

INTISARI

Kebiasaan minum teh menyebabkan pembentukan *extrinsic stain* pada gigi dan gigi tiruan sehingga mengganggu penampilan. Pasta gigi di pasaran hanya dipakai untuk membersihkan gigi dan mengandung bahan aktif kimia. Kandungan eugenol daun salam berpotensi membersihkan *extrinsic stain*. Tujuan penelitian ini mengetahui pengaruh konsentrasi pasta gigi ekstrak daun salam (*Eugenia polyantha Wight*) sebagai pembersih *extrinsic stain* pada gigi dan gigi tiruan.

Gigi, anasir gigi, dan plat resin akrilik difoto sebelum induksi *extrinsic stain* (menggunakan 25g teh dalam 100ml air mendidih selama 7 hari, diganti setiap 24 jam), setelah induksi *extrinsic stain*, dan setelah penyikatan. Pasta gigi untuk penyikatan yaitu pasta gigi kontrol negatif (pasta tanpa bahan aktif), pasta gigi ekstrak daun salam konsentrasi 5%, 10%, 15%, dan pasta gigi kontrol positif (pasta pembersih gigi komersial). Subjek disikat dengan gigi *gear* selama 70 detik/permukaan, beban 200g, dan kecepatan 5 gerakan/detik. Ketiga foto dianalisis indeks warna secara terkomputerisasi dengan metode CIELAB.

Hasil *one way ANOVA* menunjukkan terdapat pengaruh konsentrasi pasta gigi ekstrak daun salam sebagai pembersih *extrinsic stain* pada gigi dan gigi tiruan. Hasil LSD menunjukkan terdapat perbedaan signifikan antara pasta gigi ekstrak daun salam 5% dengan pasta gigi kontrol positif pada ketiga subjek, perbedaan tidak signifikan antara pasta gigi ekstrak daun salam 10% dengan pasta gigi kontrol positif pada gigi dan anasir gigi, dan perbedaan tidak signifikan antara pasta gigi ekstrak daun salam 15% dengan pasta gigi kontrol positif pada ketiga subjek. Kesimpulan penelitian ini adalah terdapat pengaruh konsentrasi pasta gigi ekstrak daun salam sebagai pembersih *extrinsic stain* pada gigi dan gigi tiruan.

Kata kunci: *Eugenia polyantha Wight*, *extrinsic stain*, gigi, gigi tiruan

ABSTRACT

Extrinsic stain on teeth and dentures which disturb appearance formed because of drinking tea. Commercial toothpastes only used for teeth and contain chemical compounds. Eugenol in bay leaves potentially removes extrinsic stain on teeth and dentures. Aim of this study is to determine effect of bay leaf extract (*Eugenia polyantha Wight*) concentration to remove extrinsic stain on teeth and dentures.

Photos of teeth, artificial teeth, and acrylic resin taken before stain induction (with 25g tea in 100ml 100°C water for 7 days, replaced every 24 hours), after stain induction, and after brushing. Toothpaste used for brushing were negative control toothpaste (toothpaste without active ingredient), bay leaf extract tooth paste at 5%, 10%, 15% concentrations, and positive control toothpaste (commercial stain removal toothpaste). Subjects were brushed using gear teeth for 70 seconds/surface, 200g load, and speed 5 movements/sec. Color index analysis of sample photos was computerized using CIELAB method.

There is effect of bay leaf extract concentration to remove extrinsic stain on teeth and dentures according to one-way ANOVA. There is significant different between 5% bay leaf extract toothpaste and positive control toothpaste on all subjects, there were no significant different between 10% bay leaf extract toothpaste and positive control toothpaste on teeth and artificial teeth only, and there were no significant different between 15% bay leaf extract toothpaste and positive control toothpaste on all subjects according to LSD. Conclusion of this study is there is effect of bay leaf extract (*Eugenia polyantha Wight*) concentration to remove extrinsic stain on teeth and dentures.

Keywords: dentures, *Eugenia polyantha Wight*, extrinsic stain, teeth