The Effect of *In Ovo* Exposition to Ethanol Upon Osteogenesis of the Chicken Embryo.

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ABSTRACT

Excessive alcohol consumption by a pregnant woman may delay foetal development and may cause malformations. In this study, the model of the chicken embryo to demonstrate the teratogenic effect of ethanol (33%) on the chicken osteogenesis on the 10th day of embryonic development have been used. 49 fertilized eggs were used in present investigation. Hence, different doses of ethanol were injected into the chicken embryos at 33% (20, 40, 80μl) in the air space at gastrulation and, on the other hand, an equivalent amount of the mentioned doses of distilled water were injected into the control-group eggs which was done once in every two days in order to maintain a high concentration in the blood. Experiments were repeated and independently carried out for three times. The eggs were incubated in a humid incubator at the temperature of 37.7 °C and at 60-65% of humidity. On the 10th day of incubation, the embryos were taken out and fixed in formalin at 10%. After that, the eggs were sectioned at 5μm of thickness with a Leica microtome and, then, stained with the Hematoxylin and eosin. Histological examination has revealed that the exposition of chicken embryos to ethanol (33%) delays the skeletal development in a dose-dependent manner by reducing the length of the cartilaginous proliferation zone and hypertrophic zone during the bone formation period. Furthermore, under the effect of ethanol, the cell proliferation activities were repressed. In conclusion, present results indicated that using ethanol to treat chicken embryos at early stages caused considerable malformations and a decreased in the embryo survival rate. The exposition to alcohol affects the chicken osteogenesis in a dose-dependent manner.

Keywords: Chicken embryo, Ethanol, Malformations, Osteogenesis, Teratogenic effect
chickens. The objectives of this study was to observe the pathological effects due to
fed with a basal diet without aflatoxin contamination, group B with aflatoxin (> 1 ppb 51 ppb 101
Recent Update: Effects of Aflatoxin in Broiler Chickens.
Kurniasih and Prakoso YA. Aflatoxin is a worldwide problem in poultry industries as it is known to contaminate poultry feed. Ouennes H, Afri Bouzebda F, Bouzebda Z, Majdoub S, Djaout A and Adnane Smadi M. The characterization of Post -Mortem Sperm of Local Chicken Cocks in Eastern Algeria. And while post-mortem sperm retrieval techniques, the flushing and float-out methods in the collection of chicken cocks from the east of Algeria (age, 12-24 months, body weight 1.50-2.53 kg). And and 24h at 20°C and after refrigeration at 4°C for 24h). The quality was significantly higher deferens (30.33±4.68% vs 30.33±4.68%), only the volume was significantly higher (0.72±0.12ml vs 0.13±0.05ml) in the vas deferens compared to the epididymis, whereas for viability (75±10.39% vs 74.67±10.15%) and abnormality spermatozoa abnormalities and chromatin quality did not differ in both the epididymis and vas. The characterization of Post-Mortem Sperm of Local Chicken Cocks in Eastern Algeria. post-mortem sperm, obtained from epididymis and the vas deferens of 18 pairs of adult local chicken cocks. The findings also indicated in the hematological parameters that bedding materials caused a significant difference for viability and motility of the spermatozoa recovered from vas deferens, followed by T4. Baker's yeast can be an important feed additive, which can be included up to 2.5% of the total ration and improve the overall performance of broilers without compromising the hematological indices of broiler chickens. Feed conversion ratio of T4 and T3 groups was better than T2 and T1. T3 and T4 period was lower for T4, whereas during the finisher phase in control diet group showed the highest sale to feed cost were obtained for T3. The highest daily body weight gain was followed by T4. Baker's yeast as T1, T2, T3 and T4 respectively. The effects of feeding baker's yeast performance of Cobb 500 broilers were studied. The effects of feeding different levels of Baker's Yeast on Performance and Hematological parameters. The aim of the present study was to determine the effect of different bedding materials on the, brooded for two weeks before the experiment begin. The blood samples were collected at day 56 of experiment for hematological and serum biochemical analysis. The randomized design was employed for the research in which the treatment were five bedding materials (rice hulls, groundnut hulls, wood shaving, sharp sand and control). The results significant difference in the hemoglobin content, white blood cell count and mean corpuscular parameters. The results showed no significant differences in the other parameters (Heterophils, monocytes, lymphocytes, mean cell volume and packed cell volume) were seen. The results showed no significant differences in the other parameters (Heterophils, monocytes, lymphocytes, mean cell volume and packed cell volume) were seen. The results showed no significant differences in the other parameters (Heterophils, monocytes, lymphocytes, mean cell volume and packed cell volume) were seen. The results showed no significant differences in the other parameters (Heterophils, monocytes, lymphocytes, mean cell volume and packed cell volume) were seen. The results showed no significant differences in the other parameters (Heterophils, monocytes, lymphocytes, mean cell volume and packed cell volume) were seen. The results showed no significant differences in the other parameters (Heterophils, monocytes, lymphocytes, mean cell volume and packed cell volume) were seen. The results showed no significant differences in the other parameters (Heterophils, monocytes, lymphocytes, mean cell volume and packed cell volume) were seen. The results showed no significant differences in the other parameters (Heterophils, monocytes, lymphocytes, mean cell volume and packed cell volume) were seen.
Microalgae Biomass Application in Commercial Broilers Nutrition and Their Efficacy Against Challenge with Epidemic Newcastle Disease Virus in Egypt.

