

## Impact of different feeds on growth, survival and feed conversion in striped snakehead *Channa striatus* (Bloch 1793) larvae

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### ABSTRACT

Growth, survival and feed conversion ratio of striped snakehead (*Channa striatus*) larvae fed on different feeds during nursery rearing were evaluated. Three different experiments were conducted using hatchlings, fry and fingerlings of *C. striatus* with three replicates per treatment. Growth performance of snakehead hatchlings was examined by feeding them with the following diets: Diet 1 - copepod, *Thermocyclops decipiens*; Diet 2 - cladoceran, *Ceriodaphnia cornuta* and Diet 3 - *T. decipiens* and *C. carnuta* in combination, for a period of four weeks. Weight gain in the fish fed with Diet 3 (*T. decipiens* + *C. carnuta*) was significantly higher ( $p < 0.05$ ) than that of the fish fed Diet 2 (*C. carnuta*) and Diet 1 (*T. decipiens*). Feeding trial of 45 days duration conducted by feeding animal wastes (D1: chicken liver, D2: fish waste and D3 : combination of chicken liver and fish waste) to evaluate the growth and survival of *C. striatus* fry showed significantly high ( $p < 0.05$ ) survival rate in *C. striatus* fry fed diet D3 compared to those fed D1 and D2. Food conversion ratio (FCR) was lowest in the group fed D3 followed by those fed D1 whereas highest FCR was noticed in D2. Among the four types of formulated diets evaluated in fingerlings of *C. striatus*, the mean growth rate was significantly higher ( $p < 0.05$ ) in fish fed on chicken liver incorporated diet. Chicken liver diet showed the lowest FCR, where as highest FCR was recorded in control diet ( $p < 0.05$ ).

Keywords: *Channa striatus*, Fingerlings, Food conversion ratio, Formulated diet, Fry, Hatchlings, Striped snakehead