INTISARI

Salah satu tujuan utama perawatan penyakit periodontal adalah untuk meregenerasi jaringan periodontal yang hilang akibat proses infeksi, termasuk tulang alveolar, ligamen periodontal, dan sementum. *Periodontal dressing* dapat mengoptimalkan proses penyembuhan luka dengan cara melindungi jaringan dari kemungkinan terjadinya infeksi, mengurangi perdarahan, dan menghindari terjadinya trauma pada saat proses mastikasi. Penelitian ini bertujuan untuk mengkaji potensi daya hambat *Periodontal Dressing* berbahan dasar utama *raw propolis* lebah *Trigona Itama* terhadap bakteri *Staphylococcus aureus* dan *Candida albicans*

Pada studi in vitro ini, *periodontal dressing* berbahan dasar raw propolis dibagi menjadi 9 kelompok dari 57%,60%,62.5%,65%,70%,75%,80%,85%, dan 100% yang kemudian dibandingkan dengan kelompok Reso-Pack™, Coe-pak™, dan formulasi baer. Pengujian antibakteri dihitung dengan menjumlahkan zona inhibisi dari *staphylococcus aureus* dan *candida albicans*. Data hasil studi kemudian dianalisis menggunakan *one-way anova* dilanjutkan dengan uji *Post Hoc LSD. Periodontal Dressing* berbahan dasar *raw propolis* 70%, 75%, 80%, 85% berpotensi dalam penghambatan laju pertumbuhan bakteri *Staphylococcus aureus*. *Periodontal Dressing* berbahan dasar *raw propolis* tidak berpotensi dalam penghambatan laju pertumbuhan jamur *Candida albicans*

Kata kunci: *Periodontal dressing, Raw Propolis, Staphylococcus aureus, Candida albicans,* Antimikroba

ABSTRACT

One of the main goals of periodontal disease treatment is to regenerate periodontal tissue lost due to the infectious process, including alveolar bone, periodontal ligament, and cementum. Periodontal dressing can optimize the wound healing process by protecting the tissue from the possibility of infection, reducing bleeding, and avoiding trauma during the masticatory process. This study aims to examine the potential inhibition of Periodontal Dressing made from raw propolis from Trigona Itama bees against Staphylococcus aureus and Candida albicans bacteria.

In this in vitro study, raw propolis-based periodontal dressings were divided into 9 groups from 57%,60%,62.5%,65%,70%,75%,80%,85%, and 100% which were then compared with the Reso-pac™, Coe-pak™, and Baer formulations. Antibacterial testing was calculated by measuring the zones of inhibition of *staphylococcus aureus* and *candida albicans*. The study data were then analyzed using *One-Way ANOVA* followed by the *Post Hoc LSD* test.

The results show that Reso-pac™ has the largest bacterial inhibition zone with a mean zone of inhibition of 10.4000mm, followed by pure raw propolis 100% with an inhibition zone diameter of 6.3167mm, raw propolis-based periodontal dressing 85% with an inhibition zone of 4.650mm, and raw raw propolis-based periodontal dressing 80% with zone of inhibition 2.5167mm against *staphylococcus aureus*. The results of the descriptive test on the *candida albicans* treatment group that had the highest inhibitory power were Reso-pac™ with a mean zone of inhibition of 5.2000mm, followed by periodontal dressing made from 100% raw propolis with a mean zone of inhibition of 2.5833mm. Periodontal dressing made from raw propolis 70%, 75%, 80%, 85% *Trigona Itama* has the potential to inhibit the growth rate of *Staphylococcus aureus*. Periodontal dressing made from raw propolis *Trigona Itama* had no potential to inhibit the growth rate *Candida albicans*.

Keywords : *Periodontal dressing, Raw Propolis, Staphylococcus aureus , Candida albicans ,* Antimicroba