# THE EFFECT OF *Canna indica* L. (Bandera Española) CRUDE EXTRACT ON THE GROWTH OF *Staphylococcus aureus* AND *Escherichia coli*

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## ABSTRACT

The rhizome crude extract of *Canna indica* L. has been studied on its inhibitory effect on the growth of *Staphylococcus aureus* and *Escherichia coli* using Kirby-Bauer method. The rhizome was collected from different geographical locations namely: Metro Manila, Kadiwa, and Tagaytay with different treatments namely: T25, T50, T75 concentrations and one positive control group Ciprofloxacin. Different concentration including the positive control was placed in a nutrient agar plate with inoculated *S. aureus* and *E. coli* in separate plates. After 24 hours of incubation, the zone of inhibition was observed and measured using a vernier caliper. Rhizome crude extract taken from Metro Manila at treatment seventy-five percent concentration has the greatest inhibition zone recorded on *S. aureus* (4.78mm) and *E. coli* (4.33mm). Rhizome crude extract taken from Tagaytay has the least inhibition zone on *S. aureus* (0.67mm) at twenty-five percent concentration, and had no inhibitory effect on *E. coli* at seventy-five percent concentration. In conclusion, rhizome crude extract of *Canna indica* L. has minimal inhibitory effect against *S. aureus* and *E. coli.* Different treatment concentrations and geographical location of the rhizome crude extract are significantly different.

**Keywords:** *Canna indica*; inhibitory effect, rhizome, crude extract, Ciprofloxacin, treatment concentrations, geographical locations, zone of inhibition

## TABLE OF CONTENTS

Title Page 1

Abstract 2

Approval Sheet 3

Acknowledgement 4

Table of Contents 5

CHAPTER 1: INTRODUCTION

1.1 Background of the Study 7

1.2 Conceptual Framework 11

1.3 Statement of the Problem 11

1.4 Hypotheses 12

1.5 Scope and Limitations 12

1.6 Significance of the Study 13

1.7 Definitions and Terms 13

CHAPTER 2: REVIEW OF RELATED LITERATURE

2.1 Conceptual Literature 15

2.2 Related Studies 20

CHAPTER 3: METHODOLOGY

3.1 Research Design 23

3.2 Research Setting 23

3.3 Research Procedure 24

3.4 Data Gathering Procedure and Statistical Analysis 26

CHAPTER 4: RESULTS AND DISCUSSION

4.1 Results 27

4.2 Discussion 28

CHAPTER 5: RECOMMENDATION AND CONCLUSION

5.1 Conclusion 37

5.2 Recommendation 37

Cited References 38

Appendices

A. The taxonomic account of *Canna indica* L. 43

B. Standard Procedures 44

C. Statistical Analysis 48

D. Zone Diameter Interpretative Standards 55

E. Photodocumentation 56

F. Curriculum Vitae 64