PRELIMINARY STUDIES ON MARGIE COPEROD GULTURE WITH DIFFERENT MICROALGAE

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PRELIMINARY STUDIES ON MARINE COPEPOD CULTURE WITH DIFFERENT MICROALGAE

Joyce Lee Huay

This project report is submitted in partial fulfilment of the requirement of the degree of Bachelor of Applied Science (Fishery Science)

FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE KOLEJ UNIVERSITI SAINS DAN TEKNOLOGI MALAYSIA

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ABSTRACT

Experiments to evaluate the survival rate and growth performance of *Oithoina similes* fed with seven different microalgae feeding treatments were undertaken. The mixture of the feeding treatment of *Chlorella* sp., *Nannochloropsis* sp. and *Tetraselmis* sp. (M) had showed the highest survival rate of 65.0 % while the feeding treatment, CN (mixed feeding treatment of *Chlorella* sp. and *Nannochloropsis* sp.) exhibited the lowest survival rate (15.0 %). The feeding treatment of T (*Tetraselmis* sp.) and CT (mixed feeding treatment of *Chlorella* sp. and *Tetraselmis* sp.) showed the best growth performance in total length, TL for the first and second experiment with the data recorded were (138.57 \pm 12.91 μ m) and (137.23 \pm 13.87 μ m) respectively. Overall results had indicated *Tetraselmis* sp. which is a constant component of the above treatments might be a high potential feed item for copepod culture or marine Cyclopoid species in specific.

ABSTRAK

Eksperimen untuk menilai kadar kemandirian dan perlakuan pertumbuhan *Oithona similis* dengan tujuh rawatan pemakanan mikroalga yang berbeza telah dijalankan. Rawatan pemakanan campuran *Chlorella* sp., *Nannochloropsis* sp. dan *Tetraselmis* sp. (M) telah menunjukkan kadar kemandirian tertinggi sebanyak 65.0 % sementara rawatan pemakanan CN (*Chlorella* sp. dan *Nannochloropsis* sp.) menunjukkan kadar kemandirian terendah (15.0 %). Rawatan pemakanan T (*Tetraselmis* sp.) dan CT (rawatan pemakanan campuran *Chlorella* sp. dan *Tetraselmis* sp.) menunjukkan perlakuan pertumbuhan terbaik dalam panjang mutlak (Total Length, TL) iaitu sebanyak 138.57 ±12.91 μm dan 137.23 ±13.87 μm masing-masing dalam eksperimen pertama dan kedua. Keputusan secara keseluruhannya telah menunjukkan *Tetraselmis* sp. yang merupakan komponen yang konstan dalam rawatan pemakanan di atas mungkin merupakan makanan yang berpotensi tinggi dalam kultur kopepod atau spesies Cyclopoid secara khusus.