

Intisari

SINTASAN DAN PERTUMBUHAN LOBSTER AIR TAWAR (*Cherax quadricarinatus*) PADA SISTEM BUDIDAYA BERTINGKAT

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Penelitian ini dilakukan untuk mengetahui sintasan dan pertumbuhan lobster capit merah air tawar (*Cherax quadricarinatus*) pada sistem budidaya bertingkat menggunakan keranjang dengan volume air berbeda. Penelitian ini dilakukan dengan metode eksperimental menggunakan rancangan acak lengkap. Percobaan ini dilakukan dengan 4 perlakuan tingkat keranjang dengan kedalaman air yang sesuai dengan jumlah tingkatnya pada masing-masing bak fiber. Ukuran keranjang 40 x 30 x 10 cm³ dan ukuran bak fiber 40 x 40 x 70 cm³. Perlakuan tersebut meliputi jumlah keranjang yang tersusun sebanyak 1, 2, 3 dan 4 tingkat dengan kedalaman air secara berurutan 10 cm, 20 cm, 30 cm dan 40 cm, dengan kepadatan 10 ekor/keranjang (10 ekor/12 liter air). Masing-masing perlakuan terdiri dari 3 ulangan. Benih lobster yang digunakan berumur 2-3 minggu dengan ukuran ± 1 inci (± 2,5 cm). Lobster air tawar dipelihara selama 2 bulan dan diberi pakan tenggelam sebanyak 3% dari biomassa total. Pengamatan dilakukan terhadap sintasan dan pertumbuhan lobster serta kualitas air. Data hasil pengamatan dianalisis secara statistik dan diuji jarak ganda *Duncan* (*Duncan's New Multiple Range Test/DMRT*) pada tingkat kepercayaan 95%. Hasil penelitian menunjukkan bahwa sintasan dan pertumbuhan berat mutlak antar perlakuan tidak berbeda nyata, sedangkan pertumbuhan panjang mutlak, panjang dan berat spesifik antar perlakuan berbeda nyata. Hasil yang paling baik diperoleh pada penelitian lobster dengan perlakuan 1 tingkat keranjang (kedalaman air 10 cm) dengan sintasan 80%, pertumbuhan panjang mutlak 2,97 cm, panjang spesifik 1,80 %, berat mutlak 2,77 gram, berat spesifik 1,25 % dan produksi (*net yield*) 19,70 gram.

Kata kunci: *Cherax quadricarinatus*, sistem budidaya bertingkat, sintasan, pertumbuhan

Abstract

***SURVIVAL RATE AND GROWTH
OF CRAYFISH (*Cherax quadricarinatus*)
IN THE MULTI LEVEL CULTURE SYSTEM***

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This research was conducted to know the survival rate and growth of crayfish (*Cherax quadricarinatus*) in multi level culture system, the system used baskets with different water volume. This research used *Complete Randomized Design* (CRD). The experiment consisted of 4 baskets level treatments, while water volume has adjusted to the basket level in every fiberglass tank. The size of basket is 40 x 30 x 10 cm³ and the size of fiberglass tank 40 x 40 x 70 cm³. The treatments were P1 (1 basket level in 10 cm water volume), P2 (2 baskets level in 20 cm water volume), P3 (3 baskets level in 30 cm water volume), P4 (4 baskets level in 40 cm water volume). The treatment was replicated three times. The juvenile crayfish used in the experiment was 2-3 weeks following the hatching, and ± 1 inch (± 2,5 cm) size. Crayfish were cultivated for 2 months and the fed at the rate 3 % of biomass. Survival rate and growth were monitored. Results of research were analyzed using statistical method and test by *Duncan Multiple Range Test* (DMRT) at 95 % level of significant. The results showed that survival rate and growth between the treatments was not significant different, while the total growth length, specific length, and specific weight between the treatments were significant different. The best result were showed by P1 treatments with 80 % survival rate; 2,97 cm total growth length; 1,80 % spesific length; 2,77 gr total weight; 1,25 % specific weight and 19,70 gr *net yield*.

Keywords: Cherax quadricarinatus, multi level culture system, survival, growth.