## Aflatoxins in dairy cattle feed in Senegal

Karen Marshall<sup>1</sup>, Ayao Missohou<sup>1</sup>, Stanly Tebug<sup>1</sup>, Irene Kagera<sup>1</sup>, Delia Grace<sup>1</sup>, Johanna Lindahl<sup>1</sup> <sup>1</sup>International Livestock research Institute (ILRI), P. O. Box 30709 Nairobi 00100, Kenya <sup>2</sup>Inter-state School of Veterinary Science and Medicine of Dakar (EISMV), P.O. Box 5077, Dakar, Senegal

### Aflatoxins and milk

- Aflatoxins are toxic compounds produced by certain moulds that grow on crops – they are a major food safety concern particularly in developing countries
- If lactating cows ingest aflatoxins through contaminated feed, they can excrete aflatoxin metabolites in their milk



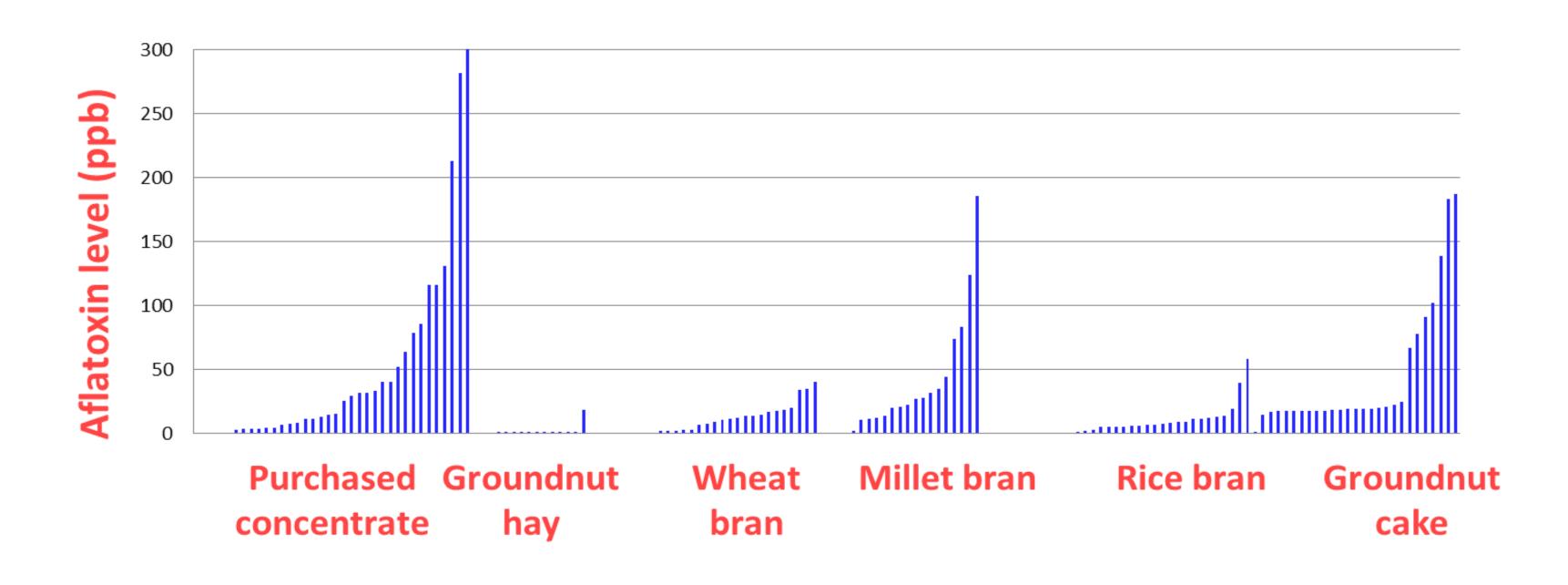


 Human consumption of aflatoxins – including in contaminated cereals and milk - can lead to liver cancer and may increase the risk of childhood stunting



#### Aflatoxins levels in Senegal dairy cattle feed

 In this pilot work we measured aflatoxin B1 levels in dairy cattle feeds sampled from smallholder farms in Senegal.
Aflatoxin levels in individual samples of a feed-type varied, but tended to be higher for particular feeds (see graph)





 The percentage of feed samples that were above the WHO recommended limit for aflatoxin in animal feed (of 5ppb) was high in commonly used feeds, for example 96% for ground-nut cake, 80% for millet bran, and 69% for concentrate.

#### Implications

Some feed samples had aflatoxin levels high enough to potentially affect milk safety



# and livestock productivity, indicating the need to further monitor both feeds and milk

This work was funded by the Finnish Ministry of Foreign Affairs through the Food Africa program, and the Livestock and Fish CGIAR Research Program.

#### Presented at TROPENTAG, Vienna 2016



We thank all donors that globally support the our work through their contributions to the <u>CGIAR system</u> organisation. This poster is licensed for use under the Creative Commons Attribution 4.0 International Licence (September 2016)





