

Research Article

Population Growth and Growth Performance of Freshwater Rotifer (*Filinia longiseta*) Fed with Different Supplemented Microalgae Diets

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ABSTRACT

The lack of size-suitable live food for small-gaped fish larvae is a major impediment to their growth and survival. Rotifers are viable live food that can bridge the gap between the dependence of such fish larvae from their endogenous yolk to larger-sized live feeds. The present study focused on developing *Filinia longiseta*, a very small local rotifer, as an important live food for fish larviculture. The study specifically investigated the effects of four different supplements (yeast, commercial fish fry booster, rice bran and fish waste) in the microalgae (*Chlorella vulgaris*) diet of *Filinia longiseta* to its population growth and individual growth. Yeast, fry booster and fish waste significantly ($p < 0.05$) improved the population growth of *F. longiseta* better than rice bran and *Chlorella* only diet after 6 days of culture. Individual growth did not significantly vary among different diet treatments and control ($p > 0.05$). Performance of these different supplements have been investigated in the past and showed that their effectivity in improving rotifer population and growth parameters were attributed to proper preparation, their digestibility, efficient absorption and interaction with microflora in the culture media.

Key words: *Filinia longiseta*, yeast, rice bran, fry booster, fish waste

