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.

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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


**Epidemiological Study on Highly Pathogenic Avian Influenza H5N1 Virus with Modeling in five Nile Delta governorates, Egypt (Dakhlia, Qalyobia, Sharkia, Gharbia, and Menofia)**

Where poultry flocks in Egypt. The present study described the spatiotemporal dynamics of HPAI H5N1 virus, revealing that a virus circulates and causes infection throughout the year, indicating changes in virus adaptation of 2.2.1.2 endemic clade. The generalized estimating equation model revealed that a higher 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 the Impact of Climate Variability on Outbreak Occurrence in Some Governorates of Nile Delta, Egypt.

**ABSTRACT**

The present study indicated that layer chickens and its products are important sources for the development of multidrug-resistance non-typhoidal Salmonella spp. at approximately similar rates of 4.7% and 4.4%, respectively. Chicken isolates were identified as E. coli, Enterobacter, and P. mirabilis, particularly against commonly used antibiotics. Therefore, it is recommended to use antibiotic sensitivity tests and accurate therapeutic doses to efficiently treat and control bacterial infection with multiple-drug resistant Salmonella Typhimurium NTS on the surface of the eggshells (7.3%) was higher than that in the other samples. Among poultry workers, were collected from five layer chicken farms. Isolation of NTS was performed by using different cultural and biochemical methods. Moreover, the prevalence of the NTS strains. This study was applied on 290 broiler chickens, aged 30-35 days, with cellulitis. Enterobacter aerogenes was the most predominant pathogen involved in cellulitis, particularly O78 serotype. In addition, E. coli demonstrated 83.1-92.9% resistance to chloramphenicol, tetracycline, and enrofloxacin. Also, streptococci isolates showed 100% resistance to erythromycin, while the human isolates were only S. Enteritidis. The prevalence of the NTS strains.

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**Antibiotic Profile of Bacterial Species Isolated from Broiler Chickens with Cellulitis.**

Aeromonas spp. (60%), P. aeruginosa (100%), Clostridia (72.7%), Enterobacter (100%), Clostridia (72.7%), and Staphylococci (5.4%) followed by neomycin and erythromycin (77.3%), norfloxacin and ampicillin (68.2%) across the poultry production system. The current study aimed to determine the prevalence and tendency of antimicrobial resistance of zoonotic Salmonella spp. from 12 antimicrobials tested, 86.4% resistance was found to streptomycin and oxytetracycline. Totally, 56.3% bacterial isolates were multidrug-resistant, 23.8% Enterobacter had 100% resistance to tetracycline and enrofloxacin. Also, streptococci isolates showed 100% resistance to erythromycin. The study was applied on 290 broiler chickens, aged 30-35 days, with cellulitis. Enterobacter aerogenes was the most predominant pathogen involved in cellulitis, particularly O78 serotype. In addition, E. coli demonstrated 83.1-92.9% resistance to chloramphenicol, tetracycline, and enrofloxacin. Also, streptococci isolates showed 100% resistance to erythromycin. The study was applied on 290 broiler chickens, aged 30-35 days, with cellulitis. Enterobacter aerogenes was the most predominant pathogen involved in cellulitis, particularly O78 serotype. In addition, E. coli demonstrated 83.1-92.9% resistance to chloramphenicol, tetracycline, and enrofloxacin. Also, streptococci isolates showed 100% resistance to erythromycin. The study was applied on 290 broiler chickens, aged 30-35 days, with cellulitis.
**ABSTRACT:**

Identifying and quantifying the causes of condemnation of carcasses and organs at the slaughterhouse level is the first step in disease surveillance aimed at preventing or controlling diseases. The aim of this study was to evaluate the causes of organ condemnation in cattle and sheep at the Nablus Municipal Slaughterhouse at the West Bank in Palestine. A total of 6344 sheep, and 3042 cattle were condemned during the study period. Both parasitic infestations and bacterial diseases associated financial loss due to these condemnations. A slaughterhouse condemnation in cattle and sheep and the associated financial loss at the Nablus Municipal Slaughterhouse at the West Bank in Palestine. A total of 6344 sheep, and 3042 cattle were condemned during the study period. Both parasitic infestations and bacterial diseases associated financial loss.

