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AQUACULTURE & FISHERIES INNOVATION LAB

RESEARCH REPORTS

Sustainable Aquaculture for a Secure Future

Title: Replacing fishmeal by some of soy protein sources in feed for snakehead (*Channa striata*)

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Abstract: AquaFish will not be distributing this publication. Copies may be obtained by writing to the authors.

The study was conducted to determine the appropriate replacing of fish meal (FM) protein by three type's soybean meal: defatted soybean meal (SB), fermented soybean meal (FSB) and soy protein concentrate (SPC) in snakehead (*Channa striata*) diet. Four isonitrogenous (45%) and isocaloric (4.6 Kcal/g) diets were formulated. The control diet was prepared with 100% FM protein. Three other diets was replaced 40% FM protein by three type's soybean meal protein. Results showed that there was no significant difference in survival rate between feeding treatments. Fish growth performance in control diet and diet replaced SPC were significantly higher than the diets replaced SB and FSB. Food intake observed in diet replaced SPC treatment was not significant difference compared to control treatment. There was no significant difference between treatments in Feed Conversion Ratio, Protein Efficiency Ratio and hematological parameters (red blood cells and white blood cells). Hepatosomatic Index calculated in control treatment was significantly higher than those of others. Thus, it can be replaced 40% fish meal (FM) protein by soy protein concentrate (SPC) in snakehead (*Channa striata*) diet.

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