

## INFORMATION ON RESEARCH RESULTS

### 1. General information

- Project title: Study on the dietary Lysine and Methionine requirement for striped catfish (*Pangasianodon hypophthalmus*)
- Code number: **B2009-16-109.**
- Coordinator: A/Prof . Dr. Tran Thi Thanh Hien
- Implementing organization: Can Tho University
- Duration: from Jan, 1<sup>st</sup> 2009 to Oct, 31<sup>st</sup> 2010

### 2. Objective(s)

Study was carried out in order to determine the dietary Lysine and Methionine requirement for striped catfish (*Pangasianodon hypophthalmus*). Moreover, it also evaluated the replacement of fish meal (FM) protein by defatted soybean meal (SBM) protein with amino acid (Methionine and Lysine) supplementation in diets to improve soybean utilization efficiency in striped catfish fingerling feed formulation, reduce feed cost and increase profits for striped catfish farmer.

### 3. Creativeness and innovativeness

**This is the first study on** dietary Lysine and Methionine requirement for striped catfish (*Pangasianodon hypophthalmus*) in order to improve soybean utilization efficiency by supplementation of amino acid (Methionine and Lysine) for better striped catfish feed.

### 4. Research results

The results showed that the dietary Lysine requirement of striped catfish was 20.3 g/kg dry diet (53.5 g/kg protein) and the dietary Methionine requirement of striped catfish was 10.1 g/kg dry diet (26.7 g/kg protein).

The results of the present study indicated that defatted soybean meal protein could replace fish meal protein up to 60% without amino acid supplementation, and 70% with amino acid (Methionine and Lysine) supplementation in formulated diets of striped catfish fingerlings.

## **5. Products**

### **+ 3 Articles in peer-reviewed journals**

1. Tran Thi Thanh Hien. (2009). Dietary Lysine requirement of striped catfish (*Pangasianodon hypophthalmus*) fingerling. *Scientific journal of Can Tho University*. No. 11: pp 398-405. ISSN: 1859-2333.
2. Tran Thi Thanh Hien, Thai Thi Thanh Thuy, Nguyen Hoang Duc Trung, Tran Le Cam Tu. (2009). Dietary Methionine requirement of striped catfish (*Pangasianodon hypophthalmus*) fingerling. *In proceeding National fishries Conference. 5 Dec, 2009. 311-316pp*
3. Tran Thi Thanh Hien, Le Quoc Phong (inpress). Replacement of fish meal by soybean meal in diets of striped catfish (*Pangasianodon hypophthalmus*) fingerlings. (*in press*)

### **+ 2 Mater students**

Thai Thi Thanh Thuy

Le Quoc Phong

## **6. Effectiveness, transfer alternatives of reserach results and applicability**

Results had significantly importance in aquaculture science as well as in catfish industry. Aquatic feed millers and farmers now are applying results of this study to improve feed formultion for culturing striped catfish.