

## عنوان مقاله:

Research Article: Replacement effects of soybean meal with sesame seed cake on growth, biochemical body composition, and economic efficiency of *Cyprinus carpio* formulated diet

## محل انتشار:

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## خلاصه مقاله:

A 90-day feeding trial was run to evaluate the effect of replacement of soybean meal (SBM) with sesame seed cake (SSC) at 0, 25, 50, 75, and 100% in the isonitrogenous (30% crude protein) and iso-lipidic (8% crude lipid) experimental diets on growth, nutrient and economic efficiency, and biochemical body composition of juvenile *Cyprinus carpio*. Common carp with an average initial weight of  $83.09 \pm 0.06$  g with a density of 30 numbers were randomly fed experimental diets in 15 tanks (300 L) with the flow-through system. The results showed that survival and growth rate, visceral indices, and proximate biochemical composition of the whole body and the fillet except protein did not significant between treatments. The feed intake, feed conversion ratio and protein efficiency ratio, calcium and phosphorus, nitrogen retention efficiency, nitrogen wastage except for SSC25, and phosphorus wastage except for SSC25 and SSC50 were not significantly affected by the dietary treatments. Economic conversion ratio of diets decreased, whereas profit index increased with increasing levels of dietary SSC. Reduced cost of SSC100 was about 35.10%. The number of white blood cells was significantly higher in SSC0 than in other experimental treatments. Hemoglobin was higher in SSC75 than in SSC0. Among serum parameters, cholesterol was significantly lower in SSC0 treatment than in SSC25 treatment. Comparable growth performance, nutrient wastage, economic efficiency, and some blood factors indicated that SBM could be replaced by 75 to 100% SSC in the formulated diet of *C. carpio* juveniles.

### کلمات کلیدی:

Replacement, Sesame seed cake, Soybean meal, Body composition, Economic efficiency, *Cyprinus carpio*

### لینک ثابت مقاله در پایگاه سیویلیکا:

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