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RESEARCH ARTICLE.....

Response of post larvae of *Penaeus monodon* (Fabricius, 1798) to varying temperatures

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ABSTRACT..... Temperature is a key environmental variable mainly influencing the survival and biological responses of the organisms. In order to understand the influence of temperature on survival and growth of post- larvae (PL 50) of tiger shrimp, *Penaeus monodon*, static bioassays as per standard methodology were undertaken. The 96 h LT_{50} value was found to be 32.2 ^{0}C. Rates of oxygen consumption were affected by temperature with direct relationship. The oxygen consumption rate of post-larva was the lowest (0.31 mg lit^{-1}) at 28^{0}C, while the highest was at 31^{0}C (0.84 mg lit^{-1}). One-way ANOVA test showed a significant temperature impact on average oxygen consumption rate of the post-larvae. The highest and lowest length and weight gains were observed at 29.5 and 31^{0}C, respectively with a medium growth at 28^{0}C. From the above, it may be concluded that the lethal/critical (maxima) temperature in shrimp thus, depend on acclimatizing temperatures, species, developmental stage and also other environmental variables.

KEY WORDS..... Growth, Oxygen consumption, *Penaeus monodon*, Post larvae, Temperature

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