

**THE APPLICATION OF ANESTHESIA TECHNIQUES OF
TILAPIA SEED (*Oreochromis niloticus*) BY USING FRANGIPANI FLOWER
EXTRACT (*Plumeria acuminata*) IN WET SYSTEM TRANSPORTATION**

by

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ABSTRACT

Tilapia fish transportation (*Oreochromis niloticus*) is a part in the tilapia hatchery operations. One of transportation methods that can be used is the wet system transportation by utilizing frangipani flower extract (*Plumeria acuminata*) as an anesthetic (anesthesia). The research aims to determine the most effective concentration of frangipani flower extract in anesthesia tilapia fish on a wet transport system. This research used a completely randomized design with treatment A (0 mg / L), B (0.398 mg / L frangipani flower extract), C (1,584 mg / L frangipani flower extract), and D (6.304 mg / L frangipani flower extract), each treatment 6 replications. The parameters that are observed toxicity test, fainting speed, long recovered unconscious, survival rate, growth rate and water quality (temperature, dissolved oxygen and pH). The results showed that the concentration of frangipani flower extract significantly different ($P > 0.05$) to the faint velocity period, realized a long time to recover, the survival rate and daily growth rate. Frangipani flower extract concentration was not significantly different among treatments ($P < 0.05$) to the survival rate and growth rate of tilapia fish daily. The most effective concentration of frangipani flower extract for anesthetic techniques in the transport system is 6.304 mg / L with a survival rate reaches 94.43%

Keywords: extract, frangipani flower, fish transportation, tilapia, anesthesia