



Novel integrated strategies for worldwide mycotoxin reduction in food and feed chains

December 2011/January 2012 – Issue n.4

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This is the 4th edition of the MycoRed e-newsletter. In this newsletter you will find information about project on going activities and useful news regarding mycotoxins in food and feed.

Enjoy your time with the MycoRed newsletter!

Antonio F. Logrieco - MycoRed Coordinator

*Help us to disseminate awareness about mycotoxins reduction:
please forward this newsletter to other interested parties!*

Visit us on www.mycored.eu

MycoRed 2012 programme



MYCORED NORTH AMERICA 2012

Ottawa, Canada
June 24-28, 2012.

Carleton University will host the MYCORED international Conference NORTH AMERICA 2012.

David Miller of Carleton University and Art Schaafsma from the University of Guelph will be chairing and vice chairing the event.

The conference will include keynote lectures by **international experts**, oral presentations posters



sessions, discussion group sessions.

Topics :

- Economic effects on the value chain: impact of changing regulations in North America
- What can fungal genomics teach us about managing mycotoxins
- Effects of low levels of mycotoxins in feed and options to ameliorate any affects
- Point of Sale analyses & models for regulations approaching the LOD
- Genetic resistance to toxigenic fungi
- Development & translation of knowledge for reducing mycotoxins in developing countries
- Applications of mycotoxin prediction systems and value chain management
- New mechanistic insights on mycotoxins& hazard assessment

The deadline for abstract submission is **March 30, 2012**.

Conference **website** : www.mycored.ca



MycoRed Workshop-Training Course: Detection techniques for mycotoxins in the food chain

Bari, Italy
May 28 - June 1, 2012

A one-week workshop-training course will be held at ISPA-CNR in Bari, Italy, under the aegis of the "MycoRed" project and ISM (International Society for Mycotoxicology).

The goal of the course is to demonstrate and teach traditional methods and new chemical and immunological systems for rapid, robust and user-friendly analysis of mycotoxins in the food chain. Much of the course will be spent on practical training in the laboratory.


Topics:

- *mycotoxins/toxigenic fungi: occurrence, risks and regulation*
- *overviews of major methods for mycotoxin detection*

Lab:

- *chemical analysis of major mycotoxins by HPLC*



	<ul style="list-style-type: none"> - multi-mycotoxin analysis by LC-MS/MS - rapid techniques for mycotoxin detection (ELISA, FPIA, LFD, fluorometric tests) <p>Trainees will be assisted individually in the laboratory by ISPA-CNR staff expert in instrumental and immunochemical analysis of mycotoxins, and in morphological identification of toxigenic fungi. Live lessons by web-learning platform will be available.</p> <p>Website: www.mycotox-society.org/MycoRedTraining-2012</p>
	<p>Fusarium Laboratory Workshop 2012 Bari, Italy 3-8 June, 2012.</p> <p>This workshop will be taught by seven international Fusarium experts. Participants will be introduced to standard morphological, genetic and molecular biological techniques used to identify and characterize strains of Fusarium. Participants will learn to use morphological characters to identify the most common Fusarium species, how to make tests for vegetative compatibility groups (VCGs) and cross-fertility, and how to extract, PCR amplify DNA, and to analyze DNA sequences. More than half of the time will be spent in the laboratory working with standard strains. Students may bring some of their own strains.</p> <p>Topics: <i>Laboratory Strain Identification</i> <i>VCG Analysis</i> <i>Mating Types and Crosses</i> <i>Species Concepts</i> <i>Molecular Identification</i> <i>Mycotoxigenic species</i></p> <p>Website: www.mycotox-society.org/fusarium-2012</p>



Novel integrated strategies for worldwide mycotoxin reduction in food and feed chains

