

**KONSENTRASI HAMBAT MINIMAL DAN KONSENTRASI BUNUH
MINIMAL EKSTRAK KUNYIT (*Curcuma longa* Linn.) TERHADAP
*Enterococcus faecalis***

**MINIMUM INHIBITORY CONCENTRATION AND MINIMUM
BACTERICIDAL CONCENTRATION OF TURMERIC EXTRACT (*Curcuma
longa* Linn.) AGAINST *Enterococcus faecalis***

ABSTRACT

Background. *Enterococcus faecalis* is one of bacteria that are associated with root canal treatment failure. Elimination of pathogenic microorganisms through root canal irrigation plays important role in root canal treatment. Herbal ingredients have been proven to have antibacterial activity that makes them effective for root canal irrigation, one of them is turmeric (*Curcuma longa* Linn.). Antibacterial activity of turmeric extract can be observed through minimum inhibitory concentration (MIC) and minimum bactericidal concentration (MBC). **Purpose.** The aim of this study was to determine the MIC and MBC of turmeric extract against *E. faecalis*. **Methods.** This research was a laboratory experimental study. Turmeric extract was made by maceration method and certain dilution was performed to obtain various concentrations. Values of MIC and MBC of turmeric extract against *E. faecalis* were known by calculating the growth of bacteria colonies on blood agar media using colony forming unit (CFU). **Results.** The growth of bacteria colonies at 50% and 55% concentration in sequence are 14,8% and 4,5% of the positive control, whereas at 60% until 100% concentration there was no growth of bacteria colonies. **Conclusion.** MIC and MBC of turmeric extract against *E. faecalis* are each at 55% and 60% concentration.

Keywords: Turmeric extract, *Enterococcus faecalis*, MIC, MBC