

PRELIMINARY STUDY ON THE EFFECTS OF THYROXINE ON
LATE STAGES OF *Macrobrachium rosenbergii* LARVAL
DEVELOPMENT


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STAGES OF *Macrobrachium rosenbergii* LARVAL DEVELOPMENT

By

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ABSTRACT

PRELIMINARY STUDY ON THE EFFECTS OF THYROXINE ON THE LATE STAGES OF *Macrobrachium rosenbergii* LARVAL DEVELOPMENT

Rasina Abdul Rasid @ Awang

Supervisor: Dr. Paymon Roustaian

This research was carried out to study the effects of thyroxine hormone immersion treatments, administration at a single dose, on the late development stages (stage 8 onward) of *Macrobrachium rosenbergii* larvae for a period of twenty-one day. Twenty days old larvae (stage 8) were immersed in thyroxine hormone solution at concentrations of 0.001, 0.01, 0.1, 1.0 ppm and control (0.00 ppm), each with three replicate. The larvae were reared in 2 liter transparent aquarium tank at the density of 40 larvae per tank (20 larvae.liter⁻¹). They were fed *Artemia* nauplii twice daily. At the termination of the experiment, 0.1 ppm treatment showed highest post larvae production (13.5 PL.liter⁻¹), followed by 0.01 ppm (10.5 PL.liter⁻¹), 0.001ppm and 1.0 ppm (10 PL.liter⁻¹ respectively). Post larvae production for control was 4.5 PL.liter⁻¹. The highest growth (in term of mean development stage) and dry weight was achieved for treatment 1.0 ppm whereas treatment 0.1 ppm resulted the highest survival.