ANIMAL ASSOCIATES OF THE THREE SPECIES OF HARD CORALS POCILLOPORA (COELENTERATA ANTHOZOA) IN THE FRINGING REEFS OF THE EASTERN COAST OF CEBU

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by

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APPROVAL SHEET

This thesis is entitled, "ANIMAL ASSOCIATES OF THE THREE SPECIES OF HARD CORAL POCILLOPORA (COELENTERATA: ANTHOZOA) IN THE FRINGING REEFS OF THE EASTERN COAST OF CEBU", prepared and submitted by MISS EMILY D. ELUMBARING in partial fulfillment of the requirements of the degree MASTER OF SCIENCE IN BIOLOGY has been examined and is recommended acceptance and approval for ORAL EXAMINATION.

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ABSTRACT

Coral heads of *Pocillopora damicornis* (Linne), *Pocillopora damicornis var bulbosa* (Ehrenberg) and *Pocillopora danae* (Verill) were observed and collected from the four fringing reefs of Carmen, Liloan, Naga, and Carcar, Cebu Samples in May to October, 1997 were utilized for the identification of animal associates of the coral species Individual characteristics of these associates were described The ecological factors such as tide, temperature, salinity, current and substrate directly affects the occurrence and abundance of the animal associates

Twenty – two species of vertebrate and invertebrate associates were collected, identified and characterized Phylum Arthropoda had the most abundant associate species Other associates were distributed among the four phyla Chordata, Mollusca Echinodermata Annelida and eight classes *Pocillopora damicornis* (Linne) hosts the majority of the animal associates

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For sheer, color of beauty of forms and design and tremendous variety of life, perhaps no natural areas in the world can equal coral reefs The beauty has fascinated generations of people, both scientific and lay, down through the years (Nybakken, 1988 373) It is considered one of the richest and most productive of all natural communities It is a closely knit ecosystem of complex reef - building animals, associated symbiotic plants, mollusks, worms, resident and transient fishes The reef primarily serves as the breeding, nursery and home grounds for many marine invertebrates, and other vertebrates as well as provide natural protection against waves to shore and coastal settlements or structures Coral reefs are unique among marine associations or communities in that they are built up entirely by biological activity (Sy and Herrera, 1989 281) Corals are the major organisms in the coral reefs because they form the basic reef structure There is a bewildering array of other organisms associated with reefs such that these areas are the most diverse and species - rich area that exists in the marine environment Wherever corals are abundant, large community of fishes are present (Montecillo, 1973 12)

The Philippines is well - endowed with fringing coral reefs In some areas like Cebu where reefs are extensive, the articles of daily living available are dependent in the reef Coral reefs are, however, not totally self-sufficient and