

THE COMMUNITY STRUCTURE, ABUNDANCE AND DISTRIBUTION OF ZOOPLANKTON AT THE EAST COAST OF PHUKET ISLAND, SOUTHERN THAILAND, ANDAMAN SEA.

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CONTENTS

	Page
Abstract	1
I. Introduction	1
II. Materials and Methods	2
(a) The studied area	2
(b) The zooplankton collection	2
(c) Analysis of zooplankton composition	2
(d) Biomass determination	3
III. Results	4
(a) Biomass and abundance	4
(b) Distribution of zooplankton biomass	5
(c) Composition of zooplankton communities	6
(d) Seasonal occurrence of selected groups of zooplankton	7
(e) Distribution of some selected groups of zooplankton	8
IV. Discussion	9
V. Conclusions	12
Acknowledgements	12
References	12

ABSTRACT

A study on zooplankton in coastal water adjacent to mangrove forest was carried out in Phang-nga Bay and east coast of Phuket Island during April 1981 to April 1982. The zooplankton biomasses were recorded in term of displacement volume, wet weight, dry weight and ash free dry weight. The biomass expressed as dry weight and ash free dry weight were correspond very well. The maximum values of biomass dry weight were 32.32 and 32.10 mg./m.³ and biomass ash free dry weight were 11.12 and 12.00 mg./m.³ in January and April respectively. The conversion factor from dry weight to ash free dry weight was 0.434.

The highest density of zooplankton recorded was 1,047 specimen/m.³ in April. The density of zooplankton was highest during the north-east moonsoon season during January to April 1982 and the maximum abundance was found in the uppermost part of Phang-nga Bay.

The zooplankton communities were comprised of 35 different categories of animal groups. Copepods was found the most dominant group ranging from 30-45% and *Lucifer* was the second most dominant organism ranging from 7-30%. Other groups of zooplankton were also recorded. The proportion of meroplankton was higher than holoplankton at the innermost station in Phang-nga Bay. The seasonal occurrence of some important zooplankton groups were also observed in this study.