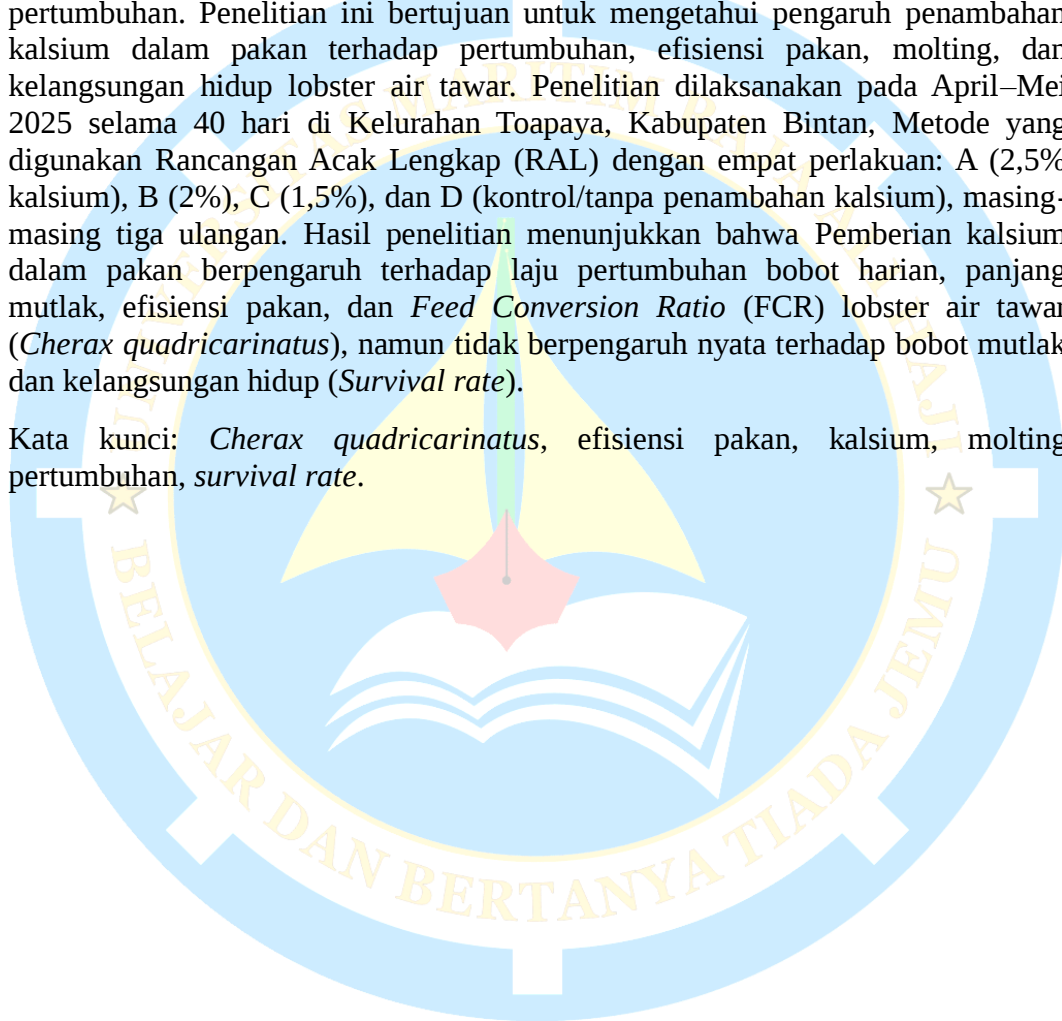


RINGKASAN

SIGIT ENGGAR PANGESTU. Frekuensi Molting dan Pertumbuhan Lobster Air Tawar *Cherax quadricarinatus* yang Diberi Pakan Diperkaya Kalsium Dibimbing oleh MUZAHAR dan TRI YULIANTO

Lobster air tawar (*Cherax quadricarinatus*) merupakan salah satu komoditas perikanan air tawar yang bernilai ekonomi tinggi dan memiliki potensi besar untuk dikembangkan di Indonesia. Salah satu faktor penting yang memengaruhi keberhasilan budidaya adalah nutrisi, khususnya kandungan kalsium dalam pakan. Kalsium berperan penting dalam proses molting, pembentukan eksoskeleton, dan pertumbuhan. Penelitian ini bertujuan untuk mengetahui pengaruh penambahan kalsium dalam pakan terhadap pertumbuhan, efisiensi pakan, molting, dan kelangsungan hidup lobster air tawar. Penelitian dilaksanakan pada April–Mei 2025 selama 40 hari di Kelurahan Toapaya, Kabupaten Bintan, Metode yang digunakan Rancangan Acak Lengkap (RAL) dengan empat perlakuan: A (2,5% kalsium), B (2%), C (1,5%), dan D (kontrol/tanpa penambahan kalsium), masing-masing tiga ulangan. Hasil penelitian menunjukkan bahwa Pemberian kalsium dalam pakan berpengaruh terhadap laju pertumbuhan bobot harian, panjang mutlak, efisiensi pakan, dan *Feed Conversion Ratio* (FCR) lobster air tawar (*Cherax quadricarinatus*), namun tidak berpengaruh nyata terhadap bobot mutlak dan kelangsungan hidup (*Survival rate*).

Kata kunci: *Cherax quadricarinatus*, efisiensi pakan, kalsium, molting pertumbuhan, *survival rate*.



SUMMARY

SIGIT ENGGAR PANGESTU. The Effect of Calcium Addition in Feed on the Molting Frequency and Growth of Freshwater Lobster *Cherax quadricarinatus*. Supervised by MUZAHAR and TRI YULIANTO

Freshwater crayfish (*Cherax quadricarinatus*) is one of the high-value freshwater aquaculture commodities with great potential for development in Indonesia. One of the key factors influencing the success of cultivation is nutrition, particularly the calcium content in feed. Calcium plays an essential role in the molting process, exoskeleton formation, and overall growth. This study aimed to determine the effect of calcium supplementation in feed on the growth, feed efficiency, molting, and survival rate of freshwater crayfish. The research was conducted in Toapaya Subdistrict, Bintan Regency, from April to May 2025 for 40 days. The experimental design used was a Completely Randomized Design (CRD) with four treatments: A (2.5% calcium), B (2%), C (1.5%), and D (control/no calcium supplementation), each with three replications. The results showed that calcium supplementation in feed significantly affected daily weight gain, absolute length, feed efficiency, and feed conversion ratio (FCR) of freshwater crayfish (*Cherax quadricarinatus*), but had no significant effect on absolute weight and survival rate.

Keywords : calcium, *Cherax quadricarinatus*, feed efficiency, growth, molting, survival rate.

