

Comparison of Water Quality at Juvenile and Adult Stages in Shrimp Farm at Bagan Tengkorak, Selangor, Malaysia

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ABSTRACT. The water quality study was carried out as part of an environmental impact assessment of tiger prawn farms in the coastal areas of Bagan Tengkorak in the State of Selangor, Malaysia. The water quality measurement that was carried out includes twenty over physical and chemical parameters including heavy metals. The measurements were carried out at six (6) ponds (B5, B6, B7, B8, B9, B10) called Group B ponds at both juvenile and adult stages. The results of water quality study showed that there was no significant variation between the ponds for parameters such as temperature and pH. However, a significant variation was recorded between the ponds for salinity, BOD, suspended solids, turbidity, dissolved solids, ammoniacal nitrogen, calcium and magnesium. The temperature, pH and NO₃ were slightly and consistently lower during the adult stage as compared to juvenile stage. However, salinity, suspended solids, turbidity and BOD were consistently and significantly higher in adult stage as compared with juvenile stage. Overall, there are some differences in water quality between juvenile and adult stages in the tiger prawn life cycle in Bagan Tengkorak shrimp culture ponds of Malaysia.

Key words: Water Quality, Shrimp Farm, Tiger Prawn, Aquaculture, Heavy Metals.

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