

INTERTIDAL ALCYONARIANS IN THE VICINITY OF DARWIN, NORTHERN TERRITORY, AUSTRALIA*

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Plates 15 and 16. Text-figures 1-12.

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ABSTRACT

The octocorals, mostly soft alcyonaceans which were collected by Miss Elizabeth C. Pope on the shore reefs near Darwin, northern Australia, during her ecological survey made between 1965 and 1967, are treated systematically in this paper. In all, seventeen known species are listed here. Of the alcyonaceans, two species belong to *Lobophytum*, four to *Sarcophyton*, and one to *Sinularia*; these are all the members of Alcyoniidae and are well-known main reef-builders widespread on the Indo-West Pacific coral reefs. Of the remaining Nephtheidae, six species of *Stereonephthya*, one species of *Dendronephthya* and one species of *Nephthea* were obtained and observed rather commonly in the intertidal zone near Darwin; some of these nephtheid octocorals are easily observed here to form colourful zonation around the reef at low tide.

Although the amount of material available for the study of the local fauna was limited, now it became clear that there was much confusion concerning the nomenclature of common tropical Australian alcyonarians in earlier decades, mainly due to the lack of free currency of literature concerned and the paucity of actual exploration in the field.

INTRODUCTION

The octocorals, mostly alcyonaceans, treated in this paper, were collected by Miss Elizabeth C. Pope, Curator of Worms and Echinoderms at the Australian Museum, on the shore reefs near Darwin, Northern Territory, Australia, during her ecological survey in October, 1965, and, supplementally, by Mr A. J. Boase, her field assistant, in October, 1966, and September-October, 1967.

Most of the specimens entrusted to me for identification are confined to the inhabitants of intertidal reef flat or reef margin, except only one subtidal gorgonacean (*Euplexaura nuttingi* Kükenthal). Though the collection is limited, it contains unexpectedly many species of *Stereonephthya*, besides leathery alcyonaceans prevalent on the Indo-Pacific coral reefs. All of them have already been recorded from the neighbouring areas; some of them seem to be very common and abundant there, showing colourful zoning communities at low tide.

I am much obliged to Dr F. H. Talbot, Director of the Australian Museum and Editor of its publications, for permitting this paper in the *Museum's Records*, and, particularly, to Miss Elizabeth C. Pope, for entrusting me with this interesting collection, together with pertinent ecological comments. My thanks are also due to Mr Chuichi Araga, of our laboratory, for taking the photographs.

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