

**EFEKTIVITAS LAMA PERENDAMAN CETAKAN POLYVINYL SILOXANE DALAM EKSTRAK DAUN SALAM TERHADAP PERTUMBUHAN BAKTERI STREPTOCOCCUS MUTANS (EFFECTIVITY OF POLYVINYL SILOXANE'S IMMERSION LENGTH IN BAY LEAF EXTRACT TO THE GROWTH OF STREPTOCOCCUS MUTANS)**

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**POLYVINYL SILOXANE; BAY LEAF EXTRACT; STREPTOCOCCUS MUTANS**

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**ABSTRACT**

**Background.** Polyvinyl siloxane impression materials have applications in a variety of indirect procedures in prosthodontics and restorative dentistry. Favourable handling properties, good patient acceptance and excellent physical properties have resulted in its popularity in today's practice. Transmission of the oral cavity bacteria can occur during the making of impression in the patient's mouth. Oral cavity microorganisms can be brought on by making the impression because of its adsorption on the surface of an impression. To prevent transmission of bacteria, polyvinyl siloxane impression needs to be disinfected.

**Purpose.** The aim of this study is to find out the soaking duration of polyvinyl siloxane impression in the bay leaf extract (*Eugenia polyantha*) 25%, which is effective in inhibiting the growth of *Streptococcus mutans*.

**Method.** Sterilized polyvinyl siloxane impression, contaminated by the *Streptococcus mutans*, then soaked in bay leaf extract 25% for 3 minutes, 5 minutes, 10 minutes, and 15 minutes. As control, polyvinyl siloxane impression, contaminated by *Streptococcus mutans* soaked in sterile distilled water. Then the sample put into a tube containing of BHIB (Brain Heart Infusion Broth). Taken from each tube 0,1 ml of bacterial, and cultured on TYC (Trypton Yeast Cystein) media. After incubation, calculate the number of *Streptococcus mutans* colonies. This research was conducted six times.

**Result.** Polyvinyl siloxane impressions soaking in bay leaf extracts 25% for 3 minutes, 5 minutes, 10 minutes, and 15 minutes showed decreased number of *Streptococcus mutans* colonies embedded in polyvinyl siloxane impression compared with the control group.

**Conclusion.** The longer period of immersion polyvinyl siloxane impression in bay leaf extract 25%, hence more effective in inhibiting the growth of *Streptococcus mutans*

**keywords:** polyvinyl siloxane, bay leaf extract, *Streptococcus mutans*, immersion length