INFLUENCE OF SALINIZATION, DIETS AND STOCKING DENSITIES ON GROWTH AND SURVIVAL RATES OF GRUNTTING TOADFISH (ALLENBATRACHUS- GRUNNIENS (LINNAEUS, 1758)) CULTURED FROM JUVENILE TO FINGERLINGS STAGE

Cao Van Hung, Nguyen Thi Phuong Thao, và Nguyen Phuoc Trieu

Summary

Research on effects of salinity (15 ppm, 20 ppm, 25 ppm, 30 ppm), diets (Acetes sp., industrial feed, copepode, artemia, chopped fish and shrimp) and stocking densities (1 individual/liter, 3 individual/liter, 5 individual/liter) on the growth and survival rate of grunting toadfish (Allenbatrachus grunniens Linnaeus, 1758) cultured from juvenile to fingerlings stage was conducted from March to September 2016 in Ba Ria - Vung Tau province. Grunting toadfish in juvenile stage with average initial body length of 19.3 ± 1.04 mm/individual and average body weight of 0.520 ± 0.010 g/individual. The results showed that after 60 days, grunting toadfish from the salinity of 25 ppm had the best growth with average body length of 29.1 ± 1.66 mm/individual and average body weight of 2.058 ± 0.029 g/individual. Grunting toadfish fed with DHA enriched Artemia or combined with fresh food (chopped fish and shrimp) achieved the highest growth (1.62 %/day) and survival rate (66.3%); appropriate stocking density 1 - 5 individual/liter with the survival rates of 57.8 ± 5.1%. These results provide the basic parameters to rear this species at artificial environment.

Key words: Grunting toadfish (Allenbatrachus grunniens), salinity, diet, stocking densities, growth, survival rate.