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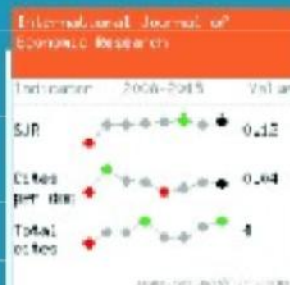
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Economic Efficiency and Cost Reduction through the Use of Non-organic Feed on the Farming of Transgenic Mutiara Catfish (*Clarias sp.*) F1 Hybrid

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Abstract: This research aims to identification the efficiency of the feed and the growth on mutiara catfish F1 hybrid. Experiment is conducted in Aquaculture Laboratory, Faculty of Fisheries and Marine Sciences, Universitas Padjadjaran, Jatinangor from June to August 2016. The method used for this research is economic analysis randomized design factorial experiment that includes three treatment factors: F1 hybrid from transgenic mutiara catfish and sangkuriang catfish, non-transgenic mutiara catfish and sangkuriang catfish, and sangkuriang catfish and sangkuriang catfish. The fish are treated with two feeding levels of 5% and 7% of biomass weight with three repetitions. The feed is the non-organic Hi-Provit 781 with the frequency of two times per day. Production cost efficiency is calculated using value of benefit and cost with average daily gain and survival rate as testing parameters. The results show that treatment on hybrid of transgenic mutiara catfish and sangkuriang catfish with feeding level of 5% induces the leading result with insignificant difference of survival rates in every treatment. The most efficient treatment is treatment A with economic efficiency of 1.13.

Key words: average daily gain, survival rate, economic efficiency, cost reduction, transgenic mutiara catfish

INTRODUCTION

Catfish farming of the genus *Clarias*, specifically African catfish, *Clarias gariepinus*, has been one of important aquaculture business in Indonesia (Imron, *et al.* 2015). The savoury taste of the fish makes the consumption rate is high, as well as the high protein level of 20%. The fish have been farmed for years and the industry has also grown rapidly in the last few years with significant environmental survival rate and the possibility of being cultivated in limited amount of water. In addition, the farming is supported by trouble-free marketing and efficient production cost that people expand their catfish farming into a