

Dear Reader,

Molds grow on feed & feed ingredients, produces poisonous chemical substances known as mycotoxins. Mycotoxins are very durable chemically, will not be destroyed by feed manufacturing process, produces moderate to severe symptoms in the birds. Turbosil is a combined mold inhibitor & mycotoxin binder, helps to improve bird's health & performance, let us have a review

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Guybro

Turbosil

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Mycotoxins are metabolites of molds growing on feedstuffs. They are spread everywhere and are capable to bring poisoning in the livestock.

Mycotoxin contamination of feed is recurring problem:

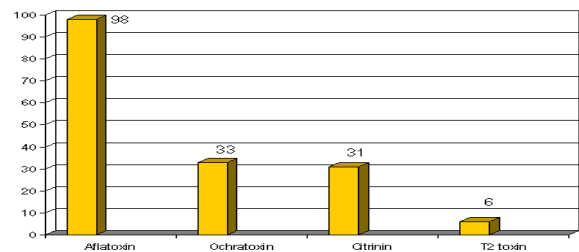
- Humidity, temperature, storage conditions, pH, insect activities are main causes of mold growth.
- Birds are consistently exposed to multiple toxins produced by molds
- Treatment with drugs or antibiotics usually has very little or no use
- Low levels of different combined mycotoxins cause more adverse damage than high level of single mycotoxins

These mycotoxins when get into system may cause moderate to severe toxicity symptoms. They include digestive disturbances, feed refusal, and lower feed intake, liver damage, nephritis, immunosuppression and poor productivity. In severe cases toxicity may result in high mortality rate.

Toxic effects of mycotoxins:

Low levels of different combined mycotoxins cause more adverse damage than high level of single mycotoxins

Incidence of Mycotoxins



Even with excellent management mycotoxins may exist in poultry feed, therefore toxin binders must be used in the feed to prevent mold & lumps.

Turbosil makes your feed 100% safe:

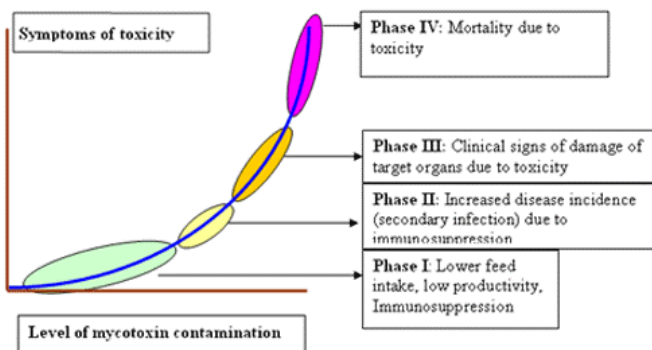
Turbosil is an ideal mycotoxin binder, contains mixture of Phyllosilicates & Tectosilicates. Ca montmorillonite is a special silicate from Phyllosilicate family treated with selected organic acids. Ca montmorillonite has capacity to adsorb wide range of mycotoxins. Tectosilicates are the first kind of silicates used in animal feeds. Synergistic combination of these two adsorbants eliminates multiple mycotoxin from feed.

Benefits:

Turbosil tested as dioxin free: Dioxins are byproducts of industrial processes which cause irreversible long term damage to birds & human beings.

Turbosil is dipolar toxin binder: Dipolar clays have a wide spectrum of adsorption ability for mycotoxins than Polar clays. Polar clays have a negative charge and can only adsorb mycotoxins with a strong positive charge. **Turbosil is Dipolar** has the wider spectrum of adsorption ability for mycotoxins, binds toxin having both negative and positive charges.

Turbosil is treated with organic acid: Turbosil is treated with organic acids. Acidic pH of Turbosil make it more ideal to work better, it promotes irreversible mycotoxin binding very effectively.



Turbosil has better cationic exchange capacity: Turbosil is dried at temperature of 100 and 105 °C. It promotes better cationic exchange capacity. **Turbosil has ideal MEQ, it makes it non expandible, it does not interfere with absorption of water & nutrients.**

Turbosil possesses ideal pore size: Turbosil is having ideal pore size to adsorb mycotoxins.

Turbosil possesses ideal Particle size: The size of particle is very critical factor. Particle size less than 300 mesh reduces the surface area & promotes less adsorption of mycotoxins & higher particle size i.e. 400 mesh or more can produce respiratory problems to human beings. **Turbosil has ideal particle size (300-400mesh), which is the best for a superior adsorbent.**

Turbosil extensively tested invitro and invivo: Turbosil adsorbs & retains the mycotoxins In vitro and In vivo at gastro-intestinal level.

pH stable: Turbosil rapidly forms a stable chemisorption complex with mycotoxins at stable pH 2-10.

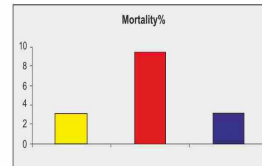
Anticaking agent: Turbosil binds excess moisture from the feed. It is micro fined powder which helps to improve flow ability of feed.

Turbosil feeding advantages:

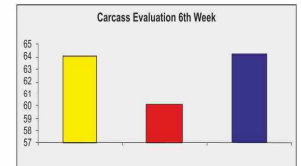
- Effective against wide range of mycotoxins
- Improves Crude protein digestibility
- Improves Crude fiber digestibility
- Keeps feed free flowing
- Improves digestibility coefficient
- Improves FCR
- Provides high meat to bone ratio
- Improves weight gain
- Reduces mortality
- Improves liver function

Scientifically proven :

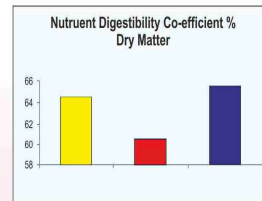
a) Mortality reduction-32.98%



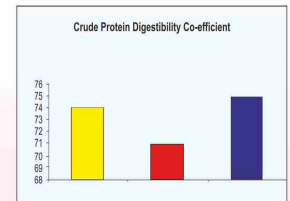
b) Improves meat v/s bone ratio +6.98%



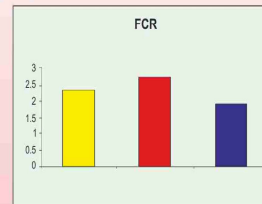
c) Improves Nutrient Digestibility+8.24%



d) Improves crude Protein Digestibility + 5.79%



e) Improves FCR* - 31%



Control feed
 Feed + Aflatoxin
 Feed + Aflatoxin + Turbosil
 Data Ref.: ■ vs ■

Feeding suggestions:

Poultry:

Broilers: 0.5 kg to 1kg/tonne of feed
 Breeders: 1.0 kg/ tonne of feed
 Layers: 0.5 kg to 1 kg / tonne of feed

Dairy:

1kg/tonne of feed

Swine:

1kg/tonne of feed

Presentation:

25 kg HDPE laminated paper bag