

INTISARI

Minyak kulit kayu manis (*Indonesian Cinnamon Bark oil*) memiliki daya antibakteri terhadap *Staphylococcus epidermidis* yang merupakan salah satu bakteri penyebab bau kaki. Sediaan krim dan gel dapat digunakan sebagai sediaan topikal minyak kulit kayu manis, meskipun diprediksi adanya eksipien dapat mempengaruhi pelepasan minyak kulit kayu manis. Tujuan penelitian ini untuk mengetahui perbedaan daya antibakteri krim antibau kaki minyak kulit kayu manis dengan gel antibau kaki minyak kulit kayu manis terhadap *Staphylococcus epidermidis*.

Penelitian ini adalah penelitian eksperimental murni dan rancangan penelitian *postest only control design*, dan data dianalisis secara statistik menggunakan program R.2.14.1 *open source*. Uji *Shapiro-Wilk* untuk mengukur distribusi kemudian untuk data parametrik menggunakan *Two sample t-test* dan non- parametrik menggunakan metode *Wilcoxon sum rank test* untuk mengukur distribusi tak normal dengan taraf kepercayaan 95% ($p < 0,05$).

Berdasarkan hasil perhitungan statistik, diketahui daya antibakteri krim antibau kaki minyak kulit kayu manis berbeda dengan gel antibau kaki minyak kulit kayu manis. Hal ini disebabkan karena adanya perbedaan dalam tingkat pelepasan zat aktif obat.

Kata Kunci: minyak kulit kayu manis, antibau kaki, krim, gel, *Staphylococcus epidermidis*

ABSTRACT

Indonesian Cinnamon Bark oil provides an antibacterial activity against *Staphylococcus epidermidis*, which is one of many bacteria contributing to foot odor. Cream and gel can be the dosage form to formulate the cinnamon oil anti-foot-odor topical preparations, therefore excipient influence cinnamon oil release. Study aimed to compare the potential of antibacterial provided by anti-foot-odor of cinnamon oil cream and gel was conducted.

This research was true experimental and posttest only control design, data were analysed statistically by using R.2.14.1 open source program. Normality data test by using Shapiro-Wilk test then Two sample t-test used for parametric data and for non-parametric used Wilcoxon sum rank test.

The significant differences in effectivity of the dosage form were tested by using non-parametric statistical analysis (Wilcoxon sum rank) on the 95% level of confidence.

From the results, it was concluded that the antibacterial potentials of anti-foot-odor of cinnamon oil cream and gel were different. It might be due to the difference of release rate.

Keyword: cinnamon bark oil, anti foot odor, cream, gel, *Staphylococcus epidermidis*