ABSTRAK

PENGKAYAAN *Artemia* sp BEKU DENGAN VITAMIN C, TAURIN DAN KOMBINASI UNTUK MENINGKATKAN PERTUMBUHAN DAN KELANGSUNGAN HIDUP LARVA UDANG VANAME (*Litopenaeus vannamei*)

Oleh

THIA MONICA

Upaya meningkatkan performa larva udang vaname dapat dilakukan melalui nutrisi pakan yang diberikan. Salah satu nutrisi yang memiliki potensi untuk meningkatkan performa larva udang vaname adalah vitamin C dan taurin. Penelitian bertujuan untuk mengetahui pengaruh vitamin C serta taurin pada pengkayaan *Artemia* beku terhadap pertumbuhan dan kelangsungan hidup post larva udang vaname. Penelitian ini dilaksanakan di Hactchery PT. Maju Tambak Sumur, Lampung Selatan, dan Laboratorium Politeknik Lampung, pada bulan Januari 2021. Metode yang digunakan adalah metode eksperimen dengan menggunakan Rancangan Acak Lengkap (RAL) yang terdiri dari 4 perlakuan dengan Perlakuan A (Tanpa pengkayaan *Artemia* sp/ Kontrol); Perlakuan B (pengkayaan *Artemia* sp 50 mg vitamin C/l media pengkaya); Perlakuan C (pengkayaan *Artemia* sp 50 mg taurin/l media pengkaya); dan Perlakuan D (pengkayaan *Artemia* sp 25 mg vitamin C/l dan 25 mg taurin/l media pengkaya) dengan 5 ulangan. Data dianalisis dengan menggunakan analisis ragam dan untuk mengetahui perbedaan pengaruh antar perlakuan yang dicobakan dilanjutkan dengan uji Tukey. Hasil uji Tukey pada pertumbuhan dan kelangsungan hidup larva udang vaname dengan pengekayaan *Artemia* dengan vitamin C dan taurin yaitu berbeda nyata dan nilai pertumbuhan dan kelangsungan hidup yang tertinggi pada larva udang vaname setelah pemberian *Artemia* yang diperkaya vitamin C dan taurin yaitu 8,44mm dan 84% dengan dosis 25 mg/l vitamin C dan 25 mg/l taurin.

Kata Kunci: *Artemia* sp, Vitamin C, Taurin, Pengayaan, Post larva vaname

ABSTRACT

Enrichment of Frozen *Artemia* sp with Vitamin C ,Taurine and Combination to Improve the Growth and Survival of Vaname Shrimp Larvae (*Litopenaeus vannamei*)

By

THIA MONICA

Improving the performance of vaname shrimp larvae can be done through the nutritional contents of the feed. Some nutritional contents which have the potential to improve the performance of vaname shrimp larvae are vitamin C and taurine. The aim of this research was to determine the enrichment effect of vitamin C and taurine given to frozen *Artemia* on the growth and survival of vaname shrimp at the post larvae. This research was conducted at the Hachery of PT. Maju Tambak Sumur, South Lampung, and the Laboratory of Lampung State Polytechnic, from October 2020 - January 2021. Completely Randomized Design (CRD) consisting of 4 treatments was used in this study. Four treatments were Treatment A (without *Artemia* sp/used as Control); Treatment B (enrichment of *Artemia* sp with 50 mg vitamin C/L media); Treatment C (enrichment of *Artemia* sp with 50 mg taurine/L media); and Treatment D (enrichment of *Artemia* sp with 25 mg vitamin C/L and 25 mg taurine/L media) and with 5 replications. The data were analyzed using analysis of variance and subsequently using Tukey test to find out the difference in the effect between treatments. The results of Tukey test on the growth and survival of vaname shrimp larvae with enrichment of *Artemia* with vitamin C and taurine were significantly different ($p<0.05$). The highest growth and survival scores of vaname shrimp larvae after being treated with enrichment of *Artemia* with vitamin C and taurine were 8.44 mm and 84% at a dose of 25 mg/L vitamin C and 25 mg/L taurine.

Keywords: *Artemia* sp, Vitamin C, Taurine, enrichment, vaname post larva