

**KEMAMPUAN ANTIBAKTERI FLAVONOID KULIT MANGGIS (*Garcinia mangostana L.*) TERHADAP BAKTERI *Enterococcus faecalis***

**ANTIBACTERIAL POTENCY OF FLAVONOIDS MANGOSTEEN PERICARP EXTRACTS (*Garcinia mangostana L.*) AGAINST OF *Enterococcus faecalis***

**Background.** *Enterococcus faecalis* is the most common bacterial cause of endodontic treatment failure. A way to eliminate these bacteria from root canal is by root canal irrigation. Root canal irrigation materials that are widely used nowadays is NaOCl, but this material has many shortcomings. The pericarp of mangosteen (*Garcinia mangostana L.*) has antibacterial potency, one of which comes from flavonoid. Therefore flavonoids of mangosteen pericarp can be an alternative material which could inhibit and bactericidal function to *Enterococcus faecalis*.

**Purpose.** The aim of this study was to know the antibacterial potency of flavonoids mangosteen pericarp extract (*Garcinia Mangostana L.*) against *Enterococcus faecalis* **Method.** A microdilution method was used to determine minimum inhibitory concentration and minimum bactericidal concentration by colony counting bacteriae in Nutrient Agar media. Growth of bacterial colonies in Nutrient Agar is calculated manually in colony forming unit (CFU). **Result.** Minimum inhibitory concentration was revealed at 5,5% concentration because bacterial growth of *Enterococcus faecalis* in this concentration was less than 10%. Minimum bactericidal concentration was at 6,3% concentration because there was no bacterial growth of *Enterococcus faecalis*. The study showed that there were different result computed using HSD Tukey test. The HSD Tukey test shows the significant different ( $p < 0,05$ ) for each groups. **Conclusion.** The minimum inhibitory concentration (MIC) of flavonoids mangosteen pericarp against of *Enterococcus faecalis* was at 5,5% concentration and the minimum bactericidal concentration (MBC) was at 6,3% concentration.

**Key words :** Flavonoid, The pericarp of Mangosteen (*Garcinia mangostana L.*), Minimum Inhibitory Concentration (MIC), Minimum Bactericidal Concentration (MBC), *Enterococcus faecalis*.