

# ANIMAX FEED SUPPLEMENT POULTRY



**MANASEER**  
Industrial Complex



**MANASEER**  
Cement Industry



**MANASEER**  
Carbonate



MICS SMART™



**Power Plant**



MICS SHIELD™



**Ultra**  
Natural Minerals

**ANIMAX**  
Natural Minerals

MIC **AQuaculture**  
Farm supplements

MIC **ANIMAX**   
Natural Minerals

# Introduction

Feed used for poultry production is mainly based on corn and SBM

Fungi grows in many types of feed and several mycotoxins are produced from it

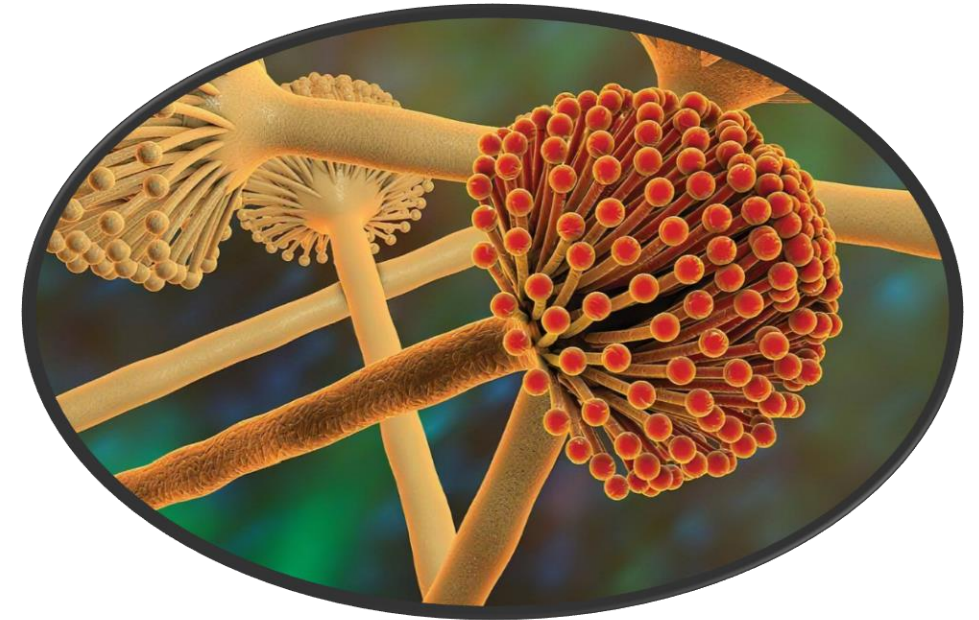
Aflatoxin

Fumonisin

Zearalenone

Trichothecenes

Ochratoxins



Mycotoxin producing  
fungus

# Introduction

## Mycotoxin in poultry feed

Reduce feed intake, and animal feed refusal will be noted

Affect the GIT environment and function

Affect hepatic function and alteration the body metabolism

Suppression of the immune system and reduced vaccination efficiency

To reduce these problems, mycotoxin binder must be used as feed supplement

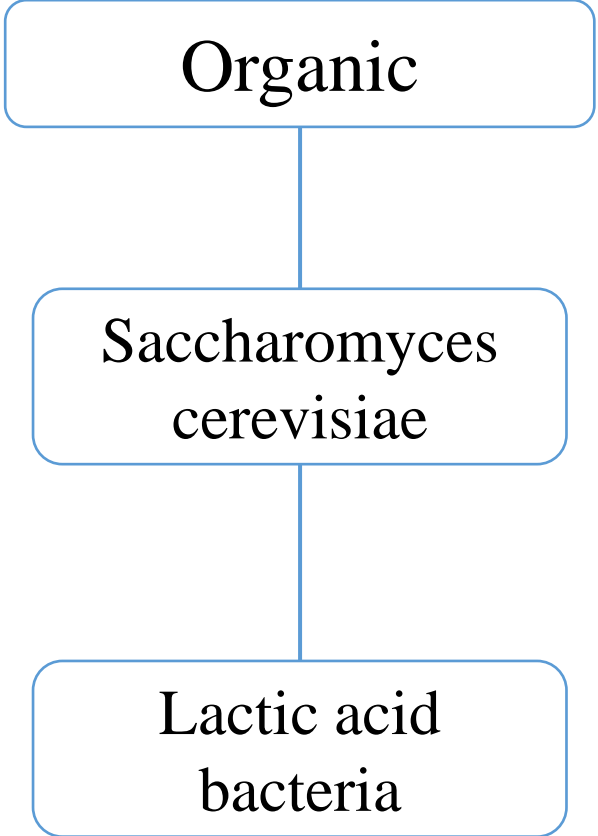
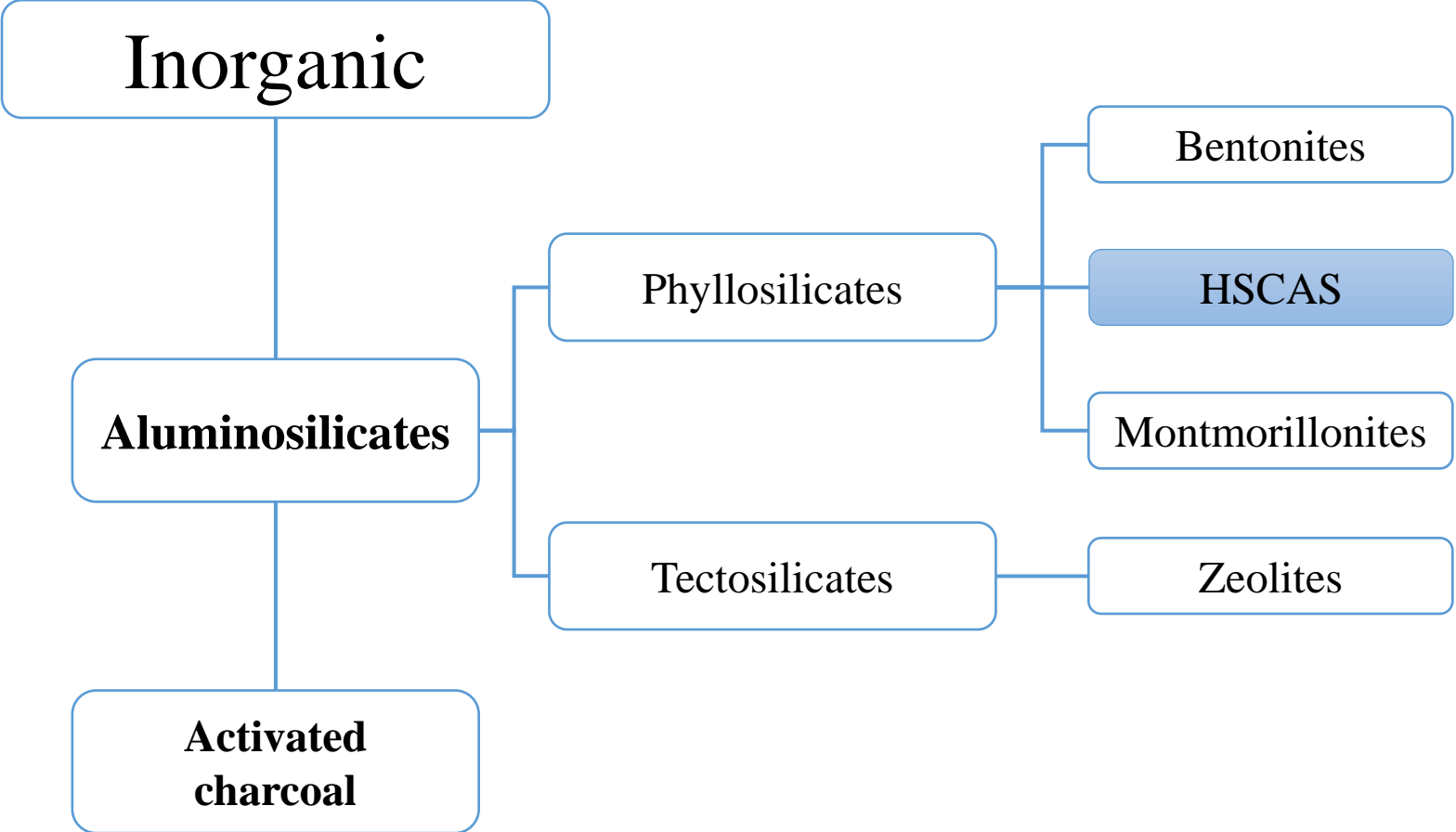
performance

