



**ANTIBACTERIAL ACTIVITIES OF BIOLUMINESCENT BACTERIA
FROM *Secutor indicus* (SAPSAP) AGAINST *Staphylococcus aureus* AND
*Pseudomonas aeruginosa***

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ABSTRACT

Infectious diseases caused by pathogenic bacteria such as *Staphylococcus aureus* and *Pseudomonas aeruginosa* were the primary cause of mortality in man due to the development and widespread usage of microbial drugs. Gut-symbiont bioluminescent bacteria from Philippine fishes were reported to have antibacterial activities. Thus, this study aimed to determine the antibacterial activity of bioluminescent bacteria isolated from *Secutor indicus* against *S. aureus* and *P. aeruginosa*. Kirby-Bauer method was used to determine the antibacterial potential of bioluminescent bacterial supernatant. Erythromycin is used as positive control, distilled water as negative control, and 100% of sterile culture supernatant is tested for its antibacterial property. Results demonstrated that the sterile culture supernatant exhibited antibacterial potential against *S. aureus* but did not inhibit the growth of *P. aeruginosa* as shown by the zone of inhibition. Therefore, bioluminescent bacteria isolated from *Secutor indicus* could be explored as potential antibacterial agent for *S. aureus*.

Keywords: Antibacterial, Bioluminescent bacteria, *Secutor indicus*, *Pseudomonas aeruginosa*, *Staphylococcus aureus*, Sterile culture supernatant



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