ABSTRACT

The study aims to evaluate the antibacterial effect *Cocos nucifera* (Coconut) cotyledon against the selected infectious bacterial pathogens including *Staphylococcus aureus*, *Escherichia coli, Pseudomonas aeruginosa*, *Salmonella typhi* and *Klebsiella pneumonia.* Disk diffusion assay following the standard procedure in Kirby-Bauer Method was utilized to establish the antimicrobial activity of coconut cotyledon extracts against the selected infectious bacterial pathogens. The zones of inhibition (mm) were compared to the commercially available antibiotics, tetracycline and ciprofloxacin to determine the susceptibility and resistivity of the microorganisms. All microorganisms are resistant to 50% and 100% coconut cotyledon extracts. Hence, among the infectious bacterial pathogens, *S. aureus* has the highest zone of inhibition, indicating that coconut cotyledon is more effective to gram positive than gram negative bacteria. This manifest that coconut cotyledon has more liphophilic compounds that can reduce bacterial enzyme/substrate activity and can intercalates in the integrity of the cell wall. Moreover, the zone of inhibition values is suggestive that 100% (12.17mm) is more effective than 50% (7.7mm) coconut cotyledon extract.