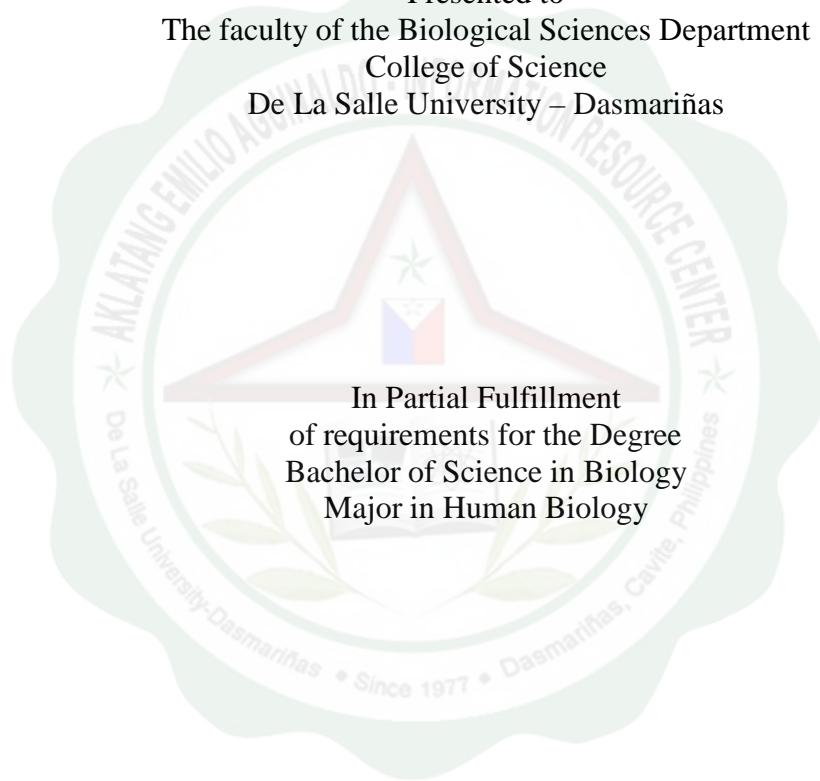


ISOLATION AND CHARACTERIZATION OF
BACTERIOPHAGE FOR *Pseudomonas aeruginosa*

An Undergraduate Research
Presented to
The faculty of the Biological Sciences Department
College of Science
De La Salle University – Dasmariñas



In Partial Fulfillment
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Bachelor of Science in Biology
Major in Human Biology

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ABSTRACT

This undergraduate research was conducted to isolate and characterize the bacteriophage for *Pseudomonas aeruginosa*. Wastewater was obtained from the sewage system of De La Salle University Medical Center and was enriched with decastrength phage broth containing an overnight broth culture of *P. aeruginosa*. The broth was membrane filtered after 24 hours and the filtrate was tested on a newly swabbed lawn of *P. aeruginosa*, in which after another 24 hours showed clearing, confirming its plaque-forming properties against the bacteria. The isolates were then sent to the Research Institute of Tropical Medicine for electron micrographs that was used for characterization and morphology. Based on the gathered data, findings revealed that the isolated bacteriophage that infected *P. aeruginosa* is the $\Phi 6$ bacteriophage, a tailless bacteriophage infecting *Pseudomonas* species in icosahedrons and dodecahedron variants. This study concluded that the isolated bacteriophage was capable of inhibiting the growth of *P. aeruginosa*.