Other Upcoming events

	<p>Brigitte Gedek Science Award 2012 for Mycotoxin Research & 34nd Mycotoxin Workshop Braunschweig, Germany 14-16 May 2012</p> <p>The Society for Mycotoxin Research announced the science award sponsored by Professor Dr. rer. nat. Brigitte Gedek, Ismaning, Germany. The award is endowed with 10,000 Euro with the intention to promote scientific research in mycotoxinology.</p> <p>The award will be given to a scientist or a group of scientists for creative and outstanding achievement in the field of mycotoxin research. Deadline for applications is 1 March 2012.</p> <p>The award will be granted for the seventh time during the 34nd Mycotoxin Workshop (http://www.mycotoxin.de), organized by the Institute of Animal Nutrition, Friedrich Löffler Institute (German Federal Research Institute for Animal Health), Germany and the Society for Mycotoxin Research.</p>
<p>MEDITERRANEAN PHYTOPATHOLOGICAL UNION</p>	<p>International Workshop Plant Protection for the Quality and Safety of the Mediterranean Diet,</p> <p>Bari, Italy 25 - 27 October 2012</p> <p>The Workshop will bring together scientists representing a wide spectrum of disciplines, research approaches, and geographical representation of research. Assembling specialists with different perspectives, all focused around the common themes of protecting quality and safety of the Mediterranean diet, provides a stimulating environment for learning, exchanging ideas, and</p>



MEDITERRANEAN
PHYTOPATHOLOGICAL
UNION



connecting with old and new colleagues.

The Workshop will include presentations at the cutting edge of the specified topics. A major emphasis in the Congress will be the fostering of interaction among participants.

Topics:

PRE-HARVEST: challenges and prospects in food security, safety and quality through crop health management;

POST-HARVEST: Advanced safe technologies for postharvest disease and pest management;

FOOD PROCESSING: Influences of quality and safety of crop produce on food processing.

Potential key subjects within the above general topics:

- *from farm to fork: bottlenecks for food quality and safety along the food chains;*
- *sensing: a tool for plant protection and food safety;*
- *packaging, logistics, natural protective agents and other low-impact technologies to improve shelf life and safety of fresh-cut products;*
- *Mediterranean diet: the need to count on safe and good ingredients;*
- *producing healthy propagation material for safer food of better quality;*
- *nutrition value of virus-infected plants;*
- *detection and solutions of Mediterranean phytosanitary emergencies in an global market;*
- *how the quality and safety of the raw crops affect food processing.*

Website: <http://mpu2012.ba.cnr.it/>



Methods of Determination of Mycotoxins in Food - International Food Safety Training Laboratory

College Park, MD, USA.

April 16-20 and 23-26 2012

This course is designed for professionals who need to perform detection and measurement of mycotoxins in food. After reviewing the relevant compliance programs from FDA and USDA, the students will learn and practice traditional and modern laboratory methods to prepare samples and standards, run ELISA plate and lateral flow methods, fluorescence



and UV detection, and LC-MS analyses. The first week is composed of lectures in the morning and laboratory work in the afternoon.

Week 2: An optional second week of laboratory work is offered to practice the techniques learned in the first week.

Course Objectives

This course is hands-on laboratory training. The learning objectives are:

- To understand the FDA and USDA Mycotoxin Compliance Program
- Be aware of various methods of analysis
- Be able to prepare samples and standards
- Be able to perform ELISA tests in plate and lateral flow modes
- Be able to perform the fluorescence method for peanuts
- Understand the method and analyze samples by LC with fluorescence and UV detection
- Understand and analyze samples by LC-MS method

All participants are expected to perform the laboratory work.

Information: www.ifstl.org/courses



CeFOOD Congress 2012 - 6th Central European Congress on Food

Novi Sad, Serbia
23- 26 May, 2012

The congress gathers the representatives of universities and research institutes, and food producers and distributors, to promote research, development, innovation and education within food science and technology. The Congress will accentuate the novel technologies and traditional products for competitive and safe food products for EU and global market. Program of this CEFood Congress will be focused on latest progress in fundamental and applied food science, research and development, innovative technology, food ingredients, novel trends in nutrition and health, functional and bioactive food, food engineering, food safety and quality and food and feed market.



