## DAYA ANTIBAKTERI EKSTRAK KULIT NANAS (Ananas comosus) TERHADAP PERTUMBUHAN Streptococcus viridans

## ANTIBACTERIAL POTENCY OF PINEAPPLE PEEL EXTRACTS (Ananas comosus) AGAINST THE GROWTH OF Streptococcus viridans

## ABSTRACT

Background. Streptococcus viridans is a facultative anaerobic bacteria that commonly cause root canal infection (40-48%). Streptococcus viridans has also been found in pulp necrosis, periapical lesions, and acute periapical abscess. The interest of using drugs derived from herbal plants have increased, and use of herbs as an alternative way since herbs are lack of microbial resistance. Pineapple peel extract (Ananas comosus) has antibacterial potency, which comes from flavonoids, saponins, tannins, and bromelain enzyme. Therefore, pineapple peel extract can be an alternative material that could inhibit and have bactericidal function to Streptococcus viridans. **Purpose.** The aim of this study was to determine the antibacterial activity of pineapple peel extract (Ananas comosus) on the growth of Streptococcus viridans. Method. A serial dilution test, growth bacterial colony with streaking and spreading method was used to determine minimum inhibitory concentration and minimum bactericidal concentration by colony counting bacteria in nutrient agar media. Growth of bacterial colonies in nutrient agar is calculated manually in colony forming unit/ ml (CF<mark>U/ml). **Results.** Minimum inhibitory concentration was revealed at 1,56%</mark> concentration from dilution test with streaking and spreading method. The antibacterial effect of pineapple peel extract (Ananas comosus) has reached minimum bactericidal concentration, because at 3,125% concentration there was no bacterial growth of Streptococcus viridans Conclusion. The Minimum Inhibitory Concentration (MIC) of pineapple peel extract (Ananas comosus) against of Streptococcus viridans was at 1,56% concentration and the Minimum Bactericidal Concentration (MBC) was at 3,125% concentration.

**Key words** : Pineapple Peel Extracts (Ananas comosus) Minimum Inhibitory Concentration (MIC), Minimum Bactericidal Concentration (MBC), Streptococcus viridans.