Effect of Salinity and Stocking Densities on Growth and Survival Rate of Humpback Grouper, *Cromileptes altivelis* (Valenciennes, 1828) Juvenile in Cement Tank

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Abstract

Study on growth and survival rate of Humpback grouper, *Cromileptes altivelis* using two difference types of salinity and stocking densities each with 2 replications. The experiment was carried out at Rayong Coastal Fisheries Research and Development Center. The Humpback grouper were stocked in cement tank separated in 4 compartments each of 1x1x0.6 m and fed at satiation level for 6 months. Initial average body weight of each group were 48.98 ± 3.82 g and average initial total body length were 14.66 ± 0.49 cm. Results showed the body weight gains were 57.52 ± 2.12, 55.02 ± 1.41, 53.52 ± 2.12 and 50.52 ± 4.95 g the total body length gain were 5.19 ± 0.50, 5.15 ± 0.12, 5.18 ± 0.12 and 4.88 ± 1.63 cm, absolute growth rates were 0.32, 0.31, 0.30 and 0.28 g/day, food conversion rate were 3.60 ± 0.01, 1.82 ± 0.21, 3.25 ± 0.01 and 2.06 ± 0.29, these FCR were significantly difference at P<0.05. The survival rate were 100 ± 0.00, 88.75 ± 8.84, 100 ± 0.00 and 97.5 ± 3.53 %, respectively. Body weight gain, total body length gain, absolute growth rate and survival rate of 4 groups were not statistically different (P>0.05).

Key words: Humpback Grouper, *Cromileptes altivelis*, Salinity levels, Stocking density, Growth, Survival rate

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