

ABSTRAK

Rahardjo, Bernike Vania. 2014. **Uji Efek Ekstrak Etanol Rimpang Jahe Merah (*Zingiber officinale* var. *Rubrum*) terhadap Bakteri *Streptococcus pyogenes* No.LKS07 (*In Vitro*)**. Tugas Akhir. Program Studi Pendidikan Dokter Gigi Fakultas Kedokteran Universitas Brawijaya. Pembimbing: (1) Dr. drh. Sri Murwani, MP. (2) drg. Fidyah, M.Si.

Rimpang jahe merah mengandung minyak atsiri yang berfungsi sebagai antibakteri. Minyak atsiri mengandung zat aktif diantaranya yaitu terpenoid, flavonoid, dan alkaloid. Penelitian ini menggunakan rancangan penelitian *true experiment post test cotrol only* dengan metode dilusi tabung dan dilusi agar. Data dianalisa dengan uji *One-Way ANOVA*, *Post Hoc Tukey*, dan Korelasi-Regresi dengan $\alpha < 0,05$. Konsentrasi ekstrak etanol rimpang jahe merah yang digunakan 75%, 80%, 85%, 90%, dan 95%. Dari hasil penelitian ini diperoleh nilai Kadar Hambat Minimal (KHM) sebesar 5% dan Kadar Bunuh Minimal (KBM) sebesar 95%. Hasil uji statistik menunjukkan bahwa terdapat hubungan yang kuat antara konsentrasi ekstrak etanol rimpang jahe merah dengan pertumbuhan koloni *Streptococcus pyogenes*, semakin tinggi konsentrasi ekstrak etanol rimpang jahe merah semakin rendah pertumbuhan bakteri *Streptococcus pyogenes*. Kesimpulan berdasarkan penelitian ini adalah ekstrak etanol rimpang jahe merah mempunyai efek antibakteri terhadap *Streptococcus pyogenes* secara *in vitro*.

Kata kunci: Rimpang jahe merah, *Streptococcus pyogenes*, Kadar Hambat Minimal (KHM), Kadar Bunuh Minimal (KBM).

ABSTRACT

Rahardjo, Bernike Vania. 2014.. **Test Effects of Red Ginger (*Zingiber officinale* var. *Rubrum*) Ethanol Extract against *Streptococcus pyogenes* Bacteria Number LKS07 (In Vitro).** Final Assignment. Dentistry Program, Faculty of Medicine Brawijaya University. Supervisors: (1) Dr. drh. Sri Murwani, MP. (2) drg. Fidy, M.Si.

Red ginger contains of atsiri oil that has function as an antibacteria. Atsiri oil contains of active substances, these are terpenoid, flavonoid, and alkaloid. This research used true experiment post test control only design research with dilution tube and dilution agar method. Data is analyzed with One-Way ANOVA, Post Hoc Tukey, and Correlation-Regretion with $\alpha < 0,05$. Concentration of red ginger ethanol extract used was 75% , 80% , 85% , 90%, and 95% . From the results of this research showed the value of Minimum Inhibitory Concentration (MIC) is 5% and the value of Minimum Bactericidal Concentration (MBC) is 95% . Statistical test results showed that there is a strong relationship between the concentration of red ginger ethanol extracts with colony growth of *Streptococcus pyogenes*, the higher red ginger ethanol extracts the lower colony growth of *Streptococcus pyogenes*. The conclusion of this research is red ginger ethanol extract have antibacterial effects against *Streptococcus pyogenes* in vitro .

Keywords: Red ginger, *Streptococcus pyogenes*, Minimum Inhibitory Concentration (MIC), Minimum Bactericidal Concentration (MBC).