

Growth performances of freshwater prawn *Macrobrachium rosenbergii* (De man) in an integrated farming system.

ABSTRACT

The growth performances of giant Malaysia prawn (*Macrobrachium rosenbergii*) in different compartments of an integrated culture system were evaluated during 12 weeks culture period. *Macrobrachium rosenbergii* were placed in tanks at about 150 individuals per tank. The experiment divided into five treatments and control tank with three replicates. Result on growth performance of *M. rosenbergii* shows the growth relative rate, final length and final weight differed significantly ($p < 0.05$) between treatment. For the length-weight relationship, the growth coefficient (b) of *M. rosenbergii* was ranged between 2.37 to 3.38 at 95% confidence limit which concentration with 20 g recorded the higher value and the lower was recorded by the concentration of 40 g. The regression between length and weight showed a positive relationship which r^2 values ranged of 0.89 to 0.99. No significant difference ($p > 0.05$) was observed during the study period on high, leaf width and weight of vegetables. In an integrated culture system, both Malaysian prawns and vegetables grow well in this system.

Keyword: Growth performance; Freshwater prawn culture; Integrated culture; Length-weight relationship.