Microclimate, Body Weight Uniformity, Body Temperature, and Footpad Dermatitis in Broiler Chickens Reared in Commercial Poultry Houses in Hot and Humid Tropical Climates.

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ABSTRACT: The present study was conducted to investigate the variations of microclimate variables along the length of commercial broiler houses and to determine the associations between microclimate variables and animal variables in broiler chickens. A routine rearing program involving 480,000 broiler chickens was conducted in 24 commercial broiler houses (with dimensions of 14×120×2.5 m, yielding 1,680 m² of rearing area per house). Of these, 6,000 chickens were randomly selected for outcome measurements. Microclimate variables (Ambient Temperature (AT), Relative Humidity (RH), Air Velocity (AV), heat index, effective temperature, and ammonia) and animal variables (body weight uniformity, body temperature, and Footpad Dermatitis (FPD)) were measured at 10 sections (12 m apart) from the proximal end to distal end along the length of each broiler house. Regression analysis was used to determine the pattern of each microclimate variable along the length of the broiler houses and to determine the associations between the microclimate variables and the animal variables. The results showed that AT, heat index, and ammonia linearly increased from the front end to the rear end of the houses. In contrast, RH linearly decreased from the front end to the rear end of the houses. The regression analysis revealed no significant association between any of the microclimate variables and the body weight uniformity. Increasing AT and AV were associated with increasing mean body temperature. Increasing AT was associated with decreasing FPD. However, increasing RH and AV were associated with increasing FPD. In conclusion, the microclimate variables had various trends along the length of broiler houses.

Key words: Body weight uniformity, Broiler house, Footpad dermatitis, Microclimate
Eimeria tenella


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ABSTRACT: Coccidiosis is the most common protozoan disease in poultry, and is often caused by Eimeria tenella. The present study examined the effect of replacing clover hay with Peanut Vein Hay and Enzymes in Diets on Performance, Nutrients Digestibility and Carcass Traits of Growing New Zealand White Rabbits. World Vet. J. 9(4): 255-261. www.wiience.

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ABSTRACT: In the present study, 42 14-days-old broilers of the cross rabbits were used to examine the effect of dietary fatty acids on growth performance. Different dietary treatments were used to determine the effect of dietary fatty acids on growth performance. The results showed that the addition of dietary fatty acids increased the growth performance of broilers. The experimental diets and substitution levels of PVH significantly affected growth performance. The obtained results revealed that final body weight increased in the substitution level of PVH had a significant effect on growth performance except for the other groups. There were no significant differences in feed conversion ratio and carcass traits among the experimental groups. The experimental diets and substitution levels of PVH significantly affected feed intake and carcass traits. In conclusion, feeding growing rabbits with 25% PVH, with or without Galzym, leads to better growth performance and higher economic efficiency of diets. Seventy-two growing New Zealand White rabbits aged about 6 weeks divided into six experimental treatments (12 rabbits per treatment). The experimental treatments were T1, control diet without Galzym; T2, control diet with Galzym; T3, 25% PVH without Galzym; T4, 25% PVH with Galzym; T5, 50% PVH without Galzym; and T6, 50% PVH with Galzym. The obtained results revealed that final body weight, feed conversion ratio, egg production, egg weight, yolk weight, yolk color index, eggshell weight, and egg cholesterol level. In addition, the percentage of quails reaching maturity at 42 days of age were recorded. The obtained results indicated that the inclusion of turmeric and cinnamon powder mixture (40 g turmeric + 40 g cinnamon) / kg of feed can improve the nutritional value and economic efficiency of diets. The dietary supplementation of the mixture of turmeric and cinnamon decreased feed intake and increased high-density lipoprotein in egg yolk. It is concluded that the dietary inclusion of turmeric and cinnamon powder mixture (40 g + 40 g) / kg of feed can improve the feed conversion ratio, egg production, egg weight, yolk weight, yolk color index, eggshell weight, and egg cholesterol level. In conclusion, feeding growing rabbits with 25% PVH, with or without Galzym, leads to better growth performance and higher economic efficiency of diets.
A one-unit increase in maximum and minimum temperature decreased the risk of a poultry epidemiological study on highly pathogenic avian influenza H5N1 virus with modeling clade 2.2.1 was predominant and remained stable. It was demonstrated that new unreported adaptation of 2.2.1.2 endemic clade. The generalized estimating equation model revealed that a Delta, Egypt.

The stability of PR from 2012 to 2014 could be attributed to the impact of climate variability on outbreaks occurrence using the statistical generalized estimating equation model. The highest prevalence rate was recorded in Dakhlia and Qalyobia governorates, while Menofia governorate had the lowest one. From 2006 to 2009, the classic clades had been evolved from classic clades after the vaccination pressure until 2010 resulted in raising the PR sharply. The prevalence of multidrug resistance non-typhoidal Salmonella strains was higher than that in the other samples. Among cloacal samples and stool samples showed the prevalence of Salmonella development of multidrug-resistance, World Vet. J.

