ABSTRAK

KONSENTRASI HAMBAT MINIMAL DAN KONSENTRASI BUNUH MINIMAL EKSTRAK BUAH DELIMA MERAH TERHADAP BAKTERI *Enterococcus faecalis*

MINIMUM INHIBITORI CONCENTRATION AND MINIMUM BAKTERICIDAL CONCENTRATION OF POMEGRANATE (PUNICA GRANATUM LINN) AGAINST Enterococcus faecalis

Background. *Elimination of pathogenic bacteria on the teeth with infected pulp is one of the goals of root canal treatment, but in clinical studies, either through mechanical instrumentation and irrigation canals, pathogenic bacteria can still be found. E.faecalis has been widely identified as the species most commonly found in retreatment root canal treatment in cases of persistent infection. The bacteria E.faecalis was the most resistant bacteria in root canals. Sterilization and irrigation are the elimination stages of root canal treatment. But until present, synthetic materials that used as irrigation and sterilization in root canal treatment still have many side effects. Back to nature, there is alternatife material, such as pomegranate, which is have active compounds like flavonoids, tannins, and alkaloids that potential for antibacterial agent.* ***Purpose.*** *The purpose of this study was to determine the Minimal Inhibitory Concentration (MIC) and Minimal Bactericidal Concentration (MBC) of pomegranate fruit extract (Punica granatum linn) against E.faecalis.* ***Methods.*** *This study was a laboratory experimental study. Pomegranate extract used is red pomegranate extracted by maceration method and performed serial dilution to obtain various concentrations. Value of MIC and MBC pomegranate's extract on E.faecalis were done by calculatign the bacteria in Blood agar media. Growth of bacteria colonies was calculated manually in colony formiting unit (CFU)* ***Results.*** *Red pomegranate fruit extract had MIC at concentrations of 25% and 50% of MBC againts E.faecalis.* ***Conclusion.*** *MIC and MBC of red pomegranate fruit extract (Punica granatum Linn) against E.faecalis bacteria are each at concentration of 25% and 50%.*

Keywords: red pomegranate extract, tannins, flavonoids, alkaloids, Enterococcus faecalis.