Topics:

1. Food Ingredients, Health and Nutrition, Functional Foods
2. Food Analysis, Quality and Safety Assurance
3. Food Engineering, Processing and Technology
4. Packaging and Shelf Life, Product Design
5. Food Biotechnology, and Novel Bioproducts
6. Food, Consumers and Sensory Science
7. Traditional Food, Food with Appellation of Origin
8. Food and Feed Chain Management
9. Feed as Challenges for Food Supplier Chain
10. Education, Innovation and Knowledge Transfer

Website: www.cefood2012.rs/

What's on...MycoRed research

WP 1



Optimization of plant resistance & fungicide use

Ref. Akos Mesterhazy

In this period the best differentiation of the genotypes was recorded at the spraying inoculation combined with polyethylene bag cover 48 hrs after inoculation. The least severe symptoms were found at the spawn method; mostly no differentiation of the genotypes could be made. In the wetter Austria, the differences were less expressed, but in 2011 they had problems with the perithecia production on maize grains, therefore infection severity was very low. Theoretically all three methods gave similar response, so any of them can be used for variety registration tests. However, the ecostability of the methods should be considered. In areas where long dry periods occur, the spraying inoculation and polyethylene bag cover brings the best differentiation. In **maize** the method to test kernel resistance and silk channel inoculation were compared. The general experience was that the kernel resistance test allowed a very good differentiation, the best and worst resistant materials were 1-2 to 50-60 % severity (coverage of ear with visible infection), the silk channel method gave mostly no symptoms, only several

hybrids showed several percent severity (Fig. 1.). The resistance differences are much higher for *F. graminearum* than for *F. verticillioides*. In the literature the silk channel method normally gives low values, in spite of this, this is the mostly used method. The correlation of the results of the two methods is medium in the literature; in the 2011 results it will be less than medium in Szeged.

**WP
2**



Field experiment on biocontrol of *Fusarium Head Blight*.



Biocontrol reducing mycotoxins in cropping systems

Ref. Jürgen Köhl

Field experiments in wheat and maize on biological control of *Fusarium* spp. have been repeated in The Netherlands, Italy or Argentina. Analysis of mycotoxins and *Fusarium* populations in various samples and final data analysis will be completed beginning of 2012. Analysis of the population development of several *Fusarium* spp. in overwintering maize stalks, obtained from The Netherlands and Nigeria, indicated a significant variation between individual maize stalks. These results now allow the comparison of the microbial diversity in samples from stalks unfavorable or favorable for growth of *Fusarium* populations. This work will be done during the last project year and may lead to the identification of novel groups of antagonists. *Fusarium* populations on wheat stubble have been evaluated in Argentina during the last two years and differences in the survival of *Fusarium graminearum* and other *Fusarium* species were observed.

The series of field trails in peanut and maize on biocontrol of toxigenic *Aspergillus flavus* using atoxigenic isolates of the same species has been completed in Nigeria and Argentina. In Nigeria, aflatoxin contents in products harvested from treated fields were about 80% lower compared to untreated fields. The final field experiments in grapevine on biocontrol of *A. niger* is currently ongoing in Argentina.

WP 3



Places selected for maize sampling in MYCORED

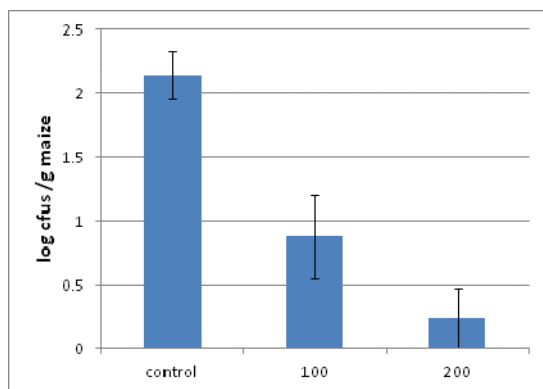
Modelling and development of Decision Support System

Ref. Paola Battilani

FHB-wheat, the predictive model for DON contamination in wheat based on meteorological data, was validated with data collected in MycoRed in different countries. Around 75% of samples contaminated over the legal limit fixed by The European Commission were correctly predicted by the model; therefore, the model give good predictions. The predictive model is available, in a web version, for all partners involved in WP3.

FER-maize, the predictive model for FUM contamination in maize with meteorological data as input, was also validated with data collected in Italy and Mexico. The correct predictions of samples contaminated above the European legal limit for raw maize destined to food was around 50% in both countries. The limited reliability of prediction is essentially due to the relevant role played by other factors than meteorology. European corn borer and hybrids were highlighted as main factors. Therefore, further studies are ongoing to quantify the role of these factors.

