REARING ON DONKEY’S EAR ABALONE (Haliotis asinina Linnaeus, 1758) AT DIFFERENT STOCKING DENSITIES BY CHANGING WATER ONCE A WEEK

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ABSTRACT

Donkey’s ear abalone (Haliotis asinina Linnaeus, 1758) had initial average weight and shell length 0.85 ± 0.30 grams and 15.70 ± 1.80 millimeter were stocked at 3 densities, which were 20, 30 and 40 pieces/basket. The basket size was 20x25x14 centimeter which had 392.9 cm² PVC substrate shelter inside. Each treatment was reared in 3 concrete tanks; the size was 1.35x3.33x1.00 meter which contained 1 cubic meter of seawater. The abalones were fed with fresh algae. Water was changed 100% once a week. The experimental period was 150 days.

The experiment result showed growth rate by body weight and survival rate of abalones reared at 20 and 30 pieces/basket were higher and significantly different (p<0.05) to the reared at 40 pieces/basket. The production per basket of the stocking at 30 pieces/basket were higher and significantly different (p<0.05) to the reared at 40 pieces/basket but not significantly different (p>0.05) to the 20 pieces/basket. The growth rate by shell length and FCR of each the stocking densities were not significantly different (p>0.05). While temperature, salinity, dissolve oxygen, pH, alkalinity, ammonia and nitrite of water of each the stocking densities showed non-significantly different (p>0.05) to each other. And found that the amount of ammonia and nitrite correlated with growth, survival and FCR of the abalones.

Key words: Donkey’s ear abalone (Haliotis asinina Linnaeus 1758), Stocking density