



ISM-MycoRed International Conference Europe 2013



Global Mycotoxin Reduction Strategies

27-31 May 2013

Martina Franca, Apulia, Italy

PRELIMINARY PROGRAMME

SCIENTIFIC SESSIONS



TUESDAY, MAY 28, 2013

OPENING SESSION – MYCOTOXINS: PUBLIC HEALTH AND INTERNATIONAL TRADING

9.00 - 9.15

OPENING ADDRESS

Angelo Visconti and Antonio Logrieco

Institute of Sciences of Food Production, National Research Council (ISPA CNR), Italy

9.15 - 10.30

KEYNOTE LECTURES

Chris Wild, *International Agency for Research on Cancer, France*

Global impact of mycotoxins on human health: from research to prevention

Johanna Fink-Gremmels, *Utrecht University, The Netherlands*

Advances in the understanding of long-term effects of mycotoxins on animals and targeted intervention strategies

11.00 - 13.00

Antonio Di Giulio, *European Commission, Belgium*

European policy for food safety in Horizon 2020

Lei Bao, *Shan Dong Import-Export Inspection and Quarantine Bureau of China, China*

The impact of mycotoxins regulations on international trade

Pino Calcagni, *International Nut and Dried Fruit Council Foundation, Spain*

A voice from trade: dried fruits and mycotoxins

Hans Van Egmond, *RIKILT-Institute of Food Safety, The Netherlands*

European regulations on mycotoxins

14.00 - 15.00

Poster Session and Sponsor exhibition – **Platinum Sponsor Highlights**

R-Biopharm AG: title tba

SESSION 1. MAIN MYCOTOXINS ISSUES AT GLOBAL LEVEL

15.00 - 18.00

Vittorio Fattori, *Food and Agriculture Organization of the United Nations (FAO), Italy*

FAO programmes on mycotoxins

Wayne Bryden, *University of Queensland, Australia*

Implications of mycotoxins in the animal feed supply chain: A view from downunder

Rudolf Krška, *University of Natural Resources and Applied Life Sciences (IFA BOKU), Austria*

New insights into the metabolization of deoxynivalenol in plants and humans and their significance for the consumer

David Miller, *Carleton University, Canada*

Managing ochratoxin A in the North American supply chain

Ranajit Bandyopadhyay, *International Institute of Tropical Agriculture, Nigeria*

Farmer-centric, action-oriented innovations for aflatoxin mitigation in Africa

Yang Liu, *Chinese Academy of Agricultural Sciences, China*

Main issues of mycotoxins contamination in China

Sophia Chulze, *National University of Rio Cuarto, Argentina*

Fumonisin contamination of maize in Latin America: reduction strategies and perspectives



WEDNESDAY, MAY 29, 2013

morning

SESSION 2. PRE-HARVEST MYCOTOXIN CONTROL (parallel session)

8.30 - 10.30

Petr Karlovsky, *George August University, Germany*

Mycotoxin detoxification in genetically modified plants

Simon Edwards, *Harper Adams University, United Kingdom*

Chemical control of Fusarium head blight of cereals: current knowledge

Gary Munkvold, *Iowa State University, USA*

Crop management practices to minimize the risk of mycotoxin contamination in temperate-zone maize production

Jürgen Köhl, *Plant Research International-DLO, The Netherlands*

MycoreD contribution to biological control of toxigenic fungi

Christina Donat, *Bio-Ferm, Austria*

Technical and economical aspects of biological control from industrial perspective

Paola Battilani, *UCSC Piacenza, Italy*

Predictive models: current knowledge and MycoRed contribution

SESSION 3. PLANT GENETIC RESISTANCE (parallel session)

8.30 - 10.30

Etienne Duveiller, *CIMMYT, Mexico*

Current CIMMYT/MycoRed solutions for minimizing mycotoxins in wheat and maize

Akos Mesterhazy, *Cereal Research Company, Hungary*

Breeding wheat for resistance against Fusarium head blight

Gerhard Adam, *IFA BOKU, Austria*

Inactivation of *Fusarium* mycotoxins by plant responses in wheat

Gary Payne, *North Carolina State University, USA*

Knowledge of maize/*Aspergillus flavus* pathosystem for aflatoxin control

Adriano Marocco, *UCSC Piacenza, Italy*

Breeding maize for resistance to Fusarium ear rot: an integrated approach of transcriptomics, metabolomics and genomics