WP 4



Effect of O₃ on total mycobiota of columns of feed maize grain treated with 100 and 200 ppm for 60 mins at 6 L/min

Novel post-harvest and storage handling practices

Ref. Naresh Magan

Efficacy of O₃ as a physical treatment was found to be more effective against *Aspergillus* than *Fusarium* species. In vitro, O₃ (100-300 ppm) was generally very effective against spore germination; practically ineffective against mycelial growth; and effective against toxin production. Columns of grain have been used to examine the efficacy of O₃ on natural wheat and maize and that inoculated with *F.graminearum*; and *F.verticillioides* respectively. The concentration range was 100-300 ppm (30 mins; 60 mins exposure at 6 L min⁻¹). Initial mycotoxin analyses suggests that at marginal a_w conditions O₃ inhibits DON/Fumonisin production after treatment with 200-300 ppm for a period of 30 mins at 6L.min. Panel analyses of grain

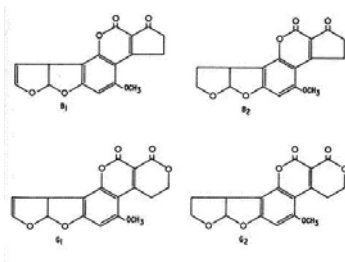


odour/quality is being done by TUBITAT. Storage studies are in progress with O₃ treated wheat/maize grain.

Pilot scale storage studies of the best novel compounds are in progress with wheat/maize and hazelnuts and mycotoxin control relative to the EU legislative limits will be compared and be available in March.

Studies have been carried out by Matrix to examine the real time analyses of temperature, relative humidity and CO₂ intergranular concentrations using the developed sensor format in small scale storage trials with layers of wheat grain of different moisture contents to simulate wet pockets in a grain silo. Monitoring is being done over a period of 3 months to test the system. Larger scale pilot scale silo experiments will be carried out in the demonstration phase of the project.

WP 5

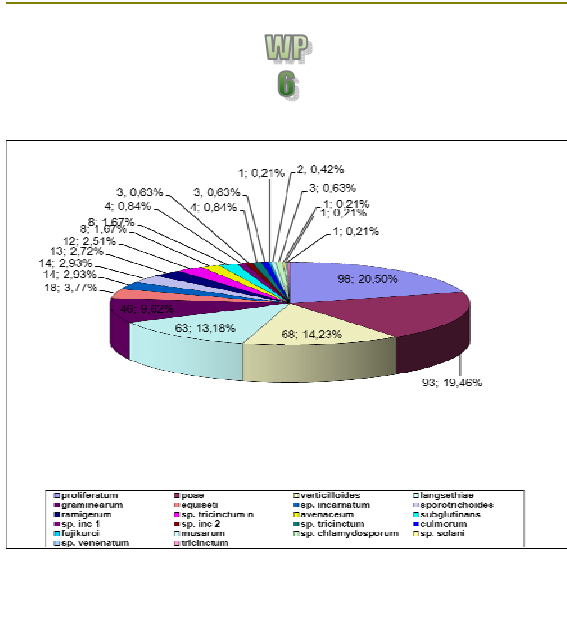


Novel application of food processing technologies

Ref. Isabelle Oswald

Two peeling processes (steaming and boiling water) were assessed to check levels and distribution of aflatoxins in blanched **almonds**, almond skins and boiling water. The separation of almond skins removes **7-10% of the toxins** originally present in the almonds whereas negligible amounts of aflatoxins ($\leq 1\%$) remains in exhausted boiling water.

