

THE EFFECT OF STEROID EXTRACTS OF SEA CUCUMBER (*Holothuria scabra*) AND 17 METHYLTESTOSTERONE AT DIFFERENT TEMPERATURE ON SEX REVERSAL OF JUVENILE FRESHWATER CRAYFISH (*Cherax quadricarinatus*)

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ABSTRACT

Red claw (*Cherax quadricarinatus*) is one kind of fresh water cray fish with high economic value which encourages farmers to increase their production. However, there are several obstacles where the growth of female individuals is faster than male. To overcome this problem, it is important to undergo a monosex (single gender) cultivation. The aim of this research is to find out the effect of sea cucumber's steroid extract and 17 methyltestosterone at different temperature to sex reversal to males on juvenile freshwater crayfish, *Cherax quadricarinatus*. This research was designed using Factorial Complete Random Design Method. The treatments were observed at temperatures of 27° C and 31°C as follows: 50 mg/kg of sea cucumber's steroid extracts at temperatures of 27°C and 31°C, and 50 mg/kg of 17 methyltestosterone at temperatures of 27 ° C and 31 ° C. The results showed that the most effective use of steroid extracts of sea cucumber and 17 methyltestosterone was at 27°C to increase the male percentage of 75.16% and 73.79% respectively and gave a significant effect on female genital decrease, total length, daily weight gain and biomass. While giving the steroid hormone did not make a significant effect on survival rate, intersex percentage and feed conversion of juvenile freshwater crayfish.

Keywords: sea cucumber, steroid, freshwater crayfish, 17 methyltestosterone, temperature