

International Conference on Livestock Nutrition

August 11-12, 2015 Frankfurt, Germany

Impact of feed enzymes supplementation on zootechnical performance and incidence of foot pad dermatitis in growing Turkeys

M A Tony¹ and Tulip A Abd El-Ghaffar²

¹Benha University, Egypt

²Cairo University, Egypt

An experiment was conducted to determine the effects of commercial feed enzyme mixtures (Nutrikem Dry[®] and Kemzyme Plus[®]) on growing performance of male turkey and monitoring the incidence of foot pad dermatitis as well. One hundred and thirty five, eight-weeks-old turkey toms (hybrid large white tom poults) were weighed and randomly assigned to three dietary treatments (45 tons each). All birds were housed in floor pens bedded by wood shavings (3 replicate pens for each treatment). The first group was fed on four stages basal diets without any enzymes and served as a control group. The second group consumed the same basal diets to which Nutrikem Dry[®] was added (0.5 kg/ton feed). The third group was reared on the same basal diets supplemented with Kemzyme Plus[®] (0.5 kg/ton feed). Feed and water were provided ad-libitum during 16 weeks experimental period. Toms and feed consumed in each replicate were weighed biweekly. Body weight gain and feed conversion were calculated. At the end of the experiment moisture and nitrogen contents of the litter were evaluated. At 24 weeks of age 9 toms from each treatment (3 birds/replicate) were randomly selected to observe pododermatitis and carcass yield. The results of feeding trial revealed that treatments that contained either Nutrikem Dry[®] or Kemzyme Plus[®] had a significantly ($p < 0.05$) improved live weight and weight gain compared to the control group. Feed consumption was significantly ($p < 0.05$) improved by the digestive enzymes used and reflected positively on feed conversion ratio (FCR). Feed enzyme additives reduced significantly ($p < 0.05$) the excretion weight in both treated groups compared with the control group. Both enzyme additives reduced the moisture and nitrogen contents of the litter. Turkey toms in all experimental groups were affected by pododermatitis with varying severity. Enzyme feed additives had positive effect on the reduction of the severity of pododermatitis. In conclusion feed enzyme additives of turkey diets resulted in an improvement in growth performance and feed utilization efficiency. Moreover, feed enzymes improved the litter quality in turkey houses which reflected positively on reduction of foot pad dermatitis.

Biography

M A Tony has completed his PhD in the year 2000 at Federal Agricultural Research Centre (FAL), Braunschweig, Germany. Currently, he is working as Associate Professor of Poultry and Animal Nutrition, Faculty of Veterinary Medicine, Cairo University, Egypt.

mohamed_tony@hotmail.com

Notes: