

ABSTRACT

PERFORMANCE OF WHITE SHRIMP (*Litopenaeus vannamei*) AT VARIOUS LEVELS OF THE STOCKING DENSITY IN BIOFLOC SYSTEM ON THE NURSERY PHASE

BY

RINI LIAN AGUSTINA

White shrimp (*Litopenaeus vannamei*) is one of Indonesia's marine fisheries commodities that has high economic value. White shrimp farming is generally done with a high degree of density with intensive systems. The main factors that inhibit the increase in the number of shrimp production is a difficulty in maintaining water quality caused by the accumulation of ammonia and nitrite compounds that are toxic and high feed conversion. Biofloc technology application is expected to reduce waste (ammonia and nitrite) and to improve the efficiency of nutrient utilization. This technique of cultivation removes waste directly in the container of cultivation by maintaining adequate oxygen, microorganisms, and C / N ratio in a certain degree. Seed size 15 PL stocked at container capacity of 10 liters with 3 levels of density (10, 15, 20 fish / container). Parameters measured were growth rate, survival rate (SR) and water quality (DO, temperature, pH, and ammonia). The results showed that the density of white shrimp with biofloc system affected survival rates, but no effect on the growth and biomass of white shrimp (*Litopenaeus vannamei*).

Keywords: White Shrimp, Biofloc, Growth, SR, Biomass