

Effect of feeding larvae meal in the diets on growth performance, nutrient digestibility and meat quality in broiler chicken

ABSTRACT

Larvae meal has been reported as a suitable alternative protein source to fish meal and soybean meal. It contains necessary essential amino acids required in poultry feeding. A feeding trial was conducted to assess the effects of feeding different levels of larvae meal on broiler performance, nutrient digestibility, carcass and meat quality, and bacterial count. Day-old male broiler chicks (216) were raised for 42 days. Birds were weighed and randomly allotted into 6 dietary treatments consisting of 6 replicates (pens) per treatment and 6 birds in each replicate. The dietary treatments were supplemented with earth larvae meal by 0% (control group), 2%, 4%, 6%, 8% and 10%. The feed and drinking water were provided ad lib. The findings showed that body weight, average daily gain and total weight gain for group of birds fed 0% larvae meal significantly decreased compared to those chickens fed 8% and 10% larvae meal. A higher crude protein digestibility was found in birds fed with larvae meal. Control group had the highest Enterobacteriaceae count compared to the other treatments. Larvae meal supplementation improved the growth performance, nutrient digestibility and meat quality of broiler chicken and decreased excreta Enterobacteriaceae counts.

Keyword: Broiler; Larvae meal; Meat quality; Nutrients digestibility