CHAPTER V

CONCLUSION AND RECOMENDATION

1. In this experiment, the quantity (0.35%, 1%, 1.5%) and ratio of EPA/DHA (1:3, 1:2, 1:1) are interaction on growth and the osmotic resistance of *P. monodon* postlarvae. By the ratio of EPA/DHA in diet improving the growth of postlarvae is 1:1 at 1% n-3 HUFAs and 1:2 at 1.5 % n-3 HUFAs, respectively. On the contrary, the ratio of EPA/DHA in diet 1:2 at 1% n-3 HUFAs and 1:3 at 1.5% n-3 HUFAs provide the highest osmotic resistance of the postlarvae.

2. The quantity and ratio of EPA/DHA have no effects on survival of the postlarvae.

3. The dietary fatty acids have influence on the fatty acid composition in shrimp tissue. Polar lipids have more n-3 HUFAs than non-polar lipids in tissues of shrimps. The n-3 HUFAs in polar lipids may be the main structural component of cell membrane.

4. The ratio of EPA/DHA in diet has influence on the ratio of EPA/DHA in polar lipid more than in non-polar lipids of shrimp tissue.

5. In this experiment, diet containing 0.35% of n-3 HUFAs with the ratio of EPA/DHA at 1:3 is adequate for normal growth and survival.

6. In this experiment, the suitable amount of n-3 HUFAs and the EPA/DHA ratio for normal growth and osmotic resistance of *P. monodon* postlarvae are 1.5 % and 1:2, respectively.

Recomendation

1. We should duplicate this kind of experiment in the farming scale to confirm these results.

2. We should study the efffect of the ratio of EPA/DHA on other stress conditions (eg. immunology and temperature stress).