.... (tba)





WEDNESDAY, MAY 29, 2013

morning

SESSION 4. POST-HARVEST MYCOTOXIN CONTROL (parallel session)

- 11.00 - 13.00
- Naresh Magan**, *Cranfield University, United Kingdom*
Mycotoxin post-harvest problems: MycoRed knowledge and solutions
- Adriana Torres**, *National University of Rio Cuarto, Argentina*
Reduction of aflatoxins in the peanut chain during storage in Latin-America
- Hayrettin Ozer**, *TUBITAK MAM, Turkey*
Toxigenic fungi, mycotoxins in dried fruits and reduction strategies
- Marta Taniwaki**, *Institute of Food Technology, Brasil*
Strategies to reduce aflatoxins in the Brazil nut chain
- Rolf Geisen**, *Max Rubner Institute, Germany*
New perspectives for mycotoxin reduction by light
- Luigi Di Taranto**, *Matrix, Italy*
Electronic device for grain quality monitoring during storage

SESSION 5. BIODIVERSITY AND GENOMICS OF TOXIGENIC FUNGI (parallel session)

- 11.00 - 13.00
- Cees Waalwijk**, *Wageningen UR, Plant Research International, The Netherlands*
Advances on genomics of toxigenic Fusaria
- Jens C. Frisvad**, *Technical University of Denmark*
Advances on chemotaxonomy of toxigenic fungi
- John Leslie**, *Kansas State University, USA*
Field and laboratory hybrids between *Fusarium fujikuroi* and *Fusarium proliferatum*
- Deepak Bhatnagar**, *USDA-Agricultural Research Service, USA*
Biodiversity and *Aspergillus flavus* genome for aflatoxin management
- Antonio Moretti**, *ISPA-CNR, Italy*
MycoRed contribution to biodiversity of toxigenic fungi in cereals, grape and dried fruits
- Matteo Chiara**, *University of Milan, Italy*
From NGS to mycotoxins: assembly and annotation of fungal genomes

14.00 - 15.00 Poster Session and Sponsor exhibition – Networking session

afternoon

PARALLEL SESSIONS - 12 oral presentations to be selected from ABSTRACTS

	SESSION 2a Pre-harvest mycotoxin control	SESSION 3a Plant genetic resistance	SESSION 4a Post-harvest mycotoxin control	SESSION 5a Biodiversity and genomics of toxigenic fungi
15.00 - 17.30



THURSDAY, MAY 30, 2013

morning

SESSION 6. TOXICOLOGY (parallel session)

- 8.30 - 10.30
- Massimo Tommasino**, *International Agency for Research on Cancer, France*
Aflatoxin B1 positively impact on Epstein-Barr virus viral life cycle *in vitro* models
- Isabelle Oswald**, *INRA, France*
Effect of deoxynivalenol and its acetylated derivatives on gut health
- Jean-Denis Troadec**, *Aix-Marseilles University, France*
Advances in deoxynivalenol toxicity mechanisms: the brain as a target
- (tba)
- (tba)
- (tba)

SESSION 7. QUALITY ASSURANCE AND ANALYTICAL METHODS (parallel session)

- 8.30 - 10.30
- Roland Poms**, *ICC, Austria*
Harmonization of mycotoxin Monitoring and Quality Assurance strategies in a global context
- Christine M. Gutschelhofer**, *R-Biopharm, Germany*
Quality assurance aspects of mycotoxin testing
- Joerg Stroka**, *EU-RL for Mycotoxins, European Commission-JRC-IRMM, Belgium*
Monitoring analytical performance by Proficiency Tests - What does it offer beyond z-scoring?
- Rainer Schuhmacher**, *IFA BOKU, Austria*
Metabolomics by LC-MSⁿ and HRMS: state-of-the-art and future perspectives
- Maria De Rosa**, *Carleton University, Canada*
New aptamers for mycotoxins: applications and future trends
- Veronica Lattanzio**, *CNR ISPA, Italy*
Evaluating performances of screening immunoassay kits through single laboratory validation and collaborative study: The case of multiplex dipstick for *Fusarium* toxins in cereals
- Sheryl Tittlemier**, *Canadian Grain Commission, Canada*
Sampling considerations for mycotoxins in wheat





THURSDAY, MAY 30, 2013

morning

SESSION 8. BIOAVAILABILITY AND EXPOSURE ASSESSMENT (parallel session)

