ABSTRACT

Three kinds of food: minced sardine (*Amblygaster* sp.), frozen adult brine shrimp (*Artemia* sp.), and frozen bloodworm (*Chironomus* sp.) larvae, were used for feeding experiment to the megalopa stage of mud crab, *Scylla paramamosain* Estampador, 1949. It was done by completely randomized design with 3 replicates. Seawater used in the system is $30 \pm 1$ ppt and its temperature was controled around $30 \pm 1 ^\circ C$. Survival rate and the rate of development to 1st crab stage are compared among foods. By repeated measurements or split-plot liked analysis, there are not significantly difference among foods, but the food \times time interaction were significance, both on survival rate and the rate of development.

First crab stage initially appeared in the 4th day and lasts on the 7th day of experiment. All megalopa in the last days were dead. On the 4th day, in the set of frozen bloodworm, minced sardine, and frozen adult brine shrimp, the survival rate are $95.2 \pm 2.92\%$, $88.45 \pm 5.01\%$, $86.1 \pm 3.19\%$, respectively, which were not significant different among foods. Whereas the percent of development were $60.3 \pm 8.52$, $58.2 \pm 4.29$, $40.9 \pm 3.71$, by which those fed frozen bloodworm and minced sardine showed nearly the same results and significantly higher than those fed frozen adult brine shrimp. In case of 1st crab stage production, short period, *i.e.* the first day of exuviation from megalopa to crab stage, would be the best.

Water qualities of all feeding set were in the range of suitable level for aquaculture. All parameters in the set of frozen bloodworm and frozen adult brine shrimp were nearly the same. However, three parameters (nitrite, ammonia, and total bacteria) in the set of minced sardine were higher than other sets.

**Key words:** *Scylla paramamosain* Estampador, 1949, megalopa, food

---

* Correspondence : 97/1 Mu 4 Takhianthong, Kanjanadit, Suratthani 84160

Tel. 0-7725-5288, 0-7725-5290 E-mail : apkeawmorakot@yahoo.com