

ABSTRACT

EFEK KONSENTRASI INFUSA KULIT BUAH DELIMA PUTIH (*PUNICA GRANATUM LINN*) DALAM MENGHAMBAT PERTUMBUHAN *CANDIDA ALBICANS* PADA PEMAKAI GIGI TIRUAN LEPASAN

THE EFFECT OF THE RIND OF *PUNICA GRANATUM LINN* INFUSIONS CONCENTRATIONS IN INHIBITING THE GROWTH OF *CANDIDA ALBICANS* IN REMOVABLE DENTURE USERS

Background. Application of removable denture – acrylic resin based is a trigger to increase the colonies of *Candida albicans* in oral cavity, especially for the patient with poor oral hygiene. In avoiding negative effects happened by increasing of *Candida albicans*, the patient need antifungals in order to inhibit the growth of *Candida albicans* colonies. One of those natural antifungal is the rind of *Punica granatum Linn*. **Purpose.** The aim of this study was to know the effect of *Punica granatum Linn* infusion concentration in inhibiting the growth of *Candida albicans* in removable denture users. **Method.** This research was done in laboratory to account the growth of *Candida albicans* as unit of experiment resulted from the swab in acrylic resin of removable dentures users. This experiment has tested the antifungal effect of the rind of *Punica granatum Linn* infusions to *Candida albicans* in Saboroud Agar plate, in some concentrations, made from serial dilution system, in 100%; 50 %; 25 %; 12,25 %; 6,25 %; 3,125 %; 1,625; 0,8125 %. All units of experiment were examined by accounting the number of *Candida albicans* colonies before and after testing by the rind of *Punica granatum Linn* infusions. **Result.** There were significant differences ($p < 0,05$) of antifungal effect of the skin of *Punica granatum Linn* infusion in groups of 12.5%; 6,25%; 3,125%; 1,625% concentration to *Candida albicans*. There were not significant differences of antifungal effect of the rind of *Punica granatum Linn* infusion in group of 0,8125% concentration to *Candida albicans*. **Conclusion.** The effect of the rind of *Punica granatum Linn* infusions are able to inhibit the growth of *Candida albicans* in removable denture users, by the lowest concentration, 25%.

Keywords: Removable denture, *Candida albicans*, *Punica granatum Linn*