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A satisfactory diet for aquarium fish should fulfill the nutrient requirement of the fish and should enhance the coloration since the commercial value of the fish greatly depends on its body colour. Omnivorous ornamental fish, guppy *Poecilia reticulat*e was used in the present study.

Peleted diets were tested along with e reference control diet in triplicate and were evaluated on the basis of growth performance, feed conversion ratio (FCR), percentage survival and cost of production. Feeding trials were carried out in glass aquaria (60 cm x 30 cm x 36 cm) using 5 day old guppy fry. Fish were fed once a day at a rate of 6% of body weight and were sampled weekly for ten weeks to measure the growth.

Soya meal diet which had considerably lower cost of production resulted significantly higher survival rates in guppies ($p<0.05$). A similar growth pattern was observed for all the guppies. The increase in body weight of guppies fed with fishmeal diet was slightly high but there was no significant difference ($p>0.05$). Feed conversion ratio recorded for guppies grew under two formulated feed were not significantly different ($P>0.05$).

Considering these results soymeal diet was selected for the color enhancing experiment. Two pigment sources were made using dried powdered carrot tubers and petals of Cassia sp. inflorescence and incorporated separately while maintaining a group of male guppies on soymeal diet without a pigmentsource as the control. At the end of the experiment the colour improvement was assessed by a panel of judges. Thecolour intensity of guppies fed with carrot+ soy meal was significantly higher ($P<0.05$) than that of other experimental guppies.

The results conclude that soymeal can be successfully used instead of fishmeal in diet preparation for guppies and colour of guppies could be improved by dietary inclusions of pigment sources such as carrot.