

CHEMICAL CONSTITUENTS AND ANTIBACTERIAL ACTIVITIES
OF DRIED PERICARP OF *Garcinia parvifolia* (Miq.)
AGAINST COMMON TYPES OF NOSOCOMIAL
BACTERIA

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ABSTRACT

CHEMICAL CONSTITUENTS AND ANTIBACTERIAL ACTIVITIES OF DRIED PERICARP OF *Garcinia parvifolia* (Miq.) AGAINST COMMON TYPES OF NOSOCOMIAL BACTERIA

The decoction of the stem bark of *Garcinia parvifolia* (Miq.) is consumed in traditional medicine. Previous studies have also reported its medicinal and antimicrobial properties especially on its twigs. The aim of this study is to assay the chemical constituents of pericarp of *G. parvifolia* also to assay its antibacterial activities. The chemical constituents screening revealed the presence of carbohydrate, protein, alkaloid, phenolic compound, flavonoid, terpenoid, diterpenes, triterpenes, steroid, and phytosterols in the dried pericarp of *G. parvifolia*. There were no tannin and saponin detected. Disk diffusion test, minimum inhibitory concentration (MIC) evaluation, and minimum bactericidal concentration (MBC) evaluation were used to test the antibacterial activities. The methanolic extract of dried pericarp of *G. parvifolia* showed bactericidal activities against the nosocomial pathogens. The disk diffusion, evaluation showed inhibition zone of *Staphylococcus aureus* (ATCC 14756) was 10.67 ± 0.88 mm and 17.00 ± 0.58 mm for *Serratia marcescens* (ATCC 43300) with lowest MIC recorded at 250 $\mu\text{g/ml}$ for both tested bacteria. Minimum bactericidal concentration (MBC) evaluation confirmed the bactericidal activity. It is suggested that the extraction varied with more with different solvents such as ethanol, chloroform and ethyl acetate. Also, it is recommended to use other microorganisms such as *Candida albican* in order to evaluate the microbicidal spectrum and the bioactivity of the *G. parvifolia* extract.