

## Effect of Feeding *Alternanthera sessilis* Leaf Meal (ASLM) on Growth Performance of Japanese Quails (*Coturnix coturnix japonica*)

N. Mayooraan\*, T. Sivajanani, S. Anand Kumar and S. Piratheepan

Department of Animal Science, University of Jaffna, Sri Lanka.

\*mayooran248@gmail.com

Japanese quail production has been extensively practiced in worldwide as its meat is lean and low in cholesterol. Many efforts are made to use different leaf meals in their diet to enhance the performance. The present study was conducted with the aim of assessing the effect of feeding *Alternanthera sessilis* leaf meal (ASLM) on growth performance of Japanese quails (*Coturnix coturnix japonica*). A total of 96 unsexed, fourteen days old Japanese quail chicks were randomly assigned to four equal treatments of 24 birds and further subdivided into four replicates according to a completely randomized design. The first (control) treatment (T1) was a diet without ASLM while ASLM was added in diets at levels of 1%, 3% and 5% in the second (T2), third (T3) and fourth (T4) treatments, respectively. Ad-libitum feeding was practiced till the end of sixth week. Body weight and feed consumption were recorded at weekly intervals, while body weight gain and feed conversion ratio (FCR) were calculated. On forty second day, quails were slaughtered, and the dressing percentage was calculated. The results indicated that the supplementation of ASLM in Japanese quail diets significantly ( $p < 0.05$ ) affected the feed intake, body weight, body weight gain and feed conversion ratio. T4 had the lowest feed intake than other treatments on the 22-28, 29-35 and 36-42 days, whereas on 35<sup>th</sup> and 42<sup>nd</sup> day it had the highest ( $p < 0.05$ ) body weight of  $167.49 \pm 17.97$  g and  $181.85 \pm 16.08$  g, respectively. On 29<sup>th</sup> to 35<sup>th</sup> day the body weight gain of T4 was significantly higher ( $p < 0.05$ ) than other treatments. Feed conversion ratio was decreased with increasing level of ASLM where T4 had the lowest ( $p < 0.05$ ) FCR on 21-28 and 29-35 days. However, ASLM supplementation had no significant ( $p > 0.05$ ) influence on the dressing percentage and it was between 70-73%. This study revealed that supplementing diet with 5% ASLM enhanced the growth performance of Japanese quails.

**Keywords:** *Alternanthera sessilis*, Feed conversion ratio, Growth performance, Japanese quails