

**Studies on brachyuran crabs and molluscs along
Chapora and Sal estuaries, Goa, West Coast of India**

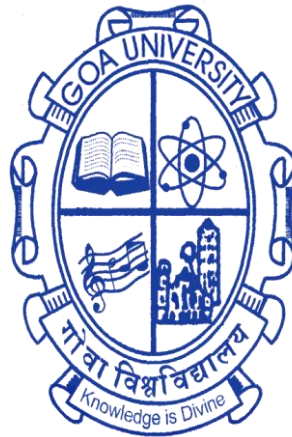
A THESIS SUBMITTED IN PARTIAL FULFILLMENT FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

in Marine Science

In The School of Earth, Ocean and Atmospheric Sciences

GOA UNIVERSITY



By

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MARCH, 2024

DECLARATION

I, Mithila Subhash Bhat hereby declare that this thesis represents work which has been carried out by me and that it has not been submitted, either in part or full, to any other University or Institution for the award of any research degree.

Place: Taleigao Plateau.

Date: 13/01/2025



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CERTIFICATE

I hereby certify that the above Declaration of the candidate, Mithila Subhash Bhat is true and the work was carried out under my supervision.



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LIST OF ABBREVIATIONS

ANOVA	: Analysis of Variance
BOD	: Biological Oxygen Demand
CCA	: Canonical Correspondence Analysis
Chl- <i>a</i>	: Chlorophyll- <i>a</i>
CL	: Carapace length
CW	: Carapace width
DCA	: Detrended Correspondence Analysis
Df	: Degrees of freedom
DO	: Dissolved Oxygen
G1	: Male gonopod/ first pleopod
GSPCB	: Goa State Pollution Control Board
H'	: Shannon-Weiner's diversity index
HTL	: High Tide Level
IUCN	: The International Union for Conservation of Nature
IWP	: Indo-West-Pacific
LTL	: Low Tide Level
MS	: Mean squares
MTL	: Mid Tide Level
N	: Total abundance
OC	: Organic Carbon
PSU	: Particle Salinity Units
RDA	: Redundancy Analysis
SD	: Standard Deviation
SL	: Shell length
SPM	: Suspended Particulate Matter
SS	: Sum of Squares
SW	: Shell width
WoRMS	: World Register of Marine Species
ZSI	: Zoological Survey of India