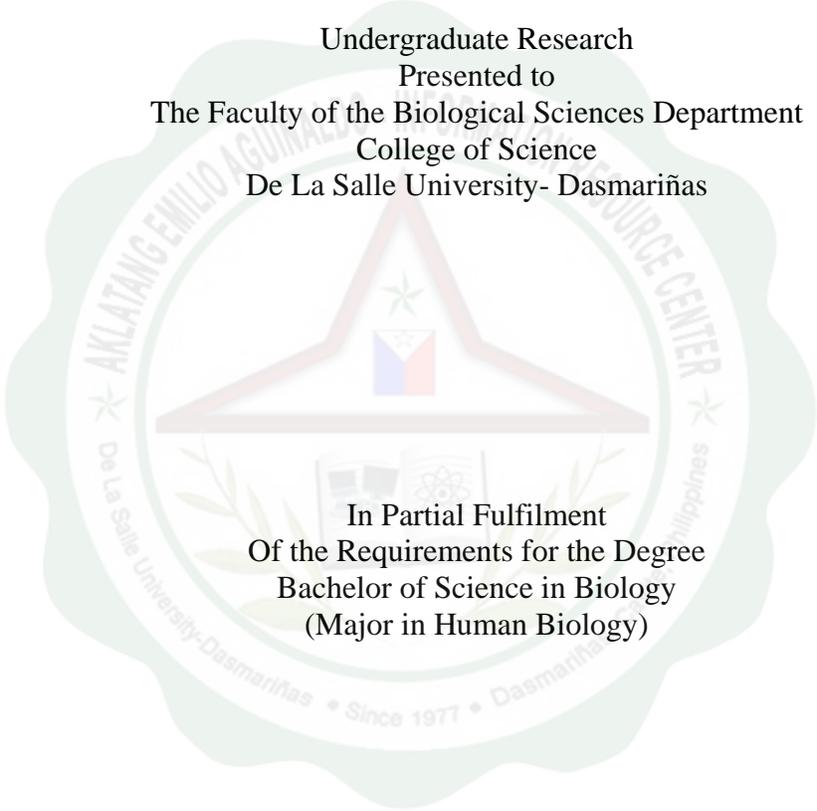


**Effect of *Lactobacillus casei*, *Lactobacillus plantarum* and the  
Combination of Both on Enterotoxigenic *Escherichia coli***

Undergraduate Research  
Presented to  
The Faculty of the Biological Sciences Department  
College of Science  
De La Salle University- Dasmariñas

The seal of De La Salle University - Dasmariñas is a circular emblem with a scalloped border. It features a central shield with a blue field containing a white cross and a red field containing a white cross. Above the shield is a green star. The shield is flanked by two green olive branches. Below the shield is a book and a lamp. The text "AKLATANG EMILIO AGUIRRE" is written along the top inner edge, and "RESOURCE CENTER" is written along the right inner edge. The bottom inner edge contains the text "De La Salle University-Dasmariñas • Since 1977 • Dasmariñas, Philippines".

In Partial Fulfilment  
Of the Requirements for the Degree  
Bachelor of Science in Biology  
(Major in Human Biology)

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## ABSTRACT

The effect of *Lactobacillus casei*, *Lactobacillus plantarum* and the combination of both on Enterotoxigenic *Escherichia coli* was determined. Initial and final concentrations of ETEC subjected to treatments were compared. It was elucidated that *Lactobacillus casei* and *Lactobacillus plantarum* inhibited the growth of ETEC at almost the same significant level ( $p < 0.05$ ). When these two probiotic treatments were combined, a significant decrease in growth of ETEC was observed, as compared to individual treatments ( $p < 0.05$ ). Positive and negative controls were also performed. With these results, it was concluded that there is a synergistic effect between *Lactobacillus casei* and *Lactobacillus plantarum* against ETEC, which can be very useful for further studies in search for alternative treatments to ETEC-induced diseases.

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