

❖ **Project title: “Research on nutritional requirement of cobia (*Rachycentron canadum*) from juvenile to marketable size in order to produce pellet feeds”**

❖ **Objectives:**

- Determining the nutritional requirement (protein, lipid, vitamins) of juvenile cobia
- Formulating and producing pelleted feed for culturing juvenile cobia
- Improving research capacity of staffs in Aquaculture Faculty

❖ **Contents:**

- Producing pelleted feed following experimental objectives
- Analyzing the nutrition composition of feed
- Culturing juvenile cobia by trial feeds, collecting parameters of growth rates, survival rates; comparison with control experiment (trash fish)
- Producing pelleted feed with parameters that determined from above experiments. Trying to culture cobia juvenile by this type of feed.

❖ **Implementation group:**

1. Assoc. Prof Dr. Lai Van Hung, team leader
2. Prof. Ivar Rønnestad, technical advisor
3. Mr. Nguyen Van Minh, PhD student
4. Ms. Pham Thi Anh, MSc student
5. Ms. Nguyen Thi Ha Trang, MSc student

❖ **Results:**

Two large-scale experiments were conducted on juvenile cobia:

- Effects of dietary protein/lipid ratio on growth rates: Nine feeds with a combination of three different levels of protein (42, 45 and 48%) and lipid (15, 18 and 21%) were tested. The best growth and quality of cobia were obtained with 45% protein: 18% lipid. Further analysis is ongoing.
- Effects of dietary vitamin E and C levels on growth and survival rates: investigated in a matrix design (vit C: 100, 200, 300 mg/kg; vit E: 30, 40, 50 mg/kg) to determine the optimal content of these two vitamins in pellet feed for cobia. The highest levels showed best results. Further analysis is currently ongoing.
- 1 staff of Food Nutrition Department received training on methods for scientific research.
- PhD student, Nguyen Van Minh finished his experiments on the influence of different feed ingredients on digestibility rates of cobia.

❖ **Papers published:** 1 paper published in an international journal

1 paper accepted by an international journal

1 paper submitted to an international journal

2 papers published in national journals

❖ *Training:* 2 Master students
1 PhD student