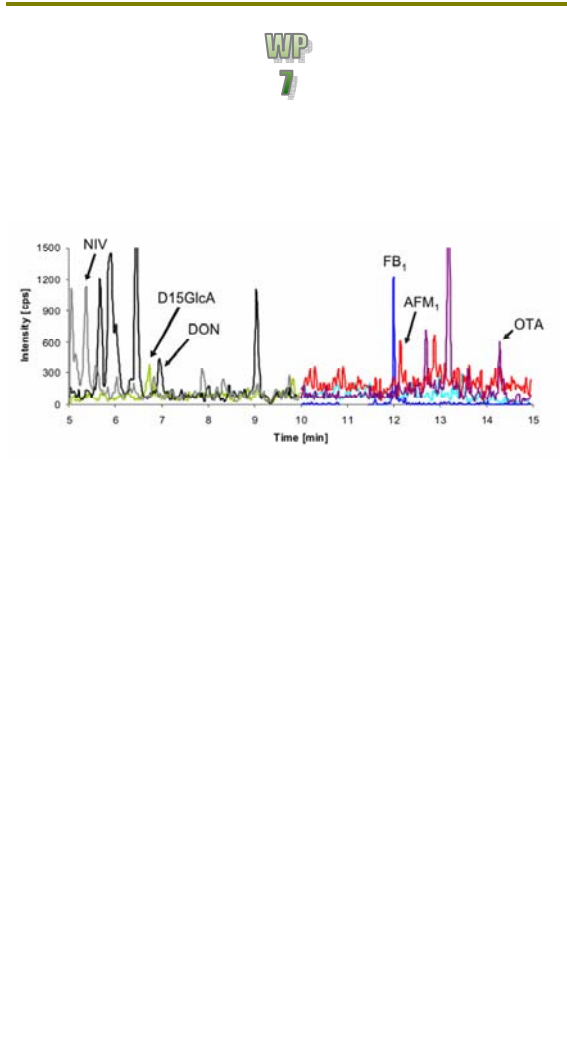
The fate of **aflatoxins** during roasting and transformation of almonds in typical products (pastries and nougat) was also evaluated. Roasting of almonds gave **about 50% reductions of aflatoxin content**. Aflatoxins were substantially stable during the preparation and cooking of pastries probably because, during the cooking, the inner temperature of the pastries does not exceed 98°C. Transformation of almonds in nougat produced **54-70 % reductions of aflatoxin content**.



Advanced technologies for diagnostics, quantitative detection and novel approaches to control toxigenic fungi

Ref. Rolf Geisen

Strains collected during WP6 (about 4241 new strains) have been identified to the species level and molecular characterization by sequencing 4 variable genes has been performed. Among these strains a total number of **1636 *Fusarium* strains** have been isolated. In this context chemotype specific primers for NIV, 3ADON and 15ADON producers, based on single nucleotide differences in the *tri11* gene, have been identified. To differentiate strains from *Aspergillus* Section Nigri a specific High Resolution Melting approach (HRM) has been developed.



Advanced analytical tools for rapid multi-toxins detection of mycotoxins and relevant biomarkers

Ref. Rudolf Krska

The quantitative multi-mycotoxin method was transferred to a more sensitive mass spectrometer and **meets now all regulatory limits for mycotoxins** (except those for baby food), while retaining the **capability of detecting 320 metabolites**. The method was applied to samples from Africa, exhibiting **aflatoxins and fumonisins**, as well as a very **broad pattern of 80 other mycotoxins**.

The LC-MS method for **fungal metabolite profiling** was applied to 400 **black aspergilli strains**. The **fumonisin and ochratoxin A producing frequencies** were **80% and 33%**.

A growing experiment of wheat lines with a large variation in resistance against *Fusarium* has been initiated to receive **well-defined samples** for the determination of the **influence of the interaction of wheat and *Fusarium graminearum* on the wheat metabolome**.

The stability of D3G was investigated in presence of acid, enzymes and bacteria. **Cellulase and several bacteria partially degraded D3G to DON**, whereas no acidic hydrolysis occurred. Therefore, it may be speculated **that cleavage of**

D3G to DON will also occur *in vivo*.

D3G to DON will also occur *in vivo*.

A **mini-interlab comparison** has been performed for the **methods for mycotoxin biomarkers**. As a preliminary experiment for the **human pilot study**, more than **50 urine samples from Cameroon were analysed**. Deoxynivalenol -glucuronide, aflatoxin M1, ochratoxin A and nivalenol occurred in 10-50% of all samples.



Demonstrating the creation of an "ambient intelligence (Aml)"

Ref. Luigi Di Taranto

An automatic ambient monitor has been developed and tested able to capture environmental data (temperature, humidity and carbon dioxide) from small bins and transmit them wirelessly to a remote PC via GPRS link.

An easy-to-use human interface let the user check all data received by selecting the Identification of the sensor node who has transmitted them, and check the bin condition in a real-time. The same software lets to plot all the data in a range of time, in the same graph that could allow to easily see how the environment conditions are moving and changing inside the small bin.