- 11.00 - 13.00
- Franz Berthiller**, IFA BOKU, Austria
Bioavailability of masked mycotoxins
- Paul Turner**, University of Maryland, USA
Aflatoxin B1 chemoprevention strategies in countries with frequent exposure to mycotoxins
- Sarah De Saeger**, Ghent University, Belgium
Mycotoxin exposure: case studies Belgium and Cameroon
- Michele Solfrizzo**, CNR ISPA, Italy
Development and validation of biomarkers to assess multi-mycotoxin exposure and the efficacy of detoxification strategies
- Gordon Shephard**, Medical Research Council, South Africa
Multi-toxin exposure assessment by a human pilot study in rural South Africa
- (tba)

SESSION 9. MYCOTOXIN REDUCTION/DETOXIFICATION IN FOOD AND FEED (parallel session)

- 11.00 – 13.00
- Giuseppina Avantaggiato**, CNR ISPA, Italy
Multi-mycotoxin adsorbent materials: efficacy assessment of commercial products and development of new feed additives to reduce mycotoxin contamination
- Ting Zhou**, Guelph Food Research Centre, AAFC, Canada
Biological detoxification of deoxynivalenol
- Michaela Thamhes**, Biomin, Austria
Catabolism of ergopeptines by Rhodococcus erythropolis MTHt3 enzymes ErgA and ErgB
- Barbara De Santis**, National Institute of Health (ISS), Italy
The effect of food processing on the fate of mycotoxins
- Kristian Fog Nielsen**, Technical University of Denmark
Thermal degradation of fumonisins (*title tbc*)
- (tba)

- 14.00 – 15.00
- Poster Session and Sponsor exhibition - **Gold Sponsor Highlights**
- Biomin**: Insidious occurrence of mycotoxins and their effective counteraction
- Syngenta International AG**: Integrating technologies to bring value to growers

afternoon

PARALLEL SESSIONS - 12 oral presentations to be selected from ABSTRACTS

	SESSION 6a Exposure and toxicology	SESSION 7a Quality assurance and analytical methods	SESSION 8a Assessment of mycotoxin bioavailability	SESSION 9a Mycotoxin reduction/detoxification in food and feed
15.00 - 17.30



FRIDAY, MAY 31, 2013

morning

SESSION 10. STRATEGIES FROM INDUSTRIES

9.00 - 10.30

Ronald Niemeijer, *R-Biopharm, Germany*
tba

Nancy Zabe, *Vicam, A Waters Business, USA*
Mycotoxin control through mycotoxin testing in the field and laboratory

Claudio Campagna, *Syngenta, Switzerland*
Syngenta: delivering an integrated approach to minimize the mycotoxin issue

Maria Angeles Rodriguez, *Olmix, France*
Modifying materials at a nano scale to improve protection

Raymond Coker, *Toximet Ltd, UK*
The ToxiMet System for the accurate, simple, rapid, and affordable analysis of multiple mycotoxins

Ebru Ates, *Thermo Fisher Scientific, Food Safety Response Center, USA*
Screening of plant and fungal metabolites in cereals and animal feed using online sample preparation coupled to high resolution mass spectrometry

Didier Jans, *FEFANA, Belgium*
Mycotoxin reduction in animal diets (*title tbc*)

SESSION 11. Round Table

GLOBAL NETWORKING ON MYCOTOXINS AND FOOD SAFETY

11.00 - 12.30

Yoshiko Sugita-Konishi, *Japanese Society of Mycotoxicology, Japan*

Cosimo Lacirignola, *Mediterranean Agronomic Institute of Bari (MAIB), Italy*

Harmen Hofstra, *SAFE Consortium, Belgium*

Yang Liu, *Chinese Academy of Agricultural Sciences, China*

Altus Viljoe, *African Mycotoxin Network, South Africa*

Sofia Chulze, *SLAM Latin-America, Argentina*

Laura Mugnai, *Mediterranean Phytopathology Union, Italy*

Deepak Bhatnagar & Antonio Logrieco, *International Society for Mycotoxicology (ISM), Italy*

12.30 -13.00

PERSPECTIVES AND CLOSING SESSION

Franz Vestraete, *European Commission, Directorate General for Health and Consumers*
Perspectives of regulating mycotoxins in the European Union

..., *EFSA*
Tba

Angelo Visconti, Nunzia Cito, Antonio Logrieco
National Research Council, Institute of Sciences of Food Production, Italy

