ANTIMICROBIAL PROPERTIES OF CRUDE ETHANOLIC EXTRACT FROM THE ROOTS AND LEAVES OF *Ehretia philippinensis* A. DC. (ALIBUNGOG) AGAINST *Staphylococcus aureus* AND *Pseudomonas aeruginosa*

A Research Presented to the Biological Sciences Department College of Science and Computer Studies De La Salle University-Dasmariñas City of Dasmariñas, Cavite

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ABSTRACT

Antimicrobial properties of crude extracts from roots and leaves of *Ehretia philippinensis* were screened and tested against *Staphylococcus aureus*, a Gram-positive bacterium, and *Pseudomonas aeruginosa*, a Gram-negative bacterium. A bacterial lawn for each test organism was prepared on Mueller Hinton agar then disk diffusion method was used to test the antimicrobial activity of the extracts against the test organisms. All the extracts produced a zone of inhibition on both *S. aureus* and *P. aeruginosa*. The mean zone of inhibition produced by the root and leaf extracts were compared to that of erythromycin. Statistically, all extracts, except the leaf extract on *P. aeruginosa* (P = 0.017), was as effective as erythromycin. The extracts were also compared to erythromycin using the Kirby-Bauer method. Both *Staphylococcus aureus* and *Pseudomonas aeruginosa* were susceptible to the root extracts and intermediate to the leaf extracts when compared to the standard zones of inhibition produced by erythromycin based on the Kirby Bauer Table.

**Key words:** Disk Diffusion Method, Kirby-Bauer Test, Erythromycin, Zone of Inhibition
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