Evaluation of simple feeding technology on growth and feed efficiency of tilapia in cage aquaculture at South Kalimantan, Indonesia

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Abstract

The objective of this study was to evaluate the effectiveness and efficiency of the automatic funnel feeding in cage aquaculture system (karamba). The examined feeding systems were an automatic funnel and a conventional method. The experiment was run for 8 weeks. The weight of the fish samples was measured every 2 weeks. The observed variables were individual weight gain (WG), specific growth rate (SGR), mortality (M), and feed consumption (FC). The unpaired t-test was applied to compare the feeding methods. Results showed that there were no significant differences in WG, SGR, M and FC of the two feeding methods. Feeding with the automatic funnel provided more benefits because it can save labour costs and reduce offered feed. Moreover, automatic feeding reduced the amount of feed entering the aquatic ecosystem thus it reduced the pollution load due to cage aquaculture. It is suggested that automatic funnel feeding technology resulted in similar fish productivity while it is more environmentally friendly in the cage aquaculture production system.

Keywords: cage aquaculture, automatic funnel, conventional feeding, fish growth rate, fish weight