

PERBEDAAN DAYA ANTIBAKTERI ALLICIN BAWANG PUTIH (*Allium sativum*) 16,7% DAN CHLORHEXIDINE 2% TERHADAP BAKTERI *Enterococcus faecalis*

THE DIFFERENCE OF ANTIBACTERIAL ACTIVITY ALLICIN GARLIC (*Allium sativum*) 16.7% AND CHLORHEXIDINE 2% AGAINST *Enterococcus faecalis*

ABSTRACT

Background. Root canal treatment failure is caused in part by the microorganisms remaining in the root canal. The prevalence of endodontic infections because the bacteria *Enterococcus faecalis* ranged between 24% -77%. This is due to various factors resistance and virulence of *Enterococcus faecalis*. Chlorhexidine 2% is recommended as a root canal medicaments, but can cause allergies and discoloration of the teeth. Need some research to find alternative materials of natural ingredients that have antibacterial properties and can be used as an alternative root canal medicaments later. Allicin in garlic and its derivatives are compounds that have antibacterial properties. In the preliminary research has been done to look for Minimum Inhibitory Concentration (MIC) and Minimum Bactericidal Concentration (MBC) allicin garlic, obtained MIC of allicin result is 13.12% and MBC of allicin is 16.7%. Differences antibacterial activity of allicin garlic 16.7% and chlorhexidine 2% can be determined by experimental laboratory to determine the inhibition zone diameter each treatment. **Purpose.** Provide information about the differences of antibacterial allicin garlic (*Allium sativum*) 16.7% and chlorhexidine 2% on the growth of *Enterococcus faecalis*. **Method.** This research is an experimental laboratory with post test only control group design using *Enterococcus faecalis* ATCC 29212 with treatment of allicin garlic 16.7% and chlorhexidine 2% used diffusion method by measuring the inhibition zone diameter of each treatment. **Results.** Diameter of bacterial inhibition zone formed by chlorhexidine 2% greater than the allicin garlic 16.7%. **Conclusion.** Antibacterial activity that generated by chlorhexidine 2% is greater than allicin garlic 16.7%.

Keywords: Allicin Garlic, chlorhexidine, *Enterococcus faecalis*, the diameter of inhibition zone