LARVAL REARING OF *Scylla serrata* Forskal: THE EFFECT OF *Artemia salina* and *Brachionus plicatilis* AS FOOD ON THE GROWTH AND SURVIVAL OF ZOEA

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ABSTRACT

A study was conducted to find out the effects of *Artemia*, *Brachionus* and a combination of *Artemia* and *Brachionus* as food on the survival of mudcrab *Scylla serrata* Forskal zoea and the ability of the zoea to metamorphose to megalopa stage. The study composed of three experiments. Each experiment lasted for 21 days.

Results showed highest mean percent survival (66.7±2.03) on zoea fed with a combination of *Artemia* and *Brachionus* at a feeding density of 5 individuals/ml each. When the density of *Brachionus* was increased from 5 individuals/ml to 12 individuals/ml in the combination diet, there was an increase in the survival of the zoea to 68.9±2.41. Highest metamorphosis from zoea to megalopa was also obtained on those fed with a combination of *Artemia* and *Brachionus*. This combination diet also gave the shortest number of days for the zoea to metamorphose to the next stage which also resulted to the least number of days for megalopa production to start.

The study also revealed that larvae fed with a combination of *Artemia* and *Brachionus* reared at 30 ppt salinity got high survival on the first three days of culture,however starting on the 4th day up to the 15th day of culture, those reared at 28 ppt obtained higher survival although not statistically different from the other salinities tested.