Effect of energy to protein ratio using alternative feed ingredients on growth performance and nutrient digestibility in broilers

ABSTRACT

Present study was conducted to evaluate the different levels of energy to protein ratios (EPR) using food waste and black soldier fly larvae meal (FWBSFL) on growth performance and nutrient digestibility of broilers. A total of 160 one-day old broiler chicks were divided randomly to four groups and each group had 8 replicates with 5 chicks per replicate. The control diet was formulated using conventional feed ingredients with EPR of 154 for the starter period and 167 for the finisher period. The other treatments were diets with normal, low, and high EPR (154,143, and 166 for the starter period; 167, 155, and 177 for the finisher period) using FWBSFL. Feed consumption and body weight gain as well as digestibility of crude protein, crude fiber, and fat were decreased due to feeding of FWBSFL diets. Different levels of EPR using FWBSFL decreased growth performance and nutrient digestibility of broilers.

Keyword: Black soldier fly larvae meal; Broiler; Energy to protein ratio; Food waste