# THE PROCESSING AND CONCENTRATION OF HAUILI *(Ficus septica)* LEAF ESSENTIAL OIL AGAINST *Pseudomonas aeruginosa* ISOLATED FROM PHILIPPINE NATIVE CHICKEN

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ALYN GRACE C. MARIANO

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Alyn Grace C. Mariano

## ABSTRACT

*Pseudomonas aeruginosa* is one of the well-known bacterial causing devastating diseases of economic importance and is regarded as an opportunistic infection in poultry that imposes higher risk when not prevented early. The birds with the most compromised immune systems are the most vulnerable to *P. aeruginosa* infection. For a long time, commercial antibiotics have been present to suppress the growth of *P. aeruginosa.* As an alternative control to *P. aeruginosa*, *Ficus septica*, a plant-based method of control was used given its promising results in having antibacterial activity against various bacteria. The study was conducted to evaluate the antibacterial activity of *Ficus septica* against *Pseudomonas aeruginosa* isolated from Philippine Native Chicken in vitro conditions. Using the ELISA test reader, the minimum inhibitory concentration (MIC) of this study revealed that after 24 hours of post-exposure, the FLEO showed a significant result comparable to the positive control. The 100% FLEO concentration has the highest mean percentage of (94.14%). On the other hand, results on the appraised level of FLEO concentration revealed that the test treatment results showed a gradual decline in the zone of inhibition every 24 hours of post-exposure. Therefore, it is concluded that FLEO can effectively control *Pseudomonas aeruginosa* within 24 hours time exposure.

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