Using different cage floor and litter types for raising Japanese quail during summer season

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Abstract:

The influence of using different cage floor and litter types on growth performance and carcass parameters was studied in 300 Japanese quail chicks from 14 to 56 day of age to alleviate high temperature effects during summer season. The experimental chicks were housed in battery cages and assigned to five groups (60 birds /each) according to the cage floor and litter type. Birds in the first group were raised on wire mesh cage floor and were considered the control (C). While the second and third groups (T1, T2 and T3) were raised on wire mesh cage with wheat straw litter, wire mesh cage with wood sawdust litter and plastic net floors, respectively. All experimental birds were raised under similar environmental and managerial conditions. The results showed that birds raised on wire mesh cage with wood sawdust litter and plastic net throughout the experiment had superior body weight, feed conversion, dressed carcass, body temperature, lymphocyte, hematocrit and mortality percentages compared to birds raised wire mesh cage with or without wheat straw litter and wooden slats floors at any time. Otherwise, the incidence of leg problems, breast blisters and airborne dust particulates, litter pH, bacterial count and ammonia concentrations inside the poultry house were decreased. However, no significant differences (P>0.05) existed in litter pH, plumage conditions, bone measurements, litter moisture percentage and caking score. It could be concluded that birds raised on wire mesh cage with wood sawdust litter and plastic net had high performance and health efficiency. Consequently, it could be recommended to manage Japanese quail on wire mesh cage with wood sawdust litter and plastic net during high summer temperatures.

Keywords:

Growth performance, floor and litter type, Japanese quail

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