ANTIBACTERIAL PROPERTIES OF SELECTED PLANT ETHANOLIC EXTRACT AGAINST WATER BORNE BACTERIA

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An Undergraduate Thesis Submitted to the Faculty of the Department of Biological Sciences, College of Arts and Sciences, Central Luzon State University, Science City of Muñoz, Nueva Ecija, Philippines
in Partial Fulfillment of the Requirements
for the Degree of

BACHELOR OF SCIENCE IN BIOLOGY

JULY 2019

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ABSTRACT

DELA PEÑA, ANNE MARIE ELEONOR D., Department of Biological Sciences, College of Arts and Sciences, Central Luzon State University, Science City of Munoz, Nueva Ecija, Philippines, **JULY 2019, ANTIBACTERIAL PROPERTIES OF SELECTED PLANT ETHANOLIC EXTRACT AGAINST WATER BORNE BACTERIA.**

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Now a days, the use of phytochemicals for pharmaceutical purpose has gradually increased in many countries. Medicinal plants represent a rich source of antimicrobial agents and plant extract have great potential as antimicrobial compounds against microorganisms. Thus, it can be used in the treatment of infectious diseases caused by resistant microbes. The five (5) selected plant samples was dried and made into powder. The powdered material was subjected for extraction using 95% ethanol for 72 hours and the filtrates were subjected to rotary evaporator. The antibacterial properties of ethanol extract of leaves and shoots against the gram positive and gram negative isolated bacteria the *Enterobacter cloacea* and *Exiguobacterium* sp. was evaluated by determining the diameter (mm) of zone of inhibition in the eradicant test and absence and presence of the bacterial growth in the protectant test. The ethanolic extracts of *P. guajava* showed antibacterial activity in the eradicant test against *E. cloacae* and *Exiguobacterium* from 6 to 24 hours of incubation and only *P. guajava* extracts showed protectant activity against *E. cloacae* and *Exiguobacterium* sp. after 6 to 24 hours of incubation.

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