ISOLATION OF BACTERIOPHAGES EFFECTIVE AGAINST *Staphylococcus aureus* AND *Pseudomonas aeruginosa* FROM SEWAGE WATER SAMPLES

An Undergraduate Thesis Presented to
The Faculty of the Biological Sciences Department
College of Science
De La Salle University- Dasmariñas
Dasmariñas, Cavite

In Partial Fulfillment of the Requirements
for the Degree of Bachelor of Science Major in Applied Biology

ANN MARGARET NAVARROZA
CAESAR FRANZ RUIZ

January 2007

ABSTRACT

This study is conducted to detect the presence of bacteriophages from sewage water. Through the series of isolation process of the phages, they were proven to exterminate *S. Aureus* and *P. Aeruginosa* present in the water.

Enrichment of the phages concentration in the sewage suspension was Enriched using Deca strength phage broth. A membrane filter was used to secure a sterilized phage suspension. Plaque picking, to culture a single type of phage in nutrient broth, followed the previous procedure. The identification of phages through the use of an Electron Microscopy and other sources from the previous study of Bacteriophages, classify the phages specific to *P. Aeruginosa* and non For *S. Aureus*.

Based on the results of the study, the researchers recommend isolating bacterial samples from the selected environment rather than collecting stock culture from laboratories. Consider isolating bacteriophages from the living sources such as flies (house flies) and apply the same methodology with enteric bacteria. Thus, in phage typing, isolate bacteriophages.

TABLE OF CONTENTS