

## RINGKASAN

M. EMON FATAHILAH. Evaluasi Pertumbuhan Rumput Laut *Eucheuma spinosum*. Dengan Bobot Bibit awal Tebar yang Berbeda di Perairan Desa Pelakak Kabupaten Lingga. Dibimbing oleh MUZAHAR dan TRI YULIANTO

Budidaya rumput laut sangat mempengaruhi pertumbuhan, dan ada beberapa faktor pada budidaya salah satu yaitu padat tebar pada metode lepas dasar. Penelitian ini bertujuan untuk mengetahui pengaruh bobot bibit awal yang berbeda. Penelitian ini dilaksanakan pada bulan Juli-September 2023 selama 42 hari dengan aklimatisasi selama 1 hari di bak dan 2 hari dikeramba. Desa Pelakak, Kecamatan Singkep Persisir, Kabupaten Lingga, Provinsi Kepulauan Riau. Metode yang digunakan adalah metode acak lengkap (RAL) dengan 3 perlakuan 3 ulangan Di mana bobot Bibit Perlakuan A: 25 gram, B: 50 gram, C: 75 gram. Hasil analisis pada pertumbuhan harian perlakuan 50gram ( $1,396 \pm 1,054$  gr), diikuti perlakuan 25gram ( $1,227 \pm 0,669$  gr) dan perlakuan paling rendah yaitu pada perlakuan 75 gram ( $0,661 \pm 0,752$  gr). Sementara itu pertumbuhan mutlak tertinggi pada perlakuan perlakuan 50gram ( $48,857 \pm 1,784$  gr) dan diikuti dengan perlakuan 25gram ( $46,714 \pm 1,000$  gr) dan perlakuan yang terendah yaitu 75 gram ( $23,143 \pm 2,147$  gr). Selanjutnya tingkat kelangsungan hidup tertinggi pada perlakuan 50 gram ( $75,000 \pm 12,50\%$ ) 25 gram ( $73,611 \pm 2,406\%$ ), dan perlakuan terendah yaitu 75 gram ( $68,056 \pm 13,39\%$ ). Perlakuan bobot bibit awal yang berbeda dengan metode lepas dasar memberikan pengaruh yang signifikan terhadap pertumbuhan harian (PH) dan laju pertumbuhan mutlak (PM) dan pertumbuhan tingkat kelangsungan hidup (SR) selama penelitian.

Kata kunci: Rumput Laut *Eucheuma spinosum* varian merah, Metode lepas dasar.

## SUMMARY

M. EMON FATAHILAH. Evaluation of the Growth of the Seaweed *Eucheuma spinosum*. With Different Initial Seed Weights Scattered in the Waters of Pelakak Village, Lingga Regency. Supervised by MUZAHAR and TRI YULIANTO

Seaweed cultivation greatly influences growth, and there are several factors in cultivation, one of which is stocking density using the off-bottom method. This research aims to determine the effect of different initial seed weights. This research was carried out in July-September 2023 for 42 days with acclimatization for 1 day in a tank and 2 days in a cage. Pelakak Village, Singkep Persisir District, Lingga Regency, Riau Islands Province. The method used was a completely random method (CRD) with 3 treatments and 3 replications. The weight of the Seedlings for Treatment A: 25 grams, B: 50 grams, C: 75 grams. The analysis results showed daily growth in the 50gram treatment ( $1.396 \pm 1.054$  gr), followed by the 25gram treatment ( $1.227 \pm 0.669$  gr) and the lowest treatment was the 75gram treatment ( $0.661 \pm 0.752$  gr). Meanwhile, the highest absolute growth was in the 50gram treatment ( $48,857 \pm 1,784$  gr) followed by the 25gram treatment ( $46,714 \pm 1,000$  gr) and the lowest treatment was 75 grams ( $23,143 \pm 2,147$  gr). Furthermore, the highest survival rate was in the 50gram ( $75,000 \pm 12.50$  %) 25gram ( $73,611 \pm 2,406$  %) treatment, and the lowest treatment was 75 gram ( $68,056 \pm 13.39$  %). Treatment of different initial seed weights using the off-base method had a significant influence on daily growth (PH) and absolute growth rate (PM) and survival rate (SR) growth during the study.

Keywords: Seaweed *Eucheuma spinosum* red variant, Off bottom method.

