



# KrishiKosh (कृषिकोश)

(/) An Institutional Repository of Indian National Agricultural Research System



(/)

[Advanced Search \(/advanced-search\)](/advanced-search)

[Krishikosh \(/\)](#) / [Birsa Agricultural University, Ranchi \(/handle/1/93542\)](#) / [Thesis \(/handle/1/93550\)](#)

Please use this identifier to cite or link to this item: <http://krishikosh.egranth.ac.in/handle/1/5810026278>

Authors: VIJAY, LALIT (/browse?type=author&value=VIJAY%2C+LALIT)

Advisor: Sinha, A.K. (/browse?type=author&value=Sinha%2C+A.K.)

Title: EFFECT OF FEEDING TAMARIND (Tamarindus Indica) SEED MEAL IN GROWING KIDS

Publisher: Birsa Agricultural University, Kanke, Ranchi, Jharkhand

Language: en\_US

Type: Thesis

Pages: 71

Agrotags: null

Keywords: EFFECT OF FEEDING TAMARIND (Tamarindus Indica) SEED MEAL IN GROWING KIDS

**Abstract:** The present research was carried out to study the effect of feeding tamarind (*Tamarindus Indica*) seed meal in growing kids on production parameters, biochemical parameters and nutrient utilization of the kids. For this purpose, eighteen weaned male growing kids of about 4 months of age were randomly assigned to three treatment groups (T1, T2 and T3) in equal number. Group T1 served as control having conventional feed ingredients as per ICAR (1998) feeding standard while tamarind seed meal was incorporated at 1/3rd and 2/3rd (w/w) in groups T2 and T3, respectively, replacing wheat bran. Feeding trial continued for 90 days period followed by a metabolic trial adopting standard procedures. Body weight of all the kids was recorded at fortnightly intervals. Blood samples were analyzed for various haematological and biochemical constituents at the start and end of the experimental period to assess the health status due to various diets. Digestibility of nutrients, average plane of nutrition, balance of nitrogen, calcium and phosphorus, feed conversion efficiency and economics of feeding were recorded. The total consumption of feed was found non-significant among three groups. The differences in DM intake as per cent of body weight in different groups also did not differ significantly indicating that intake satisfied their requirements for DM. The initial average body weights of group T1, T2 and T3 were 8.12, 8.15 and 8.25 kg and the final body weights at the end of the experiment were 12.11, 12.25 and 12.15 kg, respectively. Both were found to be nonsignificant. The average daily gain in live weight were found to be  $41.02 \pm 5.82$ ,  $44.48 \pm 5.46$  and  $41.71 \pm 7.39$  (g) in three groups (T1 to T3), respectively, which did not differ significantly. The highest daily gain in body weight was noted in group T2 followed by groups T3 and T1. This indicates that incorporation of tamarind seed meal in the ration was not harmful as far as growth performances of the kids are concerned. The digestibility co-efficient of various organic nutrients such as DM, CP, EE, CF and NFE did not differ significantly among the three groups. This also indicated that tamarind seed meal had no adverse effect on the digestibility of various organic nutrients on the different diets. There was non-significant effect on intakes of DCP, TDN, DE and ME. The balances of nitrogen, calcium and phosphorus were found to be highly positive in respect of all three groups. The balances of N, Ca and P did not differ significantly among the three groups. The Ca-retained as per cent Ca-intake was significantly higher in group T2 due to less excretion in the faeces. However, the phosphorus retained as per cent phosphorus intake was more in group T3 followed by groups T2 and T1, respectively. The incorporation of tamarind seed meal in the diet on various haematological and biochemical constituents of blood had no adverse effect even after 90 days of feeding trial and all the values remained within the normal range. All the animals in the three groups consumed sufficient quantity of feed (DM), protein and energy to satisfy the ICAR (1998) feeding standards. The quantity of feed and fodder required per kg gain in live weight were found to be  $6.31 \pm 0.03$ ,  $5.92 \pm 0.06$  and  $6.53 \pm 0.03$  on DM basis in groups T1, T2 and T3, respectively. The values were observed to be higher in group T1 than other two groups. Groups T1 and T2 differ significantly from each other, however, they did not differ significantly with group T3. The cost of feed per unit gain in live weight was lowest in group T2 ( $61.85 \pm 0.97$ ) followed by groups T1 ( $64.65 \pm 0.74$ ) and T3 ( $64.31 \pm 0.49$ ), respectively. However, the differences were not statistically significant among the three groups. Based on above findings it may be concluded that tamarind seed meal can be incorporated in place of wheat bran in the concentrate mixture of growing kids up to 1/3rd level (w/w) without any adverse effect and with distinct economic advantages.

**Description:** EFFECT OF FEEDING TAMARIND (*Tamarindus Indica*) SEED MEAL IN GROWING KIDS

**Subject:** Animal Nutrition

**Theme:** EFFECT OF FEEDING TAMARIND (*Tamarindus Indica*) SEED MEAL IN GROWING KIDS

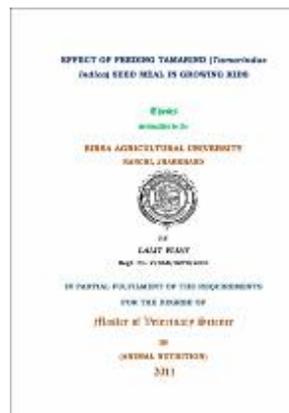
**These Type:** M.V.Sc.

**Issue Date:** 2011

**Appears in Collections:** Thesis (/handle/1/93550)

Files in This Item:

File	Description	Size	Format
1288 Lalit Vijay.pdf		5.85 MB	Adobe PDF



[View/Open \(/displaybitstream?handle=1/5810026278\)](/displaybitstream?handle=1/5810026278)

[Show full item record \(/handle/1/5810026278?mode=full\)](/handle/1/5810026278?mode=full)

[📊 \(/handle/1/5810026278/statistics\)](/handle/1/5810026278/statistics)

Items in DSpace are protected by copyright, with all rights reserved, unless otherwise indicated.