Cost





# Mycotoxin Binders



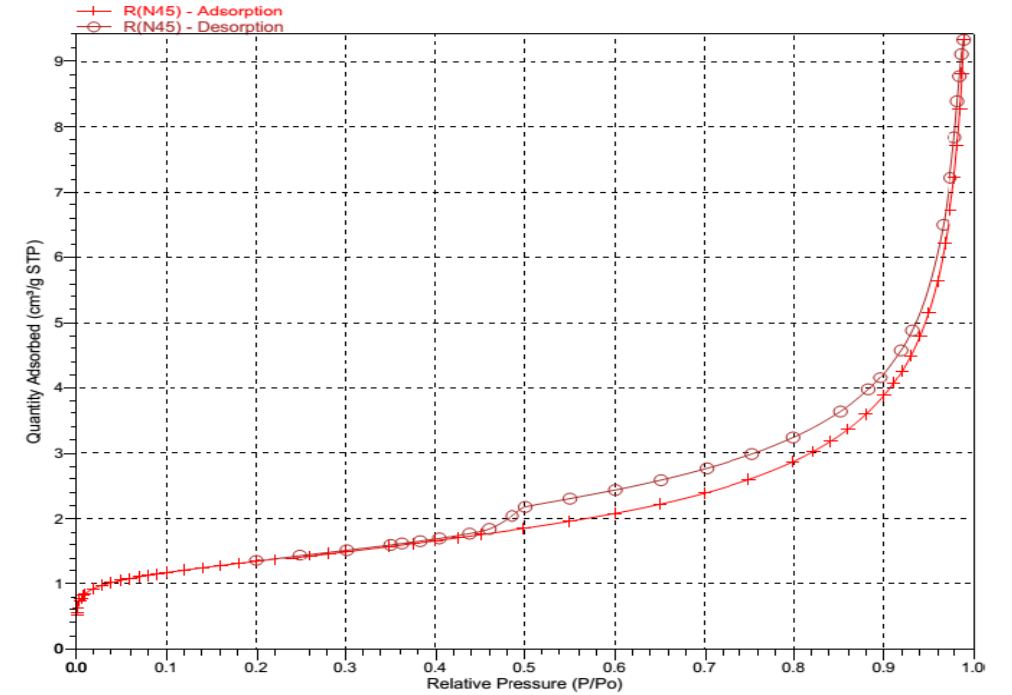
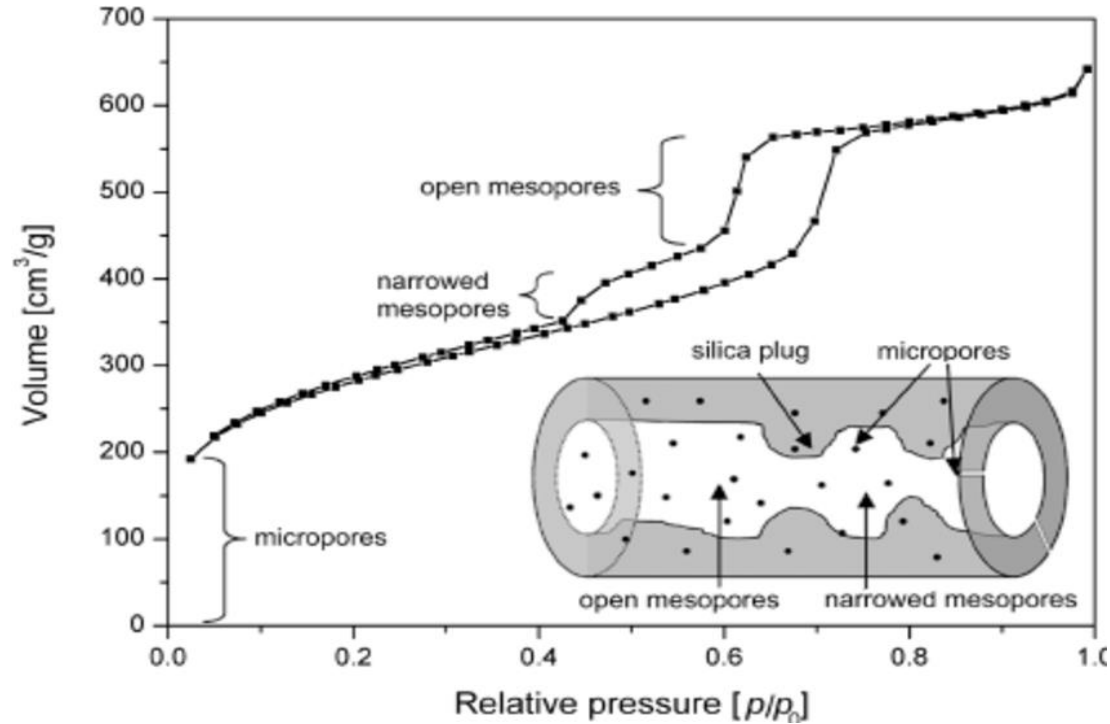
Feed additive contains hydrated sodium calcium aluminosilicate (**HSCAS**) with Trace Elements amount of some 45 different elements

Specific surface area  
4.722 m<sup>2</sup>/g

Specific surface area for micropore  
0.851 m<sup>2</sup>/g

Specific volume of micropore  
0.000377 cm<sup>3</sup>/g

PARAMETER	SPECIFICATION
SiO <sub>2</sub>	≤ 50.0 %
Al <sub>2</sub> O <sub>3</sub>	≤ 15.0 %
CaO	≤ 11.0 %
Fe <sub>2</sub> O <sub>3</sub>	≤ 10.5 %
MgO	≤ 8.5 %
Na <sub>2</sub> O	≤ 4.0 %
K <sub>2</sub> O	≤ 1.5 %
LOI	≤ 4.0 %
Moisture wt. %	≤ 0.22 %
PH Value	10-11
Particle Size	45 Micron

