## DAYA ANTIBAKTERI EKSTRAK MENIRAN (Phyllanthus niruri linn) TERHADAP BAKTERI Enterococcus faecalis

## ANTIBACTERIAL ACTIVITY OF MENIRAN (Phyllanthus niruri linn) EXTRACT AGAINST Enterococcus faecalis BACTERIA

## **ABSTRACT**

Background. Enterococcus faecalis is an anaerobic facultative grampositive bacteria which contribute to the failure of root canal treatment with the number of prevalence 24% to 77%. At the preparation stage, a material for irrigation which has antibacterial activity to Enterococcus faecalis is needed. Phyllanthus niruri linn is one of herbal medicament which is potential as antibacterial agent as it contains active antibacterial chemical-compound. **Purpose**. The purpose of the study is to identify Minimum Inhibitory Concentration and Minimum Bactericidal Concentration of Phyllanthus niruri linn against Enterococcus faecalis. Method. The research method used is laboratory experimental. Enterococcus faecalis ATCC 29212 was suspended into several c<mark>oncentratio</mark>n of Ph<mark>yllan</mark>thus niruri linn extrac<mark>t from dilu</mark>tion method on BHIB medium. Each tube was incubated for 24 hours. Then, each tube was subcultured to Nutrient agar medium using spreader in a petridish. Each petridish was incubated for 24 hours and the growth of the colony was manually calculated using CFU/ml unit. Result. At the concentration of 6.25%, Phyllanthus niruri linn was able to inhibit the growth of Enterococcus faecalis as 90% and there was no bacteria at the concentration of 12,5%. Conclusion. 6.25% concentration of Phyllanthus niruri linn extract was Minimum Inhibitory Concentration and 12.5% concentration was Minimum Bactericidal Concentration to Enterococcus faecalis.

Keywords: Phyllanthus niruri linn, Enterococcus faecalis, Minimum Inhibitory Concretation, Minimum Bacteriacidal Concentration.