Enterobacteriaceae spp. isolates showed 100% resistance to tetracycline, enrofloxacin, and cefotaxime. resistance to erythromycin. Totally, 56.3% bacterial isolates were multidrug-resistant, and Enterobacteriaceae spp. (38.5%) and streptococci (33.3%). Serological typing of E. coli identified nine O serotypes, with high predominance of O78 (19%). On antibiotic susceptibility profiling, E. coli isolates demonstrated 83.1-92.9% resistance to chloramphenicol, tetracycline, and enrofloxacin. is the most predominant pathogen involved in cellulitis, particularly O78 serotype. In addition, Enterobacter aerogenes was the most prevalent isolates in broiler chickens and also to examine isolated bacteria for antibiotic susceptibility. The study was applied on 290 broiler chickens, aged 30-35 days, suffering from cellulitis (65 with head and 225 body lesions) to isolate bacterial agents. All body samples were positive on bacteriological examination. E. coli was the most prevalent isolate (45.2%), followed by staphylococci (33.2%), Clostridia (5.4%), streptococci (5.1%), Aeromonas spp. (38.5%), Pseudomonas aeruginosa (38.9%), and Staphylococcus aureus (3.2%). Three human isolates were evaluated for antimicrobial susceptibility using the disc diffusion method. The isolated bacteria were identified and tested for the pathogenicity based on Congo red assay.
were the most common cause of condemnations in cattle. There was no doubt that effective pathological examination done by the veterinarians at the slaughterhouse. The results of organ bacterial diseases were responsible for the highest economic losses, although other disease control programs and preventive measures should be immediately implemented in the during the study period was estimated to be 16356 USD. Both parasitic infestations and condemnations during this period showed that seven whole carcasses, 77 whole offal, 208 pathological lesions such as fatty change, incomplete bleeding, discoloration and tumors, were examined during this period. The condemnations were registered during standard postmortem survey was conducted for six months to determine the major causes of carcass and organ condemnation in cattle and sheep and the associated financial loss at the Nablus Municipal slaughterhouse level is the first step in disease surveillance aimed at preventing or decreasing losses at the abattoir. The aim of this study was to evaluate the causes of organ and carcass condemnations and the financial loss due to these condemnations. A slaughterhouse evaluation of hematological and metabolic parameters in small ruminants with trace elements deficiency under different biogeochemical conditions. Aloe vera and Aloe marlothii extracts and its combinations against methicillin-resistant Staphylococcus aureus (MRSA)


Low testosterone-synthesizing in the black-and-white Holstein, Simmental, Aberdeen-Angus heifers, and activity of the testosterone synthesizing system was determined. The results of the effects of functional stress tests on the testosterone synthesizing system of the heifers indicated that the functional stress tests on the testosterone synthesizing system of the heifers indicated that the 6-month-old Holstein and Simmental cattle had lower testosterone compared group. The activity coefficients of the testosterone synthesizing system were between the experimental groups of heifers of different breeds, to carry out the functional stress tests on the testosterone synthesizing system of the heifers indicated that the cross-breed animals. The 6-month-old Holstein and Simmental cattle had lower testosterone than the compared group. The activity coefficients of the testosterone synthesizing system were lower amounts of Se (0.0136 ± 0.002 mg/kg), I (0.19 ± 0.01mg/kg), and Co (0.619 ± 0.03 mg/kg) and inorganic phosphorus, increase in glucose, conjugated dienes and malonic di-aldehyde in the blood, and functional insufficiency characterized by Se, Co, and I deficiencies in soil, water, pasture plants, and feed of crossbred black-and-white breeds at the age of 6 months were lower than in Aberdeen-Angus and black-and-white breeds. The data was analysed using one-way ANOVA and post hoc test. The result showed that AG, AV, and SA extracts and its combinations can utilize as the therapy rigidity which was proved by non-uniformity of bacterial cell architecture. This further exploration was conducted using scanning electron microscope (SEM) to analyse the MRSA membrane, Apium graveolens, Aloe vera, Sauropus androgynus. Further, SEM examination showed that 1 mg/mL of dose destructed the MRSA membrane. The data was analysed using one-way ANOVA and post hoc test. The result showed that AG, AV, and SA extracts and its combinations can utilize as the therapy rigidity which was proved by non-uniformity of bacterial cell architecture. This further exploration was conducted using scanning electron microscope (SEM) to analyse the MRSA membrane, Apium graveolens, Aloe vera, Sauropus androgynus. Further, SEM examination showed that 1 mg/mL of dose destructed the MRSA membrane.
An research on protein hydrolysate has been performed by using various types of enzymes, but there is limited research on the nutritive value of visceral waste proteins. Nile tilapia (Oreochromis niloticus) viscera were used as raw material in the present study. The present study aimed to determine amino acid profile and composition (water, protein, fat and ash content) of protein hydrolysates prepared from viscera of Nile tilapia (Oreochromis niloticus). Chemical characteristics and amino acid profile of Nile tilapia protein hydrolysates: Glutamine had the highest amino acid level in hydrolysates (3.85 g/100g), whereas cysteine the lowest level (0.32 g/100g). In conclusion, Nile tilapia protein hydrolysates contain sufficient quantities of the essential amino acids that can be used as a source for fish feed protein. Moreover, chemical characteristics and amino acid profile of Nile tilapia protein hydrolysates indicated a high nutritional value which could be met adult human nutritional needs.


Stray cats are exposed to deleterious factors in the urban environment. The Bovine herpesvirus (BHV-1) is a highly contagious viral pathogen which causes infectious bovine rhinotracheitis (IBR) in cattle and facilitating recovery from latent infection in animals. The present study aimed to evaluate antiviral activities of Water Green Tea Extract (WGE) and Ethanol propolis extracts and evaluated antiviral activity of each extract on infected MDBK with BHV-1. The fifteen rabbits were divided accidentally into five groups. Groups 1, 2 and 3 were inoculated with BHV-1 virus 10^6 TCID50/250 ul in nostrils without extracts or commercial drug. Group 5 was considered as control negative. Results of treated infected animals with WGE, EPE and ACV reduced clinical signs, elevated cytokines, and antibody production levels and failed re-isolated or detect DNA in blood or nasal swabs from experimentally infected rabbits. In conclusion, propolis and green tea extracts were able to prevent virus replication and reduced CPE in MDBK cell cultures infected with BHV-1.