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Effects of live tubificid worms on growth performance and survival of stinging catfish, *Heteropneustes fossilis* (Bloch, 1794)

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Stinging catfish (*Heteropneustes fossilis*, Bloch, 1794) is very popular and high valued fish in Bangladesh. Due to high nutritive value, the fish is recommended in the diet of sick and convalescent patients. Presently, stinging catfish is declared as one of the threatened fish in Bangladesh (IUCN Bangladesh, 2000). Considering its status it is essential to develop a suitable culture technique to sustain this threatened fish in wild nature. However, very little published literatures are available on growth and production of stinging catfish in pond, tank and net cages in Bangladesh. In the present experiment, growth performance, survival and flesh quality of stinging catfish were evaluated using three types of feeds namely live tubificid worm, tubificid powder and commercial pellet feed. Three feeds were used in three treatments where Treatment-T₁ using pellet feed (control), Treatment-T₂ using tubificid powder and Treatment-T₃ using live tubificid worms. Ten fingerlings ($W=8.04\pm 0.01$ g) were stocked in each 50 L tank with three replicates for 45 days rearing in laboratory condition. The fishes were fed twice a day at 10% of body weight for first 15 days and 8% per day for the next 30 days. Fish sampling was done at 15 days interval. Significantly higher mean body weight $W=48.53\pm 1.13$ g was found in stinging catfish at 45th day fed with live tubificid worm than that of others ($P<0.05$). The highest survival rate $91.67\pm 1.67\%$, average daily gain (ADG) 0.97 ± 0.01 g day⁻¹, specific growth rate (SGR) $4.58\pm 0.05\%$, protein content $17.48\pm 0.28\%$ and lowest food conversion ratio (FCR) 1.52 ± 0.02 were found in treatment T3 while live tubificid worms were used as feed. The present study suggests that live tubificid worms may be used as a good alternative to commercial feed in rearing of stinging catfish particularly to overcome the suffocating problem in nursing period.

Biography

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