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BROILER MEAT QUALITY: THE EFFECT OF REARING SYSTEM AND LENGTH OF FATTENING PERIOD

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Abstract: Broiler meat production in recent years has been oriented towards the implementation of non-commercial rearing systems aimed at improving broiler rearing conditions, enhancing meat quality and improving the environment. This study presents productive and slaughter results of broilers reared under two non-commercial systems, including extensive indoor and free-range systems. Length of fattening period was 63 days. On days 49 and 63 of the experiment, male and female broilers were randomly selected from both rearing systems and slaughtered thereafter to be evaluated and compared for the following traits: dressing percentage and percentage yield of primal carcass cuts, as dependent upon rearing system, length of fattening period and broiler sex. The results showed a higher dressing percentage in broilers slaughtered on day 49, regardless of the higher carcass weight of broilers slaughtered on day 63. Broiler sex had a highly significant effect on the percentage yield of breast, thigh and drumstick in the dressed carcass ($P<0.01$), whereas the percentage yield of thighs was also statistically highly significantly affected by rearing system ($P<0.01$). Rearing system, length of fattening period and the interaction of these factors had no significant effect ($P>0.05$) on the percentage yield of primal cuts (breast, thigh, drumstick, wing, back and pelvis), excepting that of pelvis which was significantly affected by rearing system ($P<0.05$).

Key words: broilers, slaughter traits, rearing system, length of fattening period, sex.

Introduction

Poultry meat production in recent years has been increasingly oriented towards evaluating different rearing systems and lengths of fattening period, and their effect on meat quality. Attention has been focused on the development of new broiler rearing systems to improve rearing conditions, reduce environmental pollution and enhance meat