

TAUFIQ NASRULLOH 19.03.4.1.1.00071. Pemberian Probiotik *Bacillus Spp.* Dengan Dosis Berbeda Terhadap Kadar Amonia Di Tambak Udang Vaname (*Litopenaues Vannamei*). Dibawah bimbingan bapak **Wahyu Andy Nugraha, S.T., M.Sc., Ph.D.**

ABSTRACT

Udang vanname adalah salah satu komoditas perikanan budidaya yang memiliki peminat yang tinggi, sehingga perlu penanganan khusus dalam budidaya agar tidak mudah terserang penyakit yang di timbulkan oleh buruknya kualitas perairan seperti tingginya kadar amonia. Tujuan dari penelitian ini yakni mengetahui penurunan probiotik *Bacillus spp.* terhadap kadar amonia dan mengetahui dosis yang efektif buat pendegradasian kadar amonia ditambak udang vannameii. Pengambilan data dilakukan pada bulan november 2020 di tambak udang PT. Pyramide paramount indonesia (PPI) farm bantul. penelitian menggunakan metode Rancangan acak Lengkap (RAL) dengan pemberian dosis yang berbeda-beda seperti 5 ml/l, 10 ml/l, dan 15 ml/l. Analisi data menggunakan uji anova di lanjutkan uji BNT 5% apabila terdapat perbedaan dari pemberian probioktik terhadap kadar amonia. Hasil dari penelitian tersebut yaitu bahwa penurunan kadar amonia yang tercepat pada kelompok C dengan pendegradasian tercepat pada jam 20.00 dan 24.00. hasil uji anova yaitu $P > 0,05$ terima H_0 yang artinya tidak adanya perbedaan secara nyata dari pemberian probiotik *Bacillus spp.* terhadap kadar amonia di perairan tambak udang vaname, dan nilai uji lanjut pada perlakuan kelompok A sebesar $0,67 \pm 0,607^a$, jadi dosis yang efektif adalah 5 ml/L.

Kata kunci: *Bacillus spp.* amonia, tambak udang vannamei

TAUFIQ NASRULLOH 19.03.4.1.1.00071. Giving Probiotics *Bacillus Spp.* With Different Doses Against Ammonia Levels in Vannamei Shrimp Ponds (*Litopenaeus Vannamei*). Under guidance of Mr. **Wahyu Andy Nugraha, S.T., M.Sc., Ph.D.**

ABSTRACT

Vannamee shrimp is one of the aquaculture commodities that has a high demand, so it needs special handling in cultivation so that it is not susceptible to diseases caused by poor water quality such as high levels of ammonia. The purpose of this study was to determine the decrease in probiotic *Bacillus spp.* on ammonia levels and find out the effective dose for degrading ammonia levels in vannamei shrimp ponds. Data collection was carried out in November 2020 at the shrimp ponds of PT. Pyramide Paramount Indonesia (PPI) Farm Bantul. the study used a completely randomized design (CRD) method with different doses such as 5 ml/l, 10 ml/l, and 15 ml/l. Data analysis using the ANOVA test was continued with the LSD 5% test if there was an effect of giving probiotics on ammonia levels. The results of this study were that the fastest decrease in ammonia levels was in group C with the fastest degradation at 20.00 and 24.00 hours. the results of the ANOVA test, namely $P > 0.05$ received H_0 , which means that there was no significant difference from the probiotic *Bacillus spp.* on ammonia levels in vannamei shrimp pond waters, and further test values in group A treatment were $0,67 \pm 0,607^a$, so the effective dose was 5 ml/L..

Keywords: *Bacillus spp.*, ammonia, vannamei shrimp ponds