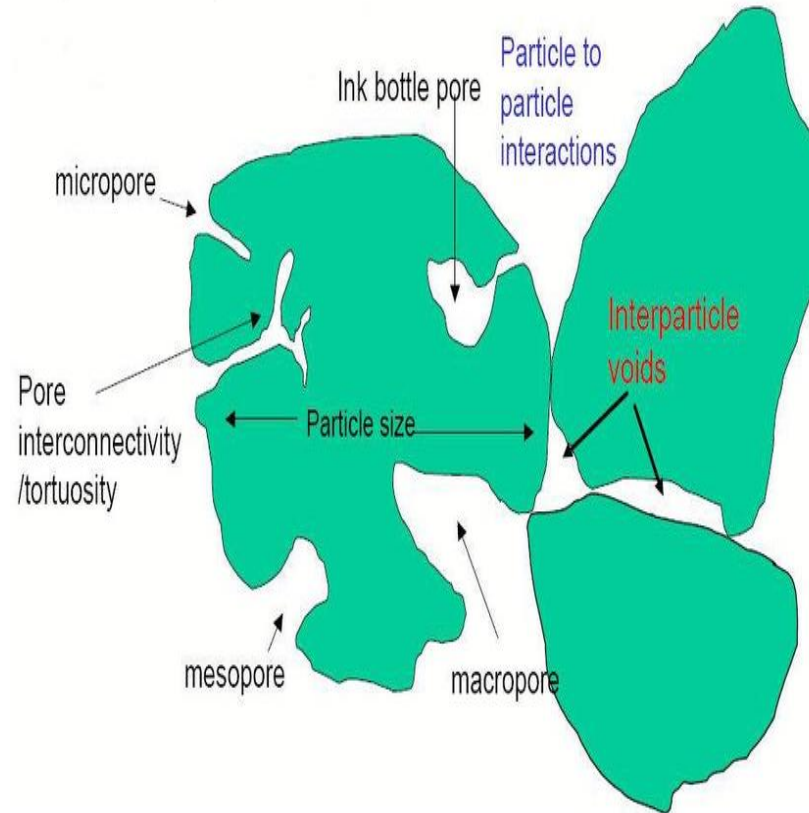


### Animax Analysis

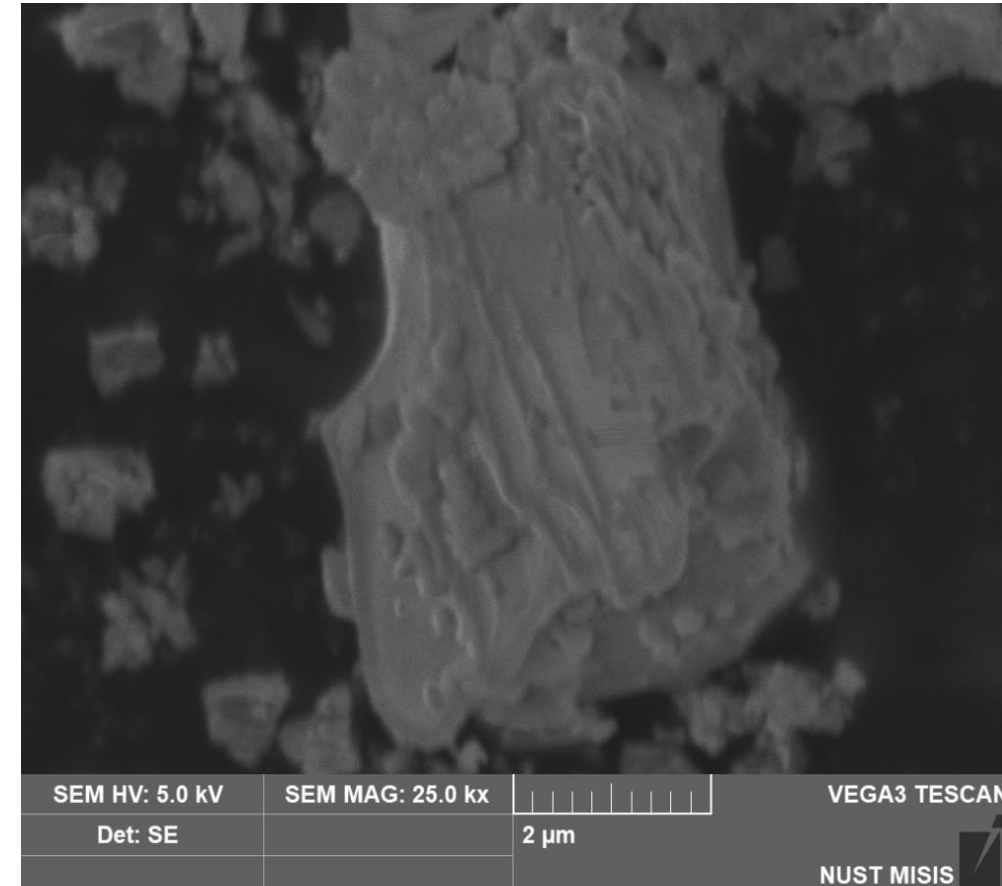
Animax is IV in the classification of adsorption isotherm (attributed to monolayer-multilayer adsorption).

# Animax Shape

HSCAS is a phyllosilicates with a flake like interlayer structure.



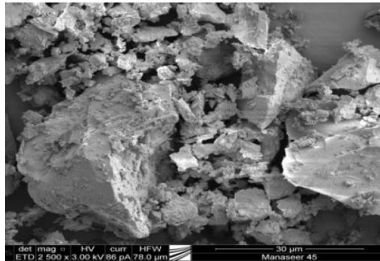
Classification of pore sizes:  
micropores (< 2 nm), mesopores (2~50 nm), macropores (> 50 nm)



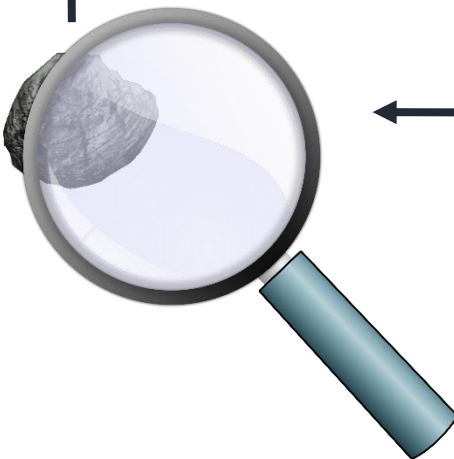
Animax Analysis



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3- The final physical and chemical surface treatment is applied to achieve each individual group specific performance goals



