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.

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


**ABSTRACT**

Research Paper

The Impact of Climate Variability on Outbreak Occurrence in Some Governorates of Nile Delta, Egypt.

Avian Avian Cellulitis


Antibiotic sensitivity, Egg, Layer poultry, Non-typhoidal

**Key words:**

- World Vet. J.
- DOI:
- Volume 9 : Issue 4, December 2019

**AVIAN CELULITIS**


**Key words:**

- Antibiotic Profile of Bacterial Species
- Isolated from C. Enteritis, C. Typhimurium, C. Gallinarum
- NTS on the surface of the eggshells (7.3%) was higher than that in the other samples. Among bacterial isolates, C. Enteritidis isolated from cloacal samples and stool samples showed the prevalence of 4.7% and 4.4%, respectively. Chicken isolates were identified as C. Enteritis, C. Typhimurium, C. Gallinarum spp. Isolation of NTS was performed using modified sulphadiazine agar (MSA). The prevalence of NTS spp. was 3.2% for eggshell samples, 6.0% for egg content samples, and 7.3% for surface samples. Serological typing of E. coli identified nine O serotypes, namely O78, O78:K1, O157, O111, O121, O26, O103, O145, and O157:K1. The antibiotic susceptibility profile revealed that C. Enteritis, C. Typhimurium, C. Gallinarum spp. isolates showed 100% resistant to tetracycline, enrofloxacin, and cefotaxime. This study demonstrated high prevalence of multidrug-resistant bacteria among isolates, particularly against commonly used antibiotics. Therefore, it is recommended to use antibiotic sensitivity tests and accurate therapeutic doses to efficiently treat and control bacterial infections.
Abuseir S. conducted a survey for six months to determine the major causes of carcass and organ condemnations. The results of this study showed that the parasitic infestations were the most common cause of condemnations in sheep, and bacterial diseases were the most common cause of condemnations in cattle. There was no doubt that effective meat inspection, proper disposal of organ infestations, and the use of antibiotics could help prevent and decrease the causes of diseases transmitted through meat.

Key words: Carcass and organ condemnation, Cattle and sheep, Economic losses, Palestine, Biogeochemistry, Goat, Metabolism, Micronutrient deficiency, Sheep, Trace elements, Selenium, Iodine, Cobalt, Zinc, Copper, Manganese.

The emphasis should be placed on effective meat inspection, proper disposal of organ infestations, and the use of antibiotics in the Palestinian territories to prevent and decrease the causes of diseases transmitted through meat.

ABSTRACT:

In this study, the major causes of carcass and organ condemnation in cattle and sheep in the Northern part of Palestine were determined. The results showed that parasitic infestations were the most common cause of condemnation in sheep, while bacterial diseases were the most common cause of condemnation in cattle. The use of antibiotics and effective meat inspection could help prevent and decrease the causes of diseases transmitted through meat.

Vorobyov V, Vorobyov D, Polkovnichenko P and Safonov V. studied the biogeochemical situation of terrestrial ecosystems of the Lower Volga region. The results showed that the region was characterized by Se, Co, and I deficiencies in soil, water, pasture plants, and feed of crossbred sheep of the Soviet Aksaray and Zaanen German White Improved goats. The deficiency of these elements could affect the health and production of livestock in the region.

SE, Co, and I deficiencies are known to affect the health and production of livestock. Crossbred animals with a decrease in alkali reserve, the content of total protein and lipids, vitamins A, E, C, B12, total calcium, and inorganic phosphorus, increase in glucose, conjugated dienes and malonic di-aldehyde in the blood, and functional insufficiency of the testes were recorded. The analyzed trace elements in the organs and tissues of crossbred sheep and goats showed that the organs and tissues of sheep had a lower content of these elements than those of goats.

Further, SEM examination showed that 1 mg/mL of dose destructed the MRSA membrane in vitro. The results of this study indicated that AV, AG and SA extracts and its combinations can utilize as the therapy for MRSA. The data was analysed using one-way ANOVA and post hoc test. The result showed that AG, Apium graveolens, and Sauropus androgynus Alcoholic Extracts extract combinations did not consistently increase phytochemical content, antimicrobial effect, and DPPH scavenging activity. The activity coefficients of the testosterone synthesizing system were determined to be 1.4, 1.5, and 1.6 for sheep, goats, and crossbred animals, respectively. The results of the effects of different biogeochemical conditions on the metabolic condition and the content of the elements were consistent with the results of the effects of different biogeochemical conditions on the metabolic condition and the content of the elements.

ABSTRACT:

The aim of this study was to elucidate the chemical compounds, antioxidant activity and efficacy of Aloe vera, Apium graveolens and Sauropus androgynus alcoholic extracts against methicillin-resistant Staphylococcus aureus (MRSA). This study also aimed to elucidate the chemical compounds, antioxidant activity and efficacy of Aloe vera, Apium graveolens and Sauropus androgynus alcoholic extracts against methicillin-resistant Staphylococcus aureus (MRSA). The results showed that the extracts and its combinations could be used as the minimum dose to inhibit colonisation of MRSA.

