KEKUATAN TRANSVERSAL BASIS GIGI TIRUAN RESIN AKRILIK YANG DIRENDAM DAN TIDAK DIRENDAM DENGAN CAIRAN KOPI ROBUSTA *(Coffea canephora L.)*

ABSTRAK

Latar belakang : Resin akrilik merupakan bahan basis tiruan yang sering dipakai di bidang kedokteran gigi. Kekuatan transversal adalah daya tahan benda terhadap beban yang diterima oleh basis gigi tiruan resin akrilik pada waktu pengunyahan. Tingginya konsumsi kopi robusta di Indonesia dimana kemungkinan pengguna gigi tiruan juga mengkonsumsi kopi robusta. Kopi robusta *(Coffea canephora L.)* mengandung asam klorogenat yang tinggi yang dapat berpengaruh pada kekuatan transversal basis gigi tiruan resin akrilik *heat cured* **Tujuan** : untuk mengetahui kekuatan transvesal basis gigi tiruan resin akrilik yang direndam dan tidak direndam dengan cairan kopi robusta *(Coffea canephora L.)*. **Metode :** ukuran sampel plat akrlik 65 mm x 10 mm x 2,5 mm direndam dalam cairan kopi robusta *light roasted, medium roasted, dark* roasted selama 7 hari. Uji kekuatan transversal menggunakan *"Tensile tester"*. **Hasil** : Dilakukan uji statistika dan didapatkan nilai p lebih besar dari 0,05 (p>0,05). **Kesimpulan** : tidak di dapatkan penurunan kekuatan transversal basis gigi tiruan resin akrilik heat cured setelah dilakukan perendaman dengan cairan kopi robusta.

Kata kunci : Resin akrilik, kekuatan transversal, kopi robusta,

THE TRANSVERSE STRENGHT OF ACRYLIC RESIN DENTURES THAT ARE IMMERSED AND UNIMMERSED IN ROBUSTA COFFEE (Coffea canephora L.)

ABSTRACT

Background *: Acrylic resin is a widely used material when making the bases of dentures in the field of dentistry. Transversal strength is the resistance of an object against the load received by the acrylic resin denture base during the process of mastication. Indonesia has one of the highest consumption of robusta coffee in the world, and the majority of denture users may also consume robusta coffee. Robusta coffee (Coffea canephora L.) contains high chlorogenic acid which can affect the transverse strength of heat-cured acrylic resin base.* ***Aim*** *: To determine the transverse strength of acrylic resin dentures that are immersed in robusta coffee (Coffea canephora L.) and those that are not immersed.* ***Method :*** *The size of the acrylic plate sample is 65 mm x 10 mm x 2.5 mm, these acrylic plates are immersed for 7 days in light roasted, medium roasted, and dark roasted coffee. Transverse strength was tested using a "Tensile tester".* ***Results*** *: Statistical tests were carried out and p values are shown to be greater than 0.05 (p> 0.05).* ***Conclusion*** *: there was no decrease in transverse strength of the heat-cured acrylic resin base after immersion in robusta coffee liquid.*

Keywords*: Acrylic Resin, Transverse Strength, Robusta Coffee.*