

FIELD REPORT

EFFECT OF DIETS WITH PROTEIN FROM DIFFERENT SOURCES ON THE GROWTH OF GOLDFISH, *CARASSIUS AURATUS*

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Abstracts

Four isoproteinous (40% crude protein) feeds (based on chicken liver, lean shrimp meal, mussel meal or squid meal) were fed to goldfish, *Carassius auratus*, of 4.61 ± 0.427 g for 30 days at 10% of their body weight. The effect of the feeds on growth performance were compared with two commercial feeds, Brine Shrimp Flake and Tubifex Worm (59% crude protein each). There were no significant differences in food conversion ratio or specific growth rate between the treatments. The protein efficiency ratios (PER) of all the formulated feeds were significantly better than that of the Brine Shrimp Flake and the PER of the diets based on mussel and squid meal were also significantly better than Tubifex Worm. The weight increment with Tubifex Worm was significantly highest of all the treatments. Considering the nutritional parameters and cost of producing one kilogram of fish, the diet based on lean shrimp meal was the best. The cost of producing one kilogram fish using the formulated feeds ranged Rs. 93.75-231.30. Using Brine Shrimp Flake and Tubifex Worm, the costs were Rs. 1150 and Rs. 3500 per kg, respectively. The cost of goldfish rearing can be appreciably reduced by using feeds prepared with locally available protein sources. The crude protein level of 40% was sufficient for the goldfish, as the PER of the fish fed the formulated feeds was better than that of the fish fed the commercial feeds.

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