Effect of intermittent feed and light programs on performance of broiler chicks

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Abstract:

A 3 x 3 factorial experiment was conducted to evaluate the performance of 270 Cobb broiler chicks exposed to three lighting regimes viz. continues light (24L: 0D), restricted light (12L: 12D), intermittent light (6 L: 6 D) and fed three feeding regimes: continues feed (24F: 0NF), restricted feed (12F: 12NF), intermittent feed (6F: 6NF). Each group was replicated three times with 10 birds /replicate. The obtained results indicated that intermittent feed and light significantly (P≤0.05) affected body weight or gain, feed consumption or conversion ratios, dressed carcass, abdominal fat, leg problems, lymphoid organs and body temperature values. However, intermittent feed and light significantly had insignificant (P>0.05) effect on most carcass or meat quality, bone measurements, plumage conditions and blood parameters except meat tenderness, H / L Ratio and blood plasma T3 or T4 values. From the achieved results and economical evaluation, it could be concluded that rearing broilers chicks under intermittent light (6 L: 6 D) with continues feed (24F: 0NF), restricted feed (12F: 12NF), intermittent feed (6F: 6NF) improved growth performance and reduced carcass fat without any adverse physiological effects.

Keywords:

broilers, intermittent feed and light, blood, carcass, growth

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