

EFFECT OF DIFFERENT LEVELS OF MAIZE POWDER SUPPLEMENTATION ON GROWTH, SURVIVAL RATE AND CAROTENOID CONCENTRATIONS IN THE FLESH OF THE BROADHEAD CATFISH(*Clarias macrocephalus*)

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Summary

The study was conducted at fish hatchery that located in Phu Thu ward, Cai Rang district, Can Tho city. The objective of this study was to determine influence of different levels of maize powder on growth, survival rate and carotenoid concentration in the flesh of the broadhead catfish (*Clarias macrocephalus*). The broadhead catfish (9.15 g) was nursed in hapas (2.0 x 2.0 m x 2.0 m) with the density of 160 fish/hapas for the duration of 5 months. Experiment was randomly set up with 4 treatments and 3 replications. Fish were fed with pellet feed 40% protein content supplemented maize powder with different levels (0%, 5%, 10% and 15%). The result showed that survival rate was very high in all of treatments and insignificant difference ($p>0.05$). The highest parameters of weight gain were obtained at treatment no supplemented maize powder. The treatments were supplemented from 5 to 15% maize powder which was no significant difference ($p>0.05$) in growth. However, carotenoid concentration in the flesh of broadhead catfish at treatment 15% maize powder supplementation was insignificant difference ($p>0.05$) than that in the flesh of wild fish. The broadhead catfish was fed with supplemental dietary 15% maize powder will obtain lower weight gain but its skin and flesh pigments is similar to the wild fish.

Keyword: *Broadhead catfish, carotenoid, Clarias macrocephalus, maize powder, supplementation.*