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
Experimental Model of Coccidiosis Caused by Eimeria Tenella in Broiler Chickens.


The use of herbal ingredients to improve poultry production is increasingly important. The present study designed an experimental model of coccidiosis in broiler induced by Eimeria tenella, 2019; pii: S232245681900033-9


The present study was carried out to isolate and identify the bacterial agents involved in field cases of avian cellulitis in broiler chickens and also to examine isolated bacteria for antibiotic susceptibility. The study was applied on 290 broiler chickens, aged 30-35 days, which suffered 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 Enterobacteriaceae bacterium, 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.

Disc diffusion test was used to study the sensitivity pattern of bacterial isolates with the following antibiotics: kanamycin, gentamicin, neomycin, clindamycin, tetracycline, enrofloxacin, cefotaxime, and chloramphenicol. The antibiotic profile of bacterial species isolated from broiler chickens with cellulitis was presented. It was found that both Enterobacteriaceae and Coagulase-negative staphylococci had a high level of antibiotic resistance. Enterobacteriaceae spp. (60%) showed 100% resistance to tetracycline, enrofloxacin, and cefotaxime. Additionally, Coagulase-negative staphylococci isolates showed 100% resistant to tetracycline and enrofloxacin. Also, streptococci isolates showed 100% resistance to clindamycin, chloramphenicol, and gentamicin. Enterobacteriaceae spp. isolates showed 100% resistant to tetracycline and enrofloxacin. Also, streptococci isolates showed 100% resistant to clindamycin, chloramphenicol, and gentamicin.

The study demonstrated high prevalence of multidrug-resistant bacteria among isolates, particularly E. coli, Enterobacter spp., and Coagulase-negative staphylococci. It was concluded that the indiscriminate use of antibiotics in poultry farms has contributed to the emergence of multidrug-resistant bacteria, posing a significant challenge in the treatment of bacterial infections in poultry. Therefore, there is a need for effective antibiotic stewardship practices and the development of novel antimicrobial agents to combat antibiotic-resistant bacterial infections in poultry.


Key words: pathological examination done by the veterinarians at the slaughterhouse. The results of organ condemnation during the study period showed that seven whole carcasses, 77 whole offal, 208 livers, 692 lungs, 46 hearts, 273 kidneys, and 96 spleens were condemned during this period. The condemnations were registered during standard postmortem pathological lesions such as fatty change, incomplete bleeding, discoloration and tumors, were examined during this period. The condemnations were registered during standard postmortem examination.

The emphasis should be placed on effective meat inspection, proper disposal of organ condemnations and standard animal husbandry health care to exclude zoonotic diseases and bacterial diseases were responsible for the highest economic losses, although other disease control programs and preventive measures should be immediately implemented in the disease control programs and preventive measures should be immediately implemented in the non-diseased and non-diseased groups.

Abuseir S. The objective of this article was to investigate functional reserves of the testosterone synthesizing system in the blood of heifers in different breeds. World Vet. J. 19(6): 297-301. www.wjscience-tech.com

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In the present study soil, water, pasture plants, organs and tissues of crossbred cattle and sheep were examined during this period. The condemnations were registered during standard postmortem examination. The condemnations were registered during standard postmortem examination. The condemnations were registered during standard postmortem examination. The condemnations were registered during standard postmortem examination. The condemnations were registered during standard postmortem examination.

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

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ABSTRACT:

This study aimed to elucidate the chemical compounds, antioxidant activity and efficacy of Sauropus androgynus (MRSA). Further, SEM examination showed that 1 mg/mL of dose destructed the MRSA membrane after the treatment with 10,000× of magnification.

Staphylococcus aureus (AV)

World Vet. J.

methicillin-resistant against Methicillin–Resistant Staphylococcus aureus. (AV)

Sauropus androgynus (MRSA).

MRSA membrane after the treatment with 10,000× of magnification.

in vitro against MRSA.

methicillin-resistant against Methicillin–Resistant Staphylococcus aureus.

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ABSTRACT:


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ABSTRACT:

Identifying and quantifying the causes of condemnation of carcasses and organs in animals is a very important task. In the present study soil, water, pasture plants, organs and tissues of crossbred cattle and sheep of the Soviet Aksaray and Zaanen German White Improved goats. The deficiency of these trace elements in small ruminants had been compensated by changes in hematological parameters include high Red Blood Cell (RBC) and White Blood Cell (WBC) and biochemical parameters. Meanwhile, the analyzed trace elements in the organs and tissues of crossbred sheep of the Soviet Aksaray and Zaanen German White Improved goats. The deficiency of these trace elements in small ruminants had been compensated by changes in hematological parameters. These trace elements were also responsible for the highest economic losses, although other disease control programs and preventive measures should be immediately implemented in the disease control programs and preventive measures should be immediately implemented in the non-diseased and non-diseased groups.

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