

ECONOMICS OF ORGANIC BROILER FEEDING

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ABSTRACT

Broiler industry is fastest growing livestock subsector in Sri Lanka and chicken meat is most widely used meat type in Sri Lanka. However, organic broiler production is still under developed in Sri Lanka. Organic production standards were established by the international organizations such as International Federation of Organic Agriculture Movement and Codex Alimentarius which accredited the organic production systems in worldwide.

Experiment was conducted in Veterinary Research Institute by using 90 cob broilers for a period of 35 days. The chicks were randomly divided into 3 treatment groups (A, B, and C) each having 30 chicks. Each treatment has 10 replicates. Three dietary treatments were formulated, treatment A (control diet) B and C semi organic diets based on the international organic standard. Treatment B includes Herb methionine and plant protein and treatment C include germinated rice, Brewer's Yeast, and Bioplex instead of vitamin and mineral premixes. Proximate composition of dietary treatments, average body weights of birds, feed intake, body weight gain, feed to gain ratio, dressing percentages, economical performance were measured.

Statistically significant difference ($p < 0.05$) in average body weight was observed in all the ages. Treatment A was shown higher average body weight and lower in treatment C. Higher feed intake and cumulative feed intake was recorded by treatment A and lower in treatment C and difference was statistically significant ($p < 0.05$) except 1 week. Higher body weight gain was shown by treatment A and lower in treatment C statistically significant difference ($p < 0.05$) exist except day 4 and day 45. Better feed to gain ratio was recorded by treatment and statistically significant ($p < 0.05$) at initial 4 weeks. It is prominent that the cumulative feed to gain ratio was suddenly increased at 6th week. Live weight and carcass weights are statistically different ($p < 0.05$) and highest live weight and carcass weight was recorded by treatment A. dressing percentages are not statistically significant. Liver weight and gizzard weight are statistically difference ($p < 0.05$) and highest liver weight was recorded by treatment A and highest gizzard weight recorded by treatment B. Higher net profit was shown by treatment A and net profit was concededly lower in treatment C due to the higher feed cost. For sustain the organic broiler sector need to move alternative cheap feed ingredients and further research needed to investigate the alternative feed ingredients.