

ABSTRACT

THE EFFECTIVE CONCENTRATION OF *OCIMUM BASILICUM* EXTRACT TOWARD THE NUMBERS OF *CANDIDA ALBICANS* COLONY IN THE ACRYLIC RESIN

Background. *Candida albicans* is one of the etiology of *denture stomatitis* that colonize in the fitting surface of the dentures. Denture cleanser can be used to prevent the colonization of the *Candida albicans*. *Ocimum basilicum* extract has the *eugenol* inside *linalool* that can be used as an antifungal agent. **Purpose.** The aim of this study were looking for the effective concentration of *Ocimum basilicum* to reduce numbers of colony *Candida albicans*. **Method.** This experimental laboratory study was using heat cured acrylic resin specimen without surface polishing with 10 x 10 x 1 mm in size. They were divided in 5 groups which are 5%, 7,5%, 10%, 12,5% of *Ocimum basilicum* extract and sterile aquadest was used for the control group. Each group consists of 7 specimens. All specimens were soaked in water for 48 hours, autoclave sterilized, soaked in sterile saliva for 1 hour and contaminated with *Candida albicans* solution for adherence evaluation. The data was analyzed using *Anova Test* and *LSD*. **Results.** There were significant difference number of colony *Candida albicans* in each group and the most effective concentration of *Ocimum basilicum* extract for reducing the numbers of colony *Candida albicans* in the acrylic resin was 12,5%. **Conclusion.** *Ocimum basilicum* extract can reduce the numbers of colony *Candida albicans*.

Keywords : *Ocimum basilicum*, *Candida albicans*, acrylic resin