2- Manaseer WI - Process is applied on each particle

Simulating the natural alternation of Olivine to Iddingsite



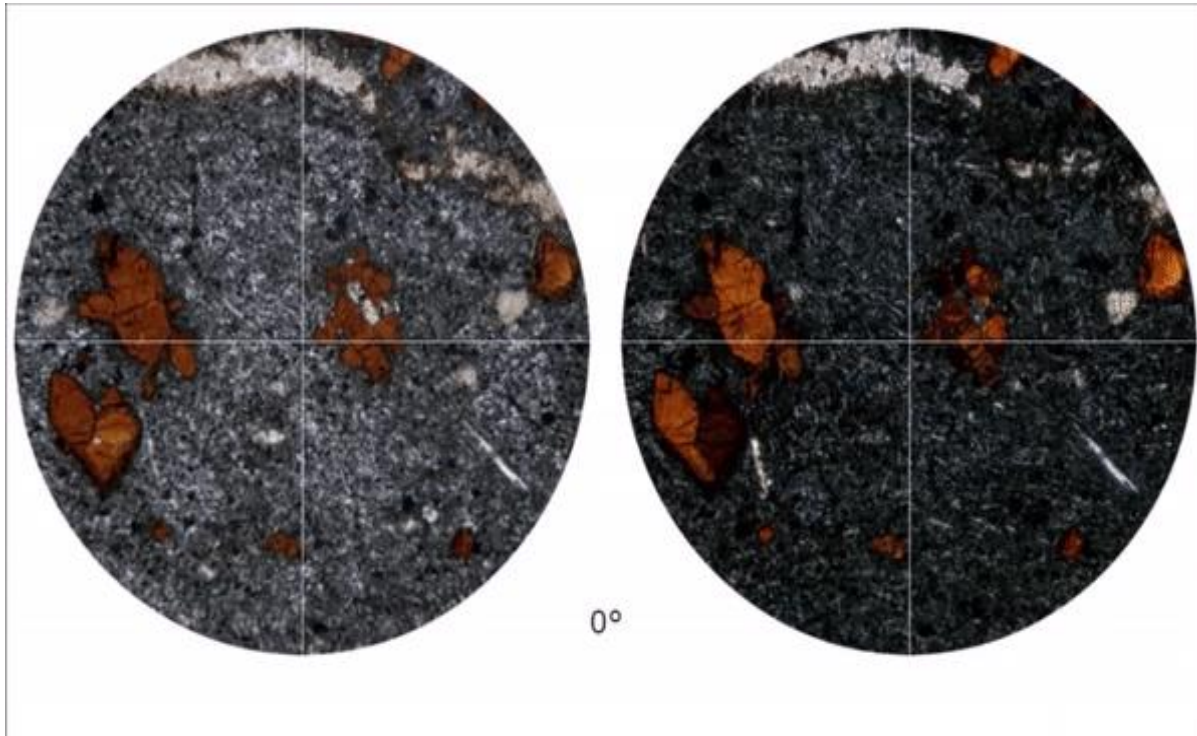
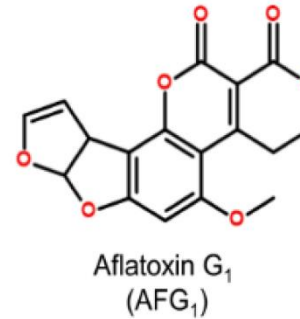
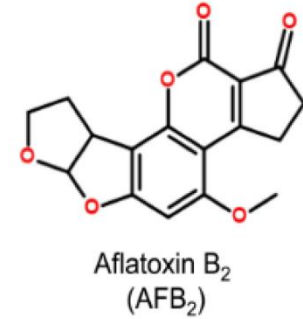
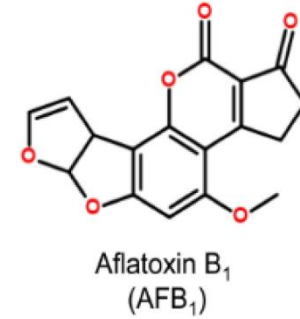
1- Grinding to the specific particle size





# Adsorption

HSCAS reported to be very effective in binding AF



Aflatoxin is one of the mycotoxins that are produced by *Aspergillus flavus*

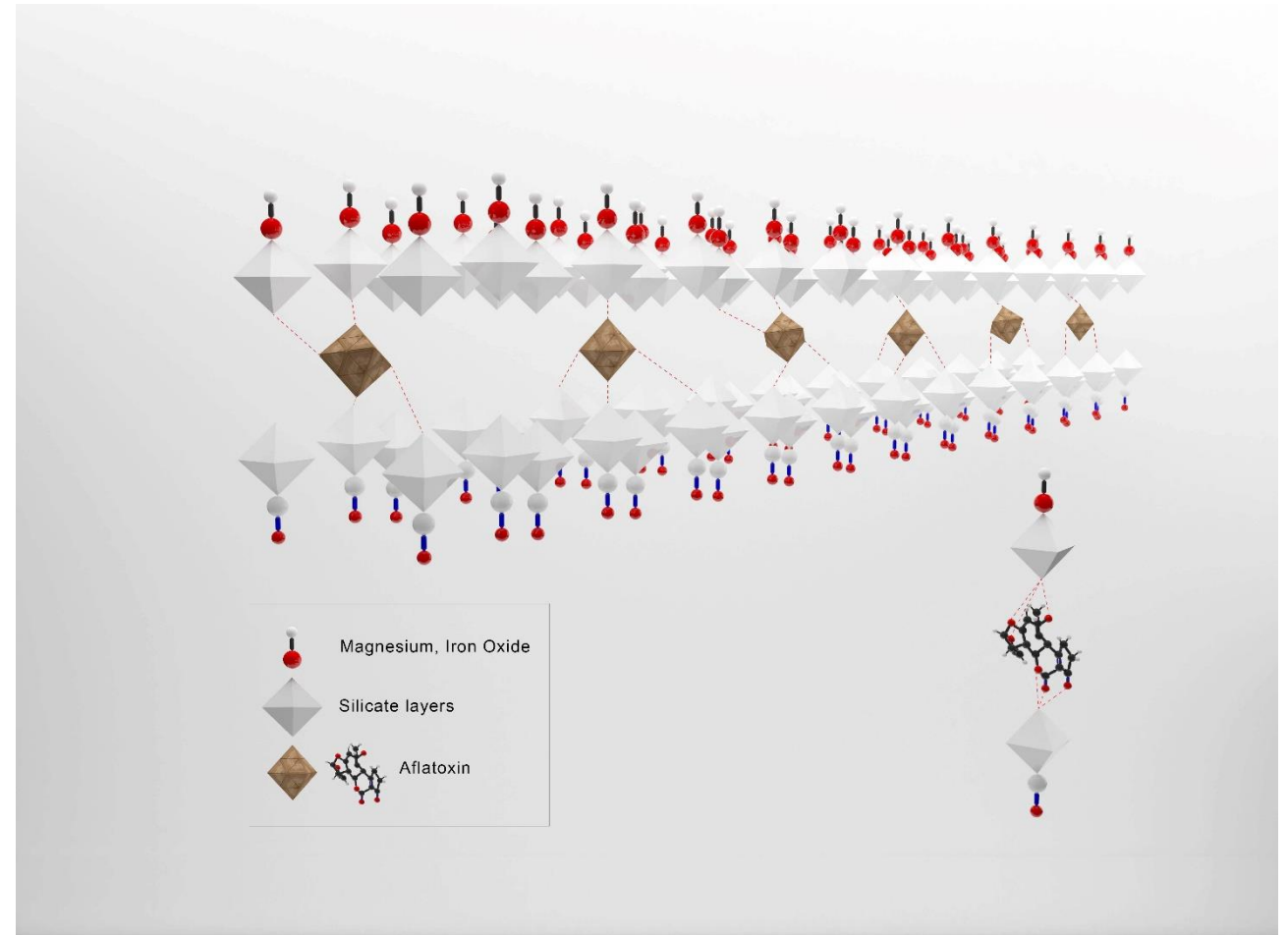
# Animax Mode of Action

## Mycotoxin binder

Adsorb the polar toxin and fix them between the clay layers.

