



THE ACADEMY

Advancing Animal Nutrition & Health

Mycotoxin Summary

▶ What are mycotoxins?

- Secondary metabolites produced by certain molds which can contaminate a wide range of feed ingredients
- When ingested, mycotoxins can be detrimental to health, reproduction and performance of animals, as well as potentially harmful to humans

▶ Common mycotoxins

- Aflatoxins, fumonisins, type A trichothecenes (including T2-toxin and HT-2 toxin), type B trichothecenes (including deoxynivalenol aka “vomitoxin” and nivalenol), ochratoxin A, zearalenone, and ergot alkaloids

▶ Mycotoxins can affect animals in a variety of ways

- Mycotoxins can evoke both subclinical and clinical effects
- The outcomes in animals vary depending on a variety of factors including the type(s) and level(s) of mycotoxin(s) present, the duration of exposure, the age/sex/breed, nutritional status, and the presence of other stressors
- Some potential signs include: reduced feed intake, diarrhea, impaired gut integrity, oral lesions, tail and ear necrosis, infertility and impaired immune function which can contribute to vaccine failure

▶ Testing for mycotoxins in your feed

- Many options are available, ranging from on-site quick tests to more advanced testing that requires sample submission to a laboratory
- dsm-firmenich, together with Romer Labs, offers a full array of mycotoxin analytical services

▶ Assess the risk of mycotoxins on your operation

- Assessing contamination is difficult due to uneven distribution of mycotoxins in feeds
- Mycotoxins can be present whether or not there is visible mold growth
- Collection of a representative sample is key
- Periodically monitor contamination over time
- dsm-firmenich offers sampling guidelines and other resources to help assess risk in your operation

▶ Stay ahead of mycotoxin threats

- Surveillance testing is key to understanding potential exposure
- Develop an appropriate mitigation strategy based on test results and clinical concerns on-farm
- dsm-firmenich offers various resources to help guide development of tailored mycotoxin risk management programs

Resources



dsm-firmenich North America Corn Survey



Mycotoxins.info

Recent Articles



Mycotoxins: The Invisible Profit Killer, Part 2 - Harvest insights for your operation



Mycotoxins: The Invisible Profit Killer, Part 3 - Analytical options and mitigation considerations



Challenges related to testing for mycotoxin biomarkers