ABSTRACT

MARSANDRE JATILAKSONO. The use of purewater medium on survival rate of Black Ghost fish *Apteronotus albifrons* in a closed transportation system with high density. Supervised by EDDY SUPRIYONO and KUKUH NIRMALA

The problem has occurred frequently in export of ornamental fish transportation is a low survival rate caused by water quality which worsen during transportation. The one solution of them is using purewater to medium of fish transportation. This study aimed to determine the effective comparison of composition of purewater and well water to create the best survival rate of Black Ghost fish in a closed transportation system with high density. The study was conducted in laboratory with a simulation of fish transport test. Fish were transported in difference medium, i.e., treatment A (100% purewater), treatment B (25% purewater + 75% well water), treatment C (50% purewater + 50% well water), treatment D (75% purewater + 25% well water) and Control (100% well water). The package system was transport up to 120 hour. The result showed that purewater given effects on survival rate and water quality of transportation medium. The real effect on survival rate was began at the 48\textsuperscript{th} hour. At that time, treatment A and treatment D has created highest survival rate (94,17±1,44%), however in economic analyzed showed that the treatment C mostly profitable. At the 120\textsuperscript{th} hour, treatment A was created highest survival rate (69,17±3,82%) too. At that time the Dissolved of Oxygen (DO) was 5,50±0,12 mg/l and Total of Ammonia-Nitrogen (TAN) was 6,77±0,58 mg/l. Treatment A which content of 100% purewater have relatively better in water quality and stable in a closed fish transportation. It was created high survival rate.

Keywords : purewater, transportation, high density, Black Ghost, *Apteronotus*