**Keywords:** Staphylococcus aureus, Crossref Metadata, Palestinian territories to prevent and decrease the causes of diseases transmitted through meat.

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**Key words:** Functional Reserves, Testosterone, Different Breeds.

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**Key words:** Trace Elements Deficiency, Small Ruminants, Biogeochemical Conditions.

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**Key words:** Aloe vera, Apium graveolens, Sauropus androgynus, MRSA.
A research on protein hydrolysate has been performed by using various types of enzymes to break down proteins into smaller peptides and amino acids. The hydrolysate derived from Nile tilapia viscera has been studied for its nutritional and biochemical properties.

**Methods:**

- Use of Alcalase enzyme for hydrolysis.
- Moisture, protein, ash, fat, and non-essential amino acids were measured.
- Essential amino acids were also quantified.

**Results:**

- Moisture content decreased from 77.24% ± 0.06 to 71.45% ± 0.03 (dry basis).
- Protein content increased significantly from 40.16% ± 0.02 to 59.84% ± 0.02 (dry basis).
- Essential amino acids (glycine, valine) were significantly increased.

**Key Words:**

- Protein hydrolysates
- Nile tilapia
- Viscera
- Amino acids
- Nutritional value

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**Detection of Lung Affections of Stray Cats in Mosul City, Iraq.**

From February to March 2013, 19 ailing cats were caught through animal control campaigns and euthanized. Necropsy and histopathologic findings were recorded for the characterization of lung lesions. Pathomorphological examination revealed changes including emphysema (84%), atelectasis (63%), and bronchiectasis (26%).

The study concluded that all lungs collected from stray cats showed pathological changes, reflecting the presence of the pathogen agents and pollution in the environment of this area.

**Key words:**

- Lung
- Lesions
- Stray cats
- Mosul city, Iraq
- Pathological changes

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**The Effects of Green Tea and Propolis Extracts on pro-inflammatory cytokines TNF-α, IFN-γ, IL2, and Immunoglobulin Production in Experimentally Infected Rabbits.**

This study was designed to investigate the antiviral activity of water green tea and ethanol propolis extracts against BHV-1 (Bovine herpesvirus-1) in vitro. The十五 rabbits were divided accidentally into five groups.

- Group 1: Inoculation with BHV-1 virus
- Group 2: Inoculation with BHV-1 virus + WGE (Water Green Tea Extract)
- Group 3: Inoculation with BHV-1 virus + EPE (Ethanol Propolis Extract)
- Group 4: Inoculation with BHV-1 virus + ACV (Commercial Acyclovir)
- Group 5: Inoculation with BHV-1 virus + Placebo

The study showed that the green tea and propolis extract were able to prevent virus replication and reduced CPE in MDBK cell cultures infected with BHV-1. In addition, cellular immune response and re-isolated BHV-1 and detected viral DNA in blood, and nasal swabs from experimentally infected rabbits. In conclusion, propolis and green tea extracts were able to induce cytokines and antibodies levels production.

**Key words:**

- Green tea
- Propolis
- Anti-inflammatory cytokines
- BHV-1
- Rabbit

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**Chemical Characteristics and Amino Acids Profile of Protein Hydrolysates of Nile Tilapia (Oreochromis niloticus) Viscera.**

- Nile tilapia protein, fat and ash content were analyzed.
- Moisture content decreased from 77.24% ± 0.06 to 71.45% ± 0.03 (dry basis).
- Protein content increased significantly from 40.16% ± 0.02 to 59.84% ± 0.02 (dry basis).
- Essential amino acids (glycine, valine) were significantly increased.

**Key words:**

- Protein hydrolysates
- Nile tilapia
- Viscera
- Amino acids
- Nutritional value