

EFEKTIFITAS PENYEMPROTAN EKSTRAK ETANOL DAUN KEMANGI
(*Ocimum basilicum L.*) SEBAGAI DESINFEKTAN TERHADAP KOLONI
MIROORGANISME PADA BAHAN CETAK ALGINAT

(*THE EFFECTIVENESS OF BASIL LEAVES (*Ocimum basilicum L.*) ETHANOL
EXTRACT SPRAY AS DISINFECTANT FOR MICROORGANISM COLONIES
ON ALGINATE IMPRESSION*)

ABSTRACT

Background. Alginate is the impression material that most frequently used by dentists. This material has a high risk for contaminated by microorganism derived from saliva and blood that potentially could cause cross contamination. Disinfection is needed to reduce the contamination of microorganisms in the mold. One of the disinfectant liquid that can be used is basil leaves (*Ocimum basilicum L.*) ethanol extract that prove to have function as antimicrobial, antifungal, antiulcer, and antiseptic effects. **Purpose.** The purpose of this study is to find out the most effective concentration of the basil leaves ethanol extract as a disinfectant to decrease microorganism colony on the alginate impression. **Material and method.** Twenty eight samples taken from seven respondents that fullfill the requirement. These alginate impression taken in first molar region and divided into 4 groups : group 1 sprayed by sterile aquades as a control, group 2 sprayed by basil leaves ethanol extract 5% for 30 second, group 3 sprayed by basil leaves ethanol extract 10% for 30 second, group 4 sprayed by basil leaves ethanol extract 20% for 30 second. Then count the microorganism colony on the blood agar. Data analysis using the Kolmogorov Smirnov test, then using Levene Test. And the last using Kruskal Wallis and Mann Whitney test **Result.** There is significant differencies between each group, $p = 0,00$ ($p < 0,05$). **Conclusion.** Basil leaves ethanol extract effective as a disinfectant to decrease the number of microorganisms on alginate impression material.

Keyword : Alginate impression, basil leaves, oral microorganism