Detection, management and challenges of mycotoxin for food and feeds quality in West, Central and East Africa

Gbemenou Joselin Benoit Gnonlonfin
International Livestock Research Institute, Kenya

Mycotoxins contamination in some agricultural food commodities seriously impact human and animal health and reduce the commercial value of crops. Mycotoxins are toxic secondary metabolites produced by fungi that contaminate agricultural commodities pre- or post-harvest. Africa is one of the continents where environmental, agricultural, processing and storage conditions of food commodities are conducive for Aspergillus, Fusarium and Penicillium fungal infection and mycotoxins biosynthesis. This paper reviews the commodity-wise aetiology and contamination process of mycotoxins and evaluates the potential risk of exposure from common African foods and feeds. Possible ways of detection and reducing risk for fungal infection and mycotoxin development that are relevant to the African context. It also highlights some of the challenges in implementing efforts to mitigate and properly managed the recurrent problem of mycotoxins in the continent. There is need for more investigations on food quality and safety and ultimately food security by making available advanced technologies and analytical methods as well as surveillance, awareness creation and capacity building in the region.

Biography
Gbemenou Joselin Benoit Gnonlonfin has completed his Ph.D. degree in Food Safety from the Department of Veterinary Disease Biology, Faculty of Life Sciences, University of Copenhagen, Denmark; and postdoctoral studies from Biosciences eastern and central Africa, International Livestock Research Institute, BecA-ILRI Hub. Since 1999 he has intensively worked on mycotoxin and recently has established a unique mycology-mycotoxin and nutrition platform in East and Central Africa and involved in capacity building. His has published more than 22 papers in peer reviewed journals and serving as a scientist at the BecA-ILRI Hub.

bgnonlonfin@yahoo.fr