Prevent toxins absorption in the intestine.

Remove the toxins naturally out of the body through faeces.



# Animax Mode of Action

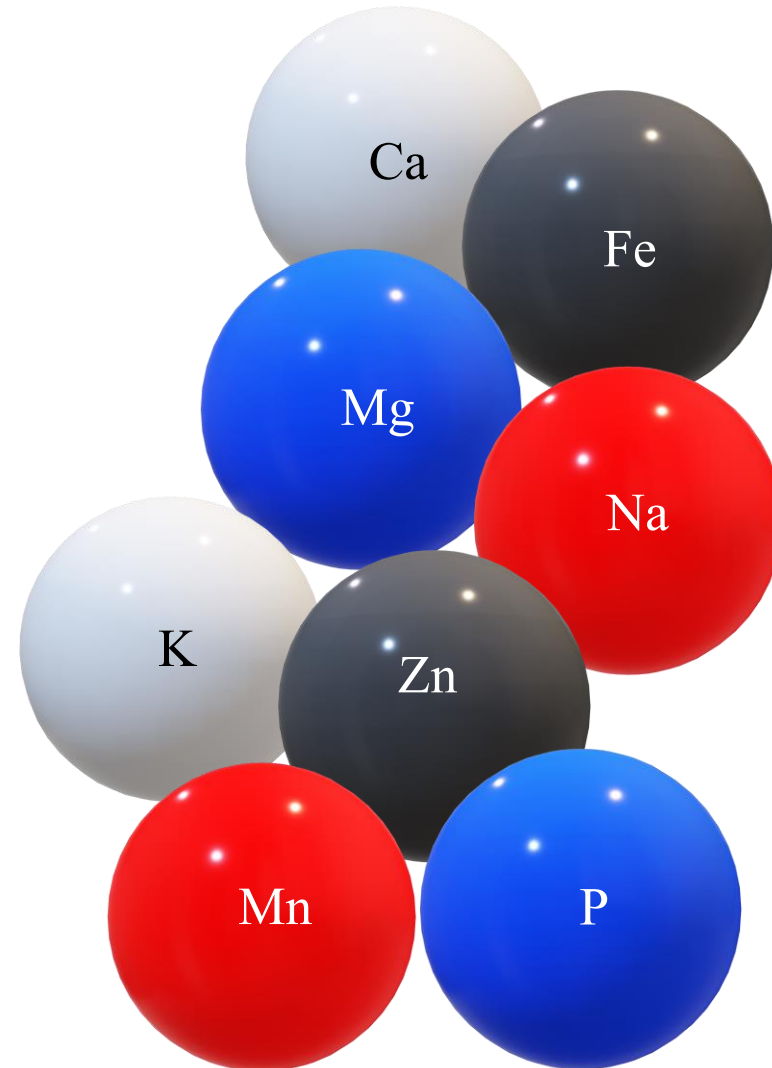
## Elements Supplement

Contain many elements that helps in enhancing the metabolic rate of the animal.

Increase feed intake and improve the digestibility of DM, protein, and fat.

Promote good intestinal health and shape.

Enhancing the immunological function.



# Commercial Trial

## **The Effect of Animax Feed Additive on Performance of Broiler Chicken**

**Manaseer Industrial Complex.**

### **Abstract**

A trial was conducted in a commercial farm in the north of Jordan to test the effect of Animax on broiler performance. Two treatments with two replicates for each treatment was distributed in four commercial houses. Each house had 20 thousand (day-old Ross 308) broiler chicken. The average body weight 40 g, and the rearing period extended for 32 days. Treatment one was the control, while treatment two had the control feed plus 0.25% Animax. The results showed that the use of Animax enhance the marketable broiler body weight which was 1917g compared to the control group that was 1768g. the use of Animax did not affect the total feed intake, which was 2598g, 2666g for T1, and T2 respectively. The use of Animax reduces the feed conversion ratio for the broiler flock and it was reported to be 1.42 in compared to the control group that reaches 1.5. the use of Animax reduced the cost of regular veterinarian treatment on average of 2 pennis for each bird due to its positive effect on the health of the flock. In conclusion the use of Animax enhanced the performance of broiler chicken.

# Results of The Trial

Treatment	Control (T1)	Animax Plus (T2)
Final body weight/ bird	1768 gram	1917 gram
Bird feed intake	2598 gram	2666 gram
Feed Conversion Ratio	1.5	1.42
Feed Efficiency	66	70.4
Cost of medicine	+ 2 pennies for each bird	

- The Average chick weight was 40 grams
- Rearing period was 32 days.
- Animax was added on the top of control diet.

