

Suitability of replacement of imported fishmeal with local fishmeal (*Amblypharyngodon melettinus*) in broiler ration

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An experiment was conducted at the Livestock Farm, Department of Animal Science of the University, for a period of 45 days beginning from 27th September to 11th November 2002 to find out the best combination of local fishmeal and Imported fishmeal in broiler ration. The treatment combinations of Local fishmeal: Imported fishmeal on weight basis (%) were 100:0 (T₁), 75:25 (T₂), 50:50 (T₃), 25:75 (T₄) and 0:100% (T₅) respectively.

The experiment consisted of five treatments including a control ration (T₅) and four experimental rations. In the experimental ration imported fishmeal was replaced by local fishmeal on weight basis. Each treatment consisted of two replicates (10 chicks were allocated to each replicate) and the broiler breed used for this experiment was AVN43.

The price of imported fishmeal (Rs 110-140/ kg) is considerably higher than the local fishmeal available at the market (Rs 20-40/ kg) (inferior in quality) and the fishmeal prepared for the trial (Rs 43/kg) and imported fishmeal is available throughout the year whereas the availability of local fishmeal is seasonal.

Records were maintained for feed intake and weight of birds, starting from the 2nd week of the experimental period. Data were collected at weekly interval.

The effects of treatments and weeks on feed consumption, weight gain, feed conversion efficiency, cost, income and profit per bird were determined. The overall mean value of the above factors were 872.21 g, 301.54 g, 2.88, Rs: 144.98, Rs: 175.09, and Rs: 30.11 respectively. Treatment 3 had the lowest feed conversion efficiency (2.63) and did not significantly ($P < 0.01$) differ from the values for T₁, T₄ and T₅. The highest value of feed conversion efficiency of T₂ (3.23) was significantly ($P < 0.01$) greater than all other treatments. Highest weight gain was obtained for T₃ (318.10g) but it did not differ significantly ($P < 0.01$) from the weight gain for T₁ and T₄ but differed significantly those of T₂ (282.50 g) and T₅ (288.40 g). The lowest cost of production was obtained for T₃ (Rs 141.83) and it was significantly ($P < 0.01$) lower than all other treatments. The highest profit per bird was obtained for T₃ (Rs 42.08) but the value did not significantly ($P < 0.01$) different from T₁ and T₄ but differed significantly than those of T₂ (Rs 19.13) and T₅ (Rs 18.51). Based on the results the study was concluded that T₃ (Local fishmeal: Imported fishmeal: 50%: 50%) is the best replacement combination in broiler ration.