

**Evaluation of commercial shrimp larval diet  
as replacement of live foods in  
mudcrab larval rearing**

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A thesis presented to the Graduate Faculty of the  
Institute of Aquaculture  
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In Partial Fulfillment of the Requirements for the  
Degree of Master of Science in Fisheries  
Major in Aquaculture

**APRIL 2014**

## ABSTRACT

**Burlas, Michael Ray J.** University of the Philippines Visayas, 5023 Miag-ao, Iloilo, Philippines, April 2014. **Evaluation of commercial shrimp larval diet as replacement of live foods in mud crab larval rearing.**

The use of live food such as rotifer and *Artemia* entails high cost of production in the hatchery. Hence, the general objective of the study was to reduce the use of natural food in the larval rearing of mud crab. The first study was conducted to screen four types of commercial shrimp formulated larval diet (Lansy, P. japonicus, P. monodon and BP Nippai) in mudcrab *Scylla serrata* larval rearing. Formulated diets were fed to each stage from zoea 1 to megalopa at an equivalent of 100% dry weight of the live food. Growth index and survival were determined at the end of the experiment. Results showed that of zoea 1 fed any of the formulated diet did not molt to zoea 2. When formulated diets were fed to zoea 2, 3 and 4, there was a decreasing trend in the growth index and survival as the larvae developed. Zoea 5 fed any of the formulated diet failed to molt to megalopa stage. Among the four formulated diets, BP fed larvae had better growth and survival. BP was then used in the second study to determine the amount of formulated diet (FD) that could replace natural food (NF) such as rotifer and *Artemia*. Results showed that larvae fed 25% FD + 75% NF and 50% FD + 50% NF had better survival and growth than those larvae fed 100% FD + 0% NF, 75% FD + 25% NF and 0% FD + 100% NF. This study indicates that shrimp larval diet in combination with formulated diet can be used to improve the growth and survival of *S. serrata* larvae.

KEY WORDS: *Scylla serrata* larvae, feed replacement, formulated diet