

## ABSTRAK

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Program Studi : Kedokteran Gigi

Judul : PENGARUH WAKTU PERENDAMAN PLAT RESIN AKRILIK  
DALAM PERASAN MURNI BAWANG PUTIH (*Allium sativum*)  
TERHADAP JUMLAH KOLONI *Candida albicans*

**Latar belakang:** Gigi tiruan lepasan yang kotor dapat menjadi tempat melekatnya mikroorganisme. Jika tidak dilakukan pembersihan rutin, maka akan dapat menimbulkan penyakit seperti *denture stomatitis* oleh jamur *Candida albicans*. Perasan murni bawang putih diketahui memiliki kandungan *allicin* untuk menghambat pertumbuhan *Candida albicans*. **Tujuan:** Mengetahui pengaruh lama waktu perendaman bahan basis akrilik dalam perasan murni bawang putih 50% terhadap jumlah koloni *Candida albicans*. **Metode:** Eksperimen lab dengan rancangan *control group post test only*. Kelompok sampel terdiri dari dua, kelompok perlakuan direndam dalam perasan murni bawang putih 50% dan kelompok kontrol direndam dalam aquades steril. Setiap kelompok dibagi berdasarkan waktu perendaman yang berbeda. **Hasil penelitian:** Diperoleh rata-rata dan standar deviasi koloni *Candida albicans* setelah perendaman dalam perasan murni bawang putih 2 jam, 4 jam, 6 jam, dan 8 jam ialah  $23,50 \pm 9,290$ ;  $18,83 \pm 1,941$ ;  $17,17 \pm 1,329$  dan  $10,33 \pm 1,211$ . **Simpulan:** Semakin lama waktu perendaman semakin sedikit jumlah koloni *Candida albicans* pada resin akrilik.

**Kata kunci:** resin akrilik, *candida albicans*, bawang putih

## **ABSTRACT**

*Name* : Cristine Natasya P

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*Title* : **THE EFFECT OF THE SOAKING TIME OF THE ACRYLIC RESIN PLATES IN THE PURE EXTRACT OF GARLIC (*Allium sativum*) ON THE AMOUNT OF *Candida albicans***

**Background:** Dirty removable dentures can become a place for attaching microorganisms. If there is no routine cleaning, it can cause diseases, such as denture stomatitis by fungal *Candida albicans*. Pure garlic extract is known of the containing allicin which can inhibit the growth of *Candida albicans*. **Objective:** To determine the effect of soaking time of acrylic denture in the 50% pure extract of the garlic on the amount of *Candida albicans*. **Method:** This research is an experimental laboratory with a post test only control group design. Sample group consists of two, such as the group of the immersed in 50% of the pure garlic extract and the control group. Each group was divided base on the length of the immersion. **Results:** This study obtained the mean number of colonies of *Candida albicans* after soaking in the pure extract of garlic 2 hours, 4 hours, 6 hours, and 8 hours was  $23,50 \pm 9,290$ ;  $18,83 \pm 1,941$ ;  $17,17 \pm 1,329$  and  $10,33 \pm 1,211$ . **Conclusion:** The longer time of the immersion, the smaller amount of the *Candida albicans* colonies in the acrylic resin plates.

**Keyword:** acrylic resin, candida albicans, garlic