

ABSTRAK

GINAL AFAFAH 105941102419. Pengaruh Pemberian *Artemia* sp. Dengan Pengkayaan Probiotik EM4 Terhadap Pertumbuhan Dan Sintasan Udang vaname (*Litopenaeus vannamei*). Dibimbing oleh Abdul Malik dan Nur Insana Salam.

Udang vaname merupakan salah satu jenis udang yang banyak dibudidayakan, dan udang vaname memiliki keunggulan antara lain responsif terhadap pakan atau nafsu makan yang tinggi, lebih tahan terhadap penyakit, pertumbuhan lebih cepat, tingkat kelangsungan hidup tinggi, padat tebar cukup tinggi. Probiotik mampu meningkatkan pertumbuhan dan status kesehatan organisme budidaya udang vaname. Tujuan penelitian ini untuk mengetahui pengaruh pemberian probiotik EM4 terhadap pertumbuhan dan sintasan udang vaname yang dipelihara pada wadah terkontrol. Rancangan penelitian yang digunakan adalah Rancangan Acak Lengkap (RAL), terdiri dari 4 perlakuan dan 3 ulangan, perlakuan A, B, C dan perlakuan D. Hasil penelitian pertumbuhan bobot mutlak tertinggi pada perlakuan D sebesar 0,01373 mg dan terendah pada perlakuan B = 0,01089 mg. Pertumbuhan panjang mutlak tertinggi pada perlakuan D sebesar 1,52 cm, dan terendah perlakuan A = 1,31 cm. Kelangsungan hidup tertinggi pada perlakuan D = 97,92% dan terendah pada perlakuan B = 91,67%.

Hasil uji anova menunjukkan berbeda nyata terhadap pertumbuhan bobot mutlak dengan nilai sig = 0,01373.

Kata Kunci: *Artemia* sp., EM4, Pertumbuhan, Sintasan, Udang vaname

ABSTRACT

GINAL AFAFAH 105941102419. Effect of Giving *Artemia* sp. With EM4 Probiotic Enrichment on the Growth and Survival of Vannamei Shrimp (*Litopenaeus vannamei*). Supervised by Abdul Malik dan Nur Insana Salam.

Vannamei shrimp is a type of shrimp that is widely cultivated, and vannamei shrimp have advantages such as responsiveness to feed or high appetite, more disease resistance, faster growth, high survival rate, high stocking density. Probiotics can improve the growth and health status of vannamei shrimp farming organisms. The purpose of this study was to determine the effect of giving EM4 probiotics on the growth and survival of vannamei shrimp reared in controlled containers. The research design used was a Completely Randomized Design (CRD), consisting of 4 treatments and 3 replications, treatment A, B, C and treatment D. The results of the research showed that the highest absolute weight growth was in treatment D of 0.01373 mg and the lowest in treatment B = 0.01089mg. The highest absolute length growth was in treatment D of 1.52 cm, and the lowest in treatment A = 1.31 cm. The highest survival was in treatment D = 97.92% and the lowest was in treatment B = 91.67%.

The results of the ANOVA test showed a significant difference in absolute weight growth with sig = 0.01373.

Keywords: *Artemia* sp., EM4, Growth, Survival, Vannamei Shrimp