Access to outdoor swimming pond during summer season improved Muscovy ducks performance and health status

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Abstract:

This experiment was conducted to evaluate the effects of different outdoor swimming durations on the performance and health status of Muscovy ducks raised during the hot summer season in Egypt. One hundred and eighty (180) one-month old Muscovy ducks were randomly allotted to four treatments based on the outdoor swimming duration offered to birds as follows: control group (C) where birds were raised by using indoor system without outdoor water pond access. While, birds of the other 3 groups had an access to outdoor swimming pond as follow: birds of treatment one (T1) had access to outdoor swimming pond for 2 hrs/day (10:00 to 12:00 h), birds of treatment two (T2) had access to outdoor swimming pond for 4 hrs/day (10:00 to 14:00 h) and birds of treatment three (T3) had access to outdoor swimming pond for 6 hrs/day (10:00 to 16:00 h). Each treatment includes forty five birds which divided into five replicates of 9 birds each. The results indicated that the different durations of outdoor swimming significantly (P≤0.05) improved the growth performance, dressed carcass, abdominal fat, meat quality (color, flavor and tenderness), lymphocyte, H/L ratio, body temperature, plumage conditions, keal bone length, body depth, foot pad burns, breast blisters score and mortality rate of Muscovy ducks. Moreover, the effects of accessing Muscovy ducks to outdoor swimming pond for 4 hrs/day during hot summer were clearer (better) than the other experimental durations. However, no significant differences in feed consumption, giblets, meat juicines, shank length, hock discoloration and blood hematocrit values were recorded between different treatments. In conclusion, accessing Muscovy ducks to outdoor swimming pond for 4 hrs/day may be a good strategy to improve the ducks’ health status during the harmful hot summer conditions; however, further investigations are still needed to give further data about the behavioral changes and welfare indicators.

Keywords:

Growth performance Health status Outdoor swimming Hot summer condition Muscovy ducks

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