INFORMATION ON RESEARCH RESULTS

1. General information:

Project title: Culturing and using of freshwater rotifer *Brachionus angularis* for feeding of sandy goby *Oxyeleotris marmoratus* (Bleeker)

Code number: B2010-16-175

Coordinator: Tran Suong Ngoc

Implementing institution: Can tho University

Duration: from January 1st 2010 to December 31st 2011

2. Objective(s): Finding the methods for culturing of freshwater rotifer *Brachionus angularis* by feeding with different kinds of food and raising survival rate of sand goby fries by using this rotifer as food.

3. Creativeness and innovativeness:

- Freshwater rotifer *Brachionus angularis* have small size, high fecundity, high growth rate of population. Biomass culture of *B. angularis* processing set up and supply rotifer biomass to freshwater fish hatcheries.

- Survival rate of sandy goby fries was improved by feeding *B. angularis*. It will be apply for other small larvae of freshwater fish. It will produce the desired effect.

4. Research results:

- Feeding schedule of *Brachionus angularis* by *Chlorella* in 60.000 cell/ind/day obtained the highest density (2,783±188 ind/mL) on the fourth day after inoculation.

- Feeding by yeast at the rate of 80 % feeding rate suggested by Suantika (2000), the maximal density of *B. angularis* was only 693±32 ind./mL.

- When to combine *Chlorella* and yeast in the proportion from 10 to 50%, density of *B. angularis* could reach more than 1000 ind/mL on the fourth day since starting.

- Harvesting rate at 25 % V/day was suitable for rotifer culture system. When feeding with yeast alone, total rotifer biomas was obtained around 19, 6 million rotifer/20L and harvest duration was 10 days.

- Sand-goby fed with fresh-water rotifer (*B. angular*) at a density of 5 ind./mL was not significant difference to those fed with yolk+soya. However when level up rotifer to 11 ind./mL their survival rate could be improved at day 10.

Moreover, survival rate of sand-goby could be enhanced when rearing in green-water with the density of *Chlorella* up to $1,5x10^6$cell/mL.

5. Products: 2 articles

1. Tran Suong Ngoc, Nguyen Thanh Duc, Nguyen Tan Khuong and Vu Ngoc Ut. 2010. Effect of *Chlorella* and yeast on population growth of freshwater rotifer (*Brachionus angularis*). Scientific journal of Can tho University. Vol 14:66-75.

2. Tran Suong Ngoc và Vu Ngoc Ut. 2011. Effect of water exchange and harvesting on population of freshwater rotifer *(Brachionus angularis)*. Proceedings of the 4th aquaculture and fisheries conference. Can tho University, January 26th, 2011: 137-144.

6. Effects, transfer alternatives of research results and applicability:

Transfer and application of research results to the freshwater fish hatcheries especially sandy goby nurseries...