

Effects of ascorbic acid (vitamin C) supplementation in layer and broiler diets in the tropics

ABSTRACT

An experiment was conducted to study the effects of Ascorbic Acid (AA) supplementations in the layer and broiler diets kept in the natural hot humid tropical climate (20-35°C). The layers and the broilers were fed on normal commercial diet as control while supplementation of 400 and 600 mg/kg Ascorbic Acid made up the experimental diets. The results showed that AA supplementation in the layers significantly reduced egg weight and increased Haugh unit values of the eggs, but produced no significant effects on feed intake, body weight, egg production, respiratory rate and body temperature. The shell thickness was slightly improved, though not significantly, with AA supplementation. AA supplementation in broilers improved body weight gain and FCR and reduced the effect of heat stress as shown by lower body temperature and respiratory rates.

Keyword: Ascorbic acid; Layers; Broilers; Egg production; Body temperature; Respiratory rate