

**PHYTOCHEMICAL SCREENING AND ANTIMICROBIAL
PROPERTIES OF *Garcinia prainiana***

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ABSTRACT

PHYTOCHEMICAL SCREENING AND ANTIMICROBIAL PROPERTIES OF

Garcinia prainiana

G. prainiana is an uncommon and rare plant species found in Malaysia. It is popularly recognized as 'Cerapu'. *G. prainiana* is a part of Guttiferae family which is part of a mangosteen family. This study was to identify the presence of phytochemicals in *G. prainiana* and to determine the antimicrobial properties of *G. prainiana*. The present study deals with the preliminary phytochemical screening and determination of antimicrobial activity of methanol, dichloromethane and cyclohexane extracts of the peel and pulp of *G. prainiana*. The extracts were tested against two Gram positive bacteria and one Gram negative bacteria by the diffusion method at various concentrations (25-100 µg/µl). The results revealed the presence of saponin, flavonoid, terpenoids, tannins and alkaloid in both extracts. Peel part was found to be rich source of phytochemicals as compared to pulp extracts. Most of the peel extracts show the antimicrobial properties which the highest antimicrobial activity was observed against *Escherichia coli* and *Staphylococcus aureus*. Nevertheless, peel extracts show moderate activity against *Bacillus subtilis*. In addition, the pulp extracts only shows antimicrobial properties against *Staphylococcus aureus*. The preliminary studies on *G. prainiana* peel extracts exhibited their antimicrobial potential which could be exploited further in the future for pharmaceutical treatment, antimicrobial product and natural therapies.