

ABSTRAK

Udang vannamei (*Litopenaeus vannamei*) merupakan jenis biota air payau yang sangat digemari dan andalan sektor perikanan budidaya, menjadi prioritas pengembangan akuakultur di Indonesia. Tujuan penelitian adalah untuk menguji pengaruh penambahan suplemen ikan salmon dalam pakan terhadap pertumbuhan, sintasan, dan konversi pakan post larva udang vannamei (*Litopenaeus vannamei*). Penelitian ini dilaksanakan pada tanggal 01 Maret-30 Maret 2022, bertempat Laboratorium Hachery dan Teknologi Budidaya, Program Studi Akuakultur, Fakultas Pertanian, Universitas Malikussaleh. Metode penelitian yang dilakukan adalah metode Rancangan Acak Lengkap (RAL) non factorial yang terdiri dari 4 perlakuan dan 3 kali ulangan yaitu : A: Pakan pellet (Kontrol), B: 0.5% suplemen ikan salmon/kg pakan, C: 1% suplemen ikan salmon/kg pakan, D: 1.5% suplemen ikan salmon/kg pakan. Parameter yang diamati yaitu meliputi, laju pertumbuhan, tingkat kelangsungan hidup, konversi pakan, dan kualitas air. Hasil penelitian menunjukkan bahwa penambahan suplemen ikan salmon dalam pakan memberikan pengaruh yang sangat berbeda nyata terhadap pertumbuhan panjang dan bobot, dengan nilai $F_{hitung} > F_{tabel}$, dan berbeda nyata terhadap konversi pakan post larva udang vannamei (*Litopenaeus vannamei*), dengan nilai $F_{hitung} < F_{tabel}$. Hasil terbaik pertambahan panjang dan bobot terdapat pada perlakuan C dengan dosis penambahan 1% suplemen ikan salmon/kg pakan, tingkat kelangsungan hidup terbaik terdapat pada perlakuan B,C,D,dan A, dan nilai FCR terbaik terdapat pada perlakuan C. Kualitas air dalam penelitian suhu berkisar antara 25⁰C – 27.02⁰C, salinitas berkisar antara 28-29 ppt, pH air berkisar antara 6.-7.6, DO berkisaran antara 5.1-7,6 mg/l mg/l.

Kata kunci: Udang vannamei, suplemen ikan salmon, pertumbuhan, kelangsungan hidup.

ABSTRACT

Vannamei shrimp (*Litopenaeus vannamei*) is a type of brackish water biota that is very popular and a mainstay of the aquaculture sector, a priority for developing aquaculture in Indonesia. The aim of the study was to examine the effect of adding salmon supplements to feed on growth, survival, and feed conversion of white vannamei shrimp (*Litopenaeus vannamei*) post larvae. This research was carried out on March 1-30 2022, at the Hachery and Aquaculture Technology Laboratory, Aquaculture Study Program, Faculty of Agriculture, Malikussaleh University. The research method used was a non-factorial Completely Randomized Design (CRD) method consisting of 4 treatments and 3 replications, namely: A: Pellet feed (Control), B: 0.5% salmon/kg feed supplement, C: 1% fish supplement salmon/kg feed, D: 1.5% salmon supplement/kg feed. Parameters observed included: growth rate, survival rate, feed conversion, and water quality. The results showed that the addition of salmon supplements to feed had a very significantly different effect on growth in length and weight, with $F_{count} > F_{table}$, and did not have a significantly different effect on feed conversion and post larval survival of vannamei shrimp (*Litopenaeus vannamei*), with value $F_{count} < F_{table}$. The best results for length and weight gain were found in treatment C with an additional dose of 1% salmon supplement/kg of feed, the best survival rates were in treatments B, C, D, and A, and the best FCR values were found in treatment C. Deep water quality temperature research ranged from 25°C – 27.02°C, salinity ranged from 28-29 ppt, water pH ranged from 6.-7.6, DO ranged from 5.1-7.6 mg/l mg/l.

Keywords: Vannamei shrimp, salmon supplement, growth, survival