

Shell Selection and Utilization Pattern in a Tropical Hermit Crab, *Diogenes Alias Mclaughlin & Holthuis*

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Abstract

Shell selection and utilization pattern of tropical hermit crab, *Diogenes* alias *McLaughlin & Holothuis*, 2001 was studied based on specimens collected from Arabian sea from Mumbai, northwest coast of India. In the natural habitat, the most common occupied molluscan shells as shelter by the species, were of *Tibia curta* followed by *Indothais lacera*. Similarly, male hermit crabs occupied more species of gastropod shells followed by female and ovigerous. The influence of species of molluscan shell, size of shell and sex of hermit in shell selection was studied in the laboratory condition where the animals were found to prefer *Indothais lacera* over other molluscan shells. The smaller crabs occupied more number of shells species than larger sized individuals, probably due to availability of more shells to fit in in their body as compared to larger animals. A high correlation was found between the internal volume of shell and weight of hermit crab occupying it. The result obtained from the study revealed that shell availability and architecture of shell influence shell occupation and selection process in hermit crabs.

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Biography:

Nirmal T., has completed his degree in fisheries science and specialised in Fisheries Resource Management. He has been contributing his hardship and dedication in fisheries sector for 10 years in taxonomy and behavioural studies of crustacean especially hermit crabs.