# Commercial Trial

## **The Influence of the Feed Additive Animax on The Growth, Development and Meat Productivity of Turkey.**

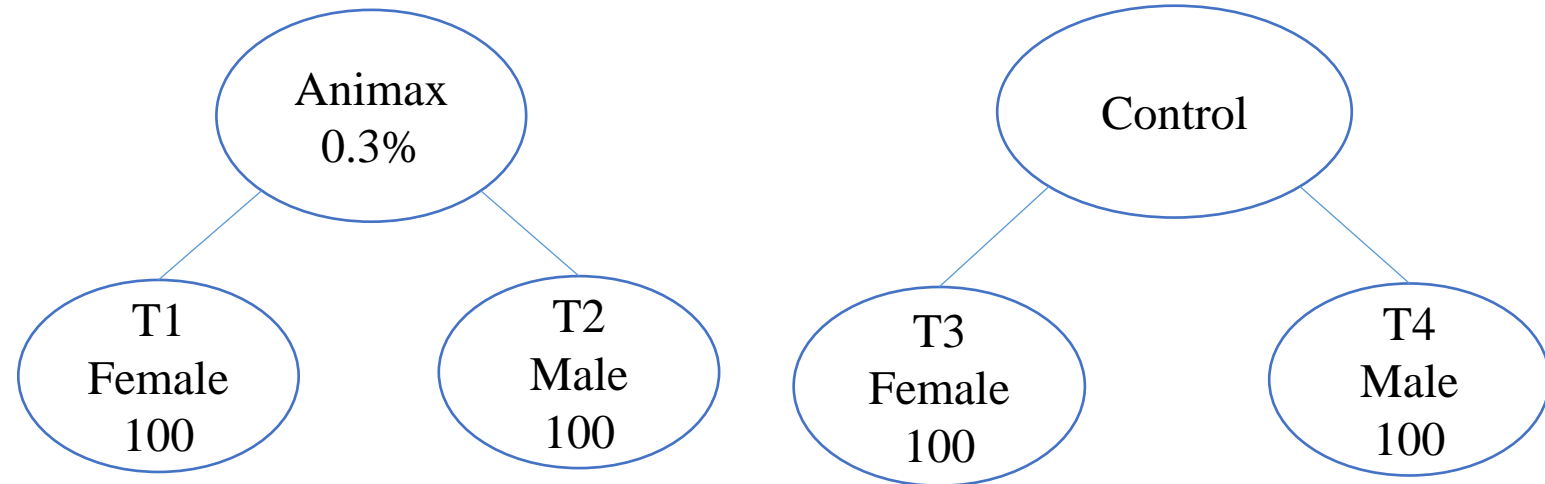
**Manaseer Industrial Complex.**

### **Abstract**

An experiment was conducted in Nizhny Novgorod State research farm to test the effect of feeding Animax on performance and meat characteristics of male and female High-breed Converter Breed. 400 turkeys were distributed to four treatments. The control groups that include male and female group with 100 birds in each group, and the Animax group which had the same distribution and feed as the control group plus 0.3% of Animax on the top of the ration. The experimental period extended from week 12 till week 22. Turkey performance, apparent digestibility, carcass characteristics, meat composition, and hematological parameter was taken. The results showed that Animax improved final body weight of the males in comparison to the control group, and it was 22.3kg, and 21.36kg for the Animax and the control groups. The average daily gain during the experimental period was significantly higher for both male and female groups that received Animax supplement, and it was 178g/day, and 91.8 g/day compared to the control groups which was 163g/day and 82.7/day. Animax significantly improved apparent fat digestibility in both of male and female and it was reached to 59.5% and 65.1% compared to the control groups which was 32.7%, and 45.2 respectively. The digestibility of crude protein and fiber not affected by the Animax supplement. The carcass weight enhanced by feeding of Animax and it reached to 18.32 kg, and 11.77 kg for male and female. The results showed that Animax increase the protein fraction in the white meat and the fat content in the red meat for both male and female. The amino acids content of the red meat was highly improved due to feeding Animax. The use of Animax had no effect on red and white meat sensory characteristics and did not affect the hematological parameters (Total protein, Albumin, Globulins, Urea, Ca, and P) for both male and female. In conclusion the use of Animax enhanced the body weight gain, the digestibility of fat, and improve the meat nutrient content.

# Turkey Experiment

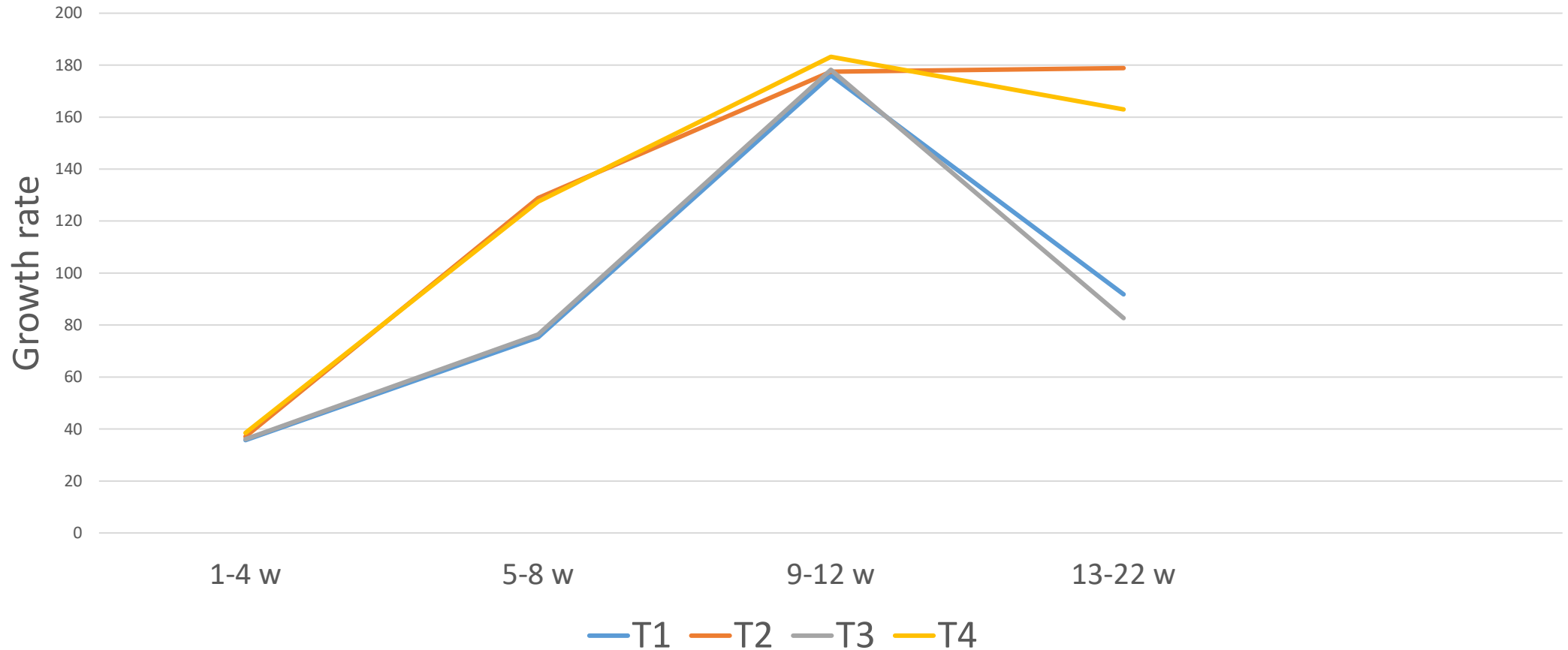
- To test the effect of feeding MIC Animax for Turkey an experiment was:
- Conducted in Nizhny Novgorod State Farm
- On Highbrid Converter Breed
- Age (12-22 week).
- For female and male.



