



# Administration of Suggested Formula to Improve the Reproductive Performance of Sheep and to Minimize the Negative Effects due to Ingesting Mycotoxin (S) - Contaminated Feed.

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## Abstract:

ISSN: 0975-8585 November - December 2014 RJPBCS 5(6) Page No. 1560 Research Journal of Pharmaceutical, Biological and Chemical Sciences Administration of Suggested Formula to Improve the Reproductive Performance of Sheep and to Minimize the Negative Effects due to Ingesting Mycotoxin (S) - Contaminated Feed. \*Abdel-Fattah Shaaban M1, Magdy MM Saad1, Abussree Yahia H1, Bedair MA1, SA Galbat2 , and Helal AA.3 1Food Toxicology and Contaminants Department, Department of Parasitology and 2Animal Diseases,National Research Centre, 3Animal Health Research Institute, Cairo, Egypt. ABSTRACT This study is an attempt to prevent or minimize the negative probabilities due to ingesting feed contaminated with aflatoxins (AFs). A previous research studies for about 30 years leads to suggest this studied formula. An exposure study extended for 3 different stages was conducted using eighteen Egyptian male sheep at the growing ages. The 1st stage (pre-treatment) was extended for 2 weeks and suggested to compare the performance of animal groupings under the normal conditions before receiving any treatment, either level of contamination(s) or dosage(s) of additive. The 2nd stage (treatment) was extended for 4 weeks and the animals received different levels of aflatoxin(s) (10 mg/kilogram concentrated diet) and / or the studied formula at two levels (250 and 500 mg / head / day). The 3rd stage (post-treatment) was extended for 4 weeks and suggested to transfer treated animal groupings to receive sound diets free from any level of contamination. Dry matter intake (DM), apparent nutrient digestibilities, nutritive values, serum chemistry profiles and AFs concentrations in feed intake, orts, feces and urine; were evaluated. Data revealed that aflatoxins contaminated rations induced significant decrease in daily feed intake and the averages of body weight, body weight gain and feed conversion rates were dramatically affected during the exposure stage to aflatoxins. Additionally, serum constituents and ruminal measurements indicated impaired liver function and digestive disturbances in sheep fed aflatoxin. An addition of studied formula at doses between 250 and 500 mg / head / day, for exactly 28 days, were able to modify rumen fermentation by changing protozoal activity and motility and could approximately normalized the adverse effects of aflatoxin contamination. Keywords: Mycotoxin, aflatoxin(s), food contaminants, food additives \*Corresponding author

## Keywords:

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