MycRed publications

Analytical and Bioanalytical Chemistry, 2011

401: 2831–2841

Simultaneous LC–MS/MS determination of aflatoxin M1, ochratoxin A, deoxynivalenol, de-epoxydeoxynivalenol, α and β -zearalenols and fumonisin B1 in urine as a multi-biomarker method to assess exposure to mycotoxins
Michele Solfrizzo & Lucia Gambacorta & Veronica M. T. Lattanzio & Stephen Powers & Angelo Visconti, CNR - arising from **WP5**

Food Additives and Contaminants, 2011

Part A. DOI: 10.1080/19440049.2011.555846 (in press).

Comparison of methods and optimisation of the analysis of fumonisins B1 and B2 in masa flour, an alkaline cooked corn product
A. De Girolamo; M. Pascale; A. Visconti, CNR arising from **WP5**

International Journal of Food Microbiology, 2011

145 (2011) 229–237

Influence of light on food relevant fungi with

Sensors and Actuators B: Chemical, 2011

Volume 154, Issue 2, Pages 81-300 (20 June 2011, in press)



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emphasis on ochratoxin producing species

Markus Schmidt-Heydt, Corinna Rüfer, Frank Raupp, Anja Bruchmann, Giancarlo Perrone, Rolf Geisen, MRI, IFA BOKU and CNR arising from **WP6**

Annals of Microbiology, 2011

61:1-3

Fumonisin B2 by Aspergillus niger in the grape-wine chain: an additional potential mycotoxicological risk

A. Logrieco, Ferracane R., Cozzi G., Haidukowsk M., Susca A., Mulè G., Ritieni A., CNR and DSA, arising from **WP6**

International Journal of Food Microbiology, 2011

145 (2011) 414-419.

AFLP variability, toxin production, and pathogenicity of Alternaria species from Argentinean tomato fruits and puree

S. Somma, G. Pose, A. Pardo, G. Mulè, V. Fernandez Pinto, A. Moretti, A.F. Logrieco, CNR and UNRC, arising from **WP6**

Trends in Food Science & Technology

Volume 22 (2011) Supplement 1 November 2011, S39eS48

The application of transcriptomics to understand the ecological reasons of ochratoxin a biosynthesis by Penicillium nordicum on sodium chloride rich dry cured foods

Markus Schmidt-Heydt, Eva Graf, Julia Batzler and Rolf Geisen arising from **WP6**

Physiological and Molecular Plant Pathology

77 (2012) 52-59

Resistant and susceptible maize genotypes activate different transcriptional responses against Fusarium verticillioides

Lanubile A., Bernardi J., Battilani P., Logrieco A., Marocco A. arising from **WP3**

Ochratoxin A immunoassay with surface plasmon resonance registration: Lowering limit of detection by the use of colloidal gold immunoconjugates
A.E. Urusov S.N. Kostenko, P.G. Sveshnikov, A.V. Zherdev and B.B. Dzantiev

Journal of Stored Products Research, 2011

xxx (2011) 1e7, in press (accepted 7 May 2011)

Fusarium langsethiae: Storage environment influences dry matter losses and T2 and HT-2 toxin contamination of oats

Kalliopi Mylona, Naresh Magan, CU arising from **WP4**

Fungal Biology, 2011

xx x, 2011 1 e1 3, in press (accepted 15 July 2011)

Aspergillus niger contains the cryptic phylogenetic species A. awamori

Giancarlo PERRONE, Gaetano STEA, Filomena EPIFANI, Janos VARGA, Jens C. FRISVAD, Robert A. SAMSON, CNR ISPA and DTU arising from **WP6**

Environmental and Experimental Botany

doi:10.1016/j.envexpbot.2011.12.006.

Differential activation of defense genes and enzymes in maize genotypes with contrasting levels of resistance to Fusarium verticillioides,

Lanubile A., Bernardi J., Marocco A., Logrieco A., Paciolla C. arising from **WP3**

Food Microbiology

29 (2012) 233e241

The biosynthesis of ochratoxin A by Penicillium as one mechanism for adaptation to NaCl rich foods

Markus Schmidt-Heydt, Eva Graf, Dominic Stoll, Rolf Geisen arising from **WP6**



What's on..MycoRed network&dissemination

MycoRed Global Network and international cooperation



MycoRed is enforcing its **Global Cooperation System**, through alliances with international organisations, research bodies, universities. We would like to enlarge the network inviting your organization to join our global network to improve Mycotoxin awareness and synergetic research all over the world!

