**Mycotoxins**
- Produced by moulds and fungi
- Formed in susceptible grains, such as maize and sorghum
- Health risk for humans and animals
- Cause acute poisoning or chronic diseases, including cancer
- Can be transferred to humans through milk and dairy products

**Aflatoxins**
- One of the most toxic mycotoxins
- Contaminate almost one quarter of global food and feed output
- Each year over 4.5 billion people are at risk of chronic exposure
- Sub-Saharan Africa is especially vulnerable to mycotoxins because of the climate conditions
- Climate change may further aggravate the situation

**FoodAfrica - Reducing Risk of Mycotoxins**

Sara Ahlberg, Johanna Lindahl, Anima Sirma, Daniel Mugangai, Vivian Hoffman, Hannu Korhonen, Delia Grace

**FoodAfrica - Three research approaches**

**Integrated risk and economic assessment of the Kenyan feed dairy chain**

A. Screen for the presence of aflatoxins in the foods and feeds in the Kenyan dairy value chain
B. Assess the direct market costs of aflatoxins in the Kenyan dairy value chain
C. Assess the human health costs of aflatoxins in the Kenyan dairy value chain
D. Suggest economically viable and socially acceptable mitigation strategies that could be followed to avoid/reduce aflatoxin contamination.

**Investigation of technologies and strategies to reduce mycotoxins risk in the feed-dairy chain**

Use indigenous lactic acid bacteria (LAB) strains from naturally fermented food products to:

A) Bind aflatoxins

Aflatoxin induced risks could be minimized by LAB which carry aflatoxins through the gastrointestinal tract

B) Inhibition of fungal growth

**Impact assessment of a package of post-harvest strategies for reducing aflatoxins in maize**

A. Test impact of access to a mobile maize dryer on aflatoxin contamination in farmers’ stored maize through an RCT
B. Assess farmers’ willingness to pay for the drying service
C. Explore options for sustainable delivery of drying services, including paying farmers a premium for aflatoxin-safe maize

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