**PENGARUH PERENDAMAN JAMU KUNYIT ASAM (*Curcuma domestica* Val – *Tamarindus indica*) TERHADAP PERUBAHAN WARNA RESIN KOMPOSIT *NANOHYBRID***

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**Abstrak**

**Latar Belakang:** Resin komposit *nanohybrid* memiliki kelebihan yaitu kehalusan permukaan dan kekuatan yang baik, serta pengerutan yang minimal. Perubahan warna resin komposit dapat terjadi secara ekstrinsik dan intrinsik, perubahan warna ekstrinsik disebabkan karena zat warna yang melekat di permukaan resin komposit dan perubahan warna intrinsik disebabkan karena teroksidasinya monomer. Jamu kunyit asam merupakan minuman tradisional Indonesia dengan bahan utama kunyit dan asam jawa dengan berbagai macam manfaat. **Tujuan:** Mengetahui tingkat perubahan warna resin komposit *nanohybrid* pasca perendaman jamu kunyit asam (*Curcuma domestica* Val – *Tamarindus indica*). **Metode:** Penelitian eksperimental laboratorium dengan desain *pre and post test only group*. Sampel penelitian 16 keping resin komposit *nanohybrid*, ukuran 10 x 2 mm. Sampel diberi perlakuan perendaman jamu kunyit asam sebanyak 5 ml tiap spesimen selama 7x24 jam dan diganti setiap hari, pengukuran dengan alat *Spechtrophotometer UV 2401 PC* dilakukan sebelum dan sesudah perendaman. Penelitian dianalisis uji beda dengan uji t berpasangan. **Hasil:** Nilai rata-rata dEe*ab sebelum perendaman adalah 14,06 dan sesudah perendaman adalah 53,63 menunjukkan nilai $p < 0,05$ perbandingan antara sebelum dan sesudah perendaman dengan jamu kunyit asam. **Kesimpulan:** Terdapat perubahan warna yang signifikan pasca perendaman jamu kunyit asam (*Curcuma domestica* Val – *Tamarindus indica*) pada resin komposit *nanohybrid*..

**Kata Kunci:** resin komposit *nanohybrid*, perubahan warna, jamu kunyit asam

# THE EFFECT OF TURMERIC-TAMARIND BEVERAGE (*Curcuma domestica* Val – *Tamarindus indica*) IMMERSION ON NANOHYBRID COMPOSITE RESIN DISCOLORATION

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**Abstract**

**Background:** *Nanohybrid* composite resins have some advantages, such as surface smoothness, good strength, and minimal shrinkage. Composite resin color change can occur extrinsically and intrinsically, which extrinsic color change caused by dyes attached to the surface of composite resins and intrinsic color change caused by oxidation of monomers. Turmeric tamarind is an Indonesian traditional drink with the main ingredients of turmeric and tamarind with a variety of benefits. **Objective:** To determine the degree of *nanohybrid* composite resin color change after the submersion with turmeric tamarind traditional drink (*Curcuma domestica Val - Tamarindus indica*). **Method:** This research is an experimental laboratory research with pre and post test only group design. The research samples were 16 *nanohybrid* composite resin pieces with a size of 10 x 2 mm. Samples were treated with turmeric tamarind traditional drink submersion as much as 5 ml of each specimen for 7x24 hours and replaced every day, while the measurements were carried out with a *UV-2401 PC Spectrophotometer* before and after the submersion. The research analyzed different tests with paired t-test. **Results:** The average value of dE*ab before the submersion was 14,06 and after the submersion was 53,63 indicating a value of $p < 0,05$ from comparison between before and after the submersion with turmeric tamarind traditional drink. **Conclusion:** There was a significant color change after the turmeric tamarind traditional drink submersion (*Curcuma domestica Val - Tamarindus indica*) on *nanohybrid* composite resin.

**Keywords:** nanohybrid composite resin, color change, turmeric tamarind traditional drink