

Effects of Phase Feeding on Carcass Characteristics and Meat Composition of Kampung Chickens

Loi Chia Fei, ¹Engku Azahan Engku Ahmed & ²Shanmugavelu Sithamnaram

¹*Department of Veterinary Preclinical Sciences
Faculty of Veterinary Medicine, Universiti Putra Malaysia*
²*Strategic Livestock Research Centre, MARDI,
Serdang, Selangor, Malaysia*

Abstract

A study on kampung chickens was undertaken to investigate the influence of scheduling of feeds by reducing protein levels during the various phases of growth of the birds until market age, on carcass characteristic and meat quality. A total of 62 3-week-old female kampung chickens were reared in two-tier wire floor cages with two chicks per cage for eight weeks. The chicks were randomly divided into four treatment groups (single-phase, 2-phase, 3-phase and 4-phase) and fed with step-down dietary protein levels (19, 17, 15 and 13%) accordingly. At the end of the study period, ten birds per treatment were randomly sampled for analysis. Carcass yield and component parts (breast, thigh, drumstick, wing, abdominal fat, back and neck) of the birds were determined as percentages of live weights. Meat chemical composition from breast muscles was determined for dry matter, crude protein and crude fat content. No significant differences were found in the percentages of carcass yield, component parts, dry matter, crude protein and crude fat contents between the four phases. It is concluded that phase feeding did not adversely affect carcass yield and meat chemical composition. This feeding strategy could therefore be an economical practice for rearing kampung chickens without sacrificing carcass yield and meat quality.

Keywords: phase feeding, carcass characteristic, meat composition, kampung chickens