

DINOFLAGELLATES ASSOCIATED WITH SARGASSUM BEDS AROUND
CEBU, PHILIPPINES

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In Partial Fulfillment of
the Requirements for the Degree
MASTER OF SCIENCE IN BIOLOGY

by

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April 1995

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This Thesis entitled "DINOFLAGELLATES ASSOCIATED WITH SARGASSUM BEDS AROUND CEBU, PHILIPPINES" prepared and submitted by **PERPETUA A. OLOROSO** in partial fulfillment of the requirements for the degree of MASTER OF SCIENCE IN BIOLOGY has been examined and is recommended for acceptance and approval for oral examination

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ABSTRACT

Sixteen dinoflagellate species were identified to be associated with the *Sargassum* spp collected from six stations around Cebu Island from August 1994 to January 1995. These species constituted nine genera, five families and three orders. Species belonging to genus *Prorocentrum* constituted 65.1% of the total dinoflagellate density with *Prorocentrum lima* having the highest number of cells in a gram of *Sargassum* (47.0%). Five species known to cause ciguatera and diarrhetic shellfish poisoning (DSP) were found in the *Sargassum* samples namely *Prorocentrum concavum*, *P. lima*, *P. minimum*, *P. rathymum* and *Ostreopsis lenticularis*.

Total dinoflagellate densities of the stations (cells/gm of *Sargassum*) were not significantly different. Physical factors (water temperature and salinity) and morphological characteristics of *Sargassum* (length of thallus and percentage of fertile thallus) did not affect the population density of dinoflagellates associated with the *Sargassum* host.

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