After the international **MycoRed AFRICA 2011** Conference held in Cape Town in April 2011, the Mycotoxin network in Africa and Argentina was launched as local branch in cooperation with ISM.

The international cooperation was reinforced too during the **MycoRed-ISM 2011** Conference organized by the Universidad Nacional de Río Cuarto and co-organized by the International Society for Mycotoxicology (**ISM**) and The Latin American Society for Mycotoxicology (**SLAM**).

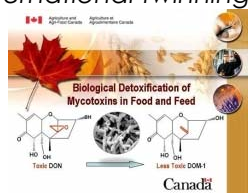
Last International Scientific Alliances

The cooperation in Asian region has been strenghten by important scientific alliances:

- organization a joint ISM-MycoRed International Conference in China in 2014, hosted by CAAS after the end of the project (March 2013).
- scientific alliance signed with prof. Meihua Yang, IMPLAD Coordinator in China, for cooperation on mycotoxin research.
- JSM -Japan Society for Mycotoxicology joined our network in September, by signing a scientific alliance with MycoRed and ISM to give support in organizing the International Conference on Mycotoxins in Beijing, China in 2014.

International twinnings

MycoRed is included in two international twinning with CANADA and ARGENTINA



The **Canadian Twinning** will support the final international Conference of MycoRed will be held in **Ottawa, Canada in 2012**.



WP **Information, dissemination and education**

Ref. Angelo Visconti

Dissemination of **aflasafe™** and management practices that reduce aflatoxin contamination were carried out through presentations and meetings with partners in Nigeria's agriculture sector.

A total of 214 extension workers and group leaders of Commodity Interest Groups (CIGs) in Kaduna, Kano and Enugu States were trained on management practices of aflatoxins through presentations, printed training material, and practical demonstrations (co-sponsored by another project funded by the Bill & Melinda Gates Foundation).

CADP and IITA worked together and conducted awareness campaign meetings in Kaduna, Kano, Enugu, and Nassarawa States. Presentations were made on the implications of aflatoxin on health, trade, and income. Management practices that minimize aflatoxin contamination in the field and during storage were also discussed and demonstrated. During the awareness campaign meetings, 4441 farmers were reached (4028 male and 413 female). Most of these farmers were aflasafe™ users and their neighbors (co-sponsored by another project funded by the Bill & Melinda Gates Foundation).

Many presentations were held in the framework of Latin American International Conference in Argentina focusing on advances on mycotoxin research carried on in the framework of MycoRed project.

Home Education

Home education sessions were held in **Indonesia**, in summer 2011, by WP8 Leader, dr. Angelo Visconti, who presented MycoRed activities to a public of young people, students and researchers.

Dr. Antonio Moretti, WP6 subleader, addressed his home education sessions in **Argentina**, in November 2011, talking about new methodologies developed to reduce mycotoxins in some food chains.



MycoRed Conferences & Workshop held in last months

2nd ISM-MycoRed Mediterranean Workshop Turkey 2011

October 14, 2011
Istanbul, Turkey

The **MycoRed Workshop** has been successfully completed as a parallel event of " 4th International Congress on Food and Nutrition" together with "3rd SAFE Consortium International Congress on Food Safety" held during 12-14 October 2011 in Istanbul Turkey. MycoRed Workshop was realized in two sessions on **14 October 2011** according to workshop



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programme.

Before the sessions, the invited speaker **Frans Verstrete**, European Commission Directorate-General for Health and Consumers, Belgium gave a plenary lecture on *Mycotoxins in food: a continuing challenge for regulation and science*.

In the first session, after brief introduction to Mycored Project, other interesting presentations were given on *Economic Impact of Mycotoxin Control*, *Fusarium Mycotoxins*, *Risk Assessment and Legislation*, *Post Harvest Strategies for Minimising Mycotoxin Contamination* and *European Mapping on Fungal and Toxigenic Biodiversity (in Wheat)*.

In the second session, country presentations were given by both MYCORED partner countries/institutions and invited speakers representing other Mediterranean Countries such as Syria, Morocco, France, and Spain about current mycotoxins situation in their countries and regions.

Total number of the participants in the Workshop was **67** where over 54 individuals belonging to academia, industry, and governments from 41 countries participated in the general event. There were **28 posters** on mycotoxins out of 266 total poster presentations.

