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Abstract:

Silver barb (*Puntius gonionotus*) is considered a promising medium carp species for freshwater aquaculture in Asia. This study in silver barb was carried out to evaluate the effects of total or partial substitution of dietary fish oil (FO) with linseed oil (LO) on growth, nutrient utilization, whole-body composition, muscle and liver fatty acid composition. Fish (12.1 ± 0.4 g of initial body weight) were fed for 60 days with five experimental iso-proteinous, iso-lipidic and iso-caloric diets in which FO (control diet) was replaced by 33.3%, 50%, 66.7% and 100% LO. Final weight, weight gain, percent weight gain, SGR decreased linearly ($p< 0.001$) with increasing LO levels in the diets. Dietary LO substitution levels did not significantly ($p>0.05$) affect the feed conversion ratio (FCR), protein efficiency ratio (PER) and whole body proximate composition.