Research Paper

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

Sohsuebngarm D, Kongpechr S and Sukon P.

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 $14 \times 120 \times 2.5$ m, yielding 1,680 m$^2$ 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
"ABH 47" were divided into seven groups of six broilers each according to the principle of Safiullin RT, Kachanova EO, Chalysheva EI and Andreyanov ON. The average daily weight gain in groups 1 to 4 was significantly lower than in the control group. Experimental model of coccidiosis caused by Eimeria tenella were kept isolated throughout the study. Chickens in groups 1, 2, 3, 4, 5 and 6 were orally inoculated with 1,000; 250; 125; 62 and 15 oocysts/ml, respectively. Broilers of group 7 were uninfected and served as control. To determine the number of oocysts, all feces from the broilers of each group were collected and examined daily using the McMaster technique. The average number of oocysts per gram of feces in broilers of the groups 1 to 6 was 4,080; 6,880; 1,780; 1,530; 662 and 80, respectively. Broilers of group 7 were oocyst-negative. The experimental model of coccidiosis in broiler chickens revealed that the number of oocysts excreted with feces is dependent on the dose of infection. The percentage of occurrence of coccidiosis in broiler chickens was significantly higher than in control chickens. Key words: Eimeria tenella, coccidiosis, experimental model, oocysts.


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 stability of PR from 2012 to 2014 could be attributed to the reduction in the number of cases reported in the years 2010 to 2012. The study also explored the impact of climate variability in outbreaks occurrence using the statistical generalized estimating equation model.

**Key words:** Epidemiology and temporal patterns.

The present study indicated that layer chickens and its products are important sources for NTS strains. Prevalence of Multidrug Resistance Non-Typhoidal Salmonella spp. (100%), Aeromonas spp. (60%), and Pseudomonas aeruginosa spp. (1.2%) were collected from five layer chicken farms. Isolation of NTS was performed followed by neomycin and erythromycin (77.3%), norfloxacin and ampicillin (68.2%) across the study sites. Kanamycin and gentamicin remained sensitive by 95.5% and 90.9%, respectively. Antibacterial susceptibility, Bacterial isolates, Broiler, Cellulitis, Sensitivity classes.

Bacterial diseases were responsible for the highest economic losses, although other condemnations and standard animal husbandry health care to exclude zoonotic diseases and pathological lesions such as fatty change, incomplete bleeding, discoloration and tumors, were the most common cause of condemnations in cattle. There was no doubt that effective disease control programs and preventive measures should be immediately implemented in the Nablus Municipal Veterinary Institute, in order to prevent future condemnation and financial loss.

Elements deficiency under different biogeochemical conditions. The biogeochemical situation of terrestrial ecosystems of the Lower Volga region was characterized by Se, Co, and I deficiencies in soil, water, pasture plants, and feed of crossbred cattle. These deficiencies were compensated by changes in hematological parameters. Meanwhile, the analyzed trace elements in the organs and tissues of crossbred cattle and sheep were recorded with a decrease in alkali reserve, the content of these trace elements in small ruminants had been compensated by changes in hematological parameters. However, the content of these trace elements in small ruminants had been compensated by changes in hematological parameters.

Activity of Aloe vera, Apium graveolens and Sauropus androgynus alcoholic extracts against methicillin-resistant Staphylococcus aureus (MRSA)

The objective of this article was to investigate functional reserves of the testosterone synthesizing system in different breeds of cattle. The studies were carried out on black-and-white Holstein, Simmental, Aberdeen-Angus heifers, and cross-bred animals. The functional reserves of the testosterone synthesizing system were determined by calculating the activity coefficients of the testosterone synthesizing system in experimental groups of heifers at the age of 6 months. The studies were carried out on black-and-white Holstein, Simmental, Aberdeen-Angus heifers, and cross-bred animals. The functional reserves of the testosterone synthesizing system were determined by calculating the activity coefficients of the testosterone synthesizing system in experimental groups of heifers at the age of 6 months. Further, SEM examination showed that 1 mg/mL of dose destructed the MRSA membrane.
Research on protein hydrolysate has been performed by using various types of crosslinking enzymes, with an increase in the protein content (62.81% ± 0.18) (dry basis). Furthermore, hydrolysis process of the Nile tilapia viscera led to an increase in the non-essential amino acids (40.16%) and a decrease in the essential amino acids (59.84%).

The nutritional value of protein hydrolysates of Nile tilapia (Oreochromis niloticus) viscera was determined. The chemical characteristics indicated a high nutritional value, which could be met adult human nutritional needs. The amino acid profile and composition (water, protein, fat, and ash content) of protein hydrolysates prepared from viscera of Nile tilapia (O. niloticus) were analyzed. The results showed a high protein content (57.81% ± 0.01 (dry basis)) and the defatting process reduced fat content from 60.24 ± 0.04 to 35.14% ± 0.02 (dry basis). The results indicated that the hydrolysis of Nile tilapia viscera led to a significant increase in the protein content and a decrease in the fat content.

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 (O. niloticus) and to evaluate antiviral activities of Water Green Tea Extract (WGE) and Ethanol Propolis Extract (EPE) against Bovine Herpesvirus-1 (BHV-1) virus comparing to commercial Acyclovir (ACV) as a laboratory animal's model. The cytotoxicity assay was determined the safe dose for WGE, EPE, and ACV. In-vitro and in-vivo experiments showed that WGE and EPE were potent inhibitors of BHV-1, which showed 80% protection against this virus and able to prevent virus replication and reduced CPE in MDBK cell cultures infected with BHV-1.