

STARFISHES OF SILUT BAY: ECOLOGICAL
AND SYSTEMATIC STUDIES

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by
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APPROVAL SHEET

IN PARTIAL FULFILLMENT of the requirements for the degree of Master of Science in Biology, this thesis entitled: STARFISHES OF SILUT BAY: ECOLOGICAL AND SYSTEMATIC STUDIES has been prepared and submitted by Airlin S. Espina, who is recommended for oral examination.

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ABSTRACT

This study is about the ecology of Oreaster nodosus and Archaster typicus and the taxonomy of starfishes found in Silut Bay, Liloan, Cebu.

Eight 10 x 10 m quadrats were located at the different parts of the bay, and actual counting of the number of starfishes in each quadrat station was made from January to May, 1970. The distribution of O. nodosus ranged from 0 to 92 individuals and 0 to 297 for A. typicus in the different quadrats during the five months of observation.

Ecological factors such as temperature, substratum, pH, salinity, oxygen content, current and food were studied in relation to starfish distribution.

Substratum seemed to affect the distribution of A. typicus, but O. nodosus showed no definite preference of substratum.

Strong currents influence the spatial distribution of A. typicus for the members of this species are small and are carried easily by strong water currents compared to O. nodosus.

There are nine genera and ten starfish species found in Silut Bay. They are: Luidia maculata, Luidia sp., Astropecten phragmorus, Pentaceropsis tyloderma, Linckia laevigata, Culcita novae-guineae, Hippasteria sp., Acanthaster planci, Oreaster nodosus and Archaster typicus. The last two species mentioned above are the most common and numerous; the rest quite rare.

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