

De La Salle University - Dasmariñas BIOLOGY PROGRAM



ANTIBACTERIAL PROPERTY OF ALGAL PIGMENT EXTRACTS (CHLOROPHYLL, FUCOXANTHIN, AND PHYCOERYTHRIN)

AGAINST Escherichia coli AND Staphylococcus aureus

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ABSTRACT

The rapid emergence of drug resistance among various pathogenic bacteria stresses the need for new compounds used in the production of antibiotics. In the present study, the seaweed samples were collected along the coastal areas of Calatagan, Batangas. The algal pigments were isolated using pure acetone as the solvent. The pigment extracts from three different seaweeds species were extracted and were tested for their antibacterial activities against two test organisms which were: *Staphylococcus aureus* (SA), and *Escherichia coli* (EC). The algal pigments were evaluated using Kirby – Bauer method to determine their inhibitory activity. The results indicated a minimal spectrum of inhibitory activity from all of the samples, exhibiting different measurements of zone of inhibition. From the susceptibility index table (See Appendix C), resistances to the effects of the pigment extracts were observed from the test bacteria.