

Sound exposure and water supply modification effect towards the ross broilers growth rate

ABSTRACT

Previous research about the exposure of Mozart music and noise and the effects towards the feeding, growth rate and the stress level of the broilers were explored. Music has the ability to have a relaxing and antidepressant effect on humans, mammals and birds. Reports that music calms animals and improves productivity appear in commercial journals. The present study investigated the growth rate comparisons between the experimented broilers (Group A: water supply modification group; Group B: sound exposure group) and the control broilers (Group C: control group) in terms of weight and raw meat texture measured by shear force. The water supply modification group was given 12 litres of Yasin water twice per day while the sound exposure group were broadcasted with sound of Quran verses. Twenty-seven broilers were randomly selected from each group on Day 24 and weight measurement was carried out every week until the harvest day (Day 39). Group B showed a higher mean weight on Day 24 (1.441 \pm 0.013 kg) than Group A and C. Significant difference in the weight on Day 39 existed for both Group A and B compared to Group C ($p < 0.05$). However, there was no significant ($p > 0.05$) difference of shear force in the same muscles (breast and drumstick raw meat) of the three groups but the shear force of the breast meat for Group A, B and C broilers was lower ($p < 0.05$) than that of their drumstick meat. Broadcasting the sound of the Quran verses in the coop and adding Yasin water to the broilers' drink can be applied to improve the growth rate of broilers for producing better quality poultry.

Keyword: Broilers; Sound; Shear force; Volodkevich bite jaws; Weight