrile extraction for the analysis of multi-toxins in animal feeds*
 C. Mair, N. Mackay, J. Wilcox, E. Marley, C. Milligan and **Elizabeth Manning**
 R-Biopharm Rhône, UK
- P104 *Assessment of citrinin in spices and infant cereals using immunoaffinity column clean-up prior to HPLC-FLD*
 C. Mair, M. Norris, C. Milligan, C. Donnelly, D. Leeman, P. Brown, E. Marley and **Elizabeth Manning**
 R-Biopharm Rhône, UK
- P105 *Improving efficiency and analytical outcomes for the busy laboratory using the chronect symbiosis rida@crest robotic system for automated analysis of mycotoxins*
 J. McGeehan, N. MacKay, E. Marley, C. Donnelly and **Elizabeth Manning**
 R-Biopharm Rhône, UK
- P106 *Analysis of aflatoxin and ochratoxin in cheese using immunoaffinity clean-up prior to FLD-HPLC detection*
 G. Millar, P. Brown, M. Norris, J. Wilcox, E. Marley, B. Houston, C. Milligan and **Elizabeth Manning**
 R-Biopharm Rhône, UK
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- P108 *Molecularly imprinted polymers applied to the simultaneous coextraction of zearalenone and alternariol mycotoxins from oil samples*
Tamara Moya-Cavas¹, F. Navarro-Villoslada¹, J. Urraca¹, L.A. Serrano-González² and M.C. Moreno-Bondi¹
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- P109 *Comparative analysis of aflatoxins in dairy feeds by high-performance liquid chromatography with a fluorescence detector and liquid chromatography/tandem mass spectrometry*
Nancy Nleya^{1,2}, T.I. Ekwomadu¹, M. Sulyok³, T.A. Dada¹, N. Lubanza¹ and M. Mwanza¹
¹Food Security and Food Safety Niche Area, Department of Animal Health, North-West University, South Africa; ²Department of Applied Biology and Biochemistry, National University of Science and Technology, Zimbabwe; ³ Department IFA-Tulln, BOKU Vienna, Austria
- P110 *OTA via 2D-LC-MS/MS: an elegant alternative for high-throughput ochratoxin A analysis*
Christina Pille¹, M. Reichel¹, N. Meyer¹, A. Dagane¹, F. Nack¹, K.Krampe^{1,2} and J.S. Mänz¹
¹Eurofins WEJ Contaminants, Germany; ²Institute of Food Chemistry Hamburg, University of Hamburg, Germany
- P111 *Z-scores arrow range (ZSAR) method – assessment of truncated mycotoxins values in proficiency testing*
Kees van Putten
 Trilogy Europe B.V., the Netherlands

- P112 *Prevalence of patulin in fruit juices and baby foods as determined by a novel ELISA*
Guilar Rosar, T. Glaze, F. Rubio and G. Yearwood
 Eurofins Tecna Srl., Italy
- P113 *Macroeconomic evaluation of mycotoxins and nutritional composition in stored maize through NIRS*
Denize Tyska^{1,2}, A.O. Mallmann², C.T. Simões¹, D.F. Soares¹, G. Prado da Rosa¹, J.K. Vidal¹, L.T. Gressler³, E. da Silva Gubiani¹ and C.A. Mallmann¹
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- P114 *Extraction of small molecule analytes from a dried blood spot card matrix for stable and amenable toxicological analysis*
 P.A. Kirkland, U. Fox and **Alexandros Yiannikouris**
 Alltech Inc., USA
- P115 *Evidence biochip technology – a multi-analyte semi-quantitative analysis for 6 main groups of mycotoxins in maize*
 M. Plotan, C.A. Acaru, J. McNaughten, **Esin Yildiz**, J. Porter, S. Brockbank, R.I. McConnell and S.P. FitzGerald
 Randox Food Diagnostics, UK

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- P117 *MycotWIN – enhancing research and innovation capacity of tubitak mrc food institute on management*
Martina Loi¹, A.F. Logrieco¹, J. Calpe², G. Meca², C.P. Kodolbas³ and H. Ozer³
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- P118 *Implementation of the net-map analysis tool to unravel the science-policy-society collaboration system in mycotoxin risk analysis*
Celine Meerpoel¹, N. van der Linden², V.M.T Lattanzio³, N.M. Cito³, M. Tomaniova⁴, S. De Saeger¹ and P.A. Luning²
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- P119 *Five years of MYTOX-SOUTH@: achievements of a global partnership*
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