

Research article

## Influence of variation extraction methods (classical procedure) for antibacterial activity of Rarugadong (*Dioscorea pyriformis* Kunth.) tuber

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### Abstract

Drug resistance due to widespread abuse and excessive use of antibiotics has become an increasingly serious problem, making the development of alternative antibacterial a very urgent problem. The aim of this study was to define whether suitable extraction methods, such as maceration, reflux and soxhlet method. In this study, rarugadong (*Dioscorea pyriformis* Kunth.) tuber extract, was extracted by maceration, reflux and soxhlet method respectively using methanol as solvent. Phytochemical screening carried out on rarugadong (*Dioscorea pyriformis* Kunth.) tuber in simplicia powder and each extract. Antibacterial activity was determined using agar well diffusion method. *Staphylococcus aureus* ATCC 25923 and *Escherichia coli* ATCC 25922 were used as test bacterial in this study. Phytochemistry screening results of simplicia and extract gave the same result, it was showed positive results against the class of chemical compounds alkaloids, flavonoids, glycosides, saponins, triterpenoids and tannins, anthraquinone glycosides and cyanogenic glycosides. Antibacterial activity of methanol extract from maceration, reflux and soxhlet methods showed inhibition for both *bacteria* (*Staphylococcus aureus* and *Escherichia coli*) from the measurement of inhibition diameter in each extract concentration.