

**KONSENTRASI HAMBAT MINIMAL (KHM) DAN KONSENTRASI
BUNUH MINIMAL (KBM) EKSTRAK DAUN PACAR KUKU (*Lawsonia
inermis Linn*) TERHADAP BAKTERI
*ENTEROCOCCUS FAECALIS***

**MINIMUM INHIBITATION CONCENTRATION (MIC) AND MINIMUM
BACTERICIDAL CONCENTRATION (MBC) OF HENNA LEAF
EXTRACT (*Lawsonia inermis Linn*) AGAINST THE *ENTEROCOCCUS
FAECALIS***

ABSTRACT

Background. The primary causes of root canal treatment failure is a settled bacterial infection which remaining in the root canal and periradikular tissue after the preparation or obturation. *Enterococcus faecalis* is a bacterium that is found about 77% of cases are resistant to treatment that can causing secondary endodontic infections. At this time, the increase of antibiotic resistance and side effects of synthetic drugs increase research efforts to find alternative herbal ingredients that have antibacterial properties effective and not toxic that can later be used as a root canal irrigation. One of herbal antibacterial ingredients that are currently developed are leaves of henna. Antibacterial activity of henna leaf extract against *Enterococcus faecalis* bacteria can be determined by minimum inhibitory concentration (MIC) and minimum bactericidal concentration (MBC). **Purpose.** To determine the minimum inhibitory concentration (MIC) and the minimum bactericidal concentration of henna leaf extract against the bacteria *Enterococcus faecalis*. **Method.** This research is a laboratory experimental with post test only control group design which used *Enterococcus faecalis* ATCC 29212 with treatment henna leaf extract on concentration 50%, 45%, 40%, 35%, 30%, dan 25% using Brain Heart Infusion Broth (BHIB). Value of MIC and MBC henna leaf extract were done by calculating manually the growth of bacteria colonies in Nutrient agar with CFU/ml results. **Result.** At the concentration 30% of henna leaf extract, showed that colonies growth less than 10%. At the concentration 35% was not revealed any bacterial growth. **Conclusion.** The henna leaf extract has antibacterial effect on bacteria *Enterococcus faecalis*. The MIC was at 30% and MBC was at 35%.

Keyword : Henna leaf extract, *Enterococcus faecalis*, MIC, MBC.