

**IDENTIFICATION AND PHARMACOLOGICAL PROPERTIES OF COASTAL  
PLANTS FROM BARANGAY DIGUISIT, BALER, AURORA**

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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,  
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**BACHELOR OF SCIENCE IN BIOLOGY  
(Major in Biotechnology)**

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## ACCEPTANCE SHEET

This undergraduate thesis (revised) entitled “**IDENTIFICATION AND PHARMACOLOGICAL PROPERTIES OF COASTAL PLANTS FROM BARANGAY DIGUISIT, BALER, AURORA**” prepared and submitted by **ZEDRICK A. VENTURA**, in partial fulfillment of the requirements for the degree of **BACHELOR OF SCIENCE IN BIOLOGY (BIOTECHNOLOGY)**, is hereby accepted.

  
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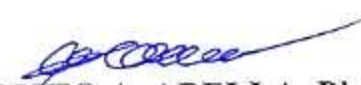
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## BIOGRAPHICAL SKETCH

Zedrick Almojera Ventura was born on December 15, 1997 at Laoag City, Ilocos Norte. He is the only son of Mr. Roland T. Ventura and Mrs. Delita A. Ventura. He is the second of his siblings; Claudette and Nerissa.

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## ABSTRACT

**VENTURA, ZEDRICK ALMOJERA.**, Department of Biological Sciences, College of Arts and Sciences, Central Luzon State University, Science City of Munoz, Nueva Ecija, Philippines, **JUNE 2018, IDENTIFICATION AND PHARMACOLOGICAL PROPERTIES OF COASTAL PLANTS FROM BARANGAY DIGUISIT, BALER, AURORA**

Adviser: EVARISTO A. ABELLA, Ph.D.

This study was conducted to screen the pharmacological properties of the different coastal plants located along coastal areas of Diguisit, Baler, Aurora. Six coastal plants were collected and were identified as *Dracaena fragrans*, *Pueraria montana* var. *lobata*, *Sphagneticola trilobata*, Urticaceae, *Nephrolepis cordifolia*, and Pandanaceae.

Ethanol extracts of plants were evaluated for antibacterial properties against *S. aureus* and *E. coli* using disc diffusion method. Positive results were revealed in *S. aureus* both in 24 and 48 hours as zones of inhibitions were manifested. *S. trilobata* and *P. montana* var. *lobata* has the largest zone of inhibition. On the other hand, only the *P. montana* var. *lobata*, *S. trilobata*, and Urticaceae showed positive result against *E. coli* at 24 hours. At the 48<sup>th</sup> hour of incubation, a decrease in zones of inhibition was observed.

Antioxidant activity assay was evaluated in 2,2-diphenyl-1-picrylhydrazyl (DPPH), trolox equivalent. All of the coastal plants collected showed antioxidant activity; Pandanaceae and *S. trilobata* were recorded with the highest antioxidant activity.

The results in test for antibacterial properties and antioxidant activities suggested that the coastal plants collected had the potential for pharmacological properties.

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