DAYA ANTIBAKTERI EKSTRAK KULIT MANGGIS (*Garcinia mangostana L.*) TERHADAP BAKTERI *Fusobacterium nucleatum*

ANTIBACTERIAL POTENCY OF MANGOSTEEN PERICARP EXTRACTS (Garcinia mangostana L.) AGAINST Fusobacterium nucleatum

ABSTRACT

Background. *Fusobacterium nucleatum is a common bacterial in root canal with pulp necrosis and periradicular lesion. A way to eliminate these bacteria from root canal is by root canal irrigation. Root canal irrigation materials that are widely used nowadays has many shortcomings. The pericarp of mangosteen (Garcinia mangostana L) has antibacterial potency. Therefore mangosteen pericarp can be an alternative material which could inhibit and bactericidal function to Fusobacterium nucleatum.* ***Purpose.*** *The aim of this study was to determine the antibacterial potency of mangosteen pericarp extract (Garcinia Mangostana L.) against Fusobacterium nucleatum.* ***Method.*** *This research is a laboratory experimental with post test only control group design. A microdilution method was used to determine minimum inhibitory concentration and minimum bactericidal concentration by colony counting bacteriae in Tryptone Soya Agar (TSA) media with drop plate technique. Growth of bacterial colonies in TSA were calculated manually in colony forming unit (CFU/ml).* ***Result.*** *Bacterial colonies growth at concentration 0,78% is 90% less than positive control group and there are no bacterial colonies growth at concentration 0,975%.* ***Conclusion.*** *The Minimum Inhibitory Concentration (MIC) of mangosteen pericarp against Fusobacterium nucleatum was at 0,78% concentration and the Minimum Bactericidal Concentration (MBC) was at 0,975% concentration.*

Key words : *pericarp mangosteen extract, Antibacterial potency, Fusobacterium nucleatum.*