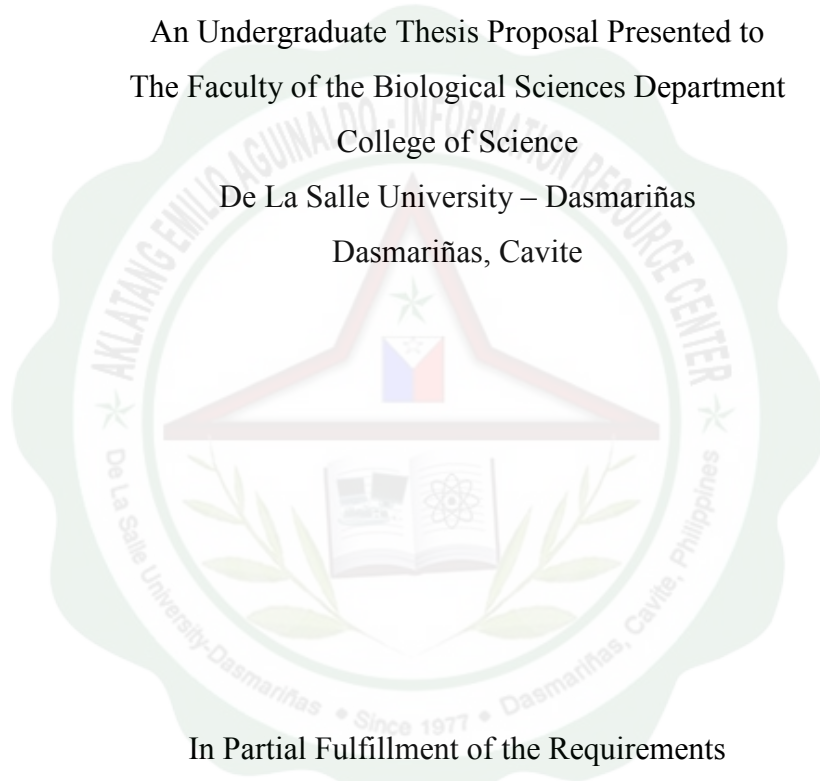


**ANTIBACTERIAL EFFICACY OF *Eucalyptus citriodora*
ESSENTIAL OIL ON *Staphylococcus aureus*
AND *Escherichia coli***

An Undergraduate Thesis Proposal Presented to
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ABSTRACT

Eucalyptus species has long been used in folk remedies since prehistoric times. Essential oil from eucalyptus has strong anti-inflammatory, anti-bacterial and anti-fungal properties that have made it a valuable asset in medical practice. The therapeutic properties of the essential oil from *E. citriodora* have been studied before, but it still lacks further research as to its antibacterial efficacy.

The study used essential oils from both fresh and dried leaves of *E. citriodora* obtained through steam distillation. These were then tested on gram positive and gram negative bacteria, *S. aureus* and *E. coli* respectively using disk diffusion method. Statistical analysis using One-way ANOVA was used to show the significance of the antibacterial effect of each essential oil on the two bacterial samples.

This study revealed that both essential oils from fresh and dried leaves, T3 and T4 have significant antibacterial effect on both *S. aureus* and *E. coli*. However, these are not as effective as compared to the positive controls, Vancomycin and Tobramycin respectively. It also showed that T3 has a more potent antibacterial efficacy than T4 because of its high citronellol content.

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