EFEK SEDUHAN BUNGA ROSELLA DALAM MENCEGAH PERTUMBUHAN *Candida albicans* PADA RESIN AKRILIK

(THE EFFECT OF ROSELLE FLOWER INFUSION IN INHIBITING Candida albicans COLONIZATION ON ACRYLIC RESIN)

ABSTRACT

Background: *Acrylic resin has been commonly used as denture base. As denture base, acrylic resin has tendency to be attached by Candida albicans. To prevent over colonization of Candida albicans, acrylic resin must be cleaned properly once a day. Besides, fabricated denture cleanser is known containing allergen. It is needed to find an alternative antifungal agent. Some experiments have proved that flavonoid has antifungal effect. Roselle flower is known containing flavonoid.* ***Purpose:*** *This study has purpose to find out the effect of roselle flower infusion and to find out its effective concentration in inhibiting Candida albicans colonization on acrylic resin.* ***Material and method:*** *Twenty eight samples suitable with requirements were exposed with saliva and Candida albicans suspension. These samples were divided into 4 groups and then each group is soaked in sterile aquadest, roselle flower infusion 20%, roselle flower infusion 30%, and roselle flower infusion 40%. They were incubated for 48 hours and the Candida albicans colonies then were counted. Data obtained were analyzed using Kolmogorov-Smirnov Test, Levene's Test, One-Way Anova Test, and Least Significance Difference Test.* ***Results:*** *All groups soaked in roselle flower infusion showed decreasing Candida albicans colonization. Statistically, there is significant difference between each group, p value = 0,00 ($p<0,05$).* ***Conclusion:*** *Roselle flower infusion has effect to inhibit Candida albicans colonization in acrylic resin. The effective concentration of roselle flower infusion to inhibit Candida albicans colonization is 30%.*

Keyword: Candida albicans, roselle flower infusion, acrylic resin