DAYA ANTI BAKTERI EKSTRAK KULIT NANAS (Ananas comosus) TERHADAP PERTUMBUHAN BAKTERI Enterococcus faecalis

(ANTIBACTERIAL POTENCY OF PINEAPPLE PEEL EXTRACT (Ananas comosus) ON Enterococcus faecalis GROWTH)

ABSTRACT

Background: Root canal infections is caused by the colonization of microorganisms. Microorganisms that commonly found in root canal failure is Enterococcus faecalis. These bacteria can be found in 80-90% of root canal infections. Currently, many plants are used as antibacterial drugs. Pineapple is one plant that can be used as antibacterial drugs. Pineapple peel has a variety of antibacterial chemical compounds, such as, bromelain, saponins, tannins and flavonoids that can inhibit the growth of Enterococcus faecalis bacteria. Aim: To obtain concentration of antibacterial from pineapple peel extract on Enterococcus faecalis growth. Methods: This study was an experimental laboratory with Post Test Only control group design using Enterococcus faecalis ATCC 29212 bacteria that were diluted based on Mc. Farland standard 1.5 x 108 CFU / ml with pineapple peel extract treatment concentration of 100%, 50%, 25%, 12.5%, 6.25%, 3.125%, 1.56%, 0, 7.8% and then planted in nutrient agar media surface evenly. Results: At concentration of 3.125% pineapple peel extract showed that the growth of colonies was less than 90% of positive control and concentration of 6.25% pineapple peel extract had no visible Enterococcus faecalis bacteria growth as much as 99.9%. Conclusion: The pineapple peel extract (Ananas comosus) have antibacterial power on the growth of Enterococcus faecalis bacterial colonies with Minimal Inhibitory Concentration (MIC) of 3.125% and the Minimum Bactericidal Concentration (MBC) of 6.25%.

Key words: Pineapple peel extract (Ananas comosus); Enterococcus faecalis; Antibacterial