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Effect of Dietary Camel Grass (*Cymbopogon schoenanthus*) on Performance, Parameters and Carcass Characteristics of Broiler Chicks

Mona Ebrahim, Khadiga Abdel Atti, Nahla Hassan

University of Khartoum, Animal Nutrition, Sudan

Abstract

The experiment was conducted to evaluate the response of broiler chicks to dietary dried camel grass (Cymbopogop schoenanthus) as phytogenic antioxidant and growth promoter to improve poultry meat quality. A total of 160 one day old, unisex of breed Arbro-acre was randomly divided into four equal groups 10 birds per replicate. Four experimental diets were formulated to meet nutrient requirements of broiler chicks. The basal diets contained sorghum and groundnut seeds cake and were supplemented with different levels of camel grass (0%, 0.25%, 0.50% and 0.75%). A completely randomised design was used to execute the experiment. Feed and water were provided all the time. Feed intake and body weight were weekly recorded, and weight gain and feed conversion ratio (FCR) were calculated, the experiment lasted for 6 weeks. Two randomly selected birds from each replicate were weighed and slaughtered to determine carcass weight and weight of some internal organs (liver, heart and abdominal fat). Blood samples were collected and serum was obtained for determination glucose, cholesterol and triglycerides. The results showed that dietary treatment had significant (p < 0.05) effect on feed intake, weight gain, carcass weight and dressing percentage. The highest values were found for birds fed 0.75% camel grass. The treatments had no significant effect (p < 0.05) on FCR, liver and heart relative weight (%), and subjective meat quality attributes. Treated diets increased serum cholesterol and glucose percentage, and decreased abdominal fat. The economic evaluation showed that all camel grass dietary levels were economically feasible, but the value profitability ratio of 1.3 found for 0.75% camel grass was the highest.

Keywords: Broiler chicks, cholesterol, glucose

Contact Address: Nahla Hassan, University of Khartoum, Animal Nutrition, Khartoun, 13314 Omdurman, Sudan, e-mail: nahlavetxx@hotmail.com