

Histopathological alterations in Aflatoxicity and its amelioration with herbomineral toxin binder in broilers

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Abstract

An experiment was conducted to study the protective role of herbo-mineral toxin binder product in induced aflatoxicosis in broilers on the basis of histopathological studies. Total sixty day old broiler chicks of either sex were randomly divided into three groups, each comprising of twenty birds and two replicates. Healthy birds of group I were supplemented with standard basal ration as per NRC (1994), group II birds were fed with standard feed mixed with aflatoxin B1 @ 1ppm, group III birds were fed with mycotoxicated feed of 1 ppm aflatoxin B1 and medicated with Toxiroak (M/s Ayurved Ltd, Baddi, India) @ 0.125%. Forty percent of birds were sacrificed at sixth week for necropsy examination. Microscopically, congestion of liver parenchyma, cytoplasmic vacuolation/fatty change of hepatocytes and renal tubules, necrosis, mononuclear cell infiltration was observed in aflatoxicated group II. Milder form of pathological lesions in treatment groups birds reveal pallor discoloration of liver and hepatomegaly, splenomegaly and mild lesion in kidneys. Present study revealed that supplementation of herbomineral toxin binder product could ameliorate aflatoxicity in broilers.

Key words: Aflatoxicosis, Broiler, Histopathology, Toxin binder, Herbal.