

B-32: Use of locally available raw materials for formulation of shrimp feeds

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Success of shrimp farming will depend on the nutritionally balanced, environmentally friendly and economically viable feeds. Cost of shrimp feeds ranges from 50 to 70% of the total variable cost of production. Sri Lanka spends around Rs. 240 million annually to import shrimp feeds.

The feasibility of formulating a ration for shrimps using locally available raw materials was investigated. Two experimental diets based on tilapia fish meal containing 2 crude protein (CP) levels (40 and 45%) were prepared. A commercial feed with 40% CP was obtained from the market as the control diet. The 3 treatments were triplicated and fed to shrimps (*Penaeus monodon*) with an initial mean wet weight 7.76 ± 1.97 g at 4% body weight per day in a growth trial performed in indoor tanks.

After 15 days, weight gain (15.14%), specific growth rate (0.94), feed conversion efficiency (0.33), feed conversion ratio (3.17), protein efficiency ratio (0.76) and survival rate (100%) were obtained. Results indicated that there was no statistically significant difference ($P > 0.05$) between the treatments in terms of growth, utilization of feed and survival.

The estimated total costs of the 2 prepared feeds and commercial feed to produce a kg weight of shrimps were Rs.128.02, 150.48 and 186.86 respectively. Thus prepared feed was more economical than commercial feed.

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