

Dwi Roni Febriyanto NPM. 190351100044. Pengaruh Pemberian Jenis Probiotik Yang Berbeda Terhadap Kualitas Perairan Dan Pertumbuhan Udang Vaname (*Litopenaeus vannamei*). **Abdus Salam Junaedi, S.Si., M. Si.**

ABSTRAK

Udang vaname memiliki prospek menjanjikan dalam segi ekonomi, sehingga banyak dibudidayakan masyarakat. Upaya memperbaiki nilai kualitas air kegiatan budidaya udang adalah menggunakan probiotik. Probiotik merupakan kumpulan mikroorganisme yang dapat meningkatkan kualitas perairan. Pemberian probiotik jenis berbeda perlu dilakukan penelitian agar mengetahui jenis probiotik yang optimal untuk budidaya udang vaname. Tujuan penelitian ini adalah mengetahui pengaruh pemberian jenis probiotik berbeda terhadap faktor fisika, kimia, biologi perairan, pertambahan berat dan panjang, serta *survival rate* dan FCR. Penelitian ini menggunakan metode Rancangan Acak Lengkap dengan 4 perlakuan 3 kali ulangan. Setiap wadah diisi 50 ekor udang vaname ukuran PL 8. Probiotik yang digunakan adalah EM4, Mina Pro, dan *Profish*. Penggunaan probiotik jenis berbeda berpengaruh secara nyata terhadap parameter fisika dan kimia perairan dengan probiotik paling optimal adalah EM4 dengan nilai suhu 26,2-27,2 °C, DO 5,19-5,73 ppm, salinitas 19-27 ppt, pH 6,3–6,7. Penggunaan probiotik jenis berbeda tidak berpengaruh secara nyata terhadap parameter biologi perairan, dengan probiotik paling optimal adalah *Profish* dengan nilai 10,13 Log CFU/ml. Penggunaan probiotik jenis berbeda berpengaruh secara nyata terhadap pertambahan berat dan panjang udang, *survival rate* dan FCR, dengan probiotik paling optimal adalah Mina Pro dengan pertambahan berat 1,25 g dan panjang 6,3 cm, *survival rate* 53% dan FCR 3,81%.

Kata Kunci : Probiotik, kualitas air, udang vaname, bakteri, survival rate.

Dwi Roni Febriyanto NPM. 190351100044. Effect of Giving Different Types of Probiotics on Water Quality and Growth of Vaname Shrimp (*Litopenaeus vannamei*). **Abdus Salam Junaedi, S.Si., M. Si.**

ABSTRACT

Vaname shrimp have promising prospects in terms of the economy, so they are widely cultivated by the community. Efforts to improve the value of water quality in shrimp farming activities are using probiotics. Probiotics are a collection of microorganikms that can improve water quality. Giving different types of probiotics needs to be researched in order to find out the optimal type of probiotic for vannamei shrimp cultivation. The purpose of this study was to determine the effect of giving different types of probiotics on physical, chemical, aquatic biology factors, weight and length gain, as well as *Survival rate* and FCR. This study used a completely randomized design with 4 treatments and 3 replications. Each container was filled with 50 PL 8 size vannamei shrimp. The probiotics used were EM4, Mina Pro, and *Profish*. The use of different types of probiotics significantly affects the physical and chemical parameters of waters with the most optimal probiotics being EM4 with a temperature value of 26.2-27.2°C, DO 5,19-5,73ppm, salinity 19-27ppt, pH 6,3–6,7. The use of different types of probiotics did not significantly affect aquatic biological parameters, with the most optimal probiotic being *Profish* with a value of 10.13 Log CFU/ml. The use of different types of probiotics had a significant effect on shrimp weight and length gain, *Survival rate* and FCR, with the most optimal probiotic being Mina Pro with a weight gain of 1,25 g and a length of 6,3 cm, a *Survival rate* of 53% and an FCR of 3.81%.

Keywords: Probiotics, water quality, vaname shrimp, bacteria, survival rate.