MYCORED Project poster has been introduced in the TUBITAK stand in the exhibition area during the event where about 22 sponsors were also located in.

MycoRed International Conference **South&Central America 2011**

November 15-18, 2011
Mendoza, Argentina

The **MycoRed-ISM 2011** Conference has been organized by the Universidad Nacional de Río Cuarto in the frame of EU Mycored project and co-organized by the International Society for Mycotoxicology (**ISM**) and The Latin American Society for Mycotoxicology (**SLAM**).

Around of **300 participants** attended the conference from which **77% were professionals and 23% graduate and undergraduate students**. The participants came from different countries including Argentina, Austria, Brazil, Mexico, United States, Germany, Austria, Ecuador, Canada, Chile, Colombia, Spain, Italy,



ISM Conference 2011





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France, Uruguay, Turkey, Finland, Hungary, Nigeria, Pakistan, Poland, Portugal, Russia, Saudi Arabia, South Africa, Switzerland, United Kingdom.

The **aims** of the Conference were:

- to provide the opportunities for professionals from different areas of mycotoxicology from both developed and developing countries to present and learn about different problems and approaches to reduce the impact of mycotoxins in Latin-America in a global context.

- to open a discussion forum among stake holders, policy makers, academy, food chain managers, processors to continue working in reducing the mycotoxin impact, -to open the opportunities for networking among different institutions from the academy and the private sector.

The highlight topics were: **biocontrol, biodiversity and global climate change** and its impact on mycotoxin contamination.

Short Term Visits

Within the Short Term Visit programme, Dr. James Halbin KOUADIO (Institut Pasteur de Côte d'Ivoire, Université de Abobo-Adjamé, URES Daloa) spent a two months training period at ISPA-CNR working on the topic "Mycotoxins in food and human fluids analysis by LC-MS/MS in Ivory Coast". Human exposure to major mycotoxins in Ivory Coast was evaluated by using multi-mycotoxin and multi-biomarker methods developed at ISPA-CNR in the MycoRed project.


What's on.. other projects



MoniQA

The 3rd MoniQA International Conference, held in Varna, Bulgaria (September 27-29, 2011) brought together more than 150 international stakeholders from research, industry, authorities and consumer representatives to discuss "food safety and consumer protection". Sessions focused on risk, understanding and choice, food safety, food security and climate change, socio-economic impact of food safety regulations, allergens, emerging issues in food (such as nanotechnology) chemical contaminants and mycotoxins, research undertaken by young MoniQA scientists and food safety education curricula around the globe; all under the umbrella of the impact on



	<p>consumers.</p> <p>The conference also hosted the official launch event of the new MoniQA Association, a non-profit-distributing organisation dedicated to collaborative research promoting a more secure and safer food supply, which will continue the activities of the project.</p>
	<p>The new website for aflatoxin mitigation from an African perspective is available at www.aflasafe.com.</p> <p>The website presents the efforts carried by MycoRed Partner IITA in Africa by various donor-supported aflatoxin Research for Development projects, as well as relevant news on mycotoxins, initiatives and actions, biocontrol and management section introducing principles, methodologies and approaches.</p> <p>This website could be a useful reference point specifically for African mycotoxin community and the entire international community too!</p>

www.mycored.eu

The **Mid-Term review** of our project was held on **1st September 2011 in Brussels**. This appointment represented an important date to report advances in research and results and to know EU Commission Project Officer and external experts points of view and advices. The meeting was a good opportunity to have a very high professional discussion on relevant topics in the field of mycotoxins and methodologies to address the major problems at global level.

The result of the review has been successful: EXCELLENT PROGRESS!

The mid-term report presented "how valuable research studies with such significant results were performed...The project benefits from a high-quality and very efficient management including strong WPs interactions which successfully supported the continued progression of the scientific work and the disseminating activities. (..)

The project delivers new knowledge in its field, evidenced by the numerous publications and successful attendance in implemented European and international conferences, and in training sessions. The project has actively engaged in specific interaction and exchanges to legal authorities of EU and to participants countries concerned by the mycotoxin issues.

Globally, the project satisfactorily fulfils the scheduled requirements by its midterm course and provides new knowledge and competency".

We thank all the experts and researchers involved in this project for the precious and efficient cooperation!

Thank you for your attention!



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