nufense

Mycotoxin Management Solutions

gold

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CERTIFIED M.S.
ISO 22000:2018
742/T

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ISO 9001:2015
2387/Δ

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FAMI-QS

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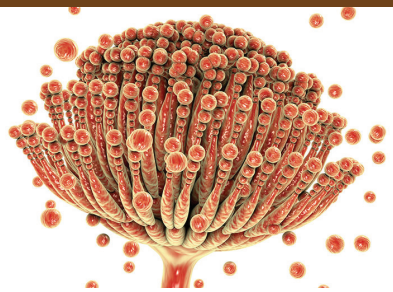
Solutions for the Mycotoxin Challenges

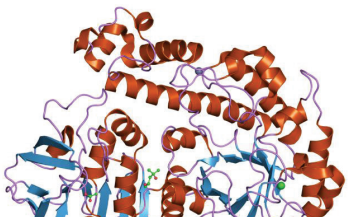
Mycotoxins are secondary metabolites of low molecular weight produced by fungi, mostly by saprophytic moulds growing on a variety of feed and foodstuffs (Turner et al., 2009).



Contamination of feeds with mycotoxins is a worldwide problem with serious impact on livestock production. Mycotoxin -detoxifying agents are used to control their negative effects.

nufense gold

- Thermally & Mechanically activated Aluminosilicate
- Dry Yeast Cell wall
- Specific enzymes DON, FUM, OTA, T-2 and ZEN
- Liver tonic



The **mineral clay** used is highly porous, thermally, and mechanically activated with a highly sorbitive behavior and enhanced hydrophilic (anti-diarrhea) and oleophilic (toxin-binding) activity.

Dry Yeast Cell Wall: a premium yeast fraction rich in β-glucans and mannan-oligosaccharides (MOS). It prevents colonization of the GIT by pathogens, stimulates the immune activity of the phagocytic cells and enhances the action of beneficial bacteria.

In **nufense gold** are used biologically specific active enzymes and glucans that have the capability to bind and deactivate harmful mycotoxins

Liver tonic: mycotoxins not only reduce animal performance, but they also cause significant liver damage. Certain mycotoxins have a strong hepatotoxic effect in chicken and hepatocarcinogenic effect in exposed animals. The liver tonic used in **nufense gold** based on Silymarin, is an antioxidant that protects liver from the free radical damage produced by mycotoxins.

Aiming to determine the mycotoxin detoxifying activity of **nufense gold** in broiler, layer and breeder feed, a mycotoxin eliminating analysis was carried out. Two pH values (pH=4.5, pH=7.5) were tested, simulating gastric and intestinal juice. In order to determine the mycotoxin eliminating efficiency of the product during the transition in poultry gastrointestinal tract, 6 incubation times were used (0,30,60,120,240 and 300 min). The mycotoxin concentration was calculated using HPLC-DAD chromatographic analysis.

Results:

- Strong adsorption efficiency: Aflatoxin concentration decreased by more than 95% for 30 min incubation time.
- High elimination efficiency: mycotoxins DON, FUM, OTA, T-2 and ZEN were eliminated by more than 90% in contrast with control diet.

Trilogy Results:

	AF1.	ZEN
% Efficiency	99.6	70.7
Incl. rate	0.02%	0.20%
Toxin conc.	4000 ppb.	500 ppb

EURL
European Union Reference Laboratory

EURL Method:
Adsorption of 4000 ppb AB1 with 0,02% product at pH 5.0

Dosage for all species: 1 kg /ton of feed

Note: Dosage depends on the mycotoxin risk level