Rearing of Mud Spiny Lobster *Panulirus polyphagus* (Herbst, 1793) with Different Feeds

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Abstract

A rearing experiment was conducted in mud spiny lobster (*Panulirus polyphagus*) at Krabi Coastal Fisheries Research and Development Center to assess the feeding potential of three different kinds of fresh diets, green mussel, stingray and sardine, in terms of growth and survival rate. The mud spiny lobster with initial body weight between 126.88±16.57 to 130.17±16.54 g, initial body length of between 16.71±0.81 to 17.17±0.60 cm and initial carapace length of between 7.32±0.26 to 7.45±0.30 cm were stocked in 500 liter tanks at density of 8 inds./tank. Three replications for each dietary feeding treatment were assigned.

At the end of 120-day feeding trial, there were no significant (P>0.05) differences in final mean body weight, body length and carapace length among dietary groups. Although, spiny lobster fed green mussel gave the highest body weight, body length and carapace length of 176±31.10 g, 18.91±1.02 cm and 8.21±0.39 cm, respectively. While the weight gain and specific growth rate of spiny lobster fed green mussel were not different to stingray, but significantly better than those fed on sardine. Survival rate, feed conversion ratio (FCR) and molting rate were not significantly (p>0.05) different among the dietary groups. The mean value of survival rate, FCR and molting frequency were 62.5-70.8 %, 27.8-36.7 and 3.00-3.11 days/time, respectively. In addition, green mussel fed group provided the higher body fatty acid of n3-HUFA level. Therefore, feeding mud spiny lobster with green mussel is much more suitable than the stingray and sardine.

Key words : Mud spiny lobster *Panulirus polyphagus* Fresh feed

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