ABSTRACT

(KONSENTRASI HAMBAT MINIMAL (KHM) DAN KONSENTRASI BUNUH MINIMAL (KBM) EKSTRAK PROPOLIS LAWANG TERHADAP Fusobacterium nucleatum)

Background. Patient commonly comes to dental clinic complained and diagnosed as caries dentin which is not perforated. In this case bacteria that plays important role to induced pain is Fusobacterium nucleatum. Therefore it is necessary to discover another antimicrobial agent deriving from nature which doesn’t have any or less harmful effect to the body. Propolis considered as best nature materials due to Its active components, flavonoid and trepenoids, that is known as antimicrobial agent with their various mechanism of action. Purpose. The aim of this study is to find out the antimicrobial effect of propolis against Fusobacterium nucleatum, by determining the minimum inhibitory concentration (MIC) and minimum bactericidal concentration (MBC).

Method. This research is an observational study. Propolis extract produced by propolis farm on lawang. The antibacterial activity test was performed by direct contact and continued by colony count to determine the value of MIC and MBC of extract propolis against Fusobacterium nucleatum. Result. Based on the colony counting showed that the propolis extract’s MIC is 1.48% and MBC is 1.54% beside that the number of colony decreasing ast the concentration of propolis extract increased. Conclusion. MIC value of propolis extract against Fusobacterium nucleatum is 1.48% and MBC value of propolis extract is 1.54%.

Keywords: Propolis extract, antimicrobial, Flavonoid, Fusobacterium nucleatum