- Feed offered 4 times/day with average of (700) g/h/d.
- Animax was Added on the top of control diet



## Average daily growth rate

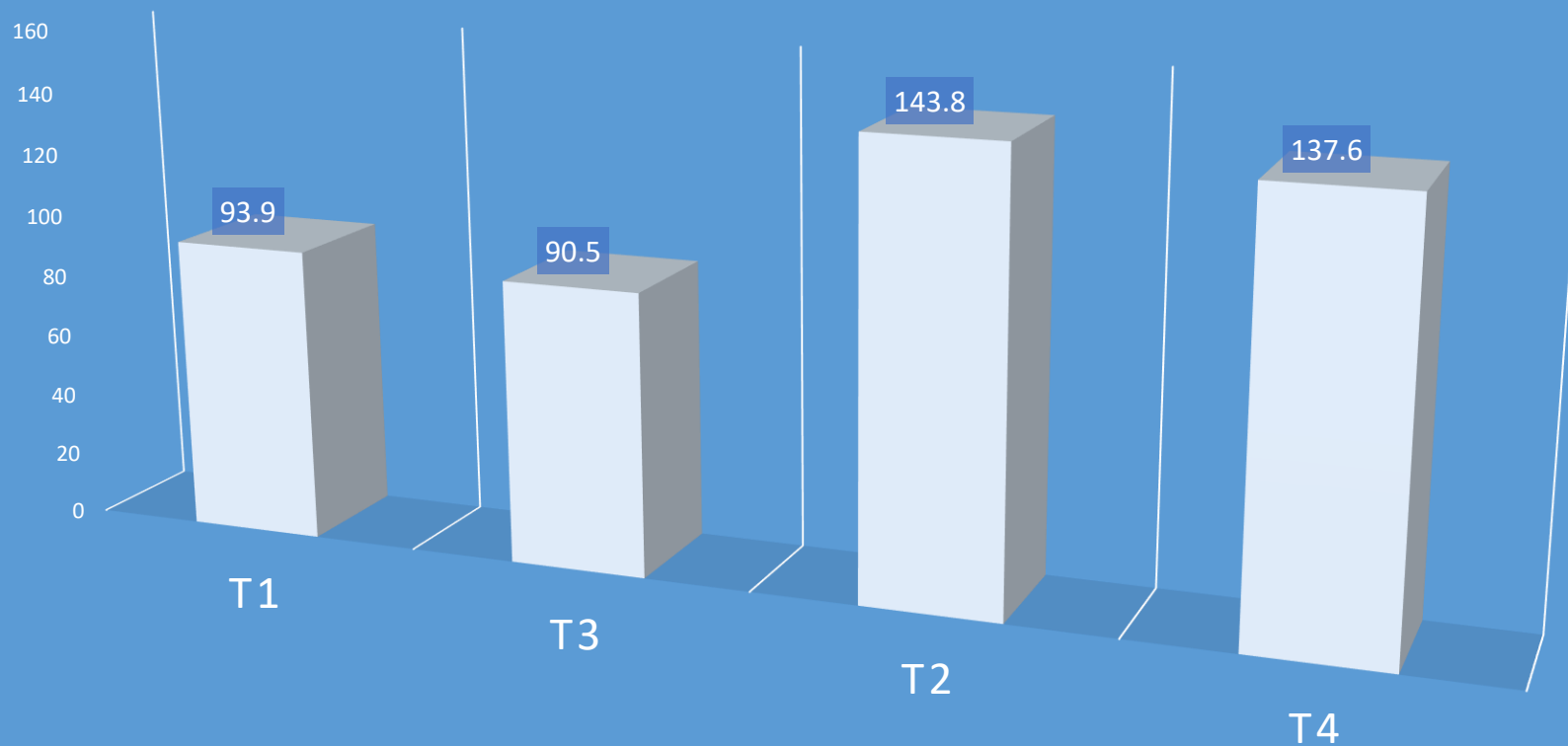


The experiment started at week 12 and extend to 22 weeks  
Animax maintain the growth rate for male (T2)  
Enhance the growth rate in female (T1)





## AVERAGE DAILY GROWTH



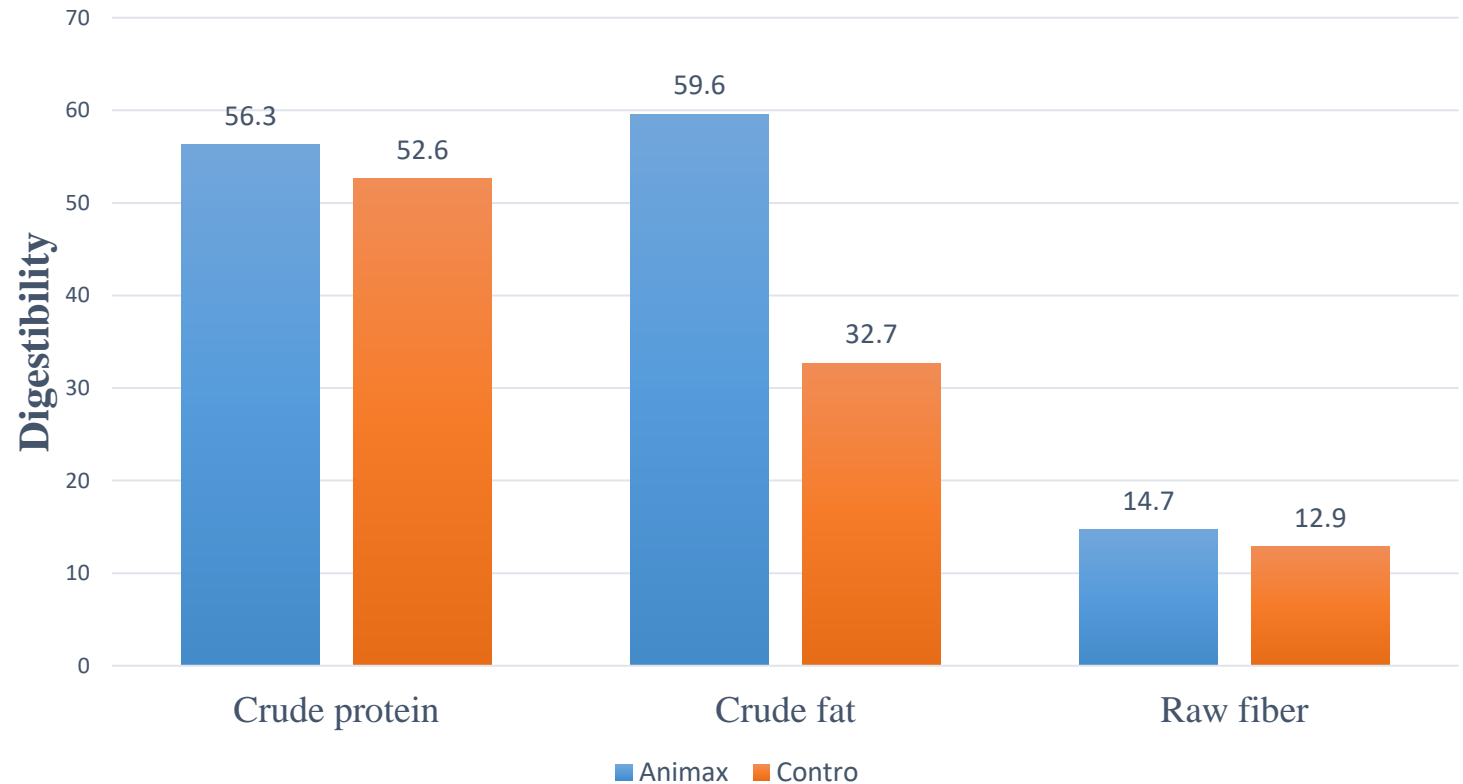
For all rearing period from week (1 to 22)  
Animax improves the growth rate for male (T2)  
Enhance the growth rate in female (T1)

# Effect of MIC Animax on Apparent Digestibility

MIC Animax Improve the digestibility significantly of crude protein and fat in turkey male

Favorable conditions for the development of microflora in the gastrointestinal tract, enhances the formation of enzymes that involved in the digestion of feed.

