

**EFEKTIVITAS KONSENTRASI INFUSA DAUN SALAM SEBAGAI
DESINFEKTAN PADA RESIN AKRILIK TERHADAP CANDIDA ALBICANS**

(Analitik eksperimental laboratoris)

**THE EFFECTIVENESS OF CONCENTRATION BAY INFUSION AS A
DESINFECTANT TO ACRYLIC RESIN ON CANDIDAN ALBICANS**

(Analytical laboratory experimental)

LESTARI, SEPTIAN PUJI

Pembimbing : Nike Hendrijantini, drg., Mkes., SpPros(K)

ACRYLIC RESIN; CANDIDA ALBICANS; BAY INFUSION

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ABSTRACT

Background: Acrylic based denture are contaminated by *Candida albicans* that caused stomatitis while contact with palatal mucosa. Denture need to be cleaned by immersed it into chemical liquid. In this case, the chemical liquid is bay infusion. This infusion contains flavonoid, tannin, and essential oils which have antimicrobes activity especially against *Candida Albicans*.

Purpose: To find out the ability of bay infusion in inhibiting the growth of *Candida albicans*'s colony on acrylic based denture.

Materials and Method: 28 acrylic plates that are used are heat cured acrylics (QC-20). During "dough stage" the acrylic is embedded into the mold and the acrylic is then cured according to the manufacture's instruction. When the acrylic resin plates are done, it was being sterilized. These acrylic were immersed in saliva for pellicle formation and immersed in *Candida Albicans* suspension. They were incubated at 37°C for 24 hours. They were divided into 4 groups equally. Group 1 was immersed in sterile aquadest. Group 2 was immersed in 80% bay infusion. Group 3 was immersed in 90% bay infusion. Group 4 was immersed in 100% bay infusion. All groups being immersed for 30 minutes each. Saboroud's broth was used after the immersion so that the *Candida Albicans* came off. Then, Saboroud's Dextrose Agar was used for growing *Candida Albicans*. The colonies were counted using coloning forming unit (CFU)

Result: The mean and standard deviation obtained for each group were : 1. ~ / ~, 2: 16428,5714 / 8482,47493, 3: 11714,2857 / 6651,17247, 4: 0 / 0. There is significant decrease of *Candida Albicans* colonies growth between infusions with different concentration, since $P(0.001) < \alpha 0.05$.

Conclusion: Bay infusion does decrease the number of *Candida Albicans* colonies growth. As high as the concentration, so that the ability of the infusion to kill the *Candida Albicans* getting stonger.

Keywords : Bay infusion, *Candida albicans*, denture stomatitis