

Reproductive performance of seahorse, *Hippocampus barbouri* (Jordan and Richardson 1908) in control condition

ABSTRACT

Hippocampus barbouri is one of the seahorse species found in shallow water of Malaysia. It is used as known as a global trade species in ornamental fish industry. To date, there is no documented report on seahorse aquaculture especially for *H. barbouri* in Malaysia even in Southeast Asia region. Seahorse aquaculture should be considered as an alternative source of seahorses to reduce the pressure on wild population. Therefore, this study was conducted to establish suitable techniques for broodstock maintenance and reproduction by focusing on culture system and feeding. *Hippocampus barbouri* were maintained and bred successfully in a controlled culture system. Minimum water depth required for the spawning of *H. barbouri* is 38 cm. Best reproductive performances was observed in broodstock fed with post-larvae shrimp. However, frozen mysid can also be used in the culture of *H. barbouri*. The minimal requirement of n-3 and n-6 fatty acids for the reproduction of *H. barbouri* was 5.13 ± 0.04 % and 14.83 ± 0.10 % respectively.

Keyword: *Hippocampus barbouri*; Culture system; Feeding