

REPLACEMENT OF AQUATIC MOSS FOR THE SOYA MEAL AS A PROTEIN SOURCE IN BROILER RATION

By

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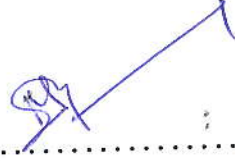
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Abstract

In broiler production, the feed cost comprises 70-80% of total cost of production. At present the feed mills use imported fishmeal as the major source of animal protein.

The potentiality of using aquatic moss as a major source of protein has not been studied in detail. The use of Soya as a major source of protein will bring down the cost of production of broilers. Hence, a study was conducted to study the suitability of replacing Soya with locally prepared aquatic moss in broiler ration.

The experiment was conducted at the Livestock Farm of Department of Animal Science, Eastern University Sri Lanka, for a period of 45 days beginning from 27th September to 11th November 2002.

Local aquatic moss (*Chaetomorpha* spp) was collected from Mailampavelli lagoon. The nutrient composition of *Chaetomorpha* spp was determined by proximate analysis. The crude protein, ether extract, ash and salt content on dry matter basis of aquatic moss were 32.11, 5.6, 4.79 and 0.175% respectively.

The experiment consisted of five treatments including a control ration (100% Soya meal) and four experimental rations. In the experimental ration Soya meal was replaced by aquatic moss on weight basis at the proportions of 20, 30, 40 and 50%. Each treatment consisted of two replicates (10 chicks were allotted to each replicate).

Records were maintained for feed intake and weight of birds, starting from 20th day of the experimental period. Data were collected at weekly interval.

The effects of treatments on feed consumption, weight gain, and feed conversion efficiency were studied. The overall mean value of the above traits were 9.42kg, 0.35, 2.98 respectively.

The effects of treatment and week on the above mentioned traits were studied separately. Based on the results it was concluded that treatment three (Soya meal: aquatic moss: 60%:40%) is the best replacement combination. in addition suggestions were made for further studies.

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