Perbedaan Daya Antibakteri Kalsium Hidroksida dan Ekstrak Propolis terhadap *Fusobacterium nucleatum*

*The Differences of Antibacterial Effect between Calcium Hydroxide and Propolis Extract against Fusobacterium nucleatum*

**ABSTRACT**

**Background.** One of gram negative bacteria that cause caries is *Fusobacterium nucleatum*, one of them is at plaque the teeth and caries profunda. Caries on the teeth can be handled with the application of Ca(OH)$_2$ or calcium hydroxide. But since the high pH level can lead to chronic inflammatory and damage the soft tissue, so it needs an alternative material that can eliminate side effects. An alternative material used is propolis extract containing flavonoid compound, tannin and other synergistic compound as an antibacterial. **Purpose.** To tell the differences of power antibacterial effects between an calcium hydroxide propolis extract against *Fusobacterium nucleatum*. **Method.** This research used a sample of the *Fusobacterium nucleatum* ATCC 25586 grown in Brain Heart Infusion Broth (BHIB). The antibacterial material applied against the bacterium *Fusobacterium nucleatum* ATCC 25586 was MIC 1.5% of propolis extract and MIC 13% of suspense Ca(OH)$_2$ pro analysis with the methods spriding on media Mueller Hinton Agar (MHA). Incubation at a temperature of 37ºC for 2 x 24 hours in anaerobic jar, finally colony counting *Fusobacterium nucleatum* ATCC 25586 grows on MHA by manual observed by 3 people observer expressed by Colony Forming Unit (CFU). **Conclusion.** It can be concluded from the result of this research that no difference of antibacterial effects between 1,5% extract propolis and 13% calcium hydroxides against *fusobacterium nucleatum* ATCC 25586 is shown.

Key words: Calcium hydroxide, Propolis extract, *Fusobacterium nucleatum*.