

**EFEKTIVITAS EKSTRAK DAUN BROTOWALI SEBAGAI
PEMBERSIH GIGI TIRUAN TERHADAP JUMLAH
KOLONI *CANDIDA ALBICANS***

(EFFECTIVENESS OF BROTOWALI LEAF EXTRACT AS A
DENTURE CLEANSER TOWARDS THE AMOUNT OF
COLONIES OF *CANDIDA ALBICANS*)

ABSTRACT

Background. Individuals who wear denture often experience denture stomatitis, which is an infection of mucosal tissue in contact with denture in the oral cavity. Denture stomatitis associated with *Candida albicans* proliferation contained on the plaque attached to the denture. Prevention of denture stomatitis can be done by cleaning the denture using denture cleanser. Indonesia is rich in medicinal plants that can be used as an alternative denture cleanser. One of these plants is brotowali (*Tinospora crispa* Miers). **Purpose.** The purpose of this study was to determine the effectiveness of brotowali extract as a denture cleanser on the number of colonies of *Candida albicans*. **Method.** The study was carried out on 48 specimens of unpolished acrylic resin plates with 10x10x1mm dimension, solution with 20%, 22,5%, 25%, 27,5%, 30%, 32,5%, and 35% brotowali leaf extract concentrations, 15 minutes of immersion times to calculate the *Candida albicans* colonies. Sterilized aquadest used as a control. Each group consist of 6 specimens. Calculation on *Candida albicans* existence was carried out by calculating the amount of *Candida albicans* colonies which grew on Saboraud's dextrose agar. The data was analyzed using One-Way ANOVA and LSD with 5% degree of significance. **Result.** The amount of *Candida albicans* colonies were significantly decreased with increasing concentration of brotowali leaf extract. **Conclusion.** Concentration of brotowali leaf extract (*Tinospora crispa* Miers) as a denture cleanser that effectively reduce the number of colonies of *Candida albicans* present in concentration of 32,5%.

Keywords: denture stomatitis, acrylic resin, brotowali (*Tinospora crispa* Miers), denture cleanser, *Candida albicans*.