

**THE EVALUATION OF ANTIMICROBIAL ACTIVITY,
PHYTOCHEMICAL SCREENING AND TOTAL
PHENOLIC CONTENT IN *Salacca zalacca***

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ABSTRACT

EVALUATION OF ANTIMICROBIAL ACTIVITY, PHYTOCHEMICAL SCREENING AND TOTAL PHENOLIC CONTENT IN *Salacca zalacca*

Salacca zalacca is a species of palm tree native to Southeast Asia. The fruit consists of three white in colour individual cloves with a very thin layer of transparent cuticular membrane cover on the cloves surface. Each of the clove has a hard and inedible seed at the centre. By using two solvent for extraction, this study was carried out to find the antimicrobial activity, phytochemical screening and total phenolic content of the fruit. Antimicrobial activity was done by using disc diffusion method against Gram-positive and Gram-negative bacteria strain which are *Staphylococcus aureus* and *Pseudomonas aeruginosa* respectively. Methanol extract of fruit exhibited the zone of inhibition against *Staphylococcus aureus* but not against *Pseudomonas aeruginosa*. Besides that, there is no inhibition zone for hexane extract whether against *S. aureus* or *P. aeruginosa*. Quantitative analysis showed that there are significant value between the different concentrations that were applied on the bacteria strain. The phytochemical analysis showed presence reducing sugar, saponins and flavonoids. The content of total phenolic was carried out based on the absorbance values of methanol extraction that react with Folin-Ciocalteu reagent and compared with the standard solutions of gallic acids equivalents and the result recorded 0.985mg GAE/g sample.