

Dietetic effects of "Clomiphene" on survival, growth performance and Fecundity indices in Convict Cichlid fish (*Amatitlania nigrofasciata*)

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Abstract

In Convict Cichlid fish (*Amatitlania nigrofasciata*), dietetic effects of "Clomiphene" was studied on survival, growth performance and Fecundity indices. The main aim of the research was to explore an effective dietetic additive for production increase of the ornamental fishes in an attempt to promote economic growth and to reduce financial loss in the ornamental fishes industry. For 2 months (2016), 150 convict cichlid fish (body weight: $0.73\text{g} \pm 0.28$ and Standard length: $2.26\text{cm} \pm 0.38$) in 5 groups of 10 (one control and 4 treatments, each with 3 replicates) fed on Clomiphene Citrate (0, 0.5, 1, 1.5 and 2 mg/kilogram of dried food). Biometry (body weight and standard length) were being done twice a month (every 2 weeks) and survival rate, growth and fecundity indices were calculated at the end (after 2 months). The results showed that Clomiphene promotes a positive effect in growth performance (the best results in 1mg/kilogram of dried food) and fecundity indices (the best results in 2mg/kilogram of dried food especially in females). Survival rate does not show any correlation between the groups. So, Clomiphene could be offered as an effective dietetic additive in Convict Cichlid fish aquaculture (1mg/kilogram of dried food for growth and 2mg/kilogram for fecundity) in ornamental fishes industry.

Keywords: Convict Cichlid, Clomiphene, Growth, Fecundity, *Amatitlania nigrofasciata*.