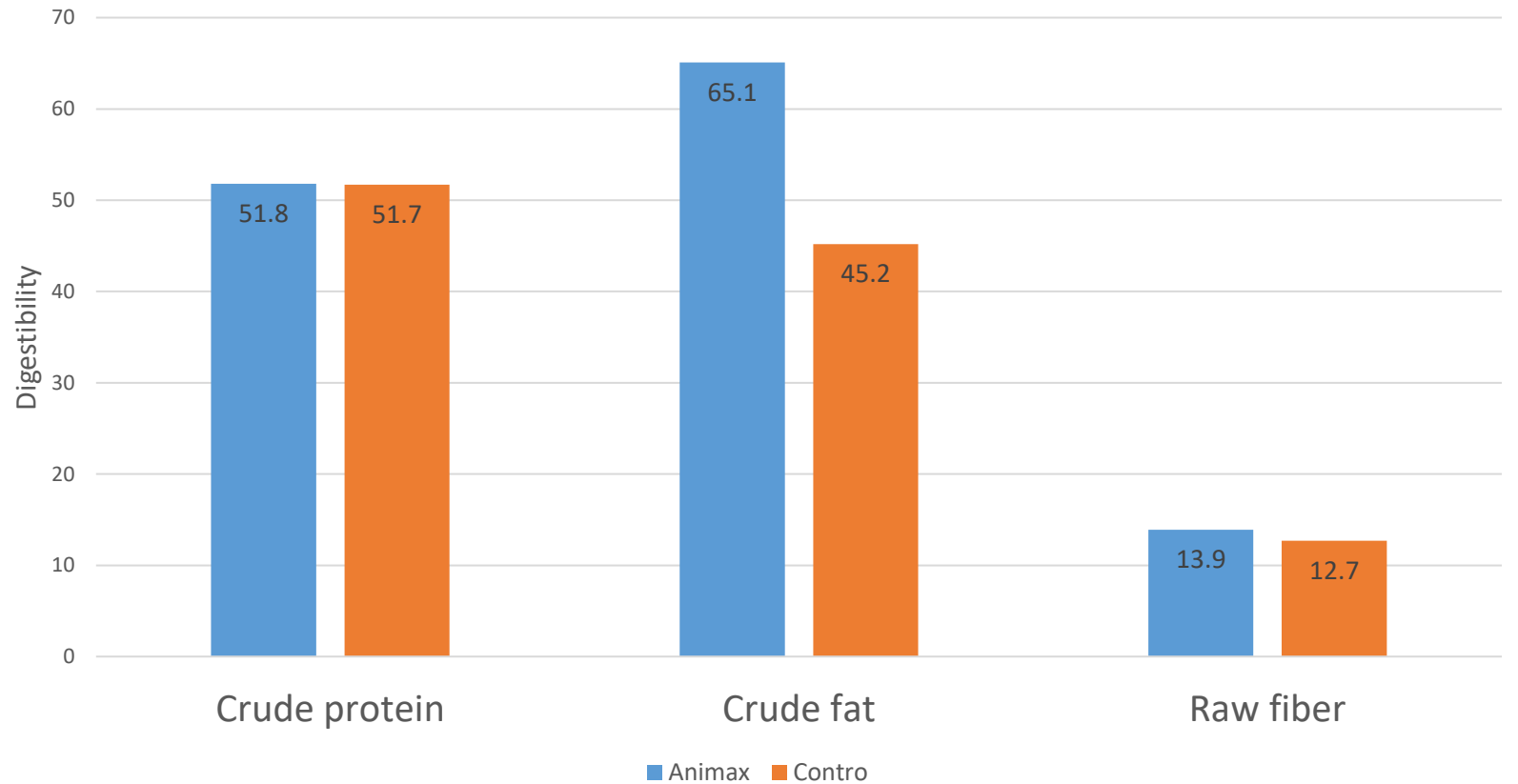
## Male nutrients digestibility



# Effect of MIC Animax on Apparent Digestibility

MIC Animax Improve the digestibility significantly of crude fat in turkey female

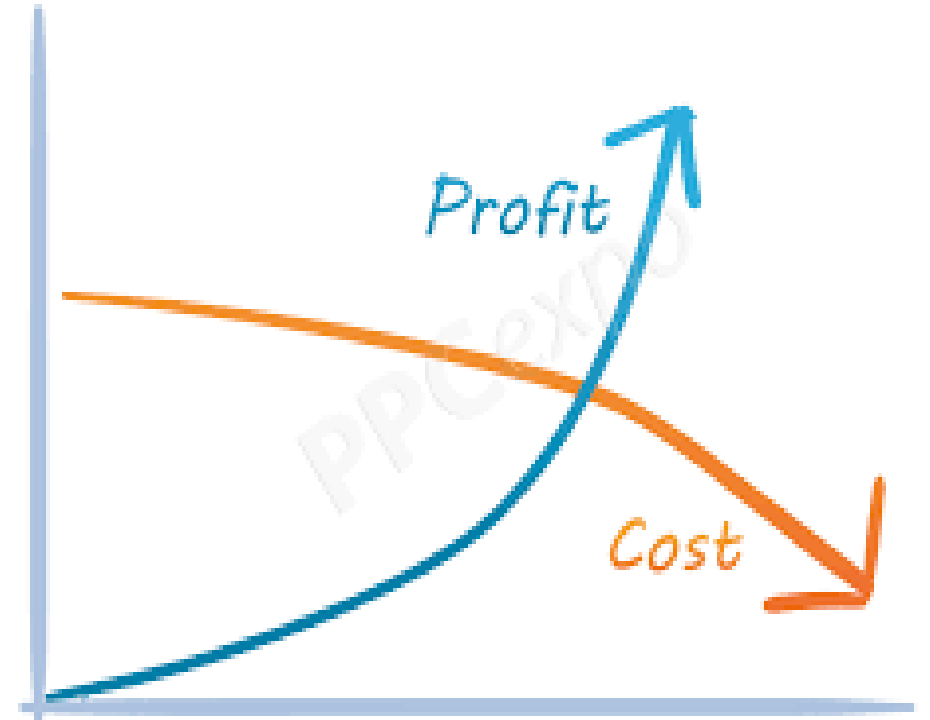
## Female Nutrients Digestibility



# Conclusion

## The use of Animax will

- Enhance the performance of broiler chickens and turkey through:
  - Increase the body weight and body weight gain.
  - Reduce feed conversion ratio.
  - Improve the digestibility of the feed.
  - Improve meat quality.
  - Enhance the intestinal shape and function.
  - Reduce the cost of the ration.
  - Enhance the environmental conditions in the reararing house.





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*The End*  
*Any question??*