J Vet Sci Technol 2017, 8:4(Suppl)
DOI: 10.4172/2157-7579-C1-025

Effects of vitamins supplementations on productive and physiological performance of broilers under water salinity stress

Z S H Ismail
Anim. and Poult. Prod. Dep., Fac. of Agric., South Valley Univ., Egypt

The current experiment was conducted to determine the effect of vitamins E and/or C during salinity stress of broiler chicks. One hundred and Twenty -one day old unsexed broiler chicks were used in the experiment. Chicks were divided into four groups of 30 birds each with 10 birds per replicate. Treatments were drinking tap water (control group), 3000 ppm NaCl in drinking water (T1, 3000 ppm salt stress group), 3000 ppm NaCl plus 100 IU/kg of feed DL- α-tocopherol (T2, 3000 ppm VE) and 3000 ppm NaCl plus 500 IU/L of water L-ascorbic acid (T3, 3000 ppm VC). Feed and water intake, live body weights were weekly recorded; weight gain and feed conversion ratio (FCR) were calculated. The experiment was lasted for 6 weeks. Six birds from each treatment were randomly selected and weighed for determining carcass dressing percentage. The results of the present studies indicated that, productive performance not adversely affected by NaCl supplementation in drinking water. Furthermore, adding Vita E or C improved BW and BWG compared with T1, Birds in T1 had the lowest WI. Contrary, birds in T3, had the highest WI compared with other groups. There was no significant difference between T2 and T3 in water intake. Birds in T4 group had the best FC comparing with other groups. Additionally, there were a significant decrease ($P<0.01$) in Ca concentration of birds received Vita E or C compared to other treatments. These results indicate that productive and physiological performance of broiler chicks was not adversely affected by 3000 ppm NaCl in drinking water supplemented with vita C and /or vita E.

zien7300@yahoo.com

Notes: