

ABSTRAK

Lingkungan perairan budidaya yang mengandung kadar amonia yang tinggi dapat dapat menyebabkan terganggunya kehidupan dan pertumbuhan udang vannamei yang berakibat fatal hingga kematian. Penelitian ini dilakukan untuk mengetahui Pengaruh kadar amonia terhadap laju pertumbuhan udang vannamei (*Litopenaus vannamei*) di Instalasi Budidaya Air Payau Probolinggo. Analisa kadar amonia dilakukan menggunakan amonia test kit yang dilakukan secara berkala dalam waktu 1 minggu sekali selama 4 kali pengulangan. Penyamplingan udang vannamei ini digunakan untuk mengetahui nilai Mean Body Weight (MBW) dan Spesific growth rate (SGR) merupakan presentasi pertambahan udang setiap harinya selama waktu penelitian. Analisa regresi ini di gunakan untuk mengetahui pengaruh variabel bebas (x) yang pada penelitian saya ini variabel x adalah kadar amonia terhadap variabel terikat (Y) yang pada penelitian saya adalah laju pertumbuhan udang vannamei. Berdasarkan nilai koefisien determinasi tambak 9 sebanyak 0.518 atau 51,8% yang berarti bahwa kadar amonia mempengaruhi laju pertumbuhan sebanyak 51,8% dan sisanya dipengaruhi oleh faktor lain dan nilai koefisien determinasi tambak 10 sebanyak 0.158 atau 15,8% yang berarti bahwa kadar amonia mempengaruhi laju pertumbuhan sebanyak 15,8% dan sisanya dipengaruhi oleh faktor lain.2. Laju pertumbuhan udang vananmei di Instalasi Budidaya Air Payau Probolinggo mengalami penurunan SGR seiring dengan meningkatnya umur udang vannamei. Data SGR % pada tambak 9 dengan hasil penyamplingan sebanyak 0.073%, 0.063%, 0.052% dan, 0.026%. Tambak 10 dengan hasil penyamplingan sebanyak 0.111%, 0.078%, 0.039% dan 0.039%. Cara yang dilakukan untuk menjaga pertumbuhan pada udang vannamei yaitu dengan perlakuan yang dilakukan menambah waktu penyiponan sebanyak 3 kali dalam seminggu dan melakukan pergantian air.

Kata kunci : udang vannamei, kadar amonia, laju pertumbuhan

Risma Amelia Kusuma Wardhani. NIM190341100099. The Effect of Ammonia Levels on the Growth Rate of Vannamei Shrimp in the Probolinggo Brackish Water Aquaculture Installation. Under the guidance of Dr. Apri Arisandi, S.Pi, M.Si

ABSTRACT

The environment in aquaculture waters containing high levels of ammonia can disrupt the life and growth of vannamei shrimp which can be fatal or even fatal. This research was conducted to determine the effect of ammonia levels on the growth rate of vannamei shrimp (*Litopenaus vannamei*) in the Probolinggo Brackish Water Aquaculture Installation. Analysis of ammonia levels was carried out using an ammonia test kit which was carried out periodically once a week for 4 repetitions. Vannamei shrimp sampling was used to determine the Mean Body Weight (MBW) and Specific Growth Rate (SGR) values, which are the percentage of shrimp added each day during the study period. This regression analysis is used to determine the effect of the independent variable (x), in my research the variable x is ammonia levels on the dependent variable (Y), which in my research is the vannamei shrimp growth rate. Based on the coefficient of determination of pond 9 as much as 0.518 or 51.8%, which means that the ammonia level affects the growth rate by 51.8% and the rest is influenced by other factors and the coefficient of determination for pond 10 is 0.158 or 15.8%, which means that the ammonia level affect the growth rate of 15.8% and the rest is influenced by other factors.2. The growth rate of vananmei shrimp in the Probolinggo Brackish Water Aquaculture Installation decreased in SGR as the age of the vannamei shrimp increased. SGR % data on pond 9 with sampling results of 0.073%, 0.063%, 0.052% and, 0. 026%. Pond 10 with sampling results of 0.111%, 0.078%, 0.039% and 0.039%. The method used to maintain the growth of vannamei shrimp is the treatment that is carried out by increasing the siphoning time 3 times a week and changing the water.

Keywords: vannamei shrimp, ammonia levels, growth rate

