

**DAYA ANTIBAKTERI EKSTRAK DAUN BELIMBING WULUH
(*Averrhoa bilimbi linn*) TERHADAP BAKTERI
*ENTEROCOCCUS FAECALIS***

**ANTIBACTERIAL ACTIVITY OF *AVERRHOA BILIMBI LINN* LEAF
EXTRACT AGAINST *ENTEROCOCCUS FAECALIS***

ABSTRACT

Background. The prevalence of *Enterococcus faecalis* bacterial infection caused the failure of root canal treatment between 24%-77%. This is due to various factors resistance and virulence of *Enterococcus faecalis*. This research to find alternative materials that have antibacterial properties and by utilizing natural ingredients that can later be used as a root canal irrigation. Antibacterial activity of the *Averrhoa bilimbi linn* leaf extract against *Enterococcus faecalis* bacteria can be determined by Minimum Inhibitory Concentration (MIC) and Minimum Bactericidal Concentration (MBC). **Purpose.** The aim of this study was to determine the concentration of *Averrhoa bilimbi linn* leaf extract that has antibacterial activity against bacteria *Enterococcus faecalis*. **Method.** This research is a laboratory experimental with post test only control group design which use diluted *Enterococcus faecalis* ATCC 29212 according Mc. Farland standard $1,5 \times 10^8$ CFU/ml. With treatment *Averrhoa bilimbi linn* leaf extract on concentration 50%, 45%, 40%, 35%, 30%, and 25% given to each of 0,05 ml *Enterococcus faecalis* and using Brain Heart Infusion Broth (BHIB) as planting media. **Result.** At the concentration 30% of *Averrhoa bilimbi linn* leaf extract, showed that colony's growth less than 10%. At the concentration 35% was not revealed any bacterial growth. **Conclusion.** The *Averrhoa bilimbi linn* leaf extract has antibacterial effect on bacteria *Enterococcus faecalis*. The MIC was at 30% and MBC was at 35%.

Keyword : *Averrhoa bilimbi linn* leaf extract, *Enterococcus faecalis*, MIC, MBC.