

Brood stock management and larval rearing of *Hippocampus kuda* (Spotted Seahorse)

J.S. Jayanatha* and M.S.M. Fahim

National Aquatic Resources Research and Development Agency (NARA), Regional Research Center, Kalpitiya, Sri Lanka.

Hippocampus kuda is a tropical seahorse species and wild stocks have declined due to over exploitation and illegal fishing practices. Seahorse aquaculture has been spread widely because of high economic value and marketability. It has a great potential to apply as an alternative livelihood for coastal communities. This study was carried out to find out the possibilities of brood-stock management and larval rearing of *Hippocampus kuda*.

Twenty male and female adult seahorses, averaging 2.5 ± 0.5 g and 3 ± 0.5 g respectively were collected from the wild. They were stocked in 250 L fiberglass tanks. Salinity, dissolved oxygen and pH were 33 ± 2 ppt, 5.9 ± 0.9 mg/L and 7.62 ± 0.2 respectively. Brooders were fed with adult *Artemia* and rotifers twice a day. After courtship behaviour, males released 18 to 106 larvae from their pouch within 28 to 30 days. Initial average length of larvae was 9.5 ± 1.5 mm. 6–10 individuals/m² were stocked and they were fed with rotifer (1500 – 3500 cells/L) and enriched *Artemia*. After 30 days larvae reached a length of 28 ± 2 mm length and a weight of 0.21 ± 0.5 g. During the study, survival rate was 75.5%. Captive breeding of *Hippocampus kuda* will be useful in enhancing the depleted wild stocks.

Keywords - brood stock management, larval rearing, *Hippocampus Kuda*

*Corresponding author e –mail: jsarathjayanatha@yahoo.com