

Effect of salinity on survival and growth of *Scylla olivacea* crablets

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Abstract

The effect of salinity on survival and growth of *Scylla olivacea* crablets was investigated. Salinities of 12, 16, 20, 24 and 32 ppt were used as treatments. Survival, molt interval and growth in terms of weight, carapace length and carapace width were measured for two molts. Growth was measured three days after every molt.

There was no significant difference on survival of the crablets between salinities at molt 1. At molt 2, survival was significantly higher at 32 ppt compared to survival at 12 ppt but not significantly different from survival at 24, 20 and 16 ppt. Moreover, duration of survival was significantly higher at 32 ppt than at 16 and 12 ppt but not significantly different from durations of survival at 24 and 20 ppt. On the other hand, molt interval was not significantly different at salinities of 12, 16, 20, 24 and 32 ppt from C1 to C2 and from C2 to C3.

Although the highest weight, carapace length and carapace width were observed at 20 ppt at molt 1, there was no significant difference in growth of the crablets at different salinities. At molt 2, the highest weight was at 32 ppt, the highest carapace length was at 24 ppt and the highest carapace width was at 16 ppt and 32 ppt. No significant difference was found in growth of the crablets between salinities at molt 2.