

Coordinator:



CNR-ISPAC (Bari, Italia)

Participants:



Cranfield Uni (UK)



IFA-BOKU (Austria)



DTU (Denmark)



MRI (Germany)



PRI (The Netherlands)



UCSC (Italy)



CRC (Hungary)



INRA (France)



RIVM (The Netherlands)



TUBITAK-MAM (Turkey)



INBI (Russia)



NRC (Egypt)



IITA (Nigeria)



CIMMYT (Mexico)



UNRC (Argentina)



UdLleyda (Spain)



Romer (Austria)



Bio-Ferm (Austria)



Matrix (Italy)



INC (Spain)



FEFANA (Belgium)



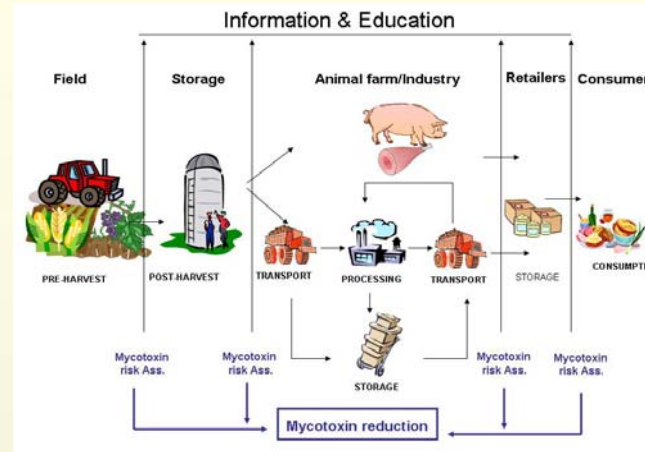
MRC (South Africa)



Uniroma1 (Italy)



DSA – UniNa (Italy)



*MYCORED actions apply to the entire food chain
"from field to fork" through an integrated scientific approach
at international level*



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Large Collaborative Project

KBBE-2007-2-5-05

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

www.mycored.com

MYCORED is a Research project recently granted by European Commission within the 7th Framework Programme.

It aims at developing novel methodologies to reduce major concern mycotoxin contamination in economically important food and feed chains.

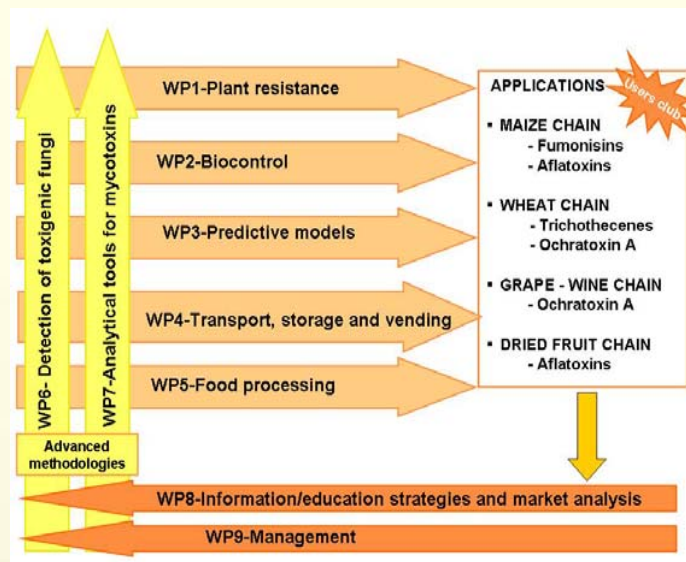
The following **toxins** and **commodities** are especially considered in the project in a context of know-how and technology multidisciplinary integration:

- Aflatoxins maize and dried fruit chains
- fumonisins wheat and maize chains
- ochratoxin A grape-wine and wheat chains
- trichothecenes wheat chain
- zearalenone wheat chain

The project will stimulate and facilitate education, cooperation and dissemination at global level thanks to the participation of important international organisations.

In addition, the direct involvement of ICPC countries (Argentina, Egypt, Russia, South Africa, Turkey) and international organizations (CIMMYT, IITA), together with strong scientific alliances with International Experts, will strengthen the project through sharing experiences and resources from several past/ongoing mycotoxin projects in a global context.

In this way MYCORED will maintain the continuity with previous European Research Programmes and initiatives on mycotoxins.



The breakdown structure of the project is made of 10 Work-packages (WP) with scientific research activities (7); dissemination, training and management (3).

Five WPs regarding the research (WPs) will develop novel solution driven strategies to reduce both pre-and post-harvest contamination in feed and food chains and two horizontal WPs will develop enabling methodologies. They involve:

WP1: Plant resistance

WP2: Biocontrol

WP3: Predictive modelling

WP4: Novel post-harvest and storage practices

WP5: Application of new food processing technologies

WP6: Advanced diagnostics of toxigenic fungi;

WP7: Rapid and multi-toxin detection of mycotoxins and relevant biomarkers.

Expected Effects

- **For consumers:** increase food quality thanks to the reduced content of mycotoxins in food and feed.
- **For agro-food producers:** availability of food production tools that would reduce mycotoxin risks along the food and feed chains and improvement of product commerciability
- **For food/feed industries:** possibility of contamination reduction thanks to improvement of storage and processing practices; well-timed interventions by detection kits of mycotoxins and toxigenic fungi faster and provided of higher sensitivity.
- **For policy makers and legislators:** availability of updated information and increasing of know-how on mycotoxin risk, with special emphasis on the possible consequences of climatic change and globalization.
- **For the scientific community:** more advanced knowledge on the mycotoxin producing fungi and their host plants (e.g. fungal and plant genomics, metabolomics, proteomics) in the whole pathway “from farm to fork”.



Fumonisin
Aflatoxins

Ochratoxin A
Trichothecenes
Zearalenone

Ochratoxin A

Aflatoxins

