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**P 23 The Effect of different dietary lipid levels on the growth performance of Angel fish (*Pterophyllum altum*) in indoor aquarium conditions**

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Effect of dietary lipid level on growth performance of Angel fish (*Pterophyllum altum*) was experimented in 24 week study. Three isonitrogenous (42% Protein) diets with varying lipid levels of 12% (L12), 16% (L16) and 20% (L20) were used. The test feeds ingredients were fish meal, Soybean meal, Punnak, Shrimp meal, Wheat flour, and Soybean oil with, vitamin & mineral mixture. Larvae of *P. altum* (21 days old) were placed in glass tanks (60 x 30 x 30 cm) at a ratio of 6 larvae/tank. Fish were fed *ad libitum* and measured frequency was maintained at 3 times per day to calculate the food conversion ratio. Growth performance of fish (Total length, standard length and weight) was measured at four week intervals and %SGR and % survival was calculated. Water temperature was monitored daily and Ammonia levels were measured once in two weeks. The Final mean total body weights of fish were  $5.87 \pm 2.57a$ ,  $7.15 \pm 0.86b$  and  $7.22 \pm 1.41b$  g for L12, L16 and L20 diets respectively and fish fed on L16 and L20 diets had significantly higher body weights at the end of the experimental period. Total lengths-of fish were  $6.21 \pm 1.0$ ,  $6.66 \pm 0.34$ ,  $6.78 \pm 0.38$  cm for L12, L16 and L20 diets respectively. Feed conversion ratio was 2.19, 1.88 and 1.92 for L12, L16 and L20 diets respectively. The survival rates were 100% for all treatments. Fish fed on diets with higher dietary lipid (L16:  $2.19 \pm 0.01$  and L20:  $2.23 \pm 0.01$ ) showed significantly higher % SGR compared to the fish fed on diets with low dietary lipid (L12:  $2.10 \pm 0.03$ ), treatments. Mean water temperature was  $23.1 \pm 1.2$  C° and Ammonia level was  $0.19 \pm 0.04$  mg/L. When comparing the three dietary lipids, fish fed on L16 and L20 diets were significantly larger (higher body weights & %SGR) compared to the fish fed on diets with L12.

**Keywords:** Angel fish, dietary lipid level, growth performance