ABSTRACT

THE EFFECT OF STOCKING DENSITY ON GROWTH AND SURVIVAL RATE OF CATFISH (Clarias gariepinus) IN INTENSIVE CULTURE WITH ZERO WATER EXCHANGE SYSTEM

By

Nurmatin Salim Priangga

Cat fish (Clarias gariepinus) is a freshwater fish introduced to Indonesia in 1985. Catfish is one of many fish that culture in Indonesia, and can survive in environment with low dissolved oxygen concentration. Optimal density is very important to culture successfully catfish. Low stocking density will decrease pond productivity, while high stocking density will decrease growth and survival rate.

The aim of this research was to study the growth and survival rate of catfish on different stocking density in intensive culture with system of zero water exchange. Compalely randomized design with tree different treatment (100 fish/m³, 200 fish/m³, 300 fish/m³) Was applied data analysed with Anova on 95% of significantly level.

Results showed that stocking density of 100 fish/m³, produced the highest growth rate (45.66 gram/fish) and survival rate (97%) as long as 40 days culture.

Key word: Catfish, Stocking density, zero water exchange system