ABSTRAK

Nama : Zahra Qurota A'yun

Program studi: Kedokteran Gigi

Judul : Uji Efektivitas Ekstrak Buah Nanas (*Ananas comosus* (L.) Merr) terhadap Diskolorisasi Anasir Gigi Tiruan akibat Teh Hitam

Pembimbing : drg.Ira Anggar Kusuma, M.Si

drg.Bintoro Kardinoto Sp.Pros

Tujuan: mengetahui efektivitas ekstrak buah nanas konsentrasi 25%, 50%, dan 75% terhadap diskolorisasi anasir gigi tiruan akibat teh hitam. **Metode**: Penelitian eksperimental laboratoris dengan desain *pre-test and post-test with control group* menggunakan 28 sampel anasir gigi resin akrilik yang dibagi menjadi kelompok perlakuan dan kontrol. Warna diukur menggunakan *chromameter* dengan analisis data menggunakan uji *Shapro-Wilk, Levene, paired t-test,* dan *One Way ANOVA*. **Hasil**: Uji *paired t-test* menunjukkan perubahan warna yang signifikan setelah perendaman dalam ekstrak buah nanas ($p < 0,05$). Analisis *One Way ANOVA* pada nilai ΔE_2 menunjukkan perbedaan bermakna antar kelompok ($p = 0,000$). Uji *post-hoc* LSD menunjukkan konsentrasi 25% dan 50% berbeda signifikan dibandingkan kontrol ($p < 0,05$), sedangkan konsentrasi 75% tidak berbeda signifikan ($p > 0,05$). **Kesimpulan**: Ekstrak buah nanas dengan konsentrasi 25%, 50%, dan 75% efektif dalam membersihkan diskolorisasi pada anasir gigi tiruan akibat teh hitam dengan konsentrasi 75% menunjukkan efektivitas yang tidak berbeda signifikan dibandingkan kontrol alkalin peroksida.

Kata kunci: Diskolorisasi, anasir gigi tiruan, resin akrilik, teh hitam, ekstrak buah nanas, *chromameter*.

ABSTRACT

Name : Zahra Qurota A'yun

Study program: Dentistry

Title : The Effectiveness of Pineapple (Ananas comosus (L.) Merr) Extract on the Discoloration of Denture Teeth Caused by Black Tea.

Counseller : drg.Ira Anggar Kusuma, M.Si
drg.Bintoro Kardinoto Sp.Pros

Objective: Determine the effectiveness of pineapple extract at concentrations of 25%, 50%, and 75% in reducing discoloration of denture teeth caused by black tea. **Methods:** Laboratory experimental study with a pre-test and post-test with control group design using 28 samples divided into treatment and control groups. Colour measurements were taken using a chromameter based on the CIE LAB system. Data were analyzed using Shapiro Wilk, Levene's test, paired t-test, and One Way ANOVA. **Results:** The paired t-test showed a significant color change after immersion in pineapple extract ($p < 0.05$). One Way ANOVA analysis of ΔE_2 values revealed significant differences among groups ($p = 0.000$). Post-hoc LSD analysis demonstrated that the 25% and 50% concentrations differed significantly from the control ($p < 0.05$), while the 75% concentration showed no significant difference compared to the control ($p > 0.05$). **Conclusion:** Pineapple extract at concentrations of 25%, 50%, and 75% was effective in reducing discoloration of denture teeth caused by black tea, with the 75% concentration showing no significant difference in effectiveness compared to the alkaline peroxide control.
Keywords: Discoloration, denture teeth, acrylic resin, black tea, pineapple extract, chromameter.