

INTISARI

Minyak kemangi (*Ocimum basilicum* L.) memiliki daya antibakteri terhadap bakteri penyebab bau pada kaki. Eugenol adalah senyawa di daun kemangi yang mempunyai aktivitas sebagai antibakteri. Tujuan penelitian ini adalah untuk mengetahui daya antibakteri minyak kemangi dan gel minyak kemangi dalam menghambat bakteri *Staphylococcus epidermidis* dan *Bacillus subtilis*.

Penelitian ini merupakan penelitian eksperimental murni dengan rancangan penelitian acak lengkap pola searah. Tahapan penelitian meliputi uji daya antibakteri minyak atsiri daun kemangi terhadap beberapa variasi konsentrasi dengan difusi sumuran; dilanjutkan dengan penentuan nilai KHM dan KBM dengan dilusi padat, dan pengujian daya antibakteri gel minyak kemangi. Data yang diperoleh dianalisis menggunakan uji normalitas *Shapiro Wilk*, dilanjutkan dengan uji *Kruskal-Wallis* dan uji *Wilcoxon* menggunakan program R 2.14.1.

Berdasarkan hasil penelitian, minyak kemangi mempunyai kemampuan menghambat bakteri *Staphylococcus epidermidis* dan *Bacillus subtilis*. Nilai KHM dan KBM minyak atsiri daun kemangi terhadap *Staphylococcus epidermidis* berturut-turut adalah 2% v/v dan 2.5% v/v, dan terhadap *Bacillus subtilis*, yaitu berturut-turut 2% v/v dan 2.5% v/v. Daya antibakteri gel minyak kemangi dan minyak kemangi 15% tidak berbeda bermakna.

Kata kunci: minyak kemangi, *Staphylococcus epidermidis*, *Bacillus subtilis*, gel, antibakteri

ABSTRACT

Basil oil (*Ocimum basilicum* L.) has antibacterial power against odor-causing bacteria on the feet. Eugenol in basil leaves is compound that has an activity as an antibacterial antibacterial activity. The aim of this study was to determine the antibacterial gel basil oil and basil oil in inhibiting the bacteria *Staphylococcus epidermidis* and *Bacillus subtilis*.

This study was an experimental study design which had one way complete random design. Research began with a study of antibacterial activity of essential oils of basil leaves on some variation of the concentration with diffusion wells; followed by determination of MIC and MBC values with solid dilution; gel of basil leave oils has also tested in terms of antibacterial activity against *Staphylococcus epidermidis* and *Bacillus subtilis*. Data were analyzed using the Shapiro Wilk normality test, followed by Kruskal-Wallis test and Wilcoxon test by using R 2.14.1 program.

The research result of basil oil had the ability to inhibit the bacteria *Staphylococcus epidermidis* and *Bacillus subtilis*. MIC and MBC values of basil essential oils against *Staphylococcus epidermidis* that are 2% v/v and 2.5% v/v, and against *Bacillus subtilis* that are 2% v/v and 2.5% v/v. Antibacterial activity of gel basil oil and 15% basil oil was not significantly different.

Keywords: basil oil, *Staphylococcus epidermidis*, *Bacillus subtilis*, gel, antibacteria