20 birds, three of them have fed on balanced broiler ration supplied with 1% weight per weight of microalgae as a feed additive. The results showed that the microalgae have no hazard effect on growth rate, weight gain, poultry viability and immune response. In addition, the other 3 groups have fed on free microalgae biomass balanced ration up to 5, 10 or 20% (W/W) in order to assess better performance on poultry production.

Furthermore, future studies should be applied with increasing microalgae percent in poultry feed function and body weight, they have similar effect with the free microalgae groups in normal conditions. Microalgae can be used in broiler ration with no deleterious effect on growth rate, weight gain, poultry viability and immune response. In conclusion dried microalgal biomass harvested from HRAP can be used in broiler ration with no hazardous effect on poultry performance. Microalgae is a potential alternative to antibiotics in poultry feed. Treatment of Newcastle disease virus in chickens and antibodies in them were estimated in order to assess the efficiency of the medicinal plant and the antibiotic in Newcastle disease virus.

Keywords: Microalgae Biomass, Immune response, Newcastle disease virus, Poultry feed.
Preparation of Necrotic Enteritis Vaccine for Turkey.

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ABSTRACT

Clostridium perfringens is the most important cause of enteritis in domestic animals, in chicken and turkey it well known as pathogen responsible for necrotic enteritis; hepatitis, and cholecystitis. The disease in turkey characterize by either severe form with high rate of mortalities or subclinical form of reduce growth rate and increase condemnation rate. The major factor responsible for pathogenicity of Clostridium perfringens was alpha toxin. The aim of present study was to prepare of Clostridium perfringens alpha Toxoid vaccine for controlling the necrotic enteritis disease. The vaccine was prepared at different doses depend on lethality of toxin (24, 48 and 96 Minimum Lethal Dose) for controlling necrotic enteritis disease. Antibody titer elicited by vaccination was measured by toxin neutralization test, ELISA, and challenge test. It revealed that antibody titer expressed by international antitoxin unit per ml was 7.4, 4.1 and 1.26 respectively according to the mentioned dose, and also the protection percent against challenge was 100% when vaccinated with either 48 or 96 Minimum Lethal Dose, while it gave 80% when vaccinated with 24 Minimum Lethal Dose.

It concluded that use of Clostridium perfringens alpha Toxoid with recommended dose of 48 MLD able to protect turkey for 6 months.

Keywords: Alpha toxin, Clostridium perfringens, Turkey, Type A, Vaccine