

PENYEMPROTAN SEDUHAN SERBUK BUNGA ROSELLA (*Hibiscus sabdariffa* L) PADA CETAKAN POLYVINYL SILOXANE TERHADAP PERTUMBUHAN MIKROORGANISME

(*SPRAYING OF STEEPING ROSELLA FLOWER POWDER (*Hibiscus sabdariffa* L) ON POLYVINYL SILOXANE IMPRESSION FOR ORAL MICROORGANISM*)

ABSTRACT

Background. Polyvinyl siloxane is the impression material that is often used by dentists. Polyvinyl siloxane impression that contaminated by saliva and blood potentially could cause cross contamination. To prevent this, the impression have to be disinfected by disinfectant such as steeping rosella flower powder. Rosella flower (*Hibiscus sabdariffa* L) was found to contain flavonoids, alkaloids, polyphenols, and saponins that act as antimicrobial. **Purpose.** The purpose of this study is to find out spraying of the steeping rosella flower powder on polyvinyl siloxane impression can inhibit the growth of microorganisms. **Material and method.** Twenty eight sample have been taken from 7 responden. This polyvinyl siloxane impression divided into 4 groups: group 1 sprayed by sterile aquades (as control), group 2 sprayed with steeping rosella flower powder 15% for 30 second, group 3 sprayed with steeping rosella flower powder 25% for 30 second, group 4 sprayed with steeping rosella flower powder 35% for 30 second. The microorganism colony was counted using colony counter (cfu/ml). Kolmogorov-Smirnov Test to know normal distribution, then Levene test and Anova one way test for further analyze. **Result.** There is significant differences between each group, $p = 0,00$ ($p < 0,05$). **Conclusion.** Usage of 15% concentration of steeping rosella flower powder as a disinfectant is already effective to decrease microorganism colony in the polyvinyl siloxane impression.

Keywords : Polyvinyl siloxane impressions, steeping rosella flower powder, oral microorganism