

EFEKTIVITAS EKSTRAK KULIT DURIAN (*Durio zibethinus Murray*) DALAM MENGHAMBAT PERTUMBUHAN CANDIDA ALBICANS PADA LEMPENG AKRILIK

(Analitik eksperimental laboratoris)

**EFFECTIVENESS OF DURIAN RIND EXTRACT
(DURIO ZIBETHINUS MURRAY)
TO PREVENT THE GROWTH OF CANDIDA ALBICANS
ON ACRYLIC PLATE
(Analytical laboratory experimental)**

ABSTRACT

Background: *Acrylic based denture always contact with the mucosa (both palatal and gingival). Denture needs to be cleaned by immersed of liquid chemical. In this case, the chemical liquid is durian rind extract. This extract cointains flavonoid, saponin, tanin that have antimicrobial effect which can against Candida albicans.*

Purpose: *To know the ability of durian rind extract in inhibiting the growth of Candida albicans' colony on acrylic based denture.*

Material and Method: *27 heat cured acrylic plates in "dough stage" is embedded into the mold and the acrylic is then cured. Then it was being sterilized. These acrylic were immersed in saliva and then in suspension of Candida albicans. Afterward they were incubated at 37°C for 24 hours. They were divided into 4 groups. First group immersed in sterile aquadest, the second in 20% durian rind extract, the third is immersed in 25% durian rind extract, and the last is in 30% durian rind extract. All groups are immersed for 30 minutes. Saboroud broth was used after the immesion so that the Candida albicans came off. Then, SDA was used for growing Candida albicans. The colonies were counted in coloning forming unit (CFU).*

Result: *The mean for each group were 1: >100 , 2:±20 , 3: ±12, and 4: ±5. There is significant decrease of Candida albicans growth between different consentration, since $p(0.00 \text{ and } 0.01) < \alpha 0,05$.*

Conclusion: *Durian rind extract can inhibit the growth number of Candida abicans. Higher of the concentration, the ability of the durian rind extract to inhibit is higher.*

Key words: *Durian rind extract, acrylic resin plate, Candida albicans*