Alltech° MYCOTOXIN MANAGEMENT

Safeguarding the health of your animals starts with the quality of your feed. Produced by molds, mycotoxins affect animal performance and producer profitability in a number of ways. Effective mycotoxin management is about seeing the whole challenge. From the farm to the feed mill and from risk assessment to feed management, the Alltech Mycotoxin Management program consists of solutions tailored to address challenges impacting animal health and performance.

Identifying a mycotoxin issue

Increased demand in animal performance brings new challenges and risks to today's farm. Mycotoxins, and their impact on the health and performance of animals, are inherently linked to these demands and if left untreated can affect farm profitability.

Commonly seen mycotoxin symptoms in poultry

Aflatoxins/DON-Group/T-2 Group/Fumonisins:

- Damage to gut integrity
- Decreased villus height and surface area
- Poor intestinal digestion and absorption
- Undigested feed particles in fecesDiarrhea
- Necrotic enteritis/cocci infection/ bacterial infections

Aflatoxins/Zearalenone/ DON-Group:

- Poor fertility
- Early embryonic mortality
- Poor hatchability

Aflatoxins/Ochratoxins/T-2 Group/DON-Group:

- Poor antibody production/vaccine titers
- Poor cell-mediated immunity
- Altered cytokine profile
- Increased mortality

Aflatoxins/Ochratoxins/ Fumonisins:

- Liver damage
- Kidney damage
- Liver enlargement
- Fatty liver
- Bite duct hyperplasia

T-2 Group/DON-Group:

- Gizzard erosions
- Oral lesions –ulcers and plaques
- Reduced feed intake





Mycotoxin quick guide – Symptoms in poultry

Symptoms	Aflatoxins	Ochratoxins	Type B Trichothecenes	Type A Trichothecenes	Zearalenone Group	Fumonisins	Other <i>Penicillium</i> mycotoxins	Other <i>Aspergillus</i> mycotoxins	Ergot Alkaloids	Fusaric Acid [*]
Acute Hepatitis	1									
Anemia	✓									✓
Bloody Diarrhea				✓				1		
Dehydration		✓								
Delayed Sexual Maturity					✓					
Diarrhea			✓	✓			1			✓
Digestive Disorders	✓		✓	✓		✓	1			 ✓
Feathering Abnormality			✓	~						
Hyperestrogenic Syndrome					~					
Impaired Thermoregulation									✓	
Increased Mortality	1	✓	✓	✓					1	 ✓
Poor Fertility and Hatchability	1		✓	~	~				1	
Inhomogeneous Flocks	√	✓	✓	✓						
Internal Organs Hemorrhaging	1	✓	~	✓		✓				
Kidney Damage and Enlargement		✓								
Lameness	√		✓	✓		✓			✓	
Liver Damage	√	✓	✓	✓		✓		1		
Malformation of Embryo/Fetus			✓	✓	✓				✓	
Neural Disturbances						✓				
Oral Lesions			✓	✓						
Poor Feathering	✓		✓	✓						
Reduced Egg Production	√		✓	✓		✓	✓		✓	
Reduced Egg Shell Quality, Blood & Meat Spots, Creamy Yolk	1	✓	✓	✓		1				×
Reduced Feed Efficiency	√	✓	√	√		✓			√	1
Reduced Feed Intake	✓	✓	√	√		✓			√	
Reduced Growth	1	✓	√	4		✓			1	✓
Reduced Immunity	1	✓	1	4		1	1	1		✓
Reduced Reproductive Performance (males & females)	1		✓	✓	~				1	~
Respiratory Difficulties		✓								
Skin Lesions			√	1						
Tremors								1	✓	

*The toxicity of Fusaric Acid is significantly enhanced when the feed is co-contaminated with the Type B Trichothecene, Deoxynivalenol (DON).



The Alltech 37+[®] mycotoxin analysis considers the mycotoxin challenge in each sample as a whole, rather than looking at the individual mycotoxins present. In this way it more closely reflects commercial production and the challenges facing producers around the world. Utilizing the most advanced mycotoxin detection technology available (LCMS/MS), Alltech 37+[®] provides producers with a more accurate picture of mycotoxin contamination. It shows how likely it is to impact their animals' health and performance through tailored species-specific risk assessment reports and recommendations.



Your flock is your business. Protecting it is ours.

Alltech.com AlltechNaturally @Alltech © 2015. Alltech, Inc. All Rights Reserved. NA_PO_MycoM_fl2