



ABSTRACT

Muh. Yusrah 105941100619. Effect of *Artemia* sp. results of enrichment of Synbiotic EM-4 and Bio-Mos on the growth and survival of vannamee shrimp seeds. Supervised by Hamsah and Darmawati

Sinbiotics are a combination of prebiotics and probiotics which are believed to have a synergistic effect by inhibiting the growth of pathogenic bacteria and increasing the growth of beneficial microorganisms in the digestive tract of organisms. This study aims to determine the growth rate and survival of vannamee shrimp (*Litopenaeus vannamei*) fed *Artemia* sp. which is enriched with the synbiotic EM-4 (*Effective microorganism 4*)” with Bio-MOS (*Mannan oligosaccharide*). The experimental design used was a Completely Randomized Design (CRD) with 4 treatments with 3 replications each. Each treatment was given *Artemia* sp. results of synbiotic enrichment (EM-4 and Bio-Mos), namely treatment A without synbiotic enrichment (control), Treatment B (8 mg/l EM-4 + 12 mg/l Bio-Mos), Treatment C (12 mg/l EM -4 + 18 mg/l Bio-Mos), Treatment D (16 mg/l EM-4, 24 mg/l + Bio-Mos). Vannamee shrimp seeds were reared in a box container measuring 55cm x 40cm x 27cm containing 20 liters of sea water with a stocking density of 2 fish/l. The results of this study indicate that giving *Artemia* sp. The results of synbiotic enrichment (EM-4 + Bio-Mos) showed significantly different results ($p>0.05$) on the weight growth of vannamee shrimp seeds, but had no effect on the absolute length growth and survival of

vannamei shrimp seeds. The best results of growth and survival were obtained in treatment D (16 mg/l EM-4 + 24 mg/l Bio-Mos).

Keywords: EM-4 Probiotics, Bio-Mos Prebiotics, growth, survival, vannamei shrimp

