Accepted Manuscript

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PII: DOI: Reference:

S0044-8486(13)00182-8 doi: 10.1016/j.aquaculture.2013.04.017 ence: AQUA 630632

To appear in: Aquaculture

Received date:24 January 2013Revised date:9 April 2013Accepted date:11 April 2013

Please cite this article as: Souza-Santos, Lília P., Regis, Cintia G., Mélo, Roberta C.S., Cavalli, Ronaldo O., Prey selection of juvenile seahorse *Hippocampus reidi*, *Aquaculture* (2013), doi: 10.1016/j.aquaculture.2013.04.017

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ACCEPTED MANUSCRIPT

PREY SELECTION OF JUVENILE SEAHORSE HIPPOCAMPUS REIDI

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ABSTRACT

The culture of ornamental organisms is seen as a possible alternative to capturing wild specimens. The low newborn survival in seahorse aquaculture may be related to the provision of ideal live food since seahorses do not accept dry food. In most cultures of seahorses, juveniles are fed Artemia sp. nauplii and rotifers however, the newborn survival is not always satisfactory. The use of wild pelagic or cultivated harpacticoid copepods in marine larval fish cultures can promote higher juvenile growth and survival. The objective of this study was to evaluate the ingestion rate and prey selection of the newly released, 5 and 10 days after released juvenile seahorse, Hippocampus reidi, for: copepod (Tisbe biminiensis) offspring, Artemia sp. nauplii, enriched Artemia sp metanauplii and rotifers (Brachionus plicatilis) in relation to prey and mouth size. The experiments tested 4 treatments mixing two live preys at 50% proportion at 10 mL⁻¹, and were performed on 5 experimental units of 600 mL glass beakers with 10 juveniles each at 26 to 28°C, 30 salinity. Five beakers with the same mix of food without juveniles were used as controls for each treatment. After 5 hours, 3 samples of 10 mL per beakers were collected and fixed to estimate the final food concentration. The ingestion rate, the proportion of offered and ingested preys, Ivlev selectivity indexes (I), prey sizes and mouth sizes of the juveniles were estimated. Tisbe biminiensis offspring and rotifer (Brachionus plicatilis) were positively selected for the Download English Version:

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