EFFECTS OF VARIOUS FEEDS ON THE GROWTH AND SURVIVAL OF SOFT-SHELL TURTLE (*Trionyx sinensis* Wiegmann)

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ABSTRACT

An eight-week feeding trial was undertaken to evaluate the growth and survival of soft-shell turtle (Trionyx sinensis) hatchlings fed with various feeds. The treatments were trash fish (TF), fish meal (FM), poultry by-products (PM) and a 1:1 mixture of fish meal and poultry by-products (MIX). During the experimental period, the growth of the hatchlings and the water quality of the culture tanks were monitored at weekly intervals.

The average weight gains observed at the end of the experiment were 12.27, 10.80, 9.55 and 4.90 g for turtles fed with MIX, FM, TF and PM, respectively. The weight gains for hatchlings fed with MIX and PM were the highest and the lowest, respectively ($P<0.05$). But the weight gains for hatchlings fed with TF and FM were not significantly different ($P>0.05$).

The gains in carapace length for turtles fed with MIX, FM, TF and PM were 19.5, 18.5, 16.8 and 10.9 mm, respectively indicating that the MIX feed enabled the best growth rate as compared to other feeds. There was also no significant difference ($P>0.05$) in survival rates.

ABSTRAK

Percubaan pemberian makanan kepada benih labi-labi (Trionyx sinensis) telah dijalankan untuk menilai kesan berlainan jenis makanan terhadap pertumbuhan dan kemandiriannya. Dalam eksperimen selama lapan minggu ini rawatan terdiri daripada ikan baja (TF), tepung ikan (FM), tepung hasil sampingan ayam (PM) dan satu makanan campuran antara tepung ikan dan tepung hasil sampingan ayam dengan nisbah 1:1 (MIX). Pertumbuhan benih labi-labi dan mutu air dalam tangki eksperimen telah dimonitor seminggu sekali, sepanjang tempoh eksperimen itu.

Pada peringkat akhir eksperimen, purata pertambahan berat badan bagi labi-labi yang memakan berlainan jenis makanan adalah seperti berikut, MIX, 12.27g; FM, 10.80g; TF, 9.55g dan PM, 4.90g. Benih labi-labi yang memakan makanan MIX dan PM masing-masing mencatatkan pertambahan berat badan yang tertinggi dan yang terendah ($P<0.05$). Bagi benih labi-labi yang memakan makanan TF dan FM pula, pertambahan berat badan antara kedua-dua rawatan ini tidak menunjukkan perbezaan yang bererti ($P>0.05$).

Pertambahan panjang karapas bagi benih labi-labi yang memakan makanan MIX, FM, TF dan PM adalah sebanyak 19.5mm, 18.5mm, 16.8mm dan 10.9mm masing-masing. Ini menunjukkan makanan MIX memberikan kadar pertambahan yang terbaik berbanding dengan makanan lain. Kadar kemandirian benih labi-labi sepanjang tempoh eksperimen tidak menunjukkan perbezaan yang bererti ($P>0.05$).