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Success Rate Of Mangrove Crab (Scylla Serrata) Molting With Different Salinity Treatments In Controlled Containers

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Abstract

Market demand for mud crab (Scylla serrata) is increasing so that its catch in nature is high in the long term. The growth of mud crabs (Scylla serrata) occurs through molting (molting) mechanisms. Softshell crab has a higher economic value than hard shell crab. The purpose of this study was to assess the molting rate of mud crab (Scylla serrata) with different salinity treatments in controlled containers. The study used a completely randomized design (CRD) with three treatments of 20 ppt, 25 ppt, and 30 ppt salinity with three replications. The crabs used are mud crabs (Scylla serrata) measuring 80-175 grams with the carapace still hard. The test parameters include the weight gain and absolute length of the individual, daily growth rate, molting percentage, and survival and mortality rates. Besides, the chemical-chemical parameters of the culture media water and the effectiveness of using controlled containers were also observed. The research data were analyzed descriptively quantitatively. The difference in treatment and the use of controlled containers had a significant effect on the 95% significance level (α = 0.05) on all parameters of the response to treatment. Absolute individual weight

values 40.6 – 47.41 grams, absolute individual length 2.6 – 3.2 cm, molting percentage 75 – 100%, daily growth rate 1.3 – 1.6 grams, 75 – 100% survival and mortality of mud crab (Scylla serrata) 25-16.7%. Optimal salinity level at 20 ppt. Water quality parameters during the study were still feasible for mangrove crab (Scylla serrata) cultivation. Controlled containers using a water rotation system are quite effective for the cultivation of mud crab (Scylla serrata).

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