ABSTRACT

THE EFFECT OF FRESH WATER MUSSEL (*Pilsbryoconcha exilis*) AS BIO FILTER IN RECIRCULATING SYSTEM ON GROWTH RATE OF SANGKURIANG CATFISH (*Clarias gariepinus*)

By

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Catfish (*Clarias gariepinus*) is one of fishery commodities in Indonesia that has a high economic value. The parameter that has an important effect of catfish growth is water quality. Ammonia is a limiting factor to growth rate of cat fish. Concerntation of 0.18 mg/l ammonia (NH_3) could inhibit fish growth. Recirculating system combine with bio filter is the way to reduce ammonia. The aim of this research was to study the effect of fresh water mussel (*Pilsbryoconcha exilis*) as bio filter in recirculating system on growth rate and survival rate of Sangkuriang catfish. This research used four difference treatment density of fresh water mussel there are 0, 100, 150, and 200/ 0,6 m^3 mussels. The result showed that all treatment by using fresh water mussel affected the growth and survival rate of Sangkuriang catfish. The highest of absolute growth was found on 200 freshwater mussels treatment by producing catfish weight of 19.71 grams, and the highest of survival rate was found on 200 *P. exilis* with of rate 80,14%.

Keywords: *Sangkuriang catfish, bio filter, fresh water mussel, growth, survival rate.*