Utilisation of earthworm meal in partial replacement of soybean and fish meals in diets of broilers

ABSTRACT

To study the effect of worm meal (WM) as partial replacement of soybean and fish meals in the diets, a total of 245 day-old broiler chicks were randomly assigned to five different treatment groups (0%, 5%, 10%, 15% and 20% WM) in partial replacement of soybean and fish meals for a period of 6 weeks. The final body weight, growth rate and feed efficiency of the 10% and 15% WM groups broiler were better (P<0.05) than that of the control group with no effect on feed intake. The digestibility of crude protein for WM was 63%. 10% WM group gave a higher (P<0.05) lactic acid bacteria counts and showed no significant difference (P>0.05) in Enterobacteriaceae count or fecal pH. These results suggest that WM could be used to replace soybean and fish meals between 10 to 15% in broiler diets.

Keyword: Earthworm; Worm meal; Soybean meal; Fish meal; Broiler