UPDATE ON *MACROBRACHIUM ROSENBERGII* FARMING IN MALAYSIA : REPORT ON THE FIRST HIGH DENSITY FARMING IN INDOOR RAS MODEL

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ABSTRACT

Fresh water giant prawn Macrobrachium *rosenbergii* is species of indigenous to Malaysian water. Following the success in its breeding during the 1970's grow out operation was initiated with polyculture together with tilapia or carps. Later during 1990's as hatchery establishment getting better grow out operation was advanced to monoculture system. Then and until today the preferred density is about 20-30 pcs/m^2. The culture to marketable size was between four to six months after few staggered harvest operations. Survival was normally between 20-60%, decided by the factors of cannibalism, mortality due stress during partial harvest and predators. Worst, lately the farming activity was troubled by another hazard - white tail syndrome disease (WTD). Only good management practices and improve biosecurity can improve the situation. At this stage FRI Pulau Sayak in collaboration with RZaquatic Enterprise of Sepang in May 2012 conducted a high density farming trial indoor using recirculating water system (RAS) model. Fries were stocked 80 pcs/m^2 in tank of 11x9x1m viz, 100 m^3 capacity. The RAS model was equipped with physical, bio-filter and ozone injector unit of 20g/hr (ozone at 51-104mg/l). The animal was fed with formulated pellet diet, at the rate of 100-350 g per meal during juveniles stage. First partial harvest of 30-40 pcs/kg commenced after 120 DOC. Record of the stock on 160 DOC indicated more than 50% still available. Overall, growth was significantly competitive to outdoor pond operation. The system allowed higher productivity or about 1 kg/m^2. With another fine tuning to the system and its work protocol will soon justify the model as viable farming tool.

Keywords **:** *Macrobrachium rosenbergii, high density, indoor RAS model, potential farming tool.*

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