



## The effects of zeolite and yeast in managing aflatoxicosis in broiler chicks

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### Abstract

*Objective of study:* The ability of dietary zeolite and yeast application as a (single treatment or compound with others) in combination 1.5 % zeolite to reduce the detrimental effects of aflatoxin B<sub>1</sub> (AFB<sub>1</sub>) in broiler diets was evaluated.

*Methodology and results:* A total of 630 seven-day Ross old broiler chicks were placed into four equal treatment groups. Group A: control, group B: 0.5 % yeast, group C: 1.5 % zeolite and group D: 0.5 % yeast + 1.5 % zeolite. The study assessed serum profile biochemical and weight changes in of internal organs in chicks fed 200ppb AFB<sub>1</sub> plus adsorbent. Addition of an adsorbent in the diets significantly diminished the deleterious effects of aflatoxins on body weight gain, feed intake and Feed Conversion Rate. The serum concentrations of glucose, cholesterol, triglyceride, albumin and uric acid in chicks fed on diets B to D were significantly higher than the control group. The relative weights of proventriculus, gizzard, liver, heart, spleen and pancreas decreased, whereas relative weight of bursa was increased compared to the control diet.

Application of findings; the results indicate that application of yeast and zeolite can contribute to reduce the detrimental effects of aflatoxins.

**Key words:** Zeolite, yeast, aflatoxicosis, broiler chicken.