

RINGKASAN

M. Rizkillah Irfiansyah. Pengaruh Pemberian Probiotik Berbeda Terhadap Bahan Organik Total dan Ammonium Pada Media Pembesaran Udang Vaname (*Litopenaeus vannamei*). Dosen Pembimbing Muhammad Arief, Ir., M.Kes. dan Prayogo, S.Pi.,MP.

Perkembangan kegiatan budidaya perikanan yang pesat dengan penerapan sistem intensif, memunculkan permasalahan berupa penurunan daya dukung tambak bagi kehidupan ikan/udang yang dibudidayakan. Menurut Austin and Austin (1999), diantara strategi pengendalian penyakit pada budidaya perikanan yang banyak dilakukan dan memberikan hasil yang baik adalah melalui kontrol biologis, salah satunya adalah dengan aplikasi probiotik, karena diharapkan dapat mengatasi masalah yang ada pada tambak intensif.

Penelitian ini bertujuan untuk mengetahui pengaruh pemberian probiotik berbeda terhadap nilai Bahan Organik Total dan Ammonium pada media pembesaran udang vaname. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) yang terdiri dari empat perlakuan dan lima ulangan. Perlakuan dalam penelitian adalah pemberian probiotik berbeda yaitu tanpa pemberian probiotik/kontrol, probiotik A, probiotik B dan probiotik C. Analisis data menggunakan Analisis Varian (ANOVA) dan dilanjutkan Uji Jarak Berganda Duncan untuk mengetahui perbedaan antar perlakuan.

Hasil penelitian menunjukkan bahwa pemberian probiotik berpengaruh nyata ($p < 0,05$) terhadap Bahan Organik Total udang vaname, tetapi tidak berpengaruh nyata ($p > 0,05$) terhadap Ammonium udang vaname. Pada perlakuan P3 (probiotik C) Bahan Organik Total berbeda nyata ($p < 0,05$) terhadap P0 (kontrol) pada hari ke 7,14,21 dan 28. Sedangkan untuk ammonium pada media pembesaran udang vaname perlakuan P1,P2 dan P3 tidak berbeda nyata ($p > 0,05$) terhadap P0 (tanpa Probiotik) pada hari ke 15(tengah) dan 30 (akhir).

SUMMARY

M. Rizkillah Irfiansyah. The Effect of Giving Different Probiotics on the Total Organic Matter on cultivation of Vaname Shrimp (*Litopenaeus vannamei*). Academic Advisor Muhammad Arief, Ir., M.Kes. and Prayogo, S.Pi.,MP.

The rapid development of aquaculture activities by implementing an intensive system decreases the carrying capacity of the pond for the life of the cultivated fish / shrimps. According to Austin and Austin (1999), biological control is one of strategies of disease control in aquaculture which has been done and it provides good results, one of the instances is the application of probiotics due to its expectation to overcome the existing problems in intensive pond.

This study aims to examine the effect of different probiotics toward the value of Total Organic Materials and Ammonium in the enlargement of vaname shrimp media. This study used a Completely Randomized Design (CRD), which consists of four treatments and five replications. In the study, different probiotics were given in the feed as the treatments. The treatments were done by excluding probiotics / control, probiotics A, probiotics B and probiotic C. The data were analyzed by applying analysis of variants (ANOVA) and followed by Duncan's Multiple Range Test to determine the differences between those treatments.

The results showed that the distribution of probiotics significantly affected ($p < 0.05$) on the Total Organic Materials vaname shrimp. However, it did not affect significantly ($p > 0.05$) on the vaname shrimp Ammonium. Treatment P3 (probiotics C) has the lowest value of the Total Organic Material, which is significantly different ($p < 0.05$) to P0 (control) on the 7th, 14th, 21st and 28th day. Meanwhile, low vaname shrimp ammonium found in treatment P3 (probiotics C) is not significantly different ($p > 0.05$) on P0 (without probiotics) on the 15th (middle) and 30th (final) day.