Sustainable floor type for managing turkey production in a hot climate

Farghly M. F. A., Kh. M. Mahrose, Cooper, Ross; Ullah, Zafar; Rehman, Zaib; Ding, Chan

Abstract:

Floor type management is a significant factor in turkey production in hot climates exceeding 30°C. In the current investigation, a total of 360 turkeys aged 4 weeks were randomly distributed to investigate growth performance, carcass characteristics, health traits and airborne conditions. Birds of the 1st group were raised on the littered floor (control; C), whilst the 2nd (T1), 3rd (T2), 4th (T3), 5th (T4) and 6th (T5) groups were raised on cement, wire net, rubber mat, plastic and wooden slatted floors, respectively. Results indicated that, growth performance and meat quality were improved by increasing body weight, daily body weight gain, feed conversion ratio, tenderness and juiciness values with plastic and wooden slatted floors. Moreover, using plastic and wooden slatted floors attenuated body temperature, airborne dust particulates and ammonia concentrations. In conclusion, the placing of plastic, wooden slatted floors or wire net on floor reduced the incidence of health disorders and alleviated heat stress effects by decreasing body temperature and H/L ratio. Plastic and wooden slatted floors are highly recommended for managing turkey in a hot climate, due to the results obtained.

Keywords:

Turkey, management, flooring, temperature >30°C, growth, carcass

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