

**FECAL COLIFORM AND FECAL STREPTOCOCCUS IN WILD BROWN
MUSSEL (*MODIOLUS METCALFEI* HANLEY) AND FARMED RED SEAWEED
(*KAPPAPHYCUS ALVAREZII* DOTY) IN TWO SELECTED AREAS
IN PANGUIL BAY**

**A Thesis
Presented to
the Faculty of the Graduate School
University of San Carlos
Cebu City**

**In Partial Fulfillment
of the Requirements for the Degree
Master of Science in Biology**

by

**SONIA MASUCOL - DEJARME
December 1995**

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ABSTRACT

The brown mussel (*Modiolus metcalfei* Hanley) and red seaweed (*Kappaphycus alvarezii* Doty) in Panguil Bay were sampled and examined microbiologically to determine their sanitary quality for human consumption.

Samples of brown mussels, water and substrate from Daromawang mussel bed; red seaweed thalli and water from Lawis seaweed farm were collected from August 1994 to January 1995. Selected physico-chemical parameters were noted to describe the prevailing conditions during sampling.

Results showed that all samples were contaminated with *Escherichia coli* and fecal streptococcus except for seaweed with only *E. coli*. Levels of microbial contamination (Most Probable Number) in the samples varied from month to month but demonstrated no definite pattern nor suggested any causal relationship.

The contamination in brown mussels is found to be within the acceptable Philippine standard limit for safe human consumption. Seaweeds are likewise considered safe.

Some programs of baywide application are recommended to assure the sanitary quality of brown mussels and farmed seaweed.

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