



Determination of the level of fish meal replacement with poultry by-product meal with an emphasis on nutrient waste

Abstract

A 60-day experiment was designed to evaluate the effect of replacing fishmeal (FM) with poultry by-product meal (PBM) on growth performance, nutrient efficiency and nutrient wastage on *Sparidentex hasta*. FM at 0, 15, 25, 35, 45 and 55% levels was replaced by PBM in experimental diets with the same levels of protein (500 g/kg) and energy (21 kJ/g). Sobaity weights (29.27 ± 0.06 g) were randomly distributed in 18 tanks (6 treatments with 3 replications) with a storage capacity of 20 tanks per tank. There was no significant difference in the percentage of weight gain, specific growth rate, protein efficiency ratio, nitrogen retention, feed conversion ratio, nitrogen and phosphorus wastage to 55% replacement in comparison with control treatment. Based on the the present study, replacement of the FM with PBM without increasing the organic loading of the system is recommended.

Key words: Poultry by-product meal, Fish meal replacement, Nutrient waste, *Sparidentex hasta*

