
LEUCAENA SEED AS A FEED INGREDIENT FOR BROILER CHICKS

The purpose of the experiment was to study leucaena seed as a feed ingredient for broiler chicks. Two trials were held and a total of 600 Hubbard broiler chicks were used.

The day-old chicks of each trial were divided into 5 treatments on the basis of sex and liveweight. The chicks of the 1st trial in treatment A received a common diet as control. Treatments B, C, D, and E were fed diets containing 5, 10, 15, or 20% of leucaena seed (Hawaii type) which had been soaked in water for 24 hours, boiled for 60 minutes, washed and dried prior to feeding. All the 5 experimental diets were equal in crude protein content. The chicks in the 2nd trial were fed the same diets as in the 1st trial but 0.3% of ferrous sulfate was added to each of the 5 diets.

Body weight of each chick was determined at two week intervals throughout 8 weeks of the feeding trial. Feed consumption records were kept on a pen basis. The proximate analysis, trace minerals and amino acid composition of the experimental leucaena seed were also investigated. The results indicated that as the leucaena seed was used to replace 5 to 20% of feed ingredient in the diet on a crude protein content basis, the growth and feed conversion rate of the chicks decreased. All differences of weight gain and feed conversion rate among the 5 treatments of the two trials were highly significant.

Addition of 0.3% ferrous sulfate to the leucaena seed diets did not improve the growth and feed efficiency significantly. The chicks fed the diet containing 20% of the leucaena seed had high percentage of mortality.

Further study on the performance of feeding different varieties of the leucaena seed to the different breeds of chickens and its interaction will be conducted.