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
Experimental Model of Coccidiosis Caused by *Eimeria tenella* in Broiler Chickens.

The present study examined the effect of replacing clover hay with Peanut Vein Hay and enzymatic additives in the diet on coccidiosis in broiler chickens. The experimental diet included different levels of PVH and enzymatic additives, and the results were compared to the control diet. The study aimed to determine the optimal level of PVH and enzyme additives to reduce coccidiosis and improve broiler performance.

Key words: Coccidiosis, *E. tenella*, Experimental model, Oocysts.

Experimental group were daily collected from the days 6 to 12 after infection. Counting was performed 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 94, respectively. The average daily weight gain in groups 1 to 4 was significantly lower compared to the non-infected control group. 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 study concluded that the inclusion of PVH and enzymatic additives in the diet can significantly reduce the incidence and severity of coccidiosis in broiler chickens, thereby improving their growth performance and carcass traits.
Antibiotic Profile of Bacterial Species Isolated from Broiler Chickens with Cellulitis.

Key words: Antibacterial susceptibility, Bacterial isolates, Broiler, Cellulitis, Sensitivity classes.


DOI: https://dx.doi.org/10.36380/scil.2019.wvj34

DOI: https://dx.doi.org/10.36380/scil.2019.wvj35

DOI: https://dx.doi.org/10.36380/scil.2019.wvj36
ABSTRACT:
Slaughterhouse at the West Bank in Palestine. A total of 6344 sheep, and 3042 cattle were
condemned during this period. The financial loss due to the rejection of carcass and organs from the slaughtered animals
during the study period was estimated to be 16356 USD. Both parasitic infestations and
disease control programs and preventive measures should be immediately implemented in the
Palestinian territories to prevent and decrease the causes of diseases transmitted through meat.

Major Causes and Associated Economic Losses of Carcass and Organ Condemnation in
livers, 692 lungs, 46 hearts, 273 kidneys, and 96 spleens were condemned during this period.

Key words:
Carcass condemnations and the financial loss due to these condemnations. A slaughterhouse
bacterial diseases were responsible for the highest economic losses, although other
also encountered. The results of this slaughterhouse study showed that the parasitic
at the slaughterhouse level is the first step in disease surveillance aimed at preventing or
Research Paper
DOI:
infestations were the most common cause of condemnations in sheep, and bacterial diseases

Vorobyov V, Vorobyov D, Polkovnichenko P and Safonov V. Elements Deficiency under Different Biogeochemical Conditions. [Full text-
ABSTRACT:
Evaluation of Hematological and Metabolic Parameters in Small Ruminants with Trace
these trace elements in small ruminants had been compensated by changes in hematological
in glucose, conjugated dienes and malonic di-aldehyde in the blood, and functional insufficiency
Selenium (Se), Iodine (I), Cobalt (Co), zinc, copper, and manganese content in the Lower Volga
Sauropus androgynus
 DOI:
MRSA membrane after the treatment with 10,000× of magnification.

Key words:
MRSA, methicillin-resistant

This study aimed to elucidate the chemical compounds, antioxidant activity and efficacy of
against MRSA.

procedure. The MRSA isolates were tested against AV, AG, SA extracts and its combinations
2,2-diphenyl-1-picrylhydrazyl (DPPH) scavenging activity using a standard laboratory
in vitro
extract has the highest phytochemical screening and antimicrobial effects compared to the other

All the herbs were extracted and determined its antioxidant constituent and

Further, SEM examination showed that 1 mg/mL of dose destructed the MRSA membrane
in vitro
The data was analysed using one-way ANOVA and post hoc test. The result showed that AG

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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 of Nile tilapia (Oreochromis niloticus). Alcalase enzyme was used as the hydrolytic enzyme at a concentration of 1.5% (w/v), pH 7.9, and temperature of 55.80 °C for 1.5 h. Fresh Nile tilapia viscera had a high protein content of 35.14% ± 0.02 (dry basis) and the defatting process reduced fat content from 60.24 ± 0.04 to 27.81% ± 0.01 (dry basis). The results indicated that the hydrolysis of Nile tilapia viscera led to an increase in the protein content (62.81% ± 0.18) (dry basis). Furthermore, hydrolysis process of tilapia viscera by Alcalase enzyme at a concentration of 1.5% (w/v) and pH 7.9 for 1.5 h led to the production of high-quality protein hydrolysates. Chemical characteristics and amino acid profile of Nile tilapia protein hydrolysates indicated a high nutritional value which could be met adult human requirements.


**Key words:** Chemical characteristics, Protein hydrolysates, Tilapia, Viscera.

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Stray cats are exposed to deleterious factors in the urban environment. The present study was aimed to describe the pathological features of lung lesions in 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 included emphysema (84%), atelectasis (63%), and bronchiectasis (26%). Hemosiderosis and parasitic infestation were also detected. The study concluded that all lungs collected from stray cats showed pathological lesions.


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**Key words:** Research Paper, Lesions, Lung, Pneumonia, Stray cats, Respiratory disease, Respiratory infection, Stray cats, Urban environment, Veterinary Medicine, "World Vet. J.

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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. The present study aimed to evaluate antiviral activities of Water Green Tea Extract (WGE) and Ethanol Propolis Extract (EPE) against BHV-1 virus comparing to commercial Acyclovir (ACV) and able to prevent virus replication and reduced CPE in MDBK cell cultures infected with BHV-1. The fifteen rabbits were divided accidentally into five groups. Groups 1, 2 and 3 were inoculated with BHV-1 virus 10^7 TCID50/250 ul in nostrils without extracts or commercial drug. Group 4 was inoculated with BHV-1 virus 10^7 TCID50/250 ul in nostrils and received propolis ethanol, water green tea extracts and ACV tly, there is no antiviral prophylactic treatment available capable of the complete cure of the viral disease 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 Extract (EPE) against BHV-1 virus comparing to commercial Acyclovir (ACV) and able to prevent virus replication and reduced CPE in MDBK cell cultures infected with BHV-1. The fifteen rabbits were divided accidentally into five groups. Groups 1, 2 and 3 were inoculated with BHV-1 virus 10^7 TCID50/250 ul in nostrils without extracts or commercial drug. Group 4 was inoculated with BHV-1 virus 10^7 TCID50/250 ul in nostrils and received propolis ethanol, water green tea extracts and ACV respectively. Group 5 was considered as control negative. The study showed water green tea, and ethanol propolis extracts were potent inhibitor on BHV-1, which showed 80% protection against this virus and able to induce cytokines and antibodies levels production. In conclusion, propolis and green tea extracts were able to prevent virus replication and reduced CPE in MDBK cell cultures infected with BHV-1.

**Key words:** Research Paper, Acyclovir, BHV-1, ELISA, Green tea, Propolis, In vivo, In vitro, Interferon, Neutralization assay, Propolis, Rabbit, Cytotoxicity assay, Acyclovir, BHV-1, ELISA, Green tea, Propolis, Interferon, Neutralization assay, Rabbit, In vivo, In vitro.

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**Key words:** Chemical characteristics, Protein hydrolysates, Tilapia, Viscera.