

INTISARI

PENGARUH JENIS *SHELTER* TERHADAP SINTASAN DAN PERTUMBUHAN BENIH LOBSTER AIR TAWAR *RED CLAW* (*Cherax quadricarinatus*)

Lobster air tawar merupakan komoditas perikanan yang berasal dari Queensland, Amerika Serikat dan Australia, yang cukup banyak dibudidayakan di Indonesia. Penelitian ini bertujuan untuk mengetahui *Shelter* terbaik pada pendederan benih lobster air tawar. Penelitian ini dilakukan menggunakan metode eksperimental dengan model Rancangan Acak Lengkap dengan 4 perlakuan dan 3 ulangan yaitu, kontrol, *shelter* pipa paralon, *shelter* eceng gondok, dan *shelter* rafia. Benih yang digunakan memiliki rerata panjang awal $2,67 \pm 0,12$ cm, $2,77 \pm 0,15$ cm, $2,77 \pm 0,05$ cm, $2,74 \pm 0,11$ cm dan rerata berat awal $0,71 \pm 0,06$ g, $0,78 \pm 0,11$ g, $0,80 \pm 0,04$ g, $0,76 \pm 0,08$ g. Penelitian ini dilakukan selama 60 hari di Laboratorium Genetik dan Pemuliaan Ikan, Departemen Perikanan, Fakultas Pertanian Universitas Gadjah Mada. Parameter yang diamati yaitu kematian, frekuensi *moulting*, pertumbuhan dan kualitas air yang diamati setiap 14 hari. Variabel pengamatan yang meliputi Sintasan benih, pertumbuhan mutlak, pertumbuhan relatif, heterogenitas panjang benih dan kualitas air. Hasil pengamatan diuji dengan analisis sidik ragam (ANOVA), apabila terdapat beda nyata ($P < 0,05$) antar perlakuan maka dilanjutkan dengan uji *Duncan's Multiple Range Test*. Hasil penelitian diketahui bahwa terdapat beda nyata antar perlakuan pada Sintasan dan pertumbuhan berat mutlak, pertumbuhan berat relatif, pertumbuhan panjang mutlak dan pertumbuhan panjang relatif benih. *Shelter* rafia merupakan *shelter* terbaik dengan Sintasan benih mencapai $89,33 \pm 1,15$ %, pertumbuhan berat mutlak $1,97 \pm 0,01$ g, pertumbuhan berat relatif $0,021 \pm 0,000$ g/hari, pertumbuhan panjang mutlak $2,26 \pm 0,05$ cm, dan pertumbuhan panjang relatif $0,010 \pm 0,010$ cm/hari.

Kata Kunci : benih, kanibalisme, lobster air tawar, *moulting*, pertumbuhan, sintasan.

ABSTRACT

EFFECT OF TYPES OF *SHELTER* ON SURVIVAL RATE AND GROWTH OF *RED CLAW* FRESHWATER CRAYFISH (*Cherax quadricarinatus*) SEEDS

Freshwater lobster is a fishery commodity originating from Queensland, the United States and Australia, which is quite widely cultivated in Indonesia. This study aims to determine the best shelter in crayfish nursery. This research was conducted using an experimental method with a completely randomized design model with 4 treatments and 3 replications namely, control, paralon pipe shelter, water hyacinth shelter, and raffia shelter. The seeds used had an average initial length of 2.67 ± 0.12 cm, 2.77 ± 0.15 cm, 2.77 ± 0.05 cm, 2.74 ± 0.11 cm and an average initial weight of 0.71 ± 0.06 g, 0.78 ± 0.11 g, 0.80 ± 0.04 g, 0.76 ± 0.08 g. This research was conducted for 60 days at the Fish Genetics and Breeding Laboratory, Department of Fisheries, Faculty of Agriculture, Gadjah Mada University. Parameters observed were mortality, moulting frequency, growth and water quality which were observed every 14 days. The observed variables included seed survival, absolute growth, relative growth, heterogeneity of seed length and water quality. The results of the observations were tested by analysis of variance (ANOVA), if there were significant differences ($P < 0.05$) between treatments then it was continued with the Duncan's Multiple Range Test. The results showed that there were significant differences between the treatments in survival and growth in absolute weight, growth in relative weight, growth in absolute length and growth in relative length of seeds. Rafia shelter was the best shelter with seed survival reaching 89.33 ± 1.15 %, absolute weight growth of 1.97 ± 0.01 g, relative weight growth of 0.021 ± 0.000 g/day, absolute length growth of 2.26 ± 0.05 cm, and relative length growth of 0.010 ± 0.010 cm/day.

Keywords: cannibalism, crayfish seeds, *moulting*, growth, survival rate.