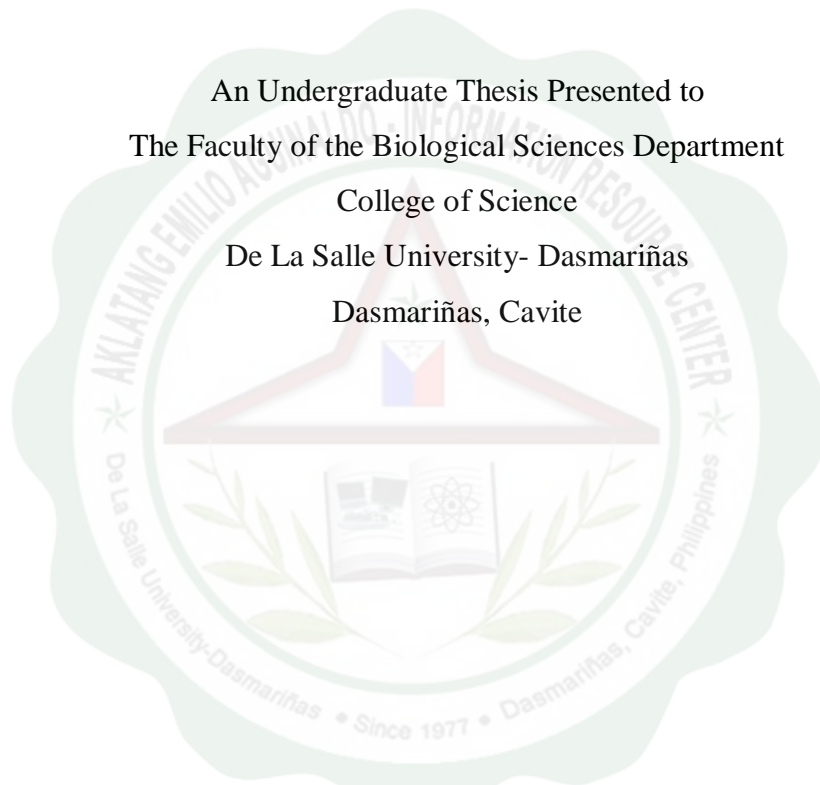




**MICROBIAL QUALITY ASSESSMENT OF SWIMMING POOL IN A
TERTIARY ACADEMIC INSTITUTION IN
DASMARIÑAS CITY, CAVITE**

An Undergraduate Thesis Presented to
The Faculty of the Biological Sciences Department
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ABSTRACT

The study determined the microbial quality of the pool water by detecting the total microbial count, and indicator species such as coliforms, and pseudomonads. The water samples from the three stations were collected in the morning every Wednesday, every 2week from July to September. The total microbial count was performed using the heterotrophic plate count using trypticase soy agar. Most probable number was used for the detection of coliforms using eosin-methylene blue agar and pour plate method for the detection of *Escherichia coli* and pseudomonads using eosin-methylene blue agar and cetrimide agar respectively. It was found out that the colony count for the total microbial count exceeded the standard level. The water samples were contaminated by coliforms, most likely *Enterobacter aerogenes* because of its thick, mucoid and pinkish colonies, rather than *Escherichia coli* but the number of bacteria was not enough to cause harm to the bathers. It's only on the first collection on the first station that has the presence of pseudomonads because it is on the first collection that there were a lot of bathers in the pool compared to the other collections. Station 1 is the most used area of the pool because it is the shallowest part of the pool area. The DENR primary parameters used in this study are the fecal coliform, pH, and temperature and the results conform to the DENR standards.



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