Further, SEM examination showed that 1 mg/mL of dose destructed the MRSA membrane in vitro. The results of this study indicated that AV, AG and SA extracts and its combinations can utilize as the therapy for MRSA. The data was analysed using one-way ANOVA and post hoc test. The result showed that AG, Apium graveolens, and Sauropus androgynus Alcoholic Extracts extract combinations did not consistently increase phytochemical content, antimicrobial effect, and DPPH scavenging activity. The activity coefficients of the testosterone synthesizing system were determined to be 1.4, 1.5, and 1.6 for sheep, goats, and crossbred animals, respectively. The results of the effects of different biogeochemical conditions on the metabolic condition and the content of the elements were consistent with the results of the effects of different biogeochemical conditions on the metabolic condition and the content of the elements.
An research on protein hydrolysate has been performed by using various types of enzymes on Nile tilapia (Oreochromis niloticus) visceras. World Vet. J., 9(4): 324-328. http://www.science-direct.com

<table>
<thead>
<tr>
<th>Viscosa Nile-tilapia</th>
<th>Alcalase enzyme</th>
</tr>
</thead>
</table>

- Moisture ↓
- Fat ↓
- Ash ↓
- Protein ↑

Non-essential amino acids (40.16 %)
- Histidine
- Isoleucine
- Leucine
- Lysine
- Methionine
- Phenylalanine
- Tyrosine
- Threonine
- Tryptophan
- Arginine
- Valine

Essential amino acids (59.84 %)
- Arginine
- Histidine
- Isoleucine
- Lysine
- Methionine
- Phenylalanine
- Threonine
- Tryptophan
- Tyrosine
- Valine


<table>
<thead>
<tr>
<th>Lesion</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bronchopneumonia</td>
<td>63%</td>
</tr>
<tr>
<td>Granulomatous pneumonia</td>
<td>15%</td>
</tr>
<tr>
<td>Verminous pneumonia</td>
<td>15%</td>
</tr>
<tr>
<td>Alveolitis</td>
<td>15%</td>
</tr>
<tr>
<td>Proliferative pneumonia</td>
<td>10%</td>
</tr>
<tr>
<td>Pleuropneumonia</td>
<td>5%</td>
</tr>
</tbody>
</table>

Al-Mallah KH and Saeed MGh. (2019). 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 collected lungs. The results indicated lesions in all the lung samples. Pathomorphogical characterization included emphysema (84%), atelectasis (63%), and bronchiectasis (26%), petechiae (31%), and fibroplasia (26%). Hemosiderosis and parasitic infestation were also detected. The study concluded that all lungs collected from stray cats showed pathological adaptation was characterized by hyperplasia of alveolar cells (52%), bronchial epithelium hyperplasia (31%) and fibroplasia (26%).

Key words: Detection of Lung Affections of Stray Cats in Mosul City, Iraq.

Zawdar GS, Ahle El-Bihik KAM, Al-Abd Shky S, Sowig TK and Mahmoud AI. (2019). The Effects of Green Tea and Propolis Extracts on Pro-inflammatory cytokines TNFa, IFNγ, IL2, and Immunoglobulin Production in Experimentally Infected Rabbits.

Figure A: Detection of the antiviral effect of green tea extract and propolis extracts against BHV-1

Figure B: Histopathomorphological lung sections. (A) Normal control (B) Influenza A Virus (H1N1) infection (C) Influenza A Virus (H1N1) and Propolis (D) Influenza A Virus (H1N1) and Green Tea (E) Influenza A Virus (H1N1) and Acyclovir (F) Influenza A Virus (H1N1) and Propolis + Green Tea

Figure C: Cellular immune response

Figure D: Detection of the antiviral effect of green tea extract and propolis extracts against BHV-1

Figure E: Histopathomorphological lung sections. (A) Normal control (B) Influenza A Virus (H1N1) infection (C) Influenza A Virus (H1N1) and Propolis (D) Influenza A Virus (H1N1) and Green Tea (E) Influenza A Virus (H1N1) and Acyclovir (F) Influenza A Virus (H1N1) and Propolis + Green Tea

ICD-10 codes: Influenza A virus (H1N1) = J10, Propolis = T31.4, Green Tea = T31.5, Acyclovir = J06.03, Influenza A Virus (H1N1) and Propolis + Green Tea = T31.4 + T31.5, Influenza A Virus (H1N1) and Green Tea = T31.4 + T31.5, Influenza A Virus (H1N1) and Acyclovir = J06.03 + J10, Influenza A Virus (H1N1) = J10.