

Challenges and opportunities:
Perspective from Nigeria"-Bio-Control of Aflatoxin



Presentation on 12/02/2014 @ Seattle, USA





By

Yemisi A. Jeff-Agboola (2014 Post doctoral AWARD Fellow)
University of Missouri, Columbia, USA

## **Aflatoxin Contamination**





In 1977 a large number of dogs and poultry died in Eldoret,
Mombasa, and other parts of the country

2004-- 331 people in eastern
Kenya affected resulting in 125
deaths • 2005-- 75 people in
eastern Kenya affected resulting
in 32 deaths Thika,2009)

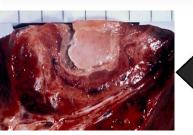
Over 2.3 million bags of maize contaminated aflatoxin were destroyed in 2010 (Thika,2009)



Occurren



Aspergillosis in air sacs of a hen during an epidemic of aspergillosis in poultry. (Courtesy C.V.L. Weybridge, England).



Aspergilloma found at post-mortem in the lung of a child with leukaemia

## Aim – collaboration with MSN, Other Scientist

- Improve the safety of various maize and other feed ingredients for increase poultry production in Nigeria
- seeks to lift 20Million women poultry farmers out of subsistence into self sufficiency from the 6 geopolitical zones in Nigeria through awareness and training programmes about aflatoxin control
- The program will puts the *resource constrained farmer* at the *centre* of the agriculture value chain and creates a series of incentives to encourage the critical actors in the maize and poultry value chain to work together to improve the productivity, food and income security of the Nigerian women farmer. Through the use of the bio-control agents.
- Investigate the effect of the Bio-Control agent on the nutritional composition and other parameters in birds
- Encourage the use of low-cost effective tool in detection/management of aflatoxin in maize and feeds.
- Encourage field cultivation of medicinal plant (Lemmon grass)

## Methodology (Training and Production)

Participant	Role	
The Women Farmers	To register for the scheme and use the agent	
Local trainer (Men and youth)	To training the local farmers after training them	(
The Extension Workers	To provide information for the researchers	
Producer of Bio-control agent	Make inventory available and build their distribution channel across the Country	
Banks	Make financing available to Maize farmers	
The principal investigator and other collaborators	To design, develop and operate the Biocontrol redemption system & coordinate product logistics	

## **Bio-Control**





Cassava pellet Medicinal plants





Field application Packaging

Outcome:? Creation of Wealth and Enhance Food Security

