

**THE GROWTH AND QUALITY OF TIGER SHRIMP (*Penaeus monodon*)
IN DIFFERENT DENSITY DURING NURSERY PHASE**

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ABSTRACT

The low productivity during extensive culture of tiger shrimp (*Penaeus monodon*) may be caused by disability to environmental adaptation of shrimp during culture period. Nursery system build up to minimize this constraints and enhances shrimp growth, quality and variation in natural pond system. Nursery system is a method to take care shrimp during post larvae to juvenile size within 14 days. The objective of this research is to measure the growth and the quality of post larvae shrimp during nursery system at different density which is 750; 1250; 1750 and 2250 shrimps/m², respectively. The observation of juvenile quality was done to observe the digestive tract, weight variation, necrosis, and parasite fouling. In the other side, growth observation was observed by the total length and the body weight. The result showed growth and quality of shrimp significantly different within different density. In contrast survival rate of shrimp in different density not significantly different. The density of 750 shrimp/m² during nursery system in extensive shrimp culture showed optimum in growth and quality. Shrimp production rose optimum size at 2250 shrimp/m². The simulation of economic analysis of shrimp production showed benefit to farmer in 1750 shrimp/m² of density. This study support shrimp production in traditional method may increase with nursery system and additional feed in short period (2 weeks).

Key words: tiger shrimp, extensive culture, nursery, density, growth