PHYTOCHEMICAL SCREENING AND ANTIBACTERIAL ACTIVITY OF Baccaurea lanceolata Muell AGAINST DIARRHEAGENIC BACTERIA

CAROLINE NGAU

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ABSTRACT

PHYTOCHEMICAL SCREENING AND ANTIBACTERIAL ACTIVITY OF Baccaurea lanceolata Muell AGAINST DIARRHEAGENIC BACTERIA

Baccaurea lanceolata Muell is one of the natural edible plants that grow wild in tropical forests especially in Asean countries. Natural plant has become an alternative for drugs and medicine development. This study was carried out to detect the presence of phytochemical components and to evaluate the antibacterial activity of B. lanceolata fruit extract against diarrheagenic bacteria: Escherichia coli, and Salmonella typhimurium, B. lanceolate was tested with particular chemicals and its colour changes were detected. Methods of disc diffusion susceptibility, minimum inhibitory concentration (MIC), and minimum bactericidal concentration (MBC) was carried out to evaluate the antibacterial activity in B. lanceolata. From this study, it is found that phytochemical constituents of quinones, flavonoids, tannins, and phenols were detected, while alkaloids, glycosides, saponins, steroids, and trepenoids were not detected. Through the antibacterial activity evaluation, it showed that methanolic B. lanceolata extract is intermediate susceptible towards E. coli and also shows bactericidal property at the minimum concentration of 10⁻³ gml⁻¹. The antibacterial evaluation showed that the methanolic fruit extract of B. lanceolata was susceptible towards S. typhimurium. Therefore, the potential of B. lanceolata extract as antibacterial is inconclusive but further study is needed to evaluate against diarrheagenic bacteria.