Experiment on Nursing of Mantis Shrimp *Harpiosquilla raphidea* (Fabricius, 1798) with 3 Different Feed in Plastic Basket

Weera Charoenphak1* Sakon Sangpradub2 Supat Gumlunggua1 Pranee Oonkaew1 and Aditep Boonjaroen1

1Songkhla Coastal Fisheries Research and Development Center
2Coastal Aquatic Feed Research Institute

Abstract

Experiment on nursing of mantis shrimp (*Harpiosquilla raphidea*) fed with 3 different feed was carried out. The completely randomized design, consisted of 3 treatments and 3 replications was used. Treatment 1 (control) was fed with fresh fish meat (*Encrasicholina* sp.). Treatment 2 was fed with shrimp pellet while treatment 3 was fed with self-formulated pellet. The experiment was conducted in 9 fiber tanks (1.5×5.0×1.2 m) at a replication per tank and 30 plastic baskets (28×19×18 cm) were hanged in each tank. The stocking density of mantis shrimp was a mantis shrimp per plastic basket. The initial average weight of mantis shrimps was 0.36±0.01 g and the average length was 2.81±0.03 cm. After 60 days of nursing, the results showed that the survival rates of treatment 2 was 48.89±16.44 % which was significant higher (p<0.05) than treatment 3 that was 11.11±5.09 %. The treatment 1, all of them died when experiment reached to 41 days. The specific growth rate of treatment 2 was 1.42±0.31 %/day which was significant higher (p<0.05) than treatment 3 that was 0.79±0.22 %/day. The food conversion rate of treatment 2 was 6.49±3.27 which was significant lower (p<0.05) than treatment 3 that was 40.74±1.53. So, it can be concluded that shrimp pellet is better than fresh fish meat and self-formulated pellet.

Keywords: Mantis shrimp (*Harpiosquilla raphidea*), fresh fish meat, shrimp pellet, self-formulated pellet

* Corresponding author : 3/1 Moo 1, Klongdan Sub-district, Ranode District, Songkhla Province 90140
Tel. 074260529 e